Every practitioner and organization in healthcare today strives for quality. Certainly, that goal has been a major focus of scores of *Healthcare Quarterly* articles since day one. We are thrilled to continue, therefore, a series profiling local quality improvement (QI) initiatives across Canada. Take a look at our call for abstracts (p. 77, and online at www.healthcarequarterly.com) in this issue for more information about how to share your story.

Digital Technologies in Healthcare

Our first five articles tackle quality via digital innovations. Corinne Eggert and her co-authors propose a "strategic framework" comprising three "closed loops": patients, protocols and populations. Positioning their work in the "arena of precision medicine," the authors explain that Closed Loop Analytics concerns decision support through analytic-data integration. A fully functioning model enables, they argue, "more refined differential diagnoses," "more tailored protocols" and "more targeted specification of populations and their health status and program needs." What we have here is an excellent introduction to a promising model. Now, we need demonstrations of it in action.

Has excitement over your physician's use of electronic health records ever collided with frustration over your inability to access those data? As Joanne Maxwell et al. explain, enabling such access – via a "consumer portal" – affects the "dynamic of control" and poses significant cultural shifts. In order to study this issue in hospitals, the authors ran a workshop with members of the "rehabilitation community." Their discussion of the four "major themes" that emerged, such as clinicians' reluctance to "share their authority and control," will prove fascinating for all who work towards information transparency.

Telehomecare might not seem exactly "digital" when lined up against data-integration loops and online portals, but the Toronto Central LHIN achieved stunning results with this old(er)-tech solution. Specifically targeting COPD and heart failure patients, this six-month, no-fee, patient self-management program led to solid drops in emergency department visits and hospital admissions. Josie Barbita and Susana Neves-Silva's adjectives "effective and proven" seem well chosen.

Similar to the piece by Maxwell et al., the fourth article in this cluster addresses patients' management of their own health data. Specifically, Katherine Atkinson and her colleagues studied the use of CANImmunize, a smartphone app for parents and guardians to report children's immunizations to public health officials. The results of the pilot in Ottawa were positive, and the authors conclude such technology "could enable more timely and accurate population assessments of vaccine coverage." They also identify areas for improvement, such as interoperability and user-interface design.

In one way or another, all the pieces in this section are concerned with *users* of technology – parents (Atkinson et al.), patients (Maxwell et al., Barbita and Neves-Silva) and clinicians (Eggert et al.). Neil and Bob Seeman take us further along that path by interrogating "online health message engagement" by Web users. Their non-invasive, anonymous study of 13,138,782 Web users "randomly interrupted" revealed the importance of timing to message reception, as well as demonstrated the flexibility of their proprietary data-gathering approach.

Health Workforce Planning

How do internationally educated healthcare providers (IEHPs) fit within the widespread drive for *interprofessional collaboration*? Ruby Emily Grymonpre and her colleagues examine the Interprofessional Competency (Practice) Toolkit (ICT) for IEHPs, which is intended to orient IEHPs – in seven professional categories – to this model of practice and to offer a measurement tool focused on aligning competency assessments among, for example, different jurisdictions. While results of the toolkit's implementation were beyond the authors' scope, their discussion of process and the "four commonalities" among the targeted health professions is illuminating.

Caring for Seniors

It is interesting to turn from collaboration among IEHPs in general to consideration of the related concept of "integrated care" – in this case, for seniors. Earlier this year, an inter-organizational forum in Alberta focused on this topic, and Marjan Abbasi et al. share with us the results of the deliberations. For many readers, the "barriers" will be familiar, including co-morbidities and lack of senior-focused training for healthcare providers. Likely of more interest will be the "enablers" of integrated care for this vulnerable group, which fall under the rubrics of education, communication, flexibility and technology.

Quality Improvement

We conclude where this editorial began, by presenting three explorations of quality improvement (QI) projects that took place coast to coast. Beginning in Newfoundland, in 2016 the discovery of an unacceptable level of staining on reprocessed surgical instruments in two hospitals led to surgical delays and large expenditures of money and staff time (Sampson and Quinn 2016). While the "root cause or causes" remain enigmatic, in their summary of the ordeal Rob Kean et al. outline the major steps Eastern Health took to resolve the crisis

(e.g., introduction of handwashing, purchasing $2 million in new instruments). Most important of all, the authors assert, were the cooperative teamwork, resilience and transparency of the organization's leaders and clinical staff.

The word "errors" in a healthcare context generally strikes fear into the hearts of providers and patients alike because of the spectre of injury and death. But what about errors in data that have financial repercussions? On this front, Nina Ahuja examines coding accuracy for ophthalmic outpatient services at an Ontario hospital. Getting the codes right is essential for proper reimbursement by the government. Ahuja's review of 100 charts, however, showed a number of sources for coding errors, and her recommendations – including having speciality-specific surgeons conduct the coding – will be of interest to hospitals, health authorities and provincial/territorial ministries.

There is something of an overlap between Ahuja's findings and our final essay, which addresses the inappropriate assignment of ambulance services for low-acuity cases reported via 9-1-1 calls. Kerry Campbell et al. conducted a QI audit of over 2,000 calls in British Columbia. They then used the results to develop Plan, Do, Study, Act cycles aimed at maximizing resource-use efficiency. The "tangible, measurable results" – many more individuals transferred to a telephone-based advice line instead of being rushed to hospital – were to an extent one certainly does not witness every day in our sector.

– The Editors

References

Sampson, A. and M. Quinn. March 3, 2016. "Cost of Eastern Health Surgery Cancellations Rises to $2.7 Million." *CBC News*. Retrieved October 27, 2017 <http://www.cbc.ca/news/canada/newfoundland-labrador/eh-surgery-cancellations-1.3474649>.