Hypertension Management Program
For Primary Care Clinics

Getting Started Toolkit

Helping primary care organizations plan & implement chronic disease prevention and management strategies for hypertension; an evidence-based approach designed to aid in the effective treatment of high blood pressure.
Why Address Hypertension?

40% of Canadian Adults >25yrs have Hypertension

19% of global deaths caused by Hypertension
9.1 million lives lost annually (2010)

20% of Canadians have pre-hypertension or elevated BP

Cost of Treating Hypertension
$13 Billion (2010) expected to reach $20 Billion annually by 2020

Global reduction in uncontrolled Hypertension by 2025, agreement at World Health Assembly

9 out of 10 Canadians expected to develop Hypertension in normal lifespan
The Framework

Ontario’s Chronic Disease Prevention and Management Framework

Delivery System Design
- Interdisciplinary care teams with defined roles and responsibilities
- Innovative patient interactions
- Care planning, care paths and care management
- Enhanced health promotion and prevention
- Outreach and population needs-based care and cultural sensitivity

Provider Decision Support
- Evidence-based guidelines embedded into daily practice
- Provider Education
- Access to specialist expertise
- Clinical care and client management tools
- Provider alerts and prompts
- Measurement, Evaluation, Routine Reporting and Feedback

Self-management Supports
- Clients are part of care team and engaged in shared decision making
- Individuals empowered to be self-managers
- Self-management support services organized for clients
- Shared clinical guidelines
- Follow-up

Self-management Supports
- Client registries (e.g., client with diabetes
- Electronic health records
- Provider portals
- Client portals
- Population health data
The Hypertension Management Program:

With the introduction of Ontario's Chronic Disease and Management Framework, there was recognition that the way chronic disease is handled needed to change. In order to provide patients with greater autonomy in taking a role in managing their condition, education and collaboration on treatment is needed, allowing for effective ‘self-management’. Patients empowered with knowledge and tools for self-management aid in preventing exasperation or progression of chronic conditions, enabling better control and health outcomes.

The other aspect of the framework was addressing care in a more collaborative approach, with clinicians working with their allied health teams and administration to provide coordinated, proactive and progressive support both medically and to address the common, controllable lifestyle risks that contribute to chronic diseases.

The Hypertension Management Program (HMP) began as a research study, called the Hypertension Management Initiative (HMI), led by the Heart & Stroke Foundation of Ontario, and Dr. Sheldon Tobe as the principal investigator. Launched in 2007, the HMI used an approach in line with Ontario’s Chronic Disease and Management Framework. Following the results of this study, the HMI became the Hypertension Management Program (HMP), fully funded by the Ministry of Health and Long Term Care.

Looking at the study, and results:

“Hypertension, also referred to as the ‘silent killer’, is a significant chronic health condition and is prevalent in 1 out of 5 adult Canadians. Despite being the number one diagnosis listed for patient visits, a substantial proportion of people remain unaware of their hypertension or have not achieved treatment targets. Data compiled by the Heart and Stroke Foundation of Ontario indicates that consumers do not take hypertension seriously, that physicians are not consistently applying clinical practice guidelines related to diagnosis and treatment targets, that patients are not adhering to prevention and treatment recommendations and that physicians lack time and skill to counsel patients about needed lifestyle modifications. Clinical trials demonstrate the efficacy and safety of blood pressure control and clinical practice recommendations provide guidance to achieve blood pressure targets. However, to achieve the benefits from blood pressure control across the entire population, without expending an even larger fraction of primary care physician’s time to the management of this chronic disease, a new paradigm is required.

“The HMI focuses on what is acknowledged to be a critical issue in high blood pressure – improving the management of this chronic health condition by primary care providers (doctors, nurse practitioners, nurses and community pharmacists) and patients.” [study protocol]

The HMI implemented and evaluated a local systems change educational approach designed to enhance physician, nursing and pharmacist approaches to high blood pressure detection, intervention and follow up measures, along with strengthen patient communications and supports to enable self management.
The Hypertension Management Initiative

The Study

Provider Education

~200 Providers

Patient Education & Self-Management

> 3600 Patients

Tools to collect information, measure and monitor outcomes

> 33,000 Patient Visits

Cost & Outcomes

Effective, evidence based care

Study Outcomes

Mean BP ↓ 6.4/3.8 mmHg over all Hypertension pts.

