

Valuing comprehensive primary care: The Starfield Principles

There is a compelling association between comprehensive primary care and system efficiency and effectiveness. The lifelong work of the late Barbara Starfield observed that an investment in primary care was associated with improved system quality, equity and efficiency (reduced cost)^{i,ii,iii,iv}. In British Columbia this efficiency was quantified by Marcus Hollander. The total cost of care was measured for the sickest patients. Patients without close alignment to primary care had a system cost of \$30,000/patients/year. Patients with close alignment to primary care had a system cost of \$12,000/patients/year^v.

Defining Comprehensive Primary Care

In Ontario, comprehensive primary care is often described by the Provincial Co-ordinating Committee on Community and Academic Health Science Centre Relations (PCCCAR) Basket of Services.^{vi} Outside of this, there has been little mention of this term in Ontario.

The concept of comprehensive primary care is congruent with that of the Patient Medical Home. The US National Committee for Quality Assurance–Patient Centered Medical Home^{vii} identified the key elements as follows:

- Enhance Access/Continuity
- Identify/Manage Patient Populations
- Plan/Manage Care
- Provide Self-Care Support/Community Resources
- Track/Coordinate Care
- Measure/Improve Performance

Measuring Comprehensive Primary Care:

Barbara Starfield said, “Any country that is serious about primary care would eschew a sole focus on disease-oriented quality goals. Yet Canada has adopted lock, stock and barrel the ‘micro’, biomedically oriented approaches to quality, and payment for performance focused narrowly on diagnosis and management of specific diseases.”^{viii}

To get a true picture of the quality of comprehensive primary care, one must consider the balance of multiple indicators at the same time. HQO's current Primary Care Performance Measurement (PCPM) framework includes many of the key indicators that are important for identifying the key attributes and services of comprehensive primary care; however the framework includes more than 50 measures grouped under 8 domains. It will be necessary to roll up individual measures into domain summary measures in order to maximize the usefulness of the PCPM framework for practices.

To facilitate comparisons between practices it will also be useful to develop an overall summary measure that includes all of the domains. To reflect the value of comprehensive primary care, it will be advisable to weight each measure according to its societal value. Appropriate weights could be established through a process that engages the public, patients, providers and decision-makers. The resulting domain and overall summary measures would then be useful measures of the value that comprehensive primary care has for society.

The appendix contains a diagram and explanation of "The Starfield Model". This is AFHTO's conceptualization of how on-going measurement to support better health and better value from comprehensive primary care.

ⁱ Shi L, Starfield B, Kennedy BP, Kawachi I. Income inequality, primary care, and health indicators. *J Fam Pract.* 48 (1999), 275--84.

ⁱⁱ Starfield B. Family medicine should shape reform, not vice versa. *Fam Pract Man.* May 28, 2009; Global health, equity, and primary care. *J Am Board Fam Med.* 20(6) (2007), 511--13; Is US health really the best in the world? *JAMA.* 284(4) (2000), 483--4; Research in general practice: co-morbidity, referrals, and the roles of general practitioners and specialists. *SEMERGEN.* 29(Suppl 1) (2003), 7--16, Appendix D.

ⁱⁱⁱ Starfield B, Shi L. Policy relevant determinants of health: an international perspective. *Health Policy.* 60 (2002), 201--18.

^{iv} Starfield B, Shi L, Macinko J. Contribution of primary care to health systems and health. *Milbank Quarterly.* 83(3) (2005), 457--502.

^v Increasing Value for Money in the Canadian Healthcare System, Hollander et al. *Healthcare Quarterly* Vol 12 No. 4 2009

^{vi} Provincial Co-ordinating Committee on Community and Academic Health Science Centre Relations (PCCCAR) Basket of Services includes:

- | | |
|---|---|
| 1. Health assessment | 8. Support for hospital care and care provided in-home and in long-term care facilities |
| 2. Clinical evidence-based illness prevention and health promotion | 9. Arrangements for 24/7 response |
| 3. Appropriate interventions for episodic illness and injury | 10. Service coordination and referral |
| 4. Primary reproductive care | 11. Maintenance of comprehensive patient health record |
| 5. Early detection, as well as initial and ongoing treatment of chronic illnesses | 12. Advocacy |
| 6. Care for the majority of illnesses (with specialists as needed) | 13. Primary mental health care including psycho-social counselling |
| 7. Education and supports for self-care | 14. Coordination and access to rehabilitation |
| | 15. Support for the terminally ill |

^{vii} [2011 PCMH Standards and Guidelines](https://inetshop01.pub.ncqa.org/publications/product.asp?dept%5Fid=2&pf%5Fid=30004%2D301%2D11); Accessed through <https://inetshop01.pub.ncqa.org/publications/product.asp?dept%5Fid=2&pf%5Fid=30004%2D301%2D11>

^{viii} Barbara Starfield, "Primary Care in Canada: Coming or Going?" *Healthcare Papers*, 2008

APPENDIX

The Starfield Principles:ⁱ A Performance-Oriented Approach to Measuring Primary Care

