

Syllabus



IPS: THE MENTAL HEALTH
SERVICES CONFERENCE

Oct. 6-9, 2016 • Washington D.C.

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COURSES

OCT 06, 2016

BUPRENORPHINE AND OFFICE-BASED TREATMENT OF OPIOID USE DISORDER

Director: John A. Renner Jr., M.D.

Faculty: Petros Levounis, M.D., Andrew J. Saxon, M.D.

EDUCATIONAL OBJECTIVE:

At the conclusion of the session, the participant should be able to: 1) Describe the basic principles of the pharmacology of opioids and buprenorphine, naloxone and naltrexone; 2) List three evidence-based psychosocial interventions in the treatment of opioid use disorders; 3) Treat acute pain syndromes in patients receiving buprenorphine; 4) Diagnose mild, moderate and severe opioid use disorder; and 5) Discuss alternative pharmacological options—such as methadone, oral naltrexone and injectable naltrexone—in the treatment of opioid use disorders.

SUMMARY:

Physicians who complete this course will be eligible to request a waiver to practice medication-assisted addiction therapy with buprenorphine for the treatment of opioid use disorder. The course will describe the resources needed to set up office-based treatment with buprenorphine for patients with opioid use disorder and review 1) *DSM-5* criteria for OUD and the commonly accepted criteria for patients appropriate for office-based treatment of OUD; 2) Confidentiality rules related to treatment of substance use disorders, DEA requirements for recordkeeping, and billing and common office procedures; 3) The epidemiology, symptoms and current treatment of anxiety, common depressive disorders and ADHD and how to distinguish independent disorders from substance-induced psychiatric disorders; and 4) Common clinical events associated with addictive behavior. Special treatment populations, including adolescents, geriatric patients, pregnant addicts, HIV-positive patients and chronic pain patients, will be addressed, and small-group case discussions will be used to reinforce learning.

OCT 07, 2016

PREVENTIVE MEDICINE IN PSYCHIATRY: CARDIOVASCULAR DISEASE

Director: Erik R. Vanderlip, M.D., M.P.H.

Faculty: Martha Craig Ward, M.D., Robert M. McCarron, D.O.

EDUCATIONAL OBJECTIVE:

At the conclusion of the session, the participant should be able to: 1) Articulate the causes of excess morbidity and mortality within the SMI population; 2) Apply current evidence-based practices to screen and manage the leading modifiable cardiovascular risk factors in persons with SMI; 3) Assess systems of practice and implement evidence-based programs to improve the general health of persons with SMI; 4) Explore the use of a primary care consultant to assist in treatment of patients when prescribing is needed; and 5) Discuss the rationale for psychiatric management of chronic physical conditions with emphasis on liability and scope of practice concerns.

SUMMARY:

Patients with mental illness, including those with serious mental illness (SMI), experience disproportionately high rates of tobacco use, obesity, hypertension, hyperlipidemia and disturbances in glucose metabolism. This is often partially the result of treatment with psychiatric medications. This population suffers from suboptimal access to quality medical care; lower rates of screening for common medical conditions; and suboptimal treatment of known medical disorders such as hypertension, hyperlipidemia and nicotine dependence. Poor exercise habits, sedentary lifestyles and poor dietary choices also contribute to excessive morbidity. As a result, mortality in those with mental illness is significantly increased relative to the general population, and there is evidence that this gap in mortality has grown over the past decades. This widening mortality gap is due, in large part, to poor access to quality medical care. Because of their unique background as physicians, psychiatrists have a particularly important role in the clinical care, advocacy and teaching related to improving the general health of their patients. As part of the broader medical neighborhood of specialist and primary care providers, psychiatrists may have a role in the principal care management and care coordination of some of their clients because of the chronicity and severity of their illnesses, similar to other medical specialists (nephrologists caring for patients on dialysis or oncologists caring for patients

with cancer). There is a growing need to provide educational opportunities to psychiatrists regarding the evaluation and management of the leading cardiovascular risk factors for their clients. This course provides an in-depth, clinically relevant and timely overview of all the leading cardiovascular risk factors that contribute heavily to the primary cause of death of most persons suffering with SMI. The course will also prepare participants to evaluate their current clinical systems of care in comparison to national implementation efforts in primary care integration and institute evidence-based clinical programs to improve the general health of those with SMI in their community.

OCT 08, 2016

ESSENTIAL PSYCHOPHARMACOLOGY

Director: Scott T. Aaronson, M.D.

Faculty: Adam Lowy, M.D., Jennifer L. Payne, M.D., O. Joseph Bienvenu, M.D., Ph.D., Andrew G. Feinberg, M.D., Crystal C. Watkins, M.D., Ph.D.

EDUCATIONAL OBJECTIVE:

At the conclusion of the session, the participant should be able to: 1) Assess for the presence of bipolar disorder with greater sensitivity; 2) Explain when a neurostimulation intervention (electroconvulsive therapy or transcranial magnetic stimulation) should be considered for a patient with mood disorder; 3) Describe the factors to be considered in the choice of medication to treat a psychotic disorder; 4) Create a risk/benefit analysis to judge the use of psychotropic agents during a pregnancy when the prospective mother is suffering from a mood or psychotic disorder; and 5) Identify the three main risk factors to be considered in the use of psychotropic agents in older adults.

SUMMARY:

Shifting treatment paradigms and the ongoing introduction of many new psychotropic agents each year create confusion among mental health practitioners, particularly those not in academic centers or working in primary care settings. This course will provide a 2016, state-of-the-art overview of the current thinking about the management of the most common psychiatric presentations encountered by mental health and primary care clinicians. Topics covered will include an overview to help differentiate between types of mood disorders (unipolar vs. bipolar, psychotic vs. nonpsychotic, comorbid vs. uncomplicated), followed by discussion

of best practice treatment paradigms and a review of currently available medications. This will be followed by a discussion of the recognition and management of psychotic and anxiety disorders (including generalized anxiety disorder and posttraumatic stress disorder). Other sessions will discuss the use of medications across the female life cycle with a special emphasis on pregnancy and the postpartum period, an overview on the use of psychiatric medications in older adults, and finally a thoughtful presentation on adult attention deficit disorder, which will address how to accurately recognize it and the best strategies to manage it. All of our speakers are distinguished faculty members from esteemed academic institutions in the Baltimore/Washington area, including Johns Hopkins University, The University of Maryland and Georgetown University. The speakers will provide guidance about what new medications deserve our attention, earning a place in the treatment paradigm, and which can be safely overlooked. Ample time will be provided for interaction with our faculty during question and answer sessions.

OCT 09, 2016

CHILD PSYCHOPHARMACOLOGY FOR THE ADULT PSYCHIATRIST

Director: Adelaide Robb, M.D.

Faculty: Julia Dorfman

EDUCATIONAL OBJECTIVE:

At the conclusion of the session, the participant should be able to: 1) Understand the diagnostic criteria and epidemiology of the four most common pediatric anxiety disorders (GAD, SAD, SoPhobia and OCD); 2) Understand the developmental progress of pediatric anxiety disorders; 3) Identify common presentations of major depressive disorder by age group in children and teens; 4) Recognize the classic symptoms of pediatric bipolar disorder, including those that distinguish individuals with ADHD from bipolar disorder; and 5) Understand different classes of medications used for treatment of ADHD.

SUMMARY:

This course will provide a 2016 snapshot of the treatment of the most common pediatric anxiety disorders, including NIMH and industry trial data. *DSM-5* diagnostic criteria will be reviewed, and best practices for the treatment of anxiety in children and teens will be discussed. Not until Graham Emslie presented his fluoxetine trial at the AACAP meetings

in 1995 did we have the first positive placebo-controlled trial for pediatric major depression. With the advent of multiple negative industry trials and the black warning clinicians, pediatricians and adult psychiatrists especially became reluctant to treat pediatric depression. This course will present a straightforward, evidence-based approach to the treatment of pediatric depression reviewing both industry and NIMH data. Pediatric bipolar disorder has been increasingly diagnosed in youth under the age of 18. In general, based on large studies, this mood disorder is more difficult to treat, resistant to monotherapy, and characterized by psychosis and rapid cycling. The monotherapy trials of the AED mood stabilizers have failed to separate from placebo (valproate, carbamazepine and oxcarbazepine), while lithium and antipsychotics have been positive in controlled trials for pediatric bipolar disorder. Minimal data exist on long-term treatment, but therapy for over a year is recommended, as is the use of combination drugs when monotherapy is ineffective. This course will provide a 2016, state-of-the-art overview of the current thinking about the epidemiology, diagnosis, neuroscientific basis and treatment of ADHD in children and adults. Efficacy of different classes of medications and effects of treatment on comorbidities will be discussed.

FORUM

OCT 06, 2016

PSYCHIATRIC SERVICES: CASE STUDY IN LEADERSHIP CHALLENGES

Chair: Anita Smith Everett, M.D.

EDUCATIONAL OBJECTIVE:

At the conclusion of the session, the participant should be able to: 1) Identify and improve mental health disparities in the community; 2) Demonstrate and apply new skills that will be useful in public psychiatry settings; 3) Examine how the current health care system affects patient care; 4) Describe how to transform systems of care; and 5) Recognize how to bring new innovations into a variety of treatments to improve patient care.

SUMMARY:

Successful leadership in health care involves multiple facets. Elements that result in effective leadership often include emotional intelligence, learned

management skills, financial management aptitude and progressive experience. The drive to build and manage better systems that serve patient-centered needs coupled with the will to endure various predictable and unpredictable challenges is essential. This forum is designed to be a hands-on experiential exchange with recognized leaders in modern psychiatric systems. Each presenter will outline a particular leadership challenge from their own personal experience that represents common challenges in contemporary behavioral health services leadership. Time will be reserved for discussion after each situation, and time will be reserved for consultation on particular leadership challenges brought forward by audience participants.

OCT 07, 2016

TOOLS FOR PROMOTING RECOVERY AND RESILIENCE IN VETERANS AND THE GENERAL PUBLIC DURING AND AFTER ECT TREATMENT

Chair: Peter Hauser, M.D.

Speaker: Kitty Dukakis, M.S., M.S.W.

EDUCATIONAL OBJECTIVE:

At the conclusion of the session, the participant should be able to: 1) Provide public awareness of resilience and recovery initiatives at the Veteran's Administration; 2) Describe successful recovery/rehabilitation programs developed by a university psychiatric rehabilitation center and a memory-enhancement initiative created by an academic ECT program in collaboration with a leading psychiatric hospital; and 3) Educate attendees about successful social support and community/national education/outreach efforts in a hospital setting and a nonprofit organization, supported by medical professionals and serving recovering individuals and their family members/advocates involved with ECT.

SUMMARY:

Over the last two decades, the mental health community has become focused on providing tools to promote resilience (i.e., ability to bounce back from adversity) and recovery (i.e., ability to resume roles that are meaningful to the person). Growth of the peer movement has led to more focus on self-determination on the part of peers. The major concerns that peers voice about ECT are their anxiety in anticipation of the treatment and the potential memory loss as a result of the treatment.

Because recovery and resilience are common to both veterans and civilians, it would be helpful to compare initiatives from both arenas in hopes of providing all peers with the best strategies for well-being that are available. Our discussion will focus on three programmatic areas: social/vocational support (individual and group-based), memory and individual/community education. We will describe pilot initiatives that might be helpful to a veteran population and the general public.

OCT 08, 2016

INVOLUNTARY OUTPATIENT COMMITMENT AND ASSISTED OUTPATIENT TREATMENT: LESSONS LEARNED FROM IMPLEMENTATIONS ACROSS THE STATES

Chairs: Margaret E. Balfour, M.D., Ph.D., Marvin S. Swartz, M.D.

Discussant: Jeffrey Zabinski, M.D.

Speakers: Mark R. Munetz, M.D., Daniel Garza, M.D., Chris Carson, M.D., M.B.A., Ronald Steven Honberg, J.D., Kana Enomoto, M.A.

EDUCATIONAL OBJECTIVE:

At the conclusion of the session, the participant should be able to: 1) Describe the current research and the APA's position on involuntary outpatient commitment/assisted outpatient treatment (IOC/AOT); 2) Explain key differences in IOC/AOT implementation in several different states; and 3) Apply lessons learned from various IOC/AOT implementations to his/her own community.

SUMMARY:

Involuntary outpatient commitment/assisted outpatient treatment (IOC/AOT) has received increasing attention in recent years as a subject of debate in legislative efforts to reform mental health services. Forty-five states have some form of IOC/AOT on the books; however, the details of implementation vary widely, and clinicians and advocates remain divided on its effectiveness and ethics. The American Psychiatric Association recently released a position statement that, after an extensive review of the research, concluded that IOC/AOT can be a useful intervention for a subset of patients with a systematic implementation that adheres to specific principles. To better understand the importance of a well-planned implementation, this forum will focus on lessons learned from IOC/AOT programs in various states. The forum will begin with a brief overview by Dr. Marvin Swartz,

one of the leading researchers in this area.

Psychiatrist panelists from around the country will describe their experience with IOC/AOT in their respective states. Then two national policy experts will discuss their perspectives: Ron Honberg, Director of Policy and Legal Affairs at the National Alliance on Mental Illness, and Kana Enomoto, Principal Deputy Administrator at the Substance Abuse and Mental Health Services Administration. Finally, audience members will be invited to share their experiences and engage in a moderated discussion with the panel.

LEARNING LAB

OCT 06, 2016

COLLABORATIVE CARE SIMULATION LAB: EXPERIENCE THE NEWEST WAY TO PRACTICE

Chairs: Erik R. Vanderlip, M.D., M.P.H., Anna Ratzliff, M.D., Ph.D.

Speaker: Lydia Chwastiak, M.D., M.P.H.

EDUCATIONAL OBJECTIVE:

At the conclusion of the session, the participant should be able to: 1) Attain an in-depth understanding, through an intensive in-vivo "lab," of a collaborative care system and how psychiatric practice is different and fun within these new models of integration; 2) Operationalize the core elements of collaborative care, including population-focused care, evidence-based treatment, measurement-driven care and team-based care; and 3) Critically compare the essential elements of collaborative care to local integrated care efforts through live participation in a fictional collaborative care model.

SUMMARY:

Collaborative care (CC) is an evidence-based approach to integrating behavioral health services within primary care settings. Through over 80 randomized controlled trials, it has proven consistent efficacy in delivering the triple aim in health care reform: cost savings, improved outcomes, improved patient and provider satisfaction, and access to care. In spite of this overwhelming and compelling evidence base, CC has many barriers to implementation, halting widespread dissemination aside from several large-scale programs. CC requires psychiatrists to rethink their role in treating individual patients and their

relationship to others in the health care team and requires the use of measurement-based, patient-reported outcomes to guide care and recommendations—all skills that many are unfamiliar with and reluctant to engage. Existing courses taught by the APA rely primarily on lecture-type methods to share these principles, and participants are left with a somewhat superficial understanding of the radical framework shift necessary to implement a CC system. This session will highlight the essential elements of CC through a time-intensive, problem-based simulation. Ten fictional cases will be presented to the participants, who will then be assigned into small teams of psychiatrist, PCP and care manager in charge of managing those 10 cases for a “month” of time—approximately 20 minutes. The teamlets will also be provided with registry data on outcomes for their team. Round 1 will consist of simple instructions for the teams to “manage” the 10 patients however they see fit. Clinical updates will follow for an additional two rounds, with subsequent updates in the registry to reflect measurement-based outcome changes over the simulated time scale of three months. During the third round, teamlets will be actively encouraged to utilize the data in the registry to organize their team-based discussion. The final 20 minutes will be spent debriefing the exercise and reviewing the essential elements of the CC model and their rationale from the perspective of this intensive simulation. This workshop will build on lessons learned during its development and implementation as part of a 2016 Annual Meeting workshop in a similar format.

OCT 07, 2016

MEDICAL DIRECTORS’ BOOT CAMP: LEADING A TEAM AND OTHER HR SKILLS FOR PSYCHIATRISTS

Chair: John Kern, M.D.

EDUCATIONAL OBJECTIVE:

At the conclusion of the session, the participant should be able to: 1) Enhance skills in supervising staff; 2) Obtain knowledge of the basics of HR; and 3) Develop plans to utilize resources efficiently and effectively.

SUMMARY:

The part 1 Medical Director’s Boot Camp will focus on the challenges faced by medical directors. Hosted in the interactive learning lab this session will provide participants exposure to develop skills in

supervising other physicians and non-physician staff, tools for navigating difficult conversations and understanding the rationale for HR policy and procedures through rich discussion and collaboration. This session is appropriate for psychiatric Medical Directors and any other practitioners interested in reviewing the non-clinical factors that impact patient care. Attendees who bring their own device to the learning lab will get the most out of the experience. Please bring your lap top, tablets and smart phones to engage with the facilitators, participate in polling, and complete group work.

MOCK TRIAL: LESSONS FOR PSYCHIATRISTS FROM THE BAR AND RISK MANAGEMENT

Chair: Kristen Lambert, Esq., M.S.W.

Speaker: Moira Wertheimer, Esq., R.N.

EDUCATIONAL OBJECTIVE:

At the conclusion of the session, the participant should be able to: 1) Recognize potential liability issues facing psychiatrists when treating patients with a substance use disorder (SUD); 2) Examine the legal procedural process of a lawsuit from inception through trial; 3) View a mock deposition and trial, including examination and cross examination of witnesses; 4) Examine mock documentation that may impact the case; and 5) Explore risk management tips, which may be helpful in avoiding some of the potential pitfalls that may impact the defensibility of a case.

SUMMARY:

Background: Approximately three percent of psychiatrists spend their careers dealing with a liability claim. Although the incidence of psychiatrists who face a medical malpractice lawsuit is lower compared to other medical specialties, the impact when and if a psychiatrist is sued can be significant. The Affordable Care Act for the first time requires all insurers, including Medicaid, to cover the treatment of drug and alcohol addiction. Between now and 2020, the addiction services field will need to fill more than 330,000 jobs to keep pace with demand. As such, many psychiatrists will find themselves treating patients with SUD diagnoses. Psychiatrists providing SUD treatment are subject to numerous federal and state regulations, as well as ethical principles designed to promote excellent medical care, avoid drug diversion and protect patient confidentiality. It is not unusual for conflicting obligations related to patient care to complicate

adherence to these numerous legal and ethical requirements. This three-hour session will explore a case involving treating a patient with an SUD diagnosis, and participants will witness the case from inception through trial. Those in attendance will witness the deposition of a defendant psychiatrist and the phases of a medical professional liability trial including opening statements, examination and cross examination of a defendant psychiatrist, plaintiff and expert witnesses. Risk management principles and tips will be provided throughout the case example. **Objective:** Explore the legal procedural process when a psychiatrist becomes a defendant in a lawsuit. It may be daunting when a psychiatrist becomes a defendant in a lawsuit. It can impact his/her practice and life over a number of years. This session will provide a case example and discuss pitfalls for psychiatrists faced with a lawsuit. A mock case example will be provided. Risk management principles will be provided, and the session will explore the process of how a lawsuit comes to be and the procedural process through and including trial. An attorney will represent the plaintiff and another will represent the psychiatrist defendant. A third attorney will serve as a judge. Two psychiatrists will serve as expert witnesses, and another psychiatrist will serve as a defendant psychiatrist. **Conclusion:** Attendees will be provided with information relative to how a lawsuit comes to fruition, the legal process and principles to mitigate risk.

OCT 08, 2016

MEDICAL DIRECTORS' BOOT CAMP: THE BUSINESS OF MEDICINE

Chairs: Victor J. A. Buwalda, M.D., Ph.D., Stuart B. Silver, M.D.

Speakers: Stuart B. Silver, M.D., Victor J. A. Buwalda, M.D., Ph.D., Sy A. Saeed, M.D., M.S.

EDUCATIONAL OBJECTIVE:

At the conclusion of the session, the participant should be able to: 1) Make a business plan; 2) Have knowledge of the basics of budgeting; and 3) Have knowledge of the basis on financial planning.

SUMMARY:

This workshop will explore three phases of psychiatric program administration, starting with business planning. One person can compose a business plan in the privacy of his or her own study. Committees can create plans. A variety of

stakeholders participate actively and meaningfully in drafting a business plan. The best choice of individuals to write a particular business plan typically lies between these extremes. The first step for the developer of a new program is to decide who should be part of the creative process. Axes of decision making are necessary expertise, complexity of the venture, political considerations and available resources. We will outline some of the ingredients of a comprehensive business plan. The budget process articulates programmatic ideas by breathing reality into abstraction, yet the budget is in itself an abstraction that reflects the values and creativity of all participants in the enterprise. Budgeting is not a task for the accountants and fiscal managers alone. It is the responsibility of each member of the organization. The budget is both a plan and a management tool. Budgeting is called a process because it is an ongoing task—a "Budget Cycle." We will explore the phases of this cycle in this workshop. Additionally, in a brief look at financial management, we will provide an overview of basic financial reports and cash management principals. Currently, formal business reporting consists of four accounting documents: the balance sheet, the income statement, the cash flow statement and the reconciliation of net worth. Each will be discussed. The presenters will address the above mentioned topics and present a case example of the challenges of business planning that will also be used for discussion with the participants.

PSYCHIATRY INNOVATION LAB: PITCH AN IDEA. BUILD A TEAM. DESIGN A VENTURE. MEASURE YOUR IMPACT.

Chair: Nina Vasan, M.D.

EDUCATIONAL OBJECTIVE:

At the conclusion of the session, the participant should be able to: 1) Understand current trends in health care innovation, including the use of technology, big data, personal health and devices to further the delivery of quality mental health care services; 2) Learn best practices in creating entrepreneurial health ventures that are effective, measurable, collaborative and sustainable; 3) Establish a team of collaborators to brainstorm and refine an innovative idea for the delivery of quality care; 4) Develop a pitch around a potential solution for addressing quality improvement problems in psychiatry; and 5) Secure feedback and mentorship from experts in quality improvement, digital health,

entrepreneurship and venture capital, as well as from peers in psychiatry and behavioral medicine.

SUMMARY:

Economic, social, scientific and political forces have finally pushed psychiatric care onto the top of the public health agenda; these myriad forces are calling for effective and sustainable business models that can deliver quality programs in the prevention and treatment of psychiatric illnesses. The next step in advancing progress for mental health is embracing the spirit of business and entrepreneurship. Compared to our peers in medicine and surgery, as well as our colleagues in other industries, we as psychiatrists have been slower to realize the potential of the tools that are driving the next revolution in health care: technology, big data, personal health and outcomes measurement. We need to draw upon our clinical experience to develop tools and systems that accelerate the delivery of higher quality psychiatric care to patients, families and communities. The Psychiatry Innovation Lab will catalyze the formation of innovative ventures that improve the delivery of quality mental health care services. Through a highly collaborative and hands-on experience guided by a panel of expert coaches in medicine, digital health, health care entrepreneurship and venture capital, this workshop will give participants the process and tools to turn their “idea(lism) to impact”. Participants will begin by pitching their own ideas for improving quality care of mental health services, which includes mental health information technology, mobile apps, performance and outcomes measurement, patient safety, and telepsychiatry. They will discuss innovative ideas that address the needs of our patients, colleagues and the health care system both here at home and around the world, as it applies to transforming access to care, disease prevention, diagnosis and treatment. They will form teams with other participants who have similar interests and work together to develop a venture-based solution. These teams will receive education on best practices in social innovation, centered on evidence-based practices, measurement, collaboration and sustainability. They will have a hands-on breakout session to brainstorm and problem solve. The workshop will culminate with a series of final pitch presentations from the teams, which will include valuable insight and feedback from the panel of experts, as well as audience members. Participants will have an online portal to share their ideas with each other, creating the opportunity for them to

continue working together, building a network and developing their ideas after the conference, as well as for other APA members who are not at the session to join.

LECTURES

OCT 06, 2016

BEHAVIORAL HEALTH AND THE BELTWAY: POLICY, POLITICS AND PRACTICE

Lecturer: Linda Rosenberg, M.S.W.

EDUCATIONAL OBJECTIVE:

At the conclusion of the session, the participant should be able to: 1) Understand the Affordable Care Act (ACA) service and payment redesign assumptions and the vision for mental health; 2) Analyze the impact of the political landscape on improving the access and quality of community-based mental health and addiction services; and 3) Describe and discuss the effort of specialty behavioral health services to operate in a competitive, shared-risk environment.

SUMMARY:

Expanding coverage and insurance reform were easy technical fixes; now the real work of the ACA—service delivery and payment reform—is underway. High-need, high-cost populations are front and center in the effort to decrease ER and hospital use by integrating and coordinating care. Mental illnesses and addictions are acknowledged as important determinants in the success of ACA reform efforts. But the discussion *not* taking place in political circles (the administration and Congress) is the current impact on working-class Americans of no insurance, high deductibles and co-pays, and limited pathways to mental health treatment. The political discussion that *is* taking place is how to spin “mental health system reform” for people with the most serious mental illness without spending the money or exerting the will to bolster and standardize community systems of mental health and addiction services. In the interim, specialty safety net behavioral health organizations—without the capital available to for-profit companies—are struggling to reinvent themselves for a “value-based purchasing world.”

TOWARD AN EQUAL CHANCE AT MENTAL HEALTH IN A DIVERSE COLLEGE WORLD

Lecturer: Annelle B. Primm, M.D., M.P.H.

EDUCATIONAL OBJECTIVE:

At the conclusion of the session, the participant should be able to: 1) Understand the nature of mental health disparities among diverse college students; 2) Identify at least three challenges to mental health facing college students of color, particularly women; and 3) Discuss the offerings of the Steve Fund and at least two other organizations, programs and resources designed to promote the mental health and emotional well-being of students of color in the university environment.

SUMMARY:

This lecture will highlight the work of the Steve Fund, a new nonprofit with a focus on the mental health and well-being of college students of color. The lecturer serves as a senior medical adviser for this organization. The need for the Steve Fund is clear. The time between adolescence and early adulthood is a period of development fraught with stressful challenges. This period is also one in which common mental illnesses such as depression and anxiety have their initial onset. The experiences of college students of color in this age range who attend schools in which they are in the minority are compounded by additional risks associated with negative stereotypes, isolation, alienation, marginalization and an environment with values often at odds with their cultures of origin. These conditions set the stage for and increase the likelihood of young people of color experiencing diminished mental health and well-being and suboptimal academic performance. A recent national survey has documented that students of color are more likely than their white counterparts to experience stress and feelings of being overwhelmed in college. Challenges facing university students of color are occurring in a societal context of heightened racial tension and student activism. Universities around the country have experienced student protests calling for greater attention to diversity on campus and the allocation of resources and implementation of services that support the mental health of young people who are marginalized in the university environment due to their racial, ethnic or cultural identity. Intersectionality involving racial and ethnic identity along with gender, religion, sexual orientation and other characteristics adds to the complexity of biases affecting students in the college environment. This lecture will take a closer look at the experiences of women students of color.

Through its conferences, resources and partnerships, the Steve Fund has begun to elucidate the unique risks and challenges of college students of color and offer information on protective factors, services and resources that can be implemented to buffer, mitigate or eliminate risks to well-being and academic success that will, in turn, create for students of color an equal chance at mental health.

STEPS IN TRANSITIONING TO SUSTAINABLE INTEGRATED MEDICAL AND PSYCHIATRIC CARE

Lecturer: Roger G. Kathol, M.D.

EDUCATIONAL OBJECTIVE:

At the conclusion of the session, the participant should be able to: 1) Understand the “traditional” core health system factors that impede delivery of value-added integrated medical and psychiatric services in medical settings; 2) Recognize the health and cost impact of untreated or poorly treated psychiatric conditions on medical health outcomes and total health-related costs; 3) Create a vision for the development of a system in which it is possible to deliver financially sustainable, value-added integrated psychiatric services and contribute to the triple aim; and 4) Discuss the steps needed to transition from segregated psychiatric services to integrated services delivered in the medical setting.

SUMMARY:

Untreated/poorly treated behavioral health conditions are associated with nearly \$450 billion in extra annual medical expenses for the 14% with behavioral health service use in the U.S. Since the majority of these patients are seen in the medical setting and receive little or no psychiatric treatment, this represents a major opportunity for the U.S. health system to impact the triple aim, but only if it can transition to a value-added approach to psychiatric service delivery that not only improves total medical and behavioral health but also leads to more efficient use of health care resources. This lecture will discuss traditional psychiatric care delivery in the current system, the impact of poor psychiatric care on total health and spending, a vision of an integrated delivery system, and the steps needed to transition from segregated psychiatric care to sustainable, value-added psychiatric care delivered in the medical/surgical setting.

PUBLIC HEALTH APPROACHES TO SUICIDE PREVENTION

Lecturer: Holly C. Wilcox, Ph.D.

EDUCATIONAL OBJECTIVE:

At the conclusion of the session, the participant should be able to: 1) Describe the epidemiology of suicide; 2) Review popular theories and models of suicide; and 3) Discuss current public health approaches to suicide prevention with regard to effectiveness and feasibility.

SUMMARY:

Suicide is a serious public health problem that accounts for over a million deaths annually worldwide. The Centers for Disease Control and Prevention recently released a report based on a comparison of suicide data in the U.S. in 1999 and 2014, showing that the overall suicide rate has increased by 24% during this time, from 10.5 to 13.0 per 100,000. There is a developmental aspect of suicidal behaviors with first origins often in adolescence. Theories of suicidal behaviors include social factors (lack of meaningful connections; feeling ostracized, lonely or burdensome), emotional pain (depression, acute anxiety, agitation), reactive and impulsive response to stress, and cognitive factors (impulsivity, rigidity); however, there is heterogeneity in suicidal presentation and course. There is evidence that biological diatheses (e.g., HPA axis, glutamate, 5HT) are important in the way suicidal behaviors are sometimes triggered by an acute stressor. This maladaptive response likely has both cognitive and biological diatheses. This lecture addresses evidence-based and promising suicide prevention approaches at the primary and secondary levels. The implementation of coordinated, developmentally timed, evidence-based suicide prevention approaches at all intervention levels is most likely to have an impact on reducing suicide. For most individuals who die by suicide, there are opportunities for intervention before imminent risk develops. The current state of the science in suicide prevention points to the value of investing in “upstream” universal interventions that build skills and resilience, as well as policies that enable access to care and protection from lethal means.

THE USE OF CLOZAPINE IN THE TREATMENT OF SCHIZOPHRENIA

Lecturer: John M. Kane, M.D.

EDUCATIONAL OBJECTIVE:

At the conclusion of the session, the participant should be able to: 1) Be familiar with the different

types of studies and data relevant to clozapine’s efficacy and effectiveness; 2) Better understand the various perceived and real obstacles to clozapine’s use and strategies to address them; and 3) Have a better sense of how to address issues of patient and family psychoeducation and how to facilitate shared decision making.

SUMMARY:

Clozapine remains the only antipsychotic medication with regulatory approval for use in “treatment-resistant” schizophrenia. It is also indicated, in the U.S., for reducing the risk of recurrent suicidal behavior in patients with schizophrenia or schizoaffective disorder. Despite this, clozapine is significantly underutilized. Estimates suggest that 20–30% of patients with a schizophrenia diagnosis would be candidates for clozapine based on poor response to alternative agents; however, only six percent of patients are receiving this medication. Patterns of clozapine use vary considerably from hospital to hospital, clinic to clinic and country to country, suggesting that the issue is not as much patient-based as provider- and system-based. There are a variety of reasons why clozapine is underutilized, ranging from confusion surrounding current data on its superior efficacy, physician reluctance to use an arguably more “complex” or “risky” medication and patient/family hesitancy. In addition, many of those who do receive a trial might stop prematurely due to potentially manageable adverse effects. There is a variety of data from clinical trials, naturalistic studies and meta-analyses that have been conducted regarding clozapine’s efficacy and effectiveness. On balance, the results support a unique role for clozapine; however, there remains some confusion, as some meta-analyses are not consistent with this view. There are a number of methodological problems in conducting studies of clozapine in treatment-resistant patients, ranging from inconsistent inclusion/exclusion criteria to variability in dosing strategies. This lecture will summarize existing knowledge, point out gaps in our evidence base and suggest methods of resolving current uncertainties. In addition, issues around provider training and support system incentives, as well as patient/family psychoeducation and shared decision making, will be discussed.

ETHICAL LOVE IN THE LEADERSHIP AND ADMINISTRATION OF PSYCHIATRY AND SOCIETY

Lecturer: Steve Moffic, M.D.

EDUCATIONAL OBJECTIVE:

At the conclusion of the session, the participant should be able to: 1) Clarify the hidden and underrecognized importance of certain aspects of “love” in administration and leadership; 2) Make a case for the well-being of colleagues and staff to be the primary ethical priority of psychiatric administrators, even above that of patient care; and 3) Present how administrators, clinicians and loved ones can help prevent and reduce the epidemic rate of burnout in mental health caregivers and general health care.

SUMMARY:

As the popular song title goes, “What’s Love Got to Do With It?” In other words, what does love have to do with psychiatric administration and leadership? Isn’t love of patients and staff unethical and something to be avoided? Yes, passionate and sexual love is a four letter word in mental health care. That kind of love is often a major problem in transference and countertransference interactions with patients. In googling “love in psychiatry,” you can find over 24 million entries that seem to cover that kind of love in our field. But that isn’t the kind of ethical love that has been hidden by the unethical kind. If you skim the Google entries, you will find virtually none on the ethical aspects of love, the care and compassion that is therapeutic in relationships. Take some of the major historical leaders in psychiatry and medicine. Freud wrote that “psychoanalysis is in essence a cure through love.” The psychologist Erich Fromm wrote in *The Art of Loving* that the healthiest people seemed to be those who received a combination of unconditional and conditional love from their two parents and other early authority figures. The great medical missionary in Africa, Albert Schweitzer, M.D., in explaining his switch from religious teaching to medicine, wrote “But this new form of activity would consist not in preaching the religion of love, but in practicing it.” The leading physician in addressing dignified dying, B. J. Miller, M.D. said this about the hospice he led: “But really the job is relating to a fellow human being. And so you kind of get smothered in that love when you walk into the house.” Avedis Donabedian, M.D., known as the “father of quality improvement” in medicine, said this on his deathbed: “Ultimately, the secret of quality is love. You have to love your patient, you have to love your profession, you have to love your God. If you have love, you can then work backward to monitor and improve the system.” I will try to bring these statements about love to bear upon

psychiatric administration and leadership, leading to what may be the very controversial recommendation that the well-being of colleagues and staff should be the primary ethical principle in our work settings. If followed, that principle is a key way to maintain wellness and reduce burnout, which will in turn improve patient care. Given that this is an election year for President of the United States, and we are meeting in Washington, D.C., one month before the election, I will briefly discuss how the same use of love for citizens can make for a better President. In society, one current example to model after is Lin-Manuel Miranda, who developed the unprecedented Broadway hit, *Hamilton*. My own story of coming to this conclusion about ethical love will be presented from the perspective of my “edge leadership,” leadership at the perilous edge of being inside and outside of the boundaries of organizations.

OCT 07, 2016

MARIJUANA: SCIENCE IN THE CONTEXT OF A SHIFTING SOCIAL AND LEGAL ENVIRONMENT

Lecturer: Wilson M. Compton, M.D.

EDUCATIONAL OBJECTIVE:

At the conclusion of the session, the participant should be able to: 1) Understand how the legal landscape regarding marijuana has shifted in the U.S. over the past 20 years, including the significant variation in ways that new laws are implemented; 2) Witness the impact of early marijuana use on educational and addiction outcomes; and 3) Know the evidence for the role of marijuana exposure on the onset of schizophrenia.

SUMMARY:

Drug addictions are quintessential gene-environment-development disorders that respond to environmental shifts, including changes in social and legal domains. A key recent example is the shifting landscape of marijuana-related legal policies, with reduced penalties for possession, expanded access for use of marijuana to treat health conditions and full nonmedical marijuana sales in some locations. Complicating the situation is the fact that marijuana has been changing, with increased potency of the plant, extraordinary potency of plant extracts and widespread availability of oral forms of marijuana extracts. The marijuana plant contains more than 500 chemicals, including more than 100 cannabinoid compounds (of which THC is just one). These

substances interact with endocannabinoid receptors, which play a central role in the formation of neural connections, both early in life and during adolescence. By acting ubiquitously on the endocannabinoid system, marijuana alters the finely calibrated functioning of various brain areas. Evidence is accumulating that marijuana use, especially when frequent and of early onset, is associated with poorer learning and educational attainment and addiction outcomes. One large New Zealand longitudinal study found up to an eight point IQ loss in adolescent heavy marijuana users who developed persistent marijuana use disorders. To help understand these potential developmental concerns, a major longitudinal study is now being conducted by the NIH—the Adolescent Brain and Cognitive Development (ABCD) study. Epidemiological and preclinical evidence also suggests an addiction priming effect for nicotine when taken during adolescence, and alcohol may also have deleterious effects on brain development. Nicotine, alcohol and marijuana, alone and in combination, will be studied in the ABCD study. While marijuana is not associated with overdose deaths, claiming that marijuana is “safe” overlooks the subtler long-term developmental hazards that are less immediately visible and less easy to quantify. In particular, evidence suggests a role for marijuana exposure (especially early onset and frequent use) in the onset of schizophrenia.

MEDICAID IMPACT ON YOUR PATIENTS AND YOUR PRACTICE: UBIQUITOUS AND COMPLICATED

Lecturer: Joseph Parks, M.D.

EDUCATIONAL OBJECTIVE:

At the conclusion of the session, the participant should be able to: 1) Describe how Medicaid coverage is different from commercial insurance and Medicare; 2) Describe how changes in Medicaid policy have resulted in changes in the behavioral health care delivery system; 3) Describe a wide range of different eligibility groups in criteria used in Medicaid; and 4) Describe the role of Medicaid in funding specialty behavioral health services.

SUMMARY:

Medicaid is the single largest payer the United States for behavioral health services, accounting for 26% of behavioral health spending in 2009. In 2011, one in five Medicaid beneficiaries had a behavioral health diagnosis, but this 20% accounted for almost half of all Medicaid expenditures. About half of the non-

dually eligible enrollees under age 65 (including children) qualified for Medicaid on the basis of disability have a behavioral health diagnosis. Total Medicaid expenditures for this group account for two-thirds of total Medicaid spending. Medicaid eligibility criteria, benefits, payment and financing are radically different from commercial or Medicare coverage. Although held to the same broad standards, each Medicaid program in every state has substantially important differences from other Medicaid programs. Medicaid in any individual state is not a single program but rather a large number of separate programs often administered by separate state agencies and contractors. Since its inception over 50 years ago, entire sectors of the behavioral health delivery system have arisen and at times been swept aside by changes in Medicaid policy. Medicaid’s broad scope and remarkable flexibility make it an ideal platform for innovations in health care delivery reform, but Medicaid’s tremendous complexity makes it confusing the patients, providers, the general public and politicians. This lecture will provide a brief history of the Medicaid program in an overview of its current structure and components with a special emphasis on behavioral health benefits in persons with behavioral health conditions. The lecture will conclude with an overview of current developing and upcoming Medicaid changes and their likely impact on the daily work of psychiatrists and the patients they treat.

OCT 08, 2016

GLOBAL MENTAL HEALTH AND MY TRANSATLANTIC EXPERIENCE: FOCUS, COMMITMENT AND RETROSPECTIVES

Lecturer: Geetha Jayaram, M.D.

EDUCATIONAL OBJECTIVE:

At the conclusion of the session, the participant should be able to: 1) Understand the impact of mental illness/depression on women and young adults in low-income countries; 2) Comprehend the interaction of care delivery and the use of local resources in community psychiatry; 3) Analyze obstacles to care delivery and apply the low cost model to their own system of care; and 4) Apply sustainable systems of care delivery.

SUMMARY:

The recognition of the service needs for the mentally ill is a rising global concern. In low- and middle-income countries, such as China and India, common

mental disorders such as depression and anxiety often remain unaddressed. These disorders are twice as common in women as compared to men. Problems exist with access to care, poverty, low literacy, and social and environmental obstacles, as well as stigma and discrimination. The World Health Organization, leaders in global health, and local ministries and governments recognize the importance of funding, local barriers to progress and development, and the need to address the key issues of human resources for health and human rights. Beside the call to governments and donor agencies that shape national health policies in low- and middle-income countries, one needs to increase funding per person by about \$2 to begin implementing interventions. Suicide rates among young persons are on the rise worldwide, with a dire need for immediacy in treatment. The five key goals to scale up services to people with mental disorders are placing mental health on the public health priority agenda, improving organization of mental health services, integrating the availability of mental health into general health care, developing human resources for mental health through local staffing, and strengthening public mental health leadership and partnerships. The Maanasi project is one such solution initiated, directed and supported by Dr. Jayaram and her colleagues; implemented through a private/nonprofit/academic partnership; integrated into primary care; supported by locally employed and trained female caseworkers; with a tripartite mission of patient care, teaching and research. The project now has a reach of 206 rural villages encompassing a population of six million households. Dr. Jayaram will introduce, describe and discuss the Maanasi project, the obstacles she faced to deliver care and the studies conducted during the last 17 years of care delivery.

THE TREATMENT OF SCHIZOPHRENIA: HOW FAR HAVE WE COME?

Lecturer: John M. Kane, M.D.

EDUCATIONAL OBJECTIVE:

At the conclusion of the session, the participant should be able to: 1) Help the audience understand the need for and nature of coordinated specialty care in early phase psychosis; 2) Promote a better understanding of the advantages and disadvantages of long-acting injectable antipsychotics; and 3) Discuss the identification and treatment of resistant or refractory illness.

SUMMARY:

Although schizophrenia affects less than one percent of the population, it is associated with a variety of often chronic symptoms affecting numerous domains of thought, behavior and functioning, as well as considerable risk of hospitalization, comorbid medical and psychiatric conditions, and shortened life span. The introduction of pharmacological agents was a major advance in the treatment of this illness; however, the need for coordinated, team-based, interdisciplinary care cannot be emphasized enough and remains inconsistently available. Nonadherence is a challenge in any chronic medical or psychiatric illness, but schizophrenia is associated with additional challenges in terms of access to care, insight, stigma and social support. The development of long-acting injectable (LAI) formulations of antipsychotic medications was an attempt to facilitate the management of schizophrenia in providing patients with an alternative to daily pill taking and families and providers with more direct knowledge of medication taking. However, this strategy was associated, at times, with perceptions of coercion and increased stigma. The clinical data addressing effectiveness of this treatment approach can be confusing, with a range of results depending upon the design of the investigation. Many experts feel that LAIs are often underutilized, and recent research suggests that their introduction in early phase illness can be very effective in reducing rates of hospitalization. Though antipsychotic medications can be efficacious for the majority of patients, particularly in alleviating or controlling positive symptoms, a substantial minority of patients derives inadequate benefit. Strategies to treat such patients are limited, with clozapine being the only medication that has a regulatory indication for treatment resistant/refractory individuals. At the same time, clozapine has a variety of side effects, can be difficult to manage and is substantially underutilized. Recent attention has been focused on the importance of coordinated specialty care provided to patients as early in a schizophrenia illness as possible. Data from large controlled trials support the effectiveness of this approach, and it is becoming more widely available across the U.S. At the same time, challenges remain in engaging individuals early in the illness, and the duration of untreated psychosis appears to be an important factor in how much impact coordinated specialty care can have on important outcomes. The duration of untreated psychosis in the U.S. has a median of well over one year, and a variety of efforts are underway to

attempt to address this challenging issue. Important work is also underway in attempting to identify biomarkers for clinical response in order to guide treatment decisions without the type of trial-and-error approach that is too often the case. This lecture will discuss these and other issues and provide a perspective on progress and remaining unanswered questions.

GUN VIOLENCE AND MENTAL ILLNESS

Lecturer: Liza H. Gold, M.D.

EDUCATIONAL OBJECTIVE:

At the conclusion of the session, the participant should be able to: 1) Understand the relationship between gun violence and mental illness, including suicide; 2) Improve their skills in identifying patients at risk for firearm violence and their familiarity with interventions to mitigate risk; 3) Develop clinical skills in discussing firearm safety with patients and/or their families to decrease the risk of suicide by firearm; and 4) Discuss the mental health prohibited categories of firearm ownership and the clinician's reporting requirements with patients.

SUMMARY:

The sensational media coverage of horrific mass shootings usually includes calls from all sides to "keep guns out of the hands of the mentally ill." This narrow and mistaken portrayal of both those with mental illness and the problems of gun violence increases the stigma associated with mental illness. It has also led to a cultural learned helplessness demonstrated in the paralyzing political and social debate over decreasing the toll of injury and death due to firearms. Contrary to stereotypes, most individuals with serious mental illness are not violent, and when violent, rarely use firearms. Suicide, not mass shootings, is the connection between gun violence and mental illness. Approximately 33,000 people in the U.S. die each year from gun violence; of these, over 20,000 are suicides. Firearms account for approximately 50% of all suicide deaths. Suicide is the tenth leading cause of death in the U.S. and the second leading cause of death in adolescents and young adults; over 90% of people who commit suicide have a psychiatric disorder. Options to intervene when persons with mental illness may be at increased risk of harming themselves or others are limited. Most individuals with mental illness do not meet statutory firearm restriction criteria; many often do not meet involuntary commitment criteria. At times, even

people who meet commitment criteria cannot be hospitalized because a bed is not available. Dr. Gold will discuss some of the political implications of increasing physician involvement in addressing the morbidity and mortality of firearm violence and suggest clinical interventions that may help decrease the toll of firearm suicide.

POSTER SESSIONS

OCT 06, 2016

POSTER SESSION 1

NO. 1

VIEW FROM THE GROUND: PERSPECTIVES ON RECOVERY

Poster Presenter: Kate Lieb, M.D.

Lead Author: Sonal Harneja, M.D., M.H.S.

Co-Author(s): Kate Lieb, M.D., Madeleine Abrams, L.C.S.W., Kristina Muenzenmaier, M.D., Joseph Battaglia, M.D.

SUMMARY:

The recovery movement emerged as new emphasis was placed on the community. States received incentives to move people out of psychiatric hospitals. The model was designed for consumers to have primary control over their own care. As resident physicians doing a six-month rotation at a state psychiatric hospital in New York, we have been trained to incorporate the goals of recovery into our daily interactions. We have experienced how optimism, focus on a meaningful life, developing supportive relationships and continuity of care can lead to successful outcomes. Because we are trainees with a sheltered caseload and more bureaucratic freedom, we have the unique ability to dedicate significant time and effort to secure appropriate services and follow consumers and families after discharge from a psychiatric facility. In order to maximize positive outcomes, residents in our program have developed a resident-led systems curriculum, which is in the third year of operation. However, despite dedicating significant time to learning about and applying for services, we faced challenges and blockages in the system. The frustration and uncertainty we experienced in this process taught us that knowing the needs and resources was not enough. While educating and empowering consumers, families, trainees and staff

about complex systems is the first step, the next step is to translate the knowledge into action. Although services like supportive housing, supported employment and ACT teams are successful and cost-effective, very few people with serious mental illness ultimately receive these services. We came to believe that advocating for and with consumers and families is an important way to minimize homelessness, drug abuse, incarceration, suicide and violence. In this poster presentation, we will outline the ways in which we feel the recovery movement could be enhanced to achieve better outcomes. Using case illustrations, we will demonstrate how ongoing relationships with trusted professionals and systemic interventions including collaboration with family and other resources have a dramatic impact on the ability of the individual to manage in the community. We believe that it is essential for providers who see what is occurring in the lives of consumers and families to advocate for and with them. We will outline the steps in which trainees can be involved in working on multiple levels: the level of the individual and family, the level of the community, and, finally, the level of policy.

Objective: 1) Learn about clinical examples of both success and failure in negotiating the complex mental health system; 2) Identify barriers to effective recovery that consumers and families face in the current climate and learn about ways they can promote collaborative advocacy; 3) Learn how trainees can be effective advocates for enhancing the goals of the recovery movement.

NO. 2
THE KING OF SPIROCHETES GOES WILD!
NEUROSYPHILIS-TRIGGERED MANIA
Poster Presenter: Leah R. Steinberg, M.D.
Co-Author(s): Ramotse Saunders, M.D.

SUMMARY:
Background: Despite the fact that syphilis' incidence has declined since the advent of penicillin, it is still important to screen patients for the disease. Neurosyphilis has currently presented either asymptotically or as dementia. When presenting with psychiatric symptoms, the majority of patients do not have manic symptoms. It is important for clinicians to be aware of this uncommon presentation to facilitate early diagnosis. **Case:** A 51-year-old HIV-positive African-American man with no known psychiatric history was admitted to investigate reported diarrhea and anorexia for the previous three weeks. Consultation-liaison consult

was requested to assess the patient's odd behavior. The patient was found to have pressured speech and grandiose and paranoid delusions during the interview. He reported lack of sleep and appetite for one week, accompanied by a weight loss of 10 pounds. He denied substance use; however, he did not provide urine toxicology due to limited cooperation and paranoid delusions about certain health care providers. CBC, CMP, TSH, vitamin B12, folate and testosterone were within normal limits. Head CT was unremarkable. Rapid plasma reagin was reactive (1:64). The patient did not agree to lumbar puncture initially due to paranoid ideation and was started empirically on intravenous penicillin G. Subsequent CSF showed 10 WBC, 96% lymphocytes, and normal glucose and protein after three days of antibiotic therapy. CSF VDRL was negative. Decision to pursue inpatient psychiatric treatment was deferred until completion of intravenous antibiotic therapy. The patient refused any psychotropic treatment. **Results:** The patient was hospitalized for 16 days and treated with intravenous penicillin G for 10 days, showing total resolution of manic symptoms. **Conclusion:** Manic symptoms in this patient were possibly due to neurosyphilis. We recommend assessing all patients, regardless of age, with new-onset behavioral and mood disturbances for all possible medical etiologies, even when the presentation is "classic."

NO. 3
HEALTH PROFESSIONAL STUDENTS AS LAY
COUNSELORS: AN EVIDENCE-INFORMED MODEL
FOR THE DELIVERY OF BEHAVIORAL HEALTH TO
UNINSURED IMMIGRANTS
Poster Presenter: Juan Rodriguez-Guzman, B.S.
Co-Author(s): Marco Ramos, B.A., Michelle Silva,
Psy.D., Andres Barkil-Oteo, M.D.

SUMMARY:
Background: Undocumented immigrants face psychosocial stressors associated with mood disorders while emigrating and living in the United States. Since the implementation of the Affordable Care Act, restrictive policy measures have limited access to health care for undocumented immigrants. Global initiatives to train lay counselors in the delivery of mental health care have been shown to be effective with populations located in low-resource settings. To address the lack of mental health providers available to the uninsured Spanish-speaking immigrant community, a behavioral health program led by supervised health professional

students acting as lay counselors was implemented in a student-run free clinic. **Methods:** Spanish-speaking health professional students were trained and supervised by a team of psychiatrists and psychologists to deliver a psychoeducational curriculum to patients at a Yale-affiliated, student-run free clinic. Over a period of six to eight sessions, patients participated in a series of individual meetings with the student facilitators designed to 1) improve their understanding of common acculturative stressors associated with the Latino immigrant experience, 2) reduce their psychosocial stressors and 3) enhance their coping skills. The Patient Health Questionnaire-9 (PHQ-9) was used to monitor patients' response to the program intervention. **Results:** Since the program's inception in 2012, 256 patients who have sought medical care at the student-run free clinic have been screened for depression with the Patient Health Questionnaire-2 (PHQ-2). Approximately 35% of patients (N=88) had a positive PHQ-2 and were administered a PHQ-9. Twenty-two patients have enrolled in the program—66.7% female with a mean age of 40.3 (SD=12.5). Eighteen patients completed the program (three dropped out after the first session; one was transferred to a mental health professional). For patients who completed the program, average initial PHQ-9 score was 11.7 (SD=6.14), and average PHQ-9 score after completing the program was 4.88 (SD=4.59). There is a statistically significant decrease from initial PHQ-9 to final PHQ-9 ($p \leq 0.001$). **Conclusion:** This student-run behavioral health program serves as a model for rational task shifting, expanding access to mental health services to undocumented immigrants, and educating students in the social and cultural barriers that affect the delivery of mental health care in the Latino immigrant community.

NO. 4 GAUGING THE INTEREST OF SMARTPHONE APPS TO IMPROVE MENTAL HEALTH LITERACY AND PARENTING AMONG CHINESE-AMERICAN PARENTS

Poster Presenter: Emily Y. Wu, M.D.

Co-Author(s): John Torous, M.D., Cindy Liu, Ph.D.

SUMMARY:

Background: Previous studies suggested that Asian Americans have lower rates of seeking help for mental health-related services as well as of utilizing mental health services. Current recognized factors that hinder them from utilizing mental health services include the internalized model minority

myth, the acculturative gap between parents and children, pervasive social stigma in Asian-American communities, family influence, and culture-specific cognitive beliefs of mental illness. Given the high usage of smartphones and associated applications (apps), mobile technology could be a potential promising tool to deliver resources addressing intergenerational acculturation and mental health problems in youth. **Objective:** The goal of this study is to evaluate the level of interest in improving mental health literacy and intergenerational acculturation conflicts. Given the high usage of smartphones in this population, we are interested to learn if Chinese Americans are willing to use smartphone applications to learn about mental health problems in youth and culture-specific parenting strategies. **Methods:** One hundred Chinese-American parents with a child at age 3–10 were recruited at a large inner city Chinese community center to complete a paper-and-pencil survey regarding smartphone ownership, use, and interest in utilizing mobile applications to learn parenting skills and mental health problems in youth. **Results:** The results will include the current prevalence of using health-related smartphone apps among Chinese-American parents, the interest level of using apps to learn child behavioral problems and culturally oriented parenting strategies, and the customized application features that parents are looking for. **Conclusion:** The findings of this study will demonstrate if mobile technology could be an alternative platform to deliver culture-sensitive, affordable and accessible mental health resources for the underserved Chinese community. The utilization of mobile apps can improve parental screening and consequently encourage help seeking for behavioral problems in their children. Future studies should focus on evaluating the efficacy and effectiveness of such culturally customized smartphone apps for improving mental health quality among the minority community.

NO. 5 MENTAL AND PSYCHOSOCIAL OUTCOMES OF GENDER IDENTITY DISORDER

Poster Presenter: Sahar Ashraf, M.D., M.B.B.S.

Co-Author(s): Fatima Motiwala

SUMMARY:

Background: With the recent introduction of the biopsychosocial model of treatment for psychiatric disorders, inclusion of psychotherapy in intensive outpatient programs and increased resources for

patients with mental health issues have helped patients maintain normal functioning in daily life. **Objective:** Highlight the early diagnosis of gender dysphoric disorder and treat patient for all the mental and psychosocial outcomes. We found out that such patients are often misdiagnosed or diagnosed late in life, which affects their overall functioning in life. **Case:** We report a case of a 69-year-old female patient who presented to Mayhill Hospital in late May 2016 with an episode of major depressive disorder (MDD) and suicidal ideation. Medical history was noncontributory, and the patient was cooperative, alert and well oriented. She was admitted and received group therapy, activity therapy and counselling. Her other psychiatric comorbidities were MDD and PTSD attribute to gender dysphoric disorder. History includes social harassment and an attempt on her life due to her sexual orientation. She received multiple sessions of ECT and improved clinically. She was discharged on antidepressants. Three days after discharge, she was readmitted with manic symptoms this time. She was very anxious, had walked five miles and was constantly talking. She was started on mood stabilizers, antidepressants and psychotherapy. She was diagnosed with MDD, bipolar disorder, borderline personality disorder and gender identity disorder (GID). She received psychotherapy, group inclusions and activity therapy. She was referred to the intensive outpatient program in her home town. She was also educated on safety issues related to her sexual orientation and resources in case of crisis. **Discussion:** The multidisciplinary team for treatment of GID comprises a psychiatrist and psychologist, reconstructive surgeons, an endocrinologist, a speech therapist, a specialist nurse practitioner, and counsellors. As up to one in 10 GID sufferers have problems with mental illness, genital mutilation or suicide attempts, mental health professionals need to maintain close contact with people with GID throughout the process. **Conclusion:** Good clinical management of GID demands a multidisciplinary approach. There are hormonal, psychological, behavioral and surgical components to the management process. The goal is to produce an outward appearance consistent with the patient's gender identity that will allow normal social functioning and bring a sense of self-acceptance.

NO. 6

GENDER DIVERSITY IN PSYCHIATRY CME PROGRAMS: ARE FEMALE VOICES HEARD?

Poster Presenter: Pooja Shah, M.D., M.B.B.S.

Lead Author: Stacy J. Doumas, M.D.

Co-Author(s): Manali Lodaya, M.D., Siana Ziembra, Ramon Solhkhah, M.D.

SUMMARY:

Background: Female faculty members account for 56% of the psychiatric faculty employed primarily at Jersey Shore University Medical Center (JSUMC) and 44% of the faculty in psychiatry for the entire Meridian Health System. A sampling of attendance at Grand Rounds and Symposia for the department also showed a female majority. When Rock Health, a digital health care initiative, looked at speaker demographics from 11 of the 12 largest medical conferences from 2013, they found that women at best were just 38% of the faces on the stage.

Objective: See to what extent female speakers were represented in continuing medical education (CME) programs in the Department of Psychiatry at JSUMC between 2011 and 2016. **Methods:** With IRB approval, CME paperwork from Grand Rounds and Symposia held by the Department of Psychiatry from 2011–2016 was retrospectively reviewed. For each program, each invited speaker's gender and affiliation as either an internal (Meridian) or external (non-Meridian) faculty member were noted. Resident activities were excluded. No further information was collected. Information was compiled by calendar year. **Results:** Results are for invited CME speakers in the department of psychiatry. In 2011, there were 25: 13 (52%) male (nine internal, four external) and 12 (48%) female (11 internal, one external). In 2012, there were 19: 11 (58%) male (five internal, six external) and eight (42%) female (eight internal). In 2013, there were 25: 17 (68%) male (eight internal, nine external) and eight (32%) female (five internal, three external). In 2014, there were 29: 19 (66%) male (nine internal, 10 external) and 10 (34%) female (seven internal, three external). In 2015, there were 30: 19 (64%) male (six internal, 13 external) and 11 (36%) female (six internal, five external). In 2016, there were 18: 11 (51%) male (three internal, eight external) and seven (48%) female (one internal, six external).

Conclusion: Despite the fact that females make up the majority of the Department of Psychiatry at JSUMC and the audience for CME activities, males constitute the majority of speakers, especially speakers from outside institutions. From 2011–2016, there have been an average of 38% female speakers. Although this is far from ideal, we are in line with Medicine X, the most gender diverse of the large international medical conferences looked at by Rock

Health. There are many contributing factors to this lack of gender diversity that may include the following: fewer women in academic positions available to speak, women being more likely to turn down speaking invitations, lack of (or perceived lack of) public speaking skills by women, women being less proactive in seeking speaking opportunities and women invited to speak less frequently than male colleagues. Further research is needed in this area both in psychiatry and other medical fields, as well as solutions for achieving medical speaker gender equality.

NO. 7
SPIRITUALITY TRAINING IN THE MEDICAL CURRICULUM: A MEDICAL STUDENT PERSPECTIVE

Poster Presenter: Pooja Shah, M.D., M.B.B.S.

Lead Author: Stacy J. Doumas, M.D.

Co-Author(s): Michael Ullo, B.S., David Cotton, David Kountz, M.D., Ramon Solhkah, M.D., Joseph Miller, Ph.D.

SUMMARY:

Spirituality is an important element of humanity, encompassing an individual's search for meaning and purpose. The parallel between spirituality and health has been present for centuries, but it has only recently been recognized as an important component of medical care and student training. The incorporation of spirituality in the medical student's curriculum is almost a revolution when we think about restoring a balance between evidence-based and humanistic aspects of patient care. Initially started through a grant from GWish and the Templeton Foundation in 2014, reflection rounds are now incorporated into the curriculum of approximately 50 third- and fourth-year allopathic and osteopathic medical students and physician assistant students doing core rotations in psychiatry at Jersey Shore University Medical Center (JSUMC). As part of the reflection rounds curriculum, education is provided to the students on the role of spirituality in health care and health outcomes, the role of pastoral care in patient care, and how personal biases can impact patient care. Students are also taught how to take a spiritual history. Weekly reflection rounds start with a deep breathing ritual for relaxation. During the one-hour period, the students get an opportunity to discuss how they address the spiritual needs of patients and themselves with a psychiatrist and chaplain co-facilitating. At the end of the academic year, an anonymous, voluntary online survey is available to

all participants, giving the students the opportunity to share their perspective on reflection rounds. Retrospective analysis has been performed using the survey data from the 2014–2015 academic year for the purpose of improving the quality of the medical student curriculum. There were 40 medical students who completed a six-week psychiatry rotation at JSUMC and participated in weekly reflection rounds for 90 minutes. Among them, 28 (56%) completed an online questionnaire aimed at identifying strengths and weaknesses of the sessions. Over 70% of participants viewed reflection rounds as a valuable part of the psychiatry curriculum at JSUMC. Sixteen (57.14%) participants indicated that the sessions enhanced their understanding of the role of spirituality in health and health care outcomes. Additionally, the majority of participants felt more comfortable referring patients to pastoral care services when needed. Students identified the length of the sessions as well as a lack of well-defined objectives as potential weaknesses of reflection rounds. The curriculum has been adjusted to address these concerns. In conclusion, reflection rounds are a well-received part of the psychiatry curriculum at JSUMC, as they provide students with a safe environment to discuss the role of spirituality in medicine. Efforts are also being made to extend reflection rounds to other rotations and graduate medical education at JSUMC.

NO. 8
THE IMPACT OF PSYCHOSOCIAL STRESS ON SEXUAL RISK BEHAVIORS AMONG GAY, BISEXUAL AND QUESTIONING MALE ADOLESCENTS

Poster Presenter: Joshua Milber, M.P.H., B.A.

SUMMARY:

Background: Compared to heterosexuals, adolescents who identify as gay, bisexual or questioning (GBQ) experience a higher prevalence of mental illness related to psychological and social stress. GBQ adolescent males also account for the largest proportion of new HIV infections among youth. It has yet to be elucidated how a higher level of psychosocial stress among GBQ male adolescents predicts sexual risk behaviors. **Methods:** Data analysis of the 2011 New York City Youth Risk Behavior Survey (YRBS) was conducted to compare the level of psychosocial stress and sexual risk behaviors between GBQ and heterosexual male adolescents. The relationship between psychosocial stress and sexual risk behaviors among GBQ male adolescents was assessed using general linear

models. Dichotomous survey items measuring depressed mood, suicidality and victimization were used to assess psychosocial stress. Sexual risk behaviors included multiple sexual partners, condom nonuse and alcohol/drug use during intercourse.

Results: All indicators of psychosocial stress were found to be higher among GBQ male adolescents compared to heterosexual male adolescents. GBQ male adolescents were also more likely to recently pursue risky sexual behaviors. Finally, depressed mood, suicidality and victimization were found to significantly predict the likelihood of sexual risk behaviors, and all psychosocial variables predicted alcohol/drug use during recent intercourse.

Conclusion: The increased levels of psychological and social stress experienced by sexual minority adolescents appear to be significant predictors of if an adolescent engages in risky sexually behaviors. Mental health should be an essential component of HIV/STD prevention efforts to effectively decrease the prevalence of sexual risk behaviors of GBQ adolescents.

NO. 9

HEALTH CARE DISPARITIES AMONG LGBT YOUTH: A LITERATURE REVIEW

Poster Presenter: Hudaisa Hafeez, M.D.

Co-Author(s): Muhammad Zeshan, M.D.,

Muhammad Annas Tahir, M.D., Nusrat Jahan, M.D.

SUMMARY:

Background: Approximately 3.5% of American adults identify themselves as lesbian, gay or bisexual, while 0.3% are transgender. The members of the LGBT community include almost every race, ethnicity, religion, age and socioeconomic group. Although the members of this community share health-related issues with the rest of the population, they face a significant number of health care disparities. This community is also at a higher risk for smoking, alcohol, substance abuse, STDs (including HIV), cancers, cardiovascular disease, poor fitness, obesity, bullying, isolation, rejection, anxiety, depression and suicide. LGBT individuals experience disparities not only in the prevalence of certain physical and mental health concerns, but also in care due to a variety of factors, including experiences of stigma, lack of awareness and insensitivity to their unique needs. The goal of our literature review was to include all the aspects of imbalance faced by this population group, which include a lack of effective health care and difficulties with hospital administration and procedural as well as increased

prevalence of certain diseases. We also focused on the identification of risk factors and the solution to these issues. **Methods:** We did an extensive search on PubMed by using the following keywords: lesbian, gay, bisexual, transgender, queer, LGBTQ, youth, health care disparities. After our extensive search, we found 27 studies, of which we selected 13. We excluded the studies that were repetitive and were not directly addressing our research question.

Results: Our results showed that there are a number of factors responsible for increased negative health outcomes in LGBTQ youth and adolescents as compared to their mainstream heterosexual counterparts. They are at higher risk of certain medical and mental health problems. There is a huge need to educate health care providers about using nonjudgmental and gender neutral language during their daily interaction with their patients.

Conclusion: The review of literature gives an insight on significant differences in the mental and physical health of LGBTQ youth. Stigmatization, social stress, peer victimization and family rejection are some of the compounding factors. Health Care providers, in general, do not have enough information on the specific needs and challenges faced by this community, so there is a lack of education in institutes and community programs. This lack of information perpetuates prejudice and discrimination, resulting in suboptimal medical care and increased incidence of certain diseases and their risk factors. Health Care providers need to be educated, proper training needs to be put in place and efforts need to be made to put existing guidelines into practice in order to provide more comprehensive, scientific and humane care for this community.

NO. 10

“WE DON’T TALK ABOUT THAT STUFF”: A TOOLKIT FOR INTEGRATING SEXUAL AND REPRODUCTIVE HEALTH SERVICES INTO OUTPATIENT PSYCHIATRIC PRACTICE

Poster Presenter: Martha Craig Ward, M.D.

Co-Author(s): Jesse Zatlhoff, Zoe Philip, Darby Ford,

Silke von Esenwein, Ph.D.

SUMMARY:

Background: Sexual and reproductive health (SRH) services, including STI testing, pap smears and contraception, are critical areas of women’s health and well-being. Women with severe mental illnesses (SMI) are more likely to experience adverse sexual and reproductive outcomes, but are less likely to

receive preventive screenings than women without SMI. In addition, the conventional wisdom among mental health care professionals has been that people diagnosed with SMI are not sexually active, and research has shown a general discomfort about discussing SRH with their patients. As a result, psychiatrists rarely discuss SRH with their clients, instead focusing on medication and symptom management. Since outpatient mental health providers are often the only point of access to health care for women with SMI, they are missing an important opportunity to provide the most basic and urgent medical needs to this vulnerable population. Thus, there is an urgent need to educate and train mental health providers on the SRH needs of their female patients. **Methods:** A retrospective chart review of adult women of reproductive age with SMI at a large, inner-city, safety net hospital was performed to examine if women receive adequate preventive services. The records were examined over time frames based on the CDC recommendations for STIs and other preventive screenings. Additionally, a short survey was created and administered to psychiatrists working at the Behavioral Outpatient Center to determine provider comfort and practices in addressing the SRH of their female patients. **Results:** The electronic medical records showed only a small proportion of patients received the recommended level of preventive SRH services, including well woman exams, pap smears and STI tests. Psychiatrists reported that there is not enough time to address SRH concerns and that other topics take precedence during appointments. Instead, most psychiatrists reported only discussing SRH when prompted directly by patients during appointments. The Prescribe, Refer, Educate model was developed to help psychiatrists address the SRH needs of women with SMI. This interactive training and toolkit intervention addresses psychiatrists' concerns and improves their knowledge of SRH topics. The training is geared toward integrating SRH topics into psychiatrists' workflow and focuses on safe sex practices, STI tests and contraception, as they pertain to women with SMI. **Conclusion:** This intervention improves patient outcomes and increases access to care by simplifying psychiatrists' workflow and responses to SRH issues. The next step will be to incorporate feedback about the intervention that will be gathered through one-on-one interviews. Then, a formal outcome evaluation of the training toolkit will be conducted to measure the knowledge and comfort levels of mental health providers who participated in the training.

NO. 11
EVALUATION OF RELATIONSHIP BETWEEN MBTI PERSONALITY FACTORS AND BIG FIVE PERSONALITY TRAITS WITH PREMENSTRUAL SYMPTOMS

Poster Presenter: Mahrokh Shayanpour, M.D.

Co-Author(s): Mohammad R. Abedi, Ph.D., Maryam Hoorfar, M.D.

SUMMARY:

Background: Premenstrual syndrome (PMS) is a cluster of psychological and/or physical symptoms in women that emerge one to two weeks before the onset of menstruation. PMS is highly prevalent and profoundly interferes with quality of life. The purpose of this study was to explore if there is any association between personality traits assessed by the Myers Briggs Type Indicator (MBTI) test and Big Five Inventory and symptoms of PMS. **Methods:** Women ages 20–45 were screened from an outpatient clinic in Shariaty General Hospital in Esfahan, Iran. 120 women were selected randomly after screening for major mental illness, hormone or psychotropic medication treatment, breastfeeding, pregnancy, and menopause. These women had to be in the luteal phase of their menstrual cycle to qualify for the study. A PMS questionnaire as well as MBTI and Big Five Inventory were administered. **Results:** Neuroticism scores correlated positively with PMS symptoms ($p=0.01$), and agreeableness and conscientiousness both correlated negatively with symptoms ($p=0.02$ and $p=0.005$, respectively). After analyzing for correlations between symptoms and MBTI questionnaire scores, the intuition and feeling types correlated positively with PMS symptoms ($p=0.01$ and $p=0.03$, respectively). Psychological symptoms of PMS were more common in the intuition and feeling types ($p=0.01$ and $p=0.01$, respectively), and physical symptoms were more common in the intuition type ($p=0.01$). **Conclusion:** An understanding of how personality traits relate to PMS is essential for a better understanding of the etiopathogenesis of the illness. More clarity about the heterogeneous nature of symptoms will aid in developing interventions specific to illness subtypes. Moreover, large-scale replications of this study will aid in identifying vulnerable populations.

NO. 12
DISORDER OF THE QUARTER: A NEW QUALITY IMPROVEMENT AND LEARNING TOOL

Poster Presenter: Sahil Munjal, M.D.

Co-Author(s): Alexander Lerman, M.D., Ana Paula Tovar, M.D., Stephen Ferrando, M.D., Eve Kellner, D.O.

SUMMARY:

We want to report the first successful Disorder of the Quarter (DOQ) meeting at our hospital, which was introduced by the chairman of our department. DOQ is an opportunity for all house staff and faculty to review the most up-to-date practice guidelines relating to the management of various psychopathologies. An integral part of DOQ is educating ourselves so that we can make better clinical decisions. Another aspect to this project is investigating our current practices here at our institution to see how we measure up and ultimately looking for ways we can improve. The first topic of investigation was the management of acute bipolar mania. There were two teams of residents assigned to work on this. One team researched the clinical components and guidelines and drafted multiple choice questions/vignettes that facilitated the ongoing education of residents and faculty. The other team of residents did chart reviews and an in-depth investigation on how we currently manage these patients, with the goal to ultimately improve our practices here at our facility. This culminated in a grand rounds presentation, where the current guidelines and treatments in regards to the management of bipolar mania were reviewed, followed up by our own practices in the hospital relating to the evidence base available. The last part of the presentation included the results of the questions, with detailed explanations available. The next presentation will be on the management of schizophrenia, and presentations on other relevant clinical topics will follow. We thus propose the DOQ meetings to be a good learning tool to stay abreast of current management guidelines of psychiatric disorders. It also serves as a good quality improvement tool to explore how our own clinical practice compares to the recommended clinical guidelines.

NO. 13

CURRENT TRENDS AND ATTITUDES OF RESIDENTS TOWARD PERSONAL PSYCHOTHERAPY DURING RESIDENCY TRAINING

Poster Presenter: Sahil Munjal, M.D.

Co-Author(s): Alexander Lerman, M.D.

SUMMARY:

In residency, personal psychotherapy is considered an important part of psychiatric and psychotherapy training. Beginning psychiatrists are still drawn to our specialty by desire and curiosity to understand more about themselves and the people around them, and personal psychotherapy plays a role in that. Many U.S. residency training directors agree on the importance of psychotherapy as a general educational tool, for teaching residents about therapeutic techniques and for managing their emotional reactions toward patients. It is useful for residents coping with premorbid psychopathology and for dealing with the stresses of training in psychiatry. Despite the importance with which training directors view personal psychotherapy, the number of psychiatric residents in personal psychotherapy has decreased over the last several decades. We wanted to survey our residency program to evaluate current trends and attitudes in personal psychotherapy among psychiatric residents. Although there have been studies looking at residents from pooled multiple national residency programs, no study has so far looked at a program individually. In order to do this, we surveyed residents about their reasons for participation in personal psychotherapy, including type of therapy, perceived value of therapy and barriers to pursuing therapy. We also compared the interest in various psychiatric treatments among residents engaged and not engaged in personal psychotherapy. We designed and emailed a brief, voluntary, anonymous survey to be completed on www.SurveyMonkey.com. Of the residents who filled out the survey, 46% were engaged in personal psychotherapy. Comparing our results to similar surveys done in other pooled national residency programs indicated that a higher proportion of our residents seek personal psychotherapy. Also, residents in personal psychotherapy reported a higher level of satisfaction in their training of psychodynamic psychotherapy and other behavioral therapies. The reasons to choose personal psychotherapy as cited by the residents included self-awareness (92%), personal stress (75%) and for training purposes only (42%). Most of the residents were reimbursed more than 80% of their out-of-pocket expense (75%), which is a big consideration in continuing with personal psychotherapy. Of the residents who were not engaged in personal psychotherapy, they reported lack of time (62.4%) as a significant/critical factor. Other stated reasons were a lack of interest (28.5%) and the cost (28.5%). The residents in personal psychotherapy rated highly

their interest in psychodynamic psychotherapy (92%) compared to residents not in personal psychotherapy (64.2%). Similarly, interest in CBT/DBT was rated as 83.3% vs. 57.1% and family/couples therapy was 75% vs. 43%. This suggests that residents in personal psychotherapy have a much higher interest in various modalities of psychotherapy, most significantly psychodynamic psychotherapy.

NO. 14
INTRODUCING A CORRECTIONAL PSYCHIATRY
ROTATION INTO A PSYCHIATRIC RESIDENCY
TRAINING PROGRAM

Poster Presenter: David L. Beckmann, M.D., M.P.H.

SUMMARY:

Background: Since the 1970s era of deinstitutionalization, when many State-run psychiatric hospitals closed, prisons and (particularly) jails have become the largest de facto providers of mental health care to the severely mentally ill. Despite correctional psychiatry being an essential part of community psychiatry (over 20% of persons in jail have severe mental illness), correctional psychiatry is not taught in most residencies, and there is a national shortage of correctional psychiatrists. **Methods:** Starting in October 2014, an MGH psychiatry resident began working at a large urban Boston-area jail, while the department worked with jail leadership to perform a needs assessment of how a relationship between the two programs may be mutually beneficial. For the 2015–2016 academic year, a new, required PGY-3 rotation in correctional psychiatry was introduced, with each third-year resident seeing patients at the jail one day per week for eight or nine weeks. This rotation was started despite some potential difficulties, including a lack of a formal relationship between the two institutions and a lack of onsite supervision by an experienced correctional psychiatry attending physician. **Results:** The first pair of residents has now completed their rotation, which we are continuing to develop. Much more work is required to assess how the new rotation affects residents (such as increasing knowledge and skills, changing attitudes) and how it affects the jail (such as decreasing the average wait time for patients to see a psychiatrist). However, preliminary feedback from both groups suggests that the rotation is off to a good start and that it may be providing benefit to the residents, the patients and the jail staff.

Conclusion: Adding a correctional psychiatry

rotation to an established psychiatry residency training program is feasible. While much more work is necessary to determine the long-term impact of such a rotation, this current venture demonstrates that it can be implemented despite some potential challenges; furthermore, early evidence suggests that such a relationship between a psychiatry training program and a correctional facility may be beneficial to both institutions.

NO. 15
OPENING DOORS TO RECOVERY: A NAVIGATION
MODEL AND ITS MEASUREMENT

Poster Presenter: Brooke Halpern, M.A.

