Variations in Quality Indicators Across Ontario Physician Networks
Briefing Note
June 7, 2016

What we know

Patients living with chronic disease have the best outcomes when they are treated throughout the progression of their disease, in a coordinated manner that engages all medical professionals involved in their care. However, in Ontario there has been a history of fragmentation of chronic disease care, leading to serious gaps.

Large multispecialty physician group practices have been shown to achieve high-quality, low-cost care. Through better ambulatory management and care coordination, such practices reduce patient complications and avoid costly readmissions to the hospital and emergency department. Although formal multispecialty physician networks are uncommon in Canada, health care providers tend to naturally form informal networks through sharing patients and information.

Researchers at the **Institute for Clinical Evaluative Sciences (ICES)** have identified 78 such multidisciplinary physician networks in Ontario by linking individuals to the physicians and hospitals that provide most of their care. These virtual networks are large and stable, behaving as informal, organic, "self-organizing" systems. Each network includes primary care physicians, specialists and at least one hospital caring for a common patient population, with shared information and resources that impact patient outcomes.

Directly informed by these ideas, the Ontario Ministry of Health and Long-Term Care (MOHLTC) adopted Health Links, an initiative to create integrated systems to improve care for high-need, high-cost patients. Health Links are variably structured, and while they are geographically-based and not identical to the physician networks, they align closely, especially in non-urban areas.

It is not currently possible to study the performance of Health Links using quality indicators, because we do not have information about the populations they serve. This makes it difficult to benchmark progress and communicate with Health Links providers in an actionable way. The research team therefore reported key quality indicators of care for patients living with chronic disease at the physician network level.

On June 7, 2016, ICES released a chartbook entitled *Variations in Quality Indicators Across Ontario Physician Networks*[1]. The chartbook reports performance levels for a comprehensive set of quality indicators that reflect health care delivery across settings of primary and specialty care, acute hospital care and long-term care, as well as shared care and transitions from one setting to another. Researchers selected indicators from multiple domains of care including screening and prevention, evidence-based medications, drug safety, hospital to community transitions, adverse outcomes, imaging, and cancer end-of-life care. They also looked at health care spending.

This is an exciting time for system-wide improvements to health care in the province of Ontario. What this chartbook brings to the dialogue is a modelled strategy for benchmarking and leveraging quality indicators at the appropriate level for accountability and change.

What the chartbook tells us

For the first time, the chartbook examines health quality indicators at the physician network level to describe health system performance overall and compare variations between networks. These findings provide a clearer snapshot of the underuse, overuse and misuse of health care services in Ontario, according to actionable metrics for accountability and improvement.

Some of the results are highlighted here:

- **The findings for primary care were mixed but mostly positive.** Prescription rates of evidence-based medications after hospitalization for serious cardiac illness were uniformly excellent across networks. Most adults routinely received recommended cancer screening and preventive care. However, adults with diabetes received less than optimal care, primarily due to low rates of HbA1c monitoring. Rates of bone mineral density testing after fragility fractures were very low.

- **Continuity of care after discharge from hospital was mixed.** Half of patients discharged from hospital with a cardiac or psychiatric condition were seen by a physician within seven days. About one-quarter had a visit with a primary care physician and relevant specialist within 30 days of discharge. Poor hospital to community transitions are often associated with higher rates of readmissions within 30 days.

- **Hospital readmissions and emergency department visits for chronic conditions were relatively high.** This may point to problems with hospital discharge planning and to suboptimal care coordination with primary care physicians when patients leave the hospital. The wide variation in rates indicates there is potential for improvement; high-performing networks show what is possible.

- **Medications were not always used appropriately.** Some medications pose a risk, particularly to elderly patients. We found high rates of potentially inappropriate and harmful antipsychotic drug use among long-term care residents with dementia, and high rates of prescriptions for medications that should be avoided among individuals with chronic conditions.

- **End-of-life care was not delivered evenly.** At the end of life, many cancer patients receive home care, an important component of supportive care. However, receipt of palliative care was variable, and receipt of chemotherapy or an intensive care unit stay in the last two weeks of life was relatively high. Responsibility for end-of-life care for cancer patients is shared among many health care providers, including primary care physicians and oncologists, in outpatient, inpatient and home care settings.

Where do we go from here?

In its *Patients First*[2] discussion paper, the Ontario MOHLTC proposed that smaller within-LHIN sub-regions be identified as the focal point for local planning and service management and delivery. Primary care should act as a patient's "medical home" and existing relationships between patients and their care providers should continue.

The physician networks identified in the chartbook are a close approximation to the populations envisioned by the MOHLTC for these smaller sub-regions, as they reflect existing doctor-patient relationships. This makes these networks an ideal basis for measurement, quality improvement and accountability in the approach described in *Patients First*.

References

1. Stukel TA, Croxford R, Rahman F, Bierman AS, Glazier RH. *Variations in Quality Indicators Across Ontario Physician Networks*. Toronto: Institute for Clinical Evaluative Sciences; 2016.

2. Ministry of Health and Long-Term Care. (2015). *Patients First: Action Plan for Health Care*. Accessed May 30, 2016 at http://www.health.gov.on.ca/en/ms/ecfa/healthy_change/docs/rep_patientsfirst.pdf