

Cancer System Performance Management: *Building a Foundation for Research*

Jenna M. Evans^{1,2}, Julie Gilbert^{1,2}, Victoria Hagens¹, Jasmine Bacola¹, Vicky Simanovski¹ & Garth Matheson¹

¹ Planning & Regional Programs, Cancer Care Ontario, ² Institute of Health Policy, Management & Evaluation, University of Toronto

Background

Cancer Care Ontario (CCO) uses a robust performance management (PM) system to monitor and improve the performance of Regional Cancer Programs across the province. This PM system includes a variety of managerial tools and processes such as contracts and agreements, scorecards, reports and performance review meetings.

Although CCO's regional PM system enables much of the organization's achievements in healthcare planning, delivery and improvement, the PM system itself has not been formally or rigorously evaluated. Given CCO's investment in PM, it is important for the organization to approach this activity critically and scientifically.

The aims of this study were to **synthesize current knowledge and identify potential research directions on health system PM**. Specific objectives were to identify the components of effective PM systems, factors that influence the effectiveness of PM systems, and approaches to evaluate PM systems.

Studying best practices can help streamline CCO's PM requirements and inform improvements to the existing suite of PM tools and processes. The results also have relevance for other organizations with a stewardship role, and can be used to inform future research.

Methods

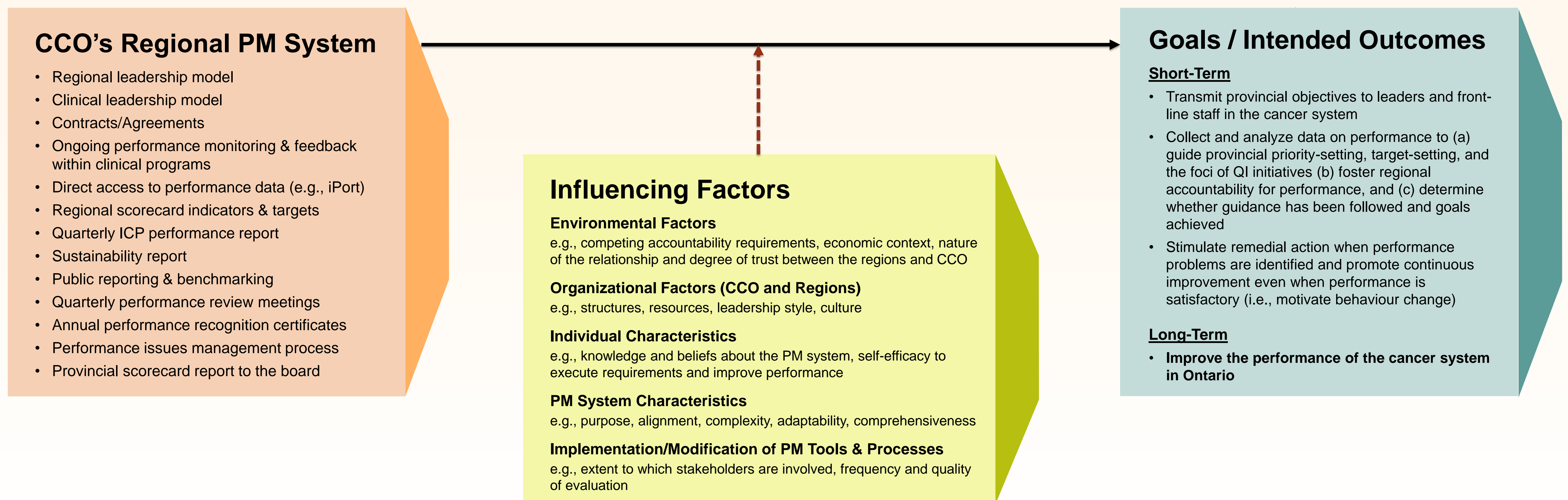
We conducted a **literature review** of health system PM using PubMed and EMBASE databases. To guide the review, we defined *Health System PM* as a set of managerial tools and processes that provide feedback and establish accountability for performance outcomes to secure optimal performance of the healthcare system over time, in line with policy objectives (Smith, 2002).



Included papers (n=115) underwent systematic data extraction to identify components of PM systems, influencing factors, evaluation methods, and key themes. To identify and organize influencing factors, we synthesized theory- and practice-based frameworks on behaviour change, quality improvement, and implementation science, and incorporated factors identified by the review. To help contextualize and apply the results, we conducted a **document review** of internal and publicly available documents on CCO and semi-structured **interviews** with CCO directors, managers, and staff (n=10) to create an inventory of CCO's PM tools and processes.

Finally, we used the literature review results and internal interviews to generate five potential research directions for CCO.

Evaluating the Effectiveness of CCO's PM System: A Conceptual Framework



Key Themes

- The literature focuses more on **measuring** health system performance, than on **managing** it.
- A strong tension exists between **PM for accountability** (compliance) and **PM for improvement** (learning).
- The effectiveness of PM systems is influenced by a range of multi-level contextual factors (see figure above), particularly **stakeholder perceptions** of the PM system.

Peer comparison and **modest financial rewards** are more effective in driving improvements than methods rooted in blame and punishment. However, growing evidence on loss aversion from the literature on Behavioral Economics suggests that **modest claw-backs** are more effective than modest financial rewards.

- Unintended negative consequences** of PM include tunnel vision, sub-optimization, measure-fixation, myopia, misrepresentation or misinterpretation of data, gaming, ossification, ritualization, and reduced staff morale.
- Two **competing views** of PM exist: (1) those who are practice-oriented, prescriptive and optimistic and (2) those who are critical and skeptical.
- Effective PM systems** are those that are:
 - Enacted in a continuous cycle, rather than a one-time event
 - Jointly developed by managers, clinicians and staff
 - Aligned with strategy
 - Shared at all levels to foster shared understanding and accountability
 - Balanced in terms of (a) indicators that address operations & finances & short- & long-term goals and (b) incentives that target extrinsic & intrinsic motivators
 - Supported by strong data quality and timely reporting
 - Focused on aspects of performance over which managers and clinicians have control
 - Rooted in improvement, not blame-laying
 - 'Living systems' that are modified regularly and are not static

Proposed Research Directions

- Examine **how Regional Cancer Programs use CCO's PM tools and processes**, and determine how to enhance the utility and/or facilitate productive use of the PM system and its data
- Describe and compare PM tools and processes across **high-performing health systems** (e.g., Kaiser Permanente, England's National Health Service, Veterans Health Administration)
- Explore how **environmental and organizational factors** influence (a) compliance with performance requirements and (b) improvement efforts
- Examine which **methods of performance feedback and reinforcement** are most effective in motivating performance improvement (i.e., to what extent do CCO's methods align with the motivations of those whose behavior they seek to influence?)
- Identify **unintended negative consequences** stimulated by CCO's PM system, and determine how important they are and how they can be mitigated

Next Steps

We are currently conducting semi-structured interviews with internal and external stakeholders to assess and prioritize the research directions. Prioritization criteria include the importance, potential impact and feasibility of each study. Results will be available in the late fall of 2017.

For more information, please contact: Jenna Evans, Staff Scientist, Enhanced Program Evaluation Unit, CCO: Jenna.Evans@cancercare.on.ca