SUMMARY:

Patient navigation emerged to help diagnose and treat cancer and other medical diseases in the 1970s after President Nixon signed the National Cancer Act. Today, it is a widely used model in public health, though it is not used as frequently in the field of psychiatry. However, patient navigation is extremely important, its goal being education and outreach. Patients' access to mental health information and treatment must be clear of barriers. Overall, people with mental illnesses are at a greater disadvantage for accessing necessary care. Opening Doors to Recovery (ODR) is a recovery-oriented case management and navigation program with the aim of increasing access and decreasing the number of hospitalizations and incarcerations for people diagnosed with serious mental illnesses. The collaborative spirit of ODR is evidenced in various contributions from local partners, including social services, housing, employment, transportation and recreation agencies, which support consumers' recovery and community integration. As part of the research arm of ODR, a measure was needed that could assess the effectiveness of this community-based case management program and evaluate various aspects of community reintegration deemed essential to the goals of recovery within the ODR model. We developed the Community Navigation Competencies (CNC) scale as part of the new ODR program in response to the lack of sufficient tools addressing community navigation and recovery. Among 100 participants, the CNC was administered at baseline (hospital discharge) and at four-, eight- and 12-month follow-ups. The analyses showed that the CNC appears to be a reliable and valid measure that can be utilized to examine community navigation and client recovery.

NO. 16
WITHDRAWN

NO. 17
JUDGE'S ROLE IN THE CIVIL INVOLUNTARY
COMMITMENT PROCESS IN FRANCE (CARE AT THE
REQUEST OF ONE THIRD) V. UNITED STATES (CIVIL
INVOLUNTARY COMMITMENT)

Poster Presenter: Denis H. Chino, M.D.

*Co-Author(s): Maria Josefa Malaga Aragon, M.D.,
Lama Kherbeck, M.D.*

SUMMARY:

The examination of a judge's order files for hospitalizations at the request of a third party in the CHU of Pointe à Pitre (Guadeloupe, France), resulting, in about 20% of cases, in the release from hospitalization, made possible the detailed study of the way the judge, in this case, was maintaining or not maintaining the hospitalization. We found that the judge determined his decision in reference to very strict criteria that are different from those used in the U.S. in the process of civil involuntary commitment. Criteria for judging the restriction of freedom in cases of mental disorder in the United States primarily consider the safety and potential danger for the patient and those nearby, while in France the emphasis is placed on the patient's mental state. This element was the prevailing element of the "esquirolienne" statute of 1838 for hospitalizations at the request of by a third party. This difference may also be explained, in part, by a different judicial approach between France and the United States. In the United States, the decision process is contradictory with the physician's presence, while in France, the judge refers primarily to the physician's certificates without his presence. This poster will discuss the judge's role in both approaches.

NO. 18
INFLUENCE OF THE WORKING ALLIANCE ON
PATIENT SATISFACTION AND MEDICATION
COMPLIANCE VIA TELEPSYCHIATRY IN NEW YORK
STATE PRISONS

Poster Presenter: Jonathan S. Kaplan, M.D.

*Co-Author(s): Stephanie Lilly, M.A., Megan Lape,
Ph.D.*

SUMMARY:

Background: Telepsychiatry is critical to the array of mental health services provided by Central New York Psychiatric Center (CNYPC) to patients in New York

State correctional facilities. Over 20,000 psychiatric treatment sessions via video conferencing occur annually. Research on telepsychiatry in nonforensic settings has found that video conferencing does not impact treatment, the therapeutic relationship or satisfaction. A review of the literature related to the use of telepsychiatry in a forensic setting concluded that it appeared to be a feasible, acceptable and cost-effective mode of service delivery. CNYPC conducted a survey in 2015 to examine patient satisfaction with telepsychiatry services. Privacy, equipment and the doctor-patient relationship were assessed. The results concluded that the doctor-patient relationship had the largest influence on inmate satisfaction in the forensic setting. The relationship between privacy and perceptions of equipment reliability with patient-reported treatment satisfaction was partially mediated by the doctor-patient relationship. Research supports the concept that a strong working alliance characterized by a positive emotional bond and agreement on the purpose and goals of therapy in a professional helping relationship has a greater impact on treatment success than the type or modality of treatment. A study partly examining the working alliance when using telepsychiatry found no difference when compared to face-to-face groups. **Objective:** The current study will examine the importance of the working alliance in predicting both patients' satisfaction with telepsychiatry treatment in a forensic setting and medication compliance. Secondly, the intervening role of patients' satisfaction in the relationship between the working alliance and medication compliance will be assessed. **Methods:** Anonymous survey responses will be collected from an anticipated sample of 350 forensic psychiatry patients and matched to psychiatrists by video conferencing session location, date and time. A modified version of the Working Alliance Inventory-Short Form (WAI-S) for use with psychiatrists and patients will assess the psychiatric working alliance in a forensic setting (three subscales). The Patient Satisfaction Scale, based on an inpatient psychiatric care consumer satisfaction survey with strong psychometric properties, will assess forensic patient satisfaction (two subscales). **Results:** Structure equation modeling will be used to confirm working alliance and satisfaction factor structures for a video conferencing psychiatric sample. The structural model will assess the contribution of the three working alliance factors to patient satisfaction and medication compliance and the contribution of the

two satisfaction factors in mediating the impact of the working alliance on psychiatric medication compliance.

**NO. 19
PROVIDING CROSS-INSTITUTION INTEGRATED CARE
TO THE SEVERELY MENTALLY ILL WHO ARE
INCARCERATED**

Poster Presenter: Diana Gurley, Ph.D.

Co-Author(s): Ewald Horwath, M.D.

SUMMARY:

Prisons and jails are often described as the new mental institutions in the U.S., based on the disproportionate arrest and incarceration of people with mental illness and addiction. This poster details a two-year preliminary program of integrated care for people with severe mental illness who have been incarcerated in the Cuyahoga County (greater Cleveland), Ohio jail. The program required a highly functional partnership among the Department of Psychiatry, MetroHealth Medical System; Cuyahoga County Corrections; the Court of Common Pleas; and Murtis Taylor Human Services System, an area social service provider. 194 individuals were served in a program of psychiatric care and medication management, primary care, addiction treatment, case management, and nurse care coordination. Almost all (over 95%) experienced comorbid addiction, and almost all (over 90%) had comorbid physical conditions. Of those enrolled, 94% were retained for at least three months of the program. However, many referrals were lost between release from jail and engagement, identifying a key component of screening and referral that has been added to the program. Since completion of the pilot, the program has added full-time staff sited in the jail, has strengthened identification and screening for mental illness at the point of intake into corrections, and has expanded partnerships to include four additional specialty courts to increase probation to services for this population.

**NO. 20
INTEGRATING PERSONS WITH LIVED EXPERIENCE AS
CLINICAL STAFF INTO PARACHUTE NYC: TOWARD
EVOLVING A COMMON LANGUAGE**

Poster Presenter: David C. Lindy, M.D.

Co-Author(s): James Mills, L.C.S.W., Antonio Munoz, Neil Pessin, Ph.D., Pablo Sadler, M.D.

SUMMARY:

Parachute NYC is a community-based mental health program that deploys mobile teams to treat seriously mentally ill people and their families in their homes. Treatment is based on the Needs-Adapted Treatment Model (NATM), which engages client, family and staff in transparent, nonhierarchical, open dialogue sessions called network meetings where no “expert voice” is privileged. While 25 years of research from northern Europe have demonstrated clinical efficacy using standard NATM, Parachute NYC teams build on the nonhierarchical model by including persons with lived experience—often referred to as peers—as fully integrated members of the clinical staff. Peers and non-peer staff all receive training in intentional peer support (IPS), a peer-oriented approach to working with people with serious psychiatric illness written and taught by peers. Although peers are often included in many community mental health settings in ancillary capacities, Parachute NYC sees peers as equal members of the interdisciplinary team, including social workers, family therapists, nurses and psychiatrists. However, this idealized goal has not always been easy to implement in reality, and cultural clashes have inevitably been part of the process. This poster will present findings from focus groups held with the Parachute NYC interdisciplinary staff to assess their respective experiences of “full integration,” the degrees to which this goal has been achieved or not, what they have learned from the experience, and its utility in working with Parachute NYC’s clients.

**NO. 21
IMPROVING COGNITIVE SCREENING RATES IN A
RESIDENT-RUN GEROPSYCHIATRY CLINIC**

Poster Presenter: Youngchan Park, M.D.

Co-Author(s): Stanley Lyndon, M.D., Gregory Burek, M.D., Reena Kumar, D.O., Jennifer Lippitt, M.D., Mi Nelson, M.D., Emilie Padfield, M.D., Jill Sorby, M.D., Mara Pheister, M.D.

SUMMARY:

Background: Geriatric patients make up a large and growing population in the United States, with estimates at over 69 million Americans who are over 65 years old. This population has been the highest utilizer of Medicaid/Medicare dollars in the United States. Approximately 8–16% of these people are estimated to have some form of cognitive impairment, which is associated with greater mortality, requirement of higher levels of care and greater health care costs. Early detection is

imperative in achieving timely diagnosis of dementia and delivering appropriate care and access to services in order to improve quality of life for these individuals and their family caregivers. However, studies have found that, of all patients over 65 who presented to a primary care clinic, only 62% were screened for cognitive impairment, and physician action was taken in only 17% of the positively screened patients. **Objective:** We launched a quality improvement project in our resident-run geropsychiatry clinic at the Milwaukee VA Medical Center to implement a standardized process that will increase the number of geriatric patients with a baseline cognitive screen performed within the past year. We proceeded through a cycle of the plan-do-study-act process to enhance the feasibility of this project, removing as many barriers as possible in order to establish a sustainable process that will facilitate ongoing annual cognitive screening for these patients. **Methods:** We set out by identifying obstacles that reduced the likelihood of cognitive assessments being performed and developed strategies to mitigate them. We also decided on measures that will help evaluate the effectiveness of the interventions. Screening was then performed by the resident on all patients who met criteria. A geropsychology fellow was also available to provide assistance and further recommendations. Meetings were held with stakeholders to increase project awareness, define shared goals and discuss strategies to further improve the workflow. In order to obtain post-intervention statistics, a sample of patient charts was reviewed at a randomly selected point in time to determine whether a MoCA, MMSE, FAST or neuropsychological test was performed within the last 12 months. **Results:** Prior to any intervention, 34 out of 68 patients (50%) were found to have received cognitive screening of some form within the previous 12 months. After each phase of the cycle, the rates increased to 26 out of 35 patients (74%) and 50 out of 60 patients (83%). The number of patients who did not have any baseline decreased from 28 out of 68 patients (41%) to nine out of 35 patients (26%) and 10 out of 60 patients (17%) following the interventions. **Discussion:** Routine screening helped identify patients with mild cognitive impairments and other neurocognitive disorders, allowing for better coordination of care. Annual cognitive screening can be made feasible by taking steps to streamline the process.

NO. 22

RESILIENCE TRAINING IN MEDICAL EDUCATION USING VIRTUAL GROUP REFLECTION

Poster Presenter: Jihan Ryu

SUMMARY:

Resilience is a combination of learnable cognitive skills, attitude and behaviors that help individuals recover after stress or adversity. Although linked to a better quality of life in all developmental phases, resilience has been studied as an important factor for student well-being in medical school training—a period often characterized by high stress, transition to a professional identity and a rapidly changing clinical environment—as well as a protective factor against physician burnout issues in the future. The Association of American Medical Colleges (AAMC) endorses “resilience” as a core competency, whereby a medical student is expected to “demonstrate tolerance [to stress], adapt effectively to it... and recover from setback.” Such a recognition, as well as the growing interest of academic medicine on this topic, emphasizes the need on an institutional level to provide a future generation of physicians with a reflective environment to regularly practice resilience, solicit feedback and respond to it. Virtual group reflection (VGR), moderated on a secure and confidential online audience response platform, seeks to promote student wellness, build visible social support in medical school during clinical years, and create an environment where a future physician’s resilience skills can be learned and practiced. It gathers third-year medical students on different rotations and geography to a uniform webpage where they vote for a topic they would like to reflect on among difficult topics such as burnout, stress, time management, personal life and conflicts and subsequently participate in collaborative dialogue anonymously. A trial VGR session during the Interdisciplinary Clinical Exercises Week—a point when all third-year medical students had finished half of their required clerkships in their year—generated rich and supportive conversations around medical student wellness issues, most notably 1) time management, 2) adjustment to a professional environment in which they have less ownership of time and authority, and 3) worries about academic and clinical performance. The session received positive feedback among faculty and students, primarily for facilitating collective vulnerability and honesty in an attempt to reflect, discuss and problem solve common struggles of third-year students. It should be highlighted that the environment in which reflective learning takes place

is a critical component of successful training in resilience. Opportunities for training, where medical students can safely use self-reflection, self-disclosure and peer engagement during or after their common hardship of medical training, are worth reviewing in the context of existing resources in the Office of Clinical Education, mobile technology and the Internet, and the wellness program at the Geisel School of Medicine at Dartmouth. This project is supported by the Dean of Student Services and the Wellness Committee at the Geisel School of Medicine at Dartmouth.

NO. 23

MEDICAL STUDENT MENTAL HEALTH: A FUTURE TIME BOMB? MISPERCEIVED, UNDERDIAGNOSED AND UNDERTREATED

Poster Presenter: Cheryl A. Kennedy, M.D.

Co-Author(s): Sondra Corgan, Thomas Jauch, Prabhav Deo, Kinal Shah

SUMMARY:

Background: Medical school is a known time of new and different stresses. Even though medical students have more mental health issues and rates of depression are higher among them than in the general public, the mental health problems of medical students remain generally underrecognized and minimized. Few students seek help. **Objective:** We examined the difference between perception and reality of medical student mental health among students and faculty. **Methods:** We electronically circulated an anonymous survey among current medical students and faculty at an urban academic medical center. The survey asked about personal experiences with help-seeking and perceptions of medical student mental health. **Results:** Almost 40% of medical students (N=176) thought that up to 40% of their classmates have or have had mental health issues, while 61% of faculty (N=36) thought from 0–20% of students had, despite 74% of faculty reporting actually speaking with students regarding a student's mental health issues. Since starting medical school, 68% of students reported feeling down, depressed or hopeless at some point; 20% of students responding to the survey screened positive for depression using the PHQ-2. The difference between student and faculty perceptions of mental health issues was significantly different ($p < 0.001$), with faculty estimating a lower percentage of students dealing with issues. Sixty-four-percent of students worried that their classmates would view them differently if it were known they were

dealing with depression. Of medical students, 39% acknowledged talking with a mental health professional, compared to 71% of faculty. About 41% of students stated they would not use mental health services. **Discussion:** There is a striking discrepancy between perception and reality about medical student mental health issues between students and faculty and among students. Stigma clearly influences student willingness for help-seeking or treatment. Awareness and education efforts need to be increased among students and faculty, and treatment services need to be thoughtful, confidential and user friendly.

NO. 24

PATIENT PREFERENCE FOR USING COMPUTERS, SMARTPHONES AND THE INTERNET TO PARTICIPATE IN DEPRESSION CLINICAL TRIALS

Poster Presenter: Nadeeka Dias, Ph.D.

Lead Author: Laura Khurana, M.P.H.

Co-Author(s): Ellen M. Durand, Ph.D., Sarah Tressel Gary, Ph.D., Antonio V. Otero, Chris Hall, Kelsey Berry, Christopher J. Evans, Ph.D., Susan M. Dallabrida, Ph.D.

SUMMARY:

Background: Patient engagement and adherence are critical to the success of clinical trials. Electronic patient-reported outcomes (ePROs) are increasingly used to evaluate depression clinical trial endpoints. This study characterized how subjects prefer to use various types of technology to report ePROs in a clinical trial. Considering patient preference during depression trial design may reduce patient burden and improve patient engagement. **Methods:** 107 subjects with depression were surveyed regarding their preferences for using computers, smartphones and the Internet in clinical trials. **Results:** Forty-seven percent of subjects reported having a computer at home, 49% reported using the Internet daily and 47% reported owning a smartphone. Subjects reported that they would be willing to participate in a clinical trial using the Internet for up to one month (28%), two to six months (19%), one to two years (12%), or five years or more (8%). Similarly, subjects were willing to participate in a clinical trial using a smartphone for up to one month (30%), two to six months (24%), one to two years (12%), or five years or more (8%). When asked what time of day they would prefer to complete a daily electronic diary, subjects preferred 8:00 p.m.–midnight (24%), 8:00 a.m.–noon (20%) or 4:00 p.m.–8:00 p.m. (18%). Subjects thought it would be

necessary (14%) or helpful (64%) to have an audible alarm to remind them to record their symptoms. In a multi-select question, subjects preferred to report their symptoms once a day for a clinical trial using a smartphone provided by their physician for use in the study (57%), a paper form (46%) or an application (app) on their own smartphone (43%).

Conclusion: Depression subjects are willing to use computers, smartphones, and the Internet in a clinical trial setting. Trial sponsors should consider patient preferences for specific technology features to reduce patient burden and improve engagement and adherence when using ePRO assessments.

NO. 25

PATIENT PREFERENCE FOR DISPLAY OF ELECTRONIC PATIENT-REPORTED OUTCOMES: WORDING EMPHASIS, QUESTION FORMAT AND NAVIGATION BUTTON PLACEMENT

Poster Presenter: Nadeeka Dias, Ph.D.

Lead Author: Laura Khurana, M.P.H.

Co-Author(s): Ellen M. Durand, Ph.D., Sarah Tressel Gary, Ph.D., Antonio V. Otero, Chris Hall, Aisling Ryan, Christopher J. Evans, Ph.D., Susan M. Dallabrida, Ph.D.

SUMMARY:

Background: Electronic patient-reported outcomes (ePROs) are a reliable method for collecting patient data in depression care and clinical trials and offer many advantages over paper collection. However, it is essential to consider patient preference and ease of use when employing this technology. Improving the usability of ePRO in depression care and clinical trials could ultimately reduce patient burden and improve patient engagement. **Methods:** 107 subjects with depression were surveyed regarding their preferences for ePRO display. **Results:** When presented with options for showing emphasis in a sentence, subjects thought that underlining best drew attention to emphasized words (41%), followed by capitalized (24%) or bold (22%) lettering. Subjects were shown screens of a multi-select question formatted to read left to right (question to the left of the answers) or top to bottom (question above the answers). Forty-seven percent could read and understand the screens equally. Of those with a preference, 71% preferred the top to bottom format. Subjects were shown screens of a tablet computer ePRO device with either one question per screen or several multi-select questions per screen in a matrix format. Fifty-eight percent preferred one question per screen; of these subjects, 61% thought

it was easier to read, and 41% thought it was easier to understand the question. Forty-two percent preferred multiple questions per screen; of these subjects, 43% thought it was faster to complete, and 18% thought it was easier to read. Subjects were shown two screens with “back” and “next” navigation buttons at either the top or bottom of the screen. Thirty-five percent thought it was equally easy to find the buttons; of those with a preference, 65% preferred them at the bottom of the screen.

Conclusion: When possible, questionnaire designers should consider these results to incorporate patient preference into the design of ePRO instruments, potentially reducing subject burden and increasing patient engagement in depression care and clinical trials.

NO. 26

PRELIMINARY FINDINGS FROM THE SMARTPHONE AND ONLINE U.S.-BASED EVALUATION FOR DEPRESSION (SOLVD) STUDY: CLINICAL AND ELECTRONIC DATA AGREEMENT

Poster Presenter: Anh L. Truong, M.D.

Co-Author(s): Jian Cao, B.S., Peter Washington, M.S., Nidal Moukaddam, M.D., Ph.D., Asim Shah, M.D., Ashutosh Sabbharwal, Ph.D.

SUMMARY:

Background: Depression is a serious illness that carries significant emotional and financial burden for modern society. Depression severity is often monitored through clinician psychometric instruments, but interest in incorporating online and phone-based assessments is increasing as technology becomes more integrated into health care. **Objective:** Our study evaluates if mobile daily mood ratings may be clinically useful in monitoring and classifying depression symptoms in a clinically depressed population compared to standard clinician psychometric instruments, including the Patient Health Questionnaire-9 (PHQ-9), Hamilton Rating Scale for Depression (HAM-D) and Hamilton Anxiety Rating Scale (HAM-A). **Methods:** Twenty-two patients with diagnoses of major depressive disorder with or without comorbid anxiety disorder were identified and recruited. A diagnosis of depression was confirmed through the Mini International Neuropsychiatric Interview (MINI). Over an eight-week period, daily moods were self-reported through the Smartphone and Online Usage-Based Evaluation for Depression (SOLVD) application, a mobile assessment application downloaded onto patients’ mobile devices. Depression and anxiety

symptoms were also measured biweekly using the HAM-D, HAM-A and PHQ-9. **Results:** The correlation between self-reported mood score using the smartphone application averaged over a two-week period and the bi-weekly PHQ-9 score was 0.73 in the moderate/severe group and 0.36 in the normal/mild group. HAM-D had a correlation with the raw mood scores of 0.5 in the moderate/severe group and 0.003 in the normal/mild group. HAM-A had a correlation of 0.47 in the moderate/severe group and 0.15 in the normal/mild group. The mood reporting ranges were larger for the moderate/severe group, with a standard deviation of 17.05, compared to 8.06 for the normal/mild group. **Conclusion:** Smartphone applications such as SOLVD represent a useful way to monitor depressive symptoms in a clinically depressed population and correlate with current gold-standard clinician-administered psychometric instruments. Our data suggest that populations with moderate to severe depression have better correlation between self-reported mood and clinically administered questionnaires when compared to individuals with mild depression. Most available literature highlights the potential use of smartphone applications for depression screening, but this is the first study reporting on usefulness in clinically depressed populations who may benefit from extra support in the pursuit of treatment. Results are preliminary because of small sample size and need to be replicated in larger studies. **Keywords:** Depression, Anxiety, Smartphone, SOLVD, Mobile Device

NO. 27

ASSESSING THE UTILITY OF SAFETY PLANS IN AN OUTPATIENT PSYCHIATRY CLINIC

Poster Presenter: Jessica Simberlund, M.D.

Co-Author(s): Jessica Zonana, M.D.

SUMMARY:

Background: According to the CDC, in 2013, suicide was the tenth leading cause of death for all ages. Suicide prevention is consequently an important area of focus, and studies have shown that up to one in five suicide victims had contact with mental health services a month before their suicide. To address the need for psychosocial interventions that could potentially mitigate the suicide risk of persons under clinical care, Stanley and Brown created a Safety Planning Intervention, which consists of a written, prioritized list of coping strategies and sources of support that patients can use to alleviate a suicidal crisis. The implementation of safety plans for all

high-risk clinic patients is now recommended by the New York State Office of Mental Health; however, the effect of this intervention in terms of its impact on patient engagement and suicide risk remains unclear. After administrative efforts to increase safety plan usage, this study assesses the utilization and effects of safety plans for high-risk patients in an outpatient mental health clinic. **Methods:** For high-risk patients with a documented safety plan, we included charts where a safety plan was developed six months after initiation of treatment in order to compare patient behavior and outcomes before and after implementation of a safety plan. To assess level of patient engagement, we compared mean number of patient visits and missed appointments with clinicians in the outpatient psychiatry department six months before and six months after implementation of a safety plan. For secondary outcomes, we compare significant patient events recorded in the adult outpatient clinic before and after the safety plan, including psychiatric ER visits, suicide attempts, completed suicides, episodes of violence, psychiatric hospital admissions or transfers to higher level of care. A qualitative review of documentation for patient utilization of the safety plan was also performed. **Results:** Fifty-nine high-risk patient charts were identified as having a completed safety plan six months after admission to the outpatient psychiatry department. Data collection is near completion, and following analysis, we can report on the parameters of patient engagement and significant treatment events. Preliminary results of 40 charts indicate that after safety plan completion, there is an 18.00% increase in patient encounters with an outpatient clinician, a 24.05% increase in missed appointments, a 78.95% increase in crisis calls to an outpatient clinician, a 55.56% decrease in psychiatric ER visits and an 80.79% decrease in days spent on an inpatient psychiatric unit. There were four suicide attempts before safety plan completion and zero after. **Conclusion:** Preliminary results indicate improved utilization of care and increased patient engagement and help-seeking behaviors. Further analysis is needed to understand the data and the impact of safety plan completion on high-risk patients in a mental health clinic.

NO. 28

CURRENT PRACTICES TO PREVENT AND MANAGE CONSTIPATION AMONG PATIENTS ON CLOZAPINE ADMITTED AT A STATE HOSPITAL

Poster Presenter: Kammarauche Asuzu, M.B.B.S., M.H.S.

Co-Author(s): Zainab Malik, M.D., Stephen Oxley, M.D., Elena Perea, M.D.

SUMMARY:

Background: Clozapine is recommended medication for treatment-resistant schizophrenia. However, clozapine has many side effects, including constipation. The prevalence of clozapine-associated constipation ranges from 14% to 60%. While constipation is easy to prevent and treat, serious adverse outcomes, including mortality, are documented. Recommendations to monitor, prevent and treat constipation include nurse flow sheets to document bowel habits, dietician consult, monitoring patients and starting on a bowel regimen. Despite these recommendations, constipation is often under-monitored or overlooked. In addition, there are no guidelines to monitor or prevent constipation. The risk factors, including clozapine dose and duration of clozapine use, for developing constipation vary among patients, highlighting the need for an individualized plan within a standard framework. **Methods:** This study was carried out to examine the constipation prevention protocols at psychiatric hospitals. For the purpose of this study, a list of patients admitted at Central Regional Hospital between May, 2014, and March, 2016, who were prescribed clozapine was compiled. A total of 106 patients were prescribed clozapine during this period. All patients who were prescribed clozapine for at least two days were included. One entry was excluded due to receiving a single dose of clozapine. Therefore, 105 charts were reviewed for data extraction. The discharge summary, problem list, discharge diagnoses and medication on discharge notes were reviewed. **Results:** The mean age at admission among those prescribed clozapine was 35.5±13.1 years. There were 60 (57%) male patients. Schizophrenia (38.1%) was the most common diagnosis, followed by schizoaffective disorder (32%). Of the 105 patients prescribed clozapine during the study period, 33% had a documented plan for managing constipation in the discharge summary, which mostly documented a prescribed bowel regimen. Out of the 86.7% who were discharged on clozapine, 65.7% were prescribed medications to prevent constipation at discharge. About 57% of patients were started on a prophylactic bowel regimen either at the same time or prior to starting clozapine. Approximately 23% were started on a constipation preventing medication at least two days after starting clozapine, while 20% were not placed on any medication to

prevent constipation during their hospitalization. Polyethylene glycol, docusate and sennosides were the most commonly prescribed medication with 66, 52 and 23 patients, respectively. **Conclusion:** There is no widely accepted guideline to manage and prevent clozapine-associated constipation. Some patients started on clozapine are not started on a bowel regimen. There is a crucial need to develop a standardized guideline for monitoring and preventing clozapine-associated constipation that can be easily implemented globally. A generalized framework that can be individualized to suit patients' needs is required.

**NO. 29
WITHDRAWN**

**NO. 30
CLONIDINE: THE STATE OF EVIDENCE IN
TREATMENT OF MANIA**

Poster Presenter: Shahana Ayub, M.D.

SUMMARY:

In numerous case reports and some small studies, clonidine was effective in treating manic and mixed states of bipolar disorder. Why has the research stopped? Why develop atypicals? Clonidine is a viable consideration for adjunct treatment in mania and mixed states with rapid response and less monitoring. This poster will review a case when clonidine was used in a patient with bipolar disorder type 2 in a mixed state with rapid response and improvement of symptoms.

**NO. 31
DC MAP: MENTAL HEALTH ACCESS IN PEDIATRICS**

Poster Presenter: Mary Gabriel, M.D.

SUMMARY:

Background: Child mental health (MH) access programs, which provide consultative support to pediatric primary care providers (PPCPs), are emerging as an increasingly popular way to address childhood MH needs, yet there are few studies of these programs. **Objective:** Examine a new child MH access program in DC—DC MAP (Mental Health Access in Pediatrics)—including describing call volume, nature of the calls and call outcomes. **Methods:** Call data gathered over the first 7.5 months (May–December 2015) of DC MAP will be examined. **Results:** Over its first 7.5 months, 158 calls were placed to DC MAP. Call volume has varied over time, though the majority of calls were

consistently funneled to the care coordinator for resource/referral questions (76.5%). Callers were primarily physicians (61%), with fewer calls coming from nurse practitioners (13.9%) and mental health clinicians (8.4%). PPCPs called about families with children, primarily males (58.9%), ranging in age from newborn to 21 years, with a mean patient age of 10.6 years (SD=4.5 years). Children being called about were predominately covered by Medicaid (82.4%), with 13.2% covered by private insurance. The most common diagnostic topics pertained to ADHD (48.4%), mood issues (depression, bipolar disorder) (25.8%), anxiety (16.1%), tantrums/explosive behavior (16.1%), conduct problems (aggression, noncompliance) (12.9%), trauma (12.9%) and psychosis (11.3%). **Conclusion:** Results demonstrate that DC MAP is a highly used program that has helped to address calls about a range of mental health topics among a variety of children. More work can be done to expand usage, particularly to encourage PPCPs to make use of MH consultants and manage what they can internally. Results will be discussed within the context of lessons learned.

NO. 32
MOOD DYSREGULATION IN THE SETTING OF EARLY CHILDHOOD TRAUMA

Poster Presenter: Raminder Pal Cheema, M.D.
Co-Author(s): Muhammad Zeshan, M.D., Jose A. Sanchez-Lacay, M.D., M.P.H.

SUMMARY:

Psychological trauma is defined as damage to the psyche as a result of a severely distressing event that threatens one's survival and sense of security. Trauma is often the result of an overwhelming amount of stress that exceeds one's ability to cope with that experience. Typical scenarios of psychological trauma include harassment; sexual abuse; bullying; domestic violence; being the victim of an abusive parent, particularly in childhood; life-threatening medical conditions; or medication-induced trauma. Catastrophic natural/man-made disasters such as earthquakes, volcanic eruptions, war, mechanized accidents (car, train or plane crashes) or medical emergencies can also cause psychological trauma. It is always prudent to look for a broad range of disorders in children with adverse childhood experiences, including PTSD, ADHD, disruptive behaviors, reactive attachment disorder, disinhibited social engagement disorders, anxiety disorder, phobias, eating disorder, substance abuse

and sleep disorders. In this poster we present the case of a 13-year-old boy who was involved in a motor vehicle accident (MVA) at age seven, in which he lost two of his siblings and his mother lost a limb. He started becoming more irritable, argumentative, oppositional and disrespectful over the year following the MVA. He was started on psychotropic medications and psychotherapy one year after the MVA, with partial resolution of behavioral symptoms. Starting at age 11, he became physically aggressive, trying to stab his elder siblings with a knife and eventually presenting with social withdrawal, depressed mood, insomnia, anhedonia and poor hygiene two weeks following his grandmother's death. We illustrate the challenges a clinician encounters while treating a child presenting with a wide range of behavioral patterns, while focusing on presenting symptoms rather than the initiating/perpetuating factors. We also want to emphasize the importance of early identification and timely and wholesome intervention to prevent the long-term manifestations of adverse childhood experiences.

NO. 33
IMPORTANCE OF IDENTIFYING AND MANAGING CHILDHOOD-ONSET SCHIZOPHRENIA AT AN EARLIER AGE: A CASE REPORT AND SYSTEMIC REVIEW

Poster Presenter: Muhammad Zeshan, M.D.
Co-Author(s): Raminder Cheema, M.D., Raheel I. Memon, M.D., Fatima Qureshi, M.B.B.S., Luisa Gonzalez, M.D., Panagiota Korenis, M.D.

SUMMARY:

Background: Schizophrenia is ranked one of the top ten causes of disability worldwide and exerts a heavy toll on patients and their families, irrespective of age of onset of the disease. Childhood-onset schizophrenia (COS) is a severe and persistently debilitating form of psychotic disorder that occurs at the age of 12 or younger. This is an extremely rare disease, and its estimated prevalence is less than one case per 40,000, compared to one in 100 cases in adults. Recent studies have substantiated that the diagnosis of COS may be based on the same symptoms used for adult schizophrenia. COS has a gradual onset, with a chronic course and poor prognosis. It usually presents deterioration in academic performance, short attention span, social isolation, disorganized or unusual behavior, lethargy, neglected personal hygiene, affective dysregulation, hyperactivity, visual hallucinations, less complex

delusions, and poor impulse control. **Methods:** In this poster, we present a case of a patient who started displaying psychotic symptoms—inattentiveness, forgetfulness, poor educational achievements and social isolation—at the age of 10. He later began talking to himself, started hearing voices and demonstrated bizarre behavior around age 13. He didn't get any treatment for his psychotic symptoms until he was first hospitalized at age 19 due to command auditory hallucinations and attempted suicide. **Conclusion:** Childhood schizophrenia is essentially the same as schizophrenia in adults, but it occurs early in life and has a profound impact on a child's behavior and development, probably due to continuing gray matter loss after the illness onset. The early age of onset of COS also presents special challenges for diagnosis, treatment, educational needs, and emotional and social development. Early identification and treatment of psychotic symptoms is associated with better prognosis, can help individuals avoid adverse social consequences, and reduces the risk of harm to themselves and others. The aim of this case report is to emphasize the importance of timely recognition and early intervention to tackle this rare but a devastating neurodegenerative disease.

NO. 34

WHAT IS THE RESULT OF DECREASING THE LENGTH OF STAY ON READMISSIONS IN CHILD AND ADOLESCENT INPATIENT PSYCHIATRIC CARE?

Poster Presenter: Christopher A. Petersen, M.D.

Co-Author(s): Lance Feldman, M.D., Lan Kong, Ph.D.

SUMMARY:

Objective: Study the association between reduced length of stay and readmission rates in an acute care child and adolescent psychiatric unit with an average age of 10.7. **Methods:** Data for 3,896 children and adolescents on length of stay, total discharges and readmission rates from 1991 to 2003 with marked reduced lengths of stay were obtained from the hospital database at Penn State Hershey. **Results:** The mean length of stay decreased dramatically from 35.55 days to 9.79 days. The trend year by year demonstrates that a decreased length of stay is associated with a higher readmission rate. However, if all years are combined, the total reveals overall results with increased readmissions being associated with increased length of stay. Somewhat contrary to other reports, diagnoses, gender and season of admission were found to be only marginally, at best,

associated with readmission when looked at as a function of time to readmission. **Conclusion:** Reducing the length of stay in an acute care facility by 25 days leads to the year to year trend of increased readmission rates. Shortening length of stay alone is not associated with either cost savings or better clinical care.

NO. 35

ROLE OF RTMS IN THE TREATMENT OF TOURETTE'S SYNDROME AND TIC DISORDERS: A REVIEW

Poster Presenter: Fatima B. Motiwala, M.D.

Co-Author(s): Inderpreet Virk, M.D., Sahar Ashraf, M.D., Dinesh Sangroula, M.D.

SUMMARY:

Background: Tourette syndrome (TS), also known as Gilles de la Tourette syndrome, is a chronic neuropsychiatric disorder occurring in early childhood or adolescence and characterized by multiple motor and vocal tics that are usually preceded by premonitory urges. The diagnosis of TS requires the presence of both motor and vocal tics with onset before 18 years of age and persistence of symptoms for at least a year. There is no definitive treatment for TS. Possible interventions include behavioral therapy, deep brain stimulation and pharmacotherapy, which are effective only in some children and cause severe side effects. There is a need for treatment, which is effective and safe, especially in children who do not respond to above interventions. Repetitive transcranial magnetic stimulation (rTMS), a relatively newer noninvasive therapeutic technique, has been widely used in psychiatric and neurological diseases such as depression, anxiety, epilepsy and Alzheimer's disease. It can be a good treatment option for the tics in TS. **Methods:** A systematic literature search was conducted with the search terms, "Tics," "Tourette syndrome" and "rTMS" using PubMed/MEDLINE, PsycInfo and clinicaltrials.gov. **Results:** A systematic review resulted in 309 hits. The initial screening and consecutive meticulous review of the articles concluded in 12 articles included for the detailed analysis. Subjects between ages seven and 61 who met the diagnosis of TS participated in the study. All subjects were given rTMS treatment. Most of the studies were conducted in an outpatient setting (83.3%). Seven out of 12 studies showed significant improvement in tics with rTMS treatment (Yale Global Tic Severity Scale [YGTSS] scored reduced, $p \leq 0.05$). No serious side effect was reported. A very small percentage of the patient

population reported side effects such as headache (the most common), scalp pain, self-injurious crises, abdominal pain, red eyes and tiredness. **Discussion:** As the tics in TS can be deteriorating, it is imperative to discover the effective and safe treatment modality for the tics. Our analysis concluded that there was a significant improvement in tics with the rTMS treatment in the majority of the studies included for the review. Our systematic review concludes that the rTMS appears to have a better safety profile than deep brain stimulation, especially in children. The major limitations for the majority of the studies were short sample size, concomitant medications, comorbid psychiatric disorders and no control group. **Conclusion:** rTMS appears to be a safe and a better treatment option for tics in TS that are refractory to other treatment regimens. Studies with a large sample size and a control group can clarify its use in TS further.

NO. 36

ELECTROCONVULSIVE THERAPY IN AUTISTIC INDIVIDUALS WITH CATATONIC FEATURES

Poster Presenter: Fatima B. Motiwala, M.D.

Co-Author(s): Vivek C. Shah, M.D., Puneet Narang, M.D.

SUMMARY:

Background: Autism is an early-onset neurodevelopmental disorder that manifests itself as a persistent deficit in social communication and restricted, repetitive patterns of behavior, interest or activities, including stereotyped movements. Introduction of "catatonia NOS" as a new category in the *DSM-5* has resulted in recognition of increased incidence of catatonia in individuals with autism. Catatonia can not only increase the risk of self-injurious behavior and deterioration in functioning, but can also be life threatening. This poster evaluates the effects of electroconvulsive therapy (ECT) in resolving catatonic symptoms in autistic individuals. **Methods:** Using the search terms "autism," "electroconvulsive therapy," "children" and "catatonia," a systematic review was conducted using three databases: "PubMed," "Web of Science" and "Embase." **Results:** Our search initially resulted in 98 total hits, of which 11 articles reporting 15 cases of catatonia in autistic patients treated with ECT were included after screening. Besides catatonic symptoms in all patients, self-injurious behavior was observed in eight out of 15 cases. Before receiving ECT, all patients were treated with other pharmacological agents, including benzodiazepines,

antidepressants such as SSRIs, antipsychotics and others. ECT was found to be effective in treating catatonic symptoms, reducing self-injurious behavior and increasing level of functioning in the majority of cases. Although no side effects were observed secondary to ECT except mild delirium in one case, a majority of the patients relapsed after ECT was stopped. Nine out of 15 cases were treated with benzodiazepines with moderate to significant improvement in a small percentage of cases.

Discussion: Since catatonia can lead to self-injurious behavior and life-threatening conditions (e.g., malignant catatonia leading to the abnormalities in vital signs as observed in one of the cases), it is imperative to treat it effectively. Several pharmacological agents, including benzodiazepines, antidepressants like SSRIs and antipsychotics, have been tried. These agents have been shown to be efficacious in few cases and have resulted in side effects. Although ECT seems to be the promising treatment in terms of resolving catatonic symptoms in autistic patients, to regain the level of functioning and the benefit of no or minimal side effects in the majority of cases, relapse rates are higher when the ECT is stopped.

OCT 07, 2016

POSTER SESSION 2

NO. 1

CHAMPIONING GUIDELINE-CONCORDANT CARE IN A CLOZAPINE CLINIC: APPLYING PREVENTION PRINCIPLES TO A HIGH-RISK COHORT

Poster Presenter: Sarah A. MacLaurin, M.S.N.

Co-Author(s): Brenda Vincenzi, M.D., Lauren Donahue, M.S.N., Ben Macri, M.S.N., Eslin Saporta, Kelly E. Irwin, M.D., Daphne Holt, M.D., Corinne Cather, Ph.D., Oliver Freudenreich, M.D.

SUMMARY:

Background: More than a decade ago, recognizing the disparity in cardiovascular disease and diabetes outcomes in those with severe mental illness (SMI), the American Psychological Association, American Diabetes Association and other national medical associations developed joint guidelines for the monitoring of metabolic syndrome in individuals prescribed antipsychotics. The guidelines recommend assessing body mass index, waist circumference, blood pressure, fasting glucose and fasting cholesterol at specified intervals, at least annually for stable patients. Despite these well-

publicized guidelines, annual screening rates fall well below 50% in most settings. Due to the nature of mandatory registry-based prescribing, with blood work and clinical visits at least every four weeks, patients on clozapine can be viewed as a well-defined cohort that lends itself to a population-based approach of disease prevention and health activation. **Methods:** At a community mental health center, a sub-cohort of patients prescribed clozapine in our resident teaching clinic (N=75), one-third of all clinic patients prescribed clozapine, were identified for automatic enrollment in the Coordinated Health and Medical Prevention Service (CHAMPS). This service entailed an annual visit to assess metabolic risk (as per the guidelines above) and other relevant clinical ratings (substance use, quality of life, function, symptoms and side effects). A follow-up visit assessed diet, exercise and readiness for behavior change and collected primary care provider (PCP) contact information and release of information. A database was created to track clinic population health priorities. **Results:** In 2015, over 68% of this clozapine cohort received guideline-concordant care, defined as annual metabolic screening (as described above). Ninety percent ($\pm 2\%$) completed metabolic blood work. Eighty percent of this clozapine cohort completed clinically relevant measures: substance use, quality of life, function, symptoms and side effects. 36.8% met criteria for metabolic syndrome. Fifty-four percent of PCPs received letters summarizing the program, blood work results and their patient's current list of medications. **Conclusion:** The provision of guideline-concordant care is the first step toward reducing the health disparities in the SMI population. We report that it is possible to perform metabolic monitoring in the SMI population at a community mental health center. Collection of such data facilitates intervention on the individual and population levels. In considering feasibility, it is significant to note that patients on clozapine provide a uniquely delineated cohort, with regular clinic attendance, and to consider other potential cohorts, such as those prescribed lithium or long-acting injectable antipsychotics.

NO. 2

QUALITY OF LIFE AS AN ELEMENT OF HEALTH: EXPLORING FACTORS IMPACTING QUALITY OF LIFE IN SCHIZOPHRENIA

Poster Presenter: Sarah A. MacLaurin, M.S.N.

Co-Author(s): Brenda Vincenzi, M.D., Lauren Donahue, M.S.N., Ben Macri, M.S.N., Eslin Saporta,

Kelly E. Irwin, M.D., Daphne Holt, M.D., Corinne Cather, Ph.D., Oliver Freudenreich, M.D.

SUMMARY:

Background: The World Health Organization (WHO) has not changed its definition of health as “a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity” since writing its constitution in 1946. Working from such a foundation, and understanding psychiatric health from the recovery perspective, it is imperative to assess quality of life (QoL) in a comprehensive health assessment. The World Health Organization Quality of Life-BREF (WHOQOL-BREF) is a 26-item questionnaire assessing the domains of physical health, psychological health, social relationships and environment. People with schizophrenia score lower on QoL measures than healthy peers; positive and negative symptoms may moderate this, and cognitive impairment, occupational function, medication side effects and poor physical health may also contribute. **Methods:** During an annual health visit at a community mental health center, a cohort of patients in a clozapine clinic (N=75) and their clinicians completed several psychosocial assessments in addition to metabolic screening. Subjective measures included the WHOQOL-BREF, Beck Depression Inventory-II (BDI-II), Subjective Scale to Investigate Cognition in Schizophrenia (SSTICS), Fagerstrom Test for Nicotine Dependence, and Alcohol Use Disorders Identification Test-C (AUDIT-C). Objective measures included the Brief Psychotic Rating Scale (BPRS), Mental Illness Research, Education and Clinical Center–Global Assessment of Function (MIRECC-GAF), and Abnormal Involuntary Movement Scale (AIMS). **Results:** Of the 75 patients who participated in an annual health visit implemented in our clinic, 84% (± 2) completed the WHOQOL-BREF, scoring lowest on the social-relationship and psychological health domains—62.8% and 65.6%, respectively. More severe psychiatric symptoms, as assessed by the BPRS and BDI-II, were negatively correlated across all domains of the WHOQOL-BREF. Patients reporting better physical functioning and greater satisfaction with their living environment and basic needs had less severe psychiatric symptoms and better work/school functioning, with a positive correlation between the MIRECC-GAF occupational and social domains and WHOQOL-BREF physical and environmental domains. There was no correlation between QoL domains and clozapine level, hemoglobin A1C or BMI. **Conclusion:** Assessing

subjective QoL during an annual health visit provides a unique opportunity to discuss results in context, educate on holistic health and identify small behavior changes. For example, a high score on the Fagerstrom leads to a discussion of clozapine levels, to psychotic symptoms and side effects and coping skills, and to a referral to smoking cessation or illness management recovery (IMR) group. This demonstration of population-based management leads to the development, and future evaluation, of interventions that will have both psychosocial and pharmacological impact.

NO. 3

HOSPITAL-BASED KETAMINE INFUSION: A NOVEL RAPIDLY ACTING ANTIDEPRESSANT!

Poster Presenter: Pooja Shah, M.D., M.B.B.S.

Co-Author(s): Daniel D'Andrea, M.D.

SUMMARY:

Objective: 1) Explain the mechanism of action of ketamine, including proposed theory on neuroplasticity; 2) Review current research on ketamine's effect on depression compared to and in conjunction with other modalities like medications and ECT; 3) Effectively understand the dosing parameters of ketamine (0.5mg/kg); 4) Identify patient inclusion and exclusion criteria for treatment with ketamine; and 5) Review the precautions and monitoring of the patient administered ketamine.

Case: The patient is a 64-year-old African-American female who presented to the ICU from a nursing facility after her second near lethal suicide attempt. The patient overdosed on 40+ Percocet and other medications, which she secreted by cheeking at the nursing home. She has a history significant for late-stage non-remitting multiple sclerosis, obesity, hypertension and diastolic heart failure and has been bed bound for two years in a skilled nursing facility with neurogenic bladder and paraplegia. Following her overdose, we were unable to secure an inpatient psychiatric bed due to her paraplegia, and she remained on a medical ward depressed and despondent for 61 days. The patient was determined to be a good candidate for ketamine infusion and has received three infusions since early 2015, with significant improvement in her mood, suicidality, empathy and approach toward family. After the first infusion, she was discharged back to her skilled nursing facility, where she has been followed by outpatient psychiatry. She was relieved of her peripheral neuropathy to an extent that she stopped opiates. She is currently on aripiprazole 15mg,

duloxetine 60mg daily and biotin 300mg/d.

Conclusion: Low-dose IV ketamine infusions (0.5mg/kg, which is one-tenth of the dose used for general anesthesia) have shown promising effects for rapid improvement of depressive symptoms and associated suicidality (two to six hours after infusion). Ketamine is a glutamate N-methyl-D-aspartic acid non-competitive receptor antagonist typically used as an anesthetic. Neuroplasticity has been proposed in mammals through activation of the m-TOR pathway, which induces synaptogenesis. Rapid results from ketamine contrast the time lag in treating depression with other antidepressants. Ketamine has been studied as both an adjunct and alternative to ECT. Bolus dosing as done in anesthesia is not associated with improved mood. Ketamine has been used as the primary anesthetic in ECT due to its relative sparing of the seizure threshold. However, it has not been shown to augment ECT when used in such high dosing. Being a dissociative anesthetic, it initially produces mild psychomimetic and dissociative effects, followed by long-lasting antidepressant effects. Infusions are carried out in a controlled setting with appropriate monitoring equipment. With response rates above 60%, ketamine may be a useful first-line intervention.

NO. 4

LITHIUM-INDUCED NEUROTOXICITY AT THERAPEUTIC LEVELS: ILLUSTRATIVE CASES AND LITERATURE REVIEW

Poster Presenter: Yara Moustafa, M.D., Ph.D., M.S.

Co-Author(s): Cris Corona, M.D., Ivonne Torriente Crespo, M.D., John W. Stiller, M.D.

SUMMARY:

Background: Lithium has been successfully used as a mood stabilizer for treatment and prophylaxis of bipolar disorders. Lithium has a narrow therapeutic index that includes neurotoxic effects at levels above the "therapeutic range." However, under certain circumstance, significant neurotoxicity may occur at levels well within the "therapeutic range." Although there are many case reports of delirium associated with therapeutic lithium levels that resolved with discontinuing or reducing the lithium dose, occasionally, an overreliance on the "therapeutic level" results in no adjustment of the lithium dose, a prolonged diagnosis of "delirium of unknown cause" and, rarely, irreversible neurotoxicity. **Case:** We present two cases of lithium neurotoxicity at therapeutic lithium levels. Case 1: A 76-year-old man

with bipolar I disorder on lithium 300mg twice daily, was admitted to a psychiatric hospital with a diagnosis of mixed manic-depressive disorder, a recognized diagnosis with the *DSM-5*. On admission, he was confused and had difficulty with balance. Lithium level was 0.71, within the “therapeutic range” (0.6–1.2), and he was continued on the 300mg twice daily. A complete work up for his Delirium (including CBC, CMP, UA, arterial blood gases, head CT, brain MRI, EEG, LP and CXR) revealed no clear cause, and a neurological consultation agreed with the diagnosis of delirium and suggested lithium neurotoxicity despite therapeutic levels. The patient’s delirium improved and ultimately resolved after discontinuing the lithium. Case 2: A 54-year-old male patient with schizophrenia on clozapine 300mg twice daily and lithium 300mg twice daily presented with recurrent falls associated with postural instability. Lithium level was 0.6; motor difficulties resolved after lithium was discontinued. **Discussion:** We review the literature on lithium-induced neurotoxicity at therapeutic levels, including other relevant case reports and possible explanations for the neurotoxic effects, including the possibility of interfering with signal transduction through G-protein-coupled receptor (GPCR) pathways and/or N-methyl-D-aspartate receptor (NMDAR)/nitric oxide (NO) signaling pathway involvement. The syndrome of irreversible lithium-effectuated neurotoxicity (SILENT) will also be discussed. **Conclusion:** Our cases and others reported in the literature highlight the importance of maintaining a high index of suspicion for lithium neurotoxicity in patients with unexplained neurological dysfunction on lithium despite therapeutic serum levels. Because lithium neurotoxicity may occur with “therapeutic” serum levels, and may occasionally be irreversible, lithium should be discontinued until it is clear that it is not contributing to the neurological dysfunction.

**NO. 5
MODIFIED COMMUNITY-BASED ACCOMPANIMENT
MODEL FOR ART DELIVERY AT A FREE CLINIC FOR
THE HOMELESS: CASES IDENTIFYING PROGRAM
NEED AND DEVELOPMENT**

Poster Presenter: Kathryn Q. Johnson, D.O.

Co-Author(s): Christian Neal, M.D., M.P.A., Helen Ferguson, M.P.H.

SUMMARY:

Background: In 2014, 24,962 people were living with HIV in Virginia; 763 were newly diagnosed. Approximately 40% are retained in HIV care, and

35% are virally suppressed. Over the past decade, antiretroviral therapy (ART) has improved. Regimens are less complex, better tolerated and more potent. Early identification and treatment could lead to reduction in the incidence of HIV infections. Most who receive combination ART can achieve viral suppression. Achieving high ART coverage in an area decreases incidence of HIV infections. Barriers to testing and care affect virological outcomes on the local, state and national levels. Homelessness, substance use and mental illness are common factors that negatively affect adherence. Psychiatrists at the Fralin Free Clinic identified patients who demonstrate difficulty with HIV treatment adherence. Integrating principles from assertive community treatment (ACT) for severe mental illness and the community-based accompaniment model for ART delivery, psychiatric providers developed an intervention to improve medical and psychiatric outcomes. **Case:** The following are representative of the patients that prompted the development of our program. Mr. K. is a 29-year-old African-American male diagnosed with HIV in 2012. Due to untreated schizophrenia, poor treatment adherence, lack of insight and homelessness, he was not retained in HIV care or treated with ART until 2016. Mr. C. is a 40-year-old African-American male diagnosed with HIV in 1992. He struggles with severe substance use disorders, comorbid mental illness, multiple incarcerations, numerous hospitalizations and chronic homelessness. He frequently reports lost or stolen medications due to his psychosocial instability, leading to poor adherence. Mr. B. is a 50-year-old African-American male diagnosed with HIV in 1992 and started on ART in 1995. He currently resides at the rescue mission affiliated with our clinic. Staff expressed concern about risky sexual behaviors with other shelter guests. His illness has progressed to AIDS, based on CD4<200. Although he is new to the area, he is retained in HIV treatment and reports compliance with ART. **Discussion:** These cases highlight issues with treatment-interfering behaviors, poor ART adherence, unsafe sex practices and retention in care. Psychosocial factors impact the ability to effectively manage and prevent the spread of HIV. Psychiatrists are familiar with intensive, community-based interventions for managing illness and can play a significant role in the growing environment of collaborative medical-behavioral care. Integrating ACT principles and components of the community-based accompaniment model for ART delivery, clinic

providers and staff identified tools for use in an intervention to improve psychiatric and virological outcomes. Plans include increased testing, support groups with education and meals, additional transportation, increased provider availability, and medication delivery and monitoring.

NO. 6

INTEGRATED TREATMENT THROUGH SERVICE LEARNING IN A CLINIC FOR THE HOMELESS: CASE REPORT DEMONSTRATING SERVICES, PROGRAM EVOLUTION AND EARLY CHALLENGES

Poster Presenter: Christian D. Neal, M.D., M.P.A.

Co-Author(s): Kathryn Q. Johnson, D.O., Helen Ferguson, M.P.H.

SUMMARY:

Background: The Roanoke Rescue Mission Fralin Clinic provides comprehensive preventative medical and mental health services for the homeless. In 2015, psychiatric residents from Carilion Clinic began a service learning program that is a collaboration of public, private and academic institutions. This program provides systems-based learning for the residents to improve quality and access to psychiatric and medical care for the patients. **Case:** Mr. K. is a 29-year-old African-American male with history of schizophrenia, HIV and herpes zoster. He is a homosexual male and contracted HIV from unprotected intercourse. Mr. K. was informed of his HIV infection in February 2012, after attempting to donate blood. He was first seen by an infectious disease specialist in July 2012. From 2012 to 2015, the patient's follow-up was poor, and labs were drawn infrequently. HIV treatment was not initiated due to his poor insight and treatment nonadherence. Mr. K. had limited contact with psychiatric care until February 2015, when Rescue Mission staff referred him for evaluation due to bizarre behavior and hallucinations. Ziprasidone was prescribed at this appointment, and over the course of the next eight months, oral aripiprazole and paliperidone were also tried, with poor adherence. In late 2015 and early 2016, Mr. K.'s mental health appeared to further decompensate, as he called 911 multiple times due to distress from auditory hallucinations, repeatedly called ID clinic disputing his diagnosis, was involuntarily admitted twice and was unable to complete his work assignment at the Rescue Mission. During his second admission, clinic providers consulted with the inpatient physician. Paliperidone palmitate was delivered to the facility by clinic staff and initiated as a result of this

collaboration. He resumed care at the Free Clinic with a new provider, and efforts were made to improve insight, trust and rapport. Since February 2016, the patient has been adherent to a regimen of aripiprazole 15mg and paliperidone palmitate 156mg every 28 days. He has not missed a weekly follow-up appointment; therefore, frequency of visits was decreased to biweekly. Mr. K. is re-established with ID clinic and compliant with antiretrovirals. He demonstrates consistent treatment adherence, insight regarding psychiatric and medical diagnoses and decline in perceptual disturbances. **Discussion:** This case highlights the many services provided and challenges faced in collaborative service learning. Current services include medications, labs, imaging, psychotherapy, case management, specialty appointments and psychoeducation to patients, staff and other providers. In the first year, the program serviced 150 unduplicated patients and is likely to double that in year two. Challenges related to obtaining medications, recruiting specialists, treatment adherence and collaboration have led to significant growth and development of the program.

NO. 7

EVIDENCE FOR USING ELECTROCONVULSIVE THERAPY IN INDIVIDUALS WITH DEMENTIA: A SYSTEMATIC REVIEW

Poster Presenter: Rajesh R. Tampi, M.D.

Co-Author(s): Anil K. Bachu, M.D., Silpa Balachandran, M.D., Rabeea Mansoor, M.D., Sujan Barua, M.D., Billy Zou, B.S.

SUMMARY:

Objective: Conduct a systematic review of the literature on evaluating the efficacy and tolerability of electroconvulsive therapy in individuals with dementia. **Methods:** We conducted a systematic search of five major databases including PubMed, Medline, PsychInfo, Embase and Cochrane Collaboration with "ECT" and "Dementia" as our search terms. There was no time or language or restrictions placed on the selection of the studies. However, we only used studies that were published in English or had an official English translation in our final review. **Results:** A total of 134 published articles were identified using our search strategy. Of these, only 28 articles were deemed eligible for a full-text review. Of the 28 articles, 20 were case reports, five were case series and three were retrospective chart reviews. We did not identify any randomized controlled trials (RCT) for the use of ECT in individuals with dementia. A total of eight articles

evaluated the use of ECT in individuals with dementia and depressive symptoms. Seven articles evaluated the use of ECT in individuals having agitation and aggression in dementia. Two articles evaluated the use of ECT in individuals with dementia who had psychotic features, catatonic symptoms, and yelling and screaming. One article identified the use of ECT in an individual who has manic symptoms. A total of six articles that evaluated use of ECT in individuals with dementia looked at one or more behavioral symptoms. All of the studies under review reported symptomatic benefits in individuals with dementia. We found that, on average, four to eight sessions of ECT were used in these studies. The majority of studies reported significant side effects with the use of ECT, including cardiovascular and neurological adverse effects. **Conclusion:** Available evidence from this systematic review indicates that there are no RCTs for the use of ECT in individuals with dementia. Current evidence from 28 non-randomized studies reported symptomatic benefits from ECT for a variety of symptoms in individuals with dementia, including depression, mania, yelling and screaming, agitation, and a combination of these symptoms. Despite showing symptomatic benefit, a majority of the studies also indicate that the use of ECT results in significant adverse effects, namely cardiovascular and neurological effects in these individuals. Data from this systematic review indicate that ECT may be beneficial in certain individuals with dementia and behavioral symptoms, but significant adverse events may limit its use in these vulnerable individuals.

NO. 8 **OXYTOCIN FOR FRONTOTEMPORAL DEMENTIA: A SYSTEMATIC REVIEW**

Poster Presenter: Rajesh R. Tampi, M.D.
Co-Author(s): Michael Maksimowski, M.D., M.A., Mohsina Ahmed, M.D., Deena J. Tampi, M.B.A.-H.C.A., M.S.N., R.N.

SUMMARY:

Objective: The aim of this systematic review is to identify published randomized controlled trials (RCTs) that evaluated the use of oxytocin in individuals with frontotemporal dementia. **Methods:** A literature search was conducted of PubMed, MEDLINE, EMBASE, PsycINFO and Cochrane Collaboration databases for RCTs in any language that evaluated the use of oxytocin in individuals with frontotemporal dementia (FTD). Bibliographic databases of published articles were also searched

for additional studies. **Results:** A total of two RCTs that evaluated the use of oxytocin in individuals with FTD were identified. In one study, the use of oxytocin in individuals with FTD produced a reduction in identification of negative facial expressions (anger and fear), which can be hypothesized to improve trust and increase cooperation in these individuals. Both studies noted short term benefits on behavioral symptoms in individuals with FTD who received oxytocin. Oxytocin was well tolerated in both studies. **Conclusion:** Oxytocin appears to improve social aspects of cognition and behavioral symptoms in individuals with FTD and is well tolerated. However, positive data from larger and longer duration RCTs are needed before the routine use of oxytocin in individuals with FTD can be recommended.

NO. 9 **DELUSIONS PRESENTING AS A SYMPTOM OF TRAUMATIC BRAIN INJURY**

Poster Presenter: Yarelis Soto, M.D.
Co-Author(s): Yarelis Guzman-Quiñones, M.D., Ana Turner, M.D.

SUMMARY:

Background: Traumatic brain injury (TBI) has become of increase interest in recent years due to its high incidence and economic burden to society. The annual incidence of TBI in the U.S. is 200 per 100,000 per year. Psychiatric disorders can be commonly encountered among patients with head injuries. It has been reported that psychosis secondary to TBI occurs in less than 10% of the population. The mean interval between the head injury and the development of psychosis is roughly four years. To meet criteria for psychosis secondary to TBI, there has to be evidence that the psychosis is a direct physiologic consequence of a brain disorder and not better accounted for by a primary psychiatric disorder. **Case:** Mr. J. is a 67-year-old Hispanic male with no prior psychiatric history who presented with psychotic and depressive symptoms. He was a victim of an armed robbery and was hit in the head multiple times. After this event, the family started noticing an abrupt cognitive decline, which led him to stop working. Two years after the event, the patient presented with depressive symptoms, and three year after, he had noticeable psychotic symptoms. He became paranoid and was convinced that his wife was being sexually inappropriate with their grandson. He had a brain MRI, which was normal. He was started on an antipsychotic

medication with a good response. **Discussion:** This is an interesting case of a patient who presents with bizarre delusions and confabulation after sustaining a traumatic brain injury. We will present a review of the literature for distinctive symptoms that help differentiate between dementia, schizophrenia and psychosis due to another medical condition: psychotic disorders due to traumatic brain injury (PDDTBI). PDDTBI can be divided in two subtypes. It can present with delusions and as schizophrenia-like psychosis. Schizophrenia-like psychosis mainly presents with hallucinations and persecutory delusions. Negative symptoms tend to be less prominent in PDDTBI. Prodromal symptoms can be seen before the development of psychosis, although they are not always present. These include behavioral changes, work deterioration and social isolation. When we compared PDDTBI patients to patients with schizophrenia, PDDTBI patients tended to present with focal abnormalities on MRI, which are less commonly seen in patients with schizophrenia. PDDTBI patients also tended to have positive EEG findings. This topic has clinical relevance, as it is important to make an accurate diagnosis that can help guide therapy and prognosis. Neuropsychological testing could provide further information in similar cases whenever possible. The current case report provides great didactic value, as it provides a clear example to follow the progression of a patient with possible psychosis secondary to TBI.

NO. 10
OLDER ADULTS WITH SERIOUS MENTAL ILLNESS
LIVING IN THE COMMUNITY: A CLINICAL
ASSESSMENT

Poster Presenter: Sarah E. Herold, M.D.
Co-Author(s): Sarah Herold, M.D., Corinne Cather,
Ph.D., Jennifer Gatchel, M.D., Ph.D., Oliver
Freudenerich, M.D.

SUMMARY:

The number of community-dwelling older adults living with serious mental illness is growing in the U.S. In addition to age-related risks of cardiovascular disease, adverse effects from antipsychotic medications and cognitive decline, these individuals may suffer from mood disturbances, functional impairments and other issues related to quality of life. Without systemic screening, some of these concerns may go unrecognized. We will describe a quality improvement project designed to screen and assess the patient population over 55 years old who receive psychiatric services in an urban mental

health center clinic that specializes in schizophrenia treatment. As part of routine care, we started collecting data in the domains of mood, global cognition, processing speed, functional status and well-being by administering a battery of clinical and neuropsychiatric assessments. The goal of our clinic initiative is to identify areas of need for this population and any barriers to intervention. Additionally, we hope to identify areas of strength in community-dwelling older adults who are living with serious mental illness.

NO. 11
THE RETROGENESIS MODEL IN ALZHEIMER'S
DISEASE: EVIDENCE AND PRACTICAL
APPLICATIONS—NEW WAYS TO HELP PATIENTS OF
ALZHEIMER'S DISEASE

Poster Presenter: Navjot K. Brainch, M.B.B.S.
Lead Author: Saeed Ahmed, M.D.
Co-Author(s): Navjot Brainch, M.D., Hema Venigalla,
M.D.

SUMMARY:

The increasing number of people living with Alzheimer's disease (AD) constitutes a growing global concern. At present, nearly 44 million people suffer from AD worldwide, and these numbers are expected to almost double every 20 years; an estimated 65.7 million people will suffer from AD in 2030 and 115.4 million in 2050. It is tremendously important to explore new ways of understanding AD, as this may improve the management of this growing medical, socioeconomic and public health burden. Evidence suggests that AD may evolve through the unique process of "retrogenesis," a decline that mirrors, in reverse order, brain development that occurs from birth. The retrogenesis hypothesis distinguishes distinct stages, each one linked to levels of cognitive functioning in developing children. Given its high prevalence and growing incidence, AD is one of the top causes of disabilities in later life, and this takes an enormous toll on the caregivers. At least half of caregivers for patients with AD have been reported to suffer from depression, 74% reported their concerns about maintaining their own health, and more than 40% of family caregivers report high or very high emotional stress. The understanding of clinical correlations and practical applications of retrogenesis theory may help caregivers to recognize different stages of AD and to provide better care with less burden.

NO. 12

LATE-ONSET BIPOLAR: CURRENT UNDERSTANDING OF ITS NEUROBIOLOGY AND IMPLICATIONS CONCERNING DIFFERENTIAL DIAGNOSIS, TREATMENT AND FUTURE RESEARCH

Poster Presenter: Tiffany Diament, M.D.

Lead Author: Elena Ortiz-Portillo, M.D.

Co-Author(s): Davin Agustines, D.O.

SUMMARY:

Background: With the worldwide increase in the number of individuals living longer, there is an expected increase in the number of older adults who will be diagnosed with bipolar disorder.

Consequently, there is a growing need to better understand late-onset mania. In this poster, we describe the current knowledge of this debilitating illness, as well as the unmet needs in the understanding of its neurobiological underpinnings.

Methods: We conducted a search of Internet databases using combinations of the keywords "late onset," "elderly," "bipolar," "mania" and "mood disorders." English-language reports presenting data regarding mania in adults over the age of 50 were included. **Results:** There is limited evidence relating to the specific prevalence, etiology, pathophysiology and management of late-onset mania. Clinically, it presents several distinct features that distinguish it from early-onset bipolar disorder. Nonetheless its diagnosis may be difficult due to the frequent presence of other comorbid illnesses and the overlap in symptomatology with other disorders. Vascular pathology and other brain changes might be associated with its pathogenesis. **Discussion:**

Diagnosis of bipolar in adults over the age of 50 should be a process whereby other potential etiologies are systematically excluded. It represents a heterogeneous population with high rates of comorbidities, and it has been hypothesized that it may constitute a completely different entity from other forms of bipolar disorder. Its pathophysiology remains unclear, but data suggest a possible link to vascular factors. In regard to treatment, age-associated modifiers have been suggested, but further studies are necessary to explore the response to psychotropic medications in this population. **Conclusion:** Diagnosis of late-life bipolar disorder requires a careful differential diagnosis and evaluation for other comorbidities. This illness presents an ongoing dilemma for the clinician with respect to treatment and management.

NO. 13

UP-TO-DATE TREATMENT OF PSYCHOSIS IN LATE-LIFE PATIENTS

Poster Presenter: Tessa C. Murante, D.O.

SUMMARY:

The major goal of the pharmacological treatment of older psychotic persons is to improve quality of life, maintain persons in the community/least restrictive setting and delay or avoid their placement in acute psychiatric settings and long-term care facilities. Certain general recommendations and guidelines should be followed regarding the use of all drugs in older psychotic adults. A pretreatment medical evaluation is essential, including a baseline electrocardiogram, as many of the drugs have potential cardiac implications, as well as a baseline complete blood count, comprehensive medical panel and lipid panel. Most psychotropic drugs should be given in equally divided doses three or four times over a 24-hour period, as older adults may not be able to tolerate a sudden rise in drug plasma levels from one large daily dose. As a person ages, the ratio of lean body mass decreases while body fat increases. Many lipid-soluble psychotropic drugs are distributed more widely in fat than in lean tissue, so a drug's action can be unexpectedly prolonged in older adults. The adage "start low, go slow" should be followed as a general rule, using the lowest possible dose to achieve the desired therapeutic response. Additionally, liquid preparations are useful for older patients who cannot swallow tablets. Making recommendations for any treatment is contingent upon demonstrating that the benefits of the treatment clearly outweigh the potential harms. Clinicians should frequently reassess all patients to determine the need for maintenance medication, changes in dosage and potential development of adverse effects. When possible, a washout period is recommended, where a patient is discontinued from psychotropic medications and reevaluated during a drug-free baseline state. The treatment of psychosis in late life is varied based on whether psychosis is due to a primary (caused by a psychiatric disorder) or secondary (due to a medical and/or neurologic condition) factor. The treatment recommendations for psychotic delirium include clinicians first addressing reversible contributors to delirium. Next, removal or reduction of psychoactive drugs, particularly sedating and anticholinergic agents is necessary. Environmental and behavioral treatment strategies are considered first-line treatments, over psychoactive substances. These treatment modalities include mobilization, sleep enhancement,

orientation, therapeutic activities and environmental modifications. Delirium rooms, with higher staff-to-patient ratios and physical restraint-free environments, have also demonstrated promise for management of agitated delirious patients.

NO. 14
EFFECT OF ANTIDEPRESSANTS ON REM SLEEP IN THE ELDERLY POPULATION: A LITERATURE REVIEW

Poster Presenter: Muhammad Annas Tahir, M.D., M.B.B.S.

Co-Author(s): Nusrat Jahan, M.D., M.P.H., Muhammad Zeshan, M.D.

SUMMARY:

Background: Sleep is required for bodies to maintain proper function and health. Sleep is divided into two types: rapid eye movement (REM) and non-rapid eye movement (NREM) sleep. With advanced age, the amount of light sleep increases and deep sleep decreases, and there is a decline in REM sleep and an increase in sleep fragmentation. This sleep disturbance among the elderly can cause physical and mental problems. Depression is very common in old age and many of the elderly have been struggling with sleep problems. Antidepressants (ADs) are commonly used for treating their depression. Most ADs change sleep and alter the physiological patterns of sleep. These effects are greatest and most consistent with REM sleep and cause reductions in the amount of REM sleep and increases in REM sleep onset latency. SSRIs have the greatest effect on REM sleep. Patients with REM sleep disorder experience worsening of symptoms while on antidepressant treatment. **Methods:** We designed and implemented comprehensive literature searches in PubMed. We searched the databases with database-specific controlled vocabulary in conjunction with keywords (e.g., "REM sleep disorders," "elderly," "antidepressants") in various combinations for reports published in English between 2011 and 2016. Our searches identified a total of 129 citations on PubMed, of which 30 were published within the last five years. After further review, 10 were identified for inclusion. Studies were selected by using inclusion criteria age 50 or above, REM sleep disorders and using antidepressants for depression. Articles selected for the review included systemic reviews, retrospective studies and prospective studies. **Results:** Antidepressants significantly affect sleep architecture of the elderly population by increasing sleep latency and decreasing REM sleep duration.

ADs are associated with REM sleep disorders, which include nightmares and REM sleep behavioral disorders (RBDs). Review of literature also suggests that RBDs in patients taking ADs may be an early sign of neurodegeneration. ADs can cause increased REM sleep without atonia. Although data report the cases of RBDs are associated with all major groups of antidepressants, SSRIs are most frequently the antidepressant reported to have this adverse effect. It is also observed that rapid changes in medications can worsen RBDs and depression. **Conclusion:** Use of ADs can affect REM sleep in the elderly through various mechanisms. RBDs can be an early sign of neurodegeneration, and antidepressants can put a patient at risk for neurodegenerative diseases. Psychiatrists must screen out neurodegenerative signs/symptoms and discuss with the patient before prescribing antidepressants for the treatment of depression in elderly patients. More research is required to study antidepressant effects on REM sleep disorder.

NO. 15
MARIJUANAISM: A PERSPECTIVE

Poster Presenter: Hema M. Mekala, M.B.B.S.

Co-Author(s): Hema Venigalla, M.D., Saeed Ahmed, M.D.

SUMMARY:

Despite marijuana being one of the most commonly abused drugs worldwide, it is still considered for legalization in several states in the United States. The main factor considered for legalizing is for the medical reasons. Recently, medical marijuana has been proposed to treat Alzheimer's disease (AD) and Parkinson's disease (PD). Researchers have studied marijuana in patients with AD and PD, which showed temporary relief of symptoms, but long-term use can cause memory impairment, psychosis, attention and cognitive deficits, and behavioral changes. Thus, marijuana might actually exaggerate the symptoms of the original disease chronically. It can also increase the risk for mood disorders, heart attacks and malignancies. Chronic use of marijuana can also suppress the immune system, increasing the predisposition to infections. It is also evident from studies that derivative compounds of marijuana can effectively target the specific receptors of the brain to treat these particular disorders, but using marijuana itself can affect all the receptors in a generalized way and impair other functions of the brain. Further extensive research is needed to understand if such derivative compounds can be

designed and applied clinically. Also, if marijuana is prescribed along with other drugs, it is quite possible to have adverse drug interactions, increasing morbidity and mortality. In addition, being a recreational drug, marijuana can be potentially addictive when used chronically. It is also challenging to conduct larger prospective studies in the future to understand the evidence-based use of marijuana in AD and PD because it is very unlikely to happen considering the intrinsic controversial effects of the drug. Rather, it is important that we focus on finding alternative treatments for AD and PD and not use marijuana as a treatment option.

NO. 16
TESTING THE ASYLUM-WITHOUT-WALLS
HYPOTHESIS: USING CENSUS DATA TO MEASURE
SOCIOECONOMIC PARITY IN THE GEOGRAPHIC
DISTRIBUTION OF LONG-TERM CARE FACILITIES

Poster Presenter: Walter Mathis, M.D.

SUMMARY:

Background: Despite noble intentions, deinstitutionalization of state hospitals was not paired with a solid plan or infrastructure to support patients released to the community. Many of these patients with serious mental illness now reside in long-term care facilities instead. There is concern that these facilities might cluster in areas that are not socioeconomically representative of the community, or what some have termed an "asylum without walls." Therefore, the purpose of this study was to investigate the socioeconomic parity in the geographic distribution of long-term care facilities in Arkansas. **Methods:** A database of long-term care facilities licensed in the state of Arkansas was used to gather address and basic information for all such facilities in the state (N=449). Custom programming scripts geocoded the facilities (converted addresses to longitude and latitude) and queried U.S. Census databases to collect socioeconomic information on the census tracts and counties in which the facilities are located. These data were collected into a relational database, and statistical analyses compared the census tracts containing facilities to the counties within which these tracts are located. **Results:** On the whole, census tracts containing long-term care facilities in the state of Arkansas did not differ significantly from the surrounding county when assessed for variables relating to race, household income or home ownership. **Conclusion:** Insofar as this study tests a select subpopulation (those living in long-term care facilities) within a

single state (Arkansas) for a short list of objective variables, it does not support the asylum-without-walls hypothesis. The informatics developed for this study and the robustness of the U.S. Census databases allow for easy adaptation to other subpopulations or other areas to further monitor for parity. With the asylum model irreversibly gone and a true community model still in the works, it is important to monitor for socioeconomic parity of patient placement if for no other reason than the imperative that a society shall judge itself on how it treats its most vulnerable members.

NO. 17
RECRUITMENT, IDEOLOGY AND STRATEGIC
PREVENTION IN RADICAL EXTREMISM: A LITERARY
REVIEW

Poster Presenter: Aida Spahic Mihajlovic, M.D., M.S.
Co-Author(s): Cody Krueger, B.A., Amanda King, B.A.,
Kristina Mihajlovic, B.A., B.M.S.

SUMMARY:

Radical extremism has become an increasingly significant issue facing our society today. Groups ranging from the Islamic State of Iraq and the Levant (ISIL) to the Aryan Nation continue to grow in power and have an influence both abroad and here in the United States. This review aims to understand the recruitment strategies and ideologies used by radical extremist groups in an attempt to develop effective opposition and preventive strategies that can be implemented in various clinical applications. Eleven articles were read by five people. Inclusion criteria for this research included keywords counternarrative, terrorism, Islam, White Power, radical extremism and prevention of radicalization. Exclusion criteria included articles written by members of radical extremist groups themselves, as well as articles written before September 11, 2001. Based on the 11 articles, individual anti-radicalization countermeasures should focus on countering the perceptions of victimization, undermining the "champion" narrative and emphasizing nonviolent alternatives. In the clinical setting, one should provide options that can fulfill the psychological needs of closure, sense of identity/belonging and personal significance. Understanding these various strategies will allow for improved patient care, particularly with adolescent psychiatric behavior within at-risk community members.

NO. 18

PARACHUTE NYC OUTCOMES: A MODEL PROGRAM MEETS THE REAL WORLD

Poster Presenter: David C. Lindy, M.D.

