

Benefits evaluation 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 an electronic health record (EHR). 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) ultimately, patients benefit from higher quality, better informed clinical decision-making.

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

The document is one in a series of case studies which describe the clinical value of the EHR in different clinical settings and contexts, particularly with respect to clinical best practices. The work of the cSWO Benefits Realization program is ongoing; in some cases, these cases raise questions for further investigation, and clinicians are invited to participate in benefits evaluation to continue to develop these answers.

Value statement

Using the cSWO Regional Clinical Viewer, ClinicalConnect™, health care professionals responsible for managing infection in hospitals can access clinical data that ultimately improves patient care by facilitating a timely and efficient diagnosis, and potentially preventing outbreaks.

Timely information leads to quality management of infectious diseases

Rapid access to a patient's health care records can streamline the utilization of laboratory and radiographic investigations. This optimizes the value of subsequent testing that is required, with the intended goal of improving the stewardship of resources without impacting on patient care.

A centralized database of patient admission records serves as a powerful reference in executing best practices for Infections Prevention & Control departments. Transmission of antibiotic resistant organisms can be avoided as key information is readily available at time of admission to hospital.

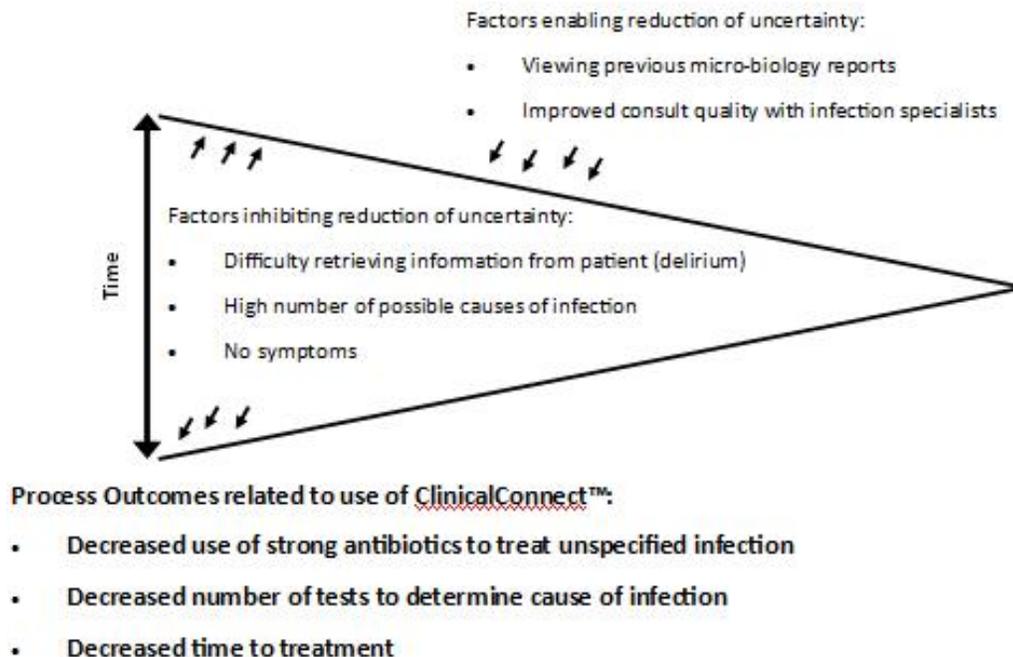
The diagnosis and management of patients with complex and/or life threatening (i.e. sepsis) infectious diseases is improved when timely care is provided (Rivers et al., 2005). The ability to efficiently view and integrate clinical data (i.e. microbiological and radiographic) at this critical phase can improve patient outcomes. ClinicalConnect can play an important role in reducing uncertainty as explained further in the graphic below.

EHR usage by infection diseases physicians

ClinicalConnect provides real-time access to information from 100% of the acute care hospital sites across south west Ontario, information from the Community Care Access Centres, and from community laboratories via the Ontario laboratories information system (OLIS).

Infectious disease management in hospitals can now rely on ClinicalConnect as a multi-organizational source of detailed information from laboratories. With data contributions from acute care hospitals and community laboratories, a more complete picture of what patients are facing as they battle infections is shared with clinicians. In addition, as more clinicians gain access to the same improved level of information the quality of consultations between infectious disease experts across south west Ontario can improve to enable additional value.

Reducing uncertainty in infection control and management



This figure helps to clarify the relationship between clinicians using ClinicalConnect and patients receiving better care. Clinician-experts in infectious diseases are focused on reducing uncertainty to enable the most appropriate action. ClinicalConnect provides important answers during their process in a way that overcomes traditional barriers. These answers result in a reduction in the time it takes clinicians to reduce uncertainty enabling better consultation and more precise treatment for patients.

Testimonial

“ClinicalConnect ensures that I have access to all of the pieces required to help my patients in a timely and accurate fashion.”

Dr. William Ciccotelli, MD, FRCPC

Infectious Diseases/Medical Microbiology, Grand River Hospital and St. Mary's General Hospital, Kitchener

Questions

For questions, comments, or to participate in cSWO Program's Benefits Realization program, please contact: Ted Alexander, Research Associate, cSWO Program ted.alexander@ehealthce.ca

Sources

Rivers, E.P., McIntyre, L., Morro, D.C. Rivers, K.K. Early and innovative interventions for severe sepsis and septic shock: taking advantage of a window of opportunity. CMAJ, 2005; 173(9):1054-65.

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