

**Title:** CBE/CHR Mental Health Capacity Building Pilot Description – Phase II  
**Author(s):** Willow Brocke, Jo Susan Blackaby, David Cawthorpe

**Purpose** To increase the capacity of school staff to respond appropriately to the needs of students exhibiting symptoms of mental and emotional distress at school. **Importance of the Problem** Many children suffer from mental health problems that impair their ability to learn and cause them to behave disruptively. Unfortunately, there is a shortage of mental health professionals available to treat these students. **Description of the Initiative** Our initiative was designed to help mental health professionals reach a greater number of students through their teachers. Besides working with individual students enrolled in the Student Health Partnership (SHP), the therapist also helped other students with similar symptoms by training teachers to respond to the special needs of these students more effectively. 1. Discovery Session: Teachers discussed specific concerns about SHP students and other students with similar symptoms. 2. Capacity Building Sessions: The therapist presented teachers with relevant strategies. 3. Capacity Support-Link: Ongoing consultation was provided to teachers by the therapist for the duration of the project. **Key Findings** We conducted a pilot project with 89 students at 7 schools in Area III of the Calgary Board of Education to study our initiative’s effectiveness. Our repeated measures ANOVA analysis of the data showed that there was a significant improvement in problem severity scores through the course of the initiative. Notably, there were statistically significant school and teacher effects on problem severity scores, but the two effects were not related. Student diagnosis also had a significant effect on scores. **Conclusions** Our consultative approach is an effective method of improving mental health outcomes among students with mental and emotional distress. By providing teachers with relevant strategies and techniques, teachers were able to improve their students’ problem severity scores. The school effect on problem severity scores is likely a geographical effect while the teacher effect reflects individual differences among the teachers. A clear student diagnosis is important in devising effective intervention strategies.

**Implications for policy or practice** Our initiative will reduce the detrimental effects of a mental health professional shortage by enabling each professional to help a greater number of students by collaborating with their teachers.

**Title:** “Finding the right kind of help”: The service needs of families seen through FASD specialty clinics in Alberta  
**Author(s):** Susan Huculak, John D. McLennan

**BACKGROUND:** There has been little systematic attempt to identify the service needs of children with complex developmental and mental health problems. **METHODS:** Thirty three caregivers of children assessed by three fetal alcohol spectrum disorder (FASD) specialty clinics in Alberta were interviewed about their experiences and needs associated with service receipt for themselves and their children post-assessment. Interviews were transcribed verbatim and a thematic analysis was conducted using a Grounded Theory (GT) methodology. **RESULTS:** “*Finding the right kind of help*,” the overarching construct, was an attempt by the caregiver to balance three, often conflicting, areas of need: supporting the child’s needs; identifying and securing supports for the caregiver; and attempting to ward off potentially negative effects associated with the FASD or brain injury label. In the first key theme, “*Helping each other*,” caregivers describe a preference for peer, family, or paraprofessional support over professional services for themselves. The form of these supports varied but was largely driven by the desire to obtain emotional support and/or share ideas with other FASD caregivers who had “been there and done that.” In the second theme, “*What’s my child’s potential?*,” the caregivers expressed uncertainty about whether their child could acquire full adult independence by virtue of the extent that the child’s current problems could be “fixed” or “cured” versus how much the child may require ongoing living supports into adulthood. The third theme, “*Acknowledging the positive*,” the caregivers indicated a desire to protect their children from potential labeling and stigmatization, peer problems, and social vulnerabilities. **CONCLUSION:** The implications of these findings suggest the need for strategic programming to help caregivers connect with each other across a variety of formal and informal settings, help families identify areas of function for the child that may require ongoing support and so plan accordingly in these domains, and to help address and eliminate the stigmatizing impacts of diagnostic labeling on the child and family.

**Title:** Mental health status changes of children in a respite program  
**Author(s):** Emily Hutcheon, John D. McLennan

**BACKGROUND:** There is very limited information on the mental health status and change in status of children participating in respite programs. **METHODS:** Caregivers participating in a new centre-based respite program in Edmonton were invited to participate in an evaluation research project. The respite service was specifically for families with young children. Data collection included the Strengths and Difficulties Questionnaire (SDQ), which provides an index of mental health status. The SDQ was completed by caregivers at the beginning and end of participation in the respite program. Respite staff also completed this measure on the same children. Only one child per family was included for this analysis. **RESULTS:** Data were available for 31 children, aged 3.0 to 8.4 years. At baseline, 83.9% of children were rated in the abnormal range by caregivers on the Total Difficulties SDQ composite scale. At endpoint, this percentage dropped, non-significantly, to 77.4%. Values for respite staff also dropped non-significantly from 46.7 to 41.9% respectively. Conduct problems and hyperactivity were the two subscale scores with the highest percentage of children in the abnormal range as rated by both caregivers and respite staff. The estimated effect size, based on caregiver ratings, was -0.124 using an added value calculation for the SDQ. **CONCLUSIONS:** Significant mental health gains did not appear to be realized for children participating in this program. The mental health status of children participating in respite programs should be tracked to identify the potential benefits (or lack thereof) from respite services, as well as identify the need for supplemental interventions.