Co-Author(s): Neil Pessin, Ph.D., Mary Jane Alexander, Ph.D., James Mills, L.C.S.W., Antonio Munoz, Pablo Sadler, M.D.

SUMMARY:

Parachute NYC is a community-based mental health program that deploys mobile teams to treat seriously mentally ill people and their families in their homes. Treatment is based on the Needs Adapted Treatment Model (NATM), which engages client, family and staff in transparent, nonhierarchical, open dialogue sessions called network meetings where no "expert voice" is privileged. Twenty-five years of research from northern Europe have demonstrated clinical efficacy. Operating since 2010, Parachute NYC uses three interdisciplinary, peer-integrated teams that include psychiatrists and operate in Manhattan, Queens and the Bronx. Each team has a maximum case load of 40 clients. Parachute NYC's first four years of funding were provided by federal and state grants, but sustainability is dependent upon demonstrating efficacy and cost effectiveness to Medicaid managed care. This poster will present preliminary outcome data on Parachute NYC's first four years as measured by hospitalization rates, ER utilization rates, mobile crisis visits, clinical measures and length of stay in the program.

NO. 19

CAREGIVER'S EDUCATION AND PERCEPTION OF CHILDREN'S MENTAL ILLNESS, OUTCOME AND FUTURE: CROSS-SECTIONAL SURVEY IN AN INNER CITY, MINORITY POPULATION

Poster Presenter: Shaheen A. Alam, M.D.

Co-Author(s): Tejas Patel, M.D., Pierre Jean-Noel, M.D., Carolyn Springer, Ph.D., Marian Moca, M.D.

SUMMARY:

Background: Psychiatric literature recognized perception as a considerable factor influencing the outcome in adult mental illness. A negative view of mental illness is often driven by misunderstanding or lack of knowledge. Studies looked at the relationship between education and perception of mental illness in adults with inconclusive findings. Little is known about this relationship in children. **Objective:** Examine caregivers' perception of a child's mental illness in relation to their education level and the effect it may have on the child's mental health,

outcome and overall future. **Methods:** The study took place in a child and adolescent psychiatry outpatient clinic located in a predominantly minority, inner-city area. A 20-item survey based on the Brief Illness Perception Questionnaire (BIPQ) was used with 43 final participants. Data analysis was conducted using SPSS 16.0 software. **Results:** Correlation analysis showed caregivers with a higher level of education had a positive outlook of the child's future. An association between caregiver's level of education, their perception of child's mental illness and outcome was found, but was not statistically significant. Caregivers who had a positive view of the child's mental illness also had a positive view of their child's future. Data also indicated that a higher number of ED visits correlated with a more negative view of the child's mental illness. Caregiver's education did not correlate with number of ED visits. **Conclusion:** Findings suggest education may play an important role in the caregiver's perception of their child's mental illness as well as future. Further research is needed to better understand the precise nature of these relationships and elaborate target preventive and remedial interventions that could lead to a more positive outcome.

NO. 20

KEY STAKEHOLDER PERCEPTIONS OF PSYCHOSOCIAL REHABILITATION IN HUNAN, CHINA: A QUALITATIVE STUDY OF COMMUNITY MENTAL HEALTH IMPLEMENTATION

Poster Presenter: Luming Li, M.D.

Co-Author(s): Mengjie Deng, Xuan Ouyang, M.D., Ph.D., Robert Rohrbaugh, M.D., Zhening Liu, M.D., Ph.D.

SUMMARY:

Limited research is available to describe the process of implementation of mental health rehabilitation services internationally. China is an interesting case example, as mental health services were among the top five priorities in the last five-year plan for health, and in 2013, China passed comprehensive national mental health reform. This reform mandated the expansion of psychosocial rehabilitation services for those with serious mental illness. Since a review of the literature did not find any systematic reviews of this topic, the aim of this study is to document the regional challenges of planning and implementing mental health rehabilitation services in Hunan, China. Hunan is a province with a population of 65 million people and may be more representative of

the opportunities and challenges for China than other eastern provinces. We used a qualitative methodology to identify and assess mental health rehabilitation facilities within Hunan province, including findings from 23 semi-structured key informant interviews, three focus groups and participant observation. Participants were purposively selected and included diverse stakeholders such as rehabilitation directors, psychiatrists, psychologists, social workers and psychiatric hospital leaders. In total, eight hospitals, seven rehabilitation centers, and three schools are represented in the study. Preliminary data suggest that while leaders are aware of rehabilitation as a relevant component of a comprehensive mental health care delivery system and despite significant investment of the overall mental health care system, important implementation challenges for mental health rehabilitation continue to be present. These challenges can be organized around four themes: 1) inadequate marketing and education, 2) resource shortage and barriers of care, 3) stigma and cultural factors, and 4) insufficient system integration. Rehabilitation center directors reported limited specialized training about rehabilitation, low employee incomes, lack of future direction and the need for additional financial investment in rehabilitation. Mental health hospital leaders discussed improvement of stakeholder communication, policy changes that outline specific rehabilitation requirements and the need for high-level government support. We believe these findings have critical implications for the implementation of rehabilitative services for the mentally ill and for the development of policies related to mental health rehabilitation services in China.

NO. 21
DEPRESSIVE SYMPTOMS AND POSTTRAUMATIC STRESS DISORDER AMONG HIV PATIENTS IN THE DOMINICAN REPUBLIC

Poster Presenter: Emily E. Erkinen, B.Sc.
Co-Author(s): Laura F Santoso, B.S., Carlos Adon, M.D., Ellen Koenig, M.D., Nancy Byatt, D.O., Gerardo Gonzalez, M.D.

SUMMARY:

Background: In the HIV population, depression prevalence is 42%, and posttraumatic stress disorder prevalence is 5–75%, making these the two most common psychiatric comorbidities among patients with HIV. Comorbid depression is known to decrease antiretroviral treatment participation. The objective

of this study was to determine 1) the prevalence of depression and posttraumatic stress disorder among HIV patients in the Dominican Republic and 2) if depression treatment is associated with antiretroviral treatment participation. **Methods:** HIV-positive patients at an infectious disease clinic in the capital city of Santo Domingo, Dominican Republic, were recruited in June and July of 2015. Participants completed the Beck Depression Inventory-II, the Mini International Neuropsychiatric Interview Module for Posttraumatic Stress Disorder and a demographic/clinical information questionnaire at one of their follow-up appointments. **Results:** Of the 100 participants recruited, 32 were found to have symptoms concerning for depression, and six met the *DSM-IV* criteria for posttraumatic stress disorder. Eighty-five participants had taken 95% or more of their antiretroviral medications since their last appointment, as determined by pill count (ideal level of medication adherence for viral suppression). Ninety percent of depressed patients (N=31) had taken 95% or more of their antiretroviral medications, and 81% had received treatment for depression (psychotherapy, group therapy and/or antidepressants). **Conclusion:** Prevalence of depressive symptoms in HIV patients in the Dominican Republic is comparable to rates found in HIV patients in other Latin American countries. Despite 45 patients reporting lifetime traumatic experiences, PTSD prevalence in this population was lower than expected for an HIV population in a developing nation. Contrary to previous studies, a higher percentage of depressed patients were participating in treatment at a therapeutic level than nondepressed patients. Participation in depression treatment may facilitate antiretroviral treatment participation.

NO. 22
NEUROCYSTICERCOSIS PRESENTING AS PSYCHOSIS

Poster Presenter: Saeed Ahmed, M.D.
Co-Author(s): St. Victor Guitelle, M.D., Vamsi Chigurupati, D.O., Nyapati R. Rao, M.D., M.S.

SUMMARY:

Neurocysticercosis is caused by accidental ingestion of eggs of *Taenia solium* (pork tapeworm); it is the most common parasitic disease of the nervous system in developing countries, often manifesting as epilepsy. It is mainly a disease of immigrants in the United States. Psychiatric abnormalities, particularly depression syndromes, are most frequent in patients

with neurocysticercosis. However, psychosis has been reported as a rare presentation of neurocysticercosis, which is seen in up to five percent of this patient population. We present a case of a 37-year-old female immigrant from El Salvador with past medical history of neurocysticercosis, migraine and no known past psychiatric history brought into the medical ER for a headache, acting bizarre, having auditory hallucinations, and delusional and paranoid thoughts that her husband wants to kill her two teenage daughters and that her husband is having an affair with a woman who is plotting to kill her. The patient was admitted on the medical floor to rule out delirium versus psychosis. CT brain scan revealed right frontal and parietal lobe hypodense regions with eccentric and irregular calcification; MRI brain scan showed encephalomalacia in the upper right frontal and right parietal lobe with the rim of adjacent gliosis. The patient was cleared from the medical floor for delirium and transferred to the psychiatric unit for psychosis secondary to neurocysticercosis. In the first two weeks of hospitalization, the patient continued to exhibit symptoms of psychosis and responded to antipsychotic treatment. The importance and objective of presenting this case are to recognize such cases that are organic in nature seen by psychiatrists, as they masquerade as psychosis. The most important aspect of this case is that the patient had a similar presentation of neurocysticercosis with psychotic features in the past. To the best of our knowledge, this is the first case of cyclic psychosis in a patient with neurocysticercosis.

NO. 23

SAFETY AND EFFICACY OF DEEP TMS IN PATIENTS WITH PACEMAKERS

*Poster Presenter: Manish Sheth, M.D., Ph.D.
Co-Author(s): Shashita Inamdar, M.D., Ph.D.,
Newshaw Karkhanehchin, B.S., Katherine Nguyen,
B.S., Douglas Gibson, M.D., Sahil Sheth*

SUMMARY:

Deep transcranial magnetic stimulation (dTMS) is an innovative, noninvasive, neuromodulation approach for treating neurological and psychiatric disorders. The Brainsway dTMS is an FDA-approved treatment for patients with treatment-resistant depression (TRD). Brief pulses of electricity generate transient magnetic fields via an H-coil in the helmet. These magnetic fields stimulate the neurons in the left prefrontal cortex, improving neuronal connectivity

and retraining the circuits to function more effectively, thus reducing the symptoms of depression. Our treatment protocol involves administering 1,980 pulses at a frequency of 18hz/s for two seconds, five days a week for six weeks. Presence of ferromagnetic metals in the magnetic field is a contraindication for TMS. There is limited data regarding the safety of TMS in patients with implantable cardiac defibrillators (ICD). Pacemakers have ferromagnetic metal, posing possible risk of pacemaker malfunction during the treatment. The safety of dTMS has not been established in patients with ICD, as explained in the Brainsway dTMS manual. We will discuss dTMS treatments in two patients with ICD. Patient 1 is a 59-year-old Caucasian male adult who presented with major depressive disorder (MDD), recurrent, severe (F33.2), and a prior diagnosis of cardiac arrhythmia treated with ICD. His ICD had been activated three times over the last three years, indicating an active cardiac condition. He had a limited response to multiple psychotropics and was assessed to be a candidate for dTMS. To monitor the effects of TMS magnetic pulses, he was connected to a cardiac monitor during the procedure. A cardiologist was present during the first three days of treatment and during the treatment days when we had redetermination of motor threshold, as there was variability in the intensity of the magnetic pulses during these treatments. A technician with an ICD monitoring device (Merlin 3650 programmer) was present during sessions with a hand-held magnetic pad that could be placed on ICD for deactivation. Patient 1 tolerated 30 sessions of the treatment without any complications. Patient 2 was a 39-year-old female diagnosed with cardiac arrhythmia and had an ICD placed in 1997. She presented with MDD, recurrent, severe (F33.2), and generalized anxiety disorder (F41.1). We consulted her cardiologist, and the patient was monitored for changes in cardiac rhythm during treatments. She was treated with maintenance TMS protocol for six sessions. Depression symptoms were monitored and quantified with PHQ-9 and BDI scores. Both patients showed objective and subjective improvements in their symptoms, with a significant decrease in their PHQ-9 and BDI scores. While these two cases demonstrate the safety and efficacy of dTMS treatment in patients with depression and ICD, more studies are needed to further establish the safety of this procedure in patients with ICD.

NO. 24

THE TIMES THEY ARE A-CHANGIN': CHANGES IN PSYCHIATRIC CARE AS REFLECTED BY BRONX PSYCHIATRIC CENTER'S NEW BUILDING

Poster Presenter: Courtney Howard, M.D.

Co-Author(s): E. Rollhaus, M.D., J. Battaglia, M.D., M. Abrams, L.C.S.W.

SUMMARY:

Changing attitudes in mental health are reflected in the aesthetic and care choices involved in Bronx Psychiatric Center's new building. In early 2016, Bronx Psychiatric Center, which was housed in an edifice built in 1963, moved within the campus to a sleek, state-of-the-art structure designed according to modern psychiatric facility trends. The new building has individual bedrooms, an open nurses' station and more living space. The day room, which had served as a lounge and meeting space in the old hospital, has been converted to an often-locked classroom, and the clinicians' offices are no longer housed on the unit. Analysis of survey data on self-reported morale and perceptions of orderliness from before and after the move proved surprising. After the move, while perceptions of orderliness improved, some measures of morale on the unit significantly decreased. For example, patients reported lower rates of helping fellow patients ($p=0.036$), and higher rates of complaining ($p=0.022$) in the new building as compared to reports on the old building. Qualitative interviews with consumers revealed themes of loneliness, lack of community and a feeling of "being lost" in the open and airy spaces of the new design. While consumers appear to appreciate the aesthetic sense of the new hospital, more space and the freedom it affords, they report a sense of detachment and the absence of a community presence. The design of the new hospital may lead to a sense of alienation and separation from peers, violating the cornerstones of recovery and healing. Notably, consumers were minimally consulted in the design of the new building. While the director of peer services and several unit representatives were shown blueprints of the new building, there was little opportunity for input and feedback. Perhaps the consumers' needs could have been better met had the importance of communal interaction been solicited and incorporated into the design. This appears to parallel a greater trend toward the "sterilization" of modern psychiatric care. In an effort to streamline practices and to provide individualized care, have consumers been inadvertently denied a voice? While modernization has been touted as an antidote to

inhumane or substandard treatment of the mentally ill, it appears that much is lost in the process. In designing an airy and neat space, have we unintentionally created a vacuum for the sense of community and humanity that was? In this poster, we will present the results of the survey and the implications for mental health services. We hope to add to the dialogue about the most essential ingredients for promoting recovery. **Objective:** Participants will learn about the impact of the physical environment on mental health services. Participants will understand the reactions of consumers to the new building design. Participants will learn about the importance of consumer involvement in decision making.

NO. 25

IMPORTANCE AND UTILIZATION OF FAMILY THERAPY IN TRAINING: RESIDENT PERSPECTIVES

Poster Presenter: Sarah A. Nguyen, M.D.

Co-Author(s): Daniel Patterson, M.D., Madeleine S. Abrams, L.C.S.W., Andrea Weiss, M.D.

SUMMARY:

Background: All "individual" problems, such as mood, psychotic and cognitive disorders, exist in a relational context. The advent of family therapy brought attention to the individual in the context of the family and the importance of family and larger systems. Understanding family systems also has the potential to enhance the power of individual therapy, yet a combination of treatments is often underutilized in residency training. Training in family psychotherapy has been difficult to integrate into psychiatric residency programs for several reasons, including conflicting paradigms, turf battles, constraints of time and money, and limited resource and supervisor availability. Currently, only eight residency programs nationwide, including Montefiore Medical Center (MMC), have been recognized as providing in-depth training in family therapy. Residents at MMC receive scheduled psychodynamic supervision in couples and family therapy, as well as engage in a curriculum including courses, seminars and electives focusing on couples and family therapy in all four years of training. Though there are some published papers on the importance of family therapy in residency training, there is minimal data published on how residents view the importance of learning family therapy. **Methods:** This poster provides a PGY-4 perspective on the importance family therapy training has in enhancing the treatment of "individual" patients by

deepening the resident's understanding of the family and systems context in which said individual exists. To this end, several case studies involving in-depth family therapy undertaken by residents throughout the four years of residency will be reviewed. Survey results from residents across four years of training assessing their view of the importance of family therapy training in their development will also be presented. **Results:** A more extensive understanding of family therapy is essential to improve treatment outcomes and family/caregiver burden from an individual, family and medical approach, as well as support appropriate interventions for patients and caregivers. **Discussion:** In-depth training in family therapy provides a deeper understanding and cultivates a curiosity and self-awareness of family dynamics. An understanding of the resident's own family, cultural and social context serves as the springboard to broaden the individual biopsychosocial conceptualization. This initial personal development is an essential turning point for continued professional development, as the progression of each year of training allows for a greater appreciation of the complexity of the individual within the family and larger systems context. Finding ways to integrate family therapy into routine patient care during residency training may enhance opportunities for residents to develop skills to deliver a more comprehensive and effective multimodal treatment paradigm that incorporates family and systems perspectives.

NO. 26

A SEVERE CASE OF PALIPERIDONE PALMITATE-INDUCED PARKINSONISM

Poster Presenter: Sheldon Brown, M.D.

Co-Author(s): E. Downes, S. Bolis, S. Welch, A. Turner

SUMMARY:

Secondary Parkinsonism is a risk of all antipsychotic medications, most notably with the typical antipsychotic agents. In this case, our patient developed secondary Parkinsonism while undergoing pharmacological transition between risperidone, olanzapine and paliperidone. We present a case of Mr. E., a 68-year-old CM with PMHx significant for CAD s/p CABG, OSA, positive PPD test, and GERD and past psychiatric history significant for dysthymic disorder and bipolar affective disorder who presented to the ED under an involuntary commitment from an outside hospital for further evaluation of psychosis. During the initial interview, the patient was hyper-verbal as well as

disorganized and tangential and had loose associations. He had a long history of homelessness with poor nutrition, with no involvement with family or any close contacts that were available for collateral information. Mr. E. was admitted to the inpatient psychiatric ward and began treatment with risperidone. Over six weeks, his mood did not improve while risperidone was uptitrated to 8mg/d and valproic acid uptitrated to 1250mg/d. Over the next two weeks, risperidone was then tapered down while olanzapine was uptitrated to a total of 20mg/d, still with very little response in mood. The decision was made to try a long-acting injectable, paliperidone, which was initiated with a 234mg loading dose followed by 156mg second dose one week later. After his second dose, the patient began to slowly develop a decrease in cognition and problems with ambulating. After the second dose of paliperidone there was a notable decline in the patient's cognition, along with postural instability with hypomimia. The severity of Parkinsonism escalated further until the patient was completely bedridden; the symptoms continued to include tremor, bradykinesia, rigidity, impaired speech (hypokinetic dysarthria with hypophonia) and cervical dystonia. Secondary Parkinsonism is most notable with the typical antipsychotics; the prevalence can vary between 50 to 75% and may be higher within the elderly population. However, all antipsychotics have a chance of demonstrating extrapyramidal symptoms. Risperidone has a low incidence at low doses; however, studies have shown dose-related Parkinsonism at doses of 2–6mg/d. Significant risk of Parkinsonism is further exacerbated when we consider drug-drug interactions. In this case, when considering giving long-acting antipsychotics, a meticulous cross-tapering must be administered in order to decrease the risk of Parkinson's disease (PD). The clinician must be vigilant to further recognize the initial symptoms of PD on clinical presentation; clinical scales such as the Simpson-Angus Extrapyramidal Side Effect (SEPSE) can be helpful in these situations. Malnutrition and increased age can predispose patients to neuroleptic side effects, and caution should be exercised when administering antipsychotics in such a population.

NO. 27

CONTRIBUTION OF ENDOGENOUS SPINAL ENDOMORPHIN 2 TO INTRATHECAL OPIOID ANTINOCICEPTION IN RATS IS AGONIST-DEPENDENT AND SEXUALLY DIMORPHIC

Poster Presenter: Arjun Kumar, Ph.D.

SUMMARY:

The effectiveness of opioid analgesics, as well as the incidence of chronic pain syndromes, can differ greatly between males and females. An understanding of the interactions between exogenous and endogenous opioids as a basis for sexually dimorphic opioid analgesia could inform the clinical use of these drugs for pain management. We investigated the influence of spinal endomorphin 2 (EM2), an endogenous mu-opioid receptor (MOR) ligand, on the spinal antinociception produced by intrathecally administered opioids. Activation of spinal MORs facilitated spinal EM2 release. This effect was sexually dimorphic, occurring in males but not females. Although activational effects of testosterone were required for opioid facilitation of spinal EM2 release in males, the absence of this facilitation in females resulted from neither insufficient levels of testosterone nor mitigating effects of estrogens. Strikingly, in males, the contribution of spinal EM2 to the analgesia produced by intrathecally applied MOR agonists depended on their analgesic efficacy relative to that of EM2. Spinal EM2 released by the higher-efficacy MOR agonist sufentanil diminished sufentanil's analgesic effect, whereas EM2 released by the lower-efficacy morphine had the opposite effect on spinal morphine antinociception. Understanding antithetical contributions of endogenous EM2 to intrathecal opioid antinociception not only enlightens the selection of opioid medications for pain management, but also helps explain variable sex-dependence of the antinociception produced by different opioids, facilitating the acceptance of sexually dimorphic antinociception as a basic tenet. The male-specific MOR-coupled enhancement of spinal EM2 release implies a parallel ability to harness endogenous EM2 antinociception. The inferred diminished ability of females to utilize the spinal EM2 antinociceptive system could contribute to their greater frequency and severity of chronic pain syndromes.

NO. 28

WITHDRAWN

NO. 29

EXAMINING READMISSIONS TO AN INPATIENT PSYCHIATRIC UNIT IN SAN DIEGO, CA

Poster Presenter: Jessica Thackaberry, M.D.

SUMMARY:

Inpatient psychiatric admissions are often necessary for very sick patients, and with today's limited resources in the state of California (including rapidly decreasing availability of inpatient beds), they are not always available when they are needed. Readmissions, defined as admissions within 30 days of discharge from the hospital, can be costly and are often a signal to the hospital administration of inadequate care. For psychiatric patients especially, there are several factors that seem to lead toward early readmission, including discharge against medical advice, lack of a follow-up plan at discharge and unemployment. We look at our specific population in San Diego, California, of primarily publicly funded patients with a wide range of housing and employment who are readmitted to the hospital within 30 days of discharge. As part of an ongoing study at UC San Diego Medical Center, we have been looking at factors that lead to readmission within our population. Since this was last presented, we have gathered more data and looked at new aspects we were unable to examine previously. We anticipate that the use of a long-acting injectable medication may increase the amount of time between hospitalizations for our very severely ill patients with a history of poor medication compliance. We also intend to look at the discharge plan for these patients and find out whether they were discharged to homelessness or temporary housing, which may have an effect on rehospitalization. While some of these patients are not rehospitalized when they re-present to the hospital, they will often come to our emergency department multiple times immediately following hospitalization, and these factors will also be investigated with regard to presentation to the emergency department, as these acute care visits can also be costly and may be preventable. If specific factors can be identified in this population that lead to readmission and recidivism in the emergency department, we can identify aspects of care in our system that can be added or enhanced in order to prevent these visits from continuing. We hope to identify interventions that are associated with decreased readmission rates so that these factors (such as long-acting injectable medications) can be utilized more effectively to prevent recidivism and improve care in the outpatient setting.

NO. 30

A CASE REPORT OF ATYPICAL NEUROLEPTIC MALIGNANT SYNDROME IN A YOUNG AFRICAN-AMERICAN FEMALE

Poster Presenter: Oluwakemi A. Aje, M.D.

Co-Author(s): Rashdi Ahmed, M.D., Benjamin Adewale, M.D.

SUMMARY:

This case report is about a patient who presented with symptoms of atypical neuroleptic malignant syndrome (NMS) that could have been easily missed. This report serves to increase our awareness and raise our index of suspicion to atypical NMS, which could be sequelae to potentially fatal full-blown NMS. Of particular note, cases have been reported of a rare but serious side effect of NMS by the use of donepezil. Our patient is a 32-year-old African-American female with a psychiatric diagnosis of treatment-resistant schizophrenia and cognitive deficit who had been tried on various antipsychotic medications with very minimal effect. She was found to have symptoms and laboratory findings consistent with atypical NMS. At the time of diagnosis, she was treated with haloperidol decanoate 50mg every two weeks, ziprasidone 20mg twice daily by mouth and valproic acid 500mg by mouth BID, in addition to several emergency medications received due to agitation, which included haloperidol, ziprasidone and olanzapine injections. The patient was also prescribed donepezil to target concerns of cognitive impairment. Prior to NMS symptoms appearing, the patient presented with symptoms suggestive of EPS, including akathisia, in which the patient was observed marching in place while standing and banging on Plexiglas repeatedly in a stereotypic manner. Additionally, she displayed episodic eye blinking more frequently, which may suggest a possible emergent tardive movement disorder. On April 22, 2016, the patient was started on valproic acid 500mg every morning to replace oxcarbazepine 900mg twice daily by mouth due to partial compliance and additional bizarre behavior. Three days later, the patient presented with tachycardia, pulse 145/min, temperature 99.4°F, diaphoresis, muscle rigidity and sialorrhea. CBC, CMP, CPK and myoglobin were ordered to rule out infections and NMS. On April 28, the patient had abnormal lab values showing significantly elevated LDH (462u/l), elevated liver enzymes (ALT/AST 90/284u/l), significantly elevated CPK levels (13,147.0u/l) and uric acid level of 13.7mg/dl, which are consistent with a presentation of NMS. These values trended down and normalized to baseline on May 6, and the

patient was found to be hemodynamically stable. In addition to her stated symptoms, the patient also presented with severe drug-induced Parkinsonism (DIP), as evidenced by marked bradykinesia/akinesia, mask-like facies, speech with low volume and poor enunciation. This patient's symptoms improved clinically through a combination of continuous hydration and medication tapering, which ultimately returned her lab results to normal levels. Medication tapering included adjusting haloperidol decanoate to every four weeks, decreasing dosage of donepezil, adjusting dosage of valproic acid, and discontinuing bupropion and replacing it with diphenhydramine. She required multidisciplinary management involving the psychiatric, medical and neurology teams.

NO. 31

CASE REPORT: A CASE OF NIGHTMARES AFTER INCREASE IN DOSE OF PAROXETINE

Poster Presenter: Wajid Hussain, M.D.

Co-Author(s): Yasir J. Ahmad, Tshering Bhutia

SUMMARY:

Background: Paroxetine is a selective serotonin reuptake inhibitor (SSRI). It is a very selective and potent inhibitor of serotonin (5-HT) reuptake and acts by binding directly to the serotonin transporter (5-HTT). It is FDA-approved for a variety of psychiatric disorders that include posttraumatic stress disorder, major depressive disorder, generalized anxiety disorder, panic disorder and obsessive-compulsive disorder. Nightmares are a rare side effect of SSRIs. There is a case report of a patient who developed severe nightmares on initiating therapy with citalopram. In addition, there are few case reports of patients developing nightmares while on mirtazapine and fluoxetine. Bupropion, a non-SSRI antidepressant, is also associated with nightmares. There is a case report of a 67-year-old female developing serial nightmares and subsequently an oneiroid state, which stopped after discontinuation of paroxetine. In this poster, we present a case of a much younger female developing vivid nightmares in the context of PTSD and panic disorder. In addition, nightmares started when her dose of paroxetine was increased from 30mg daily to 40mg daily. **Case:** The patient is a 43-year-old female with PTSD and panic disorder with agoraphobia who has been coming to our outpatient clinic for the last few years and has been compliant with her medications: paroxetine 40mg daily and clonazepam 0.5mg twice daily as needed for anxiety.

The patient complained of vivid nightmares with increase in her paroxetine dose to 40mg daily. The patient reported that she did not have the nightmares with a 30mg daily dose of paroxetine. The patient further reported that she had a similar increase in her nightmares when her dose was increased in the past, which responded to decreasing the dose of paroxetine. **Conclusion:** Nightmares occur only in REM sleep, and most antidepressants, including paroxetine, prolong REM sleep latency and suppress REM sleep time. Therefore, a decrease in nightmares is expected. In our patient, the temporal relationship between the increase in the dose of paroxetine and onset of nightmares suggests a causal etiology. Although there is a previous case report of a 67-year-old patient with serial nightmares while being on paroxetine, this is the first time it has been reported in a much younger patient population. In addition, it is the first case report where an increase in dose of paroxetine led to nightmares, signifying that it may be dose related. Clinicians should be aware of this side effect, especially when increasing the dose, as it can potentially affect treatment adherence.

NO. 32

TARDIVE DYSKINESIA FOLLOWING ZIPRASIDONE USE: A CASE REPORT AND REVIEW OF LITERATURE

Poster Presenter: Surbhi Khanna, M.B.B.S.

SUMMARY:

Objective: Review current literature on management of tardive dyskinesia associated with the use of second-generation antipsychotics. **Background:** Atypical antipsychotics have been widely hailed as offering better or equivalent efficacy than traditional antipsychotics while causing fewer side effects, especially extrapyramidal side effects like tardive dyskinesia (TD). Ziprasidone is a commonly prescribed second-generation, atypical antipsychotic with relatively low risk of extrapyramidal symptoms (EPS) and only a few published case reports regarding the same. In this case report, we discuss a patient who developed TD with pronounced bruxism after several years of ziprasidone use. **Case:** Ms. J. is a 58-year-old African-American female with past medical history of hypertension, coronary artery disease, prior myocardial infarctions and basilar stroke, hypothyroidism, obesity, and prior psychiatric history of bipolar II disorder who presented to the outpatient clinic for acute onset severe bruxism following a recent increase in her ziprasidone dose. Her medications included

ziprasidone 60mg twice daily, mirtazapine 30mg nightly and zolpidem 2.5mg twice daily. On exam, the patient underwent several voluntary movements so we could test for TD, and her Abnormal Involuntary Movements Score (AIMS) was 20 (range: 0–42). The patient reported that she had self-tapered ziprasidone over two weeks and was only taking Ambien 2.5mg twice daily, which seemed to help resolve her ongoing bruxism, jaw and leg movements. Subsequently, she was started on clonazepam 0.5mg twice daily, which was further increased to three times daily in one week; zolpidem was discontinued, and she was referred to her dentist to obtain a mouth guard. She reported subjective improvement in her symptoms, and a collaborative approach was taken by involving dentistry, primary care and psychiatry. **Conclusion:** TD is a serious, potentially irreversible side effect of antipsychotic medications. This case represents new onset oromandibular TD arising during the use of ziprasidone. This patient had several probable risk factors associated with TD, including female sex, age, exposure to antipsychotics for over six months, affective disorder and neurovascular risk factors. Therefore, we need to closely monitor individuals treated with atypical antipsychotics regardless of dose, diagnosis or choice of medication due to rare but serious risk of TD.

NO. 33

A COMPREHENSIVE REVIEW OF CLINICAL IMPLICATIONS OF CLOZAPINE

Poster Presenter: Sushma Kosaraju, M.D.

Co-Author(s): Satneet Singh, M.D., Pooja Shah, M.D., Roxanne Rengifo, M.D.

SUMMARY:

Antipsychotics are the first-line agents that are extensively used in treating psychosis. Clozapine, an atypical antipsychotic, has been a topic of debate off and on amidst its advantages and potential side effects. It has had a waxing and waning course within the neuropsychiatry community for treating treatment-resistant schizophrenia despite having significant side effects such as agranulocytosis. As time elapses, the FDA has acquired more congruence with its other potential uses for lowering suicidality with minimum extrapyramidal side effects. In modern-day practice, few clinicians have appreciated its role in the management of treatment-resistant manic depressions, schizoaffective disorder, psychosis, extrapyramidal symptoms and substance abuse in schizophrenics.

Interestingly, clozapine has contributed to reducing the severity of symptoms in patients with tremors, tardive dyskinesia, Parkinson's disease and behavioral problems in individuals with borderline intellect. Clozapine is a relatively underused drug because of its potentially serious side effects. Further clinical trials are required to prove and identify its efficacy in other medical conditions. In this poster, we have highlighted the mechanism of action, possible uses and side effects associated with clozapine. We have highlighted the need for more research into its potential effects in the management of adolescent patients with bipolar disorder and psychotic depression. An update on the evolving uses of clozapine has been discussed. This will facilitate the clinicians in practice to utilize the drug to its best potential. **Keywords:** Clozapine, Treatment-Resistant Schizophrenia, Neuroleptics, Clozapine, Parkinson's Disease, Suicidality, Substance Abuse, Borderline Intellect, Agranulocytosis

NO. 34

TRICHOTILLOMANIA—TREATMENT WITH BUPROPION XL: A POSSIBLE ALTERNATIVE TO CURRENT PSYCHOPHARMACOTHERAPY

*Poster Presenter: Tshering Wangmo Bhutia, M.D.
Co-Author(s): Wajid Hussain, Cheryl A. Kennedy*

SUMMARY:

Background: Trichotillomania (TTM), or hair pulling disorder, is a repetitive body-focused disorder frequently associated with skin picking. TTM was previously classified as an impulse control disorder but is now included in the *Diagnostic and Statistical Manual of Mental Disorders, Fifth Edition (DSM-5)* as a separate diagnosis under obsessive-compulsive and related disorders. Selective serotonin reuptake inhibitors (SSRIs) have been first line pharmacotherapy for TTM for some time but a 2007 meta-analysis of randomized trials of pharmacological and behavioral treatments for TTM found that SSRIs were not more effective than placebo in reducing TTM symptom severity. Two small trials showed a beneficial effect of clomipramine compared with placebo. In another randomized trial including 50 adults with TTM, N-acetylcysteine (NAC) was more effective than placebo in reducing hair-pulling symptoms. A subsequent trial in children and adolescents did not find any beneficial effect of NAC compared with placebo. Bupropion is a selective dopamine and serotonin reuptake inhibitor. Limited data other

than few case reports report on its use for treatment of TTM. There have been three case reports where a dose of 450mg was used. We present a case report of TTM responding to bupropion XL 450mg daily that clearly shows when the patient stopped the medication, she relapsed. Restarting bupropion XL led to amelioration of symptoms. **Methods:** Case presentation, Literature review, Hospital EMR. **Case:** The Patient is a 42-year-old female with recurrent major depressive disorder and TTM for more than 20 years. She had failed multiple trials of SSRIs, including sertraline and fluoxetine. She was started on bupropion XL four years ago and was maintained on it except for three distinct periods when she stopped the medication on her own, which led to relapse and worsening of hair pulling symptoms. The patient was able to grow more than one inch of scalp hair when on bupropion. Without bupropion, she also pulls her hair from parts of the body other than her scalp. But, with bupropion, she only pulls scalp hair and at a much reduced frequency and severity. **Conclusion:** As far we can tell, this is the first case of discontinuation of bupropion XL that led to relapse and restart clearly resulted in remission. Response to bupropion XL also suggests there is involvement of mesolimbic dopaminergic reward pathway in addition to serotonergic pathways in the etiology of TTM. We recommend that in cases with a lack of response to SSRIs, bupropion can be considered a suitable alternative for a patient. Further well-designed studies are needed to confirm this finding.

NO. 35

HYPERPROLACTINEMIA SECONDARY TO PITUITARY MICROADENOMA VERSUS HALOPERIDOL—A DIAGNOSTIC ENIGMA: A CASE REPORT AND BRIEF REVIEW

*Poster Presenter: Alisa K. Coleman, M.D.
Co-Author(s): Subramoniam Madhusoodanan, M.D., Leah Steinberg, M.D.*

SUMMARY:

Background: Hyperprolactinemia can be caused by medications, primarily antipsychotics, or by anterior pituitary tumors. The consequences of hyperprolactinemia, including gynecomastia, galactorrhea and sexual dysfunction, are very disturbing for males and females. It is sometimes difficult to differentiate the etiology of hyperprolactinemia from a clinical perspective. **Objective:** Identification of the etiology of hyperprolactinemia requires a careful review of the causes and appropriate workup. **Methods:** A 55-

year-old African-American male with extensive psychiatric history and nonadherence to treatment was admitted from a nursing home for aggression and psychotic symptoms. The patient was noted to have mild bilateral breast enlargement about ten days after hospitalization. Prolactin level on August 26, 2014 was 93.8ng/mL and on September 5, 2014 was 112ng/mL. The patient's medications included haloperidol decanoate 150mg every 28 days, haloperidol 10mg by mouth twice daily and benvotropine 0.5mg by mouth twice daily. He did not have any other clinical signs or symptoms of hyperprolactinemia. He was also seen by an endocrinologist. MRI of the pituitary gland on September 3, 2014 showed a 2.4mm pituitary microadenoma. Bromocriptine was started at 1.25mg at bedtime and titrated to 2.5mg twice daily. **Results:** Prolactin level dropped from 112ng/mL on September 5, 2014 to 99ng/mL on September 9, 2014; 61.2ng/mL on September 23, 2014; and 3.0ng/mL on February 9, 2015. **Conclusion:** Diagnosis and etiology of hyperprolactinemia were complicated by the minimal nature of clinical symptoms, the type of antipsychotic agent and prolactin level. The MRI facilitated the diagnosis of pituitary microadenoma and further treatment option with bromocriptine. MRI of the pituitary is indicated for patients with hyperprolactinemia where the etiology is not clearly due to medication.

NO. 36

PILOT STUDY OF CARDIOVASCULAR RISKS AND INSULIN RESISTANCE IN NEUROLEPTIC-INDUCED PARKINSONISM (NIP) IN SCHIZOPHRENIA: A POST HOC ANALYSIS OF AN RCT

Poster Presenter: Zahra Khazaiepool, M.D.

Lead Author: Simon Chiu, M.D., Ph.D.

Co-Author(s): Hana Raheb, Kristen Terpstra, Zack Cernovsky, Yves Bureau, JerryJirui, John Copen, Mariwan Husni

SUMMARY:

Background: The core symptoms of sporadic Parkinson's disease (sPD) are bradykinesia, cogwheel muscle rigidity and gait disturbances; however, spontaneous extrapyramidal motor signs were first described in 4–11% drug-naïve schizophrenia patients. Cumulative exposure to first-generation (FGAs) and, to a lesser extent, second-generation antipsychotics (SGAs) is known to induce neuroleptic-induced Parkinsonism (NIP) and tardive dyskinesia in schizophrenia. There is mounting evidence to suggest that type II diabetes mellitus

(T2DM) and cardiometabolic risk factors are linked to PD. There is a paucity of studies relating T2DM and cardiometabolic factors to NIP and neurocognitive deficits in schizophrenia. **Objective:** In a cohort of SGA-maintained schizophrenic patients, we examined if 1) NIP in schizophrenia is correlated with neurocognitive deficits as assessed with the standardized battery of neurocognitive tests, 2) the severity of NIP is associated with the severity of cardiovascular risk scores and 3) insulin resistance modulates the link between NIP and neurocognitive impairment. **Methods:** Our pilot study of NIP in schizophrenia was derived as a secondary analysis of data from the original randomized controlled trial of the augmentation effects of Panax Ginseng formulated as Ginsana-115 (Boehringer Ingelheim Pharmaton, Switzerland). The cohort of patients diagnosed with schizophrenia exhibiting persistent negative symptoms were maintained with SGA and received oral Ginsana-115 200 or 100mg over eight weeks. For secondary analysis, we used the baseline parameters of the Brief Psychiatric Rating Scale, Scale for Negative Symptoms, Positive and Negative Syndrome Scale, Computerized Neurocognitive Test, Simpson-Angus Scale (SAS), Abnormal Involuntary Movement Scale (AIMS), Treatment-Emergent Adverse Events Scale, HOMO-derived insulin resistance (IR), and Framingham Risk Composite Score (FRS). We calculated Pearson correlation coefficients of SAS and AIMS scores to neurocognitive measures, IR and FRS score. **Results:** We recruited 44 SGA-treated schizophrenic subjects (mean age=38; 29 male) with a mean baseline SAS score of 4.2 (SD=3.9)—52.3% (N=23) over 3 and 34.1% (N=15) over 6. Baseline SAS scores correlated significantly with log-IR ($r=0.44$, $p=0.007$) and FRS score ($r=0.60$, $p<0.001$) independent of body mass index. NIP severity was correlated directly with insulin resistance and cardiovascular risk. Higher SAS scores correlated significantly with impaired neuropsychological performance on a composite neurocognitive index ($r>0.30$, $p<0.05$) and selected cognitive domains of visual perception, executive reasoning, spatial processing, abstraction and flexibility, and psychomotor performance ($r>0.30$, $p<0.05$). AIMS scores correlated significantly with FRS scores ($r=0.36$, $p=0.039$) and memory ($r=0.32$, $p=0.037$). **Discussion:** In our cohort of schizophrenic patients, NIP is related to neurocognitive deficits, cardiovascular risk factors and insulin resistance.

NO. 37

DRUGS DECREASING SUICIDAL RATE IN PSYCHIATRIC DISORDERS

Poster Presenter: Hema Venigalla, M.B.B.S.

Co-Author(s): Hemamadhuri Mekala, M.D., Saeed Ahmed, M.D.

SUMMARY:

Suicide is the tenth leading cause of death in the United States. According to an April 2016 report from the Centers for Disease Control and Prevention, the suicidality rate has increased 24% from 1999 to 2014 in the U.S. Ninety percent of people who commit suicide are found to suffer from psychiatric illnesses such as depression, schizophrenia, anxiety, bipolar disorder, alcoholism and posttraumatic stress disorder. Several studies have been conducted to examine the drugs that may decrease suicidal ideation in mentally ill patients. SSRIs are believed so far to decrease suicidality in patients with depression. Similarly, lithium and clozapine are known to be effective to reduce the suicidal rate of patients with bipolar depression and schizophrenia, respectively. Although these drugs have been demonstrated to reduce the suicidal rate over the long term, there is limited evidence that these drugs have the same effect in the acute phase of illness. Most psychotropic medications usually take few weeks to show their effect, and some patient populations take adequate time to stabilize their symptoms. It is evident that during this period, patients are at significant risk for attempting and committing suicide. The timeline is extremely crucial when it comes to addressing suicidality in the psychiatric population. Published literature and evidence from recent research shows that drugs like ketamine may help patients with suicidal ideation within hours to days. However, use of ketamine may alter the brain chemicals similar to stimulant drugs and can be potentially addictive. In our poster presentation, we discuss various aspects of suicidality in the psychiatric population, particularly the avenues of prevention and effective treatment.

NO. 38

A CASE OF DEPRESSIVE DISORDER IN A 27-YEAR-OLD FEMALE BEING TREATED WITH TAMOXIFEN FOR BREAST CANCER

Poster Presenter: Shariq Haque, M.D.

SUMMARY:

Background: Depression is a common side effect with tamoxifen use, with a reported incidence of 2–12%. Tamoxifen selective estrogen receptor

modulator (SERM) blocks the effect of estrogen at the breast, acting as an agonist elsewhere. Its primary use is for the treatment of estrogen receptor positive (ER+) breast cancer. The mechanism behind tamoxifen-associated depression is not well understood, with some studies pointing to antagonization of ovarian hormones to be a factor, while others show hormone replacement in rats being given tamoxifen actually reverses depressive behavior. **Methods:** A case report with the diagnostic consideration, treatment and follow up are presented. In addition, a comprehensive literature review was performed. **Discussion:** Many factors may be responsible for depression in breast cancer patients, such as adjuvant therapy, stage of treatment and poor body image. Tamoxifen distinguishes itself at the neuroendocrine level due to its potential activity. Antagonist properties of tamoxifen block the neuroprotective effects of estrogen, which results in down-regulation of neurotransmitters associated with mood regulation such as serotonin and norepinephrine. Our case highlights the importance in choosing antidepressant treatment when a patient is on tamoxifen. Choosing an agent that doesn't affect the cytochrome 2D6 is important for its low potential for inhibiting P450 enzymes involved in the metabolism of tamoxifen. The choice of venlafaxine in a patient receiving tamoxifen as adjuvant therapy was well tolerated and effective to pursue her treatment with tamoxifen free of depressive symptoms. **Conclusion:** Depression is a side effect of tamoxifen use; the majority of patients on this medication are postmenopausal and thus already have a reduced amount of estrogen. However, this patient, who has a high amount of endogenous estrogen, also became depressed, pointing to perhaps a more complex mechanism for depressive symptoms caused by tamoxifen.

NO. 39

EVALUATING THE RISK OF VENOUS THROMBOEMBOLISM WITH ATYPICAL ANTIPSYCHOTIC INITIATION

Poster Presenter: Jessica A. Koenig, M.D.

Co-Author(s): Thomas Maestri, Christine Masuda, Tawny L. Smith, Erica C. Garcia-Pittman

SUMMARY:

Background: Elderly patients often have complicated medical histories and multiple factors that put them at higher risk for venous thromboembolism (VTE). An association between antipsychotics and VTE has

been discussed in observational studies and review articles. The highest risk has been associated with use of clozapine and first-generation antipsychotics; however, there have been more recent reviews highlighting the increased potential second-generation antipsychotics have on VTE risk.

Methods: Literature review and case descriptions. We describe two cases of clinically significant VTE with recent initiation of second-generation antipsychotic medication. **Results:** Our case will review literature on risk of VTE with antipsychotic use and highlight the varying degrees of risk between different antipsychotics. **Conclusion:** Assessing risks and benefits of antipsychotic medication presents unique challenges when trying to stabilize a psychiatrically ill patient. Managing and educating patients and families about potential risk factors can help protect patients from medical complications that may present during the course of their treatment.

NO. 40

RARE OCCURRENCE OF COVERT DYSKINESIA AFTER ARIPIPRAZOLE DISCONTINUATION: A CASE REPORT AND LITERATURE REVIEW

Poster Presenter: Yassir Mahgoub, M.D.

Co-Author(s): Ahmad Hameed, M.D., Andrew Francis, M.D., Ph.D.

SUMMARY:

Objective: Describe a case of covert dyskinesia occurring three months following aripiprazole discontinuation and review literature on covert dyskinesia and tardive dyskinesia (TD) with aripiprazole; reinforce clinical reasoning for using aripiprazole in nonpsychotic mood disorders given its potential for dyskinesia. **Background:** TD has been reported with many antipsychotics, both typical and atypical. Covert dyskinesia is a masked form of TD that becomes evident only after antipsychotic drugs are withdrawn or tapered in dosage. It is distinct from other forms of withdrawal-emergent dyskinesia by its persistence for more than three months following discontinuation of antipsychotics. Most cases occurred during tapers, but some cases were reported following discontinuation. Aripiprazole is a unique atypical antipsychotic, as it is a dopamine D2 receptor partial agonist, partial agonist at serotonin 5HT1A receptors and antagonist at 5HT2A receptors. Aripiprazole was approved by the FDA for adjunctive treatment of depressive disorder in 2007, in addition to its prior approval for use in both psychotic disorders and bipolar disorder. **Methods:** This study

included a systemic PubMed search for "aripiprazole," "tardive dyskinesia" and "covert dyskinesia;" review of American Neurology Association (ANN) guidelines treatment of TD; and case summary of a recent patient with covert dyskinesia. **Case:** A 53-year-old male was on aripiprazole for two years for mood symptoms and augmentation of antidepressants. Aripiprazole was tapered and discontinued over two to three months. He then developed new-onset persistent orobuccal movements three months following aripiprazole discontinuation. The literature review showed TD is reported with both typical and atypical antipsychotics. Covert dyskinesia is uncommonly reported. For aripiprazole, some case reports show it induced TD, but others indicate it improved TD that had been induced by different antipsychotics. ANN guidelines for TD suggest insufficient data to support or refute TD treatment by withdrawing causative agents or switching from typical to atypical antipsychotics. **Conclusion:** Covert dyskinesia may occur with aripiprazole. Despite the lower risk of TD with atypical antipsychotics, monitoring for TD is warranted even after stopping or reducing the dose. Dyskinesia from aripiprazole and other antipsychotics reinforces considering the clinical rationale for their use in nonpsychotic mood disorders.

NO. 41

VORTIOXETINE-INDUCED DISTAL INTERPHALANGEAL JOINT INFLAMMATION OF THE GREAT TOE

Poster Presenter: Priya Batta

Co-Author(s): Alan R. Hirsch

SUMMARY:

Background: Vortioxetine is a serotonin specific reuptake inhibitor that has been reported to cause musculoskeletal side effects. Monoarticular pain has not thus far been described. We present such a case. **Case:** A 49-year-old female with a past history of multiple hospitalizations for chronic severe migraine presented with complaints of depression and stress. She has had depression for 20 years, which has been constant and worsened in the past five years. She endorsed sadness, crying spells, fatigue, demotivation, lack of interest, poor concentration, irritability, anger, guilt, hopelessness, helplessness, anorexia, insomnia, absent libido and racing thoughts. In discussing her anxiety, she affirms that her normal state is that of nervousness and agitation, from which she has suffered all her life.

She freely admits being a worrier and suffers from panic attacks manifested by dyspnea, diaphoresis and tachycardia. **Results:** Abnormalities in her mental status examination included the following: oriented times two; disheveled; defensive; motor retardation; mood: depressed, anxious and irritable with blunted affect; memory testing: immediate recall six digits forward and four digits backward; remote memory: president: Obama?; ancillary testing: Clock Drawing Test: 4 (abnormal); Animal Fluency Test: 20 (normal); Beck Depression Inventory II: 23 (moderate depression); Beck Anxiety Inventory: 25 (moderate anxiety). Within two days of starting 5mg of vortioxetine, she developed pain and swelling of the distal interphalangeal joint of the left great toe and an antalgic gait. After five days, the medication was discontinued. Within two days, there was full resolution of the swelling and pain, and ambulation returned to normal. **Discussion:** The mechanism whereby vortioxetine induced this monoarticular pain is unclear. Underlying depression alone can precipitate arthritic exacerbation. In the depressed state, there may be a greater perception of somatic pain, which allowed her to appreciate any arthritic pain that may have existed prior to use of vortioxetine. As such, this may have represented a correspondence bias. Furthermore, mild new pain is perceived as more intense in those who are depressed. Thus, any minimal arthritic injury may be viewed as more intense. These were unlikely given the long duration of her depression as well as the timing of vortioxetine and resolution shortly after the medication was discontinued. Vortioxetine may have paradoxically exacerbated anxiety, and anxiety can precipitate pain. Misattribution may not be due to a preexisting condition, but rather due to a new condition such as unrecognized mild trauma, in which the blame was inaccurately placed on vortioxetine. Search and query as to monoarticular involvement in those taking vortioxetine is warranted.

NO. 42
NEW HAMPSHIRE'S FIVE-YEAR CIVIL AND CRIMINAL INVOLUNTARY COMMITMENT LAWS

Poster Presenter: Alexander de Nesnera, M.D.

SUMMARY:

New Hampshire has the distinction of having the longest potential time period of involuntary hospitalization for individuals committed in the criminal and civil setting: five years. The development of the same commitment time in civil

and criminal settings was a convoluted process. At one time, there were four different categories of individuals with varying commitment times. Civilly committed patients and those found not guilty by reason of insanity could be committed for a maximum of two years. Persons incarcerated but insane and still felt to be dangerous (such as dangerous sexual offenders) could be committed for life to the state hospital, and others could be criminally committed for life to the state prison. Legislators, judges, psychiatrists and advocacy groups all grappled with issues pertaining to the variations in commitment times that existed, over the years, between civilly committed patients and individuals who were mentally ill and being treated in the criminal justice system. A description of the development of the unique New Hampshire commitment law is delineated as a template for other states to consider when revising their involuntary commitment statutes.

POSTER SESSION 3

NO. 1

"IT WAS A YOGA RETREAT": A CASE REPORT OF PERSISTENT PSYCHOSIS IN A 27-YEAR-OLD FEMALE AFTER INGESTION OF AYAHUASCA

Poster Presenter: Yarelis Guzmán-Quiñones, M.D.

Co-Author(s): Jacqueline A. Hobbs, M.D., Ph.D., Maanasi Chandarana, D.O.

SUMMARY:

Background: Ayahuasca is a decoction native to the Amazon Basin traditionally used by shamans and local religions for its hallucinogenic and dissociative properties. Ayahuasca is classically prepared by boiling stems of *Banisteriopsis caapi* with leaf of *Psychotria viridis*. *B. caapi* is a plant rich in β -carbolines, which have been shown to inhibit human monoamine oxidase (MAO) in vitro. *P. viridis* contains N,N-Dimethyltryptamine (DMT), a psychedelic 5-HT_{2A} agonist that is orally inactive, yet increasingly used recreationally in the U.S. β -carbolines block the degradation of DMT, allowing it to reach the CNS, where it exerts its psychedelic effects. **Case:** The patient is a 27-year-old single Caucasian female with no psychiatric history prior to ingesting ayahuasca on a spiritual retreat. Since ingesting the ayahuasca, she has had numerous inpatient psychiatric hospitalizations over the course of a year for psychosis, including severe catatonia. In this poster, we detail the initial presentation, hospital courses, pharmaceutical treatment and

neuromodulatory treatment. **Conclusion:** Although ayahuasca has been used for centuries in the Amazonian region, reports of persistent psychosis are, to our knowledge, limited to a handful of cases in the world literature. Given the increasing use of this beverage for recreational purposes, recent events involving its abuse in the mainstream media and the proximity of the U.S. to Latin America, it is critical for our profession to better understand the long-term neuropsychiatric effects of this psychoactive beverage. It is also essential to determine which treatments are effective when treating patients affected by this decoction.

NO. 2

A STUDY ON FACTORS RELATED TO LONG-TERM HOSPITALIZATION IN PATIENTS WITH CHRONIC SCHIZOPHRENIA, REPUBLIC OF KOREA

Poster Presenter: Jang Og-jin, M.D.

Co-Author(s): Chung Young-In, M.D., Ph.D., Lee Young-Ryeol, M.D., Kim Se-Hoon, M.D.

SUMMARY:

Objective: The Republic of Korea is a fast-developing country, but, compared to its economic growth, the country failed to match its development of mental health services. Long-term hospitalization of schizophrenic patients has been an ongoing problem. The purpose of this study is to investigate the factors related to long-term hospitalization of schizophrenia patients in the Republic of Korea.

Methods: This study was done in GyeongNam provincial hospital, Republic of Korea. The subjects were inpatients with schizophrenia who were constantly hospitalized for more than 12 months and their caregivers. They were compared with schizophrenia patients with no previous experience of sustained hospitalization for more than 12 months and their caregivers. Demographic and clinical data, Korea version of the Positive and Negative Symptom Scale, functional disability, and family burden scale data were analyzed. **Results:** In this study, long-term hospitalization of schizophrenia patients was influenced by the following measures. First, primary caregiver variables such as parents/non-parents (OR=10.21, p=0.002) and cohabitation with patients (OR=5.23, p=0.041); second, negative symptom severity of passive/apathetic social withdrawal (OR=1.82, p=0.041) and lack of spontaneity and flow of conversation (OR=2.55, p=0.034); and third, functional disability of going to hospital/taking a dose regularly (OR=6.62, p=0.017) and using public

transportation/facilities (OR=3.74, p=0.036), were associated with long-term hospitalization and were significant in logistic regression analysis. **Conclusion:** The above results suggest that long-term hospitalization of schizophrenia patients in Korea might be affected by caregiver's factor, negative symptoms and functional disability. Taking into account these results, optimal mental health policy should be established to reduce long-term hospitalization of schizophrenia patients.

NO. 3

WITHDRAWN

NO. 4

PILOT STUDY OF DISSOCIATIVE SYMPTOMS IN SCHIZOPHRENIA WITH REFRACTORY NEGATIVE SYMPTOMS: POST HOC SECONDARY ANALYSIS OF A PANAX GINSENG RCT

Poster Presenter: Zahra Khazaeipool, M.D.

Co-Author(s): Simon Chiu, Zack Cernovsky, Yves Bureau, Kristen Tempstra, Hana Raheb, Mariwan Husni, John Copen, R. Campbell

SUMMARY:

Background: With the rise in childhood trauma and stress and use of substances of abuse—MDMA (3,4-methylenedioxymethamphetamine) and cannabis—there has been a resurgence toward examining the correlates of dissociation symptoms (DDS)—de-realization and depersonalization—in schizophrenia. Very few studies address the time course of dissociation symptoms relative to negative symptoms in schizophrenia exhibiting treatment-refractory negative symptoms. **Objective:** 1) Examine the prevalence and stability of DDS in schizophrenia over an eight-week period; 2) Evaluate if dissociative symptoms are sensitive toward the standardized neuro-steroid panax ginseng augmentation in parallel with negative symptoms. **Methods:** The data were retrospectively extracted from post hoc secondary analysis of an eight-week randomized placebo-controlled trial with panax ginseng in treatment-refractory schizophrenia. In the RCT, outcome measures are pre-defined as change in PANSS and HAM-D for two oral daily dosages of 100mg and 200 standardized panax ginseng—Ginsana-115 (Boehringer Ingelheim Pharmaton, Switzerland)—administered to a cohort of schizophrenia subjects maintained on antipsychotic therapy with the Scale for the Assessment of Negative Symptoms (SANS) score >14. DDS score was obtained from Depersonalization/De-

realization subscale of the 19-item clinician-administered HAM-D. **Results:** In our sample of 41 patients diagnosed with *DSM-IV* schizophrenia (N=41) in the HAM-D single-item probing DDS symptoms, seven (17%) endorsed “moderately severe,” one (2.4%) rated “very severe” and four (9.8%) had “mild” symptoms. We found nonsignificant changes in DDS symptom severity over the eight-week ginseng RCT. Total PANSS, negative symptom subscale and total HAM-D scores changed significantly ($p < 0.05$) over the eight-week period in response to ginseng treatment. The response rate for PANSS negative subscale score was 50.0% for Ginseng versus 9.1% for placebo ($p < 0.03$) and for HAM-D was 70.0% for ginseng versus 18.2% for placebo ($p < 0.01$) and dependent of dissociative symptoms. **Conclusion:** Despite the methodological limitation of small sample size and the short duration, we found that the prevalence of schizophrenia patients experiencing DDS in our pilot study (19.4%) was comparable to 13% prevalence in a study using the Dissociative Experiences Scale (DES). DDS severity was relatively stable and independent of ginseng augmentation of negative and subsyndromal depressive symptoms in schizophrenia. Our preliminary study clarified the missing links of dissociation, negative, positive and depressive symptoms in schizophrenia. We propose that innovative mental health programs integrating screening for substance use, traumatic stress and dissociative symptom severity with core psychiatric disorders will enhance outcome and catalyze client-centered recovery in community psychiatric centers and primary care health centers.

NO. 5 DEVELOPMENT OF A PATIENT DECISION AID TO EDUCATE PATIENTS WITH ACUTE PSYCHOSES ABOUT LONG-ACTING INJECTABLE ANTIPSYCHOTIC THERAPY

*Poster Presenter: Howard C. Margolese, M.D., M.Sc.
Co-Author(s): Warren Steiner, M.D., Fiore Lalla, M.D.,
Candice Cattan, M.D., Angelina Perillo, M.Sc., R.N.,
Larry Arshoff, M.Sc.*

SUMMARY:

Background: Long-acting injectable therapy is becoming the standard of care for patients with schizophrenia and related psychoses. In 2010, a working group at Lakeshore General Hospital (Montreal, Quebec) identified initiatives to address adherence among patients with schizophrenia. Implementation of a patient survey assessed patient

knowledge of and attitudes toward long-acting antipsychotic therapy. The survey found that not all inpatients knew enough about medication overall and long-acting therapy in particular. **Objective:** Develop a standardized education tool, nursing implementation protocol and process to implement it and determine if it could help educate inpatients about long-acting antipsychotic therapy. **Methods:** A review of the literature on long-acting therapy identified relevant aspects and benefits of long-acting therapy. Using the Ottawa Hospital Research Institute template, a patient decision aid and nursing implementation protocol were developed. These tools were piloted at Lakeshore General Hospital and refined based on feedback. **Results:** The patient decision aid on long-acting therapy and nursing implementation protocol were implemented in several quality improvement projects at Canadian inpatient psychiatric units and also became the focus of a follow-up retrospective/prospective study to evaluate their effectiveness and utility. **Conclusion:** The patient decision aid for selecting therapy in acute psychosis is a novel patient educational tool that may help improve adherence to therapy and improve outcomes.

NO. 6 IMPACT OF A PATIENT DECISION AID ON SELECTION OF LONG-ACTING OR ORAL TREATMENT OPTIONS BY PATIENTS WITH SCHIZOPHRENIA OR RELATED PSYCHOSES

*Poster Presenter: Howard C. Margolese, M.D., M.Sc.
Co-Author(s): Warren Steiner, M.D., Angelina Perillo,
M.Sc., R.N., Larry Arshoff, M.Sc.*

SUMMARY:

Background: Long-acting injectable antipsychotic therapy is underused for a variety of reasons, including lack of patient knowledge and understanding of the benefits of this treatment approach. **Objective:** Evaluate the impact on selection of oral versus long-acting medication with routine administration of a patient decision aid to educate patients with acute psychosis about the benefits of long-acting injectable antipsychotic therapy. **Methods:** This study will compare choice of oral versus long-acting medication before and after implementation of the patient decision aid. Fifty consecutive charts of patients admitted with acute psychosis before implementation of the decision aid will be reviewed and medication at discharge recorded. Fifty consecutive eligible and consented patients admitted after implementation of the

decision aid will be enrolled in the study and complete the decision aid. Medication at discharge will be recorded. Patient educators administering the decision aid will complete questionnaires about the decision aid's ease of use, completeness and effectiveness. Subjective data will also be collected on the decision aid's strengths and areas for improvement. **Results:** To date, the retrospective data has been completed, and 18 patients have been enrolled in the prospective arm. Preliminary data suggest that the tool is easy to administer and patient interest in and acceptance of study participation is high. **Conclusion:** Initial results suggest that patients can be better educated about their medication treatment choices through systematic implementation of a patient educational tool.

NO. 7

PREDICTORS OF IN-HOSPITAL MORTALITY IN PATIENTS WITH SCHIZOPHRENIA

Poster Presenter: Mehran Taherian, M.D.

Co-Author(s): Elizabeth Potter, Rogelio Suarez, Rhaisa Dumenigo, Juan Oms

SUMMARY:

Background: Schizophrenia is associated with mortality rates that are two to three times higher in comparison to the general population. There is speculation, but little evidence, concerning the reasons for this disparity. It has been proposed that comorbid physical conditions contribute to increased mortality risk among schizophrenics. In this study, we determine the demographics and clinical predictors of death in schizophrenics derived from a large U.S. inpatient database. **Methods:** Data for 2002–2012 were obtained for retrospective review from the Nationwide Inpatient Sample (NIS) hospital discharge database, as provided by the Health Care Cost and Utilization Project Agency for Health Care Research and Quality. All hospitalizations with a primary diagnosis of schizophrenia from the International Classification of Diseases, ninth revision (ICD-9) were selected for analysis. Multivariate logistic regression (SPSS version 22.0) was performed on the schizophrenia cohort to identify independent predictors of in-hospital mortality. **Results:** An estimated total of 3,254,554 hospitalizations were identified between 2002 and 2012 (mean±SD age 43.0±13.7, 57.7% male) with a primary diagnosis of schizophrenia. Forty-nine percent were white, followed by 34.3% black. The most common primary payer type was Medicare

(45.1%), followed by Medicaid (37.5%). Emergent admission accounted for 61% of inpatient admissions. Schizophrenic patients were observed with mean hospital costs of \$22,898 and total annual costs of \$6.7 billion. The average length of hospital stay was 11.7 days. The overall in-hospital mortality for schizophrenics was 1,157 (0.03%). The mortality rate was higher in older-age, lower-income white females (57.8±14.1) residing in southern states, treated in non-teaching hospitals and admitted during weekends. The average hospital cost was significantly higher in hospitalizations ending in death versus those who survived hospitalization (\$30,813 versus \$22,893, $p<0.001$). Adjusted analysis using multivariate logistic regression showed greater mortality with comorbidities of congestive heart failure (adjusted odds ratio [AOR]=5.90, $p<0.001$), hypertension (AOR=1.58), hyperlipidemia (AOR=1.76), coagulopathy (AOR=4.38), renal failure (AOR=2.79) and hypothyroidism (AOR=2.10).

Conclusion: In this large U.S. national inpatient cohort, the predictors of death in schizophrenics were older age, white race, low income, hospital teaching status and certain medical comorbidities. Improving the recognition and management of comorbidities could result in potentially better outcomes in these patients. Careful selection of antipsychotic drugs, some of which are associated with cardiovascular disorders, will also help reduce comorbidity and mortality among patients with schizophrenia.

NO. 8

MEDICATION NONADHERENCE AMONG SCHIZOPHRENIA INPATIENTS IN U.S. COMMUNITY HOSPITALS

Poster Presenter: Mehran Taherian, M.D.

Co-Author(s): Sirish Mulpura, Jahanbakhsh Nasserzare, Rhaisa Dumenigo, Juan Oms

SUMMARY:

Background: Studies have shown that medication nonadherence (NA) rates are substantially higher among psychiatric patients. A review indicated that NA ranges between 20 and 72% for schizophrenia. The cost of NA to psychiatric medication in the U.S. alone could be up to \$300 billion per year. Understanding the key risk factors associated with NA in these patients is important to effectively treat and develop successful interventions. The primary objectives of this study are to investigate the sociodemographic and clinical risk factors associated with NA and also assess its impact on main outcome

measures in hospitalized patients with schizophrenia during the 11-year study period in the U.S. **Methods:** Data from the Nationwide Inpatient Sample (NIS) hospital discharge database for the period 2002–2012 were retrospectively reviewed. All hospitalizations with a primary diagnosis of schizophrenia from the ICD-9-CM were selected for analysis. Patients with NA were identified using standard ICD-9-CM code V15.81. Multivariate logistic regression (SPSS 22.0 software) was performed on the schizophrenia cohort with or without NA. A p-value less than 0.05 was considered to indicate statistical significance. **Results:** An estimated total of 3,254,554 hospitalizations were identified between 2002 and 2012 (mean±SD age 43.0±13.7, 57.7% male) with a primary diagnosis of schizophrenia. Forty-nine percent were white, followed by 34.3% black. Of all schizophrenia hospitalizations, 665,268 (20.4%) had a history of NA (age 42.4±13.1, 60.6% male); black and white accounted for 44% and 40.6% of the patients, respectively. The most common primary payer in schizophrenics with NA was Medicare (43.3%). Patients with NA had a significantly higher rate of low median income (46% versus 42%) and moderate to severe disease (100% versus 66.7%) compared to patients who were compliant with their medications. The Midwest had the highest prevalence of NA. NA in schizophrenia patients was associated with a higher rate of drug abuse (adjusted odds ratio [AOR]=1.27, p<0.001), alcohol abuse (AOR=1.14), tobacco smoking (AOR=1.52), complicated diabetes (AOR=1.14) and suicidal ideation (AOR=1.31). Patients with NA had significantly longer length of stay (12.4 versus 11.6 days, p<0.001) and greater average hospital costs at \$25,016 when compared to \$22,355 in the medication-adherent group. **Conclusion:** NA was more prevalent among black male schizophrenics with lower income and was significantly associated with relapse to substance abuse, longer length of hospital stay and higher hospitalization costs. Therefore, early assessment and adequate management of modifiable risk factors associated with NA will improve adherence and better inpatient outcomes in this study population. To strengthen adherence, it is important for psychiatrists and other medical care providers to better educate their patients about side effects and the importance of adherence to sustain the benefits of medication.

NO. 9
WITHDRAWN

NO. 10
PHYSICIAN AND PATIENT BENEFIT-RISK PREFERENCES FROM TWO RANDOMIZED LONG-ACTING INJECTABLE ANTIPSYCHOTIC TRIALS

Poster Presenter: Eva G. Katz, Ph.D., M.P.H.
Co-Author(s): Brett Hauber, Srihari Gopal, Angie Fairchild, Amy Pugh, Rachel Weinstein, Bennett Levitan

SUMMARY:

Background: Schizophrenia, a chronic and severe psychiatric disorder, impairs psychosocial functioning; significantly diminishes quality of life; and requires continuous, long-term pharmaceutical treatment. Treatments should balance reducing psychotic symptoms and improving function while minimizing treatment-induced adverse events (AEs). While clinical trials and observational studies provide information on the frequency of symptoms and events, benefit-risk decisions also require judging the clinical impact of these outcomes. These value judgments have traditionally been based on a physician's perspective, but there is increasing patient group demand and industry and regulatory interest in using patient input for clinical and regulatory decision making. **Objective:** Quantify clinical trial participants' and investigators' judgments of the relative importance of benefits and harms of antipsychotic treatments for schizophrenia and assess the impact of formulation and adherence on these results. **Methods:** Discrete-choice experiments were completed by patients with schizophrenia and physician investigators participating in two phase: three multi-national clinical trials of paliperidone palmitate three-month (PP3M) long-acting injectable (LAI) antipsychotic. Respondents were asked to choose between hypothetical antipsychotic profiles characterized by efficacy, safety and mode of administration properties. Data were analyzed using random-parameters logit and probit models. **Results:** Patients (N=214) and physicians (N=438) preferred complete improvement in positive symptoms to improvement in any other attribute studied. Both preferred three-month and one-month injectables to oral formulation (p<0.05), irrespective of prior adherence to oral antipsychotic (OAP) treatment, with greater preference by physicians for a three-month over a one-month LAI for nonadherent patients. Physicians were willing to accept LAI treatments with reduced efficacy for patients with prior poor adherence to OAP. The maximum decrease in efficacy physicians would accept for

switching a patient from a daily oral to a three-month injectable were adherent—9.8% (95% CI [7.2, 12.4])—20% nonadherent—25.4% (95% CI [21.0, 29.9])—and 50% nonadherent—over 30%. For patients, up to 10.1% (95% CI [6.1, 14.1]) reduction in efficacy would be acceptable for switching an adherent patient to an injectable. For a nonadherent patient, no change in efficacy studied was regarded as important. **Conclusion:** Improvement in positive symptoms is the most important attribute to both patients and physicians. Patients and physicians preferred LAIs over OAPs, with physicians showing greater preference for three-month over one-month LAI. Physicians and patients were willing to accept reduced efficacy in exchange for switching a patient from an oral formulation to an LAI.

NO. 11
IS THERE A LINK BETWEEN CHRONIC INFECTION WITH TOXOPLASMA GONDII AND OBESITY IN SCHIZOPHRENIA?

Poster Presenter: Alice E. Stone, M.D.

Co-Author(s): Gloria M. Reeves, M.D., Ina Giegling, M.D., Annette M. Hartmann, Ph.D., Bettina Konte, Ph.D., Marion Friedl, Ph.D., Ashwin Mathai, M.D., Patricia Langenberg, Ph.D., Dan Rujescu, M.D., Teodor T. Postolache, M.D.

SUMMARY:

The well-replicated association between latent *Toxoplasma gondii* infection and schizophrenia may also have implications for obesity risk. A recent large study of individuals without mental illness reported a higher prevalence of *T. gondii* seropositivity among obese compared to non-obese individuals. In this study, we investigated the association between latent *T. gondii* infection and obesity among individuals with schizophrenia. Participants in this study include 950 individuals with schizophrenia, ages 18–80, recruited in Germany. Individuals were excluded if they had a neurologic condition, cognitive disorder or other psychiatric diagnoses, including personality disorder. *T. gondii* seropositivity was defined as IgG titer ≥ 0.8 , and obesity was defined as body mass index (BMI) $\geq 30 \text{ kg/m}^2$. Seropositivity was compared by chi-squared tests, and logistic regressions and titers were analyzed using one-way ANOVA and linear regression models, with adjustment for age, sex, education level, Positive and Negative Syndrome Scale (PANSS) score, and chlorpromazine equivalent. After adjustments, there was no significant difference in *T. gondii* seropositivity or serointensity

between obese and non-obese groups. This result differs from that of our previous study on *T. gondii* seropositivity in non-mentally ill participants recruited in the same geographic region, which may be explained by the greater and multifaceted obesity risk factors among individuals treated for schizophrenia (e.g., unhealthy lifestyle behaviors, sleep abnormalities, antipsychotic medication metabolic side effects, inflammatory pathway abnormalities) compared to non-mentally ill individuals. Further, antipsychotic treatment may impact *T. gondii* serointensity. Future studies are needed to assess the relationship of obesity and schizophrenia among antipsychotic naïve, first-episode patients to assess if *T. gondii* infection is an appropriate target for obesity prevention among individuals in the early stages of illness. This research was supported by a Distinguished Investigator Award from Rocky Mountain MIRECC, Denver, CO, VISN 5 MIRECC Baltimore, MD, and a NORC exploratory grant offspring of the parent grant P30 DK072488 from NIDDK. The antibody measurements were performed by the Stanley Laboratory of Developmental Neurovirology, Hopkins University, Baltimore, MD. Additional support was provided by the Joint Institute for Food Safety and Applied Nutrition (JIFSAN)/FDA cooperative agreement FDU.001418. The views, opinions and/or findings contained in this poster are those of the authors and do not necessarily represent the official policy or position of the Department of Veterans Affairs, FDA or the United States government.

NO. 12
TREATMENT PATTERNS IN MEDICAID PATIENTS WITH SCHIZOPHRENIA INITIATING FIRST- OR SECOND-GENERATION LONG-ACTING INJECTABLE VERSUS ORAL ANTIPSYCHOTICS

Poster Presenter: Kruti Joshi, M.P.H.

Co-Author(s): Neeta Tandon, Dominic Pilon, Rhiannon Kamstra, Bruno Emond, Patrick Lefebvre

SUMMARY:

Background: Poor adherence to antipsychotic therapy is a key issue in patients with schizophrenia. Long-acting injectable therapies (LAI) may improve treatment adherence compared to oral antipsychotics (OAP). Data evaluating the effect that first-generation (FG) and second-generation (SG) LAIs may have on antipsychotic treatment patterns are limited. **Objective:** Compare treatment adherence and persistence in Medicaid patients diagnosed with schizophrenia initiated on FG-LAI or

SG-LAI versus OAP. **Methods:** Medicaid data from FL, IA, KS, MS, MO and NJ from January 2009 to March 2015 were used to identify adults with schizophrenia initiated on FG-LAI, SG-LAI or OAP (index date) in or after January 2010. Baseline characteristics and outcomes were assessed during the 12 months before and after the index date, respectively. Index medication adherence and persistence were assessed using the proportion of patients with a proportion of days covered (PDC) of 80% or more and the proportion with no continuous gap of 60 or more days between days of supply, respectively. Outcomes were compared between FG-LAI, SG-LAI and OAP cohorts using chi-square tests and odds ratios (OR) from multivariate logistic regression models adjusted for baseline characteristics. **Results:** At baseline, OAP patients (N=20,478) were more likely to be female (49% vs. 40%, $p<0.001$) and had more unique mental health diagnoses (mean=9.3 vs. 8.1, $p<0.001$) compared to LAI patients (FG-LAI: N=1,089; SG-LAI: N=2,209). LAI patients were more likely to have antipsychotic polypharmacy (AP) (60 or more days with two or more AP) at baseline compared to OAP patients (19% vs. 14%, $p<0.001$). However, during follow-up, AP was more common in FG-LAI patients (36% vs. 33%, $p=0.029$) and was less common in SG-LAI patients (27% vs. 33%, $p<0.001$) relative to OAP patients. Compared to OAP patients, SG-LAI patients were more adherent at 12 months ($PDC\geq 80\%$: 27% vs. 25%, $p=0.008$), while FG-LAI patients were less adherent ($PDC\geq 80\%$: 16% vs. 25%, $p<0.001$). After adjustment, patients initiated on SG-LAI had a 24% higher odds of having a $PDC\geq 80\%$ at 12 months ($OR=1.24$, $p<0.001$), in contrast to FG-LAI patients, who had a 48% lower odds of having a $PDC\geq 80\%$ ($OR=0.52$, $p<0.001$) relative to OAP patients. Moreover, SG-LAI (37% vs. 30%, $p<0.001$) but not FG-LAI (31% vs. 30%, $p=0.776$) patients were more likely to be persistent for 12 months than OAP patients. In comparison to the OAP cohort, SG-LAI patients had a 46% higher odds of persistence ($OR=1.46$, $p<0.001$), while FG-LAI patients were not significantly different ($OR=0.95$, $p=0.501$). **Conclusion:** Medicaid patients initiating SG-LAIs demonstrated better treatment adherence and persistence compared to OAP patients. Those initiating FG-LAIs did not show significant improvement in adherence or persistence, but instead indicated more AP relative to OAP patients. These findings suggest potential value of SG-LAIs in the treatment of schizophrenia.

NO. 13

TOTAL PANSS CORRELATED WITH INTERFERON GAMMA AND INTERLEUKIN-1 BETA IN PATIENTS WITH SCHIZOPHRENIA

Poster Presenter: Gurtej S. Mann, M.D.

