Once the first help-seeking attempt was initiated, it took longer to get prescribed an antipsychotic for subjects seeking help before onset compared to those who sought help after (median 245 days [5 – 1400] vs. 1 day [0 – 999], p<0.0001). By contrast, it took less time for those who sought help before POPS to have their first antipsychotic prescribed once they became psychotic (median 21 days [0 – 445] vs. 56 days [0 – 1153], p=0.03). However, both groups had no significant difference in delay to STEP (p=0.30).

Help-seekers after psychosis onset had a trend of longer patient side delay (defined as the time interval from when patients noticed a change-patient's term for psychotic symptoms- to the day they sought help) compared to participants seeking help before onset (median 75 days [0 – 3928] vs. 14 days [0 – 1093], p=0.09).

Compared to those who had their first help seeking episode before psychosis onset, the group who sought help after onset had more contacts with the police (64 vs 10), more involuntary admissions (40 vs 6), and same median number of nights spent in a psychiatric hospital six months before STEP enrollment (n=14).

Discussion: Timing of first help seeking in early psychosis can be crucial in shaping the individual experience of care. Longer delays in receiving the appropriate treatment and aversive pathways might be associated with help seeking which started only after psychosis onset, compared to first help seeking started before psychosis onset. Tailored interventions are needed to improve psychosis detection and referral of first episodes to specialized services.

T243. MENTAL HEALTH SERVICE UTILIZATION IN YOUNG ADULTS REPORTING PSYCHOSIS-LIKE EXPERIENCES

Miranda Bridgwater*[1], Pamela Rakhshan Rouhakhtar[1], Mallory Klaunig[1], Emily Petti[1], Caroline Roemer[1], Nicole Andorko[1], Joseph DeLuca[2], Steven Pitts[1], Vijay Mittal[3], Teresa Vargas[3], Jason Schiffman[1]
[1]University of Maryland Baltimore County; [2]University of Maryland School of Medicine; [3]Northwestern University

Background: Psychosis-like experiences (PEs) may reflect elevated risk for the onset of serious mental illness, such as a psychotic disorder, as well as negatively impact functioning. Few studies have examined the relation between PEs and mental health service utilization or intent to seek treatment. Characterizing psychosis risk and service utilization among individuals in the peak developmental period for psychotic disorders (~ ages 18–25) may help the field improve psychosis screening tools and reduce the duration of untreated illness.

Methods: Participants (N = 439) were individuals between the ages of 18 and 25 years old (M = 20.24) who completed an online survey regarding their mental health experiences. They completed the PRIME Screen with distress and self-reported mental health service utilization throughout their lifetime and for the past two months. Participants were asked how strongly they were considering seeking mental health treatment (Likert-type scale, response options ranging from 1 ["Not at all"] to 5 ["Very much"]). The PRIME Screen symptom total score, total distress score, and specific item responses were used in bivariate correlations and a multiple linear regression model.

Results: Approximately a third of the participants (34%) screened positively on the PRIME, mean total score of 16.67 (SD = 14.53). Sixteen percent of participants reported seeking mental health treatment in the past two months, and 38% reported they were currently considering seeking treatment. There were no significant correlations between mental health service utilization in the past two months and PRIME symptom total score (p = .31), or distress total score (p = .32). PRIME total scores and PRIME distress total scores were also not significantly associated with lifetime utilization of mental health services (p = .22 and p =.45, respectively). There were significant relations between how strongly participants were considering seeking mental health treatment and both PRIME symptom total (r = 0.20, p < .01, N = 413) and distress total scores (r = 0.20, p < .01, N = 359). A multiple linear regression model indicated certain PRIME items contributed significantly to this relation (PRIME items 1[odd/unusual experiences], 3[thought control], 6[mind reading], and 12[concerns with "going crazy"]; all ps < .05). Follow-up analyses showed that distress associated with PRIME items 1, 3 and 12 was significantly higher (all ps < .01) than the mean PRIME distress item score.

Discussion: Results suggest that while a third of a college sample of young adults scored positively on the PRIME screen, PEs and related distress were not significantly related to lifetime or current mental health service utilization. Among those not already seeking services, however, both PEs symptom and distress were significantly associated with participants' intent to utilize mental health treatment. Thus, individuals may experience distressing PE symptoms, but many do not receive mental health services. Higher endorsement of and distress with experiences relating to: odd/unusual experiences, thought control, mind reading, and concern with "going crazy" were more closely associated with intent to seek treatment, suggesting that specific PEs may increase individuals' desire to address these concerns via mental health services. Findings highlight the need to identify and engage individuals not yet in treatment who have frequent/high level, distressing, and specific PEs.