**Title:** Measuring depressive symptoms in Hispanic populations using the CES-D  
**Author(s):** Ashley Farrelly, John McLennan

**Background:** The Center for Epidemiologic Studies – Depression Scale (CES-D) is a commonly used instrument for the detection of depressive symptoms. It has been found to have strong psychometric properties in a number of populations. However, its use in Spanish-speaking low- and middle-income countries (LMIC) is limited. The objectives of this presentation are to describe findings from (i) a literature review of the use of this instrument in Hispanic populations, and (ii) a study of mothers of young children in the Dominican Republic. **Methods:** For objective 1, articles identified through a literature search of the use of the CES-D with Hispanic populations were critically reviewed. For objective 2, CES-D data were extracted from a database derived from interviews with mothers of young children in a community-based study in a poor-urban neighbourhood near Santo Domingo, Dominican Republic. Descriptive statistics were generated including the use of different recommended cut-off points. **Results:** Studies that affirm the CES-D to be a valid instrument in Hispanic populations largely focus on immigrant populations in high-income countries. Some studies have found a higher prevalence of depressive symptoms in Hispanics and other populations in LMIC. It has been suggested that a higher cut-point might be considered for identifying possible depression in Hispanic populations in LMIC. Two-hundred and five mothers participated in the Dominican Republic study. The mean CES-D score was 17.3 (S.D.= 8.0), with a range of 0 to 37 (of a possible 60). Fifty-eight percent of the sample had scores  $\geq 16$  and 27% had scores  $\geq 23$ , the traditional CES-D cut-points indicating “possible” and “probable depression,” respectively. **Discussion:** Participants in the Dominican Republic sample had high rates of depressive symptoms when using traditional cut-off points. These thresholds may be inappropriate for Hispanics and other populations from LMIC. Further evaluation is needed before the CES-D can be confidently used in Spanish-speaking LMIC, for whom the instrument was not originally designed.

**Title: Social Networking Analysis as a Method of Describing Client Care Pathways in Mental Health Continuum of Care**

**Author(s): Lindsay Guyn**

**Background:** The Mental Health and Addictions Services department of Alberta Health Services (Calgary Health Region, CHR) is a large organization; in Calgary, there are more than 100 individual programs and clinics serving around 30,000 patients per year. These programs are organized into a continuum of care that ranges from prevention and promotion, through areas such as urgent care, inpatient and basic treatment, and finally to rehabilitation and sustain/support programs. For planning and performance monitoring purposes, it would be desirable to assess how clients move through this theoretical continuum. However, there are more than 90,000 clients in our administrative data set, some of whom have as many as 100 registrations, creating literally millions of data points that describe movement from clinic to clinic. This creates an analytical challenge. **Methods:** Using data for all clients registered in CHR mental health programs over a six-year period, a data file was assembled containing the longitudinal utilization profile for all 90,000 individuals. SPSS statistical software was then used to create matrices expressing the number of transfers between various clinics and program groups. These matrices were imported into UCINET social network analysis software. Graphical analysis of the inter-program relationships could then be completed. **Results:** Network diagrams created for the entire group of programs/clinics (for example a 100 by 100 matrix showing the relationship for all CHR mental health clinics) tended to be difficult to interpret. Better results were obtained by looking at single programs or small groups of programs, and an analysis based on programs grouped according to the Mental Health Continuum of Care was especially informative. It was also possible to produce useful graphics showing patterns of service utilization for specific groups based on client characteristics, in particular frequent users of mental health services. **Conclusions:** Social networking analysis can be a useful tool for assessing relationships in large complex organizations. A graphical approach, which included information on the direction and strength of inter-program movement, proved to be an effective way of describing patterns of care for the many mental health clinics and programs in the Calgary Health Region.

**Title: The Experience of Fatigue in Early Psychosis Patients:  
An Interim Analysis**

**Author(s): Jessica E. Lyons, Kathleen E. Pierson**

**Introduction:** Recovery and rehabilitation of early psychosis patients is often hindered by symptoms resembling fatigue. To our knowledge, there are no published studies of fatigue in early psychosis patients. As well, the fatigue scales currently available do not have good face validity for measuring fatigue in this population. The purpose of this study is to qualitatively explore the experience of tiredness in early psychosis patients as a prerequisite for the development of a valid and reliable rating scale that measures fatigue in such patients.

