

Assessing the senior care and services continuum

Prospects for measurement development

English summary

Une production de l'Institut national
d'excellence en santé et en services
sociaux (INESSS)

Direction des services sociaux

This is the English summary of the guidance entitled *Évaluation du continuum de soins et services aux aînés - Perspectives pour l'évolution de la mesure* - published in July 2019.

The complete version of this guidance (in French) is available on the website of INESSS in the Publications section.

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HIGHLIGHTS

Key messages for decision-makers

- The integration of health services, social services and public health services for a defined population is enshrined in the very heart of the vision of population-based responsibility contained in the Quebec legislation that underlies the public health and social services system. Such integration offers the potential to create substantial value for users and society; however, it presents assessment challenges that go beyond the practices observed in the other jurisdictions to which Quebec generally compares itself.
- As more and more investment is being made in the Support for Elderly Autonomy Program (SAPA), it is essential to assess this program in order to optimize the value that it affords the people of Quebec.
- Literature searches, both in the scientific and the grey literature, failed to identify a comprehensive assessment system for the care and services continuum that adequately meets the needs of MSSS decision-makers.
- The scientific literature strongly suggests that the continuum assessment should place greater emphasis on the viewpoints of users and their caregivers, beyond the classic indicators of fiscal capacity and production volume. Moreover, as a result of international work, there is now a new generation of health and wellness outcome indicators that could enhance measurement of the services continuum in Quebec.
- Among the relevant assessment dimensions to be considered, service continuity emerges as a concept that is being increasingly studied by scientists, including by Quebec researchers; key domains of continuity are described and various measurement indicators are suggested. While some of these indicators are built on clinical and administrative data, most of them rely on data collected from users or clinicians. This presents challenges with respect to systematically collecting and processing such data for managerial or governance use.
- The analysis of the contextual data made it possible to document a substantial number of indicators that are used in Quebec and in other jurisdictions to characterize the senior services continuum; these have been grouped together in a comprehensive indicator inventory, which is attached to this report.
- Using a rigorous and innovative approach, original experiential data was also collected from representatives of the SAPA Program's key stakeholders in Quebec, including user representatives and caregivers. This data highlighted the central importance of service responsiveness, continuity and effectiveness for these experts.
- The state of knowledge carried out by INESSS highlights the limits of the assessment and measurement approaches currently in use; more specifically, analyses based on indicators taken individually and using classic descriptive

statistical methods are often narrowly focused and can be confusing. The use of composite indicators to synthesize data on effectiveness, responsiveness and continuity of care could be considered for purposes of aggregating information and making it more accessible to the public and decision-makers. However, caution must be exercised when using composite indicators because it may be difficult to interpret them correctly.

- Capitalizing on the potential of big data, certain trajectory analysis approaches derived from data science – approaches that are rarely used in the health and social services field – could render the available data more valuable for purposes of assessing the continuum as a value chain, recognizing variations in practices and identifying weak links in the continuum that present the greatest potential for improvement.
- This state of knowledge confirms the importance of the challenges related to the integration of services into the senior care continuum, and in particular the centrality of the responsiveness, continuity and effectiveness issues. Systematic measurement of these concepts with tools that are tailored to the Quebec context admittedly presents some challenges, but it also offers great development potential for the management and governance of the health and social services system.
- Despite the importance of better documenting the direct experience of users, empirical work that builds on the rich clinical and administrative data available in Quebec could, in the short and medium terms, inform public decision-making and improve practices within the senior care continuum.

SUMMARY

The public health and social services system in Quebec is characterized by its integration of health services, social services and public health services. This integration lies at the heart of the vision of population-based responsibility and offers the potential to create substantial value for users, notably for seniors, who often have multiple or complex health problems. As more and more investment is being made in the Support for Elderly Autonomy Program (SAPA), it is essential to assess this program in order to optimize the value that it affords the people of Quebec. In accordance with the mandate granted to INESSS, this report is intended to support the MSSS with respect to assessing the senior care and services continuum; it does so by reviewing the literature and suggesting quality-assessment indicators and approaches.

This state of knowledge incorporates scientific data culled over the course of four literature reviews; contextual data derived from the grey literature for construction of an indicator inventory; and experiential data collected during a consultation of experts that focused on the preferred indicators for assessing the SAPA continuum. The first literature review did not allow to identify comprehensive measurement and assessment frameworks for integrated senior services in jurisdictions comparable to Quebec. This finding corroborated the relevance of the procedure but also raised the need to approach the continuum assessment from a different angle, i.e., from the users' point of view. Consequently, the second literature review examined seniors' health needs and preferences. The priorities of seniors include improving physical and mental health, safety, autonomy, reducing caregiver burden and communicating information to users about their health status. These results provide an essential perspective for purposes of assessing the quality of the senior care and services continuum.