Co-Author(s): Ruchir Patel, Ramandeep S. Kahlon, Satyajit Mohite, Titilayo Makanjuola, Sumana Goddu, Osarhiemen Aimienwanu, Hema Venigalla, Michelle Malouta, Allison Engstrom, Olaoluwa O. Okusaga

SUMMARY:

Background: Plasma levels of inflammatory markers have previously been shown to be elevated in patients with schizophrenia in comparison to healthy controls. Inflammatory markers have also been associated with symptom severity in patients with schizophrenia. Previous studies have shown the correlation of inflammatory cytokines with psychotic severity. We aimed to replicate these previous findings by comparing levels of plasma inflammatory cytokines in a sample of patients with schizophrenia and healthy controls and also evaluated the correlation of psychotic symptom severity with plasma cytokines in these patients. **Methods:** We recruited 10 adult patients with schizophrenia (diagnosed with the Mini International Neuropsychiatric Interview version 5) and 10 healthy controls matched for age, gender and race. Psychotic symptom severity in patients was assessed with the Positive and Negative Syndrome Scale (PANSS). We used ELISA to measure fasting plasma interferon gamma ($IFN-\gamma$), interleukin 1 beta ($IL-1\beta$), interleukin 6 ($IL-6$) and tumor necrosis factor alpha ($TNF-\alpha$) in patients and controls. Cytokine levels did not have a normal distribution, and we therefore log-transformed the cytokine levels. We used t-tests to compare log-transformed cytokine levels between patients and controls. In patients, we calculated Pearson correlation coefficients between PANSS scores and log-transformed plasma cytokines. **Results:** Cytokine levels did not differ between patients and controls. However, in patients, total PANSS correlated with $IFN-\gamma$ ($r=0.689$, $p=0.028$) and $IL-1\beta$ ($r=0.686$, $p=0.029$). **Conclusion:** These results support the evaluation of inflammatory cytokines as potential biomarkers of symptom severity in schizophrenia as well as the potential use of interventions targeting inflammation in the treatment of psychotic symptoms.

NO. 14

MULTIMORBIDITY, GENDER AND SCHIZOPHRENIA: A QUEBEC CROSS-SECTIONAL STUDY

Poster Presenter: Javad Moamai, M.D., M.Sc.

SUMMARY:

Objective: Multimorbidity (MM) is highly prevalent in schizophrenia-related disorders (SRD), yet questions remain about the impact of gender on the patterns and rates of MM. Thus, this study further examined these correlations among inpatients suffering from SRD. For this study, comorbid illnesses were defined as those currently requiring treatment or continuing medical surveillance.

Methods: This cross-sectional study was conducted using secondary data taken from discharge records (ICD-10 format) of 1,152 adults (ages 18–64) admitted for SRD to a Quebec-based facility between 2006 and 2014. Nonparametric descriptive statistics were used for analysis. **Results:** The prevalence rate of MM was 84%. The median number of comorbid illnesses was three for each study subject.

Psychiatric comorbidity (PC) was more common in males (65% vs. 52%), whereas medical comorbidity (MC) was observed more in females (73% vs. 63%). The female subjects were sicker, with a higher Charlson comorbidity index score (2 vs. 1).

Interestingly, the MM rate was not correlated with age. Metabolic syndrome (28%), cardiovascular diseases (17%) and chronic lung diseases (14%) were the most prevalent MCs, whereas substance misuse (65%), personality disorders (18%) and alcohol misuse (12%) were the most frequent PCs.

Conclusion: The distinction of this study was the observation that MM is the norm in both genders, even in younger subjects suffering from SRD. These findings advocate strongly for integrated management of psychiatric and physical health problems in clinical practice.

NO. 15

MEDICAID SPENDING ASSOCIATED WITH PALIPERIDONE PALMITATE OR ORAL ATYPICAL ANTIPSYCHOTIC TREATMENT AMONG ADULTS RECENTLY DIAGNOSED WITH SCHIZOPHRENIA

Poster Presenter: Patrick Lefebvre, M.A.

Co-Author(s): Dominic Pilon, Erik Muser, Rhiannon Kamstra, Bruno Emond, Kruti Joshi

SUMMARY:

Background: Schizophrenia is a debilitating chronic mental illness with a high burden of disease and related costs. Once-monthly paliperidone palmitate (PP1M) is a long-acting injectable antipsychotic that may improve adherence, reduce hospitalizations and lower medical costs compared to oral atypical

antipsychotics (OAA). However, the impact of PP1M treatment on health care costs in patients recently diagnosed with schizophrenia remains unknown.

Objective: Compare Medicaid spending between patients initiated on PP1M or OAA in a population aged 18–25 with schizophrenia. **Methods:** Medicaid data from IA, KS, MS, MO and NJ (September 2008–March 2015) were used to identify adults (18 years or older) with schizophrenia initiated on PP1M or OAA (index date) during or after September 2009 (overall group). Baseline characteristics were assessed during the 12 months before index date. Patients aged 18–25 at the index date were defined as “recently diagnosed” with schizophrenia, using age as a proxy for duration of illness. Inverse probability of treatment weighting (IPTW) was used to adjust for baseline differences and compare outcomes for PP1M versus OAA in the overall and recently diagnosed groups. Medical and pre-rebate pharmacy costs were assessed during the 12 months after index date and compared using mean monthly cost differences (MMCD), calculated using univariate weighted linear regression models with p-values obtained from a nonparametric bootstrap, and were descriptively compared for the overall and recently diagnosed groups. All costs were inflated to 2015 U.S. dollars. **Results:** Overall, patients initiating PP1M (N=2,053) were younger (mean age=41 vs. 44), with a higher proportion having baseline antipsychotic use (88% vs. 62%) compared to OAA patients (N=22,247). Recently diagnosed patients comprised 11% and 10% of PP1M and OAA cohorts, respectively. IPTW resulted in balanced baseline demographic and clinical characteristics, as well as health care costs (overall: PP1M=11,612, OAA=12,688; recently diagnosed: PP1M=1,107, OAA=1,288). Overall, PP1M patients had significantly lower medical costs compared to OAA (MMCD=-\$286, p<0.001), offsetting most of the higher pharmacy costs (MMCD=\$323, p<0.001) and resulting in similar total costs for both groups (MMCD=\$37, p=0.709). Among recently diagnosed patients, lower medical costs (driven mainly by lower home care costs [MMCD=-\$395, p<0.001]) associated with PP1M (MMCD=-\$466, p=0.028) appeared to completely offset higher pharmacy costs, resulting in similar total costs (MMCD=-\$144, p=0.553). **Conclusion:** Overall, PP1M patients demonstrated significantly lower medical costs, which offset higher pharmacy costs during follow-up relative to OAA patients. Patients aged 18–25 treated with PP1M appeared to have a greater magnitude of medical cost savings versus OAA than

the overall PP1M-treated population, highlighting the potential economic impact of using PP1M in adults recently diagnosed with schizophrenia.

NO. 16

VALBENZAZINE (NBI-98854) IS EFFECTIVE FOR TREATING TARDIVE DYSKINESIA IN INDIVIDUALS WITH SCHIZOPHRENIA OR MOOD DISORDER

Poster Presenter: Richard C. Josiassen, Ph.D.

Co-Author(s): Gary Remington, Joshua Burke, Scott Siegert, Bill Aurora

SUMMARY:

Background: Tardive dyskinesia (TD) is a drug-induced movement disorder characterized by repetitive and involuntary movements that can be severely disabling. TD remains a significant clinical problem for which there is no approved treatment in the U.S. phase 1 and 2 studies of valbenazine (VBZ, NBI-98854), a novel, highly selective vesicular monoamine transporter 2 (VMAT2) inhibitor, have recently yielded favorable efficacy and safety results for VBZ as a potential therapeutic option for TD. In the phase 2 KINECT 2 study, a statistically significant and clinically meaningful reduction of TD symptoms was observed using VBZ in a diverse group of psychiatric subjects with moderate to severe symptoms of TD at baseline. The purposes of this post hoc investigation were to 1) explore the efficacy of VBZ in diagnostic subgroups with TD and 2) examine the impact of baseline TD severity on treatment outcome. **Methods:** KINECT 2 (NCT01733121) was a randomized, double-blind, parallel-group, placebo-controlled, phase 2 clinical trial in moderate to severe TD patients with underlying schizophrenia, schizoaffective disorder or mood disorder (including bipolar disorder and major depressive disorder). Subjects (N=102) were randomized 1:1 to VBZ (25–75mg) or placebo administered once daily for six weeks. The primary endpoint was change from baseline (CFB) in the Abnormal Involuntary Movement Scale (AIMS) at week 6, assessed by central blinded raters who viewed AIMS videos in randomized order. Using the KINECT 2 population, CFB in AIMS scores (VBZ vs. placebo) were further explored within diagnostic subgroups (schizophrenia [N=53] or mood disorder [N=35]). Next, the CFB in AIMS was analyzed on the basis of baseline TD symptom severity (highest AIMS individual item score used as surrogate for severity). Secondary endpoints included percentage of responders (VBZ vs. placebo) in CFB in AIMS scores and Global Impression of Change–Tardive Dyskinesia

(CGI-TD) score (responders defined as those reporting “much improved” or “very much improved”). **Results:** Subjects (VBZ: N=45, placebo: N=44) were grouped by psychiatric diagnosis: schizophrenia (VBZ: N=26, placebo: N=27) or mood disorder (VBZ: N=19, placebo: N=16). Mean CFB on AIMS was consistent with that observed for the overall population (VBZ, placebo: –3.6, –1.1, $p=0.0005$) across subsets grouped by either psychiatric diagnosis (schizophrenia: –3.0, –1.0, $p<0.05$; mood disorder: –4.5, –1.4, $p<0.05$) or TD severity (severe: –4.8, –3.2; moderate: –3.4, –1.7; mild: –3.5, –1.0; minimal: –3.0, 1.3). As previously reported, AIMS and CGI-TD responder rates between VBZ and placebo showed significant improvement ($p=0.002$ and $p<0.0001$, respectively) in the VBZ group. **Conclusion:** In this exploratory analysis, VBZ improved TD regardless of psychiatric diagnosis or TD baseline severity, suggesting that VBZ may represent an important treatment option for TD across a range of patient populations.

NO. 17

PSYCHIATRIC STABILITY MAINTAINED IN TARDIVE DYSKINESIA SUBJECTS TREATED WITH VALBENZAZINE (NBI-98854)

Poster Presenter: Richard C. Josiassen, Ph.D.

Co-Author(s): Jean-Pierre Lindenmayer, Joshua Burke, Scott Siegert, Bill Aurora

SUMMARY:

Background: Tardive dyskinesia (TD) is a persistent movement disorder induced by chronic antipsychotic exposure, for which there are currently no FDA-approved treatments. Valbenazine (VBZ; NBI-98854) is a novel, highly selective vesicular monoamine transporter 2 inhibitor under investigation for use in TD and exhibiting favorable safety in earlier studies. KINECT 2 (NCT01733121) was a dose-escalating trial evaluating safety and efficacy of VBZ for TD, demonstrating significant and clinically meaningful improvement versus placebo. This analysis evaluated the psychiatric status of subjects across the trial. **Methods:** KINECT 2 was a prospective, randomized, double-blind, six-week, placebo-controlled trial in subjects with schizophrenia, mood disorder or gastrointestinal disorder with moderate or severe TD. VBZ or placebo (1:1) was administered once daily. All subjects randomized to VBZ received 25mg through week 2; then the dose was titrated to 50mg or maintained at 25mg. At week 4, the dose was titrated to 75mg, maintained or reduced to the previous dose. After week 6, subjects completed a

two-week follow-up. The primary endpoint (previously reported) was week 6 change from baseline (CFB) in Abnormal Involuntary Movement Scale (AIMS) score versus placebo. AIMS videos were scored by two blinded central raters. Safety assessments were analyzed descriptively and included the following psychiatric scales: the Positive and Negative Syndrome Scale (PANSS), Young Mania Rating Scale (YMRS), Montgomery-Åsberg Depression Rating Scale (MADRS), Calgary Depression Scale for Schizophrenia (CDSS) and Columbia Suicide Severity Rating Scale (C-SSRS).

Results: 102 subjects were randomized; 76% of VBZ subjects reached the maximum dose of 75mg. The safety population was 51 (VBZ) and 49 (placebo) subjects. Antipsychotics, antidepressants and anxiolytics were the most common concomitant medications, taken by 40% or more of subjects in each group. week 6 CFB in AIMS score (primary endpoint) was significantly greater for VBZ versus placebo ($p=0.0005$). Psychiatric status measured by psychiatric rating scales remained stable or improved from baseline to week 6 for both groups, as shown by CFB in PANSS for positive symptoms (VBZ: -0.6, placebo: -1.0), negative symptoms (VBZ: 0.5, placebo: -0.9) and general psychopathology (VBZ: -0.5, placebo: -0.7); MADRS (VBZ: -1.5, placebo: -0.2); CDSS (VBZ: -0.9, placebo: -0.7); and YMRS (VBZ: -1.1, placebo: -0.3). The percentage of subjects with suicidal ideation/behavior as measured by the C-SSRS for VBZ versus placebo was 5.9% vs. 2.0% (screening) and 5.9% vs. 0% (weeks 2–8).

Conclusion: There was no apparent increase in psychopathology, depression or suicidality with VBZ, and psychiatric status remained stable or improved in subjects with underlying schizophrenia, schizoaffective disorder, depression or bipolar disorder. Together with favorable efficacy findings, these results indicate that VBZ may be a promising therapy for TD.

NO. 18

ITI-007 FOR THE TREATMENT OF SCHIZOPHRENIA: SAFETY AND TOLERABILITY DATA TO DATE FROM TWO DOUBLE-BLIND, RANDOMIZED, PLACEBO-CONTROLLED CLINICAL TRIALS

Poster Presenter: Sharon Mates, Ph.D.

Lead Author: Cedric O’Gorman, M.D.

Co-Author(s): Kimberly Vanover, Robert Davis, Jelena Saillard, Michal Weingart

SUMMARY:

Background: ITI-007 is a first-in-class novel investigational agent in clinical development for the treatment of schizophrenia. Acting synergistically through serotonergic, dopaminergic and glutamatergic systems, ITI-007 represents a new mechanistic approach to the treatment of schizophrenia and other neuropsychiatric disorders. ITI-007 is a potent 5-HT_{2A} antagonist, a mesolimbic/mesocortical dopamine phosphoprotein modulator with activity as a presynaptic partial agonist and postsynaptic antagonist at dopamine D₂ receptors, a mesolimbic glutamate GluN2B receptor phosphoprotein modulator, and a serotonin reuptake inhibitor. ITI-007 60mg was shown to be effective in reducing symptoms of schizophrenia in a phase 2 clinical trial (ITI-007–005) with a safety and tolerability profile similar to placebo. Subsequently, a phase 3 clinical trial (ITI-007–301) was conducted to evaluate the efficacy and safety of ITI-007 for the treatment of schizophrenia, and ITI-007 was again found to be effective, safe and well tolerated, with a favorable metabolic, motoric and cardiovascular profile. Combined safety/tolerability results will be presented. A companion poster (P3–19) describes the efficacy data to date with ITI-007 in schizophrenia. **Methods:** In the phase 2 trial, patients with an acutely exacerbated episode of schizophrenia were randomized to receive one of four oral treatments once daily for four weeks: ITI-007 60mg, ITI-007 120mg, risperidone 4mg (positive control) or placebo in a 1:1:1:1 ratio. In the phase 3 trial, patients with an acutely exacerbated episode of schizophrenia were randomized to receive one of three oral treatments once daily for four weeks: ITI-007 60mg, ITI-007 40mg or placebo in a 1:1:1 ratio. The primary endpoint was change from baseline on the Positive and Negative Syndrome Scale (PANSS) total score at day 28 compared to placebo. In this poster, clinically important data concerning tolerability are presented, demonstrating placebo-like outcomes after ITI-007 administration on safety endpoints, including EPS, clinical laboratory values, adverse events, vital signs, cardiovascular function and metabolic parameters including changes in weight, glucose and insulin, lipids, and prolactin. **Results:** In phase 2, ITI-007 60mg met the primary endpoint and demonstrated efficacy with statistically significant superiority over placebo at day 28 as measured by the PANSS total score. In phase 3, ITI-007 60mg also met the primary endpoint and demonstrated efficacy with statistically significant superiority over placebo at day 28 as measured by the PANSS total score. Consistent across both

studies and prior studies, ITI-007 was safe and well tolerated, as evidenced by a motoric, metabolic and cardiovascular profile similar to placebo and no clinically significant changes in akathisia, extrapyramidal symptoms, prolactin, body glucose, insulin and lipids. Combined assessment and evaluation of ITI-007 safety and tolerability data will be presented.

NO. 19

ITI-007 FOR THE TREATMENT OF SCHIZOPHRENIA: PRIMARY AND SECONDARY EFFICACY ENDPOINTS AND SUBGROUP ANALYSES FROM TWO POSITIVE RANDOMIZED, DOUBLE-BLIND, PLACEBO-CONTROLLED CLINICAL TRIALS

Poster Presenter: Cedric O’Gorman, M.D.

Co-Author(s): Robert Davis, Kimberly Vanover, Jelena Saillard, Michal Weingart, Sharon Mates

SUMMARY:

Background: ITI-007 is a first-in-class novel investigational agent in clinical development for the treatment of schizophrenia. Acting synergistically through serotonergic, dopaminergic and glutamatergic systems, ITI-007 represents a new mechanistic approach to the treatment of schizophrenia and other neuropsychiatric disorders. ITI-007 is a potent antagonist at 5-HT_{2A} receptors, a mesolimbic/mesocortical dopamine phosphoprotein modulator with activity as a presynaptic partial agonist and postsynaptic antagonist at dopamine D₂ receptors, a mesolimbic glutamate GluN_{2B} receptor phosphoprotein modulator, and a serotonin reuptake inhibitor. ITI-007 60mg was shown to be effective in reducing symptoms of schizophrenia in a phase 2 clinical trial (ITI-007–005) with a safety and tolerability profile similar to placebo. Subsequently, a phase 3 clinical trial (ITI-007–301) was conducted to evaluate the efficacy and safety of ITI-007 for the treatment of schizophrenia and again found 60mg to be effective, safe and well tolerated. **Methods:** In the phase 2 trial (ITI-007–005), patients with an acutely exacerbated episode of schizophrenia were randomized to receive one of four oral treatments once daily for four weeks: ITI-007 60mg, ITI-007 120mg, risperidone 4mg (positive control) or placebo in a 1:1:1:1 ratio. In the phase 3 trial (ITI-007–301), patients with an acutely exacerbated episode of schizophrenia were randomized to receive one of three oral treatments once daily for four weeks: ITI-007 60mg, ITI-007 40mg or placebo in a 1:1:1 ratio. The primary endpoint was change from baseline on the Positive and Negative

Syndrome Scale (PANSS) total score at day 28 compared to placebo. The key secondary endpoint was the Clinical Global Impression Scale for Severity of Illness (CGI-S). Additional secondary endpoint analyses, as well as analyses of patient subgroups, were conducted and will be presented. **Results:** In phase 2, ITI-007 60mg met the primary endpoint and demonstrated efficacy with statistically significant superiority over placebo at day 28 as measured by the PANSS total score. Similarly, in phase 3, ITI-007 60mg also met the primary endpoint and demonstrated efficacy with statistically significant superiority over placebo at day 28 as measured by the PANSS total score. Moreover, ITI-007 60mg showed significant efficacy as early as week 1 on both the PANSS total score and PANSS positive symptom subscale score, which was maintained at every time point throughout the entire study. ITI-007 60mg also met the key secondary endpoint of statistically significant improvement on the CGI-S. Consistent with previous studies, ITI-007 was safe and well tolerated. Additional analyses from both studies on secondary endpoints and patient subgroups will be presented.

NO. 20

EVALUATION OF RISK FACTORS FOR ANTIPSYCHOTIC POLYPHARMACY IN PATIENTS ADMITTED TO PSYCHIATRIC UNITS: A RETROSPECTIVE ANALYSIS

Poster Presenter: Shreedhar Paudel, M.D., M.P.H.

Co-Author(s): Sushrusha Arjyal, M.D., Louis Gainer, Lilianna Markovic, M.D.

SUMMARY:

Background: Antipsychotic polypharmacy (APP) has been consistently found to be common practice while treating severe mental illness, even though the evidence for the benefits or efficacy of APP over antipsychotic monotherapy is controversial. Similarly, studies have shown that APP has the potential for more side effects, added cost and problems with patient safety. Some of the known important risk factors for APP are diagnosis of schizophrenia and severity of illness. In this context, we wanted to analyze the risk factors for APP at our inpatient psychiatric units. **Methods:** This is a retrospective analysis comparing risk factors for patients on APP in inpatient psychiatric units. The quality control division of Berkshire Medical Center provided the record of patients discharged on antipsychotic medications from its adult psychiatric units from October 2012 to December 2014. Out of

1,047 cases discharged on antipsychotic medications, only 82 patients were actually on APP at the time of admission, and this group was identified as the APP group. We randomly selected 72 patients for the non-APP group, who were only on one antipsychotic medication. We reviewed the electronic medical records of the selected patients starting two years prior to the admission date, focusing mainly on psychiatric diagnosis, history of violence/jail time, substance abuse, and number of psychiatric emergency department (ED) visits and psychiatric admissions. The findings were analyzed quantitatively using standard statistical tools. The study was part of a quality improvement project for the hospital. **Results:** Odds ratio (OR) of receiving treatment with APP compared to non-APP was 7.0 for paranoid schizophrenia, 4.3 for schizoaffective disorder, 3.0 for schizophrenia, 0.7 for bipolar disorder, 0.6 for PTSD and 0.4 for major depressive disorder (MDD), but the results were statistically significant only for schizoaffective disorder and MDD. OR of treatment with APP for patients with three or more psychiatric admissions over the last two years was 3.2 ($p \leq 0.05$), and OR for three or more psychiatric ED visits in the last two years was 2.8 ($p \leq 0.05$). Similarly, ORs of APP for history of violence and history of substance abuse were 1.3 and 0.7, respectively. We also looked for OR for receiving treatment with APP for abnormal lipid profile (0.3), overweight (1.5), obesity (1.7), history of diabetes (0.7) and female gender (1.2), but none of these were statistically significant. **Conclusion:** Patients with a diagnosis of schizoaffective disorder and those with history of three or more psychiatric ED visits or three or more psychiatric hospitalizations within a two-year period are likely to receive treatment with APP. Other important risk factors for receiving treatment with APP are history of violence, high BMI, diagnosis of schizophrenia and paranoid schizophrenia. Prospective studies and randomized controlled trials will be important to provide better insight into casual relationships.

NO. 21

WITHDRAWN

NO. 22

INJECTION SITE REACTIONS AND PAIN ASSOCIATED WITH LONG-ACTING INJECTABLE ANTIPSYCHOTICS PALIPERIDONE PALMITATE ONCE-MONTHLY AND ONCE-EVERY-THREE-MONTHS

Poster Presenter: Jennifer Kern Sliwa, Pharm.D.

Lead Author: Erica Elefant, M.S.W., R.N.

Co-Author(s): Adam Savitz, Isaac Nuamah, Maju Mathews, Srihari Gopal, Dean Najarian, Larry Alphas

SUMMARY:

Background: Injection site reactions and pain associated with long-acting injectable antipsychotics are of interest to health care professionals. Safety data from a randomized, double-blind (DB), parallel-group, multicenter, noninferiority study (NCT01515423) evaluated injection site reactions and pain associated with paliperidone palmitate once monthly (PP1M) and paliperidone palmitate once every three months (PP3M). **Methods:** Subjects (N=1,429) with schizophrenia were initially treated with PP1M (78mg, 117mg, 156mg or 234mg) in a 17-week open-label (OL) phase. Subjects received PP1M injections in the deltoid muscle on day 1 (234mg) and day 8 (156mg); a switch to the gluteal muscle was allowed beginning at OL week 5. Upon meeting clinical stabilization criteria, subjects were randomized 1:1 to fixed-dose injections of PP1M (78–234mg) or PP3M (273, 410, 546 or 819mg) in a 48-week DB phase. The PP3M group received a 3.5 multiple of the PP1M dose received at OL week 13; the PP1M group received the same dose at OL week 13. Investigators, blinded to treatment assignment, assessed injection site reactions (redness, induration and swelling) within 30 minutes of each injection using a four-point rating scale (0 [absent] to 3 [severe]). Subjects assessed pain using a visual analog scale (VAS; 0 [no pain] to 100 [maximum pain]). Injection site evaluation comparisons were conducted by study phase (OL vs. DB), final OL dose (78/117, 156 or 234mg), injection location (deltoid or gluteal muscle), baseline body mass index (BMI; <25 , ≥ 25 to <30 , ≥ 30 to <35 or ≥ 35 kg/m²) and region (Europe, Latin America, North America or Rest of World). VAS scores were analyzed using descriptive statistics. **Results:** Overall, injections were well tolerated with both PP3M and PP1M. Incidences of induration, redness and swelling were low (9–12%) in the OL and DB (7–13%) phases and were mostly mild in nature. Mean VAS scores were 22.0 (SD=21.6) at OL baseline and 19.0 (SD=20.6) at OL week 17. At DB baseline, VAS scores for PP3M and PP1M were 19.5 (SD=20.6) and 18.4 (SD=20.4), respectively; at DB endpoint, VAS scores were 15.6 (SD=17.9) and 15.5 (SD=18.3), respectively. No notable changes in injection site reactions or pain between the PP3M and PP1M groups were observed by injection site location or baseline BMI during the OL and DB phases or by final OL dose of PP1M during the DB phase. Subjects in the Rest of World group

had slightly higher VAS scores at OL baseline (29.7 [SD=23.6]) than those in Europe (17.1 [SD=18.2]), Latin America (18.9 [SD=20.6]) and North America (18.6 [SD=21.2]). At DB endpoint, VAS scores were 21.2 (SD=18.9), 11.8 (SD=14.6), 16.1 (SD=19.7) and 16.0 (SD=23.9), respectively, for PP3M and 22.2 (SD=19.9), 11.2 (SD=14.7), 16.5 (SD=19.5) and 12.6 (SD=20.6), respectively, for PP1M. **Conclusion:** Injection site reactions and pain were low, mild and similar between PP1M and PP3M, regardless of last dose of OL PP1M, location of the injection or baseline BMI.

NO. 23

KINECT 3: A RANDOMIZED, DOUBLE-BLIND, PLACEBO-CONTROLLED PHASE 3 TRIAL OF VALBENAZINE (NBI-98854) FOR TARDIVE DYSKINESIA

Poster Presenter: Clinton W. Wright, Pharm.D.

Lead Author: Stephen R. Marder, M.D.

Co-Author(s): Mary Ann Knesevich, Robert A. Hauser, Grace S. Liang, Christopher F. O'Brien

SUMMARY:

Background: Tardive dyskinesia (TD) is a persistent and often disabling movement disorder resulting from chronic antipsychotic exposure. There are currently no FDA-approved treatments for TD. Valbenazine (VBZ), a novel, highly selective vesicular monoamine transporter 2 (VMAT2) inhibitor, is designated an FDA breakthrough investigational therapy. VBZ demonstrated favorable efficacy and safety profiles in phase 1 and 2 studies. The efficacy, safety and tolerability of VBZ for TD were evaluated in a phase 3 trial (KINECT 3, NCT02274558).

Methods: KINECT 3 was a double-blind, parallel-group, six-week, placebo-controlled trial of subjects with moderate or severe antipsychotic-induced TD and underlying schizophrenia, schizoaffective disorder or mood disorder. Subjects were randomized 1:1:1 to placebo, VBZ 40mg or VBZ 80mg taken once daily. The primary outcome was an intent-to-treat (ITT) analysis of change from baseline on the Abnormal Involuntary Movement Scale (AIMS) score, assessed by blinded central video raters, for the VBZ 80mg dose versus placebo. Safety assessments included adverse event (AE) rates, laboratory, ECG and psychiatric assessments including the Positive and Negative Syndrome Scale (PANSS), Young Mania Rating Scale (YMRS), Montgomery-Åsberg Depression Rating Scale (MADRS), Calgary Depression Scale for Schizophrenia (CDSS) and Columbia Suicide Severity Rating Scale

(C-SSRS). **Results:** Sixty-four sites randomized 234 subjects. Sixty-six percent of subjects had schizophrenia or schizoaffective disorder, and 86% were receiving concomitant antipsychotic medications (16% typical, 77% atypical). The mean baseline AIMS score was 10.1 (SD=4.0). VBZ 80mg resulted in a significant improvement in AIMS score versus placebo (LS mean change from baseline=-3.2 vs. -0.1, $p<0.0001$). The AIMS score was also reduced in the VBZ 40mg group versus placebo (LS mean change from baseline=-1.9 vs. -0.1, $p=0.0021$; full description of supportive analyses will be presented). AE rates were similar among all groups and were consistent with prior studies; the most commonly reported AE was somnolence (VBZ 80mg: 5%, VBZ 40mg: 4%, placebo: 4%). Three percent of subjects discontinued due to treatment-emergent AEs (VBZ 80mg: 4%, VBZ 40mg: 3%, placebo: 3%). Across multiple scales (PANSS, YMRS, MADRS, CDSS, C-SSRS), results were generally similar between VBZ and placebo, and psychiatric status was stable. **Conclusion:** Once-daily VBZ was associated with a significant improvement in TD and was generally well tolerated in subjects with underlying schizophrenia, schizoaffective disorder or mood disorder (e.g., bipolar disorder and major depressive disorder). Both VBZ doses were generally well tolerated, even when taken with a wide range of concomitant medications, including antipsychotic agents. Psychiatric scales indicated no apparent increased risk in psychiatric symptoms, depression or suicidality with VBZ during the trial. VBZ may be a promising therapy for TD.

NO. 24

TARDIVE DYSKINESIA AND VALBENAZINE (NBI-98854) RESPONSE AS A FUNCTION OF CONCOMITANT ANTIPSYCHOTIC USE

Poster Presenter: Clinton W. Wright, Pharm.D.

Lead Author: Gary Remington, M.D.

Co-Author(s): Jean-Pierre Lindenmayer, Joshua Burke, Bill Aurora, Christopher F. O'Brien

SUMMARY:

Background: Tardive dyskinesia (TD) is a persistent movement disorder induced by chronic antipsychotic exposure, for which there are currently no FDA-approved treatments. Valbenazine (VBZ; NBI-98854) is a novel, highly selective inhibitor of vesicular monoamine transporter 2 under investigation for use in TD. VBZ has exhibited a favorable safety profile in early phase 1 and 2 studies. The KINECT 2 study (NCT01733121) was a dose-escalating trial

evaluating safety and efficacy of VBZ for TD in subjects with schizophrenia, mood disorder or gastrointestinal disorder and demonstrated a significant and clinically meaningful improvement in TD for VBZ versus a placebo. To evaluate the impact of concomitant medication use in this trial, outcomes for schizophrenia and mood disorder (e.g., depression, bipolar disorder) subjects from KINECT 2 were compared among subsets grouped by antipsychotic use. **Methods:** KINECT 2 was a prospective, randomized, double-blind, six-week, placebo-controlled trial. VBZ or placebo (1:1) was administered once daily for six weeks. All subjects randomized to VBZ received 25mg through week 2. At week 2, the dose could be titrated to 50mg or maintained. At week 4, the dose could be titrated to 75mg, maintained or reduced to the previous dose. The primary endpoint was change from baseline (CFB) to week 6 in Abnormal Involuntary Movement Scale (AIMS) score. AIMS videos were scored by two central raters who were blinded to study visit sequence and treatment. A key secondary endpoint was Clinical Global Impression of Change-Tardive Dyskinesia (CGI-TD) score. In this exploratory analysis, all randomized subjects who had at least one post-randomization AIMS score were grouped by antipsychotic use (atypical only, typical only or none), and descriptive analyses were performed. **Results:** 102 subjects were randomized; 76% of VBZ subjects reached the maximum allowed dose of 75mg. Antipsychotics, antidepressants and anxiolytics were the most common concomitant medications, taken by at least 40% of subjects in each group. Subjects were classified into medication subgroups (VBZ, placebo): atypical only (N=25, N=24), typical only (N=5, N=7) and none (N=13, N=11). As previously reported, the primary endpoint of week 6 CFB in AIMS score was significantly greater in the VBZ group than placebo for the overall population ($p=0.0005$). Mean CFB on AIMS for VBZ indicated greater improvement relative to placebo overall and across all subgroups (mean CFB; VBZ, placebo): all (-3.6, -1.1), atypical only (-2.6, -1.5), typical only (-2.4, -0.4) and none (-5.9, 0). Similar results were observed for the CGI-TD. **Conclusion:** In this exploratory analysis, VBZ improved TD regardless of the use or type of antipsychotic drug concomitantly administered. Despite the small sample size, results in all subgroups were consistent with those observed for the overall population on both a measure of TD symptoms (AIMS) as well as a measure of clinically meaningful benefit (CGI-TD).

NO. 25

A CASE OF DESIRED DEATH FROM MORPHINE: SUGGESTIONS FOR MENTAL HEALTH CLINICIANS TO MANAGE PATIENT'S REQUESTS FOR HASTENED DEATH DURING MEDICAL CARE

Poster Presenter: Carolyn G. C. Gnerre, M.D.

Co-Author(s): Naalla Schreiber, M.D.

SUMMARY:

Objective: 1) Consider the breadth of options for hastened death; 2) Learn techniques to explore requests for hastened death as markers of distress; and 3) Consider which treatment tools can be used to optimize medical and psychiatric treatments and limit suffering. **Background:** The American Medical Association and the American Psychiatric Association do not recognize rational suicide or physician-assisted suicide as options for end-of-life treatment. However, there is a national movement to legalize physician-assisted suicide and to consider patient requests for rational suicide as within the realm of legitimate options for end-of-life care. **Case:** A middle-aged woman with a past medical history of hypertension and past psychiatric history of major depressive disorder presented with one month of diffuse body pain and inability to ambulate. She was admitted for workup of a large breast mass and diffuse bony metastases. The psychiatry team was consulted, as the patient asked her husband to gather morphine pills from friends and told him she would overdose after discharge. Upon psychiatric evaluation, the patient and her husband both purported long-held beliefs about rational suicide in the face of terminal illness. She was considering traveling to Vermont for physician aid in dying or going home to consume morphine as an intentional overdose. The patient did not demonstrate symptoms of clinical depression, psychosis or cognitive deficits. She had been psychiatrically stable for years on an SSRI as per her outpatient psychiatrist. Throughout many conversations, the patient identified her reasons for requesting hastened death and worked through the impact this would have on those around her. She ultimately decided against suicide because she believed that her children would be adversely impacted. The patient refused chemotherapy and was transferred to inpatient hospice. **Discussion:** Throughout many discussions with the patient, her issues and fears about dying were addressed with psychotherapeutic techniques; psychotropic and pain medications; and clarification with her oncology team about her diagnosis, treatment options and prognosis. The

psychiatry team used generous amounts of time combined with the tools of compassion, empathy, validation, confrontation, clarification and coordination with other providers to address this patient and family in a respectful and nonjudgmental manner. The psychiatry consult team worked with the patient and her husband to ameliorate the multiple aspects of her suffering while maintaining fidelity to professional, ethical and legal obligations.

Conclusion: It is important for clinicians to be open to patient requests for hastened death and to use these situations as an opportunity to optimize medical and psychiatric treatment while honoring patients' values and life preferences.

NO. 26

SUICIDE IDEATION AND BEHAVIOR ASSESSMENT TOOL (SIBAT): A NOVEL MEASURE OF SUICIDAL IDEATION/BEHAVIOR AND PERCEIVED SUICIDE RISK

Poster Presenter: David Williamson, Ph.D.

Lead Author: Larry D. Alphs, M.D., Ph.D.

Co-Author(s): Carla M. Canuso

SUMMARY:

Background: Worldwide, suicide is one of the more preventable types of death. Clinicians wanting to monitor suicidal ideation, behavior and risk require a tool that includes all of these components and distinguishes nonsuicidal, self-inflicted injuries from suicide-related injuries. Ideally, it should permit assessment of changes that occur as a result of intervention. **Methods:** A consortium of experts in scale development, suicidology and clinical management of suicidal patients met over three years to develop the Suicide Ideation and Behavior Assessment Tool (SIBAT), which is organized into 10 modules that allow for efficient, comprehensive data collection. The SIBAT is divided into patient self-report and clinician-rated sections. Its modular structure allows for customization, and the administration of specific modules can be adjusted to meet clinicians' needs. Thus, responses less susceptible to change (e.g., demographics, medical history) are segregated into modules distinct from responses that fluctuate more rapidly (e.g., suicidal ideation). **Results:** The SIBAT Consortium developed a provisional version of the SIBAT based on a precursor instrument (the ISST-Plus), their extensive clinical experience and reviews of the suicide literature. During revisions of provisional versions of the SIBAT, modules were added and item structures refined. A draft version agreed upon by the SIBAT Consortium was reviewed in an emergency

department setting by two groups of patients at various degrees of risk for suicide and subsequently by 686 members of PatientsLikeMe, an online patient community, who self-identified as being at risk for suicide. All participants evaluated items from the SIBAT's patient-reported modules in terms of semantic clarity, relevance of questions and adequacy of response choices. After each of these three sets of reviews, the SIBAT was revised based on consensus from members of the SIBAT Consortium. A psychometric evaluation study to examine reliability and validity of a computerized version of the instrument is planned. This study will also include exploratory factor analyses and item response theory analyses. **Conclusion:** The SIBAT facilitates comprehensive assessment and storage of patient-reported data related to suicidal ideation, behavior and clinician assessment of risk. Its flexible, modular structure and electronic interface allow for efficient data collection. Its patient-reported modules provide a broad, standardized background of information for clinical judgments of imminent and long-term suicide risk. The validation of this instrument will support its broad application across patient populations with suicidal ideation. The SIBAT's structure will provide the possibility of its being accessed from a website or being made available to suicide prevention centers or nonpsychiatrists who examine suicidal patients but are uncertain what data to collect for expert consultants.

NO. 27

THE DILEMMA OF SYRIAN REFUGEES' MIGRATION TO THE WEST

Poster Presenter: Nicole N. Perras, M.D.

Co-Author(s): Sandeep Dendaluri, M.D., Eric Kocher, Allen Dyer, M.D., Cody Krueger, B.A., Kristina Mihajlovic, B.A., B.M.S., Amanda King, B.A., Aida Mihajlovic, M.D., Catherine May, M.D.

SUMMARY:

Background: During the first nine months of 2015, an estimated 500,000 refugees passed through Greece in an attempt to reach Western Europe. This crisis presents challenges for psychiatry. The degree of psychological trauma and need for treatment for those with extended stays in refugee camps in Turkey and other countries is well described. What is less well developed is an understanding of the psychological needs of populations in transit and how best to address these needs. Observations in this report are based on the experience of the

authors during November and December 2015 on beaches at Molivos, refugee camps in Lesbos and Chios, and the Macedonian border. **Results:** 1) Refugees had few overt psychiatric complaints—the most common was panic attack. Deep psychological distress was commonly masked by somatization; 2) Detailed psychiatric evaluation was difficult due to language barriers and “migration mentality;” 3) Interruption of migration mode can cause increased medical illness, psychological distress, hopelessness and violence; 4) Unlike disasters such as the earthquake in Haiti, which was a discrete event affecting a predominantly static population, the Syrian refugee crisis is a dynamic event affecting a migratory population that cannot be served by traditional models of diagnosis and treatment of psychopathology, nor measured by the usual metric of number of patients seen and treated; 5) Psychological needs may be best addressed as issues of population health and social psychiatry, addressing deficiency needs as described by Maslow; 6) Interventions that shift from a treatment model to models fostering hope and resilience can support the migration mindset and enhance mental health; 7) Training medical and nonmedical volunteers to administer psychological first aid would improve the psychological well-being of both refugee and volunteer populations; 8) There are complaints that a large number of NGOs and inexperienced volunteers can place stress on an already overwhelmed system. However, volunteers may provide inoculation against xenophobia in their home countries and may be the best educators of a population that could otherwise be isolated from world events and exposed only to radicalizing reports by media. **Conclusion:** Mental health is part of any disaster and cannot be ignored. Planning, assessment and delivery of services must be addressed as problems of the whole community and account for both individuals’ and communities’ needs. In many cases, communities have experienced disruptions of safety and livelihood over extended periods of time, and the response must recognize and support those needs. The implication for social psychiatry is the extent to which sectarian violence and the dilemma of the refugees infects our response to the crisis. In the aftermath of the Paris attacks, Western societies face the additional dilemma of protecting refugees while managing overt hostility toward the very individuals in need of assistance.

NO. 28

IMPORTANCE OF EARLY IDENTIFICATION OF ATYPICAL PSYCHOSIS AFTER CHILDHOOD SEXUAL ABUSE

Poster Presenter: Raminder Pal Cheema, M.D.

Co-Author(s): Muhammad Zeshan, M.D., Wen Gu, Ph.D., Marilena Jennings, M.D.

SUMMARY:

Childhood sexual abuse is a form of child abuse in which an adult or older adolescent uses a child for their own sexual stimulation. It can occur in a variety of settings, including home, school or work, with the offender being family/relatives in 30% of cases, acquaintances (such as family friends, babysitters or neighbors) in 60% of cases and strangers in 10% of cases. The global prevalence of child sexual abuse has been estimated at 19.7% for females and 7.9% for males. The estimates for the United States vary widely, ranging from three to 37% for males and eight to 71% for females, with higher than global average prevalence. Childhood sexual abuse can have a wide range of short-term and long-term implications. Review of literature shows that trauma, particularly in childhood, exerts a powerful environmental influence on the expression of psychosis. The experience of trauma can lead to negative beliefs about self, world and others. These kinds of beliefs make potentially distressing interpretations of ambiguous everyday events more likely and have been shown to be associated with psychosis. In this poster, we present case of a nine-year-old boy who initially presented with intrusive homicidal thoughts secondary to auditory hallucinations in context sexual abuse during preschool years. He was inattentive and hyperactive, with poor academic performance and sexually inappropriate behavior toward his younger sister. Before hospitalization, he was drawing sketches depicting him killing his biological family with firearms. The patient had poor treatment response to multiple psychotropic medications and was eventually discharged to a state children’s psychiatric facility for long-term inpatient treatment. We illustrate the challenges a clinician encounters in making a definite diagnosis when a child presents with atypical psychotic symptoms. We also want to emphasize the importance of early identification and timely intervention, along with focus on the causative/triggering factors rather than the presenting symptoms, to formulate an ideal treatment plan for the patient.

NO. 29

MANIFESTATION OF NON-EPILEPTIC SEIZURES IN POSTTRAUMATIC STRESS DISORDER

Poster Presenter: Amina Hanif, M.D.

Co-Author(s): Raminder Cheema, M.D., Munaza Khan, M.D.

SUMMARY:

Background: Posttraumatic stress disorder (PTSD) is the most common psychiatric sequela of traumatic life events. The etiology of this psychiatric event is explicitly tied to the psychophysiological effects of experiencing and/or witnessing a highly threatening life event. Symptoms may include flashbacks, nightmares, dissociation and severe anxiety, as well as uncontrollable thoughts about the event. Dissociative episodes can manifest in multiple ways, including, but not limited to, auditory/visual hallucinations, flashbacks and non-epileptic seizures (NES). NES resemble epileptic seizures but have no electrophysiological correlate. It manifests as alterations of consciousness including trance or stupor, amnesia and/or hypermotor activity coupled with rhythmic movements of the head and trunk, muscle stiffness, and tremor-like movements. NES are not under the patient's voluntary control and are thought to represent the patient's involuntary response to emotional stress. Evidence-based data have unveiled an increased prevalence of PTSD among patient with psychogenic/non-epileptic seizures, yet our search reveals that there is limited literature published comparing the concordance of PTSD and NES. **Case:** In this poster, we present the cases of two sisters with no past psychiatric history who presented to medical ER at the same time with similar symptoms. Both patients (A and B) presented with altered mental status, perceptual disturbances and headache followed by dissociation (not responding to the surroundings, walking and becoming aggressive during the episode). The sisters reported the initiation of these symptoms a few years ago, after they both witnessed life-threatening events (Rape and murder of friend, witnessing a group of people being killed or burned on more than two occasions in 2011 and 2012). Neurology and psychosomatic medicine services were consulted. Neurology recommended lamotrigine 25mg daily for two weeks with titration for the next two weeks. Psychosomatic medicine recommended outpatient follow-up for therapy, medication management and integration of psychiatric and neurological care. The patients were discharged to outpatient psychiatric and neurological care after a 24-hour symptom-free period. **Conclusion:** We use these two cases to

discuss the manifestation of PTSD as dissociative seizures. An interesting aspect is that both the sisters have a strong history of trauma and reported similar neurological symptoms. Psychological trauma is much more prevalent in patients with dissociative seizures than in the general population. It is therefore critical that the history of trauma and differential diagnosis of PTSD should be considered when providing care to a patient for NES.

NO. 30

EMOTIONAL FLEXIBILITY AND POSTTRAUMATIC STRESS DISORDER AMONG COMBAT VETERANS

Poster Presenter: Rebecca Rodin, M.Sc.

Co-Author(s): Adam Brown, Ph.D., George Bonanno, Ph.D., Nadia Rahman, B.A., Nicole Kouri, B.A., Maren Westphal, Ph.D., Isaac Galatzer-Levy, Ph.D., Richard Bryant, Ph.D., Charles Marmar, M.D.

SUMMARY:

Background: A growing body of evidence suggests that flexibility in the expression and suppression of emotions following exposure to traumatic events supports successful adaptation. This was demonstrated in New York City university students exposed to the September 11th terrorist attacks and in bereaved adults who recently lost a spouse. However, the protective effect of emotional flexibility has yet to be examined among individuals exposed to combat trauma and in the context of posttraumatic stress disorder (PTSD). This study tests if lower levels of emotional flexibility are associated with PTSD in combat-exposed veterans. **Methods:** Sixty Operation Enduring Freedom and Operation Iraqi Freedom combat veteran with and without PTSD were recruited to participate in this study. Participants completed a battery of self-report measures assessing symptoms of depression, PTSD and combat exposure. In addition, participants completed an emotional flexibility task in which they were asked to either enhance or suppress their expressions of emotion while viewing emotional pictures on a computer screen. Blind observers rated the expressiveness of the participants in response to the affective stimuli. **Results:** Repeated measures ANOVAs showed that both PTSD and depression were associated with lower levels of emotional enhancement ability. In addition, a series of linear regressions demonstrated that both combat exposure and lower levels of emotional enhancement ability predicted PTSD and depression symptom severity. The ability to suppress emotional responses did not differ among individuals with and

without PTSD or depression. **Conclusion:** Deficits in emotional flexibility, particularly related to the ability to enhance emotional expression, significantly predict increased posttraumatic symptom severity among combat veterans. These findings shed light on previously unrecognized affective mechanisms underlying the pathogenesis of PTSD and depression and may help to inform future interventions.

NO. 31

PREHOSPITAL DIVERSION OF PATIENTS WITH ACUTE MENTAL HEALTH CRISES

Poster Presenter: Julianne Cyr, M.P.H.

Lead Author: Jamie O. Creed, B.S.

Co-Author(s): Hillary Owino, M.P.H., Shannen Box, B.S., Brian Sheitman, M.D., Beat Steiner, M.D., Michael W. Bachman, M.H.S., Jefferson G. Williams, M.D., M.P.H., J. Brent Myers, M.D., M.P.H., Seth W. Glickman, M.D., M.B.A.

SUMMARY:

Background: Emergency departments (EDs) are overburdened with patients with acute mental health crises. Emergency medical services (EMS) are a promising mechanism to reduce unnecessary ED use and improve patient care by rapidly and safely diverting appropriate patients in crisis to alternative treatment settings. **Objective:** Describe characteristics and outcomes of patients treated in a pilot intervention to divert 911 patients experiencing a mental health crisis. Eligible patients were evaluated by advanced practice paramedics (APPs) and diverted to a dedicated crisis and assessment services unit located within a nearby community mental health center, WakeBrook (WB), instead of the ED. **Methods:** We performed a retrospective cohort study of patients screened by APPs from August 2013 through July 2014. APPs followed specialized protocols to confirm a mental health crisis and exclude an acute medical condition. We linked EMS data to destination record (WB or ED) data using direct identifiers. Descriptive statistics were used for patient demographics, disposition and length of stay (LOS). Mann-Whitney U tests were used to assess differences in LOS. **Results:** EMS screened 1,557 patients; 937 (60%) did not meet diversion criteria and were transported to the ED, and 223 (14%) were diverted to WB. The remaining 397 (25%) refused transport to WB or were transported to another destination (e.g., detox facility). We linked a high proportion of both ED (N=623, 66%) and WB (N=220, 99%) records. Overall patient characteristics at WB were similar to the ED

(male 55% vs. 46%; white 58% vs. 66%; uninsured 38% vs. 36%; median age 38 vs. 37 years, respectively). In the ED, 267 (43%) patients were admitted to the hospital, 135 (22%) were transferred to a psychiatric facility, 205 (33%) were discharged and 16 (3%) were left against medical advice. Notably, among the 267 patients admitted to the hospital, 128 (48%) were admitted to board pending psychiatric transfer. At WB, 23 (10%) were admitted, 37 (17%) were accepted for residential treatment, 89 (40%) were transferred to a psychiatric facility, 40 (18%) were discharged, 11 (5%) refused services and 10 (5%) were transferred to an ED within four hours of arrival. For those patients admitted for psychiatric reasons, median LOS prior to disposition was significantly longer in the ED (41.1 hours, interquartile range (IQR)=17.8–63.1) compared to acute crisis services at WB (21.4 hours, IQR=8.7–46.4), $p=0.03$. **Conclusion:** A mobile integrated health program allowed a significant number of patients to be treated at a dedicated community mental health center, where treatment LOS times were significantly shorter compared to a large, regional ED. Additional work is needed to characterize subsequent outcomes. Successful broader implementation could improve care quality and significantly and safely reduce the volume of patients seen in the ED with acute mental health crises.

NO. 32

USE OF INVOLUNTARY MEDICATION, SECLUSION AND RESTRAINT IN A STATE PSYCHIATRIC HOSPITAL

Poster Presenter: Malini Neramballi, M.D.

Co-Author(s): B. Abazyan, M.D., N. Kumar, M.D., F. Mohyuddin, M.D.

SUMMARY:

Background: Involuntary medication in psychiatric treatment of inpatients is highly controversial. Coercive treatments are widely used in daily practice within inpatient psychiatric facilities. There is a common belief that these procedures signal a failure in care. Our hospital has a specific routine documentation of legal status and application of involuntary medication in the patients' electronic records, which allows assessment of the frequency of involuntary medication. **Methods:** We reviewed patients' records collected from on-call logs between January 2014 and January 2015 and reviewed electronic medical records. For the year 2014–2015, we extracted aggregated data from the electronic database on age, sex, psychiatric diagnosis, legal

status during admission, kind of coercive measure (mechanical restraint, seclusion and involuntary medication) applied, and the number and duration of seclusion and restraint episodes. **Results:** We identified 125 patients who required emergency psychiatric intervention during the study period. Of these, 77 patients (61%) were male. The age range of the patients was 19–71. At least one coercive measure was applied on 98 patients (78%). Coercive treatment was required more often in young males aged between 19 and 30. Seclusion was applied in 11(8%), out of which 64% were female. Mechanical restraint was applied in four patients (3%) out of the total population, all of whom were male. The most commonly used medication was a first-generation antipsychotic with antihistamine followed by atypical antipsychotics, antihistamine and/or benzodiazepine. Medication choice was made based on whether or not the patient responded to the same medication in the past. The single most common reason for use of coercive measures was patient aggression toward others. The most common diagnosis was schizophrenia, followed by schizoaffective disorder and bipolar disorder with manic episode. **Conclusion:** Involuntary medication is applied more frequently than seclusion or mechanical restraint. Younger males with psychotic disorders are more likely to receive involuntary medication as the treatment option. Seclusion was applied most often in female patients. Only 28 patients (22%) responded to counseling needing no coercive treatment. The most commonly used medication was a first-generation antipsychotic with antihistamine, followed by atypical antipsychotic, although choice of medication was based on the patient's history of prior response to similar medication.

NO. 33
WITHDRAWN

NO. 34
TREATING INCOMPETENCE TO STAND TRIAL
Poster Presenter: Christina M. Secarea, M.D.
Co-Author(s): Navmoon S. Mann, M.D., Sean D. Cleary, Ph.D., M.P.H., Philip J. Candilis, M.D.

SUMMARY:
The forensic literature is unclear on the most consistent influences on the length of time needed to restore inpatients' competence to stand trial. Some studies find older age at admission and a less severe charge to be associated with decreased

likelihood of restoration, while others emphasize the relationship between diagnosis and length of time to restoration, namely the differences among intellectual developmental disorders, schizophrenia and schizoaffective disorders. Differences in sample size and descriptions affect the generalizability of data. We present data from a sample of 312 inpatients at a state psychiatric facility found incompetent to stand trial and identify the correlates of restoration from demographic data and severity of charges to number of previous psychiatric hospitalizations, treatment adherence and severity of illness. Unlike other competency restoration studies, we specifically explore the effect of treatment adherence on restoration by monitoring refused doses of psychotropic medication and categorizing the refusals by medication class. We further identify three different categories of subjects based on their adherence, investigating the influence of the number of episodes requiring emergency medication as well. By identifying specific adherence factors influencing time to competence restoration, we anticipate drawing more precise conclusions about the remediable factors influencing inpatient competence restoration.

NO. 35
MASS SHOOTINGS AND GUN LAWS: THE ROLES OF MENTAL ILLNESS AND PSYCHIATRISTS ON THIS DEBATE

Poster Presenter: Pankaj Manocha, M.D.

SUMMARY:
Background: Gun violence has been a constant public health problem in the United States. We are one of the top countries in firearm-induced deaths. Access to guns is a political topic, which draws media attention, but due to our constitutional rights, guns remain widely accessible. Congress continues to ban CDC research on gun violence, and states such as Florida have a law limiting the ability of doctors to ask patients about gun ownership unless safety is an immediate concern. This puts providers in a clinical dilemma as they perform suicidal and homicidal risk assessments while respecting the rights of patients. Recently, media reports have shown firearms that were used for mass shootings were legally obtained even after federal background checks; some of the gunmen were diagnosed as mentally ill. This led to questions such as "can the presence of a mental disorder anticipate a gun crime before its occurrence?" and "can a psychiatrist prevent these gun violence crimes?" **Objective:** Understand the

role of a psychiatrist in anticipating and preventing crimes involving gun violence. **Methods:** A literature review on understanding the role of providers in patients' access to firearms was conducted using Goggle Scholar, PubMed, Ovid Medline, Psych INFO and Up-to-Date. **Discussion:** Several risk and protective factors play a role in a person's likelihood of using the firearm against him/herself or others. Multiple sociocultural risk factors interplay in predicting gun violence, with the most powerful risk factor being a history of violent behavior. Mental illness itself is not predictive of violence. The media overemphasizes this degree of association and describes people with mental illness as dangerous. At an aggregate level, approximately four percent of violence in the U.S. is due to patients with mental illness, and the majority of people diagnosed with mental illness do not commit violent crimes. On the other hand, the literature suggests mentally ill individuals are more often victims than perpetrators of violent crimes. Research data show that a psychiatrist cannot predict which patient will commit a violent crime. Psychiatrists have a role in the national discussion around guns to better understand questions such as "why do people require guns in their lives?" and "how does gun ownership affect people's lives?" **Conclusion:** Mental illness, mass shootings, gun laws and access to guns are complicatedly interwoven issues and may not be simplified as cause and effect. A psychiatrist may not anticipate and prevent violent crimes but may have a role in this issue of gun debate.

NO. 36
CAREGIVER-DIRECTED PSYCHOSOCIAL INTERVENTIONS IN SCHIZOPHRENIA: SYSTEMATIC REVIEW AND META-ANALYSIS

Poster Presenter: Branislav Mancevski, M.D.
Co-Author(s): Katie Ashcroft, John Carter, Edward Kim

SUMMARY:

Background: Caring for someone with schizophrenia is challenging, but education and training can positively impact these individuals and their caregivers. The Institute of Medicine has published recommendations for improving outcomes of psychosocial interventions for those with mental health disorders and has called for additional research to strengthen the evidence base for intervention effectiveness. An exploration into the effectiveness of caregiver-directed psychosocial interventions (CDPIs) specifically for schizophrenia is

ongoing. This poster describes results of a systematic review and meta-analysis of CDPIs. **Methods:** The systematic review was conducted via electronic searches of PubMed/MEDLINE, PsychNet and the Cochrane Central Register of Controlled Trials with limitations of "2004–2015," "randomized controlled trials" and "English language." Review articles were retained and hand-searched. Two independent reviewers applied inclusion/exclusion criteria and extracted data, and discrepancies were adjudicated by a third reviewer. Rank and rating-based outcomes data were transformed, where possible, into binary outcomes, which were assessed by relative risk (RR). 95% confidence intervals (CIs) were derived from a random-effects model, given the heterogeneity among the studies analyzed. Outcomes were patients hospitalized, patients relapsing, other key events (death, suicide, suicide attempt, other [patients visiting psychiatric first aid, emergency department visit]) and noncompliance [to medication- or nonmedication-related clinical activities]). **Results:** Of 693 unduplicated studies identified, 16 were selected for inclusion in this analysis. Findings showed that CDPIs significantly reduced patient hospitalization (RR=0.71, 95% CI [0.57, 0.89], p=0.003) and relapse (RR=0.59, 95% CI [0.45, 0.76], p<0.001) versus treatment as usual. Relationships were strongest during the first 12 months of follow-up for both hospitalization (RR=0.67, 95% CI [0.49, 0.92], p=0.01) and relapse (RR=0.47, 95% CI [0.32, 0.69], p<0.001). CDPIs were also associated with significantly better patient compliance with medication and clinical activities combined (RR=0.38, 95% CI [0.19, 0.74], p=0.005). Medication compliance alone favored CDPI but was nonsignificant, whereas compliance with clinical activities (e.g., keeping appointments) alone significantly favored CDPI (RR=0.22, 95% CI [0.11, 0.47], p<0.00001). Overall effect of CDPIs for other key events favored CDPI but results were not statistically significant. **Conclusion:** Providing support and skills training to caregivers of persons with schizophrenia can reduce hospitalization and potentially improve other treatment outcomes. Further research into how to measure CDPI effectiveness and expand access to CDPI, particularly through remote, web-based delivery, is warranted. This research was supported by Janssen Scientific Affairs, LLC.

NO. 37

EVALUATION OF PALIPERIDONE PALMITATE LONG-ACTING INJECTABLE (LAI) THERAPY IN PATIENTS WITH SCHIZOPHRENIA BY DURATION OF ILLNESS

Poster Presenter: Branislav Mancevski, M.D.

Lead Author: Brianne Brown, Psy.D.

Co-Author(s): Ibrahim Turkoz, Maju Matthews

SUMMARY:

Background: Many older guidelines suggest LAI antipsychotics for the treatment of patients with schizophrenia after multiple relapses, so LAIs are often reserved for later stages of illness. Recent guidelines specify LAI use earlier in illness because it may delay functional deterioration. We evaluated paliperidone palmitate LAI therapy in patients with schizophrenia by duration of illness. **Methods:** This was a post hoc analysis of a randomized, double-blind (DB), parallel-group, multicenter, noninferiority study (NCT01515423). Subjects with schizophrenia were initially treated with paliperidone palmitate once monthly (PP1M) in a 17-week open-label (OL) phase. Upon meeting clinical stabilization criteria, they were randomized 1:1 to PP1M or paliperidone palmitate once every three months (PP3M) in a 48-week relapse-prevention phase. Subjects were evaluated based on duration of illness (≤ 5 , 6–10 and >10 years since diagnosis), combining the PP1M and PP3M results. Positive and Negative Syndrome Scale (PANSS), Clinical Global Impressions–Severity Scale (CGI-S), and Personal and Social Performance Scale (PSP) scores and functional remission rates (PSP >70 from week 13 [OL] and during DB phase for at least six months) were analyzed. No adjustment was made for multiplicity. **Results:** 532, 337 and 558 subjects diagnosed with schizophrenia ≤ 5 , 6–10 and >10 years ago, respectively, entered the OL phase. Of these subjects, 379 (71.2%), 235 (69.7%) and 380 (68.1%) met clinical stabilization criteria and entered the DB phase. At OL baseline, mean PANSS scores for the ≤ 5 -, 6–10- and >10 -year groups were 84.7 (SD=10.0), 85.6 (SD=10.7) and 84.9 (SD=10.2); mean CGI-S scores were 4.4 (SD=0.7), 4.4 (SD=0.7) and 4.4 (SD=0.6); and mean PSP scores were 54.2 (SD=12.3), 53.4 (SD=12.5) and 52.9 (SD=11.9). Mean PANSS scores at DB baseline (OL endpoint) for the ≤ 5 , 6–10 and >10 groups were 57.3 (SD=9.1), 56.5 (SD=9.1) and 59.1 (SD=5.3); mean CGI-S scores were 2.9 (SD=0.8), 2.9 (SD=0.7) and 3.0 (SD=0.6); and mean PSP scores were 66.7 (SD=9.9), 66.1 (SD=11.4) and 63.0 (SD=11.0). At DB endpoint, mean PANSS scores were 52.7 (SD=13.3), 51.2 (SD=13.3) and 56.6 (SD=15.2); mean CGI-S scores were 2.7 (SD=0.8), 2.7 (SD=0.9) and 3.0 (SD=0.9); and mean PSP scores

were 68.3 (SD=12.1), 69.2 (SD=13.0) and 64.0 (SD=12.9). Significant differences were observed in the ≤ 5 and 6–10 groups compared to the >10 group from DB baseline to DB endpoint for PANSS, CGI-S and PSP total scores ($p < 0.03$ for all). More patients achieved functional remission in the ≤ 5 (26.4%) and 6–10 (30.2%) groups compared to the >10 group (18.6%). The most common adverse events for each group were injection site reactions in the OL phase (9.0%, 11.5% and 7.9%) and weight increase in the DB phase (28.8%, 19.2% and 14.7%). **Conclusion:** Longer duration of illness (especially more than 10 years) was associated with decreased functional remission and worse outcomes despite continuous treatment with paliperidone palmitate LAI.

NO. 38

APPLYING THE SBIRT MODEL FOR SUBSTANCE USE SCREENING AT A PRIMARY CARE FREE CLINIC

Poster Presenter: Juan Rodriguez-Guzman, B.S.

Co-Author(s): P. Wang, A. Hunt, A. Barkil-Oteo, M. Silva, R. Rohrbaugh

SUMMARY:

Undetected and untreated substance use disorders represent a significant vulnerability to communities across the country. In the United States, alcohol use is the fourth leading preventable cause of death, and the cost associated with alcohol misuse is above 249 billion per year. Additionally, it is estimated that nearly half a million people died from drug overdoses between 2000 and 2014. The demand for early intervention efforts to identify substance misuse and prevent the onset of related health, legal, financial and social problems resulted in the development of the Screening, Brief Intervention and Referral to Treatment (SBIRT) evidence-based model. The SBIRT approach has gradually emerged as a best practice in a range of health care settings and has been associated with an overall reduction in health care costs and decreased severity of substance use. Unfortunately, not all communities in the United States have benefited from these approaches to substance use management. Since the implementation of the Affordable Care Act in 2010, restrictive policy measures have limited access to comprehensive health care for undocumented immigrants. Moreover, the lack of research on substance use prevalence among first-generation Latino immigrants compromises our understanding of treatment needs, preferences and potential priorities for this underserved group. To address these disparities in care, an SBIRT program was

organized at a primary care student-run free clinic that serves uninsured Latino immigrants residing in New Haven, CT. In this SBIRT model, health professional students at the HAVEN Free Clinic pre-screen patients during medical visits for binge drinking, heavy drinking, smoking and use of illicit substances. Patients who screen positive are referred to bilingual (Spanish/English) students, who then formally screen patients with the Alcohol, Smoking and Substance Involvement Screening Test (ASSIST) and provide a brief intervention and referral when appropriate. In this poster, we present project data and discuss some of the challenges and strategies for implementing similar projects within a student-run clinic.

NO. 39

HOPKINS COMMUNITY CONFERENCING: FACILITATION TRAINING IN THE BALTIMORE COMMUNITY

Poster Presenter: Hannah Carl, B.S.

Co-Author(s): Miriam Fox, B.S., Julia Ramos, B.S., Peter Abraham, B.A., Eric Xie, B.S.E., Emily Frosch, M.D.

SUMMARY:

Background: Due to a complex interaction of social factors, poor African-American children in Baltimore City have the highest rates of youth incarceration. Many of these youth suffer from emotional and behavioral issues; however, few receive care. Instead, they are shuttled through the court system without adequate mental health or additional support services. The Community Conferencing Center (CCC) is a nationally recognized restorative justice organization in Baltimore that empowers people to resolve conflicts and crimes outside of the criminal justice system, with a focus on urban youth. Through conferencing, young people and their families are connected to a support network, and everyone has the opportunity to learn and heal from the incident. Young offenders who participate in a community conference are 60% less likely to reoffend compared to those who go through the traditional court system. The aim of this project was to train medical students in the practice of conference facilitation to further expand the reach of the CCC model in the community and to incorporate that same approach to managing conflicts in health care settings. **Methods:** Johns Hopkins University medical students were trained during a 15-hour, weekend-long Facilitator Training Workshop. During the training, students worked

with CCC leaders, including Director Lauren Abramson, Ph.D., to learn the principles of restorative justice, practice conference facilitation through a series of role plays and discuss the role of emotion in transforming conflicts. After the classroom training, all students were encouraged to participate in conferences first in an observational role and then as a facilitator. **Results:** Since the training in 2015, 15 medical students have been fully trained in community conferencing facilitation with over 90% of participants rating the training as excellent. Ten students have continued their training by observing and facilitating a total of 15 conferences in the community. After this immersive learning about principles of conflict management, a group of students developed and are implementing a for-credit elective for third- and fourth-year medical students entitled Conflict on the Wards. The six-session elective will be run in collaboration with the CCC and faculty engaged in patient safety and conflict resolution at Johns Hopkins University School of Medicine. **Conclusion:** Training medical students in community conferencing increased their involvement with the local community, thereby allowing them to learn first-hand about the complexities that lead to high incarceration rates among African-American youth in Baltimore City. Furthermore, students were empowered with the skill set required for facilitating a community conference. The cohort of trained medical students is able to effectively engage in conflict resolution both within the community and as future health care providers.

OCT 08, 2016

POSTER SESSION 4

NO. 1

INTER-TEMPORAL CHOICE IN ALCOHOL DEPENDENCE

Poster Presenter: Young I. Chung, M.D.

Lead Author: Jang Og-jin, M.D.

Co-Author(s): Ahn Sang-huyn, M.D.

SUMMARY:

Objective: Investigate the inter-temporal choice and examine whether impulsivity or working memory is related to inter-temporal choice in patients with alcohol dependence. **Methods:** Fifty alcohol-dependent patients and fifty healthy controls were recruited in this study. All participants were male. All patients were subjected to the following tests: Delay

Discounting Task (DDT), the Wisconsin Card Sorting Test (WCST), the Barratt Impulsiveness Scale-11 (BIS-11) and the Korean version of the Michigan Alcohol Screening Test (MAST-K). **Results:** Compared to the control group, the alcohol dependence group showed higher delayed reward discounting rate in DDT. Performance on the WCST was significantly poorer for the alcohol dependence group than the control group. The alcohol dependence group scored higher than controls in the total score of the BIS-11, and the motor subscale scores. The perseverative error in WCST was significantly correlated with the one-day indifference point ($r=-0.505$, $p<0.01$) and two-day indifference point ($r=-0.388$, $p<0.01$) in DDT. However, the indifference point in DDT did not show significant relationships with BIS-11 or MAST-K scores within the alcohol dependence group.

Conclusion: Inter-temporal choice in patients with alcohol dependence had more delayed reward discounting compared to the control group. Delayed discounting and impaired working memory were significantly correlated. Delayed discounting and self-report measure of impulsivity or alcohol dependence were not correlated. **Keywords:** Inter-Temporal Choice, Impulsivity, Working Memory, Alcohol Dependence

NO. 2

CHRONIC LITHIUM NEUROTOXICITY: A CASE REPORT

Poster Presenter: Leah R. Steinberg, M.D.

Co-Author(s): James Lubin, M.D., Subramoniam Madhusoodanan, M.D.

SUMMARY:

Background: Chronic neurotoxicity caused by lithium became evident in the '80s, but its mechanisms remain unclear. Syndrome of irreversible lithium-effectuated neurotoxicity (SILENT) is not a common occurrence among patients on lithium chronic therapy. Possibly, lithium causes demyelination at multiple sites in the central nervous system. It is important for clinicians to be aware of this clinical entity to facilitate early diagnosis. **Methods:** A 61-year-old Jewish female with extensive psychiatric history was admitted after sustaining three falls, worsening ataxia in the previous month, dysarthria and progressive altered mental status. The patient was on olanzapine 10mg by mouth daily, lithium 300mg by mouth in the morning and 600mg at bedtime, benztropine 1mg by mouth bid, and diphenhydramine 50mg twice daily by mouth prior to admission. Lithium level was found to be 1.9. All

the above medications were discontinued, and she received intravenous fluids. Head cat scan was unremarkable. Rapid plasma reagin was negative; vitamin B12 and TSH were within normal limits. Neurologist recommended screening for Huntington's disease because of choreiform movements, but the test was negative. She was started on aripiprazole 10mg by mouth daily and valproate 500mg by mouth bid. Her ADL functioning and ambulation prior to admission were normal.

Results: Lithium level decreased from 1.9 on admission to 1.6 on day two and 0.6 on day six. The patient was hospitalized for 21 days and showed mild improvement of ataxia, dysarthria and altered mental status. She was no longer able to independently care for herself and required assistance to ambulate. She was discharged to a skilled nursing facility. **Conclusion:** Neurocognitive symptoms and chronic lithium therapy in this patient suggest possible lithium neurotoxicity. We recommend assessing patients on chronic lithium therapy frequently for decline in cognition, altered mental status, new abnormal movements and change in ambulation, even if lithium levels have been therapeutic for a long period of time.

NO. 3

ACUPUNCTURE IN COCAINE DEPENDENCE: DOES IT REALLY WORK?

Poster Presenter: Danilo Been Carrasco, M.D.

Co-Author(s): Petros Levounis, M.D., Rashi Aggarwal, M.D.

SUMMARY:

Background: Acupuncture is an ancient therapeutic modality that involves needle insertion into the body at specific points. Originally from Asia, it has gradually increased in popularity in Western society for a wide range of problems, such as addiction. As cocaine is the second most commonly used illegal recreational drug in the U.S., we reviewed the evidence for efficacy of acupuncture for cocaine use disorder. **Methods:** A literature search was conducted using PubMed and Ovid Medline. The following MESH terms were used: Acupuncture, treatment, alternative medicine, addiction, cocaine. We also did cross-checks of reference lists cited in existing articles. **Results:** Thirty-six randomized controlled trials (RCTs) met our selection criterion. The research has examined cocaine dependence, cravings symptoms and treatment primarily with auricular acupuncture (needle insertion in specific points in the ear) in comparison to sham

acupuncture and control. Most studies were conducted in the U.S. and U.K. Most studies had an average of two to five sessions a week for six to eight weeks of auricular acupuncture, compared with sham acupuncture and placebo. Three to five acupuncture points were used in treatment. Some used NADA (National Acupuncture Detoxification Association) protocol, which is a five auricular acupuncture points selection. Treatment took place at different clinical settings such as community hospitals, VA facilities, methadone clinics and private facilities. The vast majority of studies showed no advantage of acupuncture over placebo and were of low quality. Six of these studies had a relatively adequate quality methodology but were not able to establish an advantage of auricular acupuncture over sham acupuncture and placebo. A study on 82 patients showed promising results, as patients on acupuncture were most likely to have a negative urine drug screen. Another small trial showed improved craving symptoms but no distinction between two different treatment protocols chosen. One study compared two similar designs with minor changes of context (i.e., one group was given a monetary incentive). Some inconsistencies were found in their results, thought to be most likely due to perceived psychosocial benefit rather than efficacy of the acupuncture treatment. **Conclusion:** Currently, even though acupuncture is in wide use in the U.S. for cocaine cravings, research results are conflicted, and evidence does not confirm or disprove its efficacy. Acupuncture remains a virtually side effect-free, inexpensive alternative. More good quality trials are required.

NO. 4
PREDICTING THE RISK OF CARDIOVASCULAR DISEASES IN INDIVIDUALS WITH DRUG ADDICTION

Poster Presenter: Satneet Singh, M.D.
Co-Author(s): Satneet Singh, M.D., Pooja Shah, M.D., Roxanne Rengifo, M.D.

SUMMARY:

Individuals with severe addiction not only have devastating consequences to their mental well-being, but there are also additional health issues, such as lung or cardiovascular disease, stroke, and cancer, that can have adverse outcomes for the patient. Among all the medical issues, cardiovascular events are very common in such patients. We have conducted a research project with a goal of predicting a ten-year risk of having a heart attack or stroke by using QRISK2–2015. Fifty males, within the

age range of 30–60 years, were randomly selected and interviewed. Blood samples were taken from the individuals to determine cholesterol/HDL ratio, which will be used as the determinant for the relative risk of cardiovascular disease. The patient pool consisted of 25 patients with drug addiction who were admitted to different rehabilitation centers in northern India and was compared with 25 healthy controls who have never abused any substance in their lives. The substances used by these drug addicts were alcohol, cocaine and opium, which are known to have a direct effect on the cardiovascular system. The results indicate the existence of significantly greater cardiovascular disease risk among patients with drug addiction. This poster will further review the importance of cardiovascular disease prevention in drug addicts and put emphasis on appropriate screening approaches to be used for these types of patients.

NO. 5
SYNERGISTIC NEUROBIOLOGY, NEUROPSYCHIATRIC MANIFESTATIONS AND MANAGEMENT OF HOARDING DISORDER

Poster Presenter: Pooja Shah, M.D., M.B.B.S.
Lead Author: Smit Shah, M.S., B.A.
Co-Author(s): Stacy Doumas, M.D., Ramon Solhkhah, M.D.

SUMMARY:

Hoarding disorder is a disabling behavioral pattern characterized by excessive acquisition and unwillingness to discard objects, resulting in significant impairment of mental health, emotional well-being and various physical morbidities. Coined in 2013 as a mental health disorder, it is unclear if hoarding disorder is independent or a component of various psychiatric problems. There has been a massive correlation with OCD, anxiety, depression and ADHD, with the presence of core symptoms distinguishing them. Other factors often associated with hoarding include alcohol dependence; paranoid schizotypal; and deficits in memory, functional capacity and social isolation. We have highlighted the phenotypical, neurobiological, genetic basis and theory of early psychosexual development disturbance that best describe the disorder and have demonstrated its association with various neurological and psychiatric disorders. The recent significant shift in the conceptualization of hoarding will help the clinicians keep an eye open for the potential specifiers and better diagnose the disorder. We have discussed the translational science behind

the latest research, which will help bring optimum results in such patients. Pharmacological and general management with a discussion about improving the quality of life and determining its impact on the family and society has been done. Whether or not telepsychiatry is a treatment option for such patients has been discussed. **Keywords:** Hoarding, Clutter, Obsessive-Compulsive Disorder

NO. 6

AFTEREFFECTS OF THE LEGALIZATION OF MARIJUANA: AMERICA ON THE GIANT CHILL PILL!

Poster Presenter: Pooja Shah, M.D., M.B.B.S.

Co-Author(s): Stacy Doumas, M.D., Ramon Solhkhah, M.D.

