

# Do Clinical Guidelines Still Make Sense? No.

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*Ann Fam Med* 2014;202-203. doi: 10.1370/afm.1654.

The last 25 years have seen a dramatic increase in clinical practice guidelines, as well as considerable efforts to establish quality standards, and the growth of an extensive research literature on the uptake and use (or lack thereof) of clinical practice guidelines in routine clinical practