THE BURDEN OF HIGH CHOLESTEROL in Canada

Summary of the Cholesterol Management Stakeholder Policy and Advocacy Roundtable

January 2024
On 24 October 2023, the Global Alliance for Patient Access hosted a Cholesterol Management Stakeholder Policy and Advocacy Roundtable with cardiovascular disease stakeholders in Canada. The meeting focused on prioritizing cholesterol management in Canada and improving patient access to cholesterol screening and treatment.

Presenters discussed:

- The burden of high cholesterol in Canada
- The benefits of early detection and prevention
- Barriers to appropriate cholesterol management
- Solutions to improve patient outcomes for both primary and secondary prevention.
The Burden of High Cholesterol in Canada

There are two types of cholesterol: high-density, or HDL, and low-density, or LDL. LDL cholesterol is known as “bad” cholesterol. High levels of LDL cholesterol can build up in the arteries, restricting blood flow and elevating the risk of heart attack and stroke.

Living with high cholesterol significantly impacts patients and their loved ones. For patients, high cholesterol often necessitates a lifelong commitment to medication, dietary changes and regular medical check-ups, which can be stressful and challenging to maintain. High cholesterol also imposes emotional and financial burdens on families, as they strive to support lifestyle changes and cope with their loved one’s increased risk of heart disease.

High cholesterol is a heavy burden on the Canadian health care system and society at large. High cholesterol can lead to increased hospitalizations, more medical interventions and higher health care costs. This not only strains health care resources but also impacts the workforce and economy due to lost productivity and long-term disability.

Lifestyle changes such as smoking cessation, dietary improvements and regular exercise can often help reduce cholesterol levels. For many patients, taking a daily statin can significantly lower their cholesterol. For patients with genetically high cholesterol, however, lifestyle changes and statins alone may not be sufficient to reduce their cholesterol. They may require advanced treatments like PCSK9 inhibitors.

Glen Pearson, Professor of Medicine in the Division of Cardiology at the University of Alberta, provided an overview of high cholesterol in Canada. The prevalence of cardiovascular disease, and in particular atherosclerosis, burdens both individual patients and health care systems. Nearly 90% of Canadians have at least one risk factor for heart disease, with 60% of the population considered hypercholesterolemic by the ages of 60 to 70.
Early detection of elevated LDL cholesterol supports primary prevention of heart attack and stroke at relatively low costs. The Canadian Cardiovascular Society advises screening all patients over age 40, and screening even earlier for non-white patients and those living with certain preexisting health conditions. Routine screening for LDL cholesterol levels for at-risk patients, however, is often inaccessible to Canadians, either through the lack of attachment of patients to a primary care provider, or the lack of primary care providers including routine screening and conversations about LDL cholesterol in visits with patients.

Jennifer Terpstra, MPH, PhD, who represented the Cardiovascular Health & Stroke Strategic Clinical Network at Alberta Health Services, presented a case study on prioritizing cholesterol management in the primary care setting. The case study found that by incorporating a cardiovascular disease risk assessment into the electronic health records system and sharing educational materials with patients, the Alberta health care system could prevent 378 cardiovascular events over five years.

The pilot program shows how primary care screening can reduce health care costs and resource use.

In the absence of early detection, however, high cholesterol can snowball into a larger problem. Identifying at-risk patients early will lead to better patient outcomes and decrease the burden of high cholesterol on the health care system. Meeting participants emphasized the need for a preventive, rather than a reactive, approach from their health care system.
Secondary Prevention of Heart Attack & Stroke

Patients who have already suffered a heart attack or stroke are at risk of another event, especially if they do not achieve and maintain lower LDL cholesterol levels. But in Canada, these patients face significant hurdles to appropriate care.

Following a heart attack or stroke, patients may not find their way back to primary care. They also may find it difficult to maintain the specialized care regimen that was charted for them during their hospital stay. Supporting patients to adhere to their prescriptions and adopt healthy lifestyle habits raises their likelihood of avoiding another heart attack or stroke.