T244. FURTHER EVIDENCE SUPPORTING COORDINATED SPECIALTY CARE FOR EARLY PSYCHOSIS: FINDINGS FROM THE SAMHSA SUPPORTED PENN PSYCHOSIS EVALUATION AND RECOVERY CENTER (PERC)

Christian Kohler*[1], Lyndsay Schmidt[1], Bridgette Patton[1], Olivia Franco[1], Zeeshan Huque[1], Sunny Tang[2], Monica Calkins[1]
[1]University of Pennsylvania; [2]Hofstra University

Background: The early years following a first episode of psychosis (FEP) present unique opportunities to prevent declines in clinical and social function. Early intervention programs target factors known to be associated with poor long-term outcomes, including longer duration of untreated psychosis, treatment non-adherence, affective symptoms, and cognitive dysfunction. The RAISE trial and other work in the U.S. and internationally spurred congress to fund comprehensive specialty care (CSC) programming across the US through a SAMHSA block-grant set-aside that began in 2015 and was doubled in 2016. As a Pennsylvania recipient of these funds since 2015, the Penn Psychosis Evaluation and Recovery Center (PERC) enrolls individuals age 15–34 who have experienced psychosis onset within two years prior to enrollment. We received complementary funding in 2018 to provide step-down care to FEP participants, and to expand PERC services to individuals at clinical high risk for psychosis.

Methods: PERC services, offered for a minimum of two years, include pharmacotherapy, recovery oriented cognitive therapy and case management, supported employment and education, multi-family group cognitive therapy and psycho-education, peer support, and cognitive remediation. SAMHSA funds are used to provide CSC elements that cannot be supported through available insurance coverage. A comprehensive computerized assessment, conducted at admission and at 6-, 12-, 18- and 24- month follow-up intervals, includes measures from the Pennsylvania FEP Program Evaluation core battery assessing participant-level outcomes (employment and education, hospitalization, criminal justice involvement and risk behaviors, and overall functioning and clinical symptoms), complemented by standardized measures of cognitive insight, sleep quality, and other relevant domains. Systems-level data on outreach efforts, incoming and outgoing referrals, admissions and discharges are also collected. Data collection is integrated into clinical care.

Results: To date, PERC has enrolled 202 individuals (mean age=22.2, SD=4.4; 78% male; 56% European-American, 31% African-American, 13% other), of

whom 106 consented to use of clinical data for research purposes. Admission and 6- month follow-up data reflect improved psychosis and mood symptoms, increased engagement in employment or school, and low re-hospitalization rates. Clinician rated global role and social function significantly increased by 6-month follow-up. Participants self-reported significantly increased satisfaction with mental health services and improved perception of their recovery process at 6-month follow-up. Duration of untreated psychosis prior to PERC admission (mean=7.4 months, SD=7.4) was not correlated with improvements in global role or social function at 6-months. Clinical and functional changes beyond 6 months remain to be analyzed.
Discussion: Our results add to growing evidence that individuals who have experienced a first episode of psychosis benefit from participating in comprehensive interventions that can improve clinical symptoms, function and quality of life. They also provide further evidence of the feasibility and clinical utility of FEP CSC programs supported by federally mandated funds, which can reduce the personal and societal burdens associated with psychotic disorders. As our program continues to expand, ongoing comprehensive assessment across the early psychosis spectrum will afford evaluation of longer-term therapeutic benefits and analyses of predictors of varying outcomes.

T245. A MODEL 2.0 FOR EARLY INTERVENTION SERVICES FOR PSYCHOSIS: USING A LEARNING HEALTHCARE SYSTEM APPROACH TO IMPROVE EVIDENCE-BASED CARE