**Results:** A total of 6 patient interviews have been analysed. Over 100 free nodes representing patients’ experience of fatigue were extracted from the interview transcripts. These have been organized into 15 categories: Associated behavior; Etiology; Associated physical sx; Improving factors; Coping strategies; Frequency; Effectiveness of coping strategies; Exacerbating factors; Synonyms; Associated cognitive symptoms; Severity; Relational effects; Associated psychiatric symptoms; Functional effects; Associated affect

**Conclusions:** Preliminary analysis reveals that the experience of fatigue in this population would not be measured well by the Fatigue Severity Scale most often used in fatigue studies. This scale was designed to measure fatigue in patients with multiple sclerosis. Three out of nine statements on this scale refer to the physical impact of fatigue. Our population rarely mentions the physical impact of fatigue, so a research tool heavily weighted to sample this experience may not be valid. It is also possible that the fatigue experienced in this population is a different phenomenon. The most commonly mentioned ways that our population is impacted by fatigue include: difficulty socializing, difficulty working and poor concentration. The fatigue severity scale measures work and social impact together and gives no mention to poor concentration. Our preliminary results suggest that currently available scales will not reliably sample fatigue in patients with early psychosis.

**Title:       Psychiatric Illnesses in Patients with Intellectual Disability Presenting with  
Aggressive and Non-aggressive Behaviors**

**Author(s): Jason Taggart, Susan Carpenter, Jordan Cohen, David Dawson, Barb Pitcher**

**Background:** Aggressive behaviors in intellectually disabled patients are a common occurrence and focus of clinical attention. These behaviors lead to significant psychosocial difficulties and often result in patients being admitted or readmitted to institutional and psychiatric inpatient settings. Because aggressive behaviors are a symptom and not a formal diagnosis, clinicians must search for an underlying cause—with psychiatric conditions often high in etiologic consideration. Our study aims to characterize psychiatric conditions diagnosed in intellectually disabled patients with and without aggressive behaviors referred to a Canadian outpatient dual diagnosis (intellectual disability and mental illness) clinic. **Methods:** A chart review of all patients (approximately 800) attending Arnika Centre will be completed to identify patients with “aggression” as part of their referral concern. This data will be entered into a preexisting database containing demographic information, Axis I diagnoses at initial assessment, and level of mental retardation. Statistical analysis will be performed on extracted data to identify which Axis I disorders are associated with aggression at time of referral as well as whether there is an association between level of mental retardation and rates of aggression. **Results:** Pending. **Conclusion:** In identifying the common psychiatric conditions associated with aggressive compared to non-aggressive intellectually disabled outpatients, it will give the clinician high-yield etiologic options to consider when approaching diagnosis and management in this unique patient population.

**Title: Depression and stroke severity predict quality of life at 3 months post stroke**  
**Author(s): Diana Czechowsky,**

**Background** – Stroke mortality has declined in the last three decades. With a survival rate near 85%, quality of life (QOL) is increasingly recognized as an outcome measure for stroke. The present study aimed to identify predictors of QOL in stroke patients at 3-months. We hypothesized that predictors of QOL would be: (a) post-stroke depression; (b) treatment with tissue plasminogen activator (tPA) and (c) stroke severity. **Methods** – Patients from the Stroke Unit at a University hospital were surveyed in-person at 3-months post-stroke. QOL was quantified using the Short-Form 36 Health Survey (SF36) and the Stroke Specific QOL Scale (SSQOL). Neurological, functional and psychiatric status were measured using the National Institutes of Health Stroke Scale (NIHSS), modified Rankin Scale (mRS), modified Barthel Index (BI), Mini-Mental State Exam (MMSE) and Centre for Epidemiological Studies Depression Scale (CESD). **Results** – Of 119 patients, 69 were male and the mean age was 67 years (SD=14). Stroke sub-types included: 82 AIS, 8 ICH, 23 TIA, 2 venous infarcts and 4 stroke mimics. Patient scores were notably lower than normal Canadian population means in the SF36 Role Physical domain ( $p<0.001$ ). When the SSQOL summary score was dichotomized into poor ( $<3$ ) and good QOL ( $\geq 3$ ), 82% of patients defined their QOL as good at 3-months. Of 21 depressed patients ( $CESD \geq 10$ ), 52% had an SSQOL summary score  $< 3$ . Both depression (OR 17.5 95%CI 4.0-76.5) and 3-month NIHSS score (OR 1.6 95%CI 1.2-2.1 per 1-point increase in NIHSS score) were independent predictors of poor quality of life. Thrombolytic therapy was associated with a lower 3-month NIHSS score, but did not independently predict quality of life scores. **Conclusions** – Depression and 3-month NIHSS scores were independent predictors of QOL at 3 months. Acute intervention with tPA itself was not a predictor of QOL. Diagnosis and treatment of depression has an important role in improving the long-term outcome of stroke patients.

