

From the Editor

Mind the Gap

On a cold and rainy October night in 1996, I was traveling north on US Interstate 95. Just a few miles after crossing the Piscataqua River, leaving New Hampshire and entering Maine, my headlights ignited the white shimmering letters of a thought-provoking sign that read simply, “Welcome to Maine—The way life should be.” At first I wondered what this could possibly mean, but I soon concluded that this sign suggests the concept of two worlds; one, “the world as it is” and a second world, “the way life should be.” The sign for me has served as a reminder of the importance of being ever mindful of the gap between what “is” and what “should be,” and the liberating opportunity that is ours when we strive to diminish this gap. In March of 2001, the Institute of Medicine report, *Crossing the Quality Chasm* (1), was published and, in a similar way brought attention to a gap in the US healthcare system, pointing out the chasm between the way healthcare “is” and the way that healthcare “should be.” The authors reported that it takes an average of 17 years for new knowl-



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edge generated by randomized controlled trials to be incorporated into clinical practices. This sobering report describes how one nation’s healthcare system, faced with rapid changes, has fallen short in its ability to translate knowledge into practice and apply new technology safely and appropriately. Why does it take so long for research

Table 1. Draft proposed guidelines for stronger quality improvement evidence.*

Item	Paper Section	Descriptor and Topic
1	Title and abstract	Indication that this is a quality improvement article
	Introduction:	
2	Background	Current organizational and clinical knowledge about the problem area
3	Problem	Nature and severity of specific local dysfunction or failure
4	Purpose of change(s)	Specific aim(s) of proposed changes, i.e., questions to be answered
	Methods:	
5	Setting	Relevant details of geographical location, local organization, staffing
6	Function	Purpose, processes, and activities of department, team, unit, program
7	Intervention(s)	Precise details of initial strategy for intended changes/improvements
8	Measures	Balance of methods used to assess dysfunction/failure and outcomes of changes, including measurement perspective (e.g. patients, staff, administration, cost, etc); methods used to validate measures
9	Analytical methods	Statistical and time series techniques used; specific software (if any)
	Results:	
10	Situation analysis	Initial assessment of local context of the care system (e.g. specifics of the patient population, local experience with change, etc) and how that assessment helped understand the problem
11	Outcomes	How the initial improvement plan evolved over time (if it did), including alternative change strategies considered and rejected, with reasons; how and why this evaluation occurred and who was responsible for it What effects the changes/improvements actually had on clinical and/or organizational and professional outcomes and processes including benefits, harms, unexpected results, problems, failures
	Discussion:	
12	Summary	Key findings, lessons learned from evaluation of changes, outcomes achieved
13	Context	Comparison and contrast of results with the findings of others; broad formal review of the literature is desirable
14	Interpretation	Inferences about mechanisms of changes/improvements, including prior changes, change making in this setting
15	Limitations	Sources of bias or imprecision; factors affecting generalizability, particularly unique features of local setting, and potential confounders; efforts made to minimize and correct for limitations; effect of limitations on interpretation and application of results
16	Conclusions	Implications for practice and further study; plans for maintenance of improvement and for follow up to assess maintenance; next steps

*Although each section of the text of a quality improvement report in the Introduction, Methods, Results, and Discussion (IMRaD) format (for example, the Introduction) generally needs to contain at least some information about all of its guidelines items listed for that section, individual items from one guideline section are often needed in various sections of the text.

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findings to be implemented? Jeremy Grimshaw of the Ottawa Health Research Institute described the study of the uptake of research findings as “Implementation Research (2).” Implementation Research focuses on learning how to change the technical aspects of care to a system that is evidence based at the local level. Batalden and colleagues have described a creative model for accelerating improvement that provides a framework at the frontline, the microsystem level, where generalizable scientific evidence (knowledge of what is published in the scientific literature) and particular contexts (knowledge of the local system of care) are synthesized to promote experiential learning (3). Frontline clinicians, armed with knowledge about the published evidence and a knowledge of their system are provided with a framework for intelligent action in the form of tests of change that result in sustained improvement and a narrowing of this gap. Unfortunately, scholarly accounts of the methods, experiences, and results of these types of quality improvement work are not published; limiting the widespread dissemination of knowledge about the efficacy of translating and implementing the “so called” generalizable knowledge locally (4). Davidoff and Batalden attribute this void to a lack of guidance available to authors, editors, and reviewers on how best to write, review, and edit complete and precise accounts of quality improvement. Berwick has further stated that it is as though there were a filter imposed by the current publication process that does not accommodate the kind of discovery that drives most improvements

in healthcare and this filter needs to be appropriately re-configured to accelerate improvement (5). To that end, a draft set of guidelines designed to help the writing, reviewing, editing, interpreting and using such reports has been proposed (see Table 1). In 2008, the *Journal* will adopt these proposed guidelines for improvement reports and will begin to consider improvement reports for publication.

As we consider the world as it is and the world as it should be in both our private and professional lives, we would do well to not lose heart, and consider the words written and spoken frequently in London’s Underground, “Mind the Gap!”

“Knowing is not enough; we must apply. Willing is not enough; we must do.”

–Goethe

1. Crossing the Quality Chasm : A New Health System for the 21st Century. Institute of Medicine Report. <http://www.nap.edu/books/0309072808/html/> (accessed 12/01/2007).
2. Advancing Quality Improvement Research; Challenges and Opportunities–Workshop Summary. <http://books.nap.edu/catalog/11884.html> (accessed 12/01/2007). Copyright National Academy of Sciences.
3. Quality by Design. A Clinical Microsystems Approach. Nelson EC, Batalden PB, and Godfrey MM (eds). Jossey-Bass, San Francisco, 2007.
4. Davidoff F, Batalden P. Toward stronger evidence on quality improvement. Draft publication guidelines: the beginning of a consensus project. *Qual Saf Health Care*. 2005;14:319–25.
5. Berwick D. Broadening the view of evidence-based medicine. *Qual Saf Health Care*. 2005;14:315–316.