SUMMARY:

Recent years have witnessed a shift in cultural and spiritual approaches toward cannabis sativa. Over the years, cannabis has faced its fair share of criticism and condemnation with respect to its promising medicinal applications and recreational benefits with a questionable addiction potential. Recreational use continues to increase despite demonstration of some addiction potential in adolescents and exacerbation of preexisting psychiatric illness in the general population. Currently, marijuana is the most commonly used illicit drug in United States, with 12% of population above the age of 12 having reported higher usage. As of June 2015, 23 states in United States have decriminalized the use of marijuana, with restrictions on age and possession limits. This poster highlights the important aspects of aftereffects of the legalization of marijuana in health care, hospital admissions, crime rate, accidents and psychiatric illnesses. Despite some promising uses to help alleviate conditions like glaucoma, HIV-associated cachexia, epilepsy, MS and many others, marijuana continues to be a Schedule I drug. With respect to medical outcomes, marijuana has been increasingly used as a "gateway drug." Newer studies show that marijuana consumption substitutes the use of alcohol, decreasing the number of motor vehicle accidents and crimes associated with alcohol intoxication. There has been a concomitant decrease in the use of nicotine with the advent of marijuana, but we need evidence to look for a decrease in the cancer rate associated with it. There is a high incidence of psychosis and exacerbation of underlying psychiatric illnesses like schizophrenia associated with its use. It has been shown to be highly addictive in adolescents with impaired neural

connectivity and structural changes noted on brain imaging with prolonged use. There have been reports of a decrease in IQ and an increase in school absenteeism and failing grades, eventually increasing unemployment and crime rates. The various outcomes with regard to governmental policy include a population shift in the areas where marijuana was previously legalized, an increase in endogenous production of marijuana in the United States with the availability of high-quality weed at an affordable price, and an eventual decreasing of the number of crimes and arrests associated with marijuana. The hefty taxes on marijuana have been proposed to be used for schools and other projects for marijuana regulation, saving hundreds of dollars in taxpayers' money. Marketing legal marijuana will lift up other industries like food secondary to munchies, tobacco for its marketing and distribution, and various others, creating job opportunities for Americans. Conversely, we will see a significant negative effect on the alcohol industry, pharmaceuticals and prisons. **Keywords:** Marijuana, Legalization, Gateway Drug, Schedule I, Alcohol, Tobacco, Recreational, Crime

NO. 7

EXCITED DELIRIUM WITH BATH SALTS AND DESIGNER DRUGS: A CLINICAL, TOXICOLOGICAL, PUBLIC HEALTH AND LEGAL PERSPECTIVE

Poster Presenter: Pooja Shah, M.D., M.B.B.S.

Co-Author(s): Stacy Doumas, M.D., Ramon Solhkhah, M.D.

SUMMARY:

With the recent emergence of popular designer drugs, there is an increase in the number of reported cases of psychosis. Early 2012 witnessed the legal system moving forward to ban the sale, production and possession of such designer drugs by placing them in the Schedule I controlled substance category. Synthetic cathinones are an emerging class among the designer drugs that are readily available in the illegal market and over the Internet, escaping the legal scrutiny of the lawmakers by marking them "not for human consumption." Cathinones fail to be smelled by detection dogs and are undetected by a routine urine toxicology screen, requiring advanced gas chromatographic analysis of urine and hair. Euphoric and agitating effects mimic those caused by amphetamines and cocaine. Easy access has led to an increase in abuse potential of such drugs, causing a rise in the reported cases in emergency rooms and poison control centers. This poster highlights the

phenomenology, epidemiology, incidence, detection methods and management of psychosis associated with abuse of cathinones. The manufacturers have always been a step ahead of federal and state legal systems, heralding imposition of stricter legislation and regulatory control for designer drug distribution and criminally charging those found in possession. Utmost importance is given to highlight the role of emergency physicians in maintaining a high index of suspicion of abuse from these drugs due to the potential concomitant coingestion of various drugs of abuse and management of polysubstance abuse involving cathinones. Physicians should raise awareness of the dangers, spread and use of designer drugs through community outreach, since these drugs are a significant threat to public health.

Keywords: Designer Drugs, Synthetic Drugs, Cathinone, Excited Delirium, Psychosis, Methedrone, Methylone, Public Health, Legal

NO. 8

AN ODD ROUTE FOR INTRAVENOUS DRUG ABUSE: A CASE REPORT

Poster Presenter: Hanan Khairalla, M.D.

Co-Author(s): Rashi Aggarwal, M.D.

SUMMARY:

Background: The drug abuse epidemic is a serious public health problem causing millions of serious illnesses and injuries among Americans. Route of drug administration is emerging as an important contributor to adverse health consequences. A number of drugs of abuse are taken by injection to achieve a more rapid or potent effect or both. Drugs are typically injected intravenously but they may also be injected subcutaneously, intramuscularly or even sublingually. In this report, we present a unique case of an intravenous drug-using patient who presented with neck pain after injecting heroin into the veins of the neck. **Case:** A 44-year-old female with opioid use disorder, septic arthritis, osteomyelitis, cellulitis and hepatitis C presents to the emergency department with complaints of neck pain. X-ray and CT scan of the neck were ordered. Results were significant for at least seven linear foreign bodies compatible with broken needle tips within the soft tissues of the neck. The patient described injecting heroin into the neck multiple times using the same needles after losing intravenous access in the limbs. The patient did not require any acute surgical interventions and was discharged from the emergency department with resources for substance abuse. **Discussion:** Users

typically access peripheral veins, but when these become sclerosed with chronic use, some learn to inject into large central veins. Such an alternate route may increase the risk of morbidity and mortality. Emergency clinicians should raise their index of suspicion whilst treating patients with intravenous drug abuse. It is undeniable that users have become more aware of the dangers of shared needles. Many, however, have revised their methods by reusing their same needles. This method is equivalently risky, as with repetitive use, needles become fragile and are prone to breaking. Promoting awareness among users (perhaps by existing programs like the needle exchange program) may prove beneficial.

NO. 9

THE PROBLEM OF PAIN: ADDITIVE ANALGESIC EFFECT OF TRAMADOL AND BUPRENORPHINE IN A PATIENT WITH OPIOID USE DISORDER

Poster Presenter: Nicolas Genovese, B.A.

Lead Author: Cristina Montalvo, M.D.

Co-Author(s): Nicolas Genovese, B.A., John Renner, M.D.

SUMMARY:

Background: The treatment of acute and chronic pain in patients undergoing buprenorphine maintenance therapy (BMT) poses a significant challenge for providers. Anecdotal evidence has suggested the utility of tramadol, a centrally acting opioid agonist analgesic, in pain management for those on BMT. Using this case report, we seek to bring to attention the use of tramadol as an unexplored potential treatment for pain in buprenorphine-maintained patients. **Case:** The patient is a 56-year-old Caucasian male with a history of opiate use disorder on buprenorphine/naloxone maintenance therapy 8/2mg twice daily who was being followed in an outpatient mental health clinic for psychopharmacology and psychotherapy. Despite maintaining sobriety from opioids for three years, the patient continued to struggle with acute or chronic pain secondary to osteoarthritis of his hip and knee that had left him walking with a cane. The patient was started on tramadol 50mg three times daily for acute pain by his PCP while he awaited surgical intervention. He reported some analgesic effect with buprenorphine/naloxone but reported further improvement in his pain along with greater daily functioning with the additional use of tramadol without side effects or withdrawal symptoms.

Conclusion: Patients undergoing opioid agonist therapy, such as BMT, report higher incidence of pain and perceived pain compared to non-opioid dependent populations. Current treatment recommendations for pain in patients on BMT include discontinuation of BMT or addition of an adjunctive opioid analgesic while continuing on maintenance opioids; however, determining which medication to use can be difficult, as there has been no literature examining this issue. Although counterintuitive, in this case, the combination of buprenorphine and tramadol demonstrated an additive effect that can be possibly explained by several mechanisms. First, buprenorphine has a low affinity for analgesic receptors and upregulates additional μ opioid receptors, which may account for its additivity with opioid agonists. Second, tramadol also functions by inhibiting neurotransmitter reuptake, which provides an alternative mechanism for reducing pain transmission. Randomized controlled studies need to be performed to further understand the changes in pain measurement in patients on BMT with tramadol compared to other adjunctive analgesic medications.

NO. 10

RECURRENT FOREIGN BODY INGESTIONS FOLLOWING RAPID METHADONE TAPER: CASE REPORT AND PHARMACOLOGICAL, ETHICAL, SYSTEM AND MANAGEMENT ISSUES

Poster Presenter: William A. Sterling, B.A.

Co-Author(s): Zachary Wolner, B.A., Ramotse Saunders, M.D., Ramaswamy Viswanathan, M.D., D.M.Sc.

SUMMARY:

Mr. A., a homeless 39-year-old Caucasian man, presented after swallowing a six-inch knife. He was hospitalized for endoscopic removal of the object. He had a history of opioid use disorder on agonist therapy (methadone 210mg), with a three-year period of stability with no ER visits, regular follow-up and stable housing. Systems-of-care issues resulted in abrupt discharge from that program and a six-week taper and discontinuation of methadone in another medical center. This was followed by the patient engaging in recurrent self-injurious foreign body ingestions (FBIs). The authors' hypothesis was that the FBI was a pathologic manipulative response to obtain the methadone, which he did need but was denied to him by the system, and the response generalized to other situations where he felt frustrated and angry in a manner suggestive of the

parasuicidal behavior common to patients with borderline personality disorder. We started him on methadone and gradually increased it to 100mg daily, which led to cessation of FBI. He was discharged on this and referred to a methadone maintenance program. This case presents an unusual form of self-injury, highlighting the risks of abrupt methadone taper in patients with psychiatric comorbidities. As well, it brings up the neurological relationship between opioid use and parasuicidal behavior in patients with borderline personality disorder.

NO. 11

CHANGING PERSPECTIVES ON BENZODIAZEPINES

Poster Presenter: R. Ryan Leahy, M.D., M.S.

Co-Author(s): Paul B. Hill, M.D.

SUMMARY:

Benzodiazepines (BNZs) are effective medications used to treat anxiety disorders. However, there is growing debate in the medical community about the proper role of these medications, as well as concern for their potential misuse and/or abuse. This poster discusses recent prescribing trends. It looks at the indications and contraindications of BNZ prescribing. It also recounts the experiences of the residents with BNZs at our outpatient psychiatry clinic over the course of a year. The work included development of both a decision tree to establish guidelines for prescribing BNZs and a tapering protocol for cases where these medications were no longer indicated. The decision-making tree provides a framework based on how long a patient has been taking BNZs, from less than two weeks to longer (and often much longer) than six weeks. The tapering protocol lists 10 steps that may be used in the outpatient setting. Nine specific contraindications for BNZ prescribing are enumerated. Our clinic had a total of 233 patients, of whom 31% (N=72) were currently on BNZs. Out of 72 patients taking BNZs, seven patients (10%) were continued on BNZs, finding them to meet criteria for continued long-term use, while four patients (6%) continued to receive these medications by outside providers. Twenty-eight patients (39%) decided to voluntarily leave the clinic, not agreeing with tapering recommendations. However, 26 patients (36%) welcomed the BNZ taper recommendations and completed the taper or were in the process of doing so. Six patients (8%) were terminated from the clinic, and one patient required inpatient detox. The misuse and abuse of BNZs has become an issue of concern among clinicians in the

United States. Risks include increased dependence, withdrawal and overdose, especially when combined with opioids. Our poster advocates for psychiatrists to perhaps reevaluate their BNZ prescribing patterns and to use available opportunities to help educate our non-psychiatry colleagues who prescribe the majority of benzodiazepines in the United States.

NO. 12

USE OF ALCOHOL IN PREGNANT WOMEN: DATA ANALYSIS OF DEMOGRAPHIC AND HEALTH SURVEYS (DHS) OF OVER 80 COUNTRIES

Poster Presenter: Saad Salman, Pharm.D.

Co-Author(s): Katya Rubya, Ph.D., Jawaria Idrees, M.Phil., Fariha Idrees, B.S., Muhammad Anees, M.B.B.S., Sadia Pervez, Mohammad Usman, Fahad Hassan Shah, B.S., Hafsa Bibi, Ph.D., Maria Idrees, M.Phil., Abd Ullah, M.Phil., Mehwish Shah, Noreen Shah, Seemab Shahab, M.Phil., Fazal Rehman, M.Phil., Zahoor Islam, M.Phil.

SUMMARY:

Background: Alcohol use (AU) in pregnant women is a global health problem that leads to multiple other substance use disorders (SUDs). However, the broader view pregnant women's alcohol consumption and its prevalence in a pool of 80 countries have never been studied. **Methods:** The data of the Demographic and Health Surveys (DHS) program was used from January 1, 2001, to December 31, 2012. The data was comprised of 76,000 pregnant women of childbearing age (15–49 according to WHO classification). The prevalence of AU, for every country, was calculated separately through random effects meta-analysis. **Results:** The DHS AU pooled analysis among pregnant women demonstrated that the lowest prevalence was in Sub-Saharan Africa (1.1%, 0.7–2.1), while the highest prevalence was in the European region (19.1%, 12.1–26.2). **Conclusion:** AU is a kind of global burden that can precipitate comorbid SUDs as well as other psychiatric disorders. Although the prevalence of AU in pregnant women was low, the European region demonstrated a significantly higher rate. Its prevention is necessary, as it can also cause SUDs and other medical and mental health problems in offspring. DHS data accessed with permission.

NO. 13

EXPLORING OPIATE USE DISORDERS IN MUSLIM COMMUNITIES

Poster Presenter: Sierra J. Witte, D.O.

Co-Author(s): Farha Abbasi, M.D.

SUMMARY:

Use, abuse and dependence on opiate-derived prescription medications is a problem of epidemic proportions in the United States. Although the U.S. makes up less than five percent of the world population, it consumes about 80% of opiate analgesics produced. In 2015, the State of Michigan responded to this problem by organizing a task force to analyze data from the Michigan Automated Prescription System. The Michigan Prescription Drug and Opioid Task Force found that 21 million controlled substances were prescribed in 2014. In 2012, almost one-third of all controlled substance prescriptions were for hydrocodone. Michigan ranked tenth in the nation for prescribing the most opiate analgesics per capita and 18th for death by overdose. In the most recent CDC data report, there were 1,762 overdoses in Michigan in 2014, up a statistically significant 13.2% from 2013. Many reports suggest that increased use of prescription painkillers may be contributing to a rise in heroin use. Studies focusing on substance use in ethnic and cultural groups have shown differential use in these populations as compared to the general population. There is currently a paucity of literature investigating opiate use in the Muslim population. In 2014, under a U.S. 2001 national college survey, 10,401 students were polled, with 135 (1.3%) reporting they were raised in Muslim families. The past year prevalence of risk behaviors in these students was 37.3% for tobacco use, 46.2% for alcohol and 24.6% for illicit drugs. It is largely unknown how Muslim populations are responding to this epidemic amidst a multitude of outside pressures and the degree to which culture and religion may act as a protective factor. In an effort to better understand this in specific cultural and ethnic groups, the research team handed out a short survey at the 2016 Muslim Mental Health Conference to screen for differences between Muslim communities and the general population of Michigan. A total of 64 subjects responded, with 62 completing the survey. Of which, the majority were women (74.6%) who were working on or had obtained a master's degree (51.5%) or higher (20.3%) level of education. On average, respondents reported familiarity with eight different opiate medications. Of the respondents, 46.6% reported knowing someone who had suffered from withdrawal symptoms, and 32.2% knew someone who had been prescribed methadone. Respondents indicated that 42.8% knew someone who had used heroin, and 29.6% of respondents knew someone

who they felt had died in association with opiate use. Interestingly, while many respondents reported a history of serving as counselors in mental health or drug rehabilitation, a stunning amount of misinformation was volunteered in the free-write sections of the survey, highlighting the need for further investigation and conversation about opiate use and misuse in this community.

NO. 14

SELF-HARM AND SUICIDE ASSOCIATED WITH INTERNET ADDICTION

Poster Presenter: Zeynep Ozinci, M.D.

Co-Author(s): Juvaria Anjum, M.B.B.S., Rashi Aggarwal, M. D.

SUMMARY:

Background: Internet addiction (IA) is a behavioral addiction that may become as dangerous as drug addiction, with severe negative consequences, and they both share common psychological, neurobiological and genetic features with phases of withdrawal, tolerance and relapse. IA has developed into an increasingly major and serious health problem in today's world. There is growing research on the association of IA with psychiatric disorders, self-harming behaviors and suicidality. **Objective:** 1) Learn and explore the data about the association of IA and suicidality; 2) Demonstrate the importance of considering IA by screening, treating and preventing suicidality; 3) Provide strategies and increase social awareness to guide safe and positive practice, reduce suicidal behaviors and improve psychological well-being by educating professionals, children and caregivers. **Methods:** A literature search using PubMed was completed, and 15 studies were reviewed in order to highlight the association of IA with suicidality and preventive measures. **Results:** There are a number of studies showing the risk of self-destructive behaviors and suicide and among different age groups with pathological Internet use. The majority of these studies were done in China, Taiwan, Korea and Europe, and they indicate that IA is strongly associated with mental health disorders such as depression, anxiety, attention deficit/hyperactivity disorder, conduct disorder and an increased risk of self-harm. Cyberbullying victims are reported to have more severe depression and suicidality than those who were not exposed to cyberbullying, and the term "cyber suicide" is being used to describe the act of committing suicide influenced by the Internet. An online questionnaire-based research survey reports that individuals with

IA had high rates of psychiatric morbidity (65%), suicide ideation in a week (47%), lifetime suicide attempts (23.1%) and suicide attempts in a year (5.1%). This study determined the main causes for IA as Internet use time, life impairment and neurotic personality traits, and psychopathology. Higher problematic alcohol use was also reported in adolescents with problematic Internet use. Depressive symptoms and conduct problems were significantly associated with these two behavior patterns. **Conclusion:** There are proposed diagnostic criteria for IA that consist of symptoms, clinical impairment, duration and exclusion of other dependent psychotic disorders. If we implement the diagnostic criteria as a routine screening for IA, it will help in treatment, prevention and decreasing relapse rates. Extensive research studies on IA and suicidality are creating awareness and perspective for society and health professionals. The early diagnosis and treatment with cognitive behavioral therapy, individual and group therapies, family therapy, and use of psychotropic medications is essential to reduce suicidal behaviors and improve psychological well-being.

NO. 15

RELAXED, OFF-LABEL USE OF GABAPENTIN AND QUETIAPINE LEADING TO A SURGE IN PRESCRIPTION DRUG ABUSE

Poster Presenter: Fei Chen, D.O.

Co-Author(s): Maanasi Chandarana, D.O., Brent Carr, M.D.

SUMMARY:

In the last decade, quetiapine and gabapentin have gained popularity under the guise of being relatively harmless medications. Both are used for various off-label purposes with no standardization of doses and often without consideration of synergistic properties within a patient's medication regimen. However, the abuse potential of quetiapine and gabapentin is well established in correctional facilities and psychiatric hospitals. In recent years, reports of recreational misuse are surfacing in the general population, with a preponderance of the use non-FDA approved. In light of the CDC's reaction to the national opioid epidemic, lackadaisical use must be reevaluated. Quetiapine is FDA-approved for treatment of schizophrenia, adjuvant therapy in major depressive disorder and mood stabilization in acute states of bipolar disorder. Traditional off-label uses include insomnia, delirium and monotherapy for depression. It is also used as an adjuvant to other antipsychotics

to boost efficacy or to calm agitated patients. More alarmingly, the medication is used to placate drug-seeking patients before redirections are tried. Quetiapine is used orally, intranasally, and intravenously and is affectionately known on the streets as “quell,” “Susie-Q,” “baby heroin” and “Q-ball.” Individuals with a history of substance use seek the sedative, anxiolytic and hallucinogenic effects of quetiapine at high doses. There is synergy of these effects with polypharmacy or when mixed with street drugs, hence, misuse of quetiapine not evident with other atypical antipsychotics. Similarly, gabapentin is FDA-approved for adjunctive antiepileptic therapy in refractory partial seizures and pain in postherpetic neuralgia. Off-label uses include treatment of bipolar disorder (for which there is little proven efficacy), tremors, migraines, neuropathic pain and restless leg syndrome. Misuse of gabapentin occurs with doses significantly beyond the recommended range for its sedative and psychedelic effects, often in conjunction with other addictive substances. Dependency is evidenced by exhibition of seeking behaviors and pronounced withdrawal phenomenon upon sudden cessation. Common street values of gabapentin and quetiapine range from \$1/pill to \$3–8 for 25mg–100mg, respectively, and thus are readily affordable. As such, providers should give thought to the patient’s diagnosis, history of substance use and concurrent medications prior to initiation of these psychotropics. The additive and addictive nature of quetiapine and gabapentin should not be ignored with lax prescription practices, especially given off-label use. Their widespread use beyond approved indications must be weighed against the possibility of patient harm. Providers must be cognizant of domestic and international publications suggesting an abuse potential, particularly in patients vulnerable to substance use, on opioid therapy or who seek immediate symptom relief due to low frustration tolerance.

NO. 16
THE IMPACT OF STATE HEALTH CARE REFORMS ON INITIATION OF SUBSTANCE USE DISORDER TREATMENT

Poster Presenter: Marc Kealhofer, B.Sc.
Co-Author(s): Noa Krawczyk, B.A., Rosa Crum, M.D., M.H.S., Ramin Mojtabai, M.D., Ph.D., M.P.H.

SUMMARY:

Background: The implementation of the Patient Protection and Affordable Care Act (PPACA) of 2010

is expected to change the substance use disorder (SUD) treatment system drastically through its expansion of federal parity protections on mental health and SUD benefits. However, the impact of previously existent, state-specific parity laws on access to and use of SUD treatment has not been fully explored. **Objective:** Compare initiation of substance use treatment between individuals in states with and without SUD parity laws in the year 2001 using longitudinal data from two waves of the National Epidemiologic Survey on Alcohol and Related Conditions that took place, respectively, in 2001–2002 and 2004–2005. **Methods:** Adjusted mixed-effects logistic regressions were used to compare the odds of SUD treatment initiation at Wave 2 among 1) individuals living in states with and without SUD parity and who indicated having substance use at baseline but no past-year SUD treatment and 2) individuals living in states with and without SUD parity and who met the criteria of SUD at baseline but no past-year SUD treatment. **Results:** A total of five states with full parity laws and 10 states with no parity laws in 2001 were included in the analysis. Within these, a total of 20,160 individuals reported at baseline any past-year substance use but no past-year SUD treatment (19,752 any alcohol use and 2,179 any drug use other than alcohol or nicotine), and 3,317 individuals met the criteria for substance use disorder but no past-year SUD treatment (3,022 met the criteria for alcohol use disorder and 626 for drug use disorder). Individuals living in states with SUD parity laws who reported any substance use at baseline had 1.71 (95% CI [1.03, 2.83]) higher odds of SUD treatment initiation by Wave 2 than individuals in states without SUD parity laws (1.72 (95% CI [1.03, 2.88]), higher odds for individuals with alcohol use and 1.43 (95% CI [0.59, 3.48]) higher odds for individuals with other drug use. Similarly, individuals living in states with SUD parity laws who met the criteria for an SUD disorder had 2.19 (95% CI [0.98, 4.90]) higher odds of SUD treatment initiation (1.94 (95% CI [0.80, 4.67]) for alcohol use disorder and 1.55 (95% CI [0.22, 10.88]) higher odds for other drug use disorders. **Conclusion:** Parity laws may play a significant role in increasing access to SUD treatment among individuals with substance use and SUDs. This study supports the importance of parity laws in promoting access to SUD treatment and may have implications for state-level variations in the implementation of the PPACA.

NO. 17

WHAT'S MAKING ME FEEL SO QUEASY? A CASE OF CANNABIS HYPEREMESIS SYNDROME EXACERBATED BY CONCURRENT USE OF FLUOXETINE

Poster Presenter: Adefolake Akinsanya, M.D.

Co-Author(s): Katy LaLone, M.D.

SUMMARY:

Background: THC has been commonly used for its medicinal effects as both an antiemetic and an appetite stimulant. Paradoxically, prolonged heavy use of THC has been linked to the development of cannabinoid hyperemesis syndrome (CHS). While the exact mechanism by which chronic use of THC can affect the central nervous system (CNS) and the gastrointestinal (GI) tract remains mostly hypothetical, there is some evidence that THC can directly affect serotonin receptors. Furthermore, given that serotonergic antidepressants commonly cause symptoms of nausea, we sought to further understand this potential interaction between cannabis and serotonergic medications to help guide our treatment of depression. **Methods:** We present a patient with concurrent CHS and major depressive disorder who experienced worsening of CHS symptoms with use of fluoxetine, then improvement following transition to bupropion. We reviewed the current literature to better understand the mechanism by which cannabis affects the CNS, specifically its interaction with serotonin receptors. **Results:** While first described by Allen et al. in 2004, Simonetto et al. (2012) reported the largest case series to date of 98 patients with proposed clinical criteria for CHS that included long-term use of THC, severe cyclical nausea and vomiting, resolution with THC use cessation, and relief of symptoms with hot showers or baths. Several authors have hypothesized that given its highly lipophilic properties, long half-life, cumulative levels of THC in the CNS acting via CB1 receptors (centrally) and inhibition of 5HT3 receptors could cause delayed gastric emptying and disruption of the hypothalamic equilibrium, thereby affecting thermoregulation. There is some limited evidence that use of serotonergic agents like fluoxetine could even worsen symptoms of CHS. **Conclusion:** The suspected detrimental GI effect of long-term use of THC is impaired motility, and we conclude that the findings of severe achalasia in this patient with suspected CHS could have been attributed in part to chronic THC use. The patient's nausea improved with transition to a non-serotonergic antidepressant, which is consistent with previously reported findings

of fluoxetine potentially worsening CHS. Given the high prevalence of mood and anxiety disorders in the general population and ongoing legalization of cannabis nationally, the use of psychotropic agents concurrently with THC certainly demands further research to help clarify best practices for psychiatrists.

NO. 18 SYSTEMATIC REVIEW OF NALMEFENE IN ALCOHOL USE DISORDER

Poster Presenter: Meelie Bordoloi, M.D.

Co-Author(s): Vivek Agarwal, M.B.B.S., M.Med.Sc.

SUMMARY:

Background: Alcohol use is an enormous socioeconomic burden on any society. Annually, nearly 88,000 people (approximately 62,000 men and 26,000 women) die from alcohol-related causes, making it the third leading preventable cause of death in the United States. Currently, alcohol use disorder is being treated with only three medications in the United States: disulfiram, acamprosate and naltrexone. Nalmefene, a competitive opioid antagonist at mu and delta receptors with partial activity at the kappa receptor, was approved for use in the EU in March 2013, Scotland in October 2013 and England in October 2014. **Objective:** Study the literature and summarize available evidence with regard to the efficacy and tolerability of nalmefene in the treatment of alcohol use disorder. **Methods:** We carried out a literature search of medical databases Medline, CINAHL, PubMed and EMBASE. We studied the abstracts of every study that was identified in the literature search. Eighteen studies fulfilled our inclusion criteria. The full text of the selected studies will undergo further critical appraisal and evaluation. **Results:** Through examination of the abstracts, we identified 18 studies, and our preliminary findings show that nalmefene was able to reduce the number of heavy drinking days (more than 60g/d in men and more than 40g/d in women), as well as total alcohol consumption. As-needed nalmefene (18mg of nalmefene just one to two hours before the anticipated time of drinking) was efficacious in reducing alcohol consumption in patients with high risk for alcohol-related harm. The common adverse effects were headache, nausea and vomiting, but they generally decreased after continuation of treatment. We are currently undertaking critical appraisal of the selected studies to test the robustness of these results. **Conclusion:** Nalmefene

constitutes a new pharmacological treatment paradigm in terms of treatment goal (reduced drinking) and dosing regimen (as-needed) in alcohol-dependent patients unable to reduce alcohol consumption on their own. It is being used in European countries with success, and it should be considered in the United States for the same.

NO. 19
DRUG-RELATED MORTALITY IN CAMDEN, NJ: DEMOGRAPHICS AND SUBSTANCE MISUSE TRENDS DURING THE 2010–2013 PERIOD

Poster Presenter: Calvin Foo, B.Sc.

Co-Author(s): Karim Sedky, M.D., Andres J. Pumariega, M.D.

SUMMARY:

Background: Mortality from substance use has had a changing profile in recent history, with notable rising trends in particular regions of the country. With a reputation for poverty and crime, Camden, NJ, is a region that has struggled with substance use. As programs that help address this often operate at a regional level, regional trends are necessary in order to properly assist a particular population. As such, analysis of substance use-related death in this population will help us to better understand the demographic patterns of this at-risk population to better serve it. **Methods:** Mortality data were obtained from New Jersey's Department of Human and Health Services for 2010–2013 and the Centers for Disease Control and Prevention's Wide-Ranging Online Data for Epidemiologic Research (CDC WONDER) system. Subject demographic information, number of substances found at death and the substance types were investigated for trend analysis. **Results:** Across all years in this study, individuals were predominantly Caucasian (74.2%) and male (74.0%). Subjects ages 25–44 had the highest mortality rate of all groups. Opiate derivatives were the highest offending agent, occurring in 82.9% of deaths in Camden County, followed by stimulants in 42.1% and benzodiazepine-related compounds in 39.5%. Furthermore, 23.1% of victims were found to have three or more substances at death. While trending for opiate presence in drug mortalities has not significantly increased or decreased in this time period, it is still grossly higher than crude rate of drug-induced deaths at the New Jersey state level. **Conclusion:** This study highlights the opiate epidemic as a major offending agent in Camden. Victims were predominantly Caucasian, and a notable population

of them had multiple substances detected at time of death. It is imperative to focus on drug use services for this population, especially those geared toward opiate misuse.

NO. 20
UTILIZING MEASURES OF CLIENT MOTIVATION AS INDICATORS OF COMPLETION IN RESIDENTIAL SUBSTANCE USE DISORDER TREATMENT IN THE PUBLIC MENTAL HEALTH SYSTEM

Poster Presenter: Keith Wood, M.D.

Co-Author(s): Melanie Thomas, M.D., M.S., James Dilley, M.D., Scott Collier, Ph.D., M.S.W., Joshua Parmenter, B.A., Christina Mangurian, M.D.

SUMMARY:

Background: Recent epidemiologic studies show that the lifetime prevalence of DSM-5 substance use disorders (SUDs) in the United States approaches 10%, and yet only 25% of these individuals receive any form of treatment. Even among those who do receive care at publicly funded residential treatment programs (RTPs), completion rates are low. Forthcoming changes in allocation of federal program funding in California will expand the range of services and simultaneously reduce the maximum length of stay in RTPs. Although measures of motivation and preparedness for treatment (TCU MOTform) have been shown in previous smaller studies to predict patient retention in RTPs, few studies have been completed in large and diverse patient populations such as ours. **Hypothesis:** The primary hypothesis of this study is that higher motivational scores indicate higher probability of completion of an RTP and longer length of stay within a diverse population. The secondary hypothesis is that higher initial motivational scores result in decreased likelihood for subsequent recidivism among clients who have previously completed the RTP. **Methods:** Initially, we will examine retrospectively collected administrative data on diverse patients served at five separate residential treatment facilities in the San Francisco area between July 1, 2014, and November 30, 2015. We will use descriptive statistics to examine the cross-sectional data from this population. We will use linear regression models adjusted for race, age, sex, housing status and education level to determine the relationship between motivation scores and length of stay and RTP completion status. Additional analyses will examine the relationship between motivational scores and recidivism. **Results:** Preliminary data indicate that 1,517 individual RTP

encounters occurred during the study period, with a program completion rate of 31%. All individuals completed the TCU MOTform. **Discussion:** Thus far, motivational scores have not been used to inform the important issue of which individuals in a diverse population are most likely to succeed in residential treatment facilities. Given the national prevalence of SUDs, there is an ongoing need to efficiently manage changing resource availability for substance use disorder treatment. A better understanding of predictors that maximize the potential for client success would have broad policy and practice implications.

NO. 21

“WEEDING” THE SYNTHETIC WEEDS: CUTTING-EDGE DIAGNOSTIC SYSTEMS TO ASSESS DESIGNER DRUG USE

Poster Presenter: Tina S. Thakrar, M.D., M.B.A.

Co-Author(s): Vishal Madaan, M.D.

SUMMARY:

Objective: Understand shortcomings of urine drug screen while assessing use of designer drugs; identify designer drug toxidromes based on clinical presentation and evaluation; and review current, innovative diagnostic options to assess designer drug use. **Background:** Over the past decade, the abuse of designer drugs including bath salts, synthetic cannabinoids, salvia divinorum, khat, methoxetamine and piperazine derivatives has become increasingly prevalent. These substances are considered by many users to be “legal highs,” and individuals are able to alter chemical compounds in order to avoid detection by standard methods utilized by health care professionals. Acute toxicity can manifest with severe neuropsychiatric symptoms including agitation, psychosis, hemodynamic instability and death. The inability to quickly and clearly identify the inciting agent can impede the clinician’s ability to appropriately treat patients. This poster reviews current literature on new designer drugs, identifies their varied clinical presentations and revisits current diagnostic options available to clinicians. **Methods:** A PubMed literature search was completed, resulting in 17 studies available for review, of which 12 studies focused on new screening techniques, while four studies focused on clinical evaluation and management of designer drug toxidromes. **Discussion:** Designer drug acute toxicity may present with a myriad of acute symptoms requiring immediate supportive care in addition to long-term

management. Clinicians must consider designer drug toxicity in any patient presenting with acute neuropsychiatric symptoms, and in addition to clinical evaluation, the primary diagnostic tool used to manage drug toxicity is the Urine Drug Screen (UDS). The UDS is commonly used in multiple settings, including hospitals, due to the ease of use, cost effectivity and short turnaround time. There are, however, several drawbacks to the UDS, including false positives and false negatives. Positive results on a UDS require verification by gas chromatography-mass spectrometry (GC-MS), which is not ideal in the acute setting. Additionally, the standard UDS is not equipped to identify the presence of the newer designer drugs, leaving clinicians ill-equipped to treat acutely toxic patients. Currently, several new diagnostic tools are being evaluated to identify designer drug toxicity, including high-performance liquid chromatography with tandem mass spectrometry (HPLC-TMS), transporter flux assays with mass spectrometry, enzyme-linked immunosorbent assays (ELISA) and liquid chromatography-electrospray ionization-mass spectrometry (LCEI-MS). Clinical evaluation may be able to narrow down the toxidrome, allowing a targeted GC-MS or similar diagnostic tool to be completed and identifying the toxidrome while supportive management is provided.

NO. 22

STRESS REACTIVITY IN THE CONTEXT OF TRAUMA EXPOSURE AND MARIJUANA USE

Poster Presenter: Vanja Radoncic, B.A.

SUMMARY:

Background: Trauma exposure is associated with increased drug abuse. A mechanism linking trauma and substance abuse is dysregulation of acute stress response. High trauma rates and altered stress responses have been reported in cocaine users, yet little is known about how an interaction between trauma exposure and stress reactivity impacts the factors that influence marijuana use and relapse. Among regular marijuana users, a history of trauma is associated with an increased dysregulation of stress responses, and marijuana is used to relieve stress. **Objective:** This research project 1) collected data on trauma exposure in healthy regular marijuana smokers and 2) compared responses to an acute social stressor such as the Trier Social Stress Test (TSST) in marijuana (MJ) users with and without past trauma exposure, hypothesizing that a group with more trauma exposure (high posttraumatic

stress [PTS]) would have a more dysregulated stress response compared to the group with less trauma exposure (low PTS) and those with no trauma exposure (NT). **Methods:** Non-treatment-seeking daily MJ smokers (102 males, 23 females) with no current Axis 1 diagnoses (except MJ abuse or dependence) completed the Trauma Assessment for Adults (TAA) and the TSST, a standardized laboratory stressor involving public speaking and mental arithmetic tasks. Stress response was assessed with heart rate, salivary cortisol, and subjective anxiety (State-Trait Anxiety Inventory [STAI], Profile of Mood States [POMS]). Participants also reported baseline depressive symptoms (Beck Depression Inventory [BDI]), emotion dysregulation (Difficulties in Emotion Regulation Scale [DERS]) and impulsivity (Barratt Impulsivity Scale [BIS]). Participants were divided into three groups: high PTS group reporting at least three traumatic events (N=35), low PTS group reporting between one and three events (N=57), and those with no such exposure (N=33). **Results:** The high PTS group had been exposed to 3.1 (SD=1.1) types of trauma and had higher baseline BDI, DERS and BIS scores than the low PTS and NT groups. Also, the high PTS group had the most elevated anxiety levels throughout the TSST (measured with STAI and POMS) and increased heart rate compared to the low PTS and NT groups, with no significant differences in cortisol levels. Overall, the TSST increased heart rate, salivary cortisol and anxiety. **Conclusion:** These initial data indicate that higher levels of trauma exposure were associated with elevated negative affect and greater dysregulation of stress responses, which implies that marijuana smokers with trauma exposure are more sensitive to relapse and marijuana use. Further study is warranted in order to deepen our understanding of ways to improve marijuana treatment by targeting the stress reactivity mechanisms and improving coping skills of marijuana smokers with trauma histories.

NO. 23
ASSESSMENT OF DECISION MAKING CAPACITY IN A PSYCHIATRIC PATIENT: A COMMON MYTH

Poster Presenter: Sahil Munjal, M.D.
Co-Author(s): Yvette Smolin, M.D.

SUMMARY:

Some of us may equate “psychosis” with incapacity, but the case we will present in this poster demonstrates that this isn’t always true and that even people who by most measures are psychotic

may nonetheless be capable of making wise and thoughtful decisions about their lives. We are going to present a case of a 67-year-old female patient with a diagnosis of schizophrenia who presented with worsening auditory hallucinations and progressive weight loss. In addition, this patient had a complicated medical course, which eventually led to multiple capacity evaluation requests toward the consultation team. The question of capacity in this patient and the psychiatric population as a whole motivated us to review the literature, since the assumption by many on the medical teams was that psychiatric patients do not have the capacity to participate in their medical care. There are many misconceptions floating around about this topic, which we want to address through this poster. A diagnosis of schizophrenia does not automatically render a person unable to make decisions about his or her own medical care. Even patients with severe mental illness may have significant areas of reality testing still intact. Ethically, it is important to consider that patients with chronic mental illness can understand treatment options and express consistent choices. Medical providers may exclude psychiatric patients from making end of life decisions because they are worried about the emotional fragility of the patient and assume they do not have the capacity to participate in these important decisions. This case is an example of a patient who was able to participate in her own care, regardless of her psychiatric state.

NO. 24
ACUTE PSYCHOSIS AND SUICIDAL IDEATIONS SECONDARY TO CELLCEPT (MYCOPHENOLATE MOFETIL) IN A PATIENT OF NEUROMYELITIS OPTICA

Poster Presenter: Wajid Hussain, M.D.

Co-Author(s): Cheryl A. Kennedy, Tshering Bhutia

SUMMARY:

Background: Immune-suppressant therapy has been associated with psychiatric symptoms like depression, psychosis and delirium. Manic-like psychosis, hallucinations, anxiety, paranoid delusions and dissociative fugues have been associated with elevated blood concentrations of the immune-suppressant tacrolimus. Another of these agents, mycophenolate mofetil (MMF), a powerful inhibitor of lymphocyte proliferation, has been used since the early 1990s for the prevention of acute allograft rejection. It has also been a potential glucocorticoid-sparing agent for the treatment of patients with a variety of auto-immune illnesses, including

neuroinflammation (NMO). There is a case report of depressive symptoms with mycophenolate use, but psychosis has not been reported with use of mycophenolate. Here, we present a case of a 47-year-old male who developed acute psychosis requiring psychiatric inpatient stabilization after starting mycophenolate for treatment of NMO. **Case:** This is a 47-year-old male with no known past psychiatric history and past medical history significant for NMO who was brought to a hospital emergency department by his wife due to a change in behavior and paranoid delusions. The patient thought his wife was unfaithful and that people were after him. The patient also had suicidal thoughts with a plan of using a razor blade to cut his neck. At this point, his wife decided to bring him to the hospital. The wife reported that, two weeks earlier, he had started CellCept 500mg twice daily for the treatment of his NMO. Within a few days after starting CellCept, the patient developed a change in his behavior. The patient was admitted to the psychiatric unit for further stabilization and was started on risperidone 0.5mg twice daily and escitalopram 5mg daily; CellCept was discontinued. Neurology consultation agreed with the discontinuation of the mycophenolate due to the acute psychiatric symptom presentation. The patient's psychotic symptoms responded well to discontinuation of mycophenolate. In addition, the antipsychotic, risperidone, helped to further ameliorate his paranoid delusions, and when he was stabilized, he was discharged with outpatient psychiatric follow up. **Conclusion:** Although there have been several case reports of psychiatric symptoms from use of immune-suppressants and one case report of a patient developing depressive symptoms with mycophenolate use, as far as we know, this is the first case report of a patient with psychotic symptoms and suicidal thoughts that started within two weeks of starting mycophenolate for treatment of NMO. Of course, when seeking an etiology of psychosis in a patient, a careful review of the patient's current medications should be done. At the same time, after mycophenolate is started in a patient, he or she should be monitored carefully for development of psychotic or depressive symptoms. Further well-designed studies are needed to more fully understand this phenomenon.

NO. 25

A CASE OF ACUTE PSYCHOSIS AFTER ABRUPT DISCONTINUATION OF PREDNISONE IN A PATIENT OF NEUROMYELITIS OPTICA

Poster Presenter: Wajid Hussain, M.D.

Co-Author(s): Douglas Opler, Tshering Bhutia

SUMMARY:

Background: Glucocorticoids induce a range of psychiatric and cognitive symptoms, which depend upon dose and duration of therapy. Steroid-induced side effects generally require tapering as the safe approach as soon as the disease is under control. Careful tapering is also advised to avoid both recurrence of disease and possible cortisol deficiency resulting from hypothalamic-pituitary-adrenal axis (HPA) suppression. Inadequate tapering and abrupt cessation of steroid therapy is associated with further complications. There have been two case reports of psychosis after discontinuation of dexamethasone and one of methylprednisolone, but this is the first time that we report a case in which the abrupt discontinuation of prednisone in a patient of neuromyelitis optica (NMO) led to psychotic symptoms. **Case:** The patient is a 30-year-old African-American female with no psychiatric history and medical history of NMO who presented for disorganized behavior and "not being herself" for the past few days. As per her chart, the patient was discharged from our neurology service about three weeks back with prednisone 100mg daily for five days and then follow-up with her neurologist in five days, with recommended taper suggested as outpatient. Her mother reported that she was compliant with her prednisone taper at 50mg daily until three days ago, when she was preparing for a party and missed her prednisone dose for three days. On arrival, the patient had to be medicated with antipsychotics and sedatives for behavioral stability, along with Solu-Medrol 125mg, citing possible role of abrupt withdrawal of steroid as possible etiology of her mental status. Her MMSE was 30/30. The patient was interactive but still very paranoid about her husband causing harm to her. She was admitted to neurology for further workup, which revealed that psychosis was unlikely to be secondary to NMO or other organic processes. She was started on prednisone taper and needed antipsychotics for treatment of her psychotic symptoms and psychiatric inpatient transfer. She responded to antipsychotics and was discharged after two weeks. **Conclusion:** Although there have been case reports of psychotic episode after dexamethasone and methylprednisolone withdrawal, this is the first case report with psychotic episode occurring after prednisone discontinuation. This is also the first case report of

psychosis in the context of steroid cessation and NMO. Although there is a lot of literature to support corticosteroids inducing psychotic disorders, data to support psychotic symptoms in the context of abrupt discontinuation of steroids is very scant. Steroid withdrawal as an etiology of psychotic episode should always be considered a possible, albeit rare, factor. We also recommend that patients should be monitored closely for development of psychotic symptoms after discontinuation of corticosteroids. Further studies are needed to understand this phenomenon better.

NO. 26

CASE REPORT: A CASE OF SIALORRHEA WITH LURASIDONE

Poster Presenter: Wajid Hussain, M.D.

Co-Author(s): Tshering Bhutia, Najeeb Hussain, Ritesh Amin

SUMMARY:

Background: Sialorrhea, or hypersalivation, remains one of the common adverse effect of antipsychotic treatment, possibly due to the antimuscarinic properties of several antipsychotics; clozapine, quetiapine and risperidone are well known to cause this side effect. Lurasidone hydrochloride (HCl) is an atypical antipsychotic that has potent binding affinity for D2, 5-HT_{2A} and 5HT₇ receptors (antagonist effect), moderate affinity for 5HT_{1A} (partial agonist effect) and α 2C receptors (antagonist effect), and no appreciable affinity for H1 and M1 receptors. Due to its recent availability, very few reports have been published so far regarding its pharmacokinetics or its adverse effects. Most of the studies have shown that lurasidone is not known to cause sialorrhea, while others have shown it to cause dry mouth. There are few instances on social media and the web where people reported excessive salivation with lurasidone, but no actual case studies/literature have been found. In this poster, we present a case of an older patient who developed sialorrhea upon taking lurasidone and stopped after discontinuing it. **Case:** The patient is a 68-year-old African-American male with a history of bipolar disorder type 1 with psychotic features who presented to the emergency room via EMS for disorganized behavior. Upon evaluation, he was grandiose, internally preoccupied, and started gesticulating and dancing. The patient reported that earlier in the day, he was discharged home from another hospital with a prescription for lurasidone 40mg daily. When he returned home, his family

called EMS, as he continued to display bizarre behavior. The patient was hospitalized in the inpatient psychiatric unit and was initially started on lurasidone 20mg twice daily and divalproex sodium 500mg by mouth twice daily. The patient developed excessive salivation within 24hours, which worsened to severe drooling. The patient was informed that his symptoms may be due to lurasidone, considering that they started with lurasidone. The patient agreed to stop it. Within a day, there was significant improvement, and in the next two days, his symptoms stopped completely. **Conclusion:** Though excessive salivation appears to be a benign side effect, it can lead to significant distress and discontinuation of medication. Due to a scarcity of literature on lurasidone, it is difficult to predict the likelihood of occurrence of this rare adverse event. As the excessive salivation developed shortly after starting lurasidone and in the absence of any clinical guidelines, it seems a prudent clinical practice to replace it with another antipsychotic agent. We suggest that when seeking an etiology of excessive salivation in a patient, a careful review of the patient's current medications should be performed. Further studies are needed to understand the role of various neurotransmitters involved in hypersalivation and the ways various medications, including lurasidone, may cause it.

NO. 27

ACUTE ONSET DELUSIONAL PARASITOSIS IN NEW-ONSET LIVER CIRRHOSIS

Poster Presenter: Sabrina Renteria, M.D.

Co-Author(s): Davin Agustines, D.O., Elena Ortiz-Portillo, M.D.

SUMMARY:

Background: Delusional parasitosis (DP) is characterized by a person's preoccupation that his or her skin is infested by parasites such as fleas, worms or other living organisms. This condition is more common in women and in older age groups (over 50 years). Primary DP is classified when there is no known cause of the fixed belief, and secondary DP is associated with a psychiatric illness or, rarely, an underlying medical condition. With regard to underlying medical conditions, some of the most commonly associated are alcohol withdrawal, HIV and hyperthyroidism; however, there has been little to no association between DP and new-onset liver cirrhosis. **Methods:** Using an Internet database search, we found no cases of combined liver cirrhosis and DP. While cirrhosis is not an uncommon

condition, the combination of cirrhosis and DP is markedly rare. We report a case of 51-year-old female who presents to the emergency room with acute-onset DP who was subsequently found to have liver cirrhosis. **Results:** DP remains a very rare occurrence. There are case reports of this syndrome occurring throughout the medical literature. This appears to be the first known case report of DP occurring in the context of a patient who developed new-onset compensated alcoholic cirrhosis who was not intoxicated or undergoing alcohol withdrawal. This syndrome is recognized to occur in the context of delirium and intoxication states; however, it has also been linked to multiple medical and psychiatric conditions. The etiology and pathophysiology of delusional parasitosis remain unknown. Decreased striatal dopamine transporter (DAT) functioning has been hypothesized as well as being a delusional manifestation of a tactile experience the patient is having. **Discussion:** This patient initially reported her symptoms to the local police department. Eventually, she was referred into the emergency room for evaluation when she would not stop going to the police. She did not possess any symptoms of delirium or encephalopathy during the workup and had no prior episodes of psychosis. Delusional parasitosis should be a diagnosis of exclusion due to the possibility of having both precipitating as well as comorbid disorders associated. **Conclusion:** Patients who suffer from delusional parasitosis will often seek help from nonpsychiatric professionals. This syndrome is usually associated with poor response to nonpsychiatric treatment, health care cost and significant distress, which may lead to secondary problems compounding the situation. It is important to recognize the wide potential of medical etiologies that may result in the development of this syndrome.

NO. 28
HEALTH CARE UTILIZATION AND COSTS
ASSOCIATED WITH A CLUSTER OF FACTITIOUS
DISORDER: A CASE SERIES

Poster Presenter: Juliet A. Glover, M.D.

Co-Author(s): Rushiraj Laiwala, M.D., James G.

Bouknight, M.D., Ph.D., Rita Aregbesola

SUMMARY:

Background: Patients with factitious disorder simulate, induce and exacerbate illness to assume a sick role. There is substantial emotional and financial cost associated with factitious disorders, especially with severe and chronic forms like Munchausen

syndrome. Existing literature consists primarily of case reports and a few large series. Population-based systematic studies are very limited, most likely because the disorder's inherent secretive nature thwarts traditional research methods. Furthermore, studies detailing the economic impact of factitious disorder are scarce. In this study, we assess the financial burden of factitious disorder on a health care system. **Methods:** A retrospective chart review was conducted on three patients with suspected or confirmed factitious disorder evaluated within a three-month interval. Charts were reviewed for overall number of health care encounters within a local network consisting of three hospitals. Encounters were further analyzed and categorized by association with the patient's usual manner of feigned or self-induced illness. The cost associated with medical care for the most recent factitious illness episode was calculated. The total cost of care over a ten-year period was also determined. **Results:** Case 1 was diagnosed with factitious disorder with definitive features of Munchausen syndrome, including peregrination and pseudologia fantastica. Case 2 was highly concerning for factitious disorder. Case 3 demonstrated features of both malingering and factitious disorder. Results showed a total number of hospital encounters over a ten-year period of 126, 38 and 34 for cases 1, 2 and 3, respectively. The proportion of visits associated with the patient's usual manner of feigned illness ranged from 13 to 42%. The total charge incurred during the most recent factitious illness episode was \$168,146 for all three cases, with an average length of stay of seven days. Charges accumulated over a ten-year period for the three cases totaled \$2,412,561. **Conclusion:** Factitious disorder has various clinical presentations and can be difficult to diagnose. It is associated with high levels of health care utilization and cost. To date, treatment and management options are limited. Nevertheless, the high cost to health care systems underscores the need for further studies and innovative methods to identify and treat this challenging disorder.

NO. 29
FRONTOTEMPORAL NEUROCOGNITIVE DISORDER—
A DIAGNOSTIC ENIGMA: A CASE REPORT AND BRIEF
REVIEW

Poster Presenter: Edward V. Singh, M.D.

Co-Author(s): Saffa Ahmad, Yosef Sokal, M.A., Mark Serper, Ph.D., Subramoniam Madhusoodanan, M.D.

SUMMARY:

Background: Frontotemporal dementia (FTD) is the second most common form of primary degenerative dementia. The onset is insidious with personality and behavioral changes, speech and language impairment, and changes in eating patterns. The physical and neurological evaluations are generally normal except for cognitive impairment. **Methods:** A 68-year-old Caucasian woman was admitted because of agitation and elopement attempts. The patient was elated, grandiose and delusional about her discharge plans and exhibited minimal memory impairment. She was receiving risperidone 0.5mg twice daily, memantine 5mg daily and valproic acid 250mg three times daily by mouth. Results: Routine laboratory workup was unremarkable. Magnetic resonance imaging (MRI) of the brain showed differential atrophy of the anterior temporal lobe and hippocampus, left greater than right with age-appropriate ischemic white matter disease and generalized atrophy of lesser magnitude. Neuropsychological evaluation showed significant impairment of working and long-term memory, verbal generativity, severe agnosia, and impaired executive functioning and speed of information processing, which are frequently linked to degradation of the frontal and temporal lobes.

Discussion: Her Mini Mental Status Examination score was 23. Her relatively mild cognitive impairment disproportionate to her behavioral and personality changes prompted further investigation, including MRI and neuropsychological testing, which aided the diagnosis of FTD. Her clinical picture supports the *DSM-5* criteria for probable frontotemporal neurocognitive disorder including insidious onset and gradual progression, behavioral disinhibition, perseverative, compulsive behavior, hyperorality, decline in social cognition and executive abilities, prominent decline in language abilities with relative sparing of memory and perceptual motor function, and no evidence of other etiological conditions.

NO. 30
DYNAMIC CONFORMATIONAL CHANGE OF PRESENILIN 1 IN RESPONSE TO CALCIUM INFLUX

Poster Presenter: Xuejing Li, M.D., Ph.D.
Co-Author(s): Kengo Uemura, Alona Muzikansky, Bradley T. Hyman, Oksana Berezovska

SUMMARY:

An increase in the A β 42/40 ratio potentially leads to the pathogenesis of Alzheimer's disease (AD). Familial AD mutations in Presenilin 1 (PS1) or

Presenilin 2 (PS2), or other manipulations that lead to a structural change in the gamma-secretase, cause an alteration in the A β 42/40 ratio. We demonstrate that PS1 adopts rapid "closed" conformational change in response to calcium influx induced by KCl or glutamate treatment. This rapid PS1 conformational change is accompanied by increased phosphorylation level of PS1 CTF, which is not mediated by PKC or GSK3 β . This finding strongly supports the hypothesis that PS1/gamma secretase exists in a dynamic equilibrium of the two (or more) conformational states—"open" and "closed" (a "breathing model")—and this equilibrium can be allosterically modulated by elevated levels of intracellular calcium.

NO. 31
EVIDENCE FOR USING ACETYLCHOLINESTERASE INHIBITORS AND MEMANTINE IN INDIVIDUALS WITH TRAUMATIC BRAIN INJURY (TBI): A SYSTEMATIC REVIEW

Poster Presenter: Rajesh R. Tampi, M.D.
Co-Author(s): Oladele M. Oladapo, M.D., Sujan Barua, M.D., Silpa Balachandran, M.D., Esha Sharma, M.D.

SUMMARY:

Objective: Identify published randomized controlled trials (RCTs) that evaluate the use of acetylcholinesterase inhibitors and memantine in patients with traumatic brain injury (TBI). **Methods:** A literature search was conducted using PubMed, MEDLINE, EMBASE, PsycINFO and Cochrane Collaboration databases for RCTs in any language that evaluated the use of acetylcholinesterase inhibitors and memantine in individuals with TBI without restriction on date of publication using key words "acetylcholinesterase inhibitors," "memantine" and "TBI." **Results:** A total of 74 abstracts were found, of which four met the pre-defined search criteria. Three of these studies showed statistically significant improvement in neurocognitive testing with the use of acetylcholinesterase inhibitors (rivastigmine, donepezil and physostigmine) in individuals with TBI (with age, sex, type of injury and severity of TBI not affecting the response) as compared to placebo. One study showed no statistically significant improvement in neurocognitive testing with the use of rivastigmine as compared to placebo. However, in a subgroup of individuals with moderate to severe memory impairment, there was statistical significance on neuropsychological tests, functioning

and quality of life. In all four studies, acetylcholinesterase inhibitors were well tolerated with minimal gastrointestinal side effects noted. We did not find any RCTs on the use of memantine with TBI. **Conclusion:** Current evidence, although limited, does suggest efficacy for the use of acetylcholinesterase inhibitors for the symptomatic improvement of cognition in individuals with TBI, and the drug is well tolerated.

NO. 32

SELECTED NEUROPSYCHIATRIC MASQUERADES: A BRIEF REVIEW

Poster Presenter: Ashkan Soltan, M.D.

Co-Author(s): Stephanie Young Wilson, M.D.,

Submoniam Madhusoodanan, M.D.

SUMMARY:

Background: Multiple neurological conditions can manifest primarily with psychiatric symptoms. Any associated physical signs and symptoms may be delayed. **Methods:** We have summarized seven clinical psychiatric manifestations of neurologic conditions, which, due to their atypical presentations, were challenging to diagnose accurately. **Results:** Each psychiatric case was ultimately identified as a neurological condition, including brain tumors (glioblastoma multiforme, glioma and meningioma), progressive supranuclear palsy, Huntington's disease, neurosyphilis and anti-N-methyl-D-aspartate (NMDA) receptor encephalitis. **Conclusion:** These cases highlight that the practicing physician must be cognizant of the differential diagnosis spectrum of presenting symptoms. Conducting the appropriate physical examinations and ordering relevant laboratory and imaging tests will clinch an organic versus a psychiatric diagnosis. Such acumen will not only improve the quality of life for the patient, but also limit morbidity.

NO. 33

SERUM BIOMARKERS OF RISPERIDONE AND TREATMENT OF PSYCHOSIS TO PREVENT HOSPITAL RECIDIVISM

Poster Presenter: Pratik Bahekar, M.B.B.S.

Co-Author(s): Vasiliki Eirini Karagiorga, M.D.,

Michael Politis, D.O., Srinath Gopinath, M.D., Ellen

Berkowitz, M.D.

SUMMARY:

Background: Risperidone is widely used clinically. To our knowledge, this is the first review attempting to study the immunological profile of risperidone in the

treatment of schizophrenia. We identify the clinical significance and utility of this data. Interleukin levels can be used as an objective measure of inflammation. There is robust evidence that schizophrenia is characterized by abnormalities in immune-inflammatory pathways, including variations of cytokine levels that may accompany the onset of the disorder. **Methods:** An extensive search for articles was conducted using search engine PubMed with the following MeSH terms: allergy and immunology, immunology, risperidone, interleukins, prostaglandins, neutrophils, leukocyte count, schizophrenia spectrum and other psychotic disorders, blood, cerebrospinal fluid, cytology, immunology, physiology, and physiopathology. The search yielded 724 articles. By excluding articles after reading titles and abstracts, we included 49 articles. **Results:** Increased pro-inflammatory cytokines and Th1-like cytokines—(IL-1 β , sIL-2R, IL-6, and TNF- α)—suggest, respectively, a specific cytokine profile in psychosis indicative of M1 and Th1 activation/responses. It reduces Th1 cell differentiation and T-beta expression by inhibiting phosphorylation of AKT, suppressing the AKT/NF-KB pathway. Risperidone normalizes these responses, bringing cytokine levels to baseline, and additionally decreases Th2 function. Changes are not correlated with the dosage. Also, decreases elevated IL-2, IL-1 β and sIL-2 receptors. Changes in IL-2/sIL-2R levels seem to correlate with changes in positive symptoms. Risperidone also suppresses plasma-soluble IL-6 receptors. Risperidone may increase T-regulatory cell (IL-10) cytokines. The relatively smaller suppressant effect of risperidone on IL-10 may be protective against negative symptoms. IL-10 has neuroprotective effects and is known to suppresses type 1 cytokines. Risperidone increases IL-12, which plays an important role in psychoneuroimmunology. It also increases sTNF-R receptor levels and decreases IFN- γ and TGF- β levels. **Conclusion:** Risperidone induces normalization of cytokine profile, which may or may not be associated with clinical resolution of symptoms. This suggests that normalization could be related to specific effects of risperidone and not secondary to symptomatic improvement. Significance of long-term normalization of interleukins in clinical responders versus nonresponders is unknown, although, cytokine changes in clinical responders demonstrate particular changes in positive and negative symptoms. There is potential for some cytokines to serve as state markers for the acute phase and trait markers in psychosis. If baseline and

symptomatic inflammatory cytokine levels are established and monitored, this may prove helpful in preventing hospital recidivism.

NO. 34

STREP, TICS AND PANDAS, OH MY!

Poster Presenter: Kanwaldeep Dhillon, M.D.

Co-Author(s): A. Mistry, B. A. Jacobs, R. S. Daily

SUMMARY:

Background: Pediatric autoimmune neuropsychiatric disorders associated with streptococcal infections (PANDAS) is theorized to be an autoimmune disease in which children develop neuropsychiatric symptoms in relation to a recent group A streptococcal (GAS) infection. Auto-antibodies are developed after infection and cross-react with neuronal tissues, causing exacerbation of symptomatology. **Case:** S.H., an 11-year-old female, presented for worsening of her preexisting tics. She had been previously diagnosed with Tourette's syndrome. Her symptoms were well controlled with clonidine and topiramate, but recently, over the last four months, she and her family noticed a sudden increase in severity and frequency of her tics. Regardless of S.H.'s adherence, previous treatment was inadequate, and tics impaired her performance at school and disrupted her functioning at home. S.H. was not on any additional medications and had no history of developmental delay, and past medical history was otherwise nonsignificant. Thorough chart review revealed S.H. had several recent sore throats preceding the change in her tics. PANDAS was suspected, and investigations demonstrated antistreptococcal antibody titers were under 25, suggesting prior infection, and Cunningham Panel, an auto-antibodies panel specific for PANDAS, was significant for increased calcium-/calmodulin-dependent protein kinase II activity. Together, these findings and the overall clinical picture indicated a diagnosis of PANDAS. S.H.'s tics were managed by continuing topiramate at the same dosage but discontinuing clonidine and switching to guanfacine. S.H. was referred to counseling for management of the psychosocial stresses caused by her condition. **Discussion:** PANDAS is seen in the pediatric population from ages three to puberty. In this case, S.H. was within the age of onset, and her presentation was consistent with PANDAS because of her prior diagnosis of Tourette's syndrome, which symptoms (the tics) worsened acutely after a recent GAS infection. The antibodies are a confirmatory test and are not required to diagnosis PANDAS, as it is a

clinical diagnosis. Often, antibody testing is skewed due to duration of GAS infection from initial testing and antibiotic therapy. Clinicians should consider PANDAS in children with a history of OCD or tic disorders that present with acute exacerbation of symptoms.

NO. 35

PATIENT-CENTERED CARE IN A PSYCHIATRIC EMERGENCY DEPARTMENT

Poster Presenter: Lidia Klepacz, M.D.

Co-Author(s): Sahil Munjal, M.D., Cezary

Czekierdowski, Stephen Ferrando, M.D.

SUMMARY:

The psychiatric emergency room is the major point of entry to acute psychiatric services for persons with severe mental illness, particularly those who are violent. The rates of restraint/seclusion in psychiatric emergency rooms range from eight to 24%. In our opinion, patient-centered care can significantly reduce the incidence of restraints, which is corroborated by our incidence of restraints in 0.1% of the total visits to the psychiatric emergency room. Patient-centered care is the overall goal of our psychiatric emergency team, and our hypothesis is that very low rates of restraints at our facility should reflect this focus on patient-centered care and appropriately used de-escalation techniques. It is the policy of our institution that restraint and/or seclusion are to be used only as a measure of last resort to avoid imminent injury to patients and others. As restraint and seclusion have the potential to produce serious physical and/or psychological harm to the patient, the staff strives to prevent use of such procedures by focusing on quick triage and using early crisis interventions including verbal and nonverbal calming techniques. Our poster intends to share information about these components and the results of our restraint and seclusion policy.

NO. 36

"DIVIDE TO SURVIVE": EMERGENCE OF DISSOCIATE IDENTITY DISORDER (DID) IN A MALE SERVICE MEMBER WITH DEPLOYMENT TRAUMA

Poster Presenter: Jeremy Hill, D.O.

Lead Author: Mercedes Driscoll, M.D.

Co-Author(s): Jennifer Costello, D.O.

SUMMARY:

Objective: 1) Understand the significance of childhood trauma in dissociate identity disorder

(DID); 2) Identify the role of social risk factors, including military combat exposure, in the reactivation of dissociation symptoms in individuals with trauma history; and 3) Recognize different modalities of treatment, including the possibility of a multimodal approach, for addressing symptomatology related to DID with comorbid psychiatric disorders. **Background:** The concept of “multiple selves” has received much attention in both academic literature and popular fiction throughout history. Currently, DID is defined as disruption of identity characterized by two or more distinct personality states. The proposed genesis of DID is multifactorial, including early life trauma and subsequent adult trauma. DID may be more common than many providers realize, as it has been shown to occur in one to three percent of the general population. There is a lack of general consensus as to the most effective treatment for DID. We will discuss the different modalities of treatment of DID and the importance of using a multimodal approach to treatment, which includes a phasic model for interventions, hypnosis, adjunct psychotherapy and pharmacological interventions to target symptoms of DID as well as various other coexisting disorders. **Case:** S.M. was a divorced white male in his mid-30s with multiple deployments to combat zones who presented to the intensive outpatient program (IOP) after an inpatient hospitalization for suicidal ideation. The patient initially endorsed uncontrollable PTSD symptoms and poor coping skills related to severe childhood abuse and deployment trauma. He had a childhood history of experiencing dissociative states to endure his extensive physical, emotional and sexual abuse. However, during the course of the IOP, he admitted to experiencing multiple distinct personality states, which initially began following his second deployment. This was distressing to the patient. S.M. had failed multiple medication trials as well as outpatient management prior to presentation to the IOP. During the IOP, a multidisciplinary approach was initiated to include biofeedback, acupuncture, art therapy, yoga, group and individual therapy, and continued pharmacotherapy with the daily direction of a psychiatrist. **Conclusion:** DID can be conceptualized as childhood-onset posttraumatic developmental disorder in which the individual is unable to complete normal developmental processes leading to the formation of identity. Patients with DID and PTSD appear to show deterioration if unmodified progressive exposure or normalized CBT modalities are used. Therefore,

further research is required to determine which multifactorial treatment models are most effective in the treatment of DID with comorbid psychiatric disorders. The information herein should not be construed as sponsored by nor the views of any agency of the U.S. Government.

NO. 37
COMPARING PSC-17 AND KADS FOR SCREENING HEALTHY ADOLESCENTS IN FAMILY CLINICS TO ASSESS DEPRESSIVE SYMPTOMS

Poster Presenter: Denisse V. Saldarriaga

SUMMARY:

Background: Depression is a common mental health disorder and the leading cause of disabilities worldwide. The prevalence of depression varies from three percent in childhood to about 14% in adolescents. Child Health and Development Interactive System (CHADIS) is an online screening tool to evaluate symptoms of depression in young children and adolescents. The aim of this study is to identify two online screening questionnaires— Pediatric Symptom Checklist-17 (PSC-17) and Kutcher Adolescent Diagnostic Screening Tool (KADS), a part of CHADIS—in assessing adolescent depressive symptoms. We hypothesize that the prevalence of depression in adolescents measured by PSC-17 and KADS is comparable to the national average. **Methods:** At Montefiore’s Family Care Center, CHADIS questionnaires are given to well care child visit patients ages 4–20. For this study, we used the internalizing subscale of the PSC-17, comprised of five questions, a measure of depression. KADS is a six-question self-assessment that may lead to the detection of symptoms of depression in an adolescent. Both the parent and any patient over 11 years old complete the PSC-17. The KADS is completed solely by adolescent patients between the ages of 13 and 20. **Results:** In this study, 114 participants, ages 13–20, were included (73 females and 41 males). The median age of the participants was 16, the cutoff age for the age cohorts in this study. The prevalence of subjects scoring positive on either PSC-17 or KADS was 7.9% when compared to the national mean of 11.2%. There was a significant association between scoring positive on both the PSC-17 and KADS ($p=0.003$). No significant association between gender and a respondent’s score on the KADS ($p=0.05$) was observed. Similarly, gender was not significantly associated with internalizing scores on PSC-17 ($p=0.663$). Subjects in the age group under 16 had more negative scores on

the KADS than those who were ages 17–20. However, no significant association was observed ($p=0.304$). **Conclusion:** Preventative measures need to be taken to ensure that adolescents are functioning well not only physically but mentally. In this study, no significant difference was seen between gender and a respondent's score on PSC-17 internalizing part and KADS, which was different from other studies. This might be because our patients were of Caribbean descent, where depression often goes underdiagnosed due to stigma against mental health. It has been previously shown that the average age of onset of depression is around 11–14, followed by a steady increase across adolescence. In our study, subjects in the age group 17–20 scored positive in PSC-17 and KADS, reflecting that change. Thus, screening for depression in primary care settings might help early detection of depression, thereby improving the emotional health of adolescents.

NO. 38
DIFFERENTIAL DIAGNOSIS OF COGNITIVE IMPAIRMENT IN BIPOLAR DISORDER

Poster Presenter: Diego Tavares, M.D.
Co-Author(s): Doris Hupfeld Moreno, Florindo Stella, Ricardo Alberto Moreno

SUMMARY:

In old-age bipolar disorder (BD) patients, cognitive complaints complicate an accurate differential diagnosis between cognitive deficits secondary to a primary affective disorder and neurocognitive disorders, such as dementia in Alzheimer's disease (AD). This case report refers to a female 56-year-old patient with severe and treatment-resistant BD type I who presented with cognitive decline with loss in recent episodic memory and executive functions in the past year. The diagnosis of mild stage dementia associated to BD was suggested; however, neuroimaging tests such as magnetic resonance imaging (MRI) and positron emission tomography with fluorodeoxyglucose (PET-FDG) were not sufficient to exclude the differential diagnosis of AD. The CSF biomarkers (reduced levels of amyloid peptide $A\beta_{1-42}$ and the elevation of total tau protein and phosphorylated tau levels) resources were decisive for exclusion of an etiological diagnosis of AD. The differential diagnosis of cognitive impairment in a patient with BD may become particularly difficult if the clinical complaints are similar to those presented by individuals with primary dementia, such as Alzheimer's disease. This difficulty is further

accentuated when the initial investigation proves ineffective in the differential diagnosis (nonspecific morphological changes on MRI and nonspecific uptake in positron emission tomography). In such cases, only specific tests for Alzheimer's disease, as the markers in CSF beta-amyloid protein, can safely perform the differential diagnosis of a secondary cognitive impairment bipolar disorder and Alzheimer's disease associated with bipolar disorder.

NO. 39
MIXED FEATURES WITH LOW QUETIAPINE DOSES: A CASE REPORT

Poster Presenter: Diego Tavares, M.D.
Co-Author(s): Amanda de Gouveia Pettersen

SUMMARY:

About 40% of patients with bipolar disorder (BD) have at least one episode with mixed features, whether mania with depressive symptoms or depression with manic symptoms. The use of antidepressants is classically associated with the emergence or exacerbation of manic symptoms during depressive episodes in BD, without necessarily improving depression. Moreover, the use of atypical antipsychotics, such as quetiapine, is regarded as the first-line treatment for mood episodes with mixed features. This is a case report that describes the occurrence of manic symptoms during a depressive episode in a bipolar I patient who was changing the antipsychotic olanzapine for quetiapine due extrapyramidal side effects with olanzapine. Cross-exchange of antipsychotics led to a slow progression of quetiapine dose and, as psychopharmacological studies have proposed, quetiapine low dose worked predominantly as an antidepressant and afforded the occurrence of manic symptoms during a pure major depressive episode. Symptoms such as thought acceleration and arborization, marked reduction of the need for sleep and psychomotor agitation became prominent in the depressive episode, enabling the characterization of the specifier "with mixed features." Symptom improvement occurred slowly after progression of quetiapine doses. Despite anecdotal reports—all not confirmed by controlled clinical trials—the use of atypical antipsychotics such as quetiapine at low doses (<300mg/d) seems to work as an antidepressant, including the ability to produce mixed features during a mood episode of BD, maybe because the mood stabilizer doses are higher.

NO. 40

HEALING AND EMPOWERMENT THROUGH ART: ART THERAPY AND MENTAL HEALTH

Poster Presenter: Melanie L. Biscuiti, L.C.A.T.

Lead Author: Saeed Ahmed, M.D.

Co-Author(s): Gregory Haggerty, Ph.D.

SUMMARY:

Major depressive disorder affects approximately 14.8 million American adults, or about 6.7% of the U.S. population age 18 and older, in a given year. Depression is the third most common cause of hospitalization in the U.S. for both youth and adults ages 18 to 44. In fact, major depression is the leading cause of disability for Americans between the ages of 15 and 44. Depression is considered a worldwide epidemic, with five percent of the global population suffering from the condition. The treatment of the depressive patients can be challenging when words do not speak; it becomes painful for patients to verbalize emotions, struggle to express internal feelings and communicate with others. In such a state, patients need a bridge to externalize their feelings that have been internalized. In such cases, art therapy may play the essential role of that bridge in the form of drawing, painting, sculpting, music and meditation. We present the case of a 52-year-old Caucasian male with a past psychiatric history of major depressive disorder and autism spectrum disorder brought into the hospital with the drug overdose and a suicide note at the bedside. Initially, the patient was admitted to medical ICU and was later transferred to inpatient psychiatry. The patient was introduced to traditional inpatient interventions of supportive psychotherapy, milieu therapy and psychopharmacology. During the first few days of hospitalization, the patient displayed a behavior of withdrawn social isolation, mumbling to self, unable to explain his behavior and maintaining poor hygiene. The patient was acquainted with the recreational therapist, who introduced him to art psychotherapy. Daily interventions were offered to help engage the patient, but not limited to increasing self-awareness, self-worth, emotional regulation, stress management and coping skills. Through a therapeutic milieu of expressive therapies, the patient was able to connect with his illness, improved his emotional well-being and coped with the situation like never before. In this case, art therapy aided him in decreasing his symptoms, resolving any suicidal thoughts and opening up a bridge of hope. In this poster presentation, we discuss the significant role of art therapy in psychiatric illnesses. Also, we present his art, which

he used to express and communicate with psychiatrist and therapist.

NO. 41

WITHDRAWN

NO. 42

A CLINICALLY USEFUL SCREEN FOR BORDERLINE PERSONALITY DISORDER IN PSYCHIATRIC OUTPATIENTS

Poster Presenter: Mark Zimmerman, M.D.

Co-Author(s): Matthew D. Multach, B.A., Kristy

Dalrymple, Ph.D., Iwona Chelminski, Ph.D.

SUMMARY:

Objective: Borderline personality disorder (BPD) is a serious illness that is frequently underdiagnosed. The goal of this report from the Rhode Island Methods to Improve Diagnostic Assessment and Services (MIDAS) project was to determine if it was possible to identify one or two BPD criteria that could serve as “gate” criteria to screen for the disorder. We hypothesized that affective instability, considered by some theorists to be of central importance to the clinical manifestations of BPD, could function as such a gate criterion to screen for the disorder. **Methods:** 3,674 psychiatric outpatients were evaluated with a semi-structured diagnostic interview for *DSM-IV* BPD. We computed the sensitivity, specificity, and positive and negative predictive values of each of the nine BPD criteria to identify the one or two criteria that could be used to screen for the disorder. We conducted a validation and cross-validation analysis by splitting the sample in half. **Results:** In both the validation and cross-validation samples, the affective instability criterion had a sensitivity greater than 90%, higher than the sensitivities of the other eight BPD criteria. The negative predictive value of the affective instability criterion was 99%. **Conclusion:** We recommend that clinicians screen for BPD in the same way that they screen for other psychiatric disorders—by inquiring about a single feature of the disorder (i.e., affective instability), the presence of which captures most patients with the disorder and the absence of which rules out the disorder.

NO. 43

ANTI-INFLAMMATORY AGENTS IN THE TREATMENT OF BIPOLAR DEPRESSION: A META-ANALYSIS

Poster Presenter: Ron Kakar, M.D.

Lead Author: Joshua D. Rosenblat, M.D.

Co-Author(s): Michael Berk, Lars V. Kessing, Maj Vinberg, Bernhard T. Baune, Rodrigo B. Mansur, Elisa Brietzke, Benjamin Goldstein, Roger S. McIntyre

SUMMARY:

Background: Inflammation has been implicated in the risk, pathophysiology and progression of mood disorders and as such has become a target of interest in the treatment of bipolar disorder (BD). Therefore, the objective of the current meta-analysis is to determine the overall antidepressant effect of adjunctive anti-inflammatory agents in the treatment of BD. **Methods:** Completed and ongoing clinical trials of anti-inflammatory agents for BD published prior to May 15, 2015, were identified through searching the PubMed, Embase, PsychINFO and clinicaltrials.gov databases. Data from randomized controlled trials (RCTs) assessing the antidepressant effect of adjunctive mechanistically diverse anti-inflammatory agents were pooled to determine standard mean differences (SMDs) compared to standard therapy alone. **Results:** Ten RCTs were identified for qualitative review. Eight RCTs (N=312) assessing adjunctive nonsteroidal anti-inflammatory drugs (N=53), omega-3 polyunsaturated fatty acids (N=140), N-acetylcysteine (N=76) and pioglitazone (N=44) in the treatment of BD met inclusion criteria for quantitative analysis. The overall effect size of adjunctive anti-inflammatories on depressive symptoms was -0.40 (95% CI [-0.14, -0.65], p=0.002), indicative of a moderate and statistically significant antidepressant effect. Heterogeneity of the pooled sample was low [$I^2=14%$, p=0.32]. No manic/hypomanic induction or significant treatment-emergent adverse events were reported. **Conclusion:** Overall, a moderate antidepressant effect was observed for adjunctive anti-inflammatory agents compared to conventional therapy alone in the treatment of BD. The small number of studies, diversity of agents and small sample sizes limited interpretation of the current analysis.

