INTRODUCTION

Disease screening is the process of testing asymptomatic individuals for the risk or presence of disease. However, the advent of advanced screening technologies in recent decades poses a challenge to the Canadian healthcare system. The lack of a consistent screening policy among Canadian provinces and poor adherence to screening guidelines have compounded the challenge. The McMaster Health Forum convened a stakeholder dialogue on October 17, 2013 with regards to supporting optimal screening practices in Canada. In consultation with stakeholders, the Forum created an issue brief describing the problem, three elements of a comprehensive approach to address this problem, and key implementation considerations for this approach.

WHAT IS THE PROBLEM?

Three key issues have contributed to sub-optimal screening practices in Canada: 1) screening policies and practices vary between provinces and territories; 2) the structure of the healthcare system in Canada limits efforts to coordinate the implementation of optimal screening approaches; and 3) there is inconsistent adherence to existing screening guidelines and principles. Together, these three problems pose significant challenges to optimal screening practices for Canadians across provinces and territories. The level of screening provided greatly differs between Canadian provinces and territories. For example, Manitoba offers more than three times as many screening tests for newborns compared to the maritime provinces of Prince Edward Island and New Brunswick. Screening guidelines for ailments such as hypertension and diabetes are also yet to be made regionally consistent. Furthermore, competing interests in healthcare impede the implementation of optimal screening practices, such as the financial gains to physicians who offer more tests, and the political gains to candidates who promise to implement large-scale screening efforts that are unsupported by current evidence. Together, these inconsistencies lead to a great variation in screening approaches within Canada, and must be addressed when implementing optimal screening practices to benefit all Canadians. The Canadian healthcare system also faces significant challenges in the implementation of coordinated screening approaches. Screening uptake appears to be significantly lower in rural and northern areas, as well as among immigrants, refugees, and members of ethno-cultural communities. Currently, there are no existing national requirements for adherence to screening protocols, nor cross-jurisdictional reviews of current efforts in screening.

Finally, healthcare consumers often do not consistently adhere to evidence-based screening guidelines, even when the optimal screening options are available. Adherence to recommendations is severely limited by the ease of obtaining screening tests at the patients’ request, and by the widespread availability of screening tests outside formal screening programs.


APPROACHES TO ADDRESS THE PROBLEM

The McMaster Health Forum, in consultation with expert informants, identified three elements of a comprehensive approach to improve screening practices in Canada. The Forum then appraised systematic reviews relevant to each of the three elements. First, a model could be created to coordinate decision-making about screening across multiple sectors and jurisdictions. This approach includes the establishment of a process to identify potential coordination models and set priorities for evidence synthesis as part of a pan-Canadian coordinating hub on optimal screening practices.15-16 Additionally, it could include the development of criteria to guide healthcare decision-making with respect to resource allocation in terms of the costs and benefits provided by screening tests.17-18 Efforts to consult and engage consumers and other relevant stakeholders could also be made to inform the decision-making process.19 These strategies would ensure the establishment of models that are optimal for screening practices.

Second, a “hub” to coordinate evidence synthesis and recommendation development to support optimal screening practices could be established. A centralized hub can serve the needs of all Canadians through 1) panel discussions with appropriate experts; 2) providing specific locales with access to research evidence; and 3) facilitating local adaptations to research evidence. These combined interventions will minimize cross-jurisdictional variations in screening.

Third, support for optimal implementation of screening approaches could be offered to all stakeholders. For healthcare providers, practices such as the distribution of educational materials as well as audit and feedback have been shown to improve adherence to practice guidelines.20 With regards to patients, the development of decision aids and personalized risk communications improved patient risk assessment. Frequent postal and telephone reminders also significantly improved participation in organized screening programs.21-22 These efforts may collectively serve to improve adherence to established screening guidelines.

IMPLEMENTATION CONSIDERATIONS

Potential barriers exist at each level of individuals and institutions involved in the provision of optimal screening in Canada. For instance, consumers may not adopt recommended guidelines due to over-enthusiasm for one approach. Alternatively, physicians may be unwilling to change their current practice, and may view the proposal as an encroachment on their professional autonomy. Governments also may not be willing or have sufficient resources to create, develop, and sustain a central hub for evidence synthesis decision-making to support optimal screening practices.

While each element of this approach has unique or shared barriers that may prevent their full or effective implementation, there also exist ‘windows of opportunity’ through which an effective implementation can be achieved. The Canadian Task Force on Preventive Health Care, established in 2010, provides a model and infrastructure through which the elements of optimal screening can be supported.23 Additionally, the success of the National Immunization Strategy implemented in 2003 can serve as an example of how to operationalize all the elements of the plan proposed for optimizing screening practices.

**References**