Anyone who spent the summer in the eastern half of North America will not be surprised to learn that 2016 is on track to be the hottest year ever (Slezak 2016). More than just a physical annoyance, however, climate change "is disrupting national economies and affecting lives, costing people, communities and countries dearly today and even more tomorrow" (United Nations 2016).

Special Focus on Global Climate Change

For this issue of *Healthcare Quarterly*, we brought together five articles that examine climate change in relation to the healthcare system's environmental burden and efforts to reduce it: as Deanna Fourt and Claudette Poirier stress in their article, healthcare is hugely energy and carbon intensive. Major transformations are needed to address that impact and, as they aptly point out, "healthcare employees have a unique role to play as agents of change" in that work.

Trevor Hancock – who wrote a column on green healthcare for this journal from 2001 to 2005 – leads the charge with a discussion of healthcare in the Anthropocene (a new epoch in which humanity's "footprint will be evident in the geologic record far into the future"). The healthcare system is, Hancock argues, a "significant contributor to environmental damage through its consumption of resources and its production of wastes." As an "ethical system," what leadership role should it take? How can it transform to reduce its environmental impact?

Hancock's overview prefaces well the piece by Kent Waddington and Linda Varangu, which illuminates some "greening" efforts spearheaded by the Canadian Coalition for Green Health Care, an organization Hancock helped found in 2000. In order to create an "environmentally responsible health sector," the Coalition identifies leadership and collaborative efforts as key. The authors also highlight the importance of "resiliency"; in the case of a healthcare facility, for example, that would entail such things as water and energy conservation and local food procurement.

Our next three climate change-themed articles offer expert case studies of green healthcare initiatives. Jérôme Ribesse and Nathalie Robitaille describe a pilot project at three Montreal hospitals aimed at implementing a plastics recycling system. Led by Synergie Santé Environnement (SSE), the project demonstrated the importance of finding an appropriate recovery company (a far-from-straightforward quest), ensuring staff support and organizing for the storage of plastics prior to collection. The economic, environmental and social benefits the SSE project discovered dovetail with efforts to reduce organic waste at Hamilton Health Sciences (HHS). On Rosemary Van Oostrom's account, in 2012, only 13% of HHS's organic food waste was recycled "in an environmentally sustainable manner"; 87% (435 tonnes) was sent to landfill. Through the implementation of food waste dehydrators (which use heat and mechanical agitation to dry food waste) – a process that had its fair share of hiccups, including equipment maintenance, location issues and municipal by-law restrictions – HHS has demonstrated the efficacy of this technology to impact environmental and fiscal stewardship.

This section wraps up with a look at the biggest culprit: fossil fuels. Fourt and Poirier's study shows how Island Health in British Columbia has successfully reduced carbon emissions: in 2007/2008, for example, the average Energy Use Index at a cluster of seven hospitals was 538.7; in 2014/2015, it had dropped to 472.1. In 2014, Island Health reduced overall emissions by 1,178 tonnes, while offsetting the remaining 30,891 tonnes (at a cost of $813,000). In their report, the authors outline the main features of Island Health's initiatives (e.g., heat-recovery systems, upgrading boilers and variable speed drives on pumps and fans), establishing both the business and environmental benefits of going green.

Quality Improvement

Things can be better! That is a mantra of quality improvement (QI) teams everywhere, and the main driver of the observations and recommendations Terrence Montague and his colleagues make in their report stemming from two decades' worth of Health Care in Canada surveys. In very big nutshell, while levels of "excellent and good health" have decreased, chronic illnesses have become more prevalent and support for patient-centred care has risen. Sadly, on the last matter, "today's stakeholders are not optimistic," believing access will worsen over the coming five years. "Major repairs, or complete rebuilding" of the system seems to be the majority opinion. While Montague et al. do not offer definitive solutions, their survey points in valuable directions.

One popular QI tool – system maps – is the focus of Faten Mitchell's contribution. "A cross-functional diagram that describes who does what," a system map has "lanes" that describe the work each stakeholder (medical and non-medical) performs. Mitchell contends that system maps can help with important redesign work, including identifying at-risk patients; necessary partners; and patients', providers' and funders' motivations and rewards.

Leadership Development

As with many topics discussed in *Healthcare Quarterly*, including several in the climate change cluster, the issue of "leadership" is front and centre in Nadir Khan et al.'s exploration of provincial cancer systems/centres. While their cross-country research found lots of agreement in terms on the "competencies" of effective leaders (e.g., the ability to do strategic planning and manage change), the authors also discovered a serious shortfall in organizations for formally "building" future leaders. Clearly, that succession-planning gap needs to be closed – and soon.

Primary Healthcare

In his conversation with Ken Tremblay included in this issue, Michael Green, the president and CEO of Canada Health Infoway, emphasizes the "great success" telehealth/telemedicine has had in Canada. Hancock also singles out that technology as an important part of green healthcare. In their article, A. Alison Ross et al. document findings from a 12-week QI project using telehealth to expand primary care access for First Nations people in rural Northern Alberta. The conclusions: with the right organizations, equipment, staff and information-sharing, such a system is both feasible and sustainable.

Care in the Community

Sticking with Alberta (but this time in Calgary), we come to our last essay, in which Barbara Collister and her co-authors explore a three-phase evaluation methodology used in the context of home care innovations. While the authors underscore the connection between evaluation and accountability, many readers will also be drawn to the specific ways in which evaluation helped foster a culture of learning and accountability, prompt mid-course QI changes and shed light on the best ways to introduce changes.

– The Editors

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