RAPID-FIRE TALKS

OCT 07, 2016

RAPID-FIRE TALKS: FOCUS ON TELEPSYCHIATRY

NO. 1

ASYNCHRONOUS TELEPSYCHIATRY: FEASIBILITY AND SUSTAINABILITY OF VIRTUAL VIDEO-BASED VISITS IN A COLLABORATIVE CARE MODEL OF PRIMARY CARE INTEGRATION

Speaker: Peter Yellowlees, M.D., Ph.D.

Co-Author(s): Michelle Burke Parish, Steven Chan, Alberto Odor, Ana-Maria Iosif, Lorin Scher

EDUCATIONAL OBJECTIVE:

At the conclusion of the session, the participant should be able to: 1) Describe the feasibility and sustainability of synchronous and asynchronous telepsychiatry within a large multisite primary health care system; 2) Explore the technical and clinical integration of this novel telemedicine system used for integrated behavioral and primary medical care; and 3) Discuss baseline characteristics and demonstrate examples of asynchronous telepsychiatry consultations.

SUMMARY:

We are undertaking a five-year randomized controlled clinical trial funded by a \$2.5 million grant from the Agency for Health Care Research and Quality to study whether viewing digitally recorded asynchronous telepsychiatry interviews of patients (English and Spanish speaking) is more cost-effective—and results in better patient outcomes and satisfaction—than in-person telepsychiatry evaluations in primary care. The study also seeks to refine the technical approaches to asynchronous telepsychiatry in a clinical setting, identify which are the most clinically and cost-effective techniques to use, examine patient and provider satisfaction, and determine if particular patient groups benefit more than others. We will present examples of the consultations and baseline characteristics from the first 100 patients enrolled in this two-year study by their primary care providers. Patients in both arms of the study—asynchronous telepsychiatry with time-delayed consultations versus live, synchronous telepsychiatry patient-doctor visits—have similar levels and types of psychiatric disorders. The most common diagnosis is depression. Both treatment types show good patient retention levels. The results demonstrate and prove the efficacy of a new model of mental health practice: asynchronous telepsychiatry.

NO. 2

CREATING AND VALIDATING AN INNOVATIVE LANGUAGE INTERPRETATION PLATFORM FOR

ASYNCHRONOUS TELEPSYCHIATRY VIDEO VISITS AND LIVE IN-PERSON ENCOUNTERS

Speaker: Steven R. Chan, M.D., M.B.A.

Co-Author(s): Shang Wei, M.S., Alberto Odor, M.D., Michelle B. Parish, M.A., Alvaro D. Gonzalez, M.A., Peter M. Yellowlees, M.D., M.B.B.S.

EDUCATIONAL OBJECTIVE:

At the conclusion of the session, the participant should be able to: 1) Describe the advantages and disadvantages of automated speech recognition and machine translation software and contrast this with other interpretation technologies and modalities; 2) Apply speech and translation technologies to telepsychiatry, patient-doctor encounters and patient education materials; 3) Analyze error rates and describe issues stemming from use of speech and translation technologies; and 4) Discuss implications of using such technologies in community psychiatry and mental health services, with respect to cultural and language barriers.

SUMMARY:

Background: Although machine translation (MT) and automatic speech recognition (ASR) technologies have been used for the translation of static health education materials, videoconferencing and translation of face-to-face clinical encounters, they have not previously been clinically validated in the known research literature. The use of such technologies could potentially boost access for limited English proficiency (LEP) patients who are more proficient at speaking a foreign language, thus decreasing language disparities. **Methods:** Our current research in automated speech recognition and machine translation software tests if such technologies are usable by health care providers. Our platform uses multiple commercially-available translation engines, designed to be portable and run on a wide array of hardware. We have created translations of 1) public health materials and patient education literature, 2) publicly-available patient interview videos, and 3) English and Spanish clinician-patient interview videos from our team's asynchronous telepsychiatry study and compared them with translations generated by human interpreters. Error rates of MT and ASR will be compared with transcripts generated by human medical interpreting services. The accuracy will measure particular translation errors following the research of Glenn Flores et al. in medical interpretation: omission, in which the interpreter (human or machine) did not interpret a word/phrase

uttered; addition, in which the interpreter added a word/phrase not uttered by the patient; substitution, in which the interpreter substituted a word/phrase for a different word/phrase; and false fluency, in which the interpreter used an incorrect word/phrase that does not exist in that particular language. Back-translation (also known as round-trip translation, or RTT) will be used for English-speaking patients by translating to Spanish, then back to English, and will then be measured for the aforementioned error rates. Error rates are also computed using automated machine translation evaluation algorithms, including word error rate. The platform interfaces with multiple MT engines— including Microsoft Translator, Google Translate and IBM Watson Translation Service. To effectively use these translation services, we built a platform that can store usage data and abstract the programming interfaces of all MT engines. In addition, this platform accommodates various app clients and end-user devices, including iPhone and Android devices. **Conclusion:** Initial results of our accuracy analyses of speech recognition and translation engines, based on computed error rates and semantic differences, will be discussed. The use of a translation platform as used in a live patient encounter and a recorded asynchronous telepsychiatry encounter will also be demonstrated.

NO. 3

TELEPSYCHIATRY IN THE EMERGENCY DEPARTMENT SETTING: IMPROVING CARE FOR VULNERABLE POPULATIONS IN RURAL COMMUNITIES

Speaker: Sonia Tyutyulkova, M.D.

EDUCATIONAL OBJECTIVE:

At the conclusion of the session, the participant should be able to: 1) Demonstrate understanding of the importance of utilizing technology within an appropriate care delivery framework to improve access to care, quality and overall value; 2) Describe the potential benefits and drawbacks of using telepsychiatry for the assessment of patients in the emergency department; and 3) Gain working knowledge of the essential elements needed to build a successful behavioral health program in the emergency department, utilizing technology as one of its elements.

SUMMARY:

Vidant Health, a nonprofit health system serving 1.4 million people in 29 counties in rural eastern North Carolina, operates 124 inpatient beds across four

locations, seven outpatient clinics and three structured outpatient programs. In 2013, Vidant Health implemented a telepsychiatry service in six out of its eight emergency departments (ED) with the goal to improve access to specialty care and decrease ED length of stay (LOS). The service is provided through a contract with a state-sponsored telepsychiatry program, NC-STeP. The model consists of psychiatric consultation provided via videoconferencing and placement services for patients who need inpatient admission. The program operates 12 hours during daytime hours. One of the regional EDs that does not participate in the telepsychiatry option operates a 24/7 nurse triage service program providing psychiatric nurse assessment and backup by a psychiatrist on call. Analysis of data from the EDs served by the telepsychiatry program revealed disappointing results. The ED LOS has not decreased significantly, admission rates have increased and IVC status has reached 100% in some locations. In comparison, the nurse triage program has achieved a median ED LOS three times lower than the telepsychiatry program. Analysis of the data and experience from the telepsychiatry program revealed a number of issues. Major contributing factors were related to the use of technology within a fragmented care delivery model, supported by a fee-for-service payment structure, and failure to properly assess and meet the needs of the population served in the EDs. The population that presents to the EDs in rural eastern North Carolina has multiple unmet medical, behavioral health and psychosocial needs. Due to problems with access and the absence of a service and support network in the communities, this population utilizes the EDs as their only primary and specialty care provider. Based on the experience from the two ED models that we operate, we expanded the nurse triage model and incorporated videoconferencing in that model within a team, collaborative care framework. We utilized lean methodology for improving the triage process. We incorporated daily huddle discussion of ED cases in the care model. We will describe the results from the lean project and the expansion of the nurse triage model. We will review the specific elements and interventions of the two models of care and compare costs, outcomes and overall value. In conclusion, using technology within a fragmented care delivery model, supported by a fee-for-service payment structure, without giving consideration to population needs and properly assessing and meeting those needs

could exacerbate rather than solve the quality and access issues technology is meant to address.

RAPID-FIRE TALKS: FOCUS ON PSYCHIATRIST WELLNESS

NO. 1

OUR RISING RATE OF PROFESSIONAL BURNOUT AND WHAT TO DO ABOUT IT

Speaker: Steve Moffic, M.D.

EDUCATIONAL OBJECTIVE:

At the conclusion of the session, the participant should be able to: 1) Understand the increasing risk of burnout in their careers; 2) Better identify the characteristics of burnout in themselves and in colleagues; and 3) Learn how to prevent and address burnout for their own well-being, as well as the benefit of patients.

SUMMARY:

On January 1, 2015, to start the New Year, the *Urology Times* featured the article "Urologist Burnout: Exhaustion Jumps, Satisfaction Slumps." It closes with a quote from the author's interview with me: "I would say that burnout is the number one problem affecting physicians and medicine today." That problem surely includes psychiatrists, as well as the other mental health care disciplines, though most of the data is on psychiatrists. On January 13, 2016, Medscape released their 2016 Report of Psychiatry Lifestyle. This year's annual report focused on two important aspects of a physician's personal life that could adversely affect patient care: burnout and bias. Burnout in these annual surveys is defined as loss of enthusiasm for work, feelings of cynicism and a loss of personal accomplishment. Psychiatrists are at the low end of burnout among the specialties, but with a burnout rate at 40% and rising, that is a pyrrhic victory. Psychiatrists reported insurance coverage, challenges to providing quality of care, unsatisfactory income, too many work hours and maintenance of certification as the major contributors to burnout. Psychiatrists admitted to a high rate of bias, and bias that differed from other physicians. These biases were intelligence and language differences. Other patient characteristics that bothered us were chronic pain, drug seeking and smoking. Importantly for the future, about two-thirds of the youngest psychiatrists experienced biases, compared to only a third of those aged 56–65. The *Urology Times* article reported these ripple repercussions of burnout: early retirement, reduced

work hours and medical errors. I certainly experienced them as I retired from clinical care at the age of 66 and felt that the quality of care I provided was being compromised. In using myself as an example, which I will do in this presentation, what I didn't seem to realize was that even though I had an award-winning career, I was experiencing some burnout as well as subclinical PTSD symptoms. Burnout is also associated with such medical diseases as hypertension, which I had also developed. All are now gone. The ICD-10, which was finally adopted in the U.S. on October 1, 2015, includes burnout as a problem affecting health. That should resonate with us. Even though we have expertise in treating emotional problems, we seem to underrecognize them developing in ourselves. What is to be done? This presentation will discuss ways to prevent and address burnout. Those who can help include psychiatric administrators who put our well-being first, loved ones and ourselves in finding satisfying workplaces such as integrated care.

NO. 2

PSYCHIATRISTS DO CRY: ADDRESSING PHYSICIAN GRIEF AND BURNOUT

Speaker: Sheila M. LoboPrabhu, M.D.

Co-Author(s): Robert Garza, M.D., Deborah Lundin, L.C.S.W.

EDUCATIONAL OBJECTIVE:

At the conclusion of the session, the participant should be able to: 1) Describe a framework for use by the clinician for considering existential distress; 2) List the kinds of death that are "powerful deaths" more likely to cause physician grief; 3) Identify how "death talks" are transformative learning experiences for physicians; and 4) Outline seven methods to address physician grief and prevent burnout.

SUMMARY:

Psychiatrists often experience fallibility, anger, loss, frustration, high expectations and limited control when working with anxious, grieving patients and families. If their own deeper grief is not acknowledged and processed at stressful times such as patient death, patient suicide, termination with long-time patients, patient crises and transitions in relationships with colleagues, then psychiatrists can experience anger, detachment, depression and burnout, which may extend beyond work into their personal lives. Emotional exhaustion, low personal accomplishment and depersonalization are the three

major components of physician burnout. In this initiative at a major Department of Veterans Affairs (VA) medical center, senior psychiatrists and suicide prevention coordinators collaborated in an effort to process grief and prevent burnout experienced by VA psychiatrists. Guidance from studies involving physician grief in oncologists and intensive care and palliative care physicians shows that suffering threatens a person's integrity, especially when existential distress is left unaddressed. In this initiative, a framework for considering physicians' existential distress was applied to assist psychiatrists with their grief. Psychiatrists, nurses and suicide prevention coordinators discussed death anxiety, meaning of life, grief from loss of the relationship, feelings of isolation and loss of control related to psychiatrists' reactions in caring for difficult patient populations. Psychiatrists were educated about relational aspects of why certain deaths are difficult, such as feelings of closeness to patients and families, patient transference, when patients die young, death of long-term patients, and unexpected deaths. Veteran deaths meet many of these criteria. Psychiatrists who had engaged in "death talks" with terminally ill or elderly patients were allowed to process their feelings to appreciate transformative learning opportunities. Such encounters comprise complex grief dynamics as well as opportunities for personal insight and growth. Psychiatrists were also encouraged to verbalize their feelings concerning transitions in their relationships with colleagues and peers. Psychiatrists reported feeling comforted, and gradual improvement was noted in parameters like physician retention, burnout and productivity.

RAPID-FIRE TALKS: FOCUS ON NEW MODELS OF INTEGRATED CARE

NO. 1

A PROSPECTIVE COMPARISON OF COLLABORATIVE CARE FOR DEPRESSION AND ACCESS TO COLOCATION FOR DEPRESSED MINORITY PATIENTS

Speaker: Michelle Blackmore, Ph.D.

Co-Author(s): Urvashi Patel, Ph.D., Dana Stein, Kelly Carleton, M.A., Henry Chung, M.D.

EDUCATIONAL OBJECTIVE:

At the conclusion of the session, the participant should be able to: 1) Identify how the integrated collaborative care model (CCM) compares to the colocation model in primary care for depression in a socioeconomically challenged, minority population; 2) Understand the key care management elements

that support CCM compared to standard colocation that are not typically billable in a fee-for-service (FFS) environment; and 3) Identify possible sustainable and scalable features of colocation and CCM when integrating behavioral health into primary care.

SUMMARY:

Background: Integration of behavioral health into primary care settings has been successfully tested through various implementation models. Although research demonstrates effectiveness of colocation and collaborative care models, evidence is limited on whether one model is superior for improving clinical outcomes. As health care reform efforts move to improve model sustainability and scalability, understanding whether one model or another has superior outcomes may help as more primary care practices seek to provide integrated care. Montefiore Medical Center, serving primarily Medicare and Medicaid recipients with significant racial and ethnic diversity, offers colocated behavioral health care access to a psychiatrist and social worker across 19 of its primary care sites as part of "usual care." In February 2015, seven of these sites were chosen to begin implementation of the integrated collaborative care model (CCM) through the Bronx Behavioral Health Integration Program (BHIP). BHIP aimed to enhance care quality through the addition of a care manager to the behavioral health team, allowing enhanced "between-visit" care and case supervision, facilitated by measurement-informed care and technology support that encouraged collaboration with primary care physicians. **Methods:** A prospective, natural experimental design compared depression symptom severity outcomes for Montefiore primary care sites employing usual colocated care (N=12) and sites utilizing CCM (N=7). Depression symptom severity was measured with the Patient Health Questionnaire-9 (PHQ-9). Patients were enrolled in the study if they scored 10 or above on the PHQ-9, indicating moderate to severe depression symptom severity. Eligible patients at both sites had access to short-term, evidence-based behavioral health services and/or medication management. Ten to 16 weeks (mean=12.1) following enrollment, patients were readministered the PHQ-9 by a trained and blinded independent assessor over the phone. **Results:** A total of 156 participants were enrolled (N=82 colocation sites; N=74 CCM sites). Significant within-group reductions in depressive symptoms were observed in the colocation sites (difference,

2.38, $p<0.001$) and the CCM practices (difference, 5.07, $p<0.001$). Furthermore, between-group differences indicated patients at the CCM sites demonstrated a significantly greater reduction in depressive symptoms compared to patients at the colocation sites (difference, -2.70; $p=0.013$). Forty-six percent of CCM patients had a PHQ-9 score under 10 at follow up, compared to 32% of colocation site patients. **Conclusion:** The CCM intervention appears to result in significantly greater reduction in depressive symptoms compared to the colocation model across a range of Montefiore primary care clinics. The CCM may offer a faster reduction in depressive symptoms even when compared to colocation. Replication will be necessary in larger samples to further support these findings.

NO. 2

SUSTAINING COLLABORATIVE BEHAVIORAL HEALTH CARE IN PRIMARY CARE: MODELING CASE-BASED BUNDLED PAYMENT

Speaker: Michelle Blackmore, Ph.D.

Co-Author(s): Urvashi Patel, Ph.D., Dana Stein, Kelly Carleton, M.A., Henry Chung, M.D.

EDUCATIONAL OBJECTIVE:

At the conclusion of the session, the participant should be able to: 1) Identify how the collaborative care (CC) model can link behavioral health services to primary care and improve population health for a severely socioeconomically challenged, minority population; 2) Understand how case-based payment mechanisms can promote sustainability and scalability of CC in primary care across the lifespan for a broad range of behavioral health disorders; and 3) Identify innovative technology support to maximize resources and improve team efficiency in a CC model.

SUMMARY:

Background: Substantial research demonstrates the effectiveness of the collaborative care model (CCM) in integrating behavioral health in primary care practices. However, sustainable, case-based, bundled payment models may be needed to support on- and offsite activities not traditionally billable in a fee-for-service (FFS) environment, helping to accelerate adoption and clinical impact of the CCM. For instance, utilization of patient-centered technology and management of a range of behavioral health disorders across the lifespan may ensure population-based health care demands are better met and resources maximized. Montefiore

Medical Center, serving primarily Medicare and Medicaid recipients with significant racial and ethnic diversity, implemented the Bronx Behavioral Health Integration Program (BHIP). BHIP aims to promote sustainability of CCM through case-based bundled payment, allowing providers to collectively engage in person-centered care with enhanced “between visit” care and case supervision, facilitated by technology support. **Methods:** Behavioral health teams (i.e., consulting psychiatrist, licensed social worker and care manager) were integrated into seven Montefiore primary care sites to provide behavioral health services and work collaboratively with primary care physicians. Eligible BHIP patients met severity criteria for a range of behavioral health conditions, and each site aimed to maintain an active caseload of 150 patients. Once a patient enrolled, each site received initial case-based payments to cover three months of CCM services traditionally billable in an FFS environment (e.g., psychotherapy, medication management) and non-billable services, including between-visit follow up (e.g., psychiatric consultation, behavioral activation). Quarterly maintenance payments were contingent on ongoing patient engagement and progress toward primary outcome metrics. Technology support (e.g., interactive voice response, smartphone applications) maximizes resources and supports non-billable activities. **Results:** A total of 1,770 patients enrolled in BHIP (80% female, 3% pediatric, 79% adult, 18% geriatric), with a 70% engagement rate following initial assessment and 77% receiving at least monthly contact during a three-month average time in treatment. A 50% decrease from baseline scores by week 10 was shown in 44% and 49% of the population on the Patient Health Questionnaire-9 (PHQ-9) and Generalized Anxiety Disorder Screener-7 (GAD-7), respectively. Caseloads exceeded projections in year 1 (total=1,575 patients/year), providing support for the case-based payment model. **Conclusion:** BHIP demonstrates promising results that CCM can improve population health for a range of behavioral health disorders across the lifespan in a socioeconomically challenged, high-cost, high-needs population. Needed elements (e.g., patient engagement, clinical outcomes) support case-based bundled payments, improving sustainability and scalability of CCM.

NO. 3

MENTAL HEALTH CENTER-BASED COLLABORATIVE CARE TO TREAT SERIOUS MENTAL ILLNESS AND

POORLY CONTROLLED DIABETES: A PILOT RANDOMIZED CONTROLLED TRIAL

Speaker: Lydia Chwastiak, M.D., M.P.H.

Co-Author(s): Mina Luongo, Lisa Johnson, Joan Russo, Jessica Lowe, Gail Hoffman, Michael McDonell, Brent Wisse

EDUCATIONAL OBJECTIVE:

At the conclusion of the session, the participant should be able to: 1) Recognize the need for increased accountability of community mental health centers for minimizing cardiovascular risk among clients; 2) Appreciate the feasibility of adapting evidence-based treatments to improve medical outcomes in community mental health settings and implementing them in these settings; and 3) Consider how the core components of collaborative care might be implemented in other community mental health centers to improve medical outcomes.

SUMMARY:

Objective: Individuals with serious mental illness experience significant premature cardiovascular mortality compared to the general population. Evidence-based interventions are needed to decrease cardiovascular risk factors, such as diabetes, among this population. This study demonstrates the feasibility and acceptability of adapting an evidence-based multi-condition collaborative care model for the treatment of diabetes and psychiatric illness and implementing it in mental health center settings. **Methods:** This intervention development study was conducted in two phases. In phase I, an evidence-based collaborative care intervention for diabetes and depression was adapted to treat patients with serious mental illness in mental health center settings. Phase II involved a randomized controlled pilot trial in two community mental health centers in Seattle, WA, which compared this innovative model of care for diabetes and serious mental illness with usual care. The mental health center-based collaborative care intervention included the core elements of collaborative care; was team-based, population-based and person-centered; and provided measurement-based treatment. Team members included care managers (mental health center nurses) and a consulting psychiatrist, psychologist and endocrinologist. The manualized treatment included regular visits with the nurse care manager over a three-month period and weekly team meetings for systematic caseload review. All in-

person visits and team meetings were held at the mental health center. Thirty-five adult community mental health center patients with diabetes and evidence of poor disease control (defined as Hemoglobin A1c>8% or BP>150/90mmHg) participated. **Results:** Eighteen participants were randomized to receive the collaborative care intervention, and 17 received usual care. The mean number of visits was 4.9, and the mean duration of the active treatment was 14.8 weeks. Paired t-tests were used for within group comparisons of primary outcome (change in A1c) and secondary outcomes. Among the intervention participants, mean A1c decreased 1.1% over the three-month study period (95% CI [-2.2, -0.01], p=0.05), which was a statistically significant change. Among the usual care participants, mean change in A1c was -0.4%, which was not statistically significant. **Conclusion:** This pilot randomized controlled trial demonstrated the feasibility and acceptability of adapting an evidence-based depression and diabetes collaborative care intervention for patients with serious mental illness who receive treatment in mental health centers. The evidence-based intervention required substantial adaptation for patients with more complex illness and for a very different clinical setting. The preliminary evidence of effectiveness suggests that this is a promising intervention to improve diabetes care for this vulnerable population.

SPECIAL SESSION

OCT 08, 2016

INTEGRATING BEHAVIORAL HEALTH AND PRIMARY CARE: PRACTICAL SKILLS FOR THE CONSULTING PSYCHIATRIST

Chair: Anna Ratzliff, M.D., Ph.D.

Speakers: Lori E. Raney, M.D., John Kern, M.D.

EDUCATIONAL OBJECTIVE:

At the conclusion of the session, the participant should be able to: 1) Make the case for integrated behavioral health services in primary care, including the evidence for collaborative care; 2) Discuss principles of integrated behavioral health care; 3) Describe the roles for a primary care consulting psychiatrist in an integrated care team; and 4) Apply a primary care-oriented approach to psychiatric consultation for common behavioral health presentations.

SUMMARY:

Psychiatrists are in a unique position to help shape mental health care delivery in the current rapidly evolving health care reform landscape using integrated care approaches in which mental health care is delivered in primary care settings. In this model of care, a team of providers, including the patient's primary care provider, a care manager and a psychiatric consultant, work together to provide evidence-based mental health care. This special training session is designed to introduce the role of a psychiatrist functioning as part of an integrated care team. The first part of the session describes the delivery of mental health care in primary care settings with a focus on the evidence base, guiding principles and practical skills needed to function as a primary care consulting psychiatrist. The second part of the session is devoted to advanced skills. Topics include supporting accountable care and leadership essentials for the integrated care psychiatrist. This special session will focus on providing a combination of didactic material, case discussion and practice exercises.

SAMHSA'S OFFICE OF THE CHIEF MEDICAL OFFICER: HEAR FROM THE NEW SAMHSA CMO

Chairs: Anita Smith Everett, M.D., Kana Enomoto, M.A.

EDUCATIONAL OBJECTIVE:

At the conclusion of the session, the participant should be able to: 1) Identify and improve mental health disparities in; the community; 2) Demonstrate and apply new skills that will be useful; in public psychiatry settings; 3) Examine how the current health care system affects; patient care; 4) Describe how to transform systems of care; and 5) Recognize how to bring new innovations into a; variety of treatments to improve patient care.

SUMMARY:

Come meet APA President-Elect and SAMHSA CMO Anita Everett, M.D., and SAMHSA Director Kana Enomoto in this interactive town hall session. Anita Everett and Kana Enomoto will answer questions about SAMHSA and its current and upcoming projects, what the organization hopes to achieve, and anything you ever wanted to know about SAMHSA and its officers. If you're curious about SAMHSA or the new CMO's plans and goals, this is a session you don't want to miss! Bring questions for discussion during the session.

INTEGRATING BEHAVIORAL HEALTH AND PRIMARY CARE: PRACTICAL SKILLS FOR THE CONSULTING PSYCHIATRIST

Chair: Anna Ratzliff, M.D., Ph.D.

Speakers: Erik R. Vanderlip, M.D., M.P.H., Lori E. Raney, M.D., John Kern, M.D.

EDUCATIONAL OBJECTIVE:

At the conclusion of the session, the participant should be able to: 1) Make the case for integrated behavioral health services in primary care, including the evidence for collaborative care; 2) Discuss principles of integrated behavioral health care; 3) Describe the roles for a primary care consulting psychiatrist in an integrated care team; and 4) Apply a primary care-oriented approach to psychiatric consultation for common behavioral health presentations.

SUMMARY:

Psychiatrists are in a unique position to help shape mental health care delivery in the current rapidly evolving health care reform landscape using integrated care approaches in which mental health care is delivered in primary care settings. In this model of care, a team of providers, including the patient's primary care provider, a care manager and a psychiatric consultant, work together to provide evidence-based mental health care. This special training session is designed to introduce the role of a psychiatrist functioning as part of an integrated care team. The first part of the session describes the delivery of mental health care in primary care settings with a focus on the evidence base, guiding principles and practical skills needed to function as a primary care consulting psychiatrist. The second part of the session is devoted to advanced skills. Topics include supporting accountable care and leadership essentials for the integrated care psychiatrist. This special session will focus on providing a combination of didactic material, case discussion and practice exercises.

SYMPOSIUM

OCT 06, 2016

CARING AT THE BORDERS: DEVELOPING EFFECTIVE STRATEGIES TO HELP REFUGEE AND MIGRANT CHILDREN AND FAMILIES

Chair: Amy Gajaria, M.D.

Discussant: Steve Maffic, M.D.

EDUCATIONAL OBJECTIVE:

At the conclusion of the session, the participant should be able to: 1) Understand the potential mental health needs of refugee and immigrant children and families; 2) Understand various levels of prevention and discuss methods to effectively target refugee care appropriately; 3) Develop strategies for effective program development to meet the needs of refugees with mental health problems; and 4) Consider the role of advocacy in drawing attention to underserved areas of mental health programming.

SUMMARY:

Attention has recently been drawn to a migration crisis facing millions of people from multiple countries, most notably Syria. This has resulted in the movements of thousands of people from their homes to new living situations in Europe and North America. Families have often traveled long distances and faced multiple adversities, including conflict in their home countries, disruption of their lives and traumatic experiences en route. As large numbers of families arrive in high-income countries, there is a need to better understand not only how to treat those who arrive with mental health difficulties, but also how to implement preventative measures to support migrating peoples' internal strengths and resiliencies. Children and adolescents are also affected by migration, either travelling with their families or alone, yet the evidence base specifically targeting their mental health needs is lacking. In addition, there is limited knowledge about how to best support arriving families as a whole. There is a particular need to understand the process of effective program development and prevention to promote healthy child and adolescent development and to understand how general mental health providers can best support children and their families. As the number of arriving families increases, there will be both a need and an opportunity for community mental health professionals to provide culturally competent mental health care to better meet the needs of this underserved and marginalized population. This symposium will bring together speakers from varying perspectives, countries, levels of experience and disciplines to discuss how best to support arriving children and their families. We will include perspectives from those working in general psychiatry and those working in child and adolescent psychiatry and will address how community

psychiatrists might approach care of children and families. We will start with an overview of the stressors and resiliencies migrating children and families face and will present video clips from stakeholders describing the need for improved supports for this population. We will then speak about direct clinical care, with presentations addressing individual care for children and families and the historical development of a county-based “multicultural clinic.” Next, we will discuss systemic ways in which children and families can be better supported, looking at program development from the perspective of a nongovernmental organization and ending with a discussion of how physician advocacy can serve to promote health and well-being in populations not currently served by existing services. The makeup of the symposium is meant to mimic migrating peoples themselves; the presenters as a collective represent the ways in which, crossing the borders of multiple perspectives, strengths and identities can come together to foster innovation and creativity greater than their individual parts.

NO. 1

U.S.-MEXICO BORDER MENTAL HEALTH

Speaker: Gaurav C. Mishra, M.D., M.B.B.S.

SUMMARY:

The Imperial County of California is located 100 miles east of San Diego on the U.S.-Mexico border. The county population is nearly 81% Latino, and 23% live below the poverty line. The population consists of many generations of immigrant families, including first- and second-generation and newly arrived migrant families and individuals. The Hispanic youth in the area appear to have a greater risk for psychosocial stressors such as being separated from parents, exposure to violence, exploitation and abuse during immigration, fear of deportation, lack of medical insurance, change of school, adjusting to a new language and a new set of peers, teasing, and bullying. Studies have shown that migration around the border is related to stressors that could lead to higher incidence of anxiety disorders among Hispanic youth compared to other ethnic groups. We will discuss the preventive and therapeutic services available to the population of the area. Some examples include migrant education programs, in-school group therapy collaborations, case management and therapeutic behavioral services. We will discuss the assistance available to newly arrived migrants as they navigate the local mental health services landscape. The speaker will provide

some case discussions to illustrate the experience of working as a child psychiatrist in this county.

NO. 2

THE EXPERIENCE AND DEVELOPMENT OF MONTGOMERY COUNTY’S “MULTICULTURAL” CLINIC

Speaker: Roger Peele, M.D.

SUMMARY:

Montgomery County, Maryland, has a population of about one million. One-third of the County is foreign-born, but about 80% of the county’s Adult Clinic is foreign-born, coming from about 50 different countries, presenting political and clinical challenges. This presentation will describe the work of the Adult Clinic in serving a diverse patient population at the county level. In addition, it will trace the history of this service provision, highlighting challenges such as the political decision that the clinic could not only serve the foreign-born—as that would be “discriminatory” against native-born patients—and how the clinic has continued to serve a multicultural patient population despite these challenges, as the history of being a “multicultural clinic” has continued to impact who decides to access services. The presentation will highlight lessons learned from many years working with this population and will provide practical tips contributing to success in serving this population, for example highlighting the importance of having translators always be available and meeting the challenge of patients with different cultural understandings of psychosocial approaches.

NO. 3

PSYCHOSOCIAL SUPPORT FOR SYRIANS RESETTLED TO THE U.S.

Speaker: Ashley M. Nemiro, Ph.D.

SUMMARY:

The International Rescue Committee (IRC) responds to the world’s worst humanitarian crises, helping to restore health, safety, education, economic well-being and power to people devastated by conflict and disaster. The IRC is at work in over 40 countries and 26 U.S. cities, and its U.S. programs serve more than 30,000 individuals each year, among them 10,000 newly arrived refugees, including Syrians. Psychological and social distress among Syrian refugees manifests in a wide range of emotional, cognitive, physical and social problems. For many displaced Syrians, feelings of estrangement and loss

of identity are key as many struggle to adapt to new lives. The effects of conflict have profound effects on Syrian refugees' sense of safety and psychosocial well-being. If unaddressed, these effects will color their resettlement experience in the U.S. This presentation will highlight the IRC's response in provision of mental health and psychosocial support services to children and families through exploration of a 2016 pilot project where mental health screening and community adjustment groups were implemented in three resettlement sites. Providing staff with the skills to effectively identify and respond to mental health concerns, fostering opportunities for social support and connections, and liaising with culturally sound professional mental health providers enabled the IRC to provide the best possible support to Syrians who have been forced by conflict to flee their homes.

NO. 4

FAMILIES ON THE BORDERS, PSYCHIATRY ON THE BORDERS: ADDRESSING THE NEEDS OF MIGRANT FAMILIES IN IMMIGRATION DETENTION IN CANADA

Speaker: Michaela Beder, M.D.

SUMMARY:

Migrant children and families are routinely held in immigration detention in Canada. Many of these families are asylum seekers who have already been exposed to significant trauma prior to migration. Despite increasing evidence that children and families experience significant psychological symptoms and distress associated with detention, incarcerated families are provided with no psychiatric or psychosocial care. In this presentation, we will examine the challenge of addressing the mental health needs of detained families and the need for a systemic and advocacy-based approach. Using cases from our original research, we will illustrate the complexity of negotiating our roles as clinicians, researchers and advocates. Further we will draw on international advocacy efforts by physicians to change immigration detention policy, highlighting how—as clinician-advocates—we can help protect children and families from postmigratory trauma.

CONTINUUM OF CARE FOR THE PATIENT IN CRISIS: FROM THE ER TO COMMUNITY

Chairs: Leslie Zun, M.D., Jon S. Berlin, M.D.

EDUCATIONAL OBJECTIVE:

At the conclusion of the session, the participant should be able to: 1) Understand the problems

associated with a lack of integration between services for a patient in crisis from acute to ongoing care; 2) Provide the role of each of the providers in the care of the patient from crisis to return to the community; and 3) Describe the components of optimal integration of care, including treatment plans, communication processes, hand-offs and a comprehensive care plan between services.

SUMMARY:

Patients frequently present to emergency departments for care when they are in crisis and may be transferred to psychiatric emergency services, admitted to an inpatient setting and discharged home with outpatient follow up. The integration of all of these services is essential not only to provide optimal patient care, but also to ensure the proper and most cost-effective use of limited mental health services. However, these services may not include the best means of integration, including treatment plans, communication processes, hand-offs and comprehensive care plans between providers. This symposium will use a case to illustrate both the problems associated with moving the patient through the continuum of care and the means to provide an optimal process for care integration.

NO. 1

THE ROLE OF THE EMERGENCY DEPARTMENT IN PATIENTS IN CRISIS

Speaker: Leslie Zun, M.D.

SUMMARY:

The emergency department is the conduit through which many patients in crisis enter the health care system. The emergency department must not only determine if there is a medical problem causing or exacerbating the patient's presentation, but also determine if the patient needs admission, discharge or outpatient care. They must work in concert with psychiatric services and ensure a smooth and appropriate transition of care for the emergency department to other health care providers.

NO. 2

PSYCHIATRIC EMERGENCY SERVICES AND CRISIS STABILIZATION UNITS

Speaker: Scott Zeller, M.D.

SUMMARY:

Innovative care models are going beyond the traditional dichotomy of inpatient versus community

care to include an intermediate possibility—intensive emergency assessment and treatment in designated crisis programs. These centers can help stabilize psychiatric emergencies in a more timely, focused and appropriate setting than medical ERs and will typically help acute patients avoid hospitalizations in the majority of cases. Not only do psychiatric emergency programs help decompress area medical ERs, by avoiding unnecessary hospitalizations, they save inpatient bed availability for those patients who truly have no alternative. The cost savings of reduced ER utilization and boarding, and cost avoidance of reduced hospitalizations, more than cover the finances of crisis programs and indeed can allow for substantial reclaimed funds to be redirected to community treatment. With a multitude of designs unique to each municipality or region's size, population needs and patient demands, quality psychiatric stabilization programs are becoming an essential part of integration of care for the patient in crisis. This presentation will discuss the fundamentals of crisis care centers, including the Six Goals; will describe successful programs from around the U.S.; and will offer insights into how the attendees might create de novo crisis centers in their own communities.

**NO. 3
CLINICAL CARE IN ACUTE INPATIENT SETTINGS:
PROVIDING COMPREHENSIVE PSYCHIATRIC
SERVICES IN AN ERA OF DIMINISHING RESOURCES**

Speaker: Wendol A. Williams, M.D.

SUMMARY:

Psychiatric emergencies usually present as a myriad of problems. Altered mental status can result from intrinsic and comorbid illness, lack of outpatient support, medication noncompliance, and marginal social supports. Societal pressures on patients and their families have mounted annually, compounded by scarce resources on a backdrop of job losses and protracted financial strife in the macroeconomy. These economic and social deprivations manifest broadly as worsening poverty and the ill effects of under-resourced mental health services. Contemporary practitioners are asked to do more without stable ancillary services and social networks. Thus, patients who are acutely decompensated may present as isolated and withdrawn, or agitated and aggressive, being very poorly observant of traditional institutional boundaries and constraints. In other words, clinically decompensated patients who lack sufficient social supports are prone to be

more aggressive and are harder to manage under traditional hospital care models. We argue that the process of evaluating and triaging patients into acute care settings needs to be restructured. A broader conceptualization encompassing acute inpatient clinical stabilization and highly integrated social supports is needed. Without close coordination of outpatient and social support networks, management of patients from the ED to inpatient units is bound to fail, leading to high rates of recidivism and poorer clinical outcomes.

**NO. 4
INTEGRATION OF CARE FOR THE PATIENT IN CRISIS:
FROM THE ER TO THE COMMUNITY**

Speaker: Jon S. Berlin, M.D.

SUMMARY:

The value of integrated care has long been appreciated in the hospital setting. It is now being recognized in the traditional office setting, and some demonstration projects have been started in the Program for Assertive Community Treatment setting. Less common is a discussion of integrated care in the emergency setting. Emergency departments and psychiatric emergency services (EDs and PES) flourish when they work together and struggle when they don't. We propose that integration take place at every point along the continuum. EDs have been called "a room with a view." As safety net services, EDs and PES are gathering places of patients who fell through a crack in the health care system. As such, these emergency services are ideal for identifying gaps that need filling. In an era of ED and PES crowding, patient volumes can serve as a quality improvement metric for health care system reform: the volume of referrals should go down as system gaps are repaired. The patients who best identify the gaps in the system are the ones with the most severe problems. They often languish in the ED and hospital setting. They access multiple points on the treatment continuum and do best when the continuum is integrated vertically and horizontally. From a psychiatric perspective, they are prone to psychic fragmentation. Unfortunately, the fragmentation of the system mirrors this pathology. System reform should grow organically when addressing the most serious cases.

**NO. 5
INTEGRATION OF CARE FOR THE PATIENT IN CRISIS:
FROM THE ER TO THE COMMUNITY**

Speaker: Deepika Sastry, M.D., M.B.A.

SUMMARY:

Once a patient in crisis has been stabilized in the emergency and/or inpatient setting, they require more than referral to an outpatient clinic for medication management, therapy and medical care to foster continuity. For patients with severe mental illness in particular, connection to community-based supports can improve prognosis. These include peer supports, local support groups (sponsored by their CMHC, VA facility, etc.), AA/NA meetings, local National Alliance on Mental Illness chapters and reintegration programs for patients emerging from the penal system, to name a few. Psychosocial services are critical to helping these patients not only stabilize following a crisis but also maintain that equilibrium by linking with and utilizing community resources that foster strong relationships and promote recovery.

NO. 6**PARTNERING ACROSS SPECIALTIES: SUPPORTING OUTPATIENT PRIMARY CARE AND SPECIALTY SETTINGS**

Speaker: John S. Rozel, M.D.

SUMMARY:

Psychiatrist-staffed psychiatric emergency services and psychiatrist-led follow-up for patients may be the gold standard, but often may be the exception rather than the rule. Whether they choose to or not, other medical professionals, including primary care providers and specialists, are often the first to identify and attempt to manage crises in their patients. Additionally, in many regions, access to psychiatric follow-up is a rarefied commodity; primary care providers are left with difficult choices in supporting and managing patients discharged from acute psychiatric settings when they are the only follow-up available. This presentation will address how various models of integrated and embedded behavioral health care may support providers dealing with patients in crisis. The role of partnerships between behavioral and physical health providers, including emergency and crisis services, will be explored through a series of cases of people intersecting various elements of each system.

IMPACT AND BEYOND: BEHAVIORAL HEALTH TELECONSULTATION HUBS (BH-TECHS)

Chair: Ricardo Mendoza, M.D.

EDUCATIONAL OBJECTIVE:

At the conclusion of the session, the participant should be able to: 1) List the various approaches utilized to provide indirect psychiatric consultation; 2) Describe the barriers that must be overcome when exchanging protected health information (PHI) between different electronic health record systems; 3) Describe the nature of the outcomes achieved in overall health status when efforts are made to integrate primary care, mental health and substance use; 4) Have familiarity with how to apply an IMPACT-based model of integration in a large health system; and 5) Be familiar with how a virtual behavioral health team works, including things like technology, process and gathering support from PCPs.

SUMMARY:

While there are varying degrees of integration of health and mental health care, the research literature over the last two decades consistently demonstrates the benefits of care collaboration. When primary care physicians, substance use disorder specialists and mental health professionals communicate about shared patients who suffer comorbid conditions, improvements in overall health status are achieved. The IMPACT model is perhaps the most widely studied and represents a true evidence-based model for care collaboration. The Affordable Care Act has brought about mental health parity and a large increase in the number of uninsured. This previously uninsured population is a lower socioeconomic status group and is characterized by multiple comorbidities. Given the shortage of psychiatric specialists, especially in rural areas of the country, the need for effective and efficient care collaboration to better serve this population has never been greater. This symposium will highlight how concentrating the mental health workforce that is skilled in telepsychiatry and interested in all forms of consultation with primary care into a behavioral health teleconsultation hub (BH-TeCH) can be successfully used to fill the collaborative care resource gaps and spur innovation. The original literature supporting the positive outcomes of the IMPACT model, in addition to other collaborative care models, will be reviewed. Four case studies from BH-TeCHs across the nation will be discussed in order to show how telepsychiatry has extended the reach of collaborative care and allowed the field to move beyond the traditional IMPACT model. These case studies include both rural and urban populations and focus on both children and adults. Lessons learned

with respect to issues such as overcoming barriers to providing “virtual” collaborative care, scaling for large organizations and solutions for transmission of PHI when different electronic health record systems are utilized will be reviewed.

**NO. 1
TELEPSYCHIATRY COLLABORATIVE CARE FOR SMALL
RURAL PRIMARY CARE PRACTICES**

Speaker: John Fortney, Ph.D.

SUMMARY:

This presentation will begin by describing the traditional collaborative care model, along with the findings from the original trials conducted by Dr. Wayne Katon, the IMPACT Trial and Cochrane review of 79 collaborative care trials. Next, the telepsychiatry collaborative care model will be described, which was specifically designed to support small rural primary care practices without onsite mental health staff. Next, the results of three randomized controlled trials of telepsychiatry collaborative care conducted in safety net primary care settings will be reported. Finally, practical issues associated with implementing the telepsychiatry collaborative care model will be described within the context of an ongoing large pragmatic comparative effectiveness trial.

**NO. 2
STATEWIDE CHILD PSYCHIATRY
TELECONSULTATION SYSTEM AS PUBLIC MENTAL
HEALTH INFRASTRUCTURE: THE MA CHILD
PSYCHIATRY ACCESS PROJECT**

Speaker: Barry Sarvet, M.D.

SUMMARY:

In 2004, the MA Child Psychiatry Access Project was launched for the purpose of improving the ability of pediatric primary care providers to address the mental health needs of children and adolescents. The program operates six regionally distributed teams tasked with developing and maintaining collaborative relationships with primary care practices within a catchment area by providing core services of telephone consultation, direct patient evaluation, and care coordination. The child psychiatry access program (CPAP) model has been replicated at various levels of funding in 28 states and has emerged as a leading model for improving access to mental health care for children and promoting the integration of child psychiatry in primary care. This presentation will include an

overview of the CPAP model, a summary of data describing the performance of the program, and a discussion of the strengths and weaknesses of the model.

**NO. 3
USING TECHNOLOGY TO SCALE INTEGRATION: A
REAL-WORLD CASE**

Speaker: John Santopietro, M.D.

SUMMARY:

Three years ago, Carolinas Health Care System reached out to Dr. Lori Raney and her team to help solve a problem—how to scale integration of behavioral health into 200 primary care clinics. After some head scratching, a good dose of innovation and a great deal of hard operational work, we are able to tell a good and interesting story. Our “virtual” behavioral health integration team has now treated over five thousand patients, and the first look at data shows excellent outcomes for both mental health and physical health measures and looks good for population health and utilization as well.

**NO. 4
THE PROCESS AND CHALLENGES OF CREATING AN
ACADEMIC-BASED TELEPSYCHIATRY
CONSULTATION HUB AMONG DISPARATE PRIMARY
CARE NETWORKS IN SOUTHERN LOUISIANA**

Speaker: John H. Wells II, M.D.

SUMMARY:

Louisiana State University Health Sciences Center Department of Psychiatry has been developing a telepsychiatry consultation hub to serve geographically remote and otherwise isolated federally qualified health care centers and rural primary clinics in the southern coastal parishes of Louisiana. The clinics are spread across a variety of operators and cultural settings, and in most cases had no prior exposure to either collaborative psychiatric consultation or telemedicine in general; thus, in the initial phases of developing the services, outreach, education and surveys of the current situation were tantamount. As the program developed, strategies were developed to meet various challenges, including lack of interoperability of electronic health records and scheduling systems, non-communicating data and bandwidth providers, local space and personnel shortages, and providers unsure of the value of collaboration in light of their past experiences with academic “carpetbaggers.” In

this presentation, the flexible nature of the program is described, as well as the solutions to the challenges on the ground.

NO. 5
URBAN TELEPSYCHIATRY: THE LA COUNTY
DEPARTMENT OF MENTAL HEALTH
TELECONSULTATION HUB

Speaker: Ricardo Mendoza, M.D.

SUMMARY:

The Los Angeles County Department of Mental Health (LAC DMH) has fully embraced tele-based solutions to overcome resource gaps in care delivery and for purposes of integrating with primary care. A DMH teleconsultation hub (TeleHub) was created and its psychiatric staff engaged in traditional video teleconferencing to ambulatory mental health clinics, onsite indirect consultation to collocated staff at large LAC Department of Health Services (DHS) clinics and electronic consultation to primary care providers. The LAC DMH and DHS organizations utilize two different electronic health record (EHR) systems. For efficient transmission of protected health information (PHI) to occur, issues related to interoperability needed to be quickly overcome. Use case scenarios to allow for the transmittal of continuity of care documents (CCDs) and procedures to avoid data breaches and, most importantly, to allow for prompt referrals for specialty mental health when warranted were developed. Health information exchange efforts have been enhanced through the use of the ONC Direct Trust Project and direct messaging through health information service provider (HISP) accounts. The TeleHub's role and function have evolved to include new tele-project development (e.g., mental health service delivery to LAC's mobility challenged elderly in the comfort of their own homes, a new focus on cultural competency through linguistic matching and a greater emphasis on electronic consultation).

TELEPSYCHIATRY NITTY GRITTY

Chair: John H. Wells II, M.D.

Discussant: Peter Yellowlees, M.D., Ph.D.

EDUCATIONAL OBJECTIVE:

At the conclusion of the session, the participant should be able to: 1) Discuss the major regulatory and legal issues affecting the practice of telepsychiatry, from national to local views; 2) Understand ramifications on telepsychiatry that follow from the Ryan Haight Act and other rules at

the state and national levels concerning prescribing, including the use of electronic prescribing; 3) Compare telepsychiatry to traditional face-to-face visits from a board certification and licensing perspective; 4) Survey various options available from third-party vendors for managing scheduling, billing, EMR integration and clinical encounter flow; and 5) Examine the growing list of use cases for mobile apps and discuss the future of telepsychiatry.

SUMMARY:

As telepsychiatry becomes more widely accepted as a tool for strengthening clinical practice, it becomes more imperative for clinicians to be versed in the best and safest practices. This symposium includes discussions of the core issues, the boundaries of safe practice and the burgeoning frontiers of telepsychiatry. Our panel will take an in-depth look at the current regulatory climate and review specifics of how legislative, judicial, executive and enforcement perceptions and interpretations of telemedicine rules and laws are affecting current clinical practice. We review a gamut of primary sources from DEA enforcement to court proceedings, from the Ryan Haight Act to electronic prescribing rules. We will also survey available telemedicine resources for clinical practitioners, including third-party applications available for outpatient monitoring and education, scheduling, billing, and other cloud-based services.

NO. 1
PRESCRIBING RULES

Speaker: Jay H. Shore, M.D., M.P.H.

SUMMARY:

In this presentation, we focus on the rules around prescribing in telepsychiatry. We will review the Ryan Haight Act, enforcements by the DEA and selected legal cases. In addition, we will look at best practices, licensure and electronic prescribing.

NO. 2
LEGAL AND REGULATORY ISSUES IN
TELEPSYCHIATRY

Speaker: John H. Wells II, M.D.

SUMMARY:

In this presentation, we will review the current legislative initiatives that affect the practice of telepsychiatry, including privacy issues. We will also examine portability of licensure and survey state

board rules on the use of telepsychiatry in various settings.

NO. 3

THIRD-PARTY SOLUTIONS IN TELEPSYCHIATRY

Speaker: Peter Yellowlees, M.D., Ph.D.

SUMMARY:

In this presentation, we survey the bewildering array of services available to a practitioner integrating telemedicine into their psychiatric practice. We review trends moving toward a decentralization of mental health services, allowing home-based and mobile application-based services. We also look at practice management solutions such as billing, EMR integration, scheduling, connectivity and workflow support.

ISN'T IT TIME TO CHANGE USUAL CARE TO MEASUREMENT-BASED CARE?

Chair: Glenda L. Wrenn, M.D.

EDUCATIONAL OBJECTIVE:

At the conclusion of the session, the participant should be able to: 1) Discuss the empirical support for measurement-based care (MBC); 2) Provide examples of implementation of MBC and clinical impact on outcomes; and 3) Understand the policy implications of recent initiatives designed to promote adoption of MBC.

SUMMARY:

Measurement-based care (MBC) refers to the systematic administration of symptom rating scales and using the results to drive clinical decision making at the level of the individual patient. The feasibility of MBC adoption has been demonstrated in several large-scale pragmatic trials and clinical demonstration projects, but adoption in usual care has lagged. Recently, providers, advocates, policymakers, payers and regulators have sought consensus around adoption of MBC, which raises the importance of ensuring that psychiatrists remain informed and on the leading edge of this shift in what is accepted for "usual care." As not all stakeholders agree on the value of MBC, this symposium will address the key questions and engage the audience in dialogue. The presenters in this symposium have reviewed the evidence for MBC and have extensive experience in research, policy, clinical practice and payment models. We will present evidence to support the feasibility of adoption of MBC in primary care and mental health

care settings and discuss opportunities for transforming usual care, including system transformation supports (e.g., existing integrated care training that facilitates MBC) and policy changes (e.g., ACA, MACRA) that will influence adoption. There are numerous brief structured symptom rating scales that have strong psychometric properties. Randomized controlled trials of interventions with timely feedback of patient-reported symptoms to the provider as part of medication management and psychotherapy consistently reported better outcomes when compared to usual care. Presenters will also summarize evidence for ineffective approaches, including one-time screening, assessing symptoms infrequently and providing feedback to providers outside the context of the clinical encounter. **Conclusion:** In addition to the primary gains of measurement-based patient care for individual patients, aggregated patient data creates additional opportunities for provider/clinic quality improvement, demonstrating value to payers, promoting population health and ultimately achieving health equity. The barriers to adopting MBC are worthy of a concerted effort to engage: its time has come.

NO. 1

WHAT'S GOING ON WITH MEASUREMENT-BASED CARE?

Speaker: Glenda L. Wrenn, M.D.

NO. 2

THE EVIDENCE BASE FOR MEASUREMENT-BASED CARE

Speaker: John Fortney, Ph.D.

NO. 3

MEASURING COLLABORATIVE CARE

Speaker: Lori E. Raney, M.D.

SUMMARY:

Lori Raney will discuss using measurement-based care in a collaborative care model.

TRANSITION OUT OF FOSTER CARE: MENTAL HEALTH NEEDS OF A HIGH-RISK POPULATION

Chair: Megan E. Baker, M.D.

Discussant: Christopher Bellonci, M.D.

EDUCATIONAL OBJECTIVE:

At the conclusion of the session, the participant should be able to: 1) Describe characteristics of transition-age foster youth, challenges these youth

face when transitioning to independence and outcomes seen in observational studies; 2) List recent initiatives at SAMHSA that support transition-age youth (TAY) and foster youth; 3) Identify sources for national guidelines on health care for foster youth and ways to implement these in a variety of practice settings where foster youth and TAY are treated; 4) Understand how a program developed to serve TAY differs from traditional adult mental health services; and 5) Appreciate perspectives offered by former foster youth.

SUMMARY:

Foster youth have emerged in past decades as a distinct population in children’s mental health. Additionally, a new developmental stage is being recognized in health care services, often referred to as “transitional-age youth,” ranging from ages 16–25. Each year, approximately 23,000 children “age out” of the foster care system or turn eighteen without having achieved permanency. Many of these young people lack access to a personal support network as they face the challenges of adulthood. Not surprisingly, youth who “age out” are more likely to experience various poor social outcomes, including food, housing and income insecurity; incarceration; unemployment; homelessness; poor educational attainment; and pregnancy. Current and former foster youth are more likely to have mental health issues, including mood disorders, PTSD and substance use disorders. Limited research to date has specifically examined mental health treatment in young people transitioning out of foster care. Recent legislation has extended Medicaid coverage nationally for youth aging out of foster care until age 26, which may increase their utilization of mental health services. Mental health providers, including psychiatrists, are in a unique position to support foster youth in transition to adulthood and mitigate some of the poor outcomes these youth experience. Public mental health systems in place vary by state and county and should offer developmentally appropriate services to young people. The purpose of this symposium is to present a clinically relevant overview of transition-age foster youth and what is known about their mental health needs, including the impact of trauma and ongoing adolescent brain development. Presenters are working with Foster Care Alumni of America to incorporate a consumer advocate voice and will invite local former foster youth with personal experience utilizing mental health services to share their perspective. A public health advisor from SAMHSA will outline current

initiatives and provide perspective on his personal experience as a transitioning foster youth. The presentation will emphasize implementation of recent national guidelines in clinical practice and describe service delivery in one targeted TAY clinic—Young Adult Services (YAS). We will conclude with comments on the recent debate about high rates of prescriptions psychotropic medications in child welfare populations and how this may impact TAY.

NO. 1

INTRODUCTION TO TRANSITION-AGE FOSTER YOUTH: OVERVIEW OF TRAUMA, OUTCOMES AND ADOLESCENT NEURODEVELOPMENT

Speaker: Megan E. Baker, M.D.

SUMMARY:

This presentation will review unique characteristics of foster youth that are important for psychiatrists to understand when working with transition-age foster youth. Foster youth experience trauma at higher rates than the general population. Experiencing trauma at a young age or having ongoing exposure at different ages may impact youth development and predispose youth to mental health issues. Due to trauma and other vulnerabilities of this population, the few studies that have examined long-term outcomes of youth who emancipate from foster care reveal dismal outcomes, including low educational attainment, unemployment, and frequent homelessness and incarceration. Psychosocial ramifications of adolescent development extend far beyond the teenage years. Adolescence is a time of rapid growth and development both psychosocially (e.g., issues related to the development of identity, intimate relationships, sexuality and future career goals) and biologically. Recent research has increased our understanding of ongoing brain development into the mid-20s, including maturation of areas related to impulse control, affect regulation and decision making, and how this may impact behavior. Maximizing benefit from mental health treatment of transition-age youth requires a developmentally informed perspective.

NO. 2

IMPROVING MENTAL WELL-BEING FOR YOUTH IN FOSTER CARE

Speaker: Eric Lulow, B.S.W.

SUMMARY:

A real-life example of what growing up in the child welfare system is like is necessary to understand best practices in addressing the needs of young people in care. Youth who come in contact with the child welfare system are often exposed to several adverse life experiences that can have lasting negative impacts on their overall well-being. This presentation will provide the audience with personal and statistical experiences of young people in care and offer some promising practices from the field on how systems can best support the social and emotional well-being of youth in care. In addition, the presenter will discuss the activities of the Healthy Transitions cooperative agreement program under the President's Now Is the Time Initiative, which focuses on young people of transition age.

**NO. 3
PUTTING MENTAL HEALTH GUIDELINES INTO
ACTION FOR TRANSITION-AGE YOUTH**

Speaker: Lisa Hunter Romanelli, Ph.D.

SUMMARY:

In the past decade, several guidelines focusing on addressing mental health in the child welfare population generally, and transition-age youth specifically, have been published. These include *Best Practices for Mental Health in Child Welfare* (2009), the American Academy of Pediatrics *Policy Statement on Youth Aging out of Foster Care* (2012), and the American Academy of Child and Adolescent Psychiatry *Practice Parameter for the Assessment and Management of Youth Involved With the Child Welfare System* (2015). Although guidelines are an important first step in heightening awareness of the mental health needs of transition-age youth, their existence alone does not lead to behavior change among practitioners. This presentation will summarize the key mental health guidelines for transition-age youth and discuss strategies for translating guidelines into practice changes that will benefit youth.

**NO. 4
DEVELOPMENTALLY INFORMED TREATMENT OF
TRANSITION-AGE YOUTH IN CONNECTICUT'S
PUBLIC MENTAL HEALTH SYSTEM**

Speaker: Timothy C. Van Deusen, M.D.

SUMMARY:

Our knowledge about the biopsychosocial development of children and adolescents emerges from studies of children who have grown up in

family environments, not of children spending part of their formative years in child welfare and/or who have "aged out" of that system. A history of foster care is associated with increased risk of psychiatric disorders and treatment among homeless young adults. When these children suffer from persistent mental illness at age 18, they may have difficulty finding services that provide support in their transition to adulthood. In addition, adolescence and the early 20s is a time in which the primary mental illnesses, including mood, anxiety and psychotic disorders, first become apparent to individuals. Repeat visits to emergency departments among transition-age youth (TAY) with psychiatric diagnoses may indicate limited access to or lack of high-quality care. To address this gap in services, the State of Connecticut's Department of Mental Health and Addiction Services (DMHAS) created the Young Adult Services (YAS) based in five regions throughout the state. This presentation will describe service delivery of the YAS located at the West Haven Mental Health Clinic, including engagement and treatment of TAY that is developmentally informed, uses a multidisciplinary approach and involves multiple systems of care. We will review the implementation of this approach in our community mental health clinic and lessons learned.

OCT 07, 2016

**MEGA-TRANSFORMATION IN THE PUBLIC SECTOR:
FAST ENOUGH FOR YOU?**

Chairs: Hunter L. McQuiston, M.D., Charles T. Barron, M.D.

Discussants: Joseph Parks, M.D., Kenneth Minkoff, M.D.

EDUCATIONAL OBJECTIVE:

At the conclusion of the session, the participant should be able to: 1) Appreciate how key health policy initiatives, driven by clinical, fiscal and social forces, cascade from state to local levels; 2) Understand the effect of transformation policies on public sector service provision, with a focus on adaptation; and 3) Be able to apply lessons learned from NYC's transformation to similar efforts in other communities and service environments, especially regarding process, quality, workforce and public health.

SUMMARY:

The Affordable Care Act's implied service principles and explicit fiscal incentives, amplified by major

state-level Medicaid reforms affecting services for people with psychiatric disorders, have offered unprecedented challenges in recasting the nature of behavioral health care. States have differentially responded to these challenges, and behavioral health providers have, in turn, needed to realign services to capture reimbursement while also striving to advance public health principles and deliver quality care. This symposium offers the response of one state, New York, to shifts in national Medicaid policy, including how a large public hospital system within that state has sought to quickly meet these challenges, while comparing itself to similar efforts in other locales. Presenters will describe the strategy and execution of statewide policy regarding service delivery. This will be followed with a qualitative and quantitative analysis of how a public hospital system has sought to very rapidly transform its services and how that project has affected programming and day-to-day clinical practice. Contextualizing this are descriptions of similar initiatives nationally, first on a state level (Missouri's) and second using case examples, with exposition and reflection on transformation efforts in local systems of care across the country.

NO. 1
NEW YORK STATE AND THE TRIPLE AIM IN MENTAL HEALTH

Speaker: Ann M. Sullivan, M.D.

SUMMARY:

New York State began a major redesign of its Medicaid program in 2011 in response to unsustainable growth in Medicaid costs and key federal initiatives. With the ongoing implementation of the Affordable Care Act and its emphasis on redesigning the health care system to meet the goals of the triple aim of a healthy population, improved patient care and lower overall health care costs, New York State has adopted an innovative comprehensive plan for treating mental illness that incorporates comprehensive recovery and clinical best practices, including a focus on prevention and cost efficiencies that enable a sustainable care system. This presentation will describe the evolution of these changes, the challenges faced, and some of the successes and problems to date. An emphasis will be placed on two key components of the Medicaid redesign: 1) The comprehensive benefit for the seriously mentally ill, the Health and Recovery Plan (HARP), and 2) The integration of health and behavioral health throughout the mainstream and

HARP benefit. How these initiatives intersect with the redesign of the New York State Mental Hospital System and the newest Medicaid initiative, the NYS Delivery System Reform Incentive Payment Program (DSRIP), will be highlighted.

NO. 2
NEW YORK CITY: MEGA-TRANSFORMATION IN THE PUBLIC SECTOR

Speaker: Charles T. Barron, M.D.

SUMMARY:

This presentation discusses how transformation from a fee for service delivery system to a managed care system is being accomplished by a large public health care system. NYC Health+Hospitals is the largest health care delivery system in the United States. Behavioral health represents approximately 45% of the care delivery in the system and a majority of behavioral health care in New York City. The transformation of services in this system required a reconciliation of service needs, quality care and financial stability. The goal and focus is on transforming the care delivery system from an acute care focus to an ambulatory care focus that is patient-centered, recovery-oriented care. An emphasis on the integration of behavioral health and primary care is a primary goal. The initial focus was on the reduction in acute care utilization for inpatient and emergency services. Initial system-wide projects focused on reduction in the length of stay and readmission rates, increased ambulatory behavioral health access and engagement in treatment, high utilizers of acute care services, and integration of behavioral health and primary care services. These areas included utilization of care management services, peer services to enhance engagement and retention, enhancement of co-occurring mental health and substance use services, and development of additional community-based service capability.

NO. 3
PROGRAMS AND PRACTICE: MEGA-TRANSFORMATION ON THE GROUND

Speaker: Hunter L. McQuiston, M.D.

SUMMARY:

This presentation discusses how behavioral health transformation has manifested itself on clinical programming and practice levels. Systems transformation seeks to reconcile two issues often in tension within the public sector: financial stability

and quality care, the latter now with the dimension of recovery orientation. As a result, rapid behavioral health transformation at NYC Health+Hospitals has led to attempts to reduce costly psychiatric inpatient utilization. It has also focused on accessible and efficient outpatient services that must be proactive in programming, engage hard-to-reach patients, achieve highly coordinated person-centered care and have capacity for rapid service availability. These demands are driven as much by fiscal realities as humanitarian need. Gouverneur Health, a federally qualified health center and community mental health center, has been one of Health+Hospitals' transformation pilot facilities. Its Department of Behavioral Health initiated pilots to identify and triage high service utilizers, introduce peer counselors, institute a track in co-occurring mental illness and chemical misuse, and identify and advance primary care-behavioral health collaboration. The process and outcomes of these modernizing and recovery-oriented pilots are described, highlighting real-world challenges in resource utilization, staff deployment and leadership in effecting change.

NO. 4
MISSOURI TRANSFORMATION: IMPLEMENTING INTEGRATION USING POPULATION HEALTH MANAGEMENT

Speaker: Joseph Parks, M.D.

SUMMARY:

This presentation describes how Missouri implemented bidirectional primary care and behavioral health integration statewide in all of Missouri's community mental health centers (CMHCs) in almost all of its federally qualified health centers (FQHCs). Key to integration was implementing population health management for persons with serious mental illnesses and/or multiple chronic medical conditions who are high utilizers of services. Both CMHCs and FQHCs implemented centralized statewide disease registries and care coordination IT platforms that include near real-time notification of hospital admission and ER visits. Both CMHCs and FQHCs are responsible for both general medical and behavioral health performance metrics. These providers have evolved from one patient at a time complaint-driven care to using data analytics to identify care gaps in high-risk patients. This has resulted in lower hospital and emergency room utilization; improvements in blood pressure, lipid and glucose control; and

substantial cost savings. The CMHCs and FQHCs have become more sophisticated in data-driven management and strategic planning and partnership with their statewide associations.

NO. 5
TRANSFORMATION'S RANGE, BREADTH AND ESSENTIAL INGREDIENTS

Speaker: Kenneth Minkoff, M.D.

SUMMARY:

The prior discussions reflecting transformational processes in New York and Missouri are representative of similar efforts going on nationally at state, local and provider levels. This presentation summarizes some of the major themes of how transformation takes place: value-based/customer-oriented services (in line with the triple aim); universal capability to deliver integrated care based on the expectation of complexity; leveraging all resources to support success at all levels; and engaging all processes, programs and persons providing help in a collective continuous quality improvement approach to have all components take their own unique steps to achieve the common vision of designing a system within limited resources to be about the needs and hopes of the customers and engage the values and energy of the service providers at the same time. These themes are reviewed, and common system processes illustrated, then applied in a descriptive manner to the previous discussions, along with examples of how transformation is unfolding in other systems, such as in Texas, Tennessee and California. Dr. Minkoff brings perspective to this discussion by using his experience in providing transformational consultation for large systems serving complex populations all over the U.S., Canada and abroad, including specific experiences working with NYC Health+Hospitals and other service sectors within New York State.

CHALLENGES AND OPPORTUNITIES IN IMPLEMENTING COLLABORATIVE MENTAL HEALTH CARE IN LOW- AND MIDDLE-INCOME COUNTRIES

Chair: Bibhav Acharya, M.D.

Discussant: Jürgen Unützer, M.D.

EDUCATIONAL OBJECTIVE:

At the conclusion of the session, the participant should be able to: 1) List two pieces of key data that highlight the unmet needs of patients with mental health illness globally; 2) Describe four core

components of collaborative mental health care; 3) List challenges in adapting collaborative care models in low- and middle-income countries (LMICs); and 4) Describe strategies to address common challenges in successful adaptation of collaborative care models in LMICs.

SUMMARY:

Worldwide, mental illness is the largest contributor to disability-adjusted life years (DALYs) from chronic illnesses, but in low- and middle-income countries (LMICs), there is only one psychiatrist per over two million people. Collaborative care (CC) models utilize task-sharing with primary care providers (PCPs) and behavioral health professionals (BHPs) and have been shown to improve mental and physical health outcomes in populations that may not have a direct access to mental health specialists like psychiatrists and psychologists. These models have four key components: 1) Team-based management; 2) Evidence-based practice; 3) Measurement-driven care; and 4) Population-based services. Given the evidence that CC can expand access to high quality, evidence-based mental health care, this model has the potential to address the large burden of mental illness globally. However, little is known about the challenges in adapting these models in LMICs. This symposium will present a case-based illustration of strategies to address several unique challenges in low-resource settings: lack of formal mental health training in health professional schools, leading to PCPs with little to no background in mental health; poor retention of staff in rural sites, leading to high turnover of staff who may have received mental health training on the job; lack of reliable medical records, leading to difficulty in chart review and registry development; lack of scheduled patient visits, leading to patients being seen by a different PCP during follow-up visits; poor follow-up systems for patients, leading to difficulty in longitudinal tracking; unreliable telecommunications technology, leading to challenges in connecting with offsite consultants; and lack of BHPs, leading to staffing gaps for care coordinators. By describing experiences in India, Nepal and China, the speakers will present the challenges they have faced and the strategies they used to address these challenges.

NO. 1

WHO WILL WE COLLABORATE WITH IN CHINA? AN EDUCATION INTERVENTION TO DEVELOP A PRIMARY CARE WORKFORCE CAPABLE OF TREATING MENTAL HEALTH DISORDERS

Speaker: Robert M. Rohrbaugh, M.D.

SUMMARY:

This presentation will discuss the development of an education intervention to provide postgraduate medical education in primary care for associate degree physicians (ADPs) in China. China has relied on village doctors who are trained largely through apprenticeships with other village doctors. Accordingly, the professional skills of these doctors to manage common medical problems, including mental disorders, vary considerably. China provides differing levels of formal professional physician training; those trained as ADPs receive two to three years of education, often through distance learning techniques. As such, ADPs have little opportunity to practice clinical skills during medical school, do no postgraduate training and usually work in rural hospital settings. This presentation will describe a standardized two-year postgraduate clinical residency program for ADPs at the Xiangya School of Medicine in Changsha, PRC, that includes training to diagnose and treat mental disorders. With this training, the ADPs will have standardized education on the assessment and treatment of common mental disorders, but may still face systemic challenges in providing collaborative care interventions in rural settings.

NO. 2

PREPARING NON-SPECIALISTS AND DEVELOPING THE INFRASTRUCTURE FOR COLLABORATIVE CARE: LESSONS IN LEARNER ASSESSMENT, TRAINING AND HEALTH SYSTEMS-STRENGTHENING FROM RURAL NEPAL

Speaker: Bibhav Acharya, M.D.

SUMMARY:

This presentation will discuss results from qualitative studies conducted with PCPs in rural Nepal to assess their readiness for task sharing in mental health. It will describe a systematic process of curriculum development utilizing a web-based training that was translated and adapted from the World Health Organization's Mental Health Gap Action Programme (mhGAP) manual. The presentation will discuss the training program's effectiveness, which was measured using paired t-tests, showing an increase in mean scores on depression screening from 0.4 (± 0.1) to 0.9 (± 0.3), $p=0.002$. In addition, this presentation will cover strategies used to strengthen the health system by addressing key challenges like follow-up (by utilizing community

health workers), lack of a designated PCP for patients (by recruiting designated psychosocial counselors) and poor medical records (by integrating mental health protocols and data into existing medical records).

**NO. 3
ADAPTATION OF THE COLLABORATIVE CARE
MODEL TO TREAT DEPRESSION AND DIABETES IN
INDIA**

Speaker: Lydia Chwastiak, M.D., M.P.H.

SUMMARY:

This presentation will describe the adaptation of the collaborative care model for a large clinical trial to treat diabetes and depression in India. The Integrating Depression and Diabetes Treatment (INDEPENDENT) Study is an ongoing NIMH-funded randomized controlled trial of 360 patients with comorbid diabetes and depression in India. Participants, individuals 35 years or older with depression and PHQ-9 score 10 or more and poor diabetes disease control (HbA1c \geq 8.0%, SBP \geq 140mmHg, or LDL-C \geq 130mg/dl), are being recruited from four diabetes clinics in India (Chennai, Vishakhapatnam, Delhi and Bangalore) and randomized to either collaborative care for depression and diabetes or to usual diabetes care. We will discuss the challenges in the adaptation of the collaborative care model for these settings and this clinical trial. In particular, a common challenge in LMICs is the lack of behavioral health professionals (BHPs). When available, BHPs are usually located in city centers and not accessible to the majority of patients in rural sites. The government's health care workforce does not include BHPs. At our site, we will describe these challenges and discuss strategies to overcome them, including the use of nutritionists as depression care managers and training diabetologists in the treatment of depression.

**PERFORMANCE MEASURES IN PSYCHIATRIC
PRACTICE: AN UPDATE FOR PSYCHIATRISTS ON
OUTCOME MEASUREMENT AND PAYMENT
REFORM**

Chair: Margaret E. Balfour, M.D., Ph.D.

Discussant: Jack McIntyre, M.D.

EDUCATIONAL OBJECTIVE:

At the conclusion of the session, the participant should be able to: 1) Describe why performance measures are important in health care; 2) Discuss strategies for using performance measurement to

improve clinical practice; 3) Discuss how performance measurement is related to payment reform; and 4) Describe physician-led initiatives to develop relevant performance measures.

SUMMARY:

In an era increasingly focused on outcomes, performance measurement will continue to be an important part of the health care delivery system. If applied thoughtfully, performance measurement has the potential to facilitate the delivery of care that meets the triple aim of quality, cost-effectiveness and population health. The purpose of this symposium is to provide the practicing clinician with an understanding of the principles of performance measurement and how it is applicable to everyday practice. We will discuss strategies for using performance measurement to improve individual physician practice, maximize payment opportunities and improve the health of the populations under our care. The symposium will begin with an overview of the principles of performance measurement and its role in the rapidly changing landscape of health care reform and efforts focused on improving outcomes. Next, Dr. Halverson will describe how individual practitioners can apply basic quality improvement theory and employ strategies to track outcomes and improve practice. Dr. Trivedi will then discuss the role of outcome measurement in payment reform, using as an example the Tennessee roll-out of Episodes of Care through the State Medicaid program, as well as explore value-based contracting in a large, integrated, academic medical center. Dr. McIntyre will provide an update on two large physician-led initiatives to develop useful performance measures and practice standards—the American Medical Association's Physician Consortium on Performance Improvement and the Choosing Wisely Program, which includes over 70 specialty partners, including the American Psychiatric Association. Dr. Balfour will describe her efforts to develop a standard measure set for crisis/psychiatric emergency services in order to provide relevant performance targets and facilitate benchmarking for this emerging psychiatric subspecialty. The panel will then engage in an interactive discussion with the audience.

**NO. 1
USING QI STRATEGIES TO IMPROVE PERFORMANCE
ON PSYCHIATRIC PERFORMANCE MEASURES**

Speaker: Jerry Halverson, M.D.

SUMMARY:

An individual psychiatrist's ability to understand what performance measures are and do well on them will affect their ability to obtain maximal payment for billed services. This presentation will discuss basic quality improvement (QI) theory in the context of psychiatric practice. We will discuss examples of performance measures in psychiatric practice and teach listeners how to use basic QI theory and strategies to track outcomes and improve their practices' performance on performance measures. Case-based discussion will follow.

NO. 2**VALUE-BASED CONTRACTING AND EPISODES OF CARE: THE VANDERBILT EXPERIENCE**

Speaker: Harsh K. Trivedi, M.D., M.B.A.

SUMMARY:

There is a shift toward value-based care that is leading to payment model reform. This presentation will discuss the Tennessee roll-out of Episodes of Care through the State Medicaid program (TNCare), as well as explore value-based contracting in a large, integrated, academic medical center. Outcome measurement and quality improvement will be discussed.

NO. 3**TWO QUALITY IMPROVEMENT INITIATIVES: PHYSICIAN CONSORTIUM ON PERFORMANCE IMPROVEMENT AND CHOOSING WISELY**

Speaker: Jack McIntyre, M.D.

SUMMARY:

Development of evidence-based quality measures is an important component of quality improvement. Over the past decade, the Physician Consortium on Performance Improvement (PCPI) has developed 350 measures spanning 50 clinical areas. Recently, it has focused on developing frameworks and tools for measure development, specification and testing. In late 2015, PCPI made significant changes in its organization and focus. Half of the Board of Directors are now representatives from non-physician organizations, and a major component of PCPI is the NQRN, a registry network that was begun in 2011. This presentation will review the changes in PCPI and outline its current agenda. Choosing Wisely is a program developed by the American Board of Internal Medicine in 2012 and now includes over 70 specialty partners, including the American

Psychiatric Association. Its goal is to advance a national dialogue of avoiding wasteful, harmful and unnecessary medical treatments and procedures. Choosing Wisely will be reviewed in this presentation, including current and potential future psychiatric elements.

NO. 4**DEVELOPING PERFORMANCE MEASURES FOR CRISIS SERVICES**

Speaker: Margaret E. Balfour, M.D., Ph.D.

SUMMARY:

Crisis services are an integral part of the behavioral health system of care, yet in an era increasingly focused on outcomes, established quality measures do not exist. Such measures are needed to determine the intended and actual impact of crisis care on the lives of people receiving it, inform the development of targets for quality improvement activities and pay for performance contracting, and provide standard terminology to support research efforts in crisis care. This presentation will introduce a framework for developing measures that meet the needs outlined above. The session will include a brief overview of the theory and methods used in measure development, then demonstrate how these methods were applied to create a new measure set in use at two large crisis programs in Arizona. Finally, we will discuss ongoing efforts to further validate, refine and generalize these measures via implementation in a nationwide consortium of over 30 crisis programs.

PREVENTION IN SCHIZOPHRENIA: THE EARLIER USE OF LONG-ACTING INJECTABLE MEDICATIONS

Chair: John M. Kane, M.D.

Discussant: Lori E. Raney, M.D.

