

Evaluating benefits is an important component of the connecting South West Ontario (cSWO) Program that helps to support and demonstrate the realization of health system benefits through the adoption of electronic health records (EHRs). By pursuing the measurement of organizational value (improvements in the efficiency of care delivery such as time-savings and redirected resources) and clinical value (patients undergo fewer unnecessary tests, patients have improved access to care), patients ultimately benefit from higher quality, better informed clinical decision-making.

The cSWO Analysis and Research program uses a research-based approach to identify areas of clinical best practice that are affected by the use of EHRs, and works collaboratively with clinicians to understand the value of EHRs. This formative evaluation process informs change management and adoption, and enables clinicians to use EHRs more effectively. This research does not include the use of any personal health information.

This document is one in a series of case studies which describe the clinical value of EHRs in different clinical settings and contexts, particularly with respect to clinical best practices. The work of the cSWO Analysis and Research program is ongoing; depending on the circumstance, these cases occasionally raise questions for further investigation, and clinicians are invited to participate in analysis and research to continue to develop these answers.

Value statement

The cSWO Regional Clinical Viewer, ClinicalConnect™ enables clinicians working within the Initial Assessment Process at the St. Joseph's Healthcare, Hamilton Emergency Department to access information that facilitates a comprehensive medical history for adults with physical symptoms that may be misattributed to a pre-existing mental illness resulting in more timely determination and management of patients' needs and improved patient safety.

Diagnostic overshadowing: a potential barrier to physical health care for mental health patients

People with mental illness tend to have shorter lifespans and higher medical co-morbidity compared with the general population.¹ One of the challenges in providing care for those living with mental illness is that the symptoms of physical illness can be misattributed to a patient's mental illness. This unfortunate reality, referred to as diagnostic overshadowing^{1,2} results in increased risks of treatment delay and the development of complications.³

Improving the extent to which health service providers share their patient information may play a role in improving decision making for patients with complicated physical and mental health histories. Research in this area has suggested that problems in developing a history and problems in the organization of emergency care play important roles in optimal care⁴. In the Ontario context, the Canadian Patient Safety Institute (CPSI) and the Ontario Hospital Association (OHA) have recommended a role for shared electronic records to help improve communication, service integration, or inter-professional collaboration particularly during transitions of care.⁵

Emergency Psychiatric Services in the ED at St. Joseph's Healthcare Hamilton

Emergency departments like the one at St. Joseph's Healthcare Hamilton (SJHH) are places where clinicians are regularly asked to untangle the complicated stories that lead to physical and mental distress. SJHH is a designated mental health facility that serves as the regional leader in the provision of psychiatric care and innovation. The Charlton Campus has the busiest emergency department in Hamilton, with greater than 60,000 emergency room visits per year, providing emergency psychiatric services to patients from across a regional catchment area extending from the Haldimand Norfolk region to the Niagara Peninsula⁶.

The Psychiatric Emergency Services (PES) model of care within the ED at SJHH involves psychiatry staff contributing to an emergency psychiatry team that collaborates with ED staff to support and care for patients in crisis. As an extension of their model of care the ED team has developed a process improvement initiative called the Initial Assessment Process (IAP). The IAP operates at the busiest time of the day between 11am and 9pm and is designed to provide timely, high quality care with rapid determination and management of the patient’s needs. A 2015 Accreditation report suggested the IAP initiative has resulted in improved patient wait times.⁷

ClinicalConnect in Emergency Department care for mental health patients

In early 2015, to provide responsive management of the high volume of patients in the ED with mental health issues, the team introduced a highly-skilled mental health registered nurse (PES IAP RN) to work with the physicians in the ED IAP to assess patients presenting with a mental health issue. Most of the patients assessed by the nurse are triaged as emergent or urgent cases excluding those patients who arrive with the police, the Mobile Crisis Rapid Response Team (MCRRT) or the Crisis Outreach and Support Team (COAST). Many of these patients have co-morbidities such as diabetes, heart disease or a thyroid condition. The main purpose of the PES IAP RN role is to ensure patients presenting with a mental health issue get a timely assessment and are allocated to the correct care area in the ED to improve patient flow, the patient experience and most importantly patient safety.