**Title: Transcription prescription: Using psychotherapy transcripts as a tool to enhance psychotherapy supervision**  
**Author(s): Kathleen Pierson**

To facilitate acquisition of psychotherapy skills, supervisors must have some knowledge of the therapeutic discourse that unfolds between trainees and their patients during sessions. Traditional methods of recounting sessions include the use of process notes, audio- and videotaping, and direct observation of sessions; however, session transcripts offer unique learning advantages not afforded through the use of these methods. Experiential learning theory (Kolb 1984) posits that experience is fundamental in initiating an effective learning experience. Supervisors can “learn” about the therapist-patient dyad through vicarious “experience” of the session using tapes, process notes, direct observation or session transcripts. Because it is more efficient to read material than to watch/listen to tapes, it is likely that the supervisory dyad has fuller access to session material when using transcripts than when using other modalities. Both supervisors and learners can review detailed session content/process more efficiently by reading transcripts and thereby gain more in-depth knowledge of patients. Rapid access and linkage of related material throughout the session is more feasible with transcripts than with other supervisory modalities. In addition, transcripts allow for more efficient analysis of process events (eg, defenses, transference, countertransference) than can be achieved with other supervisory modalities. This presentation will provide an overview using clinical examples of how supervision can be enhanced with the use of session transcripts.

**Title: Functional connectivity of right insula during self-face processing**  
**Author(s): Rajamannar Ramasubbu, Bradley Goodyear, Ismael Gaxiola, Svetlana Maslovitch, Helen Mayberg**

**Background:** Recent functional imaging findings suggest an integral role for the insula in a wide spectrum of self relevant processing including interoceptive awareness, personally familiar faces (faces of loved ones), social cognition such as trustworthiness and empathy. In this study we examined the changes in functional connectivity of insula during processing of ones own face compared to personally familiar faces to understand the functional role of insula in “self” specific processing. **Method:** A functional connectivity magnetic resonance imaging analysis was performed on the data collected from 10 healthy young woman during the presentation of three set of facial pictures: self face, personally familiar face (mother and close, non-sexual female friend), and age and sex matched strangers (younger and older female strangers) while performing three tasks : passive viewing, salience and emotional evaluations. Based on categorical subtraction analysis data showing increased activation of right anterior insula in self face versus personally familiar faces contrast, we selected this region as seed for correlational analysis to investigate the differential functional connectivity of right anterior insula during processing of self face versus personally familiar faces. **Results:** During self face processing, the right anterior insula showed positive correlation with left anterior insula/ orbito frontal gyrus, putamen, bilateral temporal and left lateral prefrontal and anterior cingulate regions, whereas during personally familiar face processing, the right anterior insula showed positive correlation with bilateral inferior parietal cortices, bilateral prefrontal and right anterior cingulate regions and to a lesser degree to the left insula/ orbito frontal area. **Conclusions:** Self-face specific processing preferentially involves functional connectivity of right anterior insula to brain regions implicated in self awareness, emotional responses and familiarity feelings (left anterior insula, putamen, right superior temporal lobes). This suggests that the emotional aspect of self experience (phenomenological aspect) is crucial to distinguish self from personally familiar others.

**Symposium - Medical Education Research**

**Moderator – Dr. Joann McIlwrick**

**Title: Evaluation of an Online Journal Club for Psychiatrists**

**Author(s): J Steve A Simpson, DJ Simpson**

The Psychiatry Online Literature Review Course is a CPD course for psychiatrists in western Canada designed to provide asynchronous access to a collaborative group learning activity. This was set up as an online journal club to review specific articles in the psychiatric literature. This presentation will review the course design, participant engagement, satisfaction and the pedagogical characteristics of the course. A mixed methods evaluation has been completed. There were reported examples of transfer of knowledge to practice by survey respondents and interviewees.