EDUCATIONAL OBJECTIVE:

At the conclusion of the session, the participant should be able to: 1) Understand the risk of relapse among patients early in the course of schizophrenia and the factors that influence risk; 2) Demonstrate knowledge of the various methodologies that have been used to compare oral and LAI formulations and the results of such studies; and 3) Provide guidance on training clinicians in the use of LAIs, educating patients and families, and facilitating shared decision making.

SUMMARY:

Among those who have recently experienced the onset of schizophrenia, psychotic relapses early in the course of the illness can have serious consequences in terms of social and vocational functioning, family burden, cost, and subsequent outcomes. Many early-phase individuals are ambivalent about taking medication and are particularly vulnerable to adverse effects. Nonadherence in medication taking is a frequent cause of relapse. The earlier use of long-acting injectable (LAI) medications is a potential strategy to reduce the risk of relapse due to inconsistent medication taking. At the same time, these LAI formulations are underutilized even in those individuals who have experienced multiple relapses and rehospitalizations associated with poor adherence, not to mention those in the earlier phases of illness.

**NO. 1
THE CHALLENGE OF RELAPSE PREVENTION IN EARLY PHASE PATIENTS**

Speaker: John M. Kane, M.D.

SUMMARY:

John Kane will review relapse rates in first-episode and early-phase patients, including data from studies that have compared LAIs to oral medications.

**NO. 2
WHAT HAVE WE LEARNED FROM META-ANALYSES OF CLINICAL TRIALS?**

Speaker: Taishiro Kishimoto, M.D.

SUMMARY:

Taishiro Kishimoto will present data from meta-analyses of randomized controlled trials, mirror image studies and prospective naturalistic studies comparing relapse rates on oral and LAI formulations.

**NO. 3
HOW CAN WE FACILITATE EARLIER USE OF LAIS? THE ROLE OF THE CLINICIAN, PATIENT AND FAMILY**

Speaker: Eric D. Achtyes, M.D., M.S.

SUMMARY:

Eric Achtyes will review obstacles to the use of LAIs and strategies to facilitate their use, involving clinician training and supervision as well as patient/family education and shared decision making. He will provide new implementation data from an ongoing trial involving the use of LAIs in

first-episode and early-phase (less than five years of medication) individuals.

**WHAT WE DON'T KNOW CAN HURT US:
AGGRESSION AND VIOLENCE ON PSYCHIATRIC INPATIENT UNITS**

Chair: Lisa A. Mistler, M.D., M.S.

Discussant: Matthew Friedman, M.D., Ph.D.

EDUCATIONAL OBJECTIVE:

At the conclusion of the session, the participant should be able to: 1) Provide three examples of current gaps in knowledge regarding aggression and violence on psychiatric inpatient units; 2) Describe two strategies for implementing culture change around safety in a hospital setting; 3) Identify two reasons for transferring authority from nurses to police in emergency situations; and 4) List two advantages of having an administrative review committee for risk management at a psychiatric hospital.

SUMMARY:

Aggression and violence on inpatient psychiatric units has a tremendous personal cost in terms of staff and patient injuries, trauma to witnesses, days lost from work, and staff and patient demoralization. While many hospitals have implemented various programs to address aggression and violence, we still have little understanding of the actual prevalence and underlying reasons. There is currently no common language that the psychiatric community uses to define, describe and measure aggression and violence. This greatly impedes our ability to figure out which environmental, administrative and interpersonal strategies to put into place and how to assess their effectiveness. We will begin by reviewing the scope of the problem of violence and aggression on inpatient units, describing current estimates of prevalence and costs and highlighting the existing gaps in information. We will then describe a collaborative, interdisciplinary approach to characterizing and addressing aggression and violence at one acute care state psychiatric hospital. A particular example of implementation of culture change called "Staying Safe" will be provided, with data demonstrating the effects of the change. We will then present the unique relationship that has been forged between the state police and the hospital nursing staff and the methods used to develop that relationship. Finally, we will describe the role of hospital administrators in supporting hospital staff in working

with patients who are aggressive and violent, providing examples of programs put into place to reduce seclusion and restraint and to improve risk management.

**NO. 1
AGGRESSION AND VIOLENCE ON PSYCHIATRIC
INPATIENT UNITS**

Speaker: Lisa A. Mistler, M.D., M.S.

SUMMARY:

Aggression and violence on inpatient psychiatric units result in manifold costs to staff and patients. Much of the literature devoted to this topic relates to either risk assessment or to reducing the occurrence of patient-to-staff violence. In our review of the existing body of work, we note that despite the existence of large numbers of studies, we continue to have little understanding of the actual prevalence, types, causes and consequences of aggression and violence on inpatient psychiatric units. For example, we do not know why reported rates of aggression and violence on inpatient units vary considerably, even within a particular country. In this presentation, we will describe the current state of the literature and review the scope of the problem of violence and aggression on inpatient units, outlining estimates of prevalence and cost and highlighting the existing gaps in information. We will briefly review the instruments used to measure aggression and violence and explain their limitations. We will recount a practical approach to improving the collection of accurate data at New Hampshire Hospital and characterize the creation of a Northern New England consortium for sharing data between acute psychiatric inpatient facilities.

**NO. 2
THE ROLE OF NURSING STAFF: STAYING SAFE**

Speaker: Diane E. Allen, R.N.

SUMMARY:

An educational program for staff in an acute, involuntary inpatient setting challenged the belief that getting hurt is part of the job. The Staying Safe program encouraged staff to think differently about their roles and explore alternative responses to patient behaviors. Staff are taught to avoid power struggles and purposefully engage with patients to establish therapeutic relationships that keep them safe. Clear policies guide staff in situations involving weapons or extreme violence. Cultural change takes time: staff requested the program be repeated

multiple times over the past eight years, and key concepts have been incorporated into employee orientation and refresher programs. During that time, staff have learned to call for help more often and to have a plan before physically intervening with patients. The strategies described in this program have resulted in a decreased number of assaults and injuries to staff.

**NO. 3
THE ROLE OF LAW ENFORCEMENT**

Speaker: Frank Harris

SUMMARY:

Although police officers protect and secure the safety of citizens everywhere, clinicians are the primary guardians of patient safety within the treatment milieu. At New Hampshire Hospital, both clinicians and police officers share ownership of this responsibility, depending on the needs that arise specific to each profession. Psychiatric clinicians take pride in their ability to de-escalate agitated and potentially aggressive patients; however, there are times when their best efforts fail or when a situation requires intervention from police officers. Clinicians, administration and police officers at New Hampshire Hospital have worked together for many years to develop a trusting, respectful alliance. This coalition has resulted in a safe, clear, orderly process for transfer of authority from nurses to police during violent, clinically unmanageable psychiatric emergencies. In addition to enhancing safety, this conjoined approach has ensured clinical practice, and legal matters are being managed with the highest level of professionalism, resulting in excellent overall care and treatment for patients.

**NO. 4
THE HOSPITAL CLINICAL ADMINISTRATOR'S ROLE**

Speaker: Alexander de Nesnera, M.D.

SUMMARY:

Administrative clinical leaders at psychiatric hospitals are crucial in developing intrahospital and intersystem strategies that impact the treatment of aggressive and violent patients. We describe four initiatives implemented at a New England state psychiatric hospital. 1) The development of a daily morning meeting, led by physician and nursing leaders, reviewing every episode of patient seclusion or restraint occurring the day before. This meeting fosters the development of strategies minimizing future episodes of patient aggressive behavior,

seclusion or restraint. 2) The implementation of a hospital administrative review committee (ARC) as a risk-management review process providing guidance to clinicians treating high-risk, high-profile patients. The ARC is not seen by clinicians as a group of administrators making clinical decisions. 3) The development of regularly scheduled meetings between clinical and administrative leaders of the state hospital and the state forensic psychiatric unit (part of the Department of Corrections). This allowed for improved communication and collaboration between two institutions that share responsibility for increasingly violent and aggressive patients. 4) The initiation of meetings with district court judges to educate them on the challenges of dealing with hospitalized mentally ill patients who break the law and may need to be charged by the police.

INTERDISCIPLINARY TELEPSYCHIATRY: IMPROVING ACCESS AND QUALITY OF CARE THROUGH MODEL AND DELIVERY TRANSFORMATION

Chair: Jay H. Shore, M.D., M.P.H.

EDUCATIONAL OBJECTIVE:

At the conclusion of the session, the participant should be able to: 1) Understand different models and examples for providing interdisciplinary team care through videoconferencing; 2) Provide examples of how interdisciplinary telepsychiatry introduces new models of care that increase access to care while improving the efficiency of health care delivery; and 3) Understand the challenges in structuring and delivering interdisciplinary telepsychiatry and potential solutions to address these challenges.

SUMMARY:

Telepsychiatry in the form of live interactive videoconferencing is a maturing field improving both access to and quality of care while reducing costs. Telepsychiatry is increasingly being leveraged to treat across a wide range of settings using interdisciplinary team approaches. These approaches represent innovative models for structuring health care delivery. This symposium, drawn from the APA's WorkGroup on Telepsychiatry, brings together national experts in interdisciplinary telepsychiatry services. The symposium will begin with a brief overview of interdisciplinary telepsychiatry followed by three specific interdisciplinary telepsychiatry examples. Each presentation will give an overview of an

interdisciplinary model; discuss its development and the evidence supporting it; describe the structure of the team and delivery systems; and discuss each model's strengths, challenges and lessons learned. The symposium will conclude with an interactive QandA between the presenters and the audience.

NO. 1

STORE AND FORWARD TELEPSYCHIATRY IN PRIMARY CARE

Speaker: Peter Yellowlees, M.D., Ph.D.

SUMMARY:

In store-and-forward-telepsychiatry, developed at UC Davis, a patient undergoes a digitally recorded structured interview conducted at a primary care clinic. This interview is sent electronically along with the patient's information to a psychiatrist to review and develop a written assessment and recommendations to be forward back to the primary care team. The team initiates the plan, receiving further guidance through email and telephone from the psychiatrist. This presentation will discuss interdisciplinary team building across sites and providers using both synchronous and asynchronous communication methods.

NO. 2

EMERGENCY TELEPSYCHIATRY: VIRTUAL TEAM ASSESSMENT AND TREATMENT

Speaker: Meera Narasimhan, M.D.

SUMMARY:

The University of South Carolina School of Medicine has implemented a collaborative state-wide emergency telepsychiatry service. This service provides psychiatric evaluation and treatment via videoconferencing to patients in local emergency rooms. Virtual teams consist of the psychiatric provider working with emergency room staff. This presentation will give attention to dealing with psychiatric emergencies using virtual teams across differing locations and professional backgrounds.

NO. 3

COLLABORATIVE TELEPSYCHIATRY FOR RESIDENTIAL ALCOHOL TREATMENT

Speaker: Jay H. Shore, M.D., M.P.H.

SUMMARY:

The University of Colorado's Centers for American Indian and Alaska Health conducts a telepsychiatry service providing evaluation, management and

supervision for a six-month residential alcohol treatment for Alaska Native and American Indian patients. The treatment center uses a cultural treatment model. This presentation will discuss how the telepsychiatry service integrates into residential treatment and the lesson learned about building diverse interdisciplinary treatment teams to provide culturally adapted care.

OCT 08, 2016

PREVENTING VIOLENCE AND THE USE OF SECLUSION AND RESTRAINTS VIA TRAUMA-INFORMED CARE: IMPLEMENTATION AND OUTCOME DATA

Chair: S. Atdjian, M.D.

EDUCATIONAL OBJECTIVE:

At the conclusion of the session, the participant should be able to: 1) Identify the implications of trauma in the symptom formation and behavioral manifestations of individuals in psychiatric inpatient settings and the imperative to avoid re-traumatizing practices; 2) Understand trauma-informed care as the foundational principle behind the two evidence-based strategies to effectively prevent both violence and the use of seclusion and restraints; and 3) Learn about the implementation of violence/seclusion/restraint prevention efforts in three settings along with outcome data, barriers and lessons learned.

SUMMARY:

This symposium will describe the implications of trauma for the symptom formation and behavioral manifestations of individuals in inpatient psychiatric settings and the imperative to avoid re-traumatizing practices such as coercion, seclusion and restraints. Trauma-informed care will be described as the foundational principle of two evidence-based strategies effective in preventing both violence (assaults, injuries) and the use of seclusion and restraints. A video clip of four women describing their experiences before, during and after their admission to a trauma-informed program will be shown. An individual who has been hospitalized and restrained may also share her experiences. Finally, the implementation and outcomes of violence, seclusion and restraint prevention efforts at three sites (a forensic hospital, a state psychiatric hospital and a unit within a psychiatric hospital) will be discussed along with outcome data, barriers and lessons learned.

**NO. 1
TRAUMA-INFORMED CARE: PRINCIPLES AND IMPLEMENTATION**

Speaker: S. Atdjian, M.D.

SUMMARY:

Trauma and its sequelae, including symptom formation and behavioral manifestations, will be discussed. The principles and evidence base of trauma-informed practices at the core of two effective strategies that simultaneously prevent both assaults and injuries, as well as seclusion and restraints, will be reviewed. A video clip of four women describing their experiences in a trauma-informed program will be shown for discussion. Finally the implementation and outcomes at a 300-bed forensic psychiatric hospital will be presented. Barriers, outcome data and lessons learned will be shared.

**NO. 2
IMPLEMENTATION AND OUTCOME DATA IN A STATE PSYCHIATRIC HOSPITAL**

Speaker: Kevin Ann Huckshorn, Ph.D., M.S.N.

SUMMARY:

The implementation of violence, seclusion and restraint prevention efforts at a state psychiatric hospital will be reviewed by the former State Mental Health Commissioner and developer of the Six Core Strategies, an evidence-based strategy for the reduction of coercion, violence, seclusion and restraints. Outcome data and lessons learned will be shared.

**NO. 3
IMPLEMENTATION AND OUTCOME DATA IN A UNIT IN A STATE PSYCHIATRIC HOSPITAL**

Speaker: Satya Chandragiri, M.D.

SUMMARY:

Implementation of violence, seclusion and restraint prevention in a unit in a state psychiatric hospital will be discussed by a former state psychiatric hospital superintendent. Outcome data, barriers and lessons learned will be shared.

INSIDE WASHINGTON: NATIONAL PERSPECTIVES AND CROSS-SECTOR COLLABORATIONS FOR ACTING ON THE SOCIAL DETERMINANTS OF MENTAL HEALTH

Chairs: Ruth Shim, M.D., M.P.H., Michael T. Compton, M.D., M.P.H.
Discussant: Glenda L. Wrenn, M.D.

EDUCATIONAL OBJECTIVE:

At the conclusion of the session, the participant should be able to: 1) Understand three social determinants of mental health in depth: income inequality, poverty and food insecurity; 2) Consider national approaches to addressing the social determinants of mental health; and 3) Develop population-level solutions that effectively address specific social determinants of mental health.

SUMMARY:

This symposium will present national perspectives on addressing the social determinants of mental health and mental illnesses—those factors stemming from where we grow, live, work, learn and age that impact our overall mental health and well-being and those factors that contribute to mental illnesses. These social determinants are the underlying causes of poor mental health and mental illnesses and are modifiable precursors to behavioral risk factors. Moreover, they are largely responsible for social injustice and mental health inequities. After providing a brief introduction to the topic of the social determinants of mental health, we will present on three determinants in depth: food insecurity, poverty and poor access to health care. Experts will discuss national perspectives on these determinants and how to tackle them, followed by a discussion on developing partnerships and collaborations between the mental health field and other sectors at a national policy level.

NO. 1

INTRODUCTION TO THE SOCIAL DETERMINANTS OF MENTAL HEALTH

Speaker: Ruth Shim, M.D., M.P.H.

SUMMARY:

This presentation will provide an overview of the social determinants of mental health and mental illnesses—those factors stemming from where we grow, live, work, learn and age that impact our overall mental health and well-being and those factors that contribute to mental illnesses. These social determinants are the underlying causes of poor mental health and mental illnesses and are modifiable precursors to behavioral risk factors. Moreover, they are largely responsible for social injustice and mental health inequities. This

presentation will lay the groundwork for the rest of the symposium presentations, which focus on national perspectives in addressing the social determinants of mental health.

NO. 2

FOOD INSECURITY, POVERTY AND INCOME INEQUALITY, AND POOR ACCESS TO HEALTH CARE

Speaker: Michael T. Compton, M.D., M.P.H.

SUMMARY:

This presentation will highlight three social determinants of mental health in depth: food insecurity, poverty/income inequality and poor access to health care. The content will help set the stage for presentations by national experts who are addressing social determinants of mental health in these specific areas.

NO. 3

FOOD INSECURITY

Speaker: Alisha Coleman-Jensen, Ph.D., M.S.

SUMMARY:

This presentation will describe national efforts to collect and examine data about food insecurity in the United States. The presenter will discuss the work of the USDA in addressing food insecurity on a national level.

NO. 4

MEDICAL LEGAL PARTNERSHIP

Speaker: Mallory Curran, J.D.

SUMMARY:

This presentation will focus on the work of the National Center for Medical-Legal Partnership in addressing poor access to health care, poverty and income inequality through a unique collaboration between lawyers and doctors. Emphasis on how these partnerships can improve mental health outcomes will be discussed.

ADDRESSING THE PROBLEMS OF MENTAL ILLNESS IN JAILS AND PRISONS

Chair: Ewald Horwath, M.D.

Discussant: Ewald Horwath, M.D.

EDUCATIONAL OBJECTIVE:

At the conclusion of the session, the participant should be able to: 1) Describe the status, range and scope of mental illness within U.S. jails and prisons; 2) Identify stakeholders pertinent to identifying and

addressing mental illness among the incarcerated; and 3) Identify the points at which mental health providers can best intervene to connect care with individuals involved in the justice system.

SUMMARY:

Prisons and jails are frequently described as the new mental institutions in the U.S., based on the disproportionate arrest and detention of people with mental illness and addiction. This symposium will describe the scope of the problem and offer examples of interventions before, during and after release of the mentally ill from prisons and jails. Discussions will focus on the role of integrated, cross-system case identification and intensive care; the role of mental health courts; the impact of state policy and how it can be developed and encouraged; and a system of mapping points of potential intervention by key actors involved in justice and mental health care.

**NO. 1
THE SIZE, SCOPE AND ISSUES OF MENTAL ILLNESS
IN PRISONS AND JAILS**

Speaker: Diana Gurley, Ph.D.

SUMMARY:

Prisons and jails house highly disproportionate numbers of individuals with severe mental illness. This presentation will describe rates of mental illness and addiction within incarcerated populations and will offer a discussion of co-occurring diseases and medical and social conditions experienced by inmates with severe mental illness. Conditions of incarceration and their implications for exacerbating symptoms will be described and discussed, with implications for treatment before and after release.

**NO. 2
INTEGRATING PSYCHIATRIC AND PRIMARY CARE
AND SOCIAL SERVICES ACROSS INSTITUTIONS**

Speaker: Ewald Horwath, M.D.

SUMMARY:

The number and type of institutions touching the incarcerated mentally ill will be described, and a method for developing partnerships across these institutions will be proposed, with data from two years of post-release intervention for medical, psychiatric and social service care for severely mentally ill inmates in Cuyahoga County (greater Cleveland), Ohio. The presentation will describe

institutional barriers to integration, with lessons learned and examples of effective interventions.

**NO. 3
THE ROLE OF MENTAL HEALTH COURTS IN
ADDRESSING MENTAL ILLNESS IN JAILS AND
PRISONS**

Speaker: Steve Leifman, J.D.

SUMMARY:

This presentation will focus on the development of mental health courts for the purpose of diverting people with severe mental illness into probationary treatment. Implications for pre-detention diversion will be discussed, as will the potential impact of diversion on jail and prison systems through a process of court intervention.

**NO. 4
USING SEQUENTIAL INTERCEPT MAPPING TO HELP
COMMUNITIES ADDRESS THE
OVERREPRESENTATION OF PEOPLE WITH SEVERE
MENTAL ILLNESS IN THE CRIMINAL JUSTICE SYSTEM**

Speaker: Mark R. Munetz, M.D.

SUMMARY:

Sequential intercept mapping promotes dialogue and communication among stakeholders, identifies challenges and opportunities, and leads to a plan for action. This presentation will describe how cross-systems mapping strengthens local strategies to implement core services to address behavioral health, criminogenic and environmental factors for justice-involved persons with mental illness. Cross-systems mapping promotes stakeholder collaboration by tying existing efforts together from prior to arrest through reentry; identifying strengths and gaps in systems; addressing issues that are relevant across all intercepts (e.g., collaboration, cultural competence, gender-specific services, trauma-informed care and needs of veterans); and identifying solutions, many of which do not add to costs.

EARLY DETECTION AND TREATMENT OF PSYCHOSIS

Chair: Philip Wang, M.D.

Discussant: Anita Smith Everett, M.D.

EDUCATIONAL OBJECTIVE:

At the conclusion of the session, the participant should be able to: 1) Understand the impact of early detection and treatment of psychosis; 2) Discuss the clinical usefulness of biomarkers in the early

detection and treatment of psychosis; 3) Describe OnTrackNY, an example of best-practice community treatment of early-episode psychosis; and 4) Explain the potential benefits of a national mental health registry in early detection and reduction in the duration of untreated psychosis.

SUMMARY:

Psychotic disorders impart a significant burden to individuals, including recurring relapse of symptoms, unemployment, deteriorating social relationships, increased morbidity and premature mortality. Negative consequences extend to patients' families, who often experience significant caregiver burden, as well as to society as a whole. Persons with untreated psychotic disorders are less likely to contribute to the workforce; more likely to consume costly resources (e.g., hospitalizations); and at high risk for behavioral disturbance, including suicide and violence. The economic burden of psychosis is particularly great in the first year following the index episode. In the U.S., the cost of care for a psychotic disorder was estimated at \$63 billion in 2002 and was predicted to top \$81 billion by 2015. Consequently, reducing the duration of untreated psychosis has become an active topic of attention in this country. Actionable models of sound, expeditious first-episode psychosis care are available and achievable. Recent findings from the Recovery After an Initial Schizophrenia Episode (RAISE) initiative found that coordinated community care for first-episode psychosis resulted in 15% lower annual health care costs compared to annual costs for typical treatment, better self-reported quality of life, less absenteeism and fewer clinical symptoms for individuals with a short duration of untreated psychosis. Preemptive care has demonstrated success in reducing clinical symptoms and costs to such a degree that early clinical service networks have been established in the United Kingdom and Australia. In the U.S., however, such programs are still in need of wider implementation and promotion. Early intervention is critical given that outcomes worsen the longer patients with psychosis go without treatment. In the U.S., the average length of untreated psychosis following the first episode ranges from one to three years, representing a vital window in which clinicians could potentially help reduce future decline and modify exacerbating factors like substance use and lack of social supports. OnTrackNY, a coordinated specialty care program in New York State designed to treat individuals within two years of the onset of nonaffective psychosis, has

demonstrated these benefits. However, it is important to detect psychosis even earlier and get individuals into such programs within a short time after onset of index psychotic episode. Two ways to do so include identification of practical biomarkers for early detection and use of a national registry/surveillance system to connect those detected to best-practice first-episode care. This symposium will feature presentations to describe the effects of the rapid and systematic identification and treatment of first-episode psychosis. Specifically, the utility of novel biomarkers will be explored, OnTrackNY will be described, and the potential benefits of a national surveillance system will be discussed.

NO. 1

HOW BRAIN PHENOTYPES WILL BE ABLE TO TRANSFORM CLINICAL PRACTICE IN PSYCHOSIS

Speaker: Carol Tamminga, M.D.

SUMMARY:

For the last century, diagnoses within psychiatry have been based on clinical case presentation, symptomatic assessment and disease course correlates. We have not known brain biology in psychosis beyond this, since fundamental neuroscience research has only been recently productive. Now, however, we have relevant knowledge about healthy human brain function and are acquiring parallel knowledge about brain function in psychiatric disease. Therefore, it is time to look forward to speculate about how we will use 'brain phenotypes' in clinical practice. This presentation will suggest that the use of brain phenotypes in psychiatry will 1) Transform diagnosis; 2) Provide the knowledge for constructing disease mechanisms; 3) Predict disease subtypes and course; and, potentially, 4) Inform the care of each patient in line with personalized medicine concepts. The molecular and cellular elements serving learning and memory, as learned from fundamental brain research, support the articulation of psychosis pathophysiology within the medial temporal cortex in the human brain. In the end, these kinds of data, the phenotyping and the molecular characterization, and their implications generate speculations on the future of personalized medicine in psychiatry. This in turn will inform efforts to treat diseases early and understand the fit between phenotype and future disease course/treatment type.

NO. 2

MONITORING ENROLLMENT, TREATMENT AND OUTCOMES FOR EARLY PSYCHOSIS SERVICES IN NEW YORK STATE

Speaker: Lisa Dixon, M.D.

SUMMARY:

OnTrackNY is a coordinated specialty care program designed to treat individuals within two years of the onset of nonaffective psychosis in New York State. While OnTrackNY was built on the RAISE Connection program, it has a learning orientation and incorporates new components as knowledge regarding early psychosis treatment evolves. OnTrackNY is funded by New York's mental health authority, the Office of Mental Health (OMH), which supports service delivery, training and evaluation. The OMH utilizes estimated disease incidence to select sites for OnTrackNY based on geography and population. The number of OnTrackNY teams has grown from four to an anticipated 20 teams by the end of 2016. We use the FEP Cost Estimator Tool developed by our team as an aid to conducting service planning in New York State, which had a population of 19.4 million in 2010. Based on estimates of the incidence of nonaffective psychosis of 15 per 100,000 residents, a 75% rate of cases approached, a 75% agreement rate, an average rate of treatment tenure of 18 months and a team caseload of 50, approximately 50 teams would be needed statewide. A population of about 400,000 would be needed to support one team. Planning, implementing and measuring outcomes for early psychosis requires tracking the complex interplay of population- and client-level met and unmet needs. Transition and discharge are key future issues that need further exploration.

NO. 3

CAN USE OF A NATIONAL MENTAL HEALTH REGISTRY DECREASE THE DURATION OF UNTREATED PSYCHOSIS?

Speaker: Diana E. Clarke, Ph.D., M.Sc.

SUMMARY:

Psychotic disorders are debilitating conditions that can negatively impact the lives of individuals, their families or caregivers, and society as a whole. This is especially true if conditions are left untreated. In fact, the longer the duration of untreated psychosis (DUP), the poorer the prognosis. Therefore, efforts to enhance early detection and treatment of psychosis are warranted, not only on a clinician or practice level, but also nationally. A national mental

health registry that is comprehensive with de-identified but real-time, patient-reported signs, symptoms, outcomes and levels of functioning; real-time clinician assessment information; and biomarkers could prove not only useful but revolutionary to the science and practice of psychiatry and care for psychotic disorders specifically. This presentation will illustrate how a national mental health registry would work to enhance the early detection and treatment of psychosis. We will use data on real-time patient reports and real-time clinician assessment information to demonstrate how early signs of psychosis can be detected and prognosis tracked over time. Though ambitious, a national registry carries great potential to help reduce unnecessary suffering, minimize DUP and improve functional outcomes for the millions of individuals living with psychotic illnesses.

OCT 09, 2016

ASK A COP: STRATEGIES FOR COLLABORATION AT THE INTERSECTION OF BEHAVIORAL HEALTH CRISIS SERVICES AND LAW ENFORCEMENT

Chair: Margaret E. Balfour, M.D., Ph.D.

Discussant: John S. Rozel, M.D.

EDUCATIONAL OBJECTIVE:

At the conclusion of the session, the participant should be able to: 1) Discuss the current research and policy recommendations for improving law enforcement response to behavioral health crises; 2) Identify key components of a real-world example of a successful collaboration between law enforcement and crisis services; and 3) Utilize strategies for collaborating with law enforcement in his/her own community.

SUMMARY:

Collaboration between law enforcement and crisis providers can have positive impacts on a myriad of complex issues related to the intersection between the mental health and criminal justice systems. Increasing awareness of the prevalence of mental illness in officer-involved shootings has led to the adoption of programs such as Crisis Intervention Training to provide officers with the skills to de-escalate people in crisis. Increased focus on the overrepresentation of persons with mental illness in the criminal justice system has led to the development of crisis programs that receive referrals from law enforcement as an alternative to jail. These

innovations lead to better treatment of persons with mental illness but must be balanced with the need to ensure public safety, especially when there is a risk of violence to others. Thus, it is important to work together to achieve outcomes that meet the needs of both the patients served by the crisis providers and the communities served by law enforcement agencies. The symposium will begin with an overview of the current research and policy recommendations regarding the law enforcement response to persons with mental illness by the International Association of Chiefs of Police Director of Research John Firman. Next, Sergeant Terry Staten from the Pima County Sheriff's Office and Sergeant Jason Winsky from the Tucson Police Department will describe a real-world example of successful collaboration—the development of mental health investigative support teams following the Gabby Giffords shooting and how their officers interface with the crisis system. Dr. Margie Balfour, Chief Clinical Officer for ConnectionsAZ at the Crisis Response Center, will discuss this collaboration from the crisis provider perspective and outline strategies for successful partnerships. Major Ed Bergin with the Anne Arundel County Police in Maryland will provide strategies for developing relationships across disparate cultures and systems from the perspective of law enforcement leadership. Finally, Dr. John Rozel of re:Solve Crisis Network will facilitate an interactive discussion with our “Ask a Cop” panel.

**NO. 1
IMPROVING POLICE RESPONSE TO PERSONS WITH MENTAL ILLNESS: A CONTINUUM OF PROGRESS**

Speaker: Darryl D. de Sousa

SUMMARY:

The International Association of Chiefs of Police (IACP) has identified the need for research and policy addressing the response to mental health crises as a top priority. Building on the results of a multi-stakeholder summit convened by the IACP in collaboration with SAMHSA and the Department of Justice, this presentation outlines the scope of the problem; identifies factors that have contributed to current challenges; and describes innovative policies, programs and practices that have emerged in recent years to provide a foundation for a blueprint for change. These promising approaches offer safer, more compassionate and often cost-effective ways for police and their community partners to respond to adults and juveniles with mental illness. Ultimately, the effectiveness of these new

approaches depends on the strength of the collaborative working relationships on which they are founded and on the willingness of states and localities to invest in providing a continuum of education and training for first responders and effective services and supports for persons with mental illness and their families.

**NO. 2
THE TUCSON MODEL: A UNIQUE SYSTEM-
SPANNING COLLABORATION**

Speaker: Jason Winsky

SUMMARY:

A series of mass shootings, culminating in the 2011 shooting of Gabby Giffords and 18 others in a Tucson supermarket parking lot, led the law enforcement community to take a fresh look at how mental health issues were being addressed. The result was the creation of mental health investigative support teams in both the Pima County Sheriff's Office and the Tucson Police Department. These teams employ a unique multipronged approach by providing outreach to persons with mental illness and facilitating collaboration between law enforcement agencies, criminal courts and jails, civil commitment processes, behavioral health providers, and families. In addition, they serve as an expert resource for CIT-trained patrol officers needing further assistance with mental health calls. This presentation will describe the evolution of these teams, show outcomes indicating improvements in mental health care and public safety, and discuss how collaboration with system partners was critical to success.

**NO. 3
BEING A GOOD PARTNER TO LAW ENFORCEMENT:
STRATEGIES FOR CRISIS PROVIDERS**

Speaker: Margaret E. Balfour, M.D., Ph.D.

SUMMARY:

A key component of the successes of the Tucson model is a strong crisis system. At the center of this system is the Crisis Response Center (CRC). Built with county bond funds in 2011, the CRC provides urgent care, 23-hour observation and crisis stabilization for adults and children in Pima County. With a “no wrong door” approach, the CRC serves as the primary site for law enforcement to bring people in need of crisis services directly from the field regardless of legal status or behavioral acuity. ConnectionsAZ has a long history of successful law enforcement collaboration at this and other

facilities. This presentation will discuss lessons learned and outline strategies to facilitate successful collaboration, including policy, process flow, outcome measurement, relationship building and physical plant design.

NO. 4

LEADING PARTNERSHIPS BETWEEN LAW ENFORCEMENT AND MENTAL HEALTH

Speaker: Edward P. Bergin, M.S.

SUMMARY:

Law enforcement response to behavioral emergencies is a common task of line officers and one that often requires specialized training, support and resources to successfully complete. Often, departments use models such as Mental Health First Aid or Crisis Intervention Team training to develop skills in their officers. Either approach requires meaningful partnerships and collaboration with services and leaders outside of law enforcement. Opportunities and approaches to developing relationships across disparate cultures and systems will be discussed from the perspective of law enforcement leadership.

TRANSFORMING BEHAVIORAL HEALTH SERVICES: USING LEAN METHODOLOGY IN CLINICAL AND TRAINING SETTINGS

Chairs: Lan Chi Krysti Vo, M.D., Neha Chaudhary, M.D.

Discussant: Roumen Nikolov, M.D.

EDUCATIONAL OBJECTIVE:

At the conclusion of the session, the participant should be able to: 1) Define basic concepts of lean methodology; 2) Understand how lean can be used in strategic planning, problem solving and team building in clinical and academic settings; 3) Identify opportunities to incorporate lean methodology into psychiatric residency training; 4) Teach continuous performance improvement in psychiatry and psychology training programs; and 5) Apply lean concepts to the model for integrated care.

SUMMARY:

In the quest to achieve the triple aim for health care—improved outcomes, increased patient satisfaction and decreased cost—the health care industry has looked to other areas of business for quality improvement techniques. Lean management principles have been employed successfully by manufacturing companies for many decades and

have resulted in improved production processes and higher quality products. Since lean tenets focus on increasing value and quality while decreasing waste, including excess costs, lean can be adapted to settings beyond the manufacturing line. All organizations, including those in health care, are comprised of a series of processes intended to create value for a consumer. The strategy behind lean thinking is to maximize that value to the consumer while eliminating waste. Lean principles are in line with the shift in psychiatry toward recovery- and consumer-oriented programs, while still being mindful of the bottom line, and fostering a team approach to patient care. Various institutions have seen success using lean principles in transforming their delivery of mental health care, including one of the nation's largest hospital systems, The New York Health and Hospitals Corporation (NY HHC). We will share how different lean initiatives were conceptualized, designed and implemented in the NY HHC system and a variety of other clinical settings. The purpose of this symposium is to review both lessons learned and future directions for lean in mental health care. We will explore a variety of clinical settings, including Medicaid-funded community mental health services, collaborative/integrated care clinics and residency training programs. The symposium will begin with an overview of lean methodology and introduction to terms and processes unique to lean thinking presented by American Psychiatric Association's Public Psychiatry Fellows Drs. Lan Krysti Vo, Ashley Curry and Neha Chaudhary. Presenters from Behavioral Health Service of Kings County Hospital will then review how lean was used in strategic planning to create an evidence-based and financially sustainable model for delivery of publicly funded mental health services. We will then discuss how lean was used to transform an outpatient mental health clinic to improve the patients' transitions from emergency and inpatient services to outpatient care. Looking forward to the future of lean, we will discuss steps being taken to create a culture of lean by using lean concepts in residency training to educate the next generation of physicians. We will also demonstrate how lean methodology applies to the collaborative care model and review a lean curriculum that will be taught to residents in an integrated care fellowship program.

NO. 1

USING LEAN TO INTEGRATE DSRIP, MANAGED CARE AND HOME- AND COMMUNITY-BASED SERVICES

(HCBS) INTO STRATEGIC PLANNING AT NYC HEALTH+HOSPITALS KINGS COUNTY

Speaker: Kristen Baumann, Ph.D.

SUMMARY:

This presentation will describe how a large behavioral health service (BHS) at Kings County Hospital (KCH) has utilized lean to develop an integrated strategy that is creating a care delivery model that is evidence-based and financially sustainable. We will share how senior leadership used value stream mapping and vertical value stream mapping (VSA/VVSM) to restructure care delivery by incorporating the myriad of initiatives for managed care, triple aim and DSRIP as our guide in the strategic redesign. In the first step of our redesign, we took an inventory of our past successes and failures in moving ambulatory services toward a managed care future and developed a visual understanding of how the various corporate, city, state and federal initiatives were to be structured. At the end of our VSA/VVSM, we created six workgroups (Access, Getting Paid, Home- and Community-Based Services, Treatment Planning, Data Machinery, and Evidence-Based Practices) to both study and envision key areas of improvement. We followed up with an additional VVSM session to put workgroup thinking into action through coordinated rapid experiments and data analysis. We will present lessons learned from this initiative.

NO. 2 UTILIZING LEAN TO SIGNIFICANTLY INCREASE ACCESS FOR ADULTS IN AN AMBULATORY CARE CLINIC AT NYC HEALTH+HOSPITALS KINGS COUNTY

Speaker: Jenna Wood, L.C.A.T.

SUMMARY:

This session describes how an adult ambulatory care clinic began turning around significant access challenges using data. Transformation efforts had been only mildly successful in the past, as we had not been addressing root causes to our significant access problems. Our first obstacle in realizing our strategic goals of having same day and same week appointments for both our comprehensive psychiatric emergency programs (CPEP) and our six adult inpatient units (AIP) was building a system that could be used to understand our capacity. Earlier efforts had failed as we built new processes around problems without truly understanding our demand, take time and the mechanisms needed to study our access progress with weekly and daily data. Our

breakthrough happened when we moved away from a private practice model to a centralized scheduling system that allowed CPEP, AIP and walk-in clinics to book independently into intake slots that were calculated based on demand, not on clinician caseloads. Understanding the changing demands of our patients, CPEP and AIP allowed us to build a system that could get patients in where and when they needed while we continuously changed how we cared for an increasing acute population in the ambulatory setting.

NO. 3 RETHINKING RESIDENCY TRAINING USING A3 METHODOLOGY IN AMBULATORY CARE AT NYC HEALTH+HOSPITALS KINGS COUNTY

Speaker: Tzvi Furer, M.D.

SUMMARY:

This presentation will explore how A3 thinking was utilized to bring the State University of New York (SUNY) Residency Training and the Kings County Clinical Leadership together with our shared PGY-3 and -4 residents to problem solve. The reason for action for this group was to explore ways that the residency training program could be restructured within the Kings County Health ambulatory service to improve access for our patients while ensuring that the training of these future providers was enhanced. These A3 sessions resulted in our residents being part of the clinics team structure, developing a new group intake supervisory model and, most importantly, the developing data that supervisors could utilize to monitor not only productivity but also a well-balanced caseload of medication management and psychotherapeutic interventions with a variety of diagnostic types of patients.

NO. 4 IMPLEMENTING AND TEACHING CONTINUOUS PERFORMANCE IMPROVEMENT IN PSYCHIATRY AND PSYCHOLOGY TRAINING PROGRAMS

Speaker: Ray C. Hsiao, M.D.

SUMMARY:

Seattle Children's Hospital (SCH), the training site for the University of Washington Child and Adolescent Psychiatry (UWCAP) Residency and Psychology Internship Program Child Track, has embraced "continuous performance improvement" (CPI), a manufacturing quality improvement (QI) approach successfully adopted in various industries to improve

processes/outcomes and reduce costs. This presentation will showcase how CPI was applied to both psychiatry and psychology training programs at UW to enhance their educational offerings, including the development and implementation of a psychiatry-specific “Introduction to CPI” workshop curriculum with modules on Quality, Standard Work, Reliable Methods, Flow and Problem Solving. UWCAP faculty members with a range of knowledge and interest in CPI were recruited to teach the modules and demonstrate CPI principles using examples in the department. Innovative interactive teaching techniques were applied (e.g., hands-on, team-based activities), and trainees were surveyed before and after class about their interest and knowledge in CPI.

NO. 5

APPLYING LEAN PRINCIPLES IN INTEGRATED CARE

Speaker: Anna Ratzliff, M.D., Ph.D.

SUMMARY:

Collaborative care is an evidence-based integrated care approach that utilizes a team of providers, including the patient’s primary care provider, a behavioral health provider or care manager, and a psychiatric consultant, working together to deliver mental health care in primary care settings. One of the core principles in this approach is accountability to the quality of care provided and commitment to continuous quality improvement. This practice is important at an individual or patient level as well as the system or population level in achieving the triple aim of health care reform: improved outcomes, improved patient satisfaction and cost containment. Common targets for behavioral health teams involve access to care, number of patients served, patient satisfaction, patient outcomes using standard measurements (such as the PHQ-9) and costs. Using lean approaches—such as the principle of start over in a pursuit of perfection—for assessing and intervening on these improvement targets may be an important strategy in achieving accountability in integrated care. This presentation will describe the development of a lean curriculum to be delivered to integrated care psychiatry trainees as part of a new implementation and quality improvement rotation at the University of Washington.

NO. 6

APPLYING LEAN PRINCIPLES IN INTEGRATED CARE

Speaker: Ashley Curry, M.D.

SUMMARY:

Collaborative care is an evidence-based integrated care approach that utilizes a team of providers, including the patient’s primary care provider, a behavioral health provider or care manager, and a psychiatric consultant, working together to deliver mental health care in primary care settings. One of the core principles in this approach is accountability to the quality of care provided and commitment to continuous quality improvement. This practice is important at an individual or patient level, as well as the system or population level, in achieving the triple aim of health care reform: improved outcomes, improved patient satisfaction and cost containment. Common targets for behavioral health teams involve access to care, number of patients served, patient satisfaction, patient outcomes using standard measurements (such as the PHQ-9) and costs. Using lean approaches, such as the principle of “start over in the pursuit of perfection,” to assess and intervene on targets will help promote accountability in integrated care. This presentation will describe the development of a lean curriculum to be delivered to integrated care psychiatry trainees as part of a new implementation and quality improvement rotation.

ADDRESSING THE MORTALITY GAP IN INDIVIDUALS WITH SERIOUS MENTAL ILLNESS

Chair: Lydia Chwastiak, M.D., M.P.H.

Discussant: Benjamin Druss

EDUCATIONAL OBJECTIVE:

At the conclusion of the session, the participant should be able to: 1) Appreciate how poverty and other social determinants of health are obstacles for better health outcomes in patients with serious mental illness; 2) Understand the critical need for interventions to improve medical outcomes among patients with serious mental illness and the opportunity for community mental health centers to assume accountability; 3) Review evidence-based practices for improving health and health care among patients with serious mental illness, including both primary (e.g., healthy lifestyle education) and secondary disease prevention; and 4) Consider assuming a larger role in the provision of medical care for serious mental illness (SMI) cared for in psychiatric settings.

SUMMARY:

Persons with serious mental illness die an average of eight years younger than the rest of the population,

and the majority of these premature deaths are due to preventable medical causes. Health disparities adversely affect individuals with serious mental illness, and they systematically experience greater obstacles to health and health care. There are higher prevalence rates of chronic conditions such as hypertension, obesity, diabetes and HIV among persons with serious mental illness, and the presence of a psychiatric illness is associated with poorer quality of medical care for diabetes and other chronic conditions. These patients receive fragmented treatment from multiple providers in a variety of systems of care, and there is a critical need for coordination of care. These individuals are also disproportionately represented among other vulnerable groups, including chronically homeless and incarcerated individuals, adding another level of complexity to the management of their medical illnesses. In this symposium, presenters will address recent advances in understanding the scope of this excess mortality and the factors that contribute to it, including social determinants of health. Challenges to providing high-quality medical care and improving medical outcomes will be addressed, including improving communication, improving health behaviors and the self-management of chronic conditions, and strategies to navigate the increasingly complicated health care system. The panel will describe innovative approaches—in particular, the evolving role of community mental organizations and providers—for the prevention of and care for chronic medical conditions such as obesity and diabetes.

NO. 1
IMPACT OF SOCIAL DETERMINANTS OF HEALTH ON MORTALITY IN SERIOUS MENTAL ILLNESS

Speaker: Oliver Freudenreich, M.D.

SUMMARY:

Dr. Freudenreich will discuss the impact of poverty and other social determinants of health on premature mortality among persons with serious mental illness.

NO. 2
IMPLEMENTING EVIDENCE-BASED INTERVENTIONS FOR SMOKING AND OBESITY IN COMMUNITY MENTAL HEALTH SETTINGS

Speaker: Lydia Chwastiak, M.D., M.P.H.

SUMMARY:

Dr. Chwastiak will provide an overview of the evidence-based interventions for obesity and tobacco dependence—the two leading causes of preventable death in the U.S.—among persons with serious mental illness and discuss the barriers to implementation of these in community mental health organizations.

NO. 3
THE PSYCHIATRIST'S ROLE IN THE HEALTH OF PATIENTS WITH SERIOUS MENTAL ILLNESS

Speaker: Lori E. Raney, M.D.

SUMMARY:

Dr. Raney will discuss the psychiatrist's responsibility in the overall health care of the patients with serious mental illness.

NO. 4
EXPANDING THE ROLE OF PSYCHIATRISTS IN MANAGEMENT OF GENERAL MEDICAL CONDITIONS

Speaker: Erik R. Vanderlip, M.D., M.P.H.

SUMMARY:

Dr. Vanderlip will discuss new care models to improve the medical outcomes of persons with serious mental illness.

WORKSHOPS

OCT 06, 2016

BUILDING AN INTEGRATED CARE TRAINING PROGRAM

Chair: Anna Ratzliff, M.D., Ph.D.

Speakers: Ramanpreet Toor, M.D., Mark H. Duncan, M.D., Amritha Bhat, M.D., M.B.B.S.

EDUCATIONAL OBJECTIVE:

At the conclusion of the session, the participant should be able to: 1) Describe innovative approaches to building an integrated care program, including faculty development; 2) Apply strategies to collaborate with family medicine faculty to teach integrated care; and 3) Develop a plan for enhancing integrated care training at their own institutions.

SUMMARY:

The APA has recently published a position paper supporting the development of integrated care training for psychiatrists. However, there continue to be challenges to delivering these training

opportunities, including lack of funding for programs and lack of faculty development opportunities. Faculty from the University of Washington will present information about their new state-funded University of Washington Integrated Care Training Program (UWICTP). The mission of the UWICTP is to improve the health of Washingtonians by preparing a workforce to advance effective integrated behavioral health care. The first part of the workshop will be an overview of the state funding process and core components of this new program. The faculty development learning collaborative and curriculum development process will be reviewed as a model for professional development in integrated care for faculty. The perinatal psychiatric unit will be described as a model component of the new curriculum. The faculty will describe the development of a partnership with family medicine faculty and curriculum development for interprofessional training opportunities. The last portion of the workshop will be a small group discussion to develop individual training plans for each participant to enhance opportunities for integrated care training.

**PREPARING FOR THE NEXT SILVER TSUNAMI:
CARING FOR OLDER ADULTS WITH SUBSTANCE
ABUSE DISORDERS IN AN INTEGRATED HEALTH
CARE MODEL**

Chair: Rajesh R. Tampi, M.D.

EDUCATIONAL OBJECTIVE:

At the conclusion of the session, the participant should be able to: 1) Describe the epidemiology of substance use disorders in late life; 2) Elaborate on the assessment of substance use disorders in late life; 3) Enumerate the evidence-based treatments for substance use disorders in late life; and 4) Discuss the care of older adults with substance use disorders in an integrated health care system.

SUMMARY:

The population of older adults in the United States is growing at an appreciable rate, and this phenomenon has been dubbed the "Silver Tsunami." Associated with the growth of the aging population is the evidence for the significant growth of older adults who are using psychoactive substances. This substantial growth in the number of older adults who are using substances can be termed the "Next Silver Tsunami." Available evidence indicates that at least one in four older adults in the United States has used psychoactive medications with an abuse

potential. Unlike the younger population where common drugs of abuse include marijuana, cocaine and heroin, the common drugs of abuse in the elderly are alcohol, nicotine and prescription drugs. Although there is reasonable data on the epidemiology and treatments for alcohol use disorders in the elderly, there is a dearth of comparable data on other drugs of abuse among this population. Given the available evidence, clinicians caring for older adults should be familiar with the management of individuals who have substance use disorders. In this workshop, we will first describe the epidemiology of substance use disorders in late life. Next, we will review the evidence-based treatments for substance use disorders in late life. Last, we will discuss the care of older adults with substance use disorders in an integrated health care system.

**ROLE OF LEADERSHIP IN NARROWING THE GAP
BETWEEN SCIENCE AND PRACTICE: IMPROVING
TREATMENT OUTCOMES AT THE SYSTEMS' LEVEL**

Chairs: Victor J. A. Buwalda, M.D., Ph.D., Sy A. Saeed, M.D., M.S.

Speakers: Sy A. Saeed, M.D., M.S., Victor J. A. Buwalda, M.D., Ph.D., Robert P. Roca, M.D., M.B.A., M.P.H., Steven S. Sharfstein, M.D., M.P.A.

EDUCATIONAL OBJECTIVE:

At the conclusion of the session, the participant should be able to: 1) Acknowledge the information gap between science and practice; 2) Acknowledge the role of leadership in creating and sustaining health service environments that increase the likelihood of desired health outcomes; 3) Distinguish the implementation track of outcome measurement: validation, implementation and outcome; 4) Acknowledge the challenges and threats in the field of outcome measurement and management at a large psychiatric institution in the U.S.; and 5) Recognize the discussants' advice for the future concerning outcome measurement issues and leadership challenges in this field.

SUMMARY:

It has been well documented that health care does not reliably transfer what we know from science into clinical practice. As a result, patients do not always receive the care suggested by the scientific evidence. Because of this, and despite the best intentions of a skilled and dedicated health care workforce, the result is often poor or suboptimal clinical outcomes. As research and technology rapidly advance, this gap between science and practice appears to be

widening. There is an increasing public concern about a lack of access to appropriate treatment, pervasiveness of unsafe practices and wasteful uses of precious health care resources leading to suboptimum treatment outcomes. Leadership has a critical role in creating and sustaining the environment that supports health services for individuals and populations to increase the likelihood of desired health outcomes consistent with current professional knowledge. Leadership also has a responsibility to improve outcomes by ensuring effective use of evidence-based practices, measurement-based care, knowledge and skills management, care coordination, and information technologies. This workshop will address leadership issues in these components of a system's ability to improve treatment outcomes. The first presenter will summarize data that support the assertion that today there remain significant gaps between science and practice. This will be followed by describing the role of leadership in creating and sustaining health service environments that increase the likelihood of desired health outcomes. The second presenter will discuss how to use the three quality domains defined by Donabedian—structure, process and outcomes—as a framework for outcome measurement (OM) and management and what is needed to make OM part of the clinical care process: validating measurements, using the participatory model and motivating clinicians to do so. The third presenter will focus on the challenges and threats in the field of outcome measurement and management at a large psychiatric institution in the U.S. and how to overcome these issues and not to lose sight of the main aim: to enhance the quality of the clinical care process. Finally, the workshop discussant will offer a commentary on what has been said during the workshop and provide some advice for the future.

PROJECT ECHO: A DISRUPTIVE INNOVATION TO ADVANCE INTEGRATED BEHAVIORAL HEALTH

Chair: Eric R. Arzubi, M.D.

Speakers: Mark H. Duncan, M.D., Brant Hager, M.D., Daniel Duhigg, D.O., M.B.A., Jonathan Betlinski, M.D., B.A., Michael J. Hasselberg, Ph.D., N.P., R.N.

EDUCATIONAL OBJECTIVE:

At the conclusion of the session, the participant should be able to: 1) Define Project ECHO and its benefits; 2) Understand how Project ECHO can expand access to best practices in psychiatric care;

and 3) Understand how Project ECHO enhances efforts to deliver integrated behavioral health care.

SUMMARY:

Project ECHO (extension for community health care outcomes) is an interdisciplinary, collaborative, case-based, teleconsultation, hub and spoke learning approach to supporting primary care providers in tending to the needs of patients with complex conditions. Project ECHO at the University of New Mexico has, since its inception, incorporated behavioral health perspectives in delivering state-of-the-art teleconsultation to primary care providers nationally and internationally. In the not so distant days of interferon-based treatment, behavioral health collaboration formed an essential component of Project ECHO's successful hepatitis C TeleECHO clinic. Today, behavioral health collaboration remains a cornerstone of the ECHO approach, not only in hepatitis C, but also in HIV, endocrinology, chronic pain and headache management, integrated addictions and psychiatry, and other TeleECHO clinics. Behavioral health collaboration at ECHO depends upon the creation of a safe learning environment, where voices from the full range of health care providers are welcomed and encouraged. This IPS workshop will highlight the power of TeleECHO clinics to disseminate best practices in psychiatric care across diverse clinical settings and vast geographic areas. In particular, psychiatrists who lead and champion TeleECHO clinics in New Mexico, Montana, Oregon and Washington will share their experiences, including successes and challenges, in rolling out this innovative model.

THE BEHAVIORAL HEALTH HOME: NATIONAL PERSPECTIVES ON IMPLEMENTATION SUCCESSES AND FAILURES

Chairs: Erik R. Vanderlip, M.D., M.P.H., Yavar Moghimi, M.D.

Speakers: Miriam Tepper, M.D., Joseph Parks, M.D., Patrick S. Runnels, M.D., Margaret Chaplin, M.D., Risa Fishman, M.D.

EDUCATIONAL OBJECTIVE:

At the conclusion of the session, the participant should be able to: 1) Articulate the history and rationale for the creation of behavioral health homes (BHHs); 2) Identify the core features of a BHH; 3) Compare and contrast differences in implementation for BHHs across six agencies covering five states, two from the same region (DC); 4) Advocate for the role

of a psychiatric provider in a BHH; and 5) Apply lessons learned to local adaptations of reverse care integration and coordination.

SUMMARY:

Persons with severe mental illness die up to 25 years earlier than persons without severe mental illness, primarily due to preventable cardiovascular diseases. Over the past decade, numerous state and national attempts to improve access to primary and preventive care have met with varied success. The Affordable Care Act allowed for the provision of federal monies to assist states in care coordination of their most vulnerable populations served by Medicaid. Over the ensuing half decade, many states, led by the Missouri model, have implemented behavioral health homes (BHHs) focused on better coordinating care for adults and children with severe mental illnesses. Federal mandates require that BHHs attend to six core functions, 1) Comprehensive care management; 2) Care coordination; 3) Health promotion; 4) Comprehensive transitional care; 5) Individual and family support services; and 6) Referral to community and social support services, but there is large variability in outcomes reported and resources provided. Implementation has varied state to state, and even among local communities. This “rapid fire” workshop, led by Dr. Joseph Parks, the visionary behind Missouri’s Health Home Model, will explore variations in approach to these six core functions and outcomes reported from five different states and even across one local community (Washington, DC) and reveal valuable lessons learned from agencies dealing with the complexity of reverse integration.

THE COLORADO EXPERIENCE WITH LEGALIZED MARIJUANA

Chair: Karen Rice, M.D.

Speakers: Karen Rice, M.D., Rachel A. Rebecca, M.D., Wilson M. Compton, M.D.

EDUCATIONAL OBJECTIVE:

At the conclusion of the session, the participant should be able to: 1) Understand the impact of marijuana legalization in Colorado in regard to public health, safety measures and related data; 2) Understand the discrepancies between scientific information and public perception about marijuana and how they came to be; and 3) Understand some implications for community psychiatrists practicing in a state where marijuana use is legal.

SUMMARY:

Background: Although marijuana remains an illegal drug according to the U.S. government, several states have enacted varying degrees of legalized marijuana. As of January 2016, 23 states and the District of Columbia have enacted laws legalizing “medical marijuana,” and four states (Colorado, Washington, Alaska and Oregon) and the District of Columbia have legalized recreational marijuana. In November 2012, Colorado citizens voted to pass an amendment that allows all individuals to use and possess an ounce of marijuana and grow up to six plants. The amendment also permits licensing marijuana retail stores, cultivation operations, factories and testing facilities. **Methods:** Rocky Mountain High Intensity Drug Trafficking Area (RMHIDTA) is tracking the impact of marijuana legalization in the state of Colorado. RMHIDTA has collected data in areas including impaired driving, youth and adult marijuana use, emergency room admissions, and diversion of Colorado marijuana. Their reports will be presented and discussed. Related data including, but not limited to, Colorado crime statistics, tax revenue, THC potency, homelessness, medical marijuana registry and marijuana business data will also be presented and discussed. **Conclusion:** There is an ongoing debate in the United States about legalizing marijuana. Colorado voters’ decision to legalize recreational marijuana in 2012 provides an important opportunity to gather and examine data about the impact of marijuana legalization.

WOMEN IN COMBAT: PSYCHOLOGICAL IMPLICATIONS OF WOMEN ON THE FRONT LINES

Chair: Kyle J. Gray, M.D., M.A.

Speakers: Elspeth Cameron Ritchie, M.D., M.P.H., Tracey Koehlmoos, Ph.D., M.H.A., Jacqueline Garrick, M.S.W., Kate McGraw, Ph.D.

EDUCATIONAL OBJECTIVE:

At the conclusion of the session, the participant should be able to: 1) Understand the history of women in combat and the significance of the recent rescission of the ground combat exclusion role; 2) Describe the available evidence regarding how women may respond differently to the combat experience and how current and future research should impact military leadership; 3) Recognize the need for civilian providers’ awareness of the implications of women in combat and advocate for the need for an enduring focus on key women’s health issues in the military; and 4) Advocate for the

need for an enduring focus on key women's health issues in the military.

SUMMARY:

On January 1, 2016, thousands of combat roles were officially opened to women in the United States military. This move, though met with significant resistance from some corners, reflects an acknowledgment by military leadership and the American public that women have already played a vital role in U.S. military conflicts since the American Revolution. Significantly, in the most recent conflicts in Iraq and Afghanistan, nearly 300,000 women were deployed, most of whom were involved in combat functions and/or exposed to hostile fire. Despite the extensive history of women in combat, the question of how the wounds of war differentially affect women as compared to men is not well understood. The rescission of the ground combat exclusion rule only adds urgency to the need to address our gaps of knowledge in this area. Recognizing this need, a symposium on health and performance topics of concern to women in combat was held in 2014 at the Defense Health Headquarters as part of the Uniformed Services University of the Health Sciences. Among the wide spectrum of issues the symposium addressed was the psychological impact of greater exposure of females to combat. This workshop continues this conversation. We invite our civilian colleagues to help guide our efforts to prepare our men and women in uniform for this shift and hope to raise awareness regarding how this change can impact the mental health issues they can expect to face in our robust veteran population in the future. Our expert panelists will first address what we have already learned, such as 1) What may be contributing to higher rates of suicide among military women; 2) How gender differences regarding perceived levels of social support may impact psychological health, unit morale and pain perception; 3) The knowns and unknowns regarding sexual trauma, PTSD and the psychological effects of polytrauma; 4) The key areas identified for further research; and 5) How these findings should be implemented at the leadership level. We finally advocate for the need for a more cohesive driving function and/or agency for service women's health research programs and policy to continue this important work so that we may best care for our military population. We hope that feedback from participants in this workshop can help shape this vision and propel it forward.

STRUCTURAL COMPETENCY IN PSYCHIATRY: THE CASE FOR TRAINING IN THE SOCIAL AND POLITICAL DETERMINANTS OF MENTAL HEALTH

Chair: Jacob M. Izenberg, M.D.

Speakers: Helena Hansen, M.D., Ph.D., Jonathan Metzl, M.D., Ph.D., Jacob M. Izenberg, M.D.

EDUCATIONAL OBJECTIVE:

At the conclusion of the session, the participant should be able to: 1) Describe the rationale for including structural competency as a component of training in psychiatry at the medical school, residency and fellowship levels; 2) Understand how structural competency can affect clinical care and psychiatric service development, particularly for marginalized populations; 3) Identify approaches by which structural competency can be incorporated into psychiatric training; and 4) Utilize the experiences of the presenters and other participants to help navigate some of the challenges involved in broadening access to structural competency training.

SUMMARY:

Racial and economic health disparities persist, despite advances in medicine, in part because population health has less to do with health care than with social and structural factors that influence behavior, determine access to resources and even directly alter biological pathways. Structural violence describes structures that systematically undermine certain groups' ability to thrive, for example, institutionalized racism and sexism or the dismantling of the economic safety net. Although it may deeply affect the health of their patients, physicians and trainees are often inadequately equipped to address structural violence and its impacts. Because the mentally ill are often particularly affected by structural violence and because mental illness is so deeply related to social context, psychiatrists should be particularly concerned about this issue. Our workshop introduces structural competency as a means of addressing the problem. Metzl and Hansen define structural competency as "the trained ability to discern how a host of issues defined clinically as symptoms, attitudes, or diseases... also represent the downstream implications of a number of upstream decisions." Training in structural competency would ideally empower psychiatrists to effectively identify these "upstream decisions" (e.g., policies that promote housing instability) as targets for intervention and equip them with a language to collaborate with patients and the community in

addressing structural violence. The aim of this workshop is to more thoroughly examine key aspects of structural competency and the rationale for including it in medical training, particularly that of psychiatric residents and fellows. Presenters will also engage in a discussion covering approaches to integrating structural competency into various levels of training, challenges involved and best practices.

**LET'S TALK ABOUT THE ELEPHANT IN THE ROOM:
ADDRESSING PRIVILEGE, POWER AND RACISM
WITHIN OUR WORKPLACES**

Chair: Carissa Caban-Aleman, M.D.

Speakers: Michaela Beder, M.D., Kimberly Gordon, M.D., Neal Goldenberg, M.D., M.P.H.

EDUCATIONAL OBJECTIVE:

At the conclusion of the session, the participant should be able to: 1) Define privilege, oppression and racism; 2) Describe how racism is embedded in mental health, social services and our perception of the patients we serve and ourselves; 3) Understand how racial and power dynamics within our field influence the quality of psychiatric services; 4) Identify anti-racism and anti-oppression strategies psychiatrists in leadership roles (e.g., medical directors) can implement into service delivery; and 5) Explain how the above concepts can be incorporated into providing psychiatric care to diverse populations.

SUMMARY:

Increased media coverage of the murder of black citizens by police has resulted in increased awareness of persistent institutionalized racism in our society and its dramatic consequences. Recent protests and debates highlight new and old traumas, which have built up over generations in most sectors of our society. True racial equality and cross-cultural understanding among our society has not been achieved yet. In addition to the dramatic consequences of racism, subtle and perhaps more insidious forces of racism and oppression are woven into the fabric of most North American institutions. Health Care and mental health care have not been immune to this process. This workshop will provide a space to discuss how institutionalized racism influences community mental health and how to address this issue in order to provide better quality of care. In most health care settings, the culture of providers and staff might be worlds apart from that of the patients, and it is often quite different from other providers as well. Research shows that there

are racial and ethnic disparities in prescribing practices, diagnoses and even adherence to evidence-based guidelines. Our patients often perceive misunderstanding and lack of recognition of these disparities as aggressions that can cause trauma and damage the trust and rapport we aim to establish. Many well-meaning providers coming from a privileged position may have difficulty recognizing how their comments, recommendations, body language and policies might be transgressions. This workshop examines how mental health professionals, particularly medical directors and leaders in our field, have the potential to influence the agencies and institutions we work for by beginning to shed light on our own institutionalized racism and bringing anti-racist, anti-oppressive agendas into our clinical interventions. This workshop will be in buzz session format and include exercises with the audience to define privilege, how it manifests in our daily work and how to address it, not only from the perspective of providers representing racial minorities, but also emphasizing the perspective of the privileged.

HEALTH HOME, SWEET HEALTH HOME

Chair: Risa Fishman, M.D.

Speaker: Yohandry Suárez, L.C.S.W., R.N.

EDUCATIONAL OBJECTIVE:

At the conclusion of the session, the participant should be able to: 1) Gain knowledge and understand of the six required elements of the Health Home model and the treatment team through which care is coordinated; 2) Understand staff training needs in the movement from the provision of community mental health rehabilitation services to a comprehensive care management and coordination focus; and 3) Understand both government and CBO financing challenges in the implementation and long-term sustainability of the program.

SUMMARY:

In 2011, the Health Home option under the Affordable Care Act was presented as a new opportunity to coordinate care for individuals with complex needs. The Health Home model was an opportunity for states shouldering heavy health care cost burdens to improve health outcomes and reduce spending on avoidable acute care hospitalizations by rethinking and reorganizing service coordination and delivery. The model represents a paradigm shift away from a focus on

episodic acute care to a focus on health management of defined populations, especially those living with chronic health conditions. Additionally, a behavioral health home reflects efforts at primary and behavioral health care integration by recognizing the importance of caring for the whole person. State implementation of the model would provide a 90% federal match grant for the first eight quarters of the program. Critical to the long-term success of the model, then, is the ability to implement it in ways that make it sustainable. A health home must provide six core services to promote access and coordination of care, including comprehensive care management, care coordination, health promotion, comprehensive transitional care/follow up, individual and family support, and referral to community and social support services. The District of Columbia Health Home program was implemented in January 2016 and is coordinated by the Department of Behavioral Health through a network of 15 providers, many of them long-term community mental health rehabilitation service providers. District of Columbia Medicaid recipients with a diagnosis of severe mental illness are eligible for participation in the My DC Health Home Program. Consumer participation in the program is voluntary and therefore requires the consumer to opt in by signing consent forms. The Health Home model in DC has experienced both success and challenges in its first year of implementation, both at the system and individual provider levels, including management information system challenges; timely information sharing between agencies; outcome tracking; consumer enrollment and retention; and staff recruitment, training and retention.

INTEGRATED CARE AND THE ROLE OF THE COMMUNITY PSYCHIATRY FELLOWSHIP

Chairs: Aaron Meyer, M.D., Steve H. Koh, M.D., M.B.A., M.P.H.

Speakers: Lawrence Malak, M.D., Jessica Thackaberry, M.D., Jennifer Brewer, M.D.

EDUCATIONAL OBJECTIVE:

At the conclusion of the session, the participant should be able to: 1) Improve their techniques interacting with primary care physicians, more effectively gleaning their main challenge with the patient; 2) Describe best integrated care practices and models across the country; and 3) Discuss current educational barriers to producing residents proficient in integrated care.

SUMMARY:

Although community outpatient mental health clinics serve over three million people annually, wait times continue to increase as a result of the chronic lack of outpatient community psychiatrists. This shortage has placed increasing pressure on primary care physicians to manage patients with mental illness, particularly those with a chronic, stable diagnosis. An integrated mental health care approach helps formalize and improve this process as the psychiatrist provides initial recommendations and then “hands off” the patient to the primary care physician. Rather than solely working in tandem with primary care providers, an integrated approach takes co-management to a more consultative role, freeing the outpatient psychiatrist to focus on more complex cases. Community psychiatry fellowships offer physicians the opportunity to learn more about innovative models of outpatient mental health care. A number of fellowship programs have received grant funding to focus education efforts on this type of increased collaboration with primary care colleagues. To date, there has been no study investigating the difference between outpatient community psychiatrists and recent community psychiatry fellowship graduates in providing integrated care. With this workshop, we will discuss the results of a survey of community psychiatry programs and fellows on their experiences with integrated care models. In addition, we will also look more closely at an example of an integrated care clinic piloted with the UC San Diego Community Psychiatry Program. We will discuss the formation of a partnership among the San Ysidro Health Center, UCSD and the Scripps Chula Vista Family Medicine residency to create a unique teaching and service opportunity in the underserved South Bay region of San Diego. This is an identified health professional shortage area for psychiatry and in need of increased access to psychiatric care. To train psychiatry and family medicine residents in integrated care, a unique model was developed to create behavioral health clinics for family medicine residents, with community psychiatry fellows working as preceptors. This behavioral health clinic was combined with a monthly case conference and didactics. We will discuss the details of this effort, including the results of an ongoing survey of family medicine residents and issues surrounding the implantation of this program. Using the presentation on the integrated program at UCSD as an example and reviewing our survey results, we will lead a

discussion with the audience on different ways to integrate traditional psychiatric training within primary care settings. The different components of integrated care will be discussed, and we will model what would make for an ideal integrated mental health care training model with or without community psychiatry fellowship program curriculum. We will use a strengths, weaknesses, opportunities and threats model to lead the discussion on how to design a program.

PSYCH IN THE CITY: ASSERTIVE COMMUNITY TREATMENT IN A COMPLEX URBAN SETTING

Chair: Ann Hackman, M.D.

Speakers: Theodora Balis, M.D., Curtis Adams, M.D.

EDUCATIONAL OBJECTIVE:

At the conclusion of the session, the participant should be able to: 1) Identify longstanding and current issues facing urban mental health consumers, particularly those who are homeless or marginally housed; 2) Discuss challenges faced by ACT providers in troubled urban settings; and 3) Describe specific approaches to maintaining safety for staff and consumers in these settings and to facilitating individual recovery.

SUMMARY:

Assertive Community Treatment (ACT) is a time-tested, evidence-based model for delivering person-centered, recovery-based services to people with serious mental illness whose needs have not been met in more traditional treatment settings. The University of Maryland's Baltimore-based ACT team was started in 1990 as a McKinney-funded study evaluating the ACT services for homeless people diagnosed with mental illness. Over the past 25 years, although there have been changes in our cities, it is difficult to argue that there have been sweeping improvements, especially for homeless and marginally housed individuals. In addition to limited access to resources, these individuals must often contend with food deserts, high crime rates and recurrent traumas. Further, consumers staying in these communities often have interactions with police that include distrust and conflict, as well as interactions with city leaders that fail to address the needs of our most vulnerable mental health consumers. These problems create significant barriers to individual recovery, as well as challenges for ACT staff. In this workshop, we will consider the struggles faced by impoverished and homeless mental health consumers in urban settings, as well

as the challenges before ACT providers working with these individuals. Discussion will include safety in the community and interactions with police (on individual and systems levels). We will then explore with our audience ways to better serve our consumers and facilitate individual recovery in troubled urban settings.

GUN CONTROL LAWS AND THE MENTALLY ILL: AN UPDATE ON LEGISLATION AND THE IMPACT ON PSYCHIATRISTS AND THE MENTALLY ILL

Chairs: Olaya L. Solis, M.D., Elissa Benedek, M.D.

Speaker: Lisa Anacker, M.D.

EDUCATIONAL OBJECTIVE:

At the conclusion of the session, the participant should be able to: 1) Review President Obama's recent executive actions to reduce gun violence and how these actions may impact psychiatrists and confidentiality; 2) Learn about the changes states have made, even in the last year, to gun control measures impacting patients with diagnosed mental illness; 3) Discuss both responsibilities and limitations mental health providers have in assessing risk by patients of harm to self and others; and 4) Discuss panelists' clinical experiences and the limitations they encountered in attempting to mitigate risk by patients of harm to self and others, particularly with regard to gun possession.

SUMMARY:

Gun control continues to be a controversial topic, particularly when gun control laws are targeted at individuals with mental illness. In the last year, the issue of gun violence has continued to be at the forefront, due to continued tragedies across the country. New laws have been enacted in the last year regarding gun violence, although the range of these laws continues to vary. Some states have enacted laws that are meant to identify and limit gun ownership by any person who is being treated for mental illness, whereas other states are remiss to even report patients to registries, despite laws in place on a national level. The general public often looks to psychiatrists to predict human behavior, with an expectation that we can predict and stop acts of violence perpetrated by gun owners. In this workshop, the presenters will provide the audience with updated facts about gun control laws on both the state and national levels, including President Obama's recent executive actions to reduce gun violence, so the audience can appreciate the spectrum and variation of gun control laws across

our country. Presenters will review how these new laws may impact psychiatrists specifically in regard to reporting and HIPAA compliance. Presenters will also highlight the balance that psychiatrists must strike in conducting risk assessments and trying to minimize access to firearms in patients who have shown a predisposition toward violence to self or others while respecting a Constitutional right to bear arms. They will also share with the audience their own professional experiences in managing patients with access to firearms and the limitations they have faced in this regard. Finally, presenters will discuss other conditions that may have more impact on violence than mental illness alone, with the proposal that gun control laws may be best targeted at other populations than those with mental illness alone.

CAREER ENHANCEMENT IN PUBLIC SERVICE PSYCHIATRY: STRATEGIES FOR GROWING A SATISFIED WORKFORCE

Chair: Robert S. Marin, M.D.

Speaker: Wesley E. Sowers, M.D.

EDUCATIONAL OBJECTIVE:

At the conclusion of the session, the participant should be able to: 1) Describe new strategies for attracting and retaining psychiatrists to the behavioral health workforce; 2) Review factors contributing to difficulty in attracting and retaining psychiatrists to public service psychiatry; 3) Describe experiences, knowledge and skills that make public sector careers productive and satisfying; 4) Present strategies public sector providers can implement to improve recruitment and retention of psychiatrists; and 5) Describe career development strategies that educators can offer to public sector psychiatrists, residents, and other trainees that will enable them to have satisfying public sector careers.

SUMMARY:

This workshop highlights new strategies for attracting and retaining psychiatrists to the behavioral health workforce. Service users and behavioral health providers recognize the severe and growing shortage of psychiatrists in the public sector. Factors contributing to the shortage include beliefs that public sector psychiatry is difficult and unrewarding; available positions are in remote communities that are professionally and socially isolated; work hours are long and work days harried; employers overvalue short visits focused on medication-based treatment; and limited time for family life, rest and recreation. These factors make

burnout and poor retention likely. However, knowledgeable, experienced community psychiatrists know that public sector work can be rich and rewarding. This knowledge and experience can guide the education of psychiatrists and other professionals. This workshop will summarize the way such education has been implemented by the Center for Public Service Psychiatry (CPSP), a state-funded program at Western Psychiatric Institute and Clinic, now in its ninth year of operation. CPSP addresses these issues from the standpoints of both demand and supply. On the demand side of the equation, CPSP works as a consultant to behavioral health service providers, encouraging them to provide job descriptions that emphasize diversity and flexibility of roles and opportunities that accommodate psychiatrists in all stages of their careers. On the supply side, CPSP trains psychiatrists to work in a variety of settings and provide leadership that promotes system change to support these aims. CPSP encourages psychiatrists in practice as well as those in training—i.e., fellows, residents or medical students—to articulate visions of their own careers, then assists them in acquiring the skills and job-finding know-how to pursue them, including exposure to diverse professional development activities that reflect the excitement and rewards of public sector work environments. Workshop attendees will participate in extensive open discussion of the favorable (or unfavorable) experiences they have had or anticipate having in public service psychiatry.

PERSONS WITH INTELLECTUAL AND DEVELOPMENTAL DISABILITIES: PSYCHIATRIC CARE AND CONSULTATION

Chair: Mark J. Hauser, M.D.

Speakers: Donald Sherak, M.D., Adam T. Kaul, M.D.

EDUCATIONAL OBJECTIVE:

At the conclusion of the session, the participant should be able to: 1) Become familiar with various roles for psychiatrists within the intellectual disability (ID) and developmental disability (DD) populations; 2) Appreciate the pros and cons of several models of psychiatric service delivery; 3) Understand recent court cases that grapple with diagnostic issues related to intellectual disability and their impact on the death penalty; and 4) Identify challenges and opportunities in psychiatric care of persons with ID and DD with co-occurring maladaptive behaviors.

SUMMARY:

Persons with intellectual and developmental disabilities often have difficulty obtaining psychiatric care when they have co-occurring psychiatric illness, severe behavior problems, and/or emotional and interpersonal issues. Psychiatrists who specialize in this area have an opportunity not only to work with the individual persons but also to work with the support staff and significant others who provide ongoing care. Psychiatrists come into contact with this population in various ways, including emergency departments, outpatient clinics, in an organized consulting role to agencies that provide residential and day program services, and in inpatient settings. Psychiatrists become engaged through various models of care to treat this population. The components of successful strategies will be emphasized. The presenters will discuss the challenges and pitfalls of various limited models of consultation and contrast these with the opportunities inherent in a well-organized multidisciplinary model. This workshop is presented by three experienced psychiatrists who have devoted their careers to working with this population. The workshop will review the evolution of diagnostic nomenclature from the *DSM-IV* to the *DSM-5*. We will explore the role of the psychiatrist who serves persons with intellectual and developmental disabilities with a focus on the pros and cons of various models of service delivery. We will share those factors in our practices that lead us to experience career satisfaction and joy from this subspecialty. Treatment planning depends on the diagnostic evaluation. The most important role of the psychiatrist for this population is the diagnostic process, leading to treatment recommendations of which pharmacological options are the special domain of the psychiatrist. However, the psychiatrist can utilize additional skills to help plan behavioral strategies, focus on interpersonal relationships and provide psychodynamic understanding of the person in the larger context of their support system. Often, persons involved in the patient's care may have their expectations of the individual set too high or too low, and the psychiatrist can help by recommending recalibration of those expectations. Family members and friends may be involved in the care and in the decision making around care planning. Though they often have a constructive involvement, at times they complicate the situation, and the psychiatrist can help with this. For psychiatrists with an interest in the overlap of law and psychiatry, we will review two recent court cases that focus on the diagnostic

criteria for intellectual disability. These cases examine the thresholds of cognitive impairment and deficits in adaptive functioning that play a critical role in the determination of eligibility for the death penalty. Less grave but also significant are disputes over eligibility for habilitative services and other entitlements.