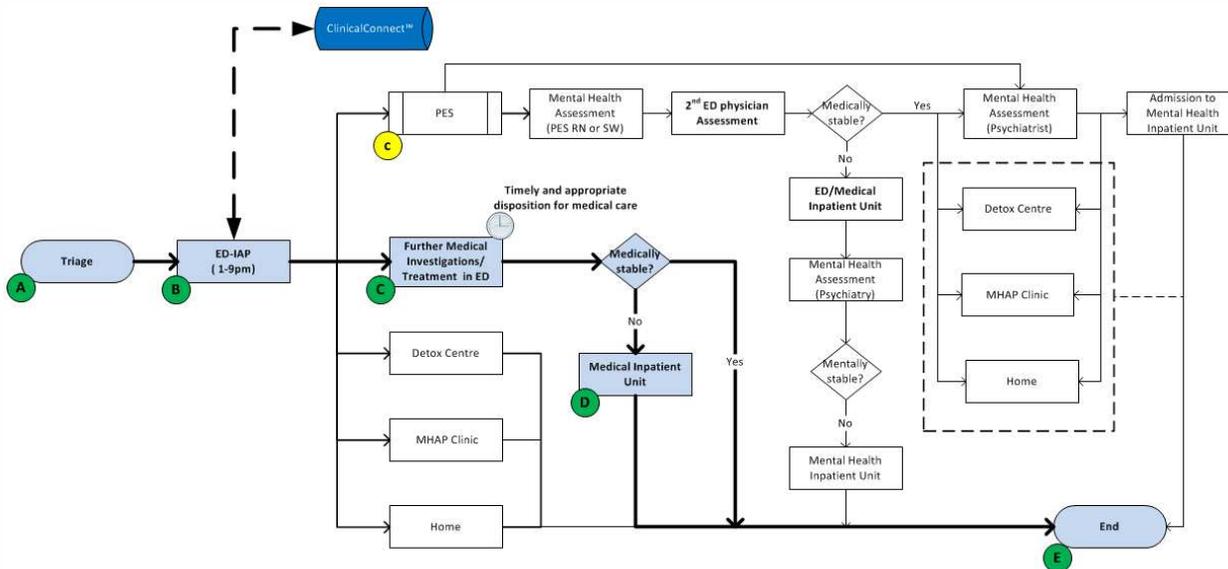


Figure 1 – ClinicalConnect Access and related clinical value production within the Integrated Assessment Program at SJHH

ClinicalConnect is accessed by the PES IAP RN after initial triage [A] in the ED process to complete a focus-based assessment of a mental health nature [B]. At this point, the nurse accesses varied reports in the regional clinical viewer such as discharge summaries, consultations and recent test results to elicit a comprehensive medical history for patients presenting with an altered mental status who may also have somatic symptoms. The medical history obtained in ClinicalConnect helps the IAP clinicians make informed decisions concluding in some cases, that the psychiatric patient’s alteration in mental status and somatic symptoms are related to a medical condition rather than an exacerbation of his or her psychiatric problems. Examples may include a case where anxiety is correctly related to an exacerbation of a recent heart condition rather than misattributed to a history of panic disorder, depression or schizophrenia or where confusion is accurately diagnosed as a post-op delirium related to a recent surgery rather than misattributed to a pre-existing diagnosis of dementia.

The comprehensive medical history enabled by the regional clinical viewer allows the PES IAP RN and the IAP ED physician to follow a care pathway appropriate to the client’s needs [C or c]. The use of ClinicalConnect by the PES RN in the IAP process promotes appropriate patient flow in the ED [A→E] which may ensure the delivery of the right care, in the right place at the right time.

Testimonial

“ClinicalConnect is a valuable tool in the ED when provisioning care for adult patients with co-morbidities who are suffering from the exacerbation of a medical condition and seemingly present with symptoms of a mental illness. The tool gives me a good ‘snapshot’ of the patient’s previous encounters and allows me to discover if the patient has had recent visits or investigations or procedures related to a medical issue so I can start to focus and direct my decision making allowing for the mitigation of adverse events that may be related to recent surgery, heart and thyroid conditions. Being better informed allows me to explain to the patient the rationale for their disposition in the ED reassuring them that they are receiving the right care. Patients and family members are relieved of the task of having to provide a medical history that they may not be aware of or have to repeatedly communicate to clinicians.”

Claudia Ross, Registered Nurse, Psychiatric Emergency Services, St. Joseph’s Healthcare Hamilton

Questions

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