Mean BP ↓ 34.6/20.8 mmHg for pts. with the highest baseline BP

41% ↑ pts. Controlled to target

↑ Provider knowledge and confidence

↑ Communication: interprofessional & patient/provider
About this Toolkit:

The Hypertension Management Programming Toolkit (toolkit) helps primary care organizations assess where they are with respect to hypertension management, and provides practical resources for implementing real change to meet chronic disease prevention and management approaches to support their patients. Built on the knowledge of the HMI study and years of the HMP running as a funded program, this toolkit enables broader audiences to advance their approach to hypertension management.

Guiding principals:

1. Commitment to collaborative, proactive, guidelines based chronic disease care for patients is included in the organizations strategic plan, operating plan, corporate goals/objectives and/or quality improvement plans (team is supported in this approach)

2. Organization is open to providing & encouraging ongoing education and/or training for hypertension diagnosis and care, along with motivational interviewing techniques to support patient self management (team knowledge is acquired and maintained)

3. The approach to hypertension management is interprofessional, with interdisciplinary care teams whose roles and responsibilities are defined, evidence based best practice care is embedded into daily practice (team approach, with tools at point of care)

4. Patients are part of the care team, they are provided with information to let them know what their condition is, how they can play a role in its management, what to expect in their care, and where to reach out for support (patients are at the centre of the care team)

5. Organization has, or is willing to implement a system to measure the clinical processes and patient outcomes for hypertension management/hypertension patients, celebrate the successes while taking action to make improvements based on these results (key performance indicators, and quality improvement plans)

6. Structures, spaces and equipment provide the ability to measure, monitor and support patients (accuracy, comfort)

This Hypertension Management Programming Toolkit contains:

a. Self Assessment tool – Questions guided by the 6 principals to identify strengths and opportunities

b. Implementation Resources – Tools & Tips to inform action plans and enable clinical teams
Hypertension Management Programming Self-Assessment Tool

This Self-Assessment Tool is a way for primary care organizations to identify strengths in chronic disease prevention and management along with opportunities for provision of evidence based chronic disease care, including hypertension management.

How to Prepare:

- Select who will conduct the assessment; it is preferable that the assessor(s) include organizational leadership in clinical programming or quality improvement/reporting, along with clinical management of patients with hypertension or elevated blood pressure (e.g. a program coordinator and a clinician)

- Create a list of all areas/units/staff that provide care for hypertension patients

Ensure assessor(s) have access to:

a. Staff in clinical care areas who provide care for hypertension patients

b. Guiding documents (such as organizational policies, plans, directives, guidelines, care pathways, etc.)

c. Staff training/education (such as job profiles, education plans)

Print the Self-Assessment Tool, document the assessment on the printed tool. Use the results of the assessment and any notes to help inform and create action plans for initial implementation and beyond.
Self-Assessment

Principal 1: Commitment to collaborative, proactive, guidelines based on chronic disease care for patients is included in the organization’s strategic plan, operating plan, corporate goals/objectives and/or quality improvement plans (team is supported in this approach)

Select all commitment statements that apply:

- Hypertension management is not currently an organizational priority
- Our organization is currently implementing at least one chronic disease program or guidelines based hypertension management goal (e.g. Quality Improvement Plan or QIP)
- Our organization has a standing committee/team that implements chronic disease programs and/or improvement work on an ongoing basis
- There is a member of the senior leadership team that is responsible for chronic disease program committees/teams
- A coordinated plan or strategy for chronic disease management is in place, which aligns/prioritizes a collaborative approach to chronic disease prevention and management
- Our organization’s senior leadership team receives regular reports on chronic disease programs and improvement work and actively monitors the work to ensure it aligns with the strategic goals/priorities of the organization and patient population

- Chronic disease prevention and management skills/qualifications are incorporated into human resource processes where applicable (e.g. such as hiring practices and performance)

