

Summary

Supporting continuous quality improvement in the
healthcare for people with chronic diseases in Québec

Quality Indicators for Primary Care Professionals and Managers

May 2012

A production of the Institut national d'excellence en santé et en services sociaux

Summary of the report prepared
under the direction of Marie-Dominique Beaulieu

Summary

Supporting continuous quality improvement in the healthcare for people with chronic diseases in Québec

Quality Indicators for Primary Care Professionals and Managers

Introduction

Québec has been fully engaged for nearly a decade in several transformations designed to improve the healthcare services delivered in the primary care sector. Health professionals from several disciplines have been actively involved in these transformations. It is primarily in response to the needs expressed by these professionals that in April 2010 the Direction de l'organisation des services de première ligne intégrés (DOSPLI), Ministère de la Santé et des Services sociaux (MSSS), entrusted INESSS, formerly AETMIS, with the mandate to develop quality indicators for the management of selected chronic diseases.

The initial mandate had three objectives:

1. To define quality indicators for chronic diseases.
2. To suggest measures and processes for promoting clinicians' uptake of these quality indicators.
3. To propose processes for updating these indicators.

The mandate stipulated that this work should also establish a standard, reproducible indicator development process that could be applied to several chronic diseases.

Given the innovative nature of this request, it was agreed that the work should be limited to the chronic diseases listed below, in addition to the development of indicators that would address the dimensions of the Chronic Care Model:

- Cardiovascular diseases (hypertension and stable angina)
- Type 1 and 2 diabetes in adults
- Treatment for dyslipidemia for both categories of patients
- Respiratory diseases (chronic obstructive pulmonary disease [COPD] and asthma)

A further aspect of the mandate was to reflect on ways to take into account multimorbidity in developing quality indicators.

Lastly, it is important to mention that the indicators developed did not have a single purpose (e.g., to support the work of designing and implementing electronic health records) but were meant to be able to support different types of initiatives under way in Québec.

Methodology

The perspective adopted by INESSS was to develop a set of indicators recognized as being evidence-based, clinically relevant and measurable in order to support chronic disease management in Québec in different contexts.

The working philosophy used to develop these indicators was centered first of all on the clinical needs expressed by primary care practitioners and by patients with chronic illnesses. The approach was intended to be participatory and to build on the expertise already present in Québec.

The working process was based on the following principles:

1. Support for continuous quality improvement as the paramount purpose for the indicators
2. Interdisciplinary work
3. Scientific rigour
4. A participatory and deliberative approach
5. Work on indicator development (Objective 1) and on the implementation strategies to be carried out concurrently:

a) Indicator Development

We used a three-step method derived from the method developed by the RAND (Research and Development) Corporation.

The first step consisted in identifying indicators developed by other countries or applied in other projects and then matching them to data in the scientific literature. The most recent clinical practice guidelines (2006 to 2011) meeting high quality criteria (evaluated with the AGREE II instrument) were used as the source for best practice recommendations supporting the indicators. **Two categories of indicators were defined: indicators specific to the diseases under study and generic indicators associated with the Chronic Care Model.** Clinical practice guidelines published between 2006 and 2011 by national and international organizations (France, England and the United States) were the source for the evidence supporting each specific indicator. The generic indicators were not matched to levels of evidence, since they were not covered in clinical practice guidelines; however, systematic reviews addressing the effects of the Chronic Care Model informed the INESSS work team. In addition, the literature on their measurement properties (validity, precision) was assessed. The indicators and the literature supporting them were then submitted to four *ad hoc* scientific committees tasked with determining the validity and relevance of each indicator.

The second step consisted in consulting representative patients with the chronic diseases under study and representatives from professionals and managers directly involved in delivering care to these patients. These persons were invited to analyze the indicators and to score them for relevance.

The third step consisted in consulting an expert committee on operationalizing the indicators to assess their measurability in Québec.

b) Uptake Strategies

The work to determine strategies to support clinicians' uptake of the indicators—the second objective of this work—was undertaken at the beginning of the mandate. The data sources for this work included a review of accomplishments in Québec and Canada and interviews with key informants; four discussion groups set up in four different regions of Québec and consisting of professionals from various disciplines; a targeted analysis of the literature based on the retrieved systematic reviews of interventions designed to integrate indicators into clinical practices; and case studies from the countries or provinces having introduced quality indicators in their primary care service organization. The information obtained from these different sources was analyzed using a reference framework on the uptake of new service organization strategies, which viewed uptake strategies in relation to two levels of intervention: the contextual level (health system) and the practice level (clinical settings delivering healthcare). The factors were categorized under four other dimensions: governance, culture, resources and tools.

Results

a) Indicators Developed

A total of 164 indicators were identified in the literature or proposed by the *ad hoc* scientific committees. These included 126 specific indicators and 38 generic indicators.