Manuela Ferrari*[1]
[1]*McGill University and Douglas Mental Health Institute*

Background: In Canada, 26.3% of people reporting having mental disorders have indicated that they did not receive adequate care for their mental illness. However, early and evidence-based treatment can significantly reduce the severity of mental illnesses. Early Intervention Services (EIS) for psychosis are an example of such an intervention. EIS are widely recognized as a more effective treatment than routine care for early psychosis. Most Canadian EIS for psychosis follow recommendations on clinical components of care (i.e., easy and rapid access, a case management team approach); however, evidence-based interventions (e.g., measurement-based care or integrated psychosocial interventions) are not always available. Overall, various barriers limit the provision of quality care in the mental health sector, including EIS for psychosis treatment. These barriers include insufficient funding at a time of increasing demand; lack of services; lack of evidence- and measurement-based treatments; and insufficient training for staff and resources for patients. Innovative solutions are required. This presentation describes how e-mental health (eMH) technologies can mitigate these barriers, thus increasing access to evidence-based treatments.
Methods: Using a learning healthcare system approach, this 2.0 mental health services model aims to (a) identify, describe, and explain the factors affecting the routine incorporation and sustainability of eMH technologies in EIS for psychosis, and (b) optimize the methods associated with the development, adaptation, and evaluation of eMH technologies in real clinical settings. These aims are achieved by implementing three e-MH projects and unpacking the co-design/adaptation process and test the implementation, evaluation, and sustainability of eMH interventions and their effects on patient outcomes.
Results: The learning healthcare system is considered a new research paradigm able to promote quality, safety, and value in health care. Three project are at the core of this learning healthcare system for psychosis: (1) e-Mental Health Assessment and Monitoring (Project A: DIALOG+/e-Pathways to care): (a) To promote evidence- and measurement-based care in EIS for psychosis and (b) to use such technologies (such as electronic data capture platforms and data visualization) to support shared decision-making during treatment; (2) e-Treatment (Project B: CBT/pathways to care game-based interviews): (a) To facilitate the access and use of e-cognitive behavioral therapy (e-CBT) interventions in EIS for psychosis and (b) to support the treatment of secondary illnesses/comorbidities (depression and anxiety); (3) Web-based Training (Project C e-Training): (a) To co-produce web-based training and evaluate its effects on building capacity for the use of eMH technologies in EIS for psychosis and (b) to deliver psycho-educational interventions and continuing education training through interactive case-based learning.
Discussion: This work is timely. The innovative use of the rapid learning system approach in EIS for psychosis will offer a unique opportunity for integrating technologies and data into clinical practice, and should bring meaningful benefits to patients and promote Quebec's open science research.

T246. RISK FACTORS FOR PSYCHOTIC RELAPSE IN CHRONIC SCHIZOPHRENIA AFTER DOSE-REDUCTION OR DISCONTINUATION OF ANTIPSYCHOTICS: A SYSTEMATIC REVIEW AND META-ANALYSIS

Jan Bogers*[1], George Hambarian[1], Jentien Vermeulen[2], Lieuwe de Haan[2]
[1]*MHO Rivierduinen;* [2]*Academic Medical Center, University of Amsterdam*

Background: Patients are often treated with high doses or combinations of antipsychotics. High doses are associated with more severe side effects and reduction of motivation and drive, which may hamper recovery. Nevertheless, dose-reduction (DR) or discontinuation of antipsychotic medication in chronic patients, carries the risk of psychotic relapse. In order to identify risk factors of psychotic relapse after DR or discontinuation, we performed a meta-analysis, aimed (i) to determine the rate of relapse after DR or discontinuation in patients with chronic schizophrenia, and (ii) to assess risk factors for psychotic relapse.
Methods: We searched PubMed, EMBASE and PsycINFO for studies on dose-reduction of antipsychotics from January 1950 through June 2019. We extracted data and calculated event rates (ER=relapse rate) per person-years including 95% confidence intervals (95%CI). The following data were extracted: (1) patient characteristics (age, percentage of male subjects, setting, duration of illness), (2) dose-reduction/discontinuation characteristics (start-dose before dose-reduction, end-dose after dose-reduction, dose-reduction in milligrams, dose-reduction as percentage of start-dose, time period of dose-reduction), (3) follow-up characteristics (time after dose-reduction), and (4) study characteristics (blinding, year of publication and relapse definition). To account for sample variation we pooled the results following the Dersimonian and Laird random effects method (CMA; Borenstein et al 2009). Between-study heterogeneity was assessed with Cochran's I2-statistic. We examined the risk of bias in the included studies based on five aspects that could affect the association between exposure and outcome from the Newcastle-Ottawa scale (NOS).
Results: 46 unique cohorts, presenting 1677 patients in which doses were reduced/discontinued were included in meta-analysis. Most included patients were man at middle age, and with a mean duration of illness of 15 years. There was a considerable risk of bias in studies (48% of studies with NOS≤3).
We found an overall event rate (ER) per person-years on psychotic relapse of 0.55 (CI95% 0.46–0.65; p<0.0001; I2 =79).
We present various variables that influence event rates. Highest rates were found for inpatients with a short duration of illness. Most robust event rates for psychotic relapse were seen for discontinuing antipsychotics, and if not discontinuing, dose-reduction till under 5mg haloperidol equivalents daily (HE). Abrupt reduction yielded higher rates than gradual reduction. During short follow-up time more relapses occurred than in studies with long follow-up time. Older studies and studies in which relapse was defined as a clinical decision (without applying a psychometric scale) also yielded high event rates, explained by the fact that older studies mostly reduced antipsychotics abruptly till zero or at least doses under 5mgHE, while more recent studies did not, and used rating scales for relapse.
Discussion: In patients with chronic schizophrenia discontinuing, and to a lesser extent DR till end-dose <5mgHE, patients who reduce doses abrupt, inpatients, and patients with a short duration of illness carry highest relapse risk. Most relapses occur during the first half year after DR.