Select all support statements that apply:

- Our organization has NOT YET reviewed guiding documents (e.g. policies, standards, procedures, care pathways, etc.) to ensure they fully support a collaborative approach to chronic disease prevention and management
- Our organization has reviewed SOME guiding documents and/or is actively reviewing/updating guiding documents to support evidence-based collaborative chronic disease prevention and management
- Our organization has guiding documents in place that support collaborative approaches to evidence-based chronic disease prevention and management (e.g. medical directives, care pathways, etc.)
Self-Assessment

Principal 2: Our organization is open to providing & encouraging ongoing education and/or training for hypertension diagnosis and care, along with motivational interviewing techniques to support patient self management (team knowledge is acquired and maintained)

We provide (directly or sponsored) training to all staff on chronic disease prevention and management (e.g. general awareness on chronic diseases, common risk factors, programs in place, speaking to patients)

Select the statement that best applies:
- We do not provide this training
- This training is optional
- This training is provided one time (e.g. all staff at orientation)
- This training is provided on an ongoing basis (e.g. refreshed periodically)

We provide (directly or sponsored) training for healthcare providers on clinical topics and supporting mechanisms for collaborative chronic disease management (e.g. best practice guidelines for care such as Hypertension Canada guidelines, C-CHANGE; supportive mechanisms such as motivational interviewing, choices and change, etc.)

Select the statement that best applies:
- We do not provide this training
- This training is optional
- This training is provided one time (e.g. all staff at orientation)
- This training is provided on an ongoing basis (e.g. refreshed periodically)

Note: For this section, training may be locally done/directly done in the organization, or sponsored through education plans, conference funding, etc.
Self-Assessment

Principal 3: The approach to hypertension management is interprofessional, with interdisciplinary care teams whose roles and responsibilities are defined, evidence based best practice care is embedded into daily practice (team approach, with tools at point of care)

Interprofessional / interdisciplinary / community roles

Select the statement(s) that best apply:

- Our organization has assessed our internal care delivery team for chronic disease management (assessed: identified the skills of individuals to support care)
- Our organization has addressed gaps within the internal care delivery team for chronic disease management (addressed: closed gaps through training, tools, medical directives, community partnerships, external referrals, etc.)
- Our organization has aligned the internal care delivery team for chronic disease management (aligned: individuals are actively engaged in different aspects of patient care in line with their skills, scope of practice, role descriptions, etc.)

We have a process in place which assures seamless transitions between care delivery team members (e.g. escalation, referrals, etc.) for:

- None of our patient needs
- Some of our patient needs
- Most of our patient needs
- All of our patient needs
Self-Assessment

Principal 4: Patients are part of the care team, they are provided with information to let them know what their condition is, how they can play a role in its management, what to expect in their care, and where to reach out for support (patients are at the centre of the care team)

Patient Self-Management

Select the statement(s) that best apply:

- Our organization provides verbal information to patients related to their condition, care plan and ways they can self-manage
- Our organization provides practical written information to patients related to their condition, care plan and ways they can self-manage
- Our organization has systems in place to provide ongoing self-management support for patients specific to chronic diseases and risk factors (e.g. healthy weight, diet/nutrition, physical activity, smoking cessation, stress management, etc.)
- Our organization provides referrals or recommendations to community resources specific to patient needs (e.g. exercise programs)

Care plans, goals and expected results of care are developed in collaboration with patients (select the statement that best applies):

- None of the time
- Some of the time
- Most of the time
- All of the time
Self-Assessment

**Principal 5:** Our Organization has, or is willing to implement a system to measure the clinical processes and patient outcomes for hypertension management/hypertension patients, celebrate the successes while taking action to make improvements based on these results (key performance indicators, and quality improvement plans)

**Principal 6:** Structures, spaces and equipment provide the ability to measure, monitor and support patients (accuracy, comfort)

**Record Systems:**
- Our organization has an EMR (electronic medical records) system in place that is used for all patient records (e.g. visit schedules, 100% encounter notes/CPP, medication prescribing, etc.)
- Our organization has an EMR, with limited use
- Our organization is considering implementing an EMR