**Title: Ask Me Something Easier Next Time**

**Authors: A. Mackie, R. Turner, C. Nicholson, J. McIlwrick**

**Presentation Objectives:**

The proposed presentation would:

1. Introduce the pilot resident-run clerk-teaching program at the University of Calgary and review the iterative evaluations of the clerks’ knowledge.
2. Discuss the concept of Miller’s Pyramid as it pertains to the development of knowledge acquisition for clinical clerks.
3. Provide practical applications and techniques for physicians involved in teaching.

**Abstract:**

During their final year of undergraduate medical education, clinical clerks complete various rotations to learn the practical application of the knowledge acquired during medical school. This model of education presupposes that a clerk has effectively acquired a foundational level of knowledge from which they can develop the skills of clinical reasoning and knowledge application. Psychologist George Miller developed a conceptualization pyramid of assessing clinical competence. In considering Miller’s Pyramid, it is assumed that clinical clerks have a prerequisite base knowledge and thus spend time during their rotation learning to apply that knowledge. In developing a clerk-teaching program administered by residents, we have been able to evaluate the base level knowledge of the clinical clerks at varying points in their six-week rotation in psychiatry this past academic year. Our results have demonstrated intriguing foundational knowledge deficits, only some of which demonstrate improvement after clinical clerks complete the teaching modules. Data from the first 6 months of the program was presented at last year’s Littman Day. The current presentation will demonstrate the trends seen over 12 months of data collection.

**Title: The Coordinators of Psychiatric Education (COPE) Residency In-Training Exam: A Preliminary Psychometric Assessment**

**Author(s): Greg Montgomery, David Crockford, Kent Hecker**

**Abstract: Objective:** Formative in-training residency exams are helpful to resident preparation for specialty certification exams. The Coordinators of Psychiatric Education (COPE) Residency In-Training Exam is a formative exam for Canadian psychiatry residents that was re-constructed in 2006 using assessment best practices. An assessment of its psychometric properties was performed on the 2007 COPE exam to ensure its preliminary validity and reliability. **Method:** An exam blueprint was developed based on the 2007 Royal College objectives for psychiatric training. All current Canadian residency training program directors were surveyed and asked to verify/modify the exam blueprint. A minimum pass level was established using a modified Angoff method involving 5 judges. The exam was administered to all PGY 2-5 Canadian psychiatry residents in November/December 2007. Test reliability was assessed (Cronbach’s alpha) and item analysis was performed to determine the difficulty of individual items, item discrimination and distractor effectiveness. Exam validity was assessed through director and resident feedback, blueprint adherence and cross-year resident performance analysis. **Results:** Six out of the 16 program directors provided feedback on the exam blueprint, verifying its original form. 436 residents wrote the 2007 COPE exam with 402 being suitable for analysis. The overall mean score for all residents was 69.6% (SD = 8.5) with significant differences in total scores between each of the PGY groups with consistently better performance with increasing time in residency. Cronbach’s alpha was 0.79. **Conclusions:** The re-constructed COPE exam demonstrates adequate reliability and validity as well as being well accepted by Canadian psychiatry residents and program directors.

**Title:** A Randomized Crossover Trial of Lectures and Podcasts  
**Author:** Lauren Zanussi, Janet Tworek

**Background:** Prior research has demonstrated that medical students are highly interested in audio recordings of lecture in podcast format, particularly for reviewing prior to exams (Zanus

si & Tworek, 2008). Beyond convenience, do podcasts enhance student retention and expression of knowledge as measured by exam results? **Purpose:** Our objective was to evaluate the effect of providing podcasts in addition to lecture on student knowledge acquisition and expression. **Method:** This was a control trial-type study in which we will be comparing student performance in different subject areas based on the availability of podcasted information. One half of the subjects in a 4 week course were randomly selected to use podcasted information in addition to lecture materials. The other half were delivered by lecture alone. We will be comparing student’s performance in the subjects with podcasts available directly with the lecture-only subjects. **Results:** Data will be collected in Winter 2009 and be available in April 2009. Students were asked to identify if they attended lecture and if they listened to the podcast (when available). Student scores on exam questions related to the topics taught will be analyzed by subject (lecture only vs lecture + podcast) and compared. **Conclusions:** Students rate podcasting highly, but the educational value of these recordings in light of student performance on knowledge exams is unknown. Results of the present study will hopefully guide the pedagogical rationale behind podcasting, rather than reinforce a technocratic approach to implementing technology merely because it is available or generally popular. Given the need to consider alternative educational methods with increased class size, limited physical and faculty resources, and potentially distributed education, we hope that the present study will inform the educational value of podcasting as a digital educational supplement.