Furthermore, a search of 72 grey literature documents identified a very substantial number of potential indicators for assessing the quality of the SAPA continuum and each of its components. These indicators were analyzed, classified and selected for inclusion via the construction of typical trajectories that illustrate the optimal path for users as they make their way through the senior care continuum. By mapping the comprehensive continuum ([hyperlink](#)) and five typical trajectories ([hyperlink](#)), it was possible to highlight areas of weakness in the users' journeys and to determine indicators that could be used to monitor them. Finally, the indicator inventory ([hyperlink to web site – forthcoming](#)) contains 282 indicators presenting a balanced distribution of the various levels of management (strategic, tactical and operational) together with structure, process and outcome indicators.

After the initial version of the indicator inventory was developed, experts were consulted at a workshop aimed at identifying the critical areas of weakness and those indicators considered as priorities within the inventory. In total, 23 critical areas of weakness and 30 priority indicators were selected by the 47 experts attending the consultation, including user representatives, caregivers, researchers, managers and partner organization representatives. According to the experts consulted, the elements of particular importance

are user/caregiver participation in the intervention plan, continuity and complementarity of services and caregiver support. These experts further suggested adding more health and wellness outcome indicators and favoured carrying out a comprehensive and integrated analysis of care and service quality, as opposed to reviewing the indicators in isolation.

The feedback from the experts led to improvements in the indicator inventory and also prompted the third and fourth literature reviews, which focused on measuring the continuity of care for seniors and on emerging statistical approaches to trajectory analysis. The review on the continuity of care for seniors helped to identify various potential measurement areas, such as relational continuity, management continuity, intra/interfacility coordination and follow-up coordination. Continuity measurement is largely based on assessment tools and most often involves user questionnaires, but other assessment methods and procedures are also employed, such as staff questionnaires and administrative and clinical data analysis.

The literature review on emerging statistical approaches to trajectory analysis identified two main types of approaches, i.e., those that group individual trajectories according to certain similarities and those that can be used to model transitions. These statistical approaches are employed in a preliminary way, e.g., to illustrate the main sequences of use by seniors of care and services before they enter a residential facility. Although some development work still needs to be done, trajectory analysis shows great potential in terms of generating useful knowledge to sustain improvements in the senior care and services continuum.

Broadly speaking, the results of this state of knowledge highlight the centrality of responsiveness, continuity and effectiveness when assessing the quality of senior care and services. Responsiveness is defined as the ability of the health care system to adapt to the values and expectations of the population, whereas effectiveness represents the healthcare system's capacity to improve the health and wellness of the population. Continuity occurs when users perceive a clear link between the various care and services components. The data collected also indicates that the assessment approaches and traditional indicators, taken in isolation, have limits that prevent a full understanding of the many nuances related to the quality of the senior care and services continuum. Four avenues for effecting improvements are thus proposed.

First, greater emphasis could be placed on the perspective of users and caregivers when assessing the care and services continuum, e.g., by compiling more data on the care experience. Patient-Reported Experience Measures (PREM) questionnaires could be helpful in achieving this. Further, the use of health and wellness outcome indicators appears to be indispensable for measuring the effectiveness of senior care and services. These indicators, often called Patient-Reported Outcome Measures (PROM), are based on measurements of a more clinical nature and focus on the users' priorities for improving their health and wellness, such as autonomy, solitude or pain. The indicators for older persons suggested by the International Consortium for Health Outcomes Measurement provide a promising starting point in this respect and have inspired a few additions to the indicator inventory attached to this report. Moreover, the use of composite indicators, sometimes called synthetic indicators, could be explored as a way to overcome the difficulty of expressing the interrelated and nuanced aspects of quality within the

continuum of care. Composite indicators could, for instance, combine the data related to service responsiveness, continuity and effectiveness and thus help to aggregate various pieces of data and render such data more accessible to the public and decision-makers. However, caution must be exercised when using composite indicators because it may be difficult to interpret them correctly. Finally, an analysis of the care and services trajectory using emerging statistical approaches would enhance the continuum assessment by conceptualizing it as a user value chain. More specifically, these approaches would make it possible to recognize practice variations and identify weak links in the continuum that present the greatest potential for improvement.

In summary, the data derived from this state of knowledge aims to enhance the assessment of the quality of the care continuum by clearly identifying the priority quality dimensions for seniors and their caregivers, and by proposing an indicator inventory and suggesting avenues to guide improvement in measurement.

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