**Measurement/Monitoring:**
- Our organization has a robust method to measure patient medical management to best practice guidelines (e.g. labs due/done, treatment targets)
- Our organization has a method to measure patient chronic disease risk factors and lifestyle goals (e.g. physical activity, diet, etc.)
- Our organization has key performance indicators identified and routinely reported for the prevention and management of chronic disease for our patients (e.g. % of patients with Hypertension and BP <140/90, % of patients >18 yrs of age with BP recorded in past 12 mo)
- Our organization has an established method to track and follow up with patients for proactive medical management (e.g. screening, follow up of results/no show for appointment, prescription renewal)
- Our organization has a resource(s) with skills to utilize data from patient records for reporting on clinical process and health outcomes

**Blood Pressure Measurement:**
- Our organization utilizes validated electronic (oscillometric) upper arm devices for BP measurement, and validated wrist devices for measurement of BP for patients with large arm circumferences (Automated Office Blood Pressure/AOBP devices)
- Our organization has access to ambulatory BP measurement (e.g. patient home monitor loan program, ABPM, etc.)
- Our organization has space to perform BP measurement that is quiet, free from distractions
Self-Assessment

Principal 5: Our Organization has, or is willing to implement a system to measure the clinical processes and patient outcomes for hypertension management/hypertension patients, celebrate the successes while taking action to make improvements based on these results (key performance indicators, and quality improvement plans)

We collect the following types of feedback about our approach(es) to chronic disease management (check all that apply):

☐ None
☐ KPI (key performance indicators)
☐ Staff feedback
☐ Patient experience feedback

Our organization reviews feedback (select the one statement that best applies):

☐ Never
☐ Annually
☐ Semi annually
☐ Quarterly
☐ Monthly

In the past year, we have created and implemented improvement plans based on feedback (select one statement that best applies):

☐ At least once
☐ Not this year
Section 1: Commitment & Roles

Site Wide Program Support

It is important to obtain support for implementation of any health program, from physicians and health centre administrative leaders, as well as the local clinical team.

- Meet with physicians, clinic / health centre administrative leaders and the local clinical team. All should be involved in the decision to implement a hypertension management program in order to best assure support of resource commitments, as well as, potential benefits to patients and the organization.
- Identify strengths and opportunities to enhance practices and how your interprofessional team can collaborate to support patients more effectively.
- Action Plans go a long way to articulate your implementation plan.

Identify program Core Team – THE ‘WHO’

To support the implementation of a hypertension management program and help sustain the program in the long run, it is important that program Champions be identified at your organization. Ideally, these individuals would lead the implementation; have the respect of their team and an interest in chronic disease management and teaching. The Champions will aid in obtaining buy-in for the program, foster motivation and ensure that there is regular team discussion, assessment and planning of the program.

- Identify multi-disciplinary team members for the program, who can assist with various patient visit aspects and with counselling on specific lifestyle changes.
- Consider involving administrative staff, volunteers and healthcare students (medical and nursing) for certain tasks, to free up regular healthcare staff for other tasks.
- Optimum team size and composition will depend upon your estimate of the number of patients you will have in your hypertension management program (it can and will evolve over time, e.g., as capacity / needs change.

Commitment & Roles Resources:

Tools:
- Program Champion Role Description template
- Program Action Plan (example)
- Program Action Plan Guide
- Program Planning Tool
- Program Action Plan (template)
- Program Planning – Tips & Suggestions
- Management of Hypertension Medical Directive template

References
- Chronic Disease Prevention and Management Framework
- Healthline; identifying home health and community resources in your area
Establishing Common Knowledge

Before implementation begins, it is important to gather the whole team together and conduct an orientation and training session(s). The Self-Assessment component of this toolkit offers an opportunity to look at education strengths and opportunities.

All team members and patients benefit from working with the same best practice information for their role, techniques for measurement and clinical flow/process for seeing patients.

