Hypertension Management Program

A case study on hypertension management in primary care

Background

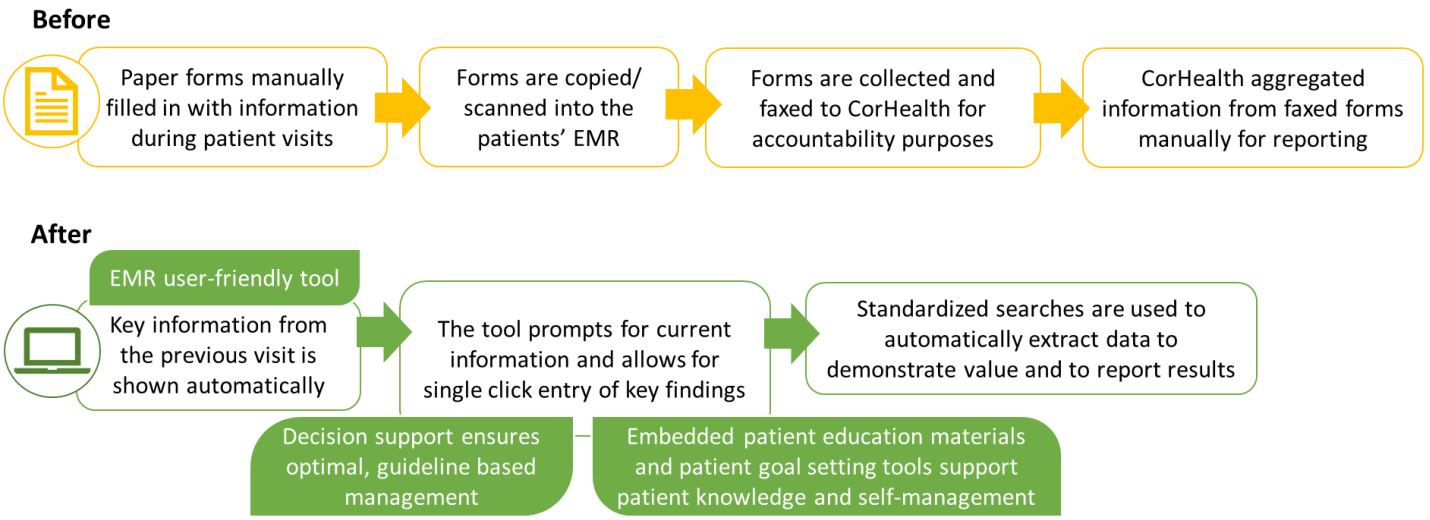
Optimal management of high blood pressure (BP) is necessary in reducing the probability of developing other chronic conditions, such as cardiovascular disease and renal failure, supporting improvements in patient health outcomes.[1-3] In Ontario, almost 20% of the population has hypertension,[4] and 9 out of 10 Canadians are expected to develop hypertension in their lifetimes.[2]

To support management of hypertension in primary care, the eHealth Centre of Excellence worked in collaboration with CorHealth Ontario to translate the paper-based Hypertension (HTN) Management Toolkit, already used by organizations across Ontario,[1] into an electronic medical record (EMR) decision support tool for primary care providers (PCPs). The goal of this tool is to enable efficient assessment and management of hypertension in accordance with the Hypertension Canada clinical best practice guidelines.[1]

The Dryden Area Family Health Team (FHT) adopted the HTN EMR toolkit to further provide their Heart Health Program with informed decision support for patient management, standardization of care, and documentation.

The Hypertension EMR Toolkit guides clinicians through the application of best practices for hypertension screening and management, increasing the likelihood of timely BP monitoring, and facilitating appropriate management, treatment, and follow up measures. The use of this tool is associated with improvements in hypertension management performance measures.

Figure 1. Dryden Area FHT's workflow before and after implementing the Hypertension EMR Toolkit.



Testimonials

"From an administrative standpoint, the HTN EMR Toolkit has improved the data quality of information captured from patients, allowing for increased clinical efficiencies in searching data and reporting key performance metrics to the ministry [MOHLTC]."

- Lucy Nabb, Director of Rehab Services

"From a clinical point of view, the HTN EMR tool enables me as a clinician to capture comprehensive information, guiding the patient assessment and monitoring patient risk factors, as well as supporting the patient with goal setting for improving their hypertension self-management."

- Tracey Mihalus, RN, Dryden Area Family Health Team

What were the benefits?

Since its adoption in April 2019, the **Hypertension EMR toolkit has been used for all of hypertensive patients** (N=373) referred to the Heart Health Program at the Dryden Area FHT. A comparison of hypertension management related measures before and after the adoption of the toolkit illustrates improvements in all three measures, as shown below:

Measures	Improvement	Impact
% of patients with annual follow up completed	13%	↑
% of patients with BP on last reading at target (<=140/90)	4%	↑
% of patients with improved diet at annual follow up	38%	↑

The Dryden Area FHT also reported additional clinical and organization benefits as a result of using the Hypertension EMR toolkit.

Figure 2. Clinical benefits experienced from the use of the EMR tool for hypertension visits.

Reduced probability of missed information during visit
Provides template to guide the assessment, highlighting overdue exams, such as a BP vital, and labs outside the target goal.

Workflow efficient
More efficient documentation of patient visit, as values from the previous visit can be pulled into the current visit form for review.

Consistent reporting
Standardized documentation of CV risk and lifestyle factors aids in patient monitoring and patient self-management.

Identify patient's risk profile
The Framingham risk score automatically calculates the patient's cardiac age.

Support patient engagement
Encourage patient goal setting and empower patients with information and tools for self-management.

Figure 3. Organization benefits experienced since the use of the EMR decision support tool.

Improved data quality
Searchable EMR form enables proactive care to improve the delivery of clinical best practices.

Efficient reporting
Standardized EMR searches supports ad hoc and routine reporting, allowing the FHT to efficiently report key performance indicators to the MOHLTC.

Reduced administrative tasks
Eliminate faxes with less administrative filing and processing, collecting information to electronically send to the MOHLTC.

Program description

QBIC Supporting Care

QBIC is a program hosted by the eHealth Centre of Excellence in Waterloo, Ontario. The objective of QBIC is to improve the health of residents in Waterloo Wellington by supporting primary care clinicians with digital health solutions that meet their needs and enhance the quality of care they provide.

For more information about the tools and services available, or to book an eHealth Coaching session, please scan the QR code (right) or visit: www.ehealthce.ca/QBIC

Works cited

1. CorHealth Ontario. Hypertension Management Program For Primary Care Clinics. (2019). Retrieved https://www.corhealthontario.ca/HMP-Toolkit-PC-APR3.pdf.
2. Leung, A. A., Bushnik, T., Hennessy, D., McAlister F. A., and D. G. Manuel. (2019). Risk factors for hypertension in Canada. *Health Reports;* 30(2):3-13.
3. Nerenberg, K. A. et al. (2018). Hypertension Canada's 2018 Guidelines for Diagnosis, Risk Assessment, Prevention, and Treatment of Hypertension in Adults and Children. *Can J Cardiol*; 34(5): 506-525.
4. Statistics Canada. (2020). Table 13-10-0096-09. High blood pressure, by age group. Retrieved https://doi.org/10.25318/1310009601-eng.

If you have any questions or would like further information on this case study, contact communications@ehealthce.ca.

Authored by: Jennifer La and Lirije Hyseni, eHealth Centre of Excellence.

Published: June 2020