IMPROVING QUALITY AND ACCESS IN SPECIALTY MENTAL HEALTH CARE BY APPLYING THE PRINCIPLES OF INTEGRATED CARE: WE'LL EVEN SHOW YOU THE MONEY

Chair: Caroline Fisher, M.D., Ph.D.

Speakers: Heidi J. May-Stoullil, B.S., Nathan Perry, B.A.

EDUCATIONAL OBJECTIVE:

At the conclusion of the session, the participant should be able to: 1) Understand how adding a mental health specialist may or may not create advantages for specialty mental health care; 2) Understand the financial repercussions of employing a mental health specialist; 3) Determine what individual training would be required for a specialty care mental health specialist; and 4) Discover what other models and adaptations people are using in their respective areas.

SUMMARY:

Like many rural community health systems, Samaritan Mental Health (SMH) has struggled to provide mental health care to a geographically large, resource-poor community. The transition to integrated care has been both a help and a hindrance by diverting both patients and psychiatric time out of specialty care and into primary care. In response, SMH has revamped how specialty care is being delivered using many of the principles of integrated primary care, including outcome measures, mental health specialists and diversion from frequent appointments. In doing so, the patient capacity of each psychiatrist has significantly increased, and both patients and doctors seem to like it better. By using non-specialty trained providers, the limited workforce of a rural area is effectively expanded, but in exchange, it requires a fairly defined training experience on the job. Increasing capacity in specialty mental health has allowed a more seamless transition between primary and specialty care, allowing patient referrals to be prioritized by severity. Patients find the consistent process—and familiar face—to be reassuring. Overall, this has been a very functional model;

however, it hasn't been an easy transition, and we will present both our successes and struggles. After that, we will break into small groups focusing on the patient experience, the clinician experience and the finances, with discussion questions on each topic. Finally, we will have an open discussion and brainstorming session with the audience, wherein we can all learn from one another. Caroline Fisher, M.D., Ph.D., will present the systems overview as a case study showing how using a bachelor's-level mental health specialist has changed the patient flow, timing and means of monitoring, as well as the pros and cons of the system from a clinical point of view. Heidi May-Stoullil, Director of Mental Health Operations, will present how the project has worked within our accountable care organization, as well as billing options, problems and solutions we have learned along the way. Nathan Perry, Mental Health Specialist, will talk about his experience developing this role as psychiatric medical assistant, what it has taken to train new mental health specialists for the system, the experience with families and patients, and the results of our survey of their opinions of the new system.

APPLYING FOR RESIDENCIES: ERAS, PERSONAL STATEMENTS AND PRACTICAL REALITIES—THINGS YOUR VICE DEAN NEVER TOLD YOU

Chair: Stephen M. Goldfinger, M.D.

Speaker: Marshall Forstein, M.D.

EDUCATIONAL OBJECTIVE:

At the conclusion of the session, the participant should be able to: 1) Have a clearer idea of how the process of applying for residencies really works; 2) Be able to better describe ERAS, how to prepare a personal statement and what sorts of letters of recommendation to obtain; and 3) Demonstrate the ability to discuss how best to schedule and participate in interviews.

SUMMARY:

The co-leaders of this workshop, who between them have decades of experience advising medical students and reviewing applications for residencies, are offering this forum as a "consumer-driven" place to bring your questions about the entire residency application process. After talking with many, many medical students, we've come to recognize that a significant number of applicants are unclear about how ERAS and the match work and have questions about how to choose programs to which to apply, how to "sell" themselves, and how to best prepare

their personal statement and maximize their opportunities to match with their top-choice programs. We hope that, in this highly interactive workshop, we can allay some anxieties and help answer some, if not all, of your questions. The sorts of topics we hope you will bring for discussion and would be happy to address include: 1) Do programs have a USMLE cut off? What can I do if my scores are lower than I hoped? 2) How many programs should I apply to? 3) How far back should I go when listing community activities or research? Should I worry more about a skimpy CV or one that looks "padded?" 4) How personal should my personal statement be? Are there things I should never talk about? Things I should be sure to include? 5) From whom is it best to get my letters of recommendation? I've worked briefly with somebody really famous... Should I ask her for one? 6) Is there a best time to put in the application? If I wait until late fall, am I waiting too long? 7) Is there a way to know how many interviews I should go on? Are there advantages to scheduling interviews at a particular time or in a particular order? 8) Whom can I trust to give me honest information about programs? Are the residents who take me to dinner evaluating me as well? We cannot promise that we will be able to, in the space of one workshop, answer all of your questions. We can, however, promise to be honest in our responses and to share our own experiences and perspectives.

OCT 07, 2016

PROTECTING AGAINST LIFETIME PSYCHIATRIC DISORDERS THROUGH NURTURING CLASSROOM ENVIRONMENTS: THE PAX GOOD BEHAVIOR GAME

Chair: Alan A. Axelson, M.D.

Speakers: Dennis D. Embry, Ph.D., Gail F. Ritchie, M.S.W., Glenn Thomas, Ph.D.

EDUCATIONAL OBJECTIVE:

At the conclusion of the session, the participant should be able to: 1) Understand that the PAX Good Behavior Game is a cost-efficient, population-focused intervention that demonstrates scalable, evidence-based, primary and secondary prevention results; 2) Identify the Good Behavior Game as a SAMHSA evidence-based intervention that has been successful in securing financial and administrative support for broad-based applications; 3) Identify key elements contributing to the complexity of disseminating evidence-based prevention practices designed to be implemented by elementary teachers

supported by school district administration; and 4) Identify how partnerships involving school district administrations, health organizations and mental health service organizations promote quality implementation.

SUMMARY:

A simple “behavioral vaccine”—originally developed by a fourth grade teacher and behavioral psychologists—used daily in primary grades protects against multiple lifetime psychiatric disorders. This has been proven by multiple randomized longitudinal trials spanning the second and third decades of life. The simplicity belies the embedded evolutionary signals that protect against lifetime mental, emotional and behavioral disorders, including protective phenotypic expression of BDNF genes. This workshop begins with a segment of a prime time TV show in Canada showing the PAX Good Behavior Game (PAX GBG), where most first graders in Manitoba are part of a randomized longitudinal trial being followed through age 18. The presentation details the developmental history and significance of the major components that protect against lifetime psychiatric disorders. A teacher can learn how to use the strategy in a day or two with materials and formal training; implementation mentoring and proximal data feedback—delivered by locally trained mentors—improve effectiveness in controlled studies. The PAX GBG has experimental evidence in both schools and afterschool settings for protecting against psychiatric disorders and improving parent-child relationships. Since the release of the 2009 Institute of Medicine Report on the Prevention of Mental, Emotional and Behavioral Disorders Among Young People, the adoption and implementation of PAX GBG, which is on the National Registry of Evidence-Based Programs and Practices, has skyrocketed to 38 states in the U.S. as a preventive and early intervention/treatment strategy, reaching an estimated 200,000 children since 2010. In September 2014, Nationwide Children’s Behavioral Health implemented PAX GBG in four inner city schools. Initial data show that, over the course of four months, disruptions in the classrooms decreased by almost 50% for three of the four inner city schools, from 200 disruptions per classroom period at baseline to 103 disruptions per period. At the fourth school (the one school for which we did not provide mental health therapists), implementation was unsuccessful, and disruptions rose from 50.2 to 117 per classroom period, with the teachers no longer playing the game at four months.

For two exurban schools, 34 teachers were trained, but only 11 classrooms implemented the intervention. For these classrooms, disruptions decreased from 20.6 per classroom period to 5.9. This workshop will provide discussion in a town hall format; to promote productive discussion involving workshop participants, we will have each participant complete a questionnaire that describes the key challenges related to the implementation of prevention interventions in their individual settings.

IMPROVING MENTAL HEALTH SERVICES IN UNDERSERVED COMMUNITIES: A FOCUS GROUP WITH ADMINISTRATORS, MEDICAL DIRECTORS AND TRAINEES

Chair: Alvaro Camacho, M.D., M.P.H.

Speakers: J. M. Evosevich, Ph.D., R.N., Gaurav C. Mishra, M.D., M.B.B.S.

EDUCATIONAL OBJECTIVE:

At the conclusion of the session, the participant should be able to: 1) Illustrate the different requirements to run a behavioral health department from a psychiatrist’s and administrator’s perspective; 2) Expose encountered barriers that practicing psychiatrist find when dealing with county mental health systems and federally qualified health centers; 3) Generate strategies to improve communication between medical directors, practicing psychiatrists and administrators that echo the general consensus of other community psychiatrists; and 4) Learn about state and federal regulations that administrators must follow in behavioral health centers.

SUMMARY:

Background: The treatment of mental illness in community settings has been influenced by administrative forces shaping the development of services and psychiatrists trying to improve delivery of care. The real impetus for change was the mobilization of patients from state hospitals to community mental health centers. This movement has been challenging for primary care providers, psychiatrist and administrators who see options for improvements that are antagonistic and without clear integration. In order to improve integration of mental health services from a psychiatric and administrative perspective, the literature has emphasize the use of focus groups to identify areas of improvement in 1) Access; 2) Education; and 2) Communication. **Objective:** Engage the audience in a live focus group between psychiatrists and

administrators to address the above mentioned areas of improvement to delivery of mental health in a rural underserved community. **Methods:** The panel consists of 1) An administrator (director of a federally qualified health center (FQHC) behavioral health service); 2) A medical director with experience in county mental health and an FQHC; and 3) A fellow in community psychiatry training on how to become an effective mental health administrator. A total of six questions will be debated: 1) What do you understand of primary psychiatry and community mental health? 2) What do you believe is the role of a psychiatrist as an administrator? 3) What special skills do you need to become an effective administrator in mental health? 4) What assistance do you need to enhance your performance as an administrator and be in compliance with state and federal regulation? 5) How do you communicate with doctors and administrators? and 6) How do you solve discrepancies and differences in point of view?

DESIGNING EFFECTIVE JAIL DIVERSION PROGRAMS AND IDENTIFYING RELEVANT OUTCOME MEASURES

Chairs: Tobias Wasser, M.D., Madelon V. Baranoski, Ph.D.

EDUCATIONAL OBJECTIVE:

At the conclusion of the session, the participant should be able to: 1) Distinguish metrics that can identify effectiveness of court-based programs from the court, provider and defendant perspectives; 2) Identify areas for needed health service expansion and implementation for the population of mentally ill individuals entangled with the criminal justice system; and 3) Outline ways in which implementing appropriate diversion treatment recommendations can be challenging for both providers and patients.

SUMMARY:

This workshop will present preliminary data on the effect of jail diversion for defendants with mental illness. The objective is to demonstrate metrics that can identify the effectiveness of court-based programs from the court, provider and defendant perspectives. A second objective is to identify areas for health service expansion and implementation, in particular substance abuse treatment. The final objective is to explore critical areas for further research. Mental health courts and jail diversion programs are designed to find effective alternatives to the usual process of adjudication for persons with mental illness. The explicit assumption is that by

diversion to mental health services, defendants get the treatment they need while the courts continue some oversight. Evaluating the effectiveness of these programs has been challenging. Cost savings are difficult to capture, and measuring the benefit to the courts and especially the defendants requires the right metrics and indicators. Often, programs are evaluated on the number of diversions made and general satisfaction indicators. Furthermore, a clinical trial with random assignment to a control group is ethically prohibited in an established program. We have experimented with a proxy measure of efficacy, the Outcome Without Diversion Measure. This measure asks defense attorneys and prosecutors what outcome they foresee for the defendant without diversion (i.e., if diversion had not been available). Ratings are made before resolution of the case, and data are confidential until the case is resolved. We report preliminary data that show a 72% reduction in competency to stand trial requests and 55% reduction in number of incarcerations. We will also report on the effects of this jail diversion program on length of sentence, probation and recidivism rates. In the final portion of the workshop, we will engage participants by dividing into small groups and providing them with case examples of individuals referred by the court for diversion. The groups will then take on the role of jail diversion clinician and make appropriate treatment recommendations from a list of available resources. We will then compare the groups' recommendations with the patient's actual course through diversion and eventual outcome. We will conclude with a discussion with the group regarding the challenges of determining appropriate treatment recommendations and the challenges presented to this population.

COMMUNITY CLINICS ON THE CONTINUUM OF INTEGRATED CARE: LESSONS LEARNED IN CLEVELAND, MIAMI AND NYC

Chair: Farah Munir, D.O.

Speakers: Carissa Caban-Aleman, M.D., Jeanie Tse, M.D., Janelly Marquez-Irias, M.S.

EDUCATIONAL OBJECTIVE:

At the conclusion of the session, the participant should be able to: 1) Differentiate between the different evidence-based models of integrated and collaborative behavioral health and primary care models; 2) Identify key characteristics of high-performing organizations employing different models of primary care and behavioral health

integration; and 3) Discover some of the innovations and best practices employed at these health centers designed to meet the unique public health needs of the three different urban populations.

SUMMARY:

The continuum of primary care and behavioral health integrated care is composed of an ever-growing, diverse array of organizations attempting to optimize the delivery of primary and behavioral health care in a variety of settings. Depending on the needs of each community, the impetus and strategy for integration may be driven by access and workforce shortages, the need for improved health care outcomes through care coordination, and/or any number of other unique needs represented by a given geographic area. The continuum of integrated community health care represented for this panel discussion and presentation will include a large primary care community health center with collocated behavioral health services, a large reverse-integrated, community mental health organization and a small, integrated primary care/behavioral health organization. Each organization has developed innovative models of integrated care to address the public health needs in the communities they serve. The speaker panel is composed of community health administrators and clinicians who will contrast lessons learned from the integrated programs they have implemented to serve the unique needs of their communities in the present and describe proposed solutions for anticipated future health care needs for their respective communities of New York City, Miami and Cleveland.

THE OPIOID EPIDEMIC: INNOVATIVE STRATEGIES TO ADDRESS A PUBLIC HEALTH EMERGENCY

Chair: Jeffrey C. Eisen, M.D., M.B.A.

Speakers: Leah K. Bauer, M.D., Margaret Chaplin, M.D., Gary Tsai, M.D.

EDUCATIONAL OBJECTIVE:

At the conclusion of the session, the participant should be able to: 1) Understand the accelerating nature and extent of the opioid use/overdose epidemic nationwide; 2) Develop a knowledge base regarding various local and regional strategies to address the epidemic, from legislative measures to program development; 3) Compare an organization's and/or region's efforts to those described in this presentation in order to identify areas for improvement with regard to the treatment of

substance use disorders; 4) Generate talking points and/or goals for one's own organization related to treatment of opioid use disorders so as to motivate organizational change; and 5) Create a network of other providers around the country and world with whom to collaborate on this growing challenge in the community.

SUMMARY:

The United States is experiencing an epidemic of drug overdose deaths. Since 2000, the rate of deaths from drug overdoses has increased 137%, including a 200% increase in the rate of overdose deaths involving opioids, which includes opioid pain relievers and heroin. In 2014, 61% (28,647) of drug overdose deaths involved some type of opioid, including heroin. This growing public health concern affects all corners of the country, with particularly significant rates of increase in overdose deaths in the Northeastern, Midwestern, and Southern regions of the United States. In Massachusetts, for example, the rate of unintentional opioid overdose deaths increased 88% from 2012 to 2014 alone, exceeding the number of deaths from car accidents and gun violence combined. Across the country, a variety of strategies have emerged to address the growing concern, ranging from legislative action to criminal justice-based efforts to new program development and psychosocial interventions. This workshop will introduce a number of approaches that are emerging across the country to address what has become a public health emergency. Panelists will present on initiatives occurring in their regions and the challenges inherent in developing and implementing solutions to the widespread concern. Attendees will be encouraged to discuss the nature of the opioid epidemic in their respective regions, as well as their experiences in combating the epidemic.

INTEGRATED COGNITIVE BEHAVIOR THERAPY FOR PATIENTS WITH PSYCHOSIS: LEARN THE MODEL AND APPLY TO YOUR CURRENT PRACTICE

Chairs: Carolyn J. Brenner, M.D., Anna Ratzliff, M.D., Ph.D.

Speakers: Anna Ratzliff, M.D., Ph.D., Carolyn J. Brenner, M.D.

EDUCATIONAL OBJECTIVE:

At the conclusion of the session, the participant should be able to: 1) Recognize that there is strong evidence to use cognitive behavior therapy (CBT) for patients with psychotic disorders; 2) Describe the

CBT model for delusions, hallucinations and negative symptoms; and 3) Apply CBT principles when discussing symptoms with psychotic patients and integrate this approach into current psychiatric practice.

SUMMARY:

Cognitive behavior therapy for psychosis (CBTp) has strong evidence for improving symptoms of schizophrenia and other psychotic disorders. We will briefly review the evidence for CBTp and then focus on applying these principles in psychiatrists' current work with patients with psychosis. Clinical cases will be used to demonstrate the model for delusions, hallucinations and negative symptoms. Common communication and learning difficulties in this population will be discussed. Participants will work in small groups to practice applying CBTp techniques to cases. Group discussion will allow participants to learn from the speakers and each other about different strategies to effectively work with patients' psychotic symptoms in multiple treatment settings.

THE ROLE OF COMMUNITY PSYCHIATRISTS IN CORRECTIONAL/FORENSIC PSYCHIATRY: HOW TO BRIDGE THE GAP

Chairs: Mardoche Sidor, M.D., Stephanie LeMelle, M.D., M.S.

Discussant: Steve Moffic, M.D.

Speakers: Stephanie LeMelle, M.D., M.S., Mardoche Sidor, M.D.

EDUCATIONAL OBJECTIVE:

At the conclusion of the session, the participant should be able to: 1) Better appreciate the common grounds in the fields of community—and forensic—psychiatry; 2) Start a stimulating discussion on how to bridge the gaps between the two fields; 3) Have the opportunity to learn from the experience of experts in both fields; 4) Have the opportunity to learn new ways to better navigate the intersection of community psychiatry and forensic psychiatry; and 5) Brainstorm what the future of community psychiatry should look like as it relates to correctional/forensic psychiatry.

SUMMARY:

Community psychiatrists care for the most vulnerable and underserved patients. They often play the role of bridging the gaps, spearheading preventive measures and paying closer attention to the social determinants of health. As we serve our patients, there is often an overlap between

correctional psychiatry and the work we do on a daily basis. Many have gone so far as to say that, given the high percentage of our patients involved in the criminal justice system, "the future of community psychiatry is forensic psychiatry."

However, others have historically seen the two fields as either "separate" or even "non-reconciliatory." In an era where more people have become aware of this overlap, the following questions arise: 1) How do we reconcile the two fields? 2) How do we close the gap? 3) What should be the concrete role of a community psychiatrist in the field of forensic psychiatry? 4) What should be the concrete role of the forensic psychiatrist in community psychiatry? To address these questions and many more, several experts in both fields will join in a workshop and 1) Share their experience from working in both fields; 2) Start a discussion to help establish the direction to take; and 3) Discuss the geographically based similarities and differences experienced while working in both fields. The audience will therefore benefit from this workshop from several perspectives: 1) Start to better appreciate the common grounds in the fields of community—and forensic—psychiatry; 2) Start a stimulating discussion on how to bridge the gaps; 3) Learn from the experiences of experts in both fields; 4) Learn new ways to navigate the intersection of community—and forensic—psychiatry; 5) Start brainstorming on the future of community psychiatry as it relates to correctional/forensic psychiatry; and 6) Compare both fields in terms of required skills and provided funding.

COLLABORATIVE CARE: ONE SIZE DOESN'T FIT ALL

Chairs: Thomas N. Wise, M.D., Yu Dong, M.D., Ph.D.

Speakers: Catherine Crone, M.D., Brian J. Masterson, M.D., M.P.H., M.S.

EDUCATIONAL OBJECTIVE:

At the conclusion of the session, the participant should be able to: 1) Review why behavioral health integration with primary care is currently so important; 2) Discuss the basic components of integrated care and understand the financial impact of depressive disorders; 3) Illustrate different models with both pros and cons of each; 4) Discuss the basic components of integrated care from a structural and mandated perspective; and 5) Review the newer technologies, both innovative and disruptive, that allow better integration.

SUMMARY:

The increasing recognition that effective treatment for psychiatric disorders within primary care populations may improve quality and lower health care costs has led to reexamining various models to integrate behavioral health (including psychiatry) into primary care. There are some who doubt that these models will be universally accepted as reasonable psychiatric care, but Karl Mannheim's concept of generational change and the impact of disruptive technologies suggests otherwise. Often, such collaborative care models are termed approaches to population health. Except for HMOs, most health care systems treat cohorts of patients with many types of insurance coverage. This demands alternate forms of integration than often presented in the psychiatric literature. Strategies to integrate behavior health include colocation of mental health clinicians into primary practices or more integrated methods that include stepped care via screening for common psychiatric disorders and increasing levels of treatment. Although the Patient Health Questionnaire (PHQ)-2 and -9 are the common psychometric screens, there are other validated instruments to evaluate psychiatric categories in a cost efficient and reliable manner. This workshop will discuss the various models and screening instruments and present a collaborative care model for a hospital system with a large primary care component in its ambulatory division that is spread over a large suburban area. It was designed to manage those within an HMO and other insurance models. The workshop will discuss how one model will not be sufficient for the many variety of health care organizations.

INNOVATIONS IN ENHANCING ACCESS TO SERVICES AND ADDRESSING BARRIERS TO TREATMENT COMPLIANCE IN THE SERIOUSLY MENTALLY ILL (SMI) OUTPATIENT POPULATION

Chair: Bernadette Cullen, M.D.

Speakers: Deirdre Johnston, M.B., Stas Spivak, M.D., Becky Rye, M.S.N., N.P., Melissa E Mitchell, L.C.S.W.

EDUCATIONAL OBJECTIVE:

At the conclusion of the session, the participant should be able to: 1) Understand how telemedicine can be of benefit in improving access to care; 2) Identify the issues that need to be considered before and during the implementation of this type of service; 3) Understand the impact of advertising on medication adherence among an SMI population; and 4) Identify ways to enhance medication compliance in the SMI population.

SUMMARY:

Despite advances in treatment options over the years, there has been very little change in the overall morbidity and mortality rates among those with serious mental illness (SMI). Accessing and adhering to treatment are two important factors that impact these rates, and finding ways to address these issues is vital to the overall health and well-being of this population. In this workshop, the speakers will 1) Report on how telemedicine has been implemented to provide psychiatric medication services to elderly patients with SMI in the community. The speaker will provide a demonstration on the use of a secure teleconferencing system via iPads in the community; 2) Provide data on patient satisfaction with the use of the telemedicine services and discuss practical considerations that influence the success of this type of service; 3) Report on the impact of advertising on patient medication compliance among an outpatient SMI population; and 4) Discuss methods that are being implemented in the clinical setting to improve medication adherence among this population.

OVERCOMING BARRIERS TO CARE AND CHALLENGES IN TREATMENT OF CLIENTS INVOLVED IN THE NORTH AMERICAN SEX INDUSTRY

Chair: Rachel Robitz, M.D.

Speakers: Amy Gajaria, M.D., Carolyn Dawson, Monica D. Ulibarri, Ph.D., Nicole Wimberger, M.D.

EDUCATIONAL OBJECTIVE:

At the conclusion of the session, the participant should be able to: 1) Describe the nature and complexities of the North American sex industry; 2) Understand barriers to engaging clients involved in the sex industry in psychiatric services; and 3) Discuss potential methods to engage clients involved in the sex industry with psychiatric services.

SUMMARY:

The sex industry is a multi-million dollar industry affecting many people across North America and abroad. In general, individuals engaged in the commercial sex trade have higher rates of past sexual trauma and mental health diagnoses. Despite the size of the industry and the complex needs of those engaged in the industry, there has been a lack of attention to the mental health care of those involved, and participants remain underserved. There are complex reasons for this, one of which is participant reluctance to engage with formal health care due to stigma and discrimination. Additionally,

there is little available information about knowledgeably and sensitively treating this complex population. This workshop brings together a diverse panel to discuss both the barriers to engaging clients with a history of involvement in the sex industry and the complexities of their care. We will first provide an overview of the sex industry, including the diversity of work, a primer on terminology, and controversies and considerations related to sex industry involvement. Following this, we will have a panel discussion highlighting the perspectives of a research psychologist, trainees who have worked with those in the sex industry, and a client who has a personal and family history of engagement in the sex industry. The panel will examine questions surrounding care for this marginalized population, initially providing a brief introduction to sex work and worker perspectives. Trainee perspectives on providing care for a population when supervision is limited as well as techniques to engaging clients previously stigmatized in medical settings will be presented. A client will discuss experience in the sex industry and in accessing mental health services. In addition, panel members will comment on harm, harm reduction, barriers to care and methods to prevent engagement in the sex industry. Finally, attendees will break into small groups to brainstorm potential strategies for improving care. Each small group will be provided with prompts to help guide their discussion, and each small group will be led by a member of the panel. The workshop will conclude with attendees gathering to discuss methods of improving care for this vulnerable population.

THE RISE OF K2: THE EPIDEMIOLOGY, INNOVATIVE CLINICAL TREATMENT AND CRIMINAL LAW ISSUES RELATED TO SYNTHETIC CANNABINOIDS

Chair: Anthony Carino, M.D.

Speakers: Nitin Savur, Joanna Fried, M.D.

EDUCATIONAL OBJECTIVE:

At the conclusion of the session, the participant should be able to: 1) Identify innovative clinical approaches to treat synthetic cannabinoid use disorders; 2) Recognize criminal law issues related to synthetic cannabinoid access in the community; 3) Describe the emerging epidemiology of synthetic cannabinoids in the U.S.; and 4) Identify population health interventions to address synthetic cannabinoids in the community.

SUMMARY:

There has been a rapid rise in synthetic cannabinoid ("K2" or "Spice") use among individuals over the last four years. This rise has resulted in significant psychiatric, physical health and social consequences. We will review the epidemiology of synthetic cannabinoids and discuss how access is affected by legal, economic and social factors. An assistant district attorney of New York County will present the criminal law issues that affect access, distribution and prosecution of those involved in synthetic cannabinoid sales. A clinical case review of individuals with co-occurring mental health conditions and K2 addiction will be presented. We will make recommendations around the clinical treatment of K2 addiction and population-based interventions to address this condition at the community level. This workshop includes interactive clinical case discussions with audience participation in addition to general audience discussion.

COGNITIVE BEHAVIOR THERAPY FOR PERSONALITY DISORDERS

Chair: Judith S. Beck, Ph.D.

EDUCATIONAL OBJECTIVE:

At the conclusion of the session, the participant should be able to: 1) Conceptualize personality disorder patients according to the cognitive model; 2) Improve and use the therapeutic alliance in treatment; 3) Engage Axis II patients in treatment; 4) Set goals and plan treatment for personality disorder patients; and 5) Describe advanced cognitive and behavioral techniques.

SUMMARY:

A number of studies have demonstrated the efficacy of cognitive behavior therapy in the treatment of patients with personality disorders. The conceptualization and treatment for these patients is far more complex than for patients with acute disorders such as depression and anxiety. Therapists need to understand the cognitive formulation for each of the personality disorders. They need to be able to take the data patients present to develop individualized conceptualizations, including the role of adverse childhood experiences in the development and maintenance of patients' core beliefs and compensatory strategies. This conceptualization guides the clinician in planning treatment within and across sessions and in effectively dealing with problems in the therapeutic alliance. Experiential strategies are often required for patients to change their core beliefs of

themselves, their worlds and other people, not only at the intellectual level, but also at the emotional level.

TEACHING PSYCHIATRIC RESIDENTS ABOUT RACISM: SECONDARY AND TERTIARY PREVENTION?

Chair: Derri Shtasel, M.D., M.P.H.

Speakers: David L. Beckmann, M.D., M.P.H., Morgan Medlock, M.D., Anna Weissman, M.D., Andrew D. Carlo, M.D.

EDUCATIONAL OBJECTIVE:

At the conclusion of the session, the participant should be able to: 1) Appreciate why understanding the role of race in psychiatric care is important for secondary and tertiary prevention of negative health outcomes for racial minorities; 2) Understand the need to teach psychiatric residents about racism; 3) Recognize the personal, as well as professional, challenges in talking about race; and 4) Consider strategies to promote learning and talking about racism throughout the psychiatric workforce.

SUMMARY:

Most psychiatric residents nationally (including in our program) are white; this reflects the larger mental health workforce in the United States, of which 90% are non-Hispanic white. Many psychiatric residents and practitioners have come from middle and upper middle class backgrounds; their direct experience of racism is, for the most part, limited, while their experiences of privilege are normative. On the other hand, many of our patients are persons of color, have grown up in impoverished and violent neighborhoods, and experience racism—in some form—routinely. Additionally, people of color (who make up less than 30% of the U.S.) are disproportionately represented in homeless populations (60%) and correctional settings (68%), where many of our most seriously mentally ill patients find themselves. In addition, there is a large body of evidence that racial minorities experience significant problems in multiple domains of psychiatric care including access, correct diagnosis and standard-of-care treatment, and meaningful patient-centered outcomes. Training psychiatric residents about the myriad effects of racism is a form of both secondary and tertiary prevention. Increased attention to access barriers may change residents' decisions about resource allocation (as residents are often front-line clinicians making these decisions), promoting early identification of illness, minimizing diagnostic inaccuracy, establishing a

collaborative treatment relationship and understanding potential barriers to treatment adherence. Further, broadening interventions to address health-critical, nonmedical factors (e.g., housing, employment, legal problems) may buffer some of the common consequences of severe mental illness. While many residency training programs have curricula addressing cultural issues in psychiatry, engaging all trainees in frank—and sometimes difficult—discussions about race is a first step toward meaningful change. Embedding this training in the standard curriculum begins the “race conversation” for all trainees and provides a framework for actionable learning. If successful, it will shape the approach to clinical care and training for our next generation of psychiatrists.

ZEN AND THE ART OF RISK MANAGEMENT: INTEGRATING THE SCIENCE AND PSYCHOLOGY OF RISK INTO CLINICAL DECISION MAKING AND ORGANIZATIONAL LEADERSHIP

Chair: John S. Rozel, M.D.

Speakers: James Tew, M.D., Elizabeth Bettinelli, B.A.

EDUCATIONAL OBJECTIVE:

At the conclusion of the session, the participant should be able to: 1) Understand models of risk perception, including the impact of cognitive biases; 2) Apply techniques of risk communication to effectively share information with colleagues and families; 3) Understand the role of organizational risk management teams to support safe delivery of care; 4) Understand how risk and risk aversion impact clinical decision making in a variety of settings but with particular emphasis on inpatient admission and discharge; and 5) Understand the economic and operational impact of varying degrees of risk tolerance and aversion in psychiatrists.

SUMMARY:

Risk gets a bad rap. High-risk patients are seen as something to be avoided. Risk-taking psychiatrists are seen as a liability to an organization. Risk management is often seen purely as litigation avoidance. Clinicians convince themselves that decisions can be reduced to a choice of risk versus no risk and often look to “defensive medicine” as a panacea to mitigate risk. The reality is far more subtle—and far more hopeful. By integrating psychological and scientific aspects of risk and prediction into clinical decision making, clinicians can take a more mindful approach to understanding risk and begin to use risk as a way to provide better care.

We will present a model of risk that integrates ethos, pathos and logos. Ethos can be seen as the ethical and philosophical framework of risk: who is entitled to take risk, how is it defined, and how it might be quantified or categorized. Pathos describes the psychological aspects of risk: fear, perception, communication and cognitive biases. Logos is the rational science underlying risk-related decision making, including the application of complexity and chaos theory to clinical practice. By integrating these three viewpoints, we can provide better resources for clinicians and leaders in supporting risk-aware medical systems. Risk can be especially important to understand in the context of shared and distributed risk contracting, an increasingly common feature of health systems under the Affordable Care Act. We will apply this model to a variety of clinical decisions, but will focus on the challenges of admission and discharge decisions from inpatient settings. We will show how these risk models apply to frontline clinical processes, ongoing operational processes including hospital risk management systems, and strategic planning and organizational leadership. Implications of various approaches to risk will be demonstrated through case examples and simulations with the audience at the conclusion of the session.

CARE COORDINATION FOR BEHAVIORAL HEALTH PROBLEMS IN PRIMARY CARE SETTINGS: HOW FAR CAN WE STRETCH THIS APPROACH?

Chair: Mark D. Williams, M.D.

Speakers: Akuh Adaji, Ph.D., M.B.B.S., Angela Mattson, D.N.P., M.S., R.N.

EDUCATIONAL OBJECTIVE:

At the conclusion of the session, the participant should be able to: 1) Describe the basic components of care coordination based on current evidence and where the evidence is strongest; 2) Identify practical challenges in implementation of these concepts in real world settings; and 3) Develop an argument for care coordination to bring to one's own work environment.

SUMMARY:

There is no shortage of evidence to support improved clinical, quality of life, care satisfaction and (to a lesser extent) cost outcomes when care coordination is implemented in primary care settings for patients with behavioral health issues. There are models for various types of patient populations that differ slightly from one another. Each may have their

own strengths and weaknesses, but clearly a health care system cannot implement all of them. How should clinicians sort through the evidence to bring the best option to their work areas? Our group has experience in implementing and sustaining care coordination for depression in adults and adolescents, as well as for medically complex patients with depression. We will discuss outcomes from several of these models and the practical challenges in integrating care coordination approaches into a single model when dealing with diverse settings and populations. For a group seeking to develop care coordination as a means to extend mental health, which components are critical to implement and where can practices adjust to their own needs? What training needs, resource needs and support systems are involved? We look for an interactive audience willing to share their own experiences and questions about care coordination as a tool in the integration of behavioral health with primary care.

PREVENTION TO PRACTICE: HOW TO APPLY PUBLIC HEALTH AND PREVENTION PRINCIPLES TO YOUR PRACTICE

Chairs: Peter Chien, M.D., M.A., Michael T. Compton, M.D., M.P.H.

EDUCATIONAL OBJECTIVE:

At the conclusion of the session, the participant should be able to: 1) Apply key prevention principles to mental health; 2) Apply a public health approach to mental health; 3) Identify specific office-based strategies in prevention; and 4) Identify specific office-based strategies that support a broader public mental health approach.

SUMMARY:

This workshop will provide an overview of key tenets of public health and prevention as they pertain to psychiatry. How can we best promote mental health and prevent mental disorders in our society at the individual and the population levels? We will discuss current and promising practices toward these aims. What can we do in our individual practices to focus on prevention or support broader public mental health? If you always wanted to be more prevention-oriented in your practice, and if you want to better align your work with the public mental health needs of your community, we look forward to discussing this with you.

**NEGOTIATING MEDICAL CONTRACTS:
IMPLICATIONS FOR TRAINEES AND EARLY CAREER
PHYSICIANS**

Chair: Napoleon B. Higgins Jr., M.D.

EDUCATIONAL OBJECTIVE:

At the conclusion of the session, the participant should be able to: 1) Identify and improve mental health disparities in the community; 2) Demonstrate and apply new skills that will be useful in public psychiatry settings; 3) Examine how the current health care system affects patient care; 4) Describe how to transform systems of care; and 5) Recognize how to bring new innovations into a variety of treatments to improve patient care.

SUMMARY:

This workshop will discuss contract negotiations for the physician and increase the physician's employment satisfaction. Medical curricula often leave the physician essentially unprepared to engage in contract negotiations. This causes many doctors to be in jobs that they do not feel are personally satisfying and in which they are not reaching their career goals. We will discuss how all things are negotiable and how the employment seeker does not realize the process has well begun before receiving a contract. We will discuss negotiating principles and how to have a plan of action, which will help a physician receive a job that is in line with their career path and goals. We will discuss career level and how current personal and financial demands direct the type of jobs that physicians take. Psychiatrists are often left at the whim of others, and they are not commanding their own career direction. We will review the parts of a contract, identifying key elements to look for and how financial compensation is important, but not the most essential part of a contract. There will be open discussion regarding resources for help and discussion regarding issues affecting psychiatrists who are currently graduating or negotiating the next job. After this talk, participants should be better informed and empowered to negotiate medical contracts in order to improve job satisfaction and meet career goals.

**BUPRENORPHINE UPDATE AND EVOLVING
STANDARDS OF CARE**

Chair: John A. Renner Jr., M.D.

Speakers: Petros Levounis, M.D., Andrew J. Saxon, M.D.

EDUCATIONAL OBJECTIVE:

At the conclusion of the session, the participant should be able to: 1) Describe treatment protocols used by psychiatrists around the country who are treating opioid use disorder with buprenorphine; 2) Discuss cutting-edge research related to use of buprenorphine for treating opioid use disorder; and 3) Describe appropriate patient selection for the newly approved buprenorphine implants for treating opioid use disorder.

SUMMARY:

This workshop is intended for psychiatrists who have a waiver to treat opioid use disorder in an office-based setting. It will augment waiver training through case presentations and discussion of treatment challenges with expert faculty. Topics addressed will include patient engagement and monitoring, minimizing diversion, and management of acute and chronic pain. Participants will also be encouraged to share their experiences with reimbursement policies that impede appropriate treatment.

**ZERO SUICIDE: PREVENTING SUICIDE IN HEALTH
CARE SYSTEMS AND THE ROLE FOR INDIVIDUAL
CLINICIANS**

Chair: Peter Chien, M.D., M.A.

Speaker: Adam D. Swanson, M.P.P.

EDUCATIONAL OBJECTIVE:

At the conclusion of the session, the participant should be able to: 1) Explain a zero suicide institutional framework; 2) Describe the institutional steps for a zero suicide approach; and 3) Understand the evidence for clinician interventions to prevent suicide.

SUMMARY:

Suicide is preventable. In health care institutions, this requires a comprehensive, systemic approach for suicide prevention, including a commitment to patient engagement and effective treatment strategies. Using the Zero Suicide Toolkit as a framework, we will discuss the steps health care institutions can take to prevent suicide. We will also discuss how individual clinicians can support this effort and the evidence base for treatment of people at elevated risk of suicide.

EARLY INTERVENTIONS IN PSYCHOSIS

Chairs: Michael Hann, M.D., M.B.A., M.S., Nathaniel Brown, M.D.

Speakers: Steve H. Koh, M.D., M.B.A., M.P.H., Lawrence Malak, M.D., Laura F. Marrone, M.D., Jong H. Yoon, M.D., Isabel Alexandra Ribeiro Caldas Domingues, M.D.

EDUCATIONAL OBJECTIVE:

At the conclusion of the session, the participant should be able to: 1) Discuss current research on the identification of risk factors for the development of mental illness; 2) Demonstrate the impact of early interventions on psychotic illness disease progression; 3) Understand different models for specialized early psychosis health care delivery; and 4) Appreciate the economic impact/benefits of early psychosis interventions.

SUMMARY:

Psychotic illnesses such as schizophrenia are associated with significant clinical and economic challenges. Despite progress in early identification and treatment for these disorders, patients with psychotic illnesses often experience repeated hospitalization due to relapse of symptoms, persistent unemployment, significant societal stigma and premature mortality. Specialized clinical services provided to patients who are early in the disease course have been shown to be effective in reducing both the clinical and economic impacts of these diseases. However, early intervention health care models for psychosis remain scarce in the United States. Evidence from various large randomized clinical trials, including the National Institute of Mental Health (NIMH) Recovery After an Initial Schizophrenia Episode (RAISE) study, suggests that programs with specialized early psychosis interventions are more effective for treating first-episode psychosis with respect to hospital admissions and symptom reduction compared to standard community care. The U.S. military and leading academic institutions have developed early psychosis intervention programs that specialize in multicomponent care designed to reduce the individual and societal impacts of psychotic illness by intervening at the earliest stages of psychosis. The goals of this workshop will be to increase awareness of various early psychosis treatment models and discuss related current research and the potential clinical and economic benefits of multicomponent specialized interventions for early psychosis. Psychiatric leaders from various early psychosis treatment programs will discuss program development, utility, and clinical and economic benefits. Panel experts include representatives from

the Department of Psychiatry and Behavioral Sciences at Stanford University School of Medicine, University of California San Diego Cognitive Assessment and Risk Evaluation (CARE) Program, Naval Medical Center San Diego Psychiatric Transition Program (PTP), and the Naval Medical Center Portsmouth Continuity of Psychiatric Care (CPC) program. Attendees will be divided into small groups for facilitated discussion regarding the challenges and benefits of early psychosis interventions from both health care system and clinical perspectives. This will be followed by an interactive question and answer session with experts. Finally, attendees will be given a summary handout of high-yield “pearls” collected from experts in early psychosis treatment.

APPLYING RECOVERY-ORIENTED COGNITIVE THERAPY FRAMEWORK AND PROCEDURES TO ENERGIZE PSYCHIATRIC INPATIENT UNITS

Chair: Paul M. Grant, Ph.D.

Speakers: Aaron Brinen, Psy.D., Ellen J. Inverso, Psy.D.

EDUCATIONAL OBJECTIVE:

At the conclusion of the session, the participant should be able to: 1) Name three methods for connecting the individual with staff to establish a collaborative treatment team; 2) Understand motivating goals for each individual and demonstrate breaking them down into steps that can be started immediately on the unit; and 3) Identify elements of successful milieu programming that achieve treatment plan objectives for the greatest number of individuals on the unit.

SUMMARY:

This interactive workshop will illustrate procedures expressly designed to transform the way a psychiatric unit is run to promote recovery for the most challenging individuals (e.g., those with severe negative symptoms, aggressive behavior, extreme self-injury, constant hallucination, intractable delusions or profound disorganization). Presenters will initially discuss the basic psychological formulation to orient the attendees to a recovery-oriented cognitive model for how some individuals get stuck in the hospital and others frequently return. Using this understanding as a basis, the group will be introduced to techniques and policies to energize patient care and the treatment milieu while overcoming iatrogenic factors of inpatient stays. The workshop will include an experiential

exercise of a recovery-oriented treatment team meeting and the methods of communicating the plan across three shifts, each shift organized by a specific recovery mission. The workshop will also include an experiential exercise to develop milieu programming that contains a variety of social roles, meaningful group action, and a recovery-promoting role for staff. Additional discussion topics will include meeting Medicaid and Medicare requirements and ways to measure effectiveness of recovery efforts on the milieu (both collective and individual).

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CLOZAPINE: WHY? (WHY NOT!)

Chair: Andrew J. McLean, M.D., M.P.H.

Speakers: James L. Roerig, Pharm.D., Robert O. Cotes, M.D., Edwin Fuller Torrey, M.D.

EDUCATIONAL OBJECTIVE:

At the conclusion of the session, the participant should be able to: 1) Identify appropriate indications for clozapine use; 2) Describe attitudes and perceptions regarding clozapine use and practice; and 3) Apply information learned toward practice.

SUMMARY:

Clozapine is considered the “gold standard” treatment for individuals with schizophrenia and is the only FDA-approved antipsychotic medication for those individuals considered treatment-resistant. Clozapine has been available in the U.S. since 1990, yet its rate of use here is significantly lower than in many developed countries. In an era of shared decision making and informed consent, it is important that clinicians and patients/supports continue to be aware of this resource. This workshop will include an overview of the medication, results from regional and national surveys of prescriber attitudes toward the use of clozapine, and examples of how increased use is possible, despite limited psychiatric resources. There will be opportunity for discussion, both in small group and panel formats.

PRACTICAL APPROACHES TO SPIRITUALITY AND SCHIZOPHRENIA

Chair: Mark Ragins, M.D.

Speakers: Mary Kay Smith, M.D., Julian A. Davies, Ph.D., M.Div.

EDUCATIONAL OBJECTIVE:

At the conclusion of the session, the participant should be able to: 1) Understand several approaches

and strategies to incorporating spirituality directly within the treatment relationship to enhance engagement, mutual trust and collaboration; 2) Understand integration of spirituality within the overall services to enhance outcomes within community mental health services especially for people with psychotic diagnoses; 3) Understand how to create bridges between mental health and spiritual professionals to create overtly collaborative services; and 4) Understand how to teach and learn the incorporation of spirituality within mental health settings and services.

SUMMARY:

Many psychiatric patients, especially those with psychotic diagnoses, describe their experiences in spiritual terms. This can lead to a lack of connection with mental health providers, poor treatment collaboration and frustration on all sides. The historic reluctance to bridge the separation of church and state has generally inhibited effective integration of spirituality into service provision for these people. Common measures, for example including spiritual interests in the psychosocial history or encouraging “healthy” spiritual practices and religious supports, have been encouraged lately. This workshop goes beyond these cautious efforts to maximize the impact of including spirituality in community mental health services. We will explore this from a number of overlapping perspectives based upon clinical experience: 1) Engagement and the doctor-patient relationship and building mutual respect; 2) Spirituality, world views and cultural competency; 3) Diagnosing “spiritual schizophrenia” and other spiritual experiences; 4) Applying Joseph Campbell’s “psychotics drown in the same deep waters mystics swim gracefully in” to incorporate specific spiritual strategies to help “swim” successfully; 5) Building cohesion between physical, emotional and spiritual bodies; 6) Incorporating spirituality into clinical philosophy—compassion and caring, clinical excellence, and collaboration; 7) Spirituality integrated within ACT teams; 8) Spirituality and CBT for psychosis; 9) Incorporating spirituality into treatment ethics; 10) Bridging spiritual and mental health communities to increase collaboration and supports; 11) Spirituality, neurobiology and positive psychiatry; 11) Multidisciplinary culture of spirituality in a recovery-oriented mental health center; 12) Incorporating spirituality into professional identity and practice in residency/fellowship; 13) Jungian perspectives of spirituality and schizophrenia; 14) Re-integrating a

comprehensive biopsychosocial-spiritual approach. Our goal in sharing our professional explorations is to help lower barriers to these clinical discussions about spirituality and increase understanding of multiple strategies for effective engagement, support, treatment, collaboration and training with spirituality.

TAKING TELEMEDICINE TO PRIMARY CARE COLLABORATION

Chair: John H. Wells II, M.D.

Speakers: Erik R. Vanderlip, M.D., M.P.H., Meagan Relle, M.B.A., M.P.H.

EDUCATIONAL OBJECTIVE:

At the conclusion of the session, the participant should be able to: 1) Review how telepsychiatry has been used to effectively enhance integration in a primary care collaborative setting; 2) Plan how to get started using telemedicine in a primary care collaborative setting by identifying potential integration points; and 3) Identify and apply the best practices for telepsychiatry with a focus on issues important to the primary care setting.

SUMMARY:

In this workshop, we provide guidance for clinicians and practice managers who are considering powering a primary care collaboration with telemedicine. Telemedicine, in this case, can be defined as using audio and visual technology to overcome the challenge of having the primary care provider and patient in one spot and the mental health provider in another; it broadly encompasses teleconferencing and can include, for example, the use of mobile devices. Excellent guidelines are available for the use of telemedicine, though in many cases, special regulatory issues must be navigated. For background, we will review the literature concerning the use of telemedicine in primary care settings, as well as discuss our own experiences. Next, we will explore what to weigh when deciding if a telemedicine component is right for your practice and how to implement. Finally, we will review best practices in telepsychiatry with a focus on its use in primary care consultation.

NYC SAFE: AN INNOVATIVE PROGRAM TO SERVE HOMELESS INDIVIDUALS WITH HISTORIES OF MENTAL ILLNESS AND VIOLENT BEHAVIOR

Chairs: William A. Fisher, M.D., Myla Harrison, M.D., M.P.H.

Speakers: William A. Fisher, M.D., Myla Harrison, M.D., M.P.H., Janine Perazzo, L.C.S.W.

EDUCATIONAL OBJECTIVE:

At the conclusion of the session, the participant should be able to: 1) Understand the engagement and treatment challenges presented by homeless individuals with a history of mental illness and violent behavior; 2) Understand the structure and function of a mental health/police co-response team; and 3) Understand the structure and function of an intensive mobile treatment team.

SUMMARY:

Homeless individuals with a history of mental illness and violent behavior present extraordinary challenges to successful engagement and treatment by mental health service providers. Their unpredictable relocations among shelter, street and jail constitute major obstacles to continuity of care. Their at times hostile reactions and even history of violence toward those attempting to engage and treat them create visceral reactions, making empathic engagement more difficult. Their history of trauma and frequent co-occurring substance use disorders call for the delivery of sophisticated therapeutic interventions in a chaotic treatment environment. Acts of violence committed by these individuals often become front page stories for the tabloid media, prompting public demand that "something be done." In 2015, New York City introduced NYC Safe, a targeted program to address the needs of these individuals. The program spans multiple agencies, including the Department of Health and Mental Hygiene, Mayor's Office of Criminal Justice, Department of Homeless Services, and the Police Department. Elements of the program include information sharing, close case monitoring and augmentation of existing services (assertive community treatment, forensic assertive community treatment and assisted outpatient treatment). In addition, two new services were introduced as part of NYC Safe: mental health/police co-response teams and intensive mobile treatment teams, both designed to work with individuals who cannot be engaged by the conventional array of available services. This workshop will present the context, structure and function (and some of the challenges) of the NYC Safe program, as well as some preliminary outcome data. We will then present more detailed descriptions of the co-response and intensive mobile treatment team programs, along with case vignettes illustrating the way in which they

provide services. This will be followed by a facilitated audience discussion of the NYC Safe program.

AN ARGUMENT FOR CHANGE IN TOBACCO TREATMENT OPTIONS GUIDED BY THE ASAM CRITERIA FOR PATIENT PLACEMENT

Chair: Jill M. Williams, M.D.

EDUCATIONAL OBJECTIVE:

At the conclusion of the session, the participant should be able to: 1) Discuss the ASAM dimensions of care for substance use disorders, including tobacco; 2) Discuss the ASAM placement levels of care for substance use disorders, including tobacco; 3) Recognize that tobacco treatment is not offered or financed in the same way as other substance use disorders; and 4) Recognize that the vast majority of treatment options for tobacco operate at an extremely low intensity of care (ASAM level of 1.0 or less).

SUMMARY:

Tobacco use is a major threat to public health in the United States and the number one cause of preventable death. While most smokers try to quit unaided, robust data indicate that pairing behavioral support to FDA-approved cessation medications significantly increases cessation rates. Those who do receive assistance in quitting usually receive very low-intensity treatment, regardless of the severity of their dependence or their medical and environmental circumstances. This is in stark contrast to how other substance use disorders are treated, where there are varying levels of care depending on addiction severity and biopsychosocial circumstances. The American Society of Addiction Medicine (ASAM) developed a formal algorithm for assessing substance use disorders and determining the optimal level of care. The ASAM Patient Placement Criteria are regularly used to determine the appropriate level of care for all substance use disorders except tobacco. This session will review key aspects of the ASAM dimensions of care and placement levels with emphasis on how they apply to tobacco use and present case examples of typical smokers who would benefit from a higher intensity of tobacco dependence treatment. We also discuss current barriers to reimbursing health care providers for these services and conclude with a commentary and discussion regarding recommendations for improvements in tobacco dependence treatment care.

RECOVERY TO PRACTICE CURRICULUM FOR PSYCHIATRY: FACILITATOR TRAINING AND THE DISSEMINATION STRATEGY

Chairs: Wesley E. Sowers, M.D., Annelie B. Primm, M.D., M.P.H.

EDUCATIONAL OBJECTIVE:

At the conclusion of the session, the participant should be able to: 1) Describe the Recovery to Practice Curriculum development process; 2) Discuss some of the challenges related to changing the dominant culture in psychiatry; and 3) Explain strategies that could be used to successfully disseminate the psychiatry curriculum across the profession.

SUMMARY:

In 2009, the Substance Abuse and Mental Health Services Administration (SAMHSA) established an initiative on recovery-oriented mental health care as a transformative effort in mental health professional disciplines. The Recovery to Practice initiative involved a five-year project to develop and implement curricula in six discipline areas. The American Psychiatric Association and the American Association of Community Psychiatrists partnered to develop the curriculum for psychiatry. The need for a transformation of the dominant professional approach from a directive and paternalistic one to a person-centered and collaborative one is now widely embraced by policy makers and administrators, as well as many progressive clinicians, but in real world settings, these principles are not commonly recognized and/or consistently put into practice. The curriculum was designed to present some standards for these practices and to be easily accessible and attractive to psychiatrists in all phases of their career development. It consists of nine modules addressing the essential aspects of recovery-oriented practice residing in a slide presentation with embedded audio and video elements. Ideally, the modules are presented to groups of psychiatrists and followed by a discussion facilitated by a psychiatrist and a person in recovery, allowing opportunities for participants to express their reactions, reservations and frustrations, as well as positive experiences related to these topics. The remaining challenge for the project is to disseminate the learning material as broadly as possible across our profession. To do so, it will be necessary to create plentiful opportunities for psychiatrists and psychiatrists-in-training to be exposed to the curriculum. Training programs and CME programs provide two such opportunities.

Because the modules are best used in a format where discussion can occur, the creation of an ample pool of facilitators to conduct trainings across the country is an important objective. Having facilitators associated with each training program, and having the modules incorporated into every curriculum, would be an ideal outcome. Trainings will need to occur in a variety of other venues as well, such as APA district branches, intra-agency CME programs and regional conferences. In this workshop, participants will be asked to consider these strategies and engage in a conversation regarding other dissemination and promotion strategies that might help accomplish the goal of professional transformation.

FEDERALLY QUALIFIED HEALTH CENTERS AND PRIMARY PSYCHIATRIC PRACTICE: TOWARD WHOLE PERSON, WHOLE LIFE, PATIENT- AND FAMILY-CENTERED PRIMARY HEALTH CARE

Chair: Kenneth Thompson, M.D.

Speakers: Carissa Caban-Aleman, M.D., Mardoche Sidor, M.D., Farah Munir, D.O., Mary Kay Smith, M.D.

EDUCATIONAL OBJECTIVE:

At the conclusion of the session, the participant should be able to: 1) Understand what a federally qualified health center is and why an FQHC presents a unique opportunity to bring psychiatric practice in primary health care; 2) Appreciate the various approaches to practicing primary care psychiatry in an FQHC; 3) Be aware of the challenges of practicing in an FQHC; 4) Describe why engaging psychiatry in community-based, whole person, whole life, patient-centered and family-oriented primary health care is imperative to patient recovery; and 5) Appreciate the distinction between primary medical care (“primary care”) and primary health care.

SUMMARY:

Federally qualified health centers (FQHCs) have emerged as a key focal point for the development of primary health care (as distinct from primary medical care or primary care) in modern America. As a setting for the elaboration of the concept of the “medical home” specifically serving socially excluded populations, FQHCs are developing a new form of psychiatric practice—primary care psychiatry. With some psychiatrists now working primarily in FQHCs, they are going beyond some of the more limited forms of integrating behavioral health services into primary medical care and approaching something more akin to “fusion,” helping to create easily

accessible, community-based, whole person, whole life, patient-centered, family-oriented primary health care. This workshop will describe FQHCs and their unique place in American health care. Several practitioners from different FQHCs will describe their work, their challenges and what they see are the future prospects for pursuing psychiatric practice in primary health care. Discussion will focus on what psychiatry and psychiatrists need to do to fully engage with FQHCs.

PACT TO THE FUTURE: HOW USING TECHNOLOGY CAN ENHANCE PACT SERVICES AND OUTCOMES

Chair: Anthony Battista, M.D., M.P.H.

Speakers: Erik R. Vanderlip, M.D., M.P.H., Nancy Williams, M.D., Hannah H. Larsen, M.D.

EDUCATIONAL OBJECTIVE:

At the conclusion of the session, the participant should be able to: 1) Understand how the use of an electronic shared decision making tool impacts opportunities for engagement, promotes collaborative care and informs treatment planning within the PACT model; 2) Describe the current knowledge base, relative merits and potential shortcomings regarding the use of telepsychiatry in PACT; and 3) Identify the rationale, barriers and benefits to implementing and utilizing a registry to manage chronic health conditions within the PACT model.

SUMMARY:

Program of Assertive Community Treatment (PACT) teams provide a unique arena to incorporate innovative treatment strategies in mental health care. This three-part workshop will explore ways in which PACT teams can interface with technology to improve treatment in mental health care. This topic also provides fertile ground for a stimulating discussion built into the workshop with an invitation to audience members to share experiences of adopting technology within PACT and other clinical practices. Part 1: CommonGround is a web-based application that supports individuals with psychiatric illness in assuming an active role in their care so they and their care providers arrive at a shared decision for treatment and recovery. It is rooted in the principle that shared decision making is vital to recovery-based care and has the potential to improve outcomes and satisfaction with care. We will explore how this program and its accompanying resources have been effectively utilized within four PACT teams to empower individuals and enhance

the recovery orientation of their treatment teams to achieve meaningful change. Part 2: Psychiatric workforce shortages are a barrier to the proliferation of PACT, especially in rural states. Telemedicine, or telepsychiatry, is increasingly employed to address access issues in many psychiatric service settings. Is there a role for the use of telepsychiatry in PACT? We will review the literature, describe a PACT team that is using telepsychiatry, and weigh the pros and cons of using this technology in PACT. Part 3: PACT teams are innately poised to engulf advanced models of chronic disease management. Known as collaborative care, these models rely on four key principles, including team- and evidence-based care (of which PACT teams already excel in performing) and population- and measurement-guided care. The latter two may be successfully accomplished utilizing a registry of PACT consumers focused on tracking clinical outcomes of chronic illnesses prevalent in PACT populations (e.g., hypertension, smoking and diabetes). We will review the implementation of a registry on a university-based PACT team and detail the pros and cons of this approach to manage and screen for common modifiable cardiovascular comorbidities within a traditional, high-fidelity PACT model.

I DON'T FEEL LIKE I'M GETTING THE WHOLE STORY: MALINGERING IN PSYCHIATRIC TREATMENT SETTINGS

Chair: R'el Rodriguez, M.D.

Speakers: Margaret E. Balfour, M.D., Ph.D., Joseph J. Rasimas, M.D., Ph.D., John S. Rozel, M.D., Scott A. Simpson, M.D., M.P.H.

EDUCATIONAL OBJECTIVE:

At the conclusion of the session, the participant should be able to: 1) Better identify malingering in psychiatric treatment settings; 2) Understand the risks of both over- and under-identifying malingering; 3) Accurately document occurrences of malingering in psychiatric practice; and 4) Understand and process negative countertransference toward patients who malingering.

SUMMARY:

Malingering, the intentional feigning or exaggeration of symptoms for secondary gain, can be encountered in all medical specialties and at all levels of care. Psychiatric symptoms cannot be confirmed by objective laboratory tests or imaging and are thus particularly difficult to distinguish from

feigned symptoms. Although malingering is frequently encountered, it is not generally a focus of psychiatric education and can be difficult to identify and approach. In this workshop, participants will learn strategies for better identifying and managing patients who malingering. The workshop will focus on practical strategies for successfully identifying malingering, including distinguishing it from symptoms arising from personality pathology and acute intoxication. Recommendations for appropriate documentation will be reviewed. We will discuss potential harms of over-identifying malingering compared with potential harms of under-identifying malingering. Malingering can engender powerful negative countertransference among clinicians, and we will explore ways to foster empathy for patients whose needs may not be best served by the psychiatric services they seek. Speakers will review the literature underlying treatment recommendations and use case examples to demonstrate principles in treatment. In addition to providing practical and useful information in addressing malingering, this workshop will provide a forum for participants to share their own clinical experience with patients who malingering, receive feedback from presenters on challenging cases and process their own negative countertransference arising from these difficult but common clinical situations.

GUIDELINES FROM THE FRONT LINE: IMPLEMENTING SUCCESSFUL, SUSTAINABLE PRIMARY CARE INTO A COMMUNITY MENTAL HEALTH CENTER

Chairs: Patrick S. Runnels, M.D., Nicole Martin, M.A.

EDUCATIONAL OBJECTIVE:

At the conclusion of the session, the participant should be able to: 1) Identify common clinical roadblocks to implementing a full primary care service in a community mental health setting; 2) Identify common administrative and financial roadblocks to implementing a full primary care service in a community mental health setting; 3) Identify common barriers to engaging in partnerships between federally qualified health centers (FQHCs) and community mental health centers (CMHCs); and 4) Describe common solutions to overcoming clinical and administrative barriers, including how to best negotiate partnerships between FQHCs and CMHCs.

SUMMARY:

While several successful paradigms have been put forth for integrating mental health into primary care settings, the experience bringing primary care into community mental health centers has been less auspicious. SAMHSA has led the effort to develop models of so-called “reverse integration” with primary care and behavioral health integration (PBHCI) grants, with hundreds of participants over the past several years, but the effort so far has yielded little by way of successful templates to follow. Several factors have likely contributed to this problem: difficulty with financing such a model, skepticism by mental health center clients in engaging with primary care, major cultural differences between primary care and behavioral health clinicians, and the primary care workforce shortage, just to name a few. The Centers for Families and Children is a large community mental health center in Cleveland serving more than 7,000 individuals annually. It was also the recipient of one of the original 13 PBHCI grants and has been developing and delivering integrated care for more than five years. During that time, many mistakes were made and lessons learned, but we have now established full service primary care at three of our four main clinic sites and are growing this service. During this workshop, we intend to only briefly highlight our story, but instead present a common set of problems encountered at the clinical, administrative, financial and partnership levels and a core set of solutions to managing these problems. The workshop will address these issues through dynamic group work during which the audience will break into groups and identify common problems they have encountered in implementing models of integrated care, after which they will consult with the presenters to help solidify a list of common principles for successful integration based on our experience.

MEDICATION-ASSISTED TREATMENTS OF ADDICTION DISORDERS: WHAT YOU NEED TO KNOW

Chair: Carolina A. Klein, M.D.

EDUCATIONAL OBJECTIVE:

At the conclusion of the session, the participant should be able to: 1) Review current pharmacological options for the management of addiction disorders and associated psychiatric comorbidities; 2) Discuss pharmacological options currently under development, research or off-label

use; and 3) Address potential barriers and concerns in delivering MAT options to qualifying populations.

SUMMARY:

Medication-assisted treatment (MAT) is the use of medications, in combination with counseling and behavioral therapies, to provide a whole-patient approach to the treatment of substance use disorders. Research shows that when treating substance use disorders, a combination of medication and behavioral therapies is most successful. MAT is a form of pharmacotherapy and refers to any treatment for a substance use disorder that includes a pharmacological intervention as part of a comprehensive substance abuse treatment plan with an ultimate goal of patient recovery with full social function. MAT may include interventions targeted at replacing the drug of choice, managing adverse effects of intoxication or withdrawal, providing positive or negative behavioral reinforcement of drug use, or treating psychiatric comorbidities safely and effectively. As part of a comprehensive treatment program, MAT has been shown to improve survival, increase retention in treatment, decrease illicit opiate use, decrease hepatitis and HIV seroconversion, decrease criminal activities, increase employment and improve birth outcomes in perinatal addicts. In the U.S., MAT has been demonstrated to be effective in the treatment of alcohol dependence with Food and Drug Administration-approved drugs such as disulfiram, naltrexone and acamprosate and opioid dependence with methadone, naltrexone and buprenorphine. New alternatives and formulations have become available, including long-term implanted devices for opiate replacement therapies, as well as adjunctive intervention strategies such as transcranial magnetic stimulation. Furthermore, alternative pharmacological options are available internationally, but remain largely debated (or illegal and unavailable) in the U.S., such as ibogaine. Treatment of associated syndromes such as pain, sleep disturbances, anxiety and depression is often complex. Some pharmacological options may improve symptomatology while supporting the process of addiction recovery and improving time to relapse. We offer an overview of available treatment options and discuss current barriers to providing such care. We will also foster an academic debate regarding the principles underlying support and rejection of current treatment alternatives.

THE FORMATION OF BRAIN (BEHAVIORAL RESEARCH AND INNOVATION NETWORK), A COMMUNITY PSYCHIATRY PRACTICE-BASED RESEARCH NETWORK (PBRN)

Chairs: Kathleen A. Clegg, M.D., Andrew W. Hunt, M.D.

Speaker: Patrick S. Runnels, M.D.

EDUCATIONAL OBJECTIVE:

At the conclusion of the session, the participant should be able to: 1) Describe two reasons that participation in a practice-based research network (PBRN) is particularly suited to community psychiatry clinicians; 2) Outline the process, timeline and resources involved in establishing a practice-based research network; and 3) Describe possible research methodologies that can be implemented in a PBRN conducive to real-life clinical community psychiatric practice.

SUMMARY:

Practice-based research networks (PBRNs) have been utilized in primary care settings to study clinical problems for more than 30 years, but have been underused in psychiatric and mental health settings. PBRNs are particularly well suited for community psychiatry providers to study real-life clinical problems, utilizing methods that require a minimum commitment of time from any one clinician. PBRNs are amenable to rapid cycle research, allowing a short time frame between data collection and changing practice to improve clinical care and clinical outcomes. Many research methodologies can be implemented in a PBRN setting. At University Hospitals Case Medical Center, the PBRN known as the Behavioral Research and Innovation Network, or BRAIN, was built upon a robust community psychiatry program within an academic department of psychiatry. The steps in the formation of this PBRN will be described. Participants will have the opportunity to envision the role of practice-based research in their careers, as well as engage in an interactive process to map steps in the formation of a PBRN in their practice settings.

QUALITY IMPROVEMENT IN MENTAL HEALTH CARE

Chair: Nick Kates, M.B.B.S.

EDUCATIONAL OBJECTIVE:

At the conclusion of the session, the participant should be able to: 1) Understand the dimensions of high-quality care and IHI's triple aim; 2) Identify where their own service, program or system is

underperforming and why; 3) Use basic quality improvement tools to analyze their service; 4) Understand the importance of person- and family-centered care and how this can be incorporated into any service; and 5) Use a simple eight-component framework for introducing change in a mental health system.

SUMMARY:

Increasingly, changes in mental health care systems are being driven by the desire to improve quality and efficiency and provide safe care. This workshop introduces participants to practical tools and approaches for understanding how their system is performing in the six domains of quality mental health care—patient-centeredness, timeliness, effectiveness, efficiency, safety and equity—which will enable them to identify opportunities for improvement and implement and sustain needed changes. It summarizes what quality care is, as defined by the U.S. National Institute of Medicine; presents an overview of the Institute for Health Care Improvement's (IHI's) triple aim; and discusses where our current systems are underperforming and why this happens. It outlines a simple five-step approach for analyzing a system, identifying root causes of problems and introducing improvements and demonstrates some of the basic tools of quality improvement work that can be used in any setting. These include measuring team performance, analyzing how well core processes are working; building a process map, using the five whys and fishbone diagram to understand root causes, following the improvement model and rapid cycles of change (Plan Do Study Act [PDSA] cycles), conducting a supply and demand analysis to improve access, engaging consumers in their own care, and using the consumer/family experience to redesign services. It then presents the NHS (England) change model with eight components for successful change within a system or organization, ways to change the culture of an organization to support innovation and improvement, and strategies to sustain and spread these improvements.

MILD TRAUMATIC BRAIN INJURY (MTBI)/CONCUSSION: A PRIMER FOR PSYCHIATRISTS

Chair: Inbal Eshel, M.A.

Speakers: Donald Marion, M.D., M.Sc., Gary McKinney, M.S.

EDUCATIONAL OBJECTIVE:

At the conclusion of the session, the participant should be able to: 1) Understand the neurobiology and diagnostic criteria for MTBI; 2) Discuss current clinical practice guidelines for the treatment of MTBI; 3) Demonstrate knowledge of comorbid disorders and symptoms of MTBI; and 4) Identify nonpharmacological symptom management of MTBI.

SUMMARY:

This workshop will engage clinicians in an interactive, problem-based learning methodology on diagnosis, clinical practice guidelines and treatment of MTBI. The session will provide diagnostic and treatment strategies for psychiatrists and clinicians who treat veterans and/or civilians with MTBI. Traumatic brain injury (TBI) is estimated to cause disability in 2.3–3.5 million people in the U.S. and has been diagnosed in over 300,000 service members returning from the Iraq/Afghanistan Conflicts. Retrospective analysis of data from 1,247 injured members of a U.S. Army brigade combat team showed 26% had history of MTBI and screened positive for PTSD. The Army STARRS study of 4,645 service members shows that one in five soldiers reported exposure to mild TBI (19.2%) during deployment. After adjusting for other risk factors (e.g., pre-deployment mental health status, severity of deployment stress, etc.), deployment-acquired MTBI was associated with elevated adjusted odds of PTSD, anxiety disorder and major depressive episode. Diagnostically, MTBI, often referred to as “concussion,” differs from moderate/severe TBI, as it does not show focal neurological signs, nor is it sensitive to conventional imaging techniques. Diagnoses are often made by self-reported symptoms. Patients with MTBI may develop persistent postconcussive symptoms that include headache, fatigue, sleep disturbances and subtle cognitive disturbances leading to difficulties with memory, attention, learning and/or gait. Disorders of personality, mood, anxiety and/or suicidality can co-occur with MTBI and disrupt quality of life. This workshop will include assessment of neurocognitive deficits, clinical recommendations for treating headache, sleep disorders, fatigue, dizziness and cognitive symptoms.

OCT 09, 2016

DEMYSTIFYING PAYMENT REFORM: AN INTRODUCTION TO THE MEDICARE ACCESS AND

CHIP REAUTHORIZATION ACT OF 2015 (MACRA) AND ALTERNATIVE PAYMENT MODELS

Chairs: Pilar Abascal, M.D., Harsh K. Trivedi, M.D., M.B.A.

Speaker: Laurence H. Miller, M.D.

EDUCATIONAL OBJECTIVE:

At the conclusion of the session, the participant should be able to: 1) Understand the changes to Medicare payment systems outlined in MACRA; 2) Review the most common alternative payment models; and 3) Demonstrate how several of these models are currently being implemented in diverse health systems across the United States.

SUMMARY:

In recent years, there has been a movement away from traditional fee-for-service models and toward payment models that explicitly attempt to reward quality or value. The Medicare Access and CHIP Reauthorization Act of 2015 (MACRA) accelerated this movement by instituting mandatory payment reform in Medicare starting as soon as 2019. The payment reforms in MACRA are reviewed and explained. The most common alternative payment models (APMs) outlined in the legislation are summarized. Leaders in payment reform describe their experiences implementing these APMs in diverse health systems across the United States. Current opportunities for the implementation of payment reform are discussed.

CONTROLLED SUBSTANCE PRESCRIBING: CHALLENGES AND OPPORTUNITIES FOR PROVIDERS AND ORGANIZATIONS

Chair: Jeffrey C. Eisen, M.D., M.B.A.

Speakers: Margaret Chaplin, M.D., Jeffrey C. Eisen, M.D., M.B.A.

EDUCATIONAL OBJECTIVE:

At the conclusion of the session, the participant should be able to: 1) Gain knowledge of the scope of controlled substance use and prescribing in the United States; 2) Understand the many challenges faced by psychiatrists and psychiatric nurse practitioners in the prescribing of controlled substances, benzodiazepines and stimulants in particular; 3) Review approaches taken by organizations to consider approaches to controlled substance prescribing, including guideline, policy and procedure development, as well as educational efforts; and 4) Develop a framework for their own organizations to consider efforts that may improve

practice patterns, patient knowledge, and health and safety outcomes.

SUMMARY:

The prescribing of controlled substances, namely benzodiazepines and stimulants, remains a controversial topic that generates much debate and dialogue. Twenty-five years ago, the American Psychiatric Association developed a task force to examine the risks and benefits associated with benzodiazepine use; in 2015, this subject was again widely discussed among members of the American Association of Community Psychiatry. While these medications can be prescribed safely and utilized effectively, they also present with risks, including dependence, withdrawal and diversion. This matter can be complicated by a significant variance in the way in which providers within the same organization or clinic prescribe these medications, leading to tension among providers and between patients and providers. This workshop presents this topic in a historical context, as well as examines prescribing and use trends. In addition, psychiatrists will present case studies describing how their respective organizations have addressed this matter, from guideline development to educational initiatives for providers and patients. The workshop provides an opportunity for psychiatrists to learn about the strategies that organizations have taken to promote healthy and safe prescribing and use, as well as to develop a practical approach to this for their respective organizations.

SMARTPHONES AND MOBILE TECHNOLOGY: HANDS ON WITH EVALUATION, RATINGS AND CLINICAL INTEGRATION

Chair: John Torous, M.D.

Speakers: Steven R. Chan, M.D., M.B.A., Shih Yee-Marie Tan Gipson, M.D., Steve Daviss, M.D., Michael B. Knable, D.O., Dror Ben-Zeev, Ph.D.

EDUCATIONAL OBJECTIVE:

At the conclusion of the session, the participant should be able to: 1) List three risks and three potential benefits of using mobile apps in clinical care; 2) Apply at least two algorithmic tools to evaluate and rank mental health apps; and 3) Lead patients in informed discussions regarding smartphone apps.

SUMMARY:

Despite tremendous interest, there remain many important barriers and concerns around using

mobile technology like smartphone apps and fitness tracker data in clinical care. In this symposium, participants will learn to evaluate smartphone apps through hands-on interactive real-life cases, support advances in rating criteria for digital psychiatry tools, understand the influence of the media shaping advances in and perceptions of apps, and work as a group to consider barriers and solutions to implementing mobile technology in clinical settings.

STUDYING PRESCRIPTION MONITORING PROGRAM IMPACTS IN A COMMUNITY PSYCHIATRY PRACTICE-BASED RESEARCH NETWORK

Chairs: Andrew W. Hunt, M.D., Kathleen A. Clegg, M.D.

Speaker: Farah Munir, D.O.

EDUCATIONAL OBJECTIVE:

At the conclusion of the session, the participant should be able to: 1) Describes the known and predicted impacts of prescription monitoring programs on community psychiatric practice; 2) Identify the steps in implementing a card study protocol in a community psychiatric practice-based research network; and 3) Create and develop research questions pertaining to the study of prescription monitoring programs' (PMPs) impact on community-based psychiatric prescribers.

SUMMARY:

In this workshop, we will simulate the development of a "card study" in a practice-based research network (PBRN) for the study of prescription monitoring programs (PMPs) and their impact on the practices of community psychiatric prescribers. PBRNs are a relatively new and effective strategy for studying clinical care and the translation of evidence-based practice into patient care. While common in primary care practice settings, heretofore, there are few PBRNs focusing on psychiatric practice. Participants will be asked to create and develop possible research questions and will be introduced to the card study method of research. Attendees will be active participants in simulated provider-client interactions characteristic of the data collection step in an actual card study protocol. Finally, we will report findings of a current PMP study and engage in discussion about the utility, relevance and feasibility of practice-based research in community mental health settings.

KEY PRINCIPLES FOR MAKING INTEGRATED CARE SUCCESSFUL ACROSS SETTINGS

Chairs: Andrew S. Pomerantz, M.D., Neil Korsen, M.D., M.S.

EDUCATIONAL OBJECTIVE:

At the conclusion of the session, the participant should be able to: 1) Articulate a working knowledge of various models of integration and have an understanding of the lexicon of terms used to describe these approaches; 2) Understand the key differences in clinical approaches to mental health care in the primary care population versus care provided in specialty mental health settings; 3) Appreciate the critical roles played by nonpsychiatrists in integrated care; 4) Describe the key components of integrated care; and 5) Identify existing tools to support development of integrated care in their own setting.

SUMMARY:

Despite over two decades of research supporting the integration of psychiatrists and other mental health providers into primary care, translation of these findings into effective, sustainable programs continues to be difficult. In addition to the challenges of retraining clinicians to master the skills necessary to work in general health care settings, those seeking to implement such programs face an array of potential models that may often appear to be incompatible with each other. Despite efforts to develop a common lexicon—terms such as collaborative care, integrated care, care management, case management, behavioral health consultant and others—such terms often have different meanings in different settings. Even within such terms as “collaborative care,” there are several models from which to choose. Furthermore, reimbursement issues loom large for any program, regardless of payment source. Successful integration can play a significant role in improving population health. For example, research and program evaluation findings from successful efforts have demonstrated how collaborative care can expand the reach of a single psychiatrist to oversee the care of a much larger number of patients with mental disorders than could ever be accomplished in the usual referral model of care. Despite the wide variety of approaches and models, there are core features common to all that can be used to guide development of integrated care programs. This workshop will review the many models of integrated care in research and practice and present the core features common to all. The presenters will draw from their experiences in the public and private

sectors, as well as fee-for-service versus capitated reimbursement methodologies, and assist participants to identify resources to help them develop plans for how they might implement an effective program in their own setting.