Items to cover include:

- Program overview and tools that will be implemented for your practice
- Proper BP measurement, targets, equipment in use
- Best practices for hypertension management and control
- Behavior change techniques & skills
- Development and refinement of a Program Action Plan by, and for, your team

Guidelines:

- College of Family Physicians: Recommendations on screening for High Blood Pressure
- RNAO Nursing Management of Hypertension
- Canadian Diabetes Association Clinical Practice Guidelines
- Dyslipidemia Guidelines:
  - Full Guidelines
  - eGuidelines

Training:

- ‘Prevention In Hand’, elearning see topic listing including hypertension
- Institute for Healthcare Communication:
  - Choices and Changes: Motivating Behaviors
  - “Difficult” Clinician-Patient Relationships
- RNAO Strategies to Support Self-Management in Chronic Conditions

Provider Education Resources:

- How to Take Blood Pressure & Log: ENG; FRE
- Accurate Measurement & Diagnosing Hypertension
- Hypertension Follow up Protocol
- Counselling Tips - Motivational Interviewing Guide
- Counselling Tips: Motivational Interviewing Case Studies
- The 5 As (Assess, Advise, Agree, Assist, Arrange Follow Up) – Provider Intervention Tool for Patient Self-Management
- Transtheoretical Model of Change/Stages of Change
- Medication Adherence Counselling Tips
Hypertension Management Programming: Implementation Resources

Section 3: Patient Self-Management

Putting Patients at the Centre

Use the 5 A’s (Assess, Advise, Agree, Assist and Arrange) and behavior change tools and techniques, such as motivational interviewing within visits to help your patient consider medication adherence, a lifestyle change and goal setting, according to his / her readiness to change.

- Provide patients with information on BP and hypertension, risk factors and how they can take part in their treatment. Consider where resources will be stored and used, so that they are accessible when needed (e.g. load to EMR, print copies, etc.)
- Various resources are available to support patient education with this toolkit and you may have others
- If the patient is ready to choose a healthier lifestyle focus, note which one, and the current assessment, in their records, provide to patients, so they too, have a note of their choice of goal and plan.
  » Provide the patient with support in their self-management of this lifestyle change
  » Provide resources and referral to programs available within your healthcare team or community relevant / appropriate to the patient’s selected healthier lifestyle focus
- If the patient is not ready, simply note their stage of change in their records and leave them to think about it. You can still provide BP education and point out how small changes can make a big difference to his / her BP, and other positive outcomes that could be achieved through these changes
- A portion of the visit process and discussion depends on where the patient is in their stage of change and process of self-management. Use behavior change tools and techniques, such as motivational interviewing with patients in order to elicit “change talk”

Additional Resources:

- Stroke Network of Southwestern Ontario - Multilingual Stroke Prevention Brochures
- Heart & Stroke Foundation: Manage Stress
- Blood pressure devices endorsed by Hypertension Canada

Patient Self-Management Resources:

Patient Educational tools
- What is BP/Hypertension?: ENG; FRE
- Healthy Eating / DASH: ENG; FRE
- Managing Stress: ENG; FRE
- Medication Adherence: ENG; FRE
- Smoking Cessation / Alcohol Reduction: ENG; FRE
- Sodium Reduction: ENG; FRE
- Weight, Physical Activity: ENG; FRE
- How to take Blood Pressure & Log: ENG; FRE
Hypertension Management Programming: Implementation Resources

Section 4: Clinical Visits

Awareness Activities
By raising awareness of the program you are planning and its benefits, you won’t only be pursuing potential clients; clients will learn about the program and come to you! Some past ideas have been placing an ad in the local newspaper or putting up a poster in your clinic waiting room. It’s a good idea to start awareness activities as soon as you’ve identified the team, needed education and clinical workflow.

Identify and connect with patients for your program:
• Review health records to select potential adult patients based on their diagnosis of Hypertension or elevated BP History and referring to current Hypertension Canada Guidelines
• Add routine BP screening to all appropriate adult patient visits to detect un-diagnosed Hypertension
• Many patients with diabetes also have hypertension; review your diabetes patient roster
• You know your patients best – some may respond best to phone calls where the program can be explained briefly and a visit booked. Others might prefer a letter sent with the basic details and a number to call to discuss it with you before they book a visit. Still others you might plan to speak to when they are next in the clinic.