**Title:** Using Summary Enhanced Podcasts in the Psychiatric Curriculum: A Randomized Trial  
**Author(s):** Lauren Zanussi

**Background:** Prior research has demonstrated that medical students are highly interested in audio recordings of lecture in podcast format, particularly for reviewing prior to exams (Zanus

si & Tworek, 2008). Beyond convenience, do podcasts enhance student retention and expression of knowledge as measured by exam performance? **Purpose:** Our objective was to evaluate the effect of providing podcasts in addition to lecture on student knowledge acquisition, comprehension and application. **Method:** This is a control trial-type study in which we will compare student performance in different subject areas based on the availability of podcasted information. One half of the topics in a 4-week course will be randomly selected to provide podcasted information in addition to lecture materials; the other half will be delivered by lecture alone. We will compare students’ performance in the topics with podcasts available directly with the lecture-only topics. **Results:** Data will be collected in Winter 2009 and be available in April 2009. Students will be asked to identify if they attended lecture and if they listened to the podcast (when available). Student scores on exam questions related to the topics taught will be analyzed by topic and condition (lecture only vs lecture + podcast), and compared. **Conclusions:** Students rate podcasting highly, but the educational value of these recordings in light of student performance on knowledge exams is unknown. Results of the present study will hopefully guide pedagogical rationales behind podcasting, rather than reinforce a technocratic approach to implementing technology merely because it is available or generally popular. Given the need to consider alternative educational methods with increased class size, limited physical and faculty resources, and potentially distributed education, we hope that the present study will inform the pedagogical value of podcasting as a digital educational supplement.

**Title:** Approaches to Postgraduate Medical Education in Addiction Psychiatry  
**Author(s):** David Crockford, Nady el-Guebaly

Training in the management of addictions in psychiatry remains disproportionately limited in psychiatric residency training programs compared to other major psychiatric disorders despite the recognition that concurrent addictive disorders in patients presenting for psychiatric care is the norm rather than the exception. The 2008 RCPSC requirements for addiction psychiatry training during the 5 years of psychiatric residency aim to address this deficit. Residents are required to complete 1 month of training in addiction psychiatry evaluated separately from the rest of their rotations, have an introductory knowledge of motivational interviewing and be able to demonstrate proficient knowledge, skills and attitudes in the clinical care of patients with addictive disorders integrating all of the CanMEDs roles. The goal is that all psychiatry residents by the end of their training will have acquired and developed the ability to adequately screen and assess, treat in a biopsychosocial fashion, and refer when appropriate patients with addictions they will encounter in general and specialized psychiatric treatment settings. This presentation will review the Objectives for Training in addiction psychiatry, content areas to be addressed and then discuss potential strategies and barriers to meeting the new training requirements. Findings from a survey of Canadian psychiatry residency program directors regarding the proposed approaches to meeting the Objectives for Training in addiction psychiatry will also be presented.



**Title:** A population-based longitudinal study of work and health in Alberta  
**Author(s):** Carmelle A. Bolo, Yadana C. Elumir, Megan A. Manning, JianLi Wang

Recent reports indicate that mental disorders are prevalent in the Canadian workforce with as many as 5.3% displaying a 12-month mood disorder. Mental disorders have a significant impact on worker productivity and well-being – it is estimated that 50% of disability claims (representing \$15 to 33 billion) in Canada are attributed to mental illnesses. The implementation of interventional strategies and their success depends on a thorough understanding of the inter-relationships between psychosocial determinants and mental health. Few studies have examined the impact of mental health in the workplace using a longitudinal study design in an unselected population. The current study examines psychosocial determinants of mental health in a randomly selected population of working Albertans. The objective of this presentation is to describe the design and methodology of the longitudinal study and preliminary baseline interview results. Individuals employed within the 12 months prior to initial contact between 25 and 64 years of age comprised the target population. Data related to work stress, effort-reward imbalance, work-family conflicts, and mental health status was collected via the Computer Assisted Telephone Interview method. Participants were interviewed at 12 and 24 months following the baseline interview. A total of 4304 eligible participants were recruited; initial results for 2048 individuals are presented herein. Approximately 63% (n=1298) of respondents screened negative for mood and anxiety disorders and 22% (n=455) screened positive. A total of 306 individuals refused to participate and thus were excluded from future follow-up. It is anticipated that the results of this study will increase our understanding about factors affecting mental disorders in the Canadian workforce and will likely have significant implications for social and organizational policy.

