

Primary care data sharing (PCDS) is a time-limited, small-scale regional initiative as part of the cSWO Program to explore the value, challenges and feasibility of sharing a pre-defined dataset from primary care electronic medical records (EMRs) to be shared amongst health service providers within the patients' circle of care through the electronic health record (EHR). This proof of concept will inform the evolving provincial primary care data sharing strategy.

The evaluation and realization of value is an important component of the cSWO Program that supports and delivers the adoption of the integrated EHR across south west Ontario (SWO). By pursuing the measurement of organizational value (i.e. reduction in health care professional time required to find information) and clinical value (i.e. reduction in potential adverse drug events, PADEs) we can learn about how patients benefit from better informed clinical decision-making.

The PCDS proof of concept project team works with primary care teams to improve the quality of EMR data in the Cumulative Patient Profile (CPP) and shares that data to a clinical data repository (CDR). Clinicians along the continuum of care will be able to view CPP data as part of the integrated EHR via the cSWO Regional Clinical Viewer, ClinicalConnect™.

Value statements

Value within the primary care (PC) setting: Standardized EMR data can be used to create a decision support tool for physicians' consideration of oral anticoagulant (OAC) therapy prescriptions for their atrial fibrillation (AF) patients. The report, based on identified best practices, would identify AF patients who should consider the use of an OA medication in order to reduce their risk of stroke.

Value external to the PC setting: When PC EMR data is shared into the cSWO Regional Clinical Viewer, an emergency room physician would be able to access patient level information prior to providing treatment. When a patient presents in the ER with AF, through accessing the patient's EHR, the physician will know that the patient is diagnosed with AF and whether or not they are taking an OAC, which are determinants of care.

Internal value: clinical best practice for mitigating stroke risk in AF patients

In 2014, the Canadian Cardiovascular Society published updated guidelines for the management of AF [1]. One of the strong recommendations presented in the guidelines is that all patients with AF be "stratified using a predictive index for stroke risk". The CCS Algorithm is the suggested predictive index to be used, and categorizes AF patients by their risk of having a stroke and suggests treatment using OACs.

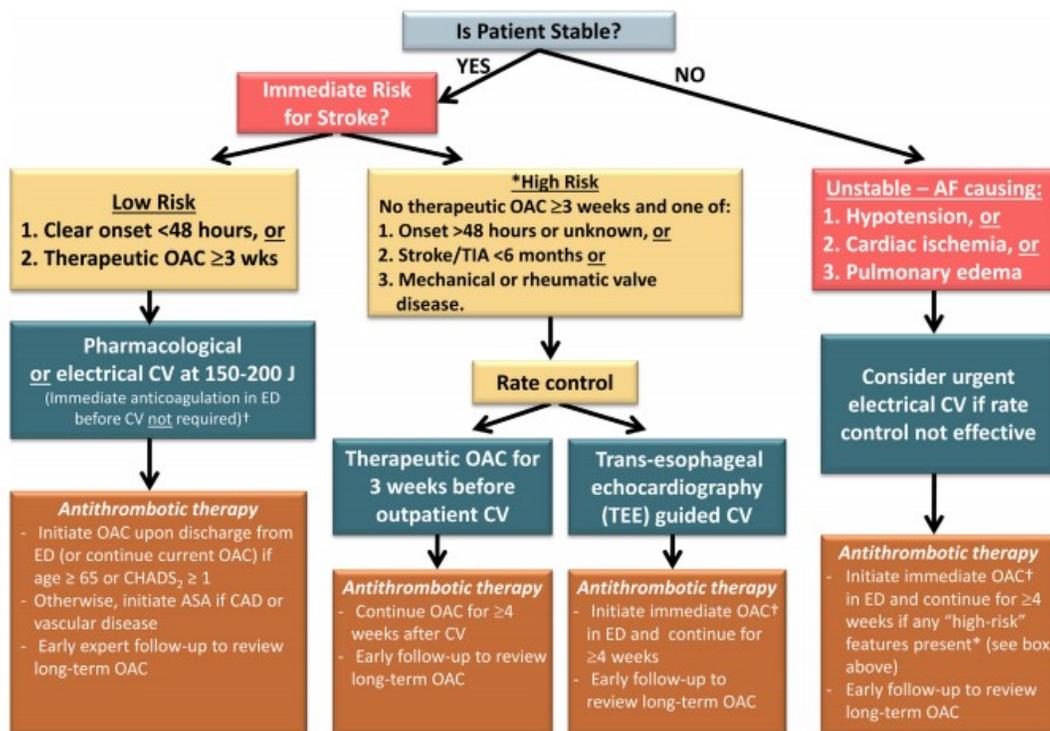
As part of an early phase of PCDS, benefit realization resources sought to develop internal value propositions for primary care clinicians being asked to standardize their CPP data for the purpose of sharing in the CDR. A decision support report was created based on standardized (SNOMED-CT) diagnoses to proactively identify AF populations and additional diagnoses that determine stroke risk (i.e. diabetes, hypertension).

The report process identified patients who were in higher risk categories as a result of their age (65+) and as a result of their CHADs risk score calculated using other diagnosed conditions. Patients who were already taking an OAC were removed from the report. Initially, 50 patients across the AF population were identified and a chart review of those patients was completed by a pharmacist. 37 additional patients were ruled out for reasons such as starting OACs in the time interval between report creation and chart review or previously documented patient preference. A recommendation was made by the pharmacist to pursue an initial or follow up conversation with 14 (~5 per cent) of the AFib patients at the FHT. As a result of that recommendation, four out of 14 (29 per cent) patients identified started anticoagulant therapy after review with the family MD.

External value: primary care data informing emergency care for AF

The 2014 update of the CCS AF Guidelines recommends (strong recommendation, moderate-quality evidence) that: for patients with no high-risk factors (recent stroke or TIA within 6 months; rheumatic heart disease; mechanical valve) and clear AF onset within 48 hours or therapeutic OAC therapy for ≥ 3 weeks, we recommend that they may undergo cardioversion in the ED without immediate initiation of anticoagulation. After attempted or successful cardioversion, antithrombotic therapy should be initiated as per the CCS algorithm [1].

For emergency clinicians interpreting patient presentation and best practice guidelines the ability to access primary care records to assist in determining risk factors such as duration of OAC use or stroke/TIA occurrence within 6 months may serve as an important resource in maintaining patient safety during care.



Testimonial

“[This project] provided an invaluable tool to help clinicians provide optimal care for patients. Although nearly every patient identified already had a documented discussion about antithrombotic medications with their physician, a significant number of them were overdue for a re-assessment. The strongest proof of the value of this data sharing project is the fact that several of the identified patients are now taking an antithrombotic to lower their risk of a stroke.”

Dr. Jeff Nagge, Clinical Pharmacist, the Centre for Family Medicine FHT, Associate Clinical Professor, School of Pharmacy, University of Waterloo

Questions

For questions, comments, or to participate in cSWO Program’s Benefits Realization program, please contact: Lori-Anne Huebner, Benefits Realization Lead, cSWO Change Management and Adoption Delivery Partner, eHealth Centre of Excellence: lori-anne.huebner@ehealthce.ca

Source:

1. Verma, A., et al., 2014 focused update of the Canadian Cardiovascular Society Guidelines for the management of atrial fibrillation. Can J Cardiol, 2014. 30(10): p. 1114-30.