Overview of the Model

Comprehensive primary care is the foundation of a sustainable, responsive health care system in Ontario. The goals of comprehensive primary care are to:

- Optimize health outcomes for patients and populations
- Meet patient and public expectations
- Support a sustainable health care system

The focus of the primary care team is therefore to:

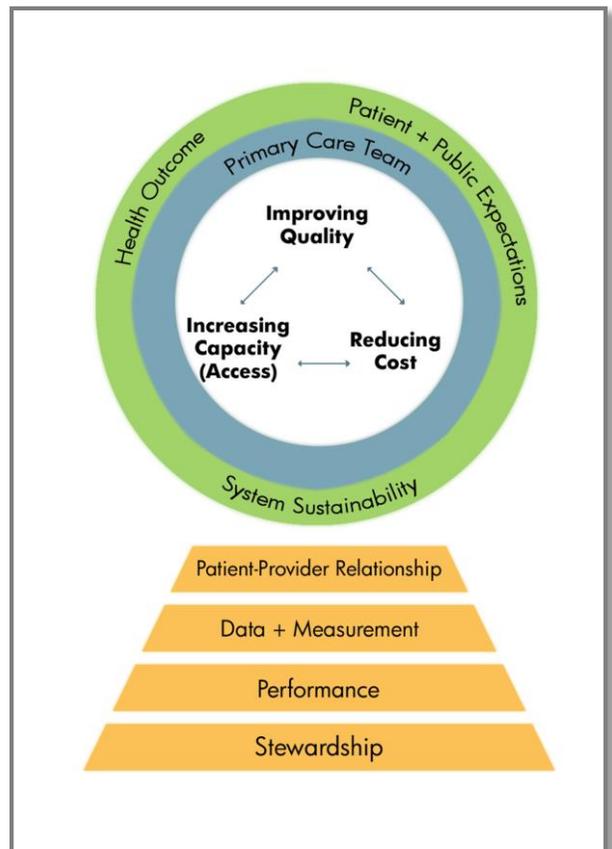
- Improve quality
- Increase capacity to assure access for patients
- Reduce the total cost of care

To be able to optimize performance of primary care teams, the foundation must be set to:

- Support the fundamental relationship between patients and their primary care team
- Enable primary care teams to collect and report data efficiently
- Encourage and reinforce excellence in team performance
- Provide the feedback needed to promote stewardship of health system resources beyond the Primary Care Team

The key components of this model are as follows:

- Measurement is for **teams providing comprehensive primary care** to a defined patient population.
- Measurement is **focused on outcomes and processes**, not activities and transactions.
- Performance is measured in terms of **quality, capacity** and **total system cost** (depicted in the model above).
- Assessing “quality” requires simultaneous measurement of multiple indicators. In order to track overall quality over all of these dimensions, a **weighted score** is developed. The weighting is informed through **patient engagement**. This is done across a sample of patients across the primary



care teams to get their input on what they value in their care, and the results will inform the choice of indicators, their weightings, and thresholds.

- **Indicators** are defined by a representative body that negotiates and refines the selection and weighting of the indicators, always referring back to the relative values that the population expressed. This establishes a uniform measurement system for all of the teams.
- Measures are adjusted to reflect the **complexity** in the case-mix of patients.
- The measurement system is **dynamic**. Periodic review of indicators enables measurement to adapt to changing public expectations and evolving scientific evidence, thereby increasing accuracy over time.
- **Source data** must be reported. This would entail reporting on each rostered/registered patientⁱⁱ on all discrete data elements necessary to generate the desired indicator outcomes. This enables:
 - Multiple ways of analysing data and indicators.
 - Efficient verification of the accuracy of data.
 - EMR vendors do not have to analyse data.
- Teams receive financial **support** to access the goods and services they require **to collect and submit such data**. Funds could be used for such things as EMR upgrades, electronic devices, data clerk, decision support analyst, project management. The team's accountability is to deliver the data as a condition of funding; choices about the support needed to do so is up to the team.
- **Reporting** to the participants is **at the team level** (not the provider level). Teams could receive provider level performance data confidentially for their internal use only. Reports will also be delivered to MOHLTC and the steering body for the pilot, with level of analysis to be determined in consultation.
- Improvement based on internal human drive for **purpose, autonomy and mastery**.

The **expected benefits** of implementing the Starfield Model:

- Better value for the health care dollar.
- Improved outcomes for patients.
- Greater autonomy for health care providers to innovate and improve to achieve outcomes.
- Measurement results provide greater evidence for investing in achieving the outcomes.

ⁱ The Starfield Principles are so-named in honour of the late Dr. Barbara Starfield, researcher and champion of the value of strong primary care systems worldwide. Her name is used with permission from her family.

ⁱⁱ Ideally, patient data would be linkable to be able to look at system costs (hosp admissions, ED use, lab/DI and drug costs would need identifiable data. First step in the project would be to work out roles and accountabilities for organizations such as CIHI, HQO and ICES, which will determine the appropriate way to manage patient data.