**Title:** Problem gambling stigma: A program of research  
**Author(s):** Jenny Horch, David C. Hodgins

Stigmatization is known to result in reduced treatment seeking in mental health. Researchers have recently proposed stigma may also impact disordered gamblers, a population where less than 10% of individuals seek treatment. Using methodology adopted from the broader stigma literature, a vignette study determined that male problem gambling was less stigmatized than alcohol dependence and schizophrenia, but more stigmatized than cancer and a control condition (Horch & Hodgins, 2008). A follow-up study revealed that the results were generalizable to female problem gamblers. While these studies were an important first step in examining problem gambling stigma, little is known about self-stigma or about the process of stigmatization as it applies to problem gamblers. The stigma process has been conceptualized as consisting of four components or social-cognitive processes: cues (perception), stereotypes (cognition), prejudice (affect), and discrimination (behaviour). Three studies are currently underway to examine several of these different components.

**Title: The Experience of Fatigue in Early Psychosis Patients:  
An Interim Analysis**

**Author(s): Jessica E. Lyons, Kathleen E. Pierson**

**Introduction:** Recovery and rehabilitation of early psychosis patients is often hindered by symptoms resembling fatigue. To our knowledge, there are no published studies of fatigue in early psychosis patients. As well, the fatigue scales currently available do not have good face validity for measuring fatigue in this population. The purpose of this study is to qualitatively explore the experience of tiredness in early psychosis patients as a prerequisite for the development of a valid and reliable rating scale that measures fatigue in such patients.

**Results:** A total of 6 patient interviews have been analysed. Over 100 free nodes representing patients’ experience of fatigue were extracted from the interview transcripts. These have been organized into 15 categories: Associated behavior; Etiology; Associated physical sx; Improving factors; Coping strategies; Frequency; Effectiveness of coping strategies; Exacerbating factors; Synonyms; Associated cognitive symptoms; Severity; Relational effects; Associated psychiatric symptoms; Functional effects; Associated affect

**Conclusions:** Preliminary analysis reveals that the experience of fatigue in this population would not be measured well by the Fatigue Severity Scale most often used in fatigue studies. This scale was designed to measure fatigue in patients with multiple sclerosis. Three out of nine statements on this scale refer to the physical impact of fatigue. Our population rarely mentions the physical impact of fatigue, so a research tool heavily weighted to sample this experience may not be valid. It is also possible that the fatigue experienced in this population is a different phenomenon. The most commonly mentioned ways that our population is impacted by fatigue include: difficulty socializing, difficulty working and poor concentration. The fatigue severity scale measures work and social impact together and gives no mention to poor concentration. Our preliminary results suggest that currently available scales will not reliably sample fatigue in patients with early psychosis.

**Title:       Psychiatric Illnesses in Patients with Intellectual Disability Presenting with  
Aggressive and Non-aggressive Behaviors**

**Author(s): Jason Taggart, Susan Carpenter, Jordan Cohen, David Dawson, Barb Pitcher**

**Background:** Aggressive behaviors in intellectually disabled patients are a common occurrence and focus of clinical attention. These behaviors lead to significant psychosocial difficulties and often result in patients being admitted or readmitted to institutional and psychiatric inpatient settings. Because aggressive behaviors are a symptom and not a formal diagnosis, clinicians must search for an underlying cause—with psychiatric conditions often high in etiologic consideration. Our study aims to characterize psychiatric conditions diagnosed in intellectually disabled patients with and without aggressive behaviors referred to a Canadian outpatient dual diagnosis (intellectual disability and mental illness) clinic. **Methods:** A chart review of all patients (approximately 800) attending Arnika Centre will be completed to identify patients with “aggression” as part of their referral concern. This data will be entered into a preexisting database containing demographic information, Axis I diagnoses at initial assessment, and level of mental retardation. Statistical analysis will be performed on extracted data to identify which Axis I disorders are associated with aggression at time of referral as well as whether there is an association between level of mental retardation and rates of aggression. **Results:** Pending.

**Conclusion:** In identifying the common psychiatric conditions associated with aggressive compared to non-aggressive intellectually disabled outpatients, it will give the clinician high-yield etiologic options to consider when approaching diagnosis and management in this unique patient population.

**Title: Depression and stroke severity predict quality of life at 3 months post stroke**  
**Author(s): Diana Czechowsky,**

