

Executive Summary

Introduction

Chronic diseases including diabetes, chronic obstructive pulmonary disease, hypertension, asthma, depression, and arthritis are a major burden to our society and our health care system. As our population ages, the prevalence of these diseases is increasing. Chronic diseases have a huge impact on the population: chronic conditions are the primary cause of disability; and they are associated with significant direct and indirect costs to both individuals and society. Despite the impact of these diseases, the current health care system is based on an 'acute care' model, which is not conducive to the planned, organized care required to efficiently and effectively manage chronic diseases. More comprehensive chronic disease prevention and management programs and services that recognize the unique and more complex aspects of chronic diseases, such as the importance of self-management, are required. The increasing burden of chronic disease and concomitant health system challenges have led to new models of chronic disease prevention and management including the Chronic Care Model in the United States, the Expanded Chronic Care Model in British Columbia and, more recently, the Chronic Disease Prevention and Management Framework in Ontario. As care is being redesigned and programs develop, evaluation is integral to the development process and quality improvement. Thus, a comprehensive framework to guide evaluation is needed.

Objectives

The specific **objectives** of this work are to:

1. Summarize the literature on a) chronic disease prevention and management models (focusing on the most widely implemented model and Canadian models) and b) methods of evaluating these models.
2. Identify gaps or limitations in the literature.
3. Develop an evaluation framework that identifies the major areas that need to be included when evaluating chronic disease prevention and management initiatives at the program, organization or health system level.

Methods

A literature review was conducted to document 1) the most widely adopted chronic disease prevention and management models as well as the Canadian models and 2) the evaluation frameworks and methods used to evaluate chronic disease prevention and management programs. In addition, a number of interviews were conducted with experts in chronic disease prevention and management to identify gaps and limitations in the current models and evaluation frameworks, to gather baseline information about chronic disease prevention and management care in Ontario, and to advise on additional information sources.

The literature review and interviews, as well as identified gaps and limitations in the literature were used to ascertain the important elements of comprehensive and successful chronic disease prevention and management. These elements were used to inform the development of our proposed evaluation framework. This framework was based on 13 areas (domains) of importance, which were further subdivided into components and sub-components. The validity and comprehensiveness of the proposed framework was assessed by a group of 12 experts. The feedback related primarily to two areas: improving clarity of the components; and expanding comprehensiveness through potential new components or revisions to existing components. Based on this feedback, revisions were made to existing components, and a new component and sub-component were added.

Overview of the Evaluation Framework

Our proposed chronic disease prevention and management evaluation framework was not based on any one model. We identified the important elements and features of successful chronic disease prevention and management and used these to inform the development of an evaluation framework that identifies the areas that should be included in an evaluation of chronic disease prevention and management from the program, organization, or system level.

Thirteen domains of importance were identified. Ten of the domains address chronic disease prevention and management at the level of the health care or community organization or specific program. The other three domains address chronic disease management at a health system level. Each domain was further subdivided into components and sub-components. The domains are as follows:

- Organizational Characteristics
- Delivery System Design
- Linkages
- Information Systems
- Provider Decision Support
- Self-management Support
- Prevention
- Clinical Utilizations and Outcomes
- Provider Perspectives
- Client Perspectives
- Needs Assessment and Planning
- Access
- Coordination of Care Across the Continuum

While some of these elements share names and concepts with elements of the Chronic Care Model, the Expanded Chronic Care Model, or the Chronic Disease Prevention and Management Framework, many of these areas have been broadened in our proposed evaluation framework to address gaps and limitations or highlight specific concepts. In addition, most of the current evaluations of chronic disease prevention and management initiatives focus on the health care organization/program, and, to our knowledge, there is no evaluation literature that attempted to assess chronic disease prevention and management from a broader, system level. To address this limitation, we have included three domains for evaluation at the system level: the Needs Assessment and Planning; Access; and Coordination of Care Across the Continuum domains. The proposed framework is not a new model for chronic disease prevention and management. Rather, it is a guide for the future development of specific measurable indicators and instruments to evaluate chronic disease prevention and management initiatives. As such, these domains represent areas for evaluation of programs and not new elements for a chronic disease management model. However, some of the areas identified in our framework (e.g., access to care and client-initiated follow-up) are very important for successful chronic disease prevention and management, and yet they do not appear in the current chronic disease prevention and management models. Thus, these areas may be considered in the further design of chronic disease prevention and management models.

Conclusion

This report proposes an evaluation framework for chronic disease prevention and management as a first step in the process of developing methods of evaluation and instruments for measuring chronic disease prevention and management at the program, organization and health system

level. Important next steps in the further development of the evaluation framework include: developing a finance domain; assessing the feasibility of domains related to chronic disease prevention from the perspective of the upstream, broader health determinants (such as physical and social environments); developing appropriate instruments for the balanced evaluation of the domains/components; and pilot testing the evaluation framework.