Initiate Visits
• The first program visits should be booked to start soon after the orientation and training has been held for the team and all resources and tools are on hand
• Schedule the first visit as a ½ hour appointment so that there is enough time to ensure the patient has a reasonable understanding of hypertension, applicable risk factors & you can begin a conversation about lifestyle goals.
• Agree on and book a follow up visit with the patient before they leave.
• The frequency of follow-up visits should be determined by the level of the patient’s BP control, consistent with Hypertension Canada guidelines, however medical judgement may indicate another time frame (e.g. shorter intervals when adjusting medications to reach target)
Measurement

Use a standard approach to documenting clinical visits for hypertension patients, this provides a framework for all staff supporting the program to work toward best practices (e.g. expansion to full scope of practice) and ensures that information is easy to find and report on. Consider a program ‘flowsheet’ or ‘custom form’ that embeds best practices within it.

Several flowsheets are available, paper based, fillable electronic .pdf, or you can create your own. For users of Telus’ Practice Solutions EMR, a pre-populating embedded form/tool is available through the eHealth Centre of Excellence, which includes pre-built queries for managing patients and the program.

Monitoring

Standardizing how clinical visits are conducted and information recorded is the first step in monitoring. The next step is reporting on the key performance indicators (KPI) for clinical processes, and following up on gaps through patient management (e.g. patients who are overdue for BP follow up), celebrating advances in clinical outcomes and identifying opportunities to improve.

Routinely reporting KPI back to the team that is facilitating the program keeps engagement and focus on the program. Openly identify advancement, discuss barriers and challenges and ways to mitigate or correct them, use goal setting and action plans to continuously drive improvement.

Measurement, Monitoring Resources:

Tools:
- Hypertension program Key Performance Indicators (KPI)
- Flowsheet template (fillable .pdf)
- HMP Visit Flowsheet (.pdf fillable) Quick Reference
- Flowsheet template (paper based)
- Flowsheet criteria (for creating a flowsheet/custom form in your EMR)
- Telus Practice Solutions EMR users: connect with eCE to access a ready-made PSS Hypertension tool and support
Quality Improvement (QI) is the consistent systematic formal approach to improving performance. For a chronic disease prevention and management program, this means looking at the key performance indicators and feedback regularly and using it to set goals, close gaps in performance and continuously move forward to best practice care.

Striving for best practice – Plan/Do/Study/Act (PDSA):

1. Set a schedule for reviewing indicators and feedback
2. Celebrate achievements, identify challenges/barriers and brainstorm how to mitigate or solve them
3. Set clear goals that are SMART; specific, measurable, achievable, realistic and timely. Communicate goals throughout your organization, execute plans, measure and share results.

Striving for best practice – Clinical Process aims:

1. Trained staff measure BP consistently, are knowledgeable about Hypertension, risk factors, programs/supports in place, resources available and clinical workflows
2. Screening all adult patients for hypertension annually (measure BP and consider risk factors)
3. Educate all adult patients with elevated BP or Hypertension on hypertension, risk factors and health behavior impacts (lifestyle risk factors, goals, self-management opportunities)
4. Assess Cardiovascular risk factors, encourage goal setting at all Hypertension visits
5. Assess medications, adherence and treatment targets at all appropriate visits
6. Order labs at initial diagnosis and routine intervals to identify target organ damage and support patient treatment plans
7. Monitor and follow up Hypertension patients in a timely manner
Appendix A

References


Heart and Stroke Foundation of Ontario (HSFO) high blood pressure strategy’s hypertension management initiative study protocol, 2008, retrieved Jan 2019 at https://www.ncbi.nlm.nih.gov/pmc/articles/PMC2627848/

Appendix B

Acknowledgements

We would like to express our gratitude to everyone who took part in the Hypertension Management Initiative (HMI), Hypertension Management Program (HMP) and Aboriginal Hypertension Management Program (AHMP). The collaborative and continual approach to learning, sharing patient stories, and team mentorship, has been an excellent example of an unwavering commitment to patients across Ontario, ultimately making the successes of the HMI, HMP and AHMP possible.