The indicators were distributed fairly evenly among the different diseases. The majority of them were judged to be very relevant by the professionals and patients consulted. The indicators on the measurement of biometric parameters (blood pressure, weight) and on drug prescription seemed to be the most easily measurable in the short term. Cardiovascular diseases and diabetes seemed to be favoured in the shorter term because several indicators were associated with pharmacological treatments. The work revealed the importance of developing ways to measure the indicators on respiratory diseases and on the dimensions of the Chronic Care Model.

The work on multimorbidity helped determine different measures that could be considered but provided few specific indicators on the way to take them into account in measuring the quality indicators that were developed. The literature and the experts consulted agreed that the indicators must be used with caution with people who are very advanced in age (80 years and over) or who present with complex multimorbidities, especially with respect to pharmacotherapy and the achievement of specific treatment targets.

b) Uptake Strategies: Support for Indicator Uptake in Clinical Settings

With respect to audit and feedback, our literature review retrieved a Cochrane review and three other systematic reviews. Two health technology assessment reports dealt in part with audit within the scope of a broader analysis of the effectiveness of disseminating clinical practice guidelines. The case studies selected were from the United Kingdom, France and Belgium. Analysis of all the data sources consulted, including studies in progress and the work of discussion groups, served to determine the main factors promoting the uptake of quality indicators. On a contextual level, the main factors related to *governance* are the need to rely on recognized professional leaders but also on external national structures, which are invaluable stakeholders for offering methodological and financial assistance. Other positive factors include a *culture of innovation* and a culture of practice evaluation, which often precede the implementation of indicators. Devoting *financial resources* to this initiative is necessary in all cases. Lastly, developing *tools* in partnership with professional organizations provides practitioners with audit templates that can be integrated into conventional healthcare quality evaluation activities or into electronic clinical records. On a practice level, it is crucial to appoint clinical and administrative staff to collect and monitor the indicators. Here again, local leaders play a capital role. Finally, electronic health records, which provide decision-support tools, are pivotal elements.

Québec Context

INESSS has proposed an integrated vision of the elements that could potentially be used in an implementation strategy for Québec. This vision is the result of all the consultations led, including the literature analysis. The overall strategy for supporting indicator use and uptake must be developed by adopting a systemic perspective. The pivotal elements of the strategy may be summarized as follows:

- Begin introducing quality indicators immediately, gradually and in a coordinated fashion.

Carrying out flagship projects with teams that are already involved in projects to improve the quality of care in chronic disease management could be the basis for the implementation strategy. It will be essential to coordinate existing resources and expertise across the province in order to avoid chaotic development and duplication of efforts.

- Establish an indicator implementation plan

It will be important to establish an indicator implementation plan in order to optimize the work in progress in the rest of the healthcare system, especially the approval of electronic health records (EHR), the implementation of the Québec Health Record (QHR), and the ongoing reflections to ensure greater seamlessness in the exchange of information between the different institutions in the healthcare system. Support for the implementation and approval process for EHRs must lie at the core of the strategy. It will also be important to consider the possibility of integrating quality measures for the services received, based on patients' viewpoints, mainly for the dimensions of the Chronic Care Model.

- Assist and support professionals and contribute to developing a quality improvement culture

In this regard, it is essential to mobilize the federations, professional orders and teaching institutions in order to support the development of a culture of quality assessment, and to develop tools and reflective practice skills.

- Plan for implementation evaluation

Conclusions

By giving this mandate to INESSS, the DOSPLI broke new ground and gave impetus to the primary care organizations and professionals concerned. The work performed as part of this mandate served both to determine a series of quality indicators for chronic disease management that are scientifically valid and relevant for potential users and to identify ways to promote the uptake of these indicators by professionals and practice settings. It also served to establish a method that could be reproduced in the development of other quality indicators in the future. The implementation of healthcare quality indicators must be viewed from a perspective of optimizing the resources already invested in the healthcare system toward enhancing the information infrastructure and improving service organization.

Next Steps under Consideration

Producing the indicators measurement, which must take into account the selected reference population and the chosen source for measuring the indicator (EHRs, administrative databases or surveys), will require a joint effort by the different stakeholders having the necessary resources and expertise, along with support from clinical teams in the field.

Updating the indicators should take into consideration: (a) scientific dimensions related to the evolving knowledge about clinical practices; (b) methodological dimensions related to the evaluation of the precision of certain indicators and the development of new indicators deemed relevant; and (c) technological dimensions related to Québec's evolving information infrastructure.

Science and technology watch system could be put in place and INESSS could be associated with them. It would also be important to create a joint forum for sharing current and future experiences with care and service quality indicators.

Lastly, different priorities have been established, including the importance of pursuing research on the central aspects of chronic disease management (support for self-management skills, interdisciplinary work, patient-centred approaches), consideration of multimorbidity in developing and using quality indicators, and evaluation of the implementation strategies that will be used.