Chris Varughese, an Ontario-based nurse practitioner, discussed the innovative care model being implemented in the clinic where she practices. This integrative model prioritizes continuity of care between the hospital and primary care settings. It ensures that patients who have recently suffered a heart attack, heart failure or stroke have the support needed to adhere to evidence-guided medical therapy, avoid recurrent emergency department visits or hospitalizations and follow through on their cardiovascular rehabilitation. One key to the success of this model is its effective use of nurse practitioners and other allied health professionals.
Meeting participants discussed the barriers to appropriate cholesterol management in Canada. Among the factors identified are:

**An overburdened health care system.**
Delays and access hurdles bog down a health care system that is already overburdened. The excessive paperwork and payer hurdles that health professionals face often delay access to care and prevent them from focusing on patients. These delays are especially harmful for at-risk patients or those living with a cardiovascular condition.

**Low awareness of risk among patients.**
Some Canadians might not be aware of what high cholesterol is, what it could mean for their health and their risk. Low awareness can delay diagnosis, hamper management and heighten a person’s risk for a cardiovascular event.

**Limited access to screening and treatment.**
Many Canadians have no primary care provider or live in rural communities that lack sufficient providers. Meanwhile, screening to evaluate a patient’s cardiovascular risk is not the standard of care, leaving many patients in the dark about their LDL cholesterol levels.

**Lack of continuity of care and transition care following a cardiovascular event.**
In Canada, cardiovascular care functions as a reactive system rather than a preventive one, with interventions occurring only after a patient has a heart attack or stroke. Even then, patients struggle once they leave the hospital to access follow-up care and therapeutic management that is essential to secondary prevention.

**Inconsistent guidelines.**
Inconsistent or low adoption of medical guidelines increases the likelihood that patients miss out on screening and treatment.
Raising Awareness

Awareness about high cholesterol and its risks is key to preventing cardiovascular events like heart attack and stroke. Straightforward, accessible resources and education campaigns that are population specific could increase awareness and encourage:

- All patients to understand what LDL cholesterol is, what their numbers mean and how to talk with their health care providers about their LDL cholesterol.
- Patients to understand the importance of managing their LDL cholesterol properly and how not doing so can impact their risk for a heart attack or stroke.
- Policymakers to be aware of how unmanaged high LDL cholesterol exacerbates cardiovascular disease and further burdens health systems and society at large.

The “Check it before you wreck it” campaign implemented as a part of the case study presented by Jennifer Terpstra provides an example of education successfully directed at patients. Keeping a concise and clear message while encouraging patients to get screened, know their risk and make necessary changes improves patient outcomes. These resources used by the program were made available in multiple languages in digital and hardcopy formats.

Prioritizing Prevention

Health systems must make prevention a higher priority by incentivizing routine screening in the primary care setting. Early and routine screenings are crucial to preventing significant cardiovascular events later in a patient’s life. For patients who have suffered a heart attack or stroke, appropriate therapeutic management is another key to preventing future cardiovascular events. Continuity of care and ongoing support can ensure patients continue to adhere to treatment plans following their discharge from acute care. Widespread adoption and application of standardized clinical guidelines embedded into patient algorithms could also help standardize screening and encourage better patient outcomes.
Conclusions

The burden of cardiovascular disease in Canada, if left unaddressed, will continue to increase, taking a toll on patients and the health care system. An increased focus on access to screening and growing the number of health care providers who can manage patients is important to improve the health outcomes for patients with cardiovascular disease in Canada.

Expanding Scope of Practice for Health Professionals

Increasing the scope of practice for health professionals such as pharmacists and nurse practitioners could alleviate some of the burden on the health care system. By expanding allied health professionals’ responsibilities to include both cardiovascular screenings and therapeutic management, more patients could access care and reduce their risk of a heart attack or stroke. This is especially important given the number of Canadians with no primary care provider or living in a rural area. Incorporating team-based care approaches can also help by reducing individual provider burdens and making patients active participants in their care.

Patient Advocacy

Patient advocacy organizations can serve a critical role in educating and supporting people who are at risk for cardiovascular disease or who are managing their condition. They also have insights regarding the burden of cardiovascular disease and the benefits of appropriate management that should be shared with policymakers.

By engaging in policy advocacy, patients, clinicians and other cardiovascular health stakeholders can advocate for changes that structure and resource the health care system to prioritize LDL cholesterol management. As provincial policies most impact the delivery of health care in Canada, advocates in each province must pinpoint barriers to appropriate cholesterol management and work with their elected officials and other decisionmakers to inform policy.
About the Global Alliance for Patient Access

The Global Alliance for Patient Access is an international platform for health care providers and patient advocates to inform policy dialogue about patient-centered care.

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Note: This summary is provided as a high-level record of discussions and does not necessarily represent the individual or consensus views of participants.

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