

EDITOR'S NOTE

Quality Improvement is a Professional Responsibility in Diabetes Care

The past 10 years have seen widespread attention paid to quality improvement (QI) initiatives in healthcare. This interest has highlighted the need to increase the use of effective elements of care, as well as to decrease the overuse of ineffective elements and misuse of others. Unfortunately, however, QI research has often suffered from low methodological quality (1). For instance, published reports of QI interventions commonly fail to identify the “active ingredients” of the intervention or provide clear definitions or descriptions of interventions they do mention. Other publication concerns include inattention to key effect modifiers, such as aspects of the institutional setting where the intervention was delivered or characteristics of the personnel involved (1).

Enter the Standard for Quality Improvement Reporting Excellence (SQUIRE) guidelines for publication of QI initiatives (2). The *Canadian Journal of Diabetes* is proud to be one of the international journals supporting these important new publishing guidelines (3). We have been anxiously waiting the completion and publication (4) of the consultation and consensus process described by Davidoff and colleagues, as we believe these guidelines will substantially enhance scholarship in the field of QI.

A scholarly approach to QI is needed in diabetes care in Canada. Diabetes care is complex, relying heavily on individual patient knowledge and capacity in a unique psychosocial, temporal and cultural context. Devising strategies to improve outcomes and reduce diabetes complications is like devising strategies to reduce bullying in the playground. The complex relationships and interactions between the contributing factors to poor diabetes outcomes make the design, conduct and analysis of randomized, controlled trials extremely difficult.

A previous editorial in the *Canadian Journal of Diabetes* (5) described this “messiness” and encouraged diabetes healthcare professionals to engage in QI projects to identify diabetes outcomes that could be modified by simple changes in local practice to improve service delivery and, hopefully in turn, diabetes outcomes. At the 2008 Canadian Diabetes Association/Canadian Society for Endocrinology and Metabolism Professional Conference and Annual Meetings in Montreal, many diabetes education programs shared local QI initiatives, such as strategies to increase the frequency of foot examinations and BP monitoring, or

to address the psychosocial barriers to self-care by integration of a mental health worker into the diabetes healthcare team. Publication of the results of these initiatives is necessary “because it allows testing of reproducibility, promotes public accountability, enhances translation of improvements and stimulates innovation” (6). However, a recent review of QI strategies for glycemic control in type 2 diabetes in adults has highlighted the variability and inadequacy of published reports, resulting in misclassification of intervention outcomes (7). The SQUIRE guidelines will provide a roadmap to help authors prepare manuscripts and help journal editors and reviewers to assess them. We hope that they will also provide a framework to help instructors teach faculty and inform professional development workshops on QI.

With the explosion of specific QI activities in hospitals across Canada, it is vital that all healthcare professionals understand the imperative for institutional culture change and participate in professional development to learn the skills for conducting QI. These skills are now being introduced into the curricula for all healthcare professionals at the undergraduate, postgraduate (8) and continuing professional development levels (9); future graduates will have the knowledge, skills and attitudes necessary to integrate QI into their daily activities. The Open School of the Institute for Healthcare Improvement is an example of an innovative way to teach students and healthcare professionals about QI (10). This web-based 6-module certification course, created for and by undergraduate students, is also available for professionals in the workplace.

The SQUIRE guidelines now join a list of other important international standards for publication, such as CONSolidated Standards Reporting of Trials (CONSORT) (11) for randomized, controlled trials; Strengthening The Reporting of OBServational studies in Epidemiology (STROBE) for epidemiological observational studies; QUality Of Reporting for Meta-analyses (QUORUM) for meta-analysis and systematic reviews; and STAndards for the Reporting of Diagnostic accuracy studies (STARD) for reports of diagnostic tests. These guidelines are universally credited with raising publication standards in the world. The *Canadian Journal of Diabetes* eagerly awaits authors who submit manuscripts that comply with the SQUIRE guidelines and, even more fundamentally, who use the guidelines to inform the design of the QI projects they undertake.

Heather J. Dean MD FRCPC
 Editor-in-Chief, Canadian Journal of Diabetes
 Associate Dean (Academic Affairs)
 Faculty of Medicine
 University of Manitoba
 Winnipeg, Manitoba, Canada

Kaveh G. Shojania MD, FRCPC
 Canada Research Chair in Patient Safety
 and Quality Improvement
 Faculty of Medicine
 University of Toronto
 Toronto, Ontario, Canada

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