**Background** – Stroke mortality has declined in the last three decades. With a survival rate near 85%, quality of life (QOL) is increasingly recognized as an outcome measure for stroke. The present study aimed to identify predictors of QOL in stroke patients at 3-months. We hypothesized that predictors of QOL would be: (a) post-stroke depression; (b) treatment with tissue plasminogen activator (tPA) and (c) stroke severity. **Methods** – Patients from the Stroke Unit at a University hospital were surveyed in-person at 3-months post-stroke. QOL was quantified using the Short-Form 36 Health Survey (SF36) and the Stroke Specific QOL Scale (SSQOL). Neurological, functional and psychiatric status were measured using the National Institutes of Health Stroke Scale (NIHSS), modified Rankin Scale (mRS), modified Barthel Index (BI), Mini-Mental State Exam (MMSE) and Centre for Epidemiological Studies Depression Scale (CESD). **Results** – Of 119 patients, 69 were male and the mean age was 67 years (SD=14). Stroke sub-types included: 82 AIS, 8 ICH, 23 TIA, 2 venous infarcts and 4 stroke mimics. Patient scores were notably lower than normal Canadian population means in the SF36 Role Physical domain ( $p<0.001$ ). When the SSQOL summary score was dichotomized into poor ( $<3$ ) and good QOL ( $\geq 3$ ), 82% of patients defined their QOL as good at 3-months. Of 21 depressed patients ( $CESD \geq 10$ ), 52% had an SSQOL summary score  $< 3$ . Both depression (OR 17.5 95%CI 4.0-76.5) and 3-month NIHSS score (OR 1.6 95%CI 1.2-2.1 per 1-point increase in NIHSS score) were independent predictors of poor quality of life. Thrombolytic therapy was associated with a lower 3-month NIHSS score, but did not independently predict quality of life scores. **Conclusions** – Depression and 3-month NIHSS scores were independent predictors of QOL at 3 months. Acute intervention with tPA itself was not a predictor of QOL. Diagnosis and treatment of depression has an important role in improving the long-term outcome of stroke patients.

**Title: Transcription prescription: Using psychotherapy transcripts as a tool to enhance psychotherapy supervision**  
**Author(s): Kathleen Pierson**

To facilitate acquisition of psychotherapy skills, supervisors must have some knowledge of the therapeutic discourse that unfolds between trainees and their patients during sessions. Traditional methods of recounting sessions include the use of process notes, audio- and videotaping, and direct observation of sessions; however, session transcripts offer unique learning advantages not afforded through the use of these methods. Experiential learning theory (Kolb 1984) posits that experience is fundamental in initiating an effective learning experience. Supervisors can “learn” about the therapist-patient dyad through vicarious “experience” of the session using tapes, process notes, direct observation or session transcripts. Because it is more efficient to read material than to watch/listen to tapes, it is likely that the supervisory dyad has fuller access to session material when using transcripts than when using other modalities. Both supervisors and learners can review detailed session content/process more efficiently by reading transcripts and thereby gain more in-depth knowledge of patients. Rapid access and linkage of related material throughout the session is more feasible with transcripts than with other supervisory modalities. In addition, transcripts allow for more efficient analysis of process events (eg, defenses, transference, countertransference) than can be achieved with other supervisory modalities. This presentation will provide an overview using clinical examples of how supervision can be enhanced with the use of session transcripts.

**Title: Functional connectivity of right insula during self-face processing**  
**Author(s): Rajamannar Ramasubbu, Bradley Goodyear, Ismael Gaxiola, Svetlana Maslovitch, Helen Mayberg**

**Background:** Recent functional imaging findings suggest an integral role for the insula in a wide spectrum of self relevant processing including interoceptive awareness, personally familiar faces (faces of loved ones), social cognition such as trustworthiness and empathy. In this study we examined the changes in functional connectivity of insula during processing of ones own face compared to personally familiar faces to understand the functional role of insula in “self” specific processing. **Method:** A functional connectivity magnetic resonance imaging analysis was performed on the data collected from 10 healthy young woman during the presentation of three set of facial pictures: self face, personally familiar face (mother and close, non-sexual female friend), and age and sex matched strangers (younger and older female strangers) while performing three tasks : passive viewing, salience and emotional evaluations. Based on categorical subtraction analysis data showing increased activation of right anterior insula in self face versus personally familiar faces contrast, we selected this region as seed for correlational analysis to investigate the differential functional connectivity of right anterior insula during processing of self face versus personally familiar faces. **Results:** During self face processing, the right anterior insula showed positive correlation with left anterior insula/ orbito frontal gyrus, putamen, bilateral temporal and left lateral prefrontal and anterior cingulate regions, whereas during personally familiar face processing, the right anterior insula showed positive correlation with bilateral inferior parietal cortices, bilateral prefrontal and right anterior cingulate regions and to a lesser degree to the left insula/ orbito frontal area. **Conclusions:** Self-face specific processing preferentially involves functional connectivity of right anterior insula to brain regions implicated in self awareness, emotional responses and familiarity feelings (left anterior insula, putamen, right superior temporal lobes). This suggests that the emotional aspect of self experience (phenomenological aspect) is crucial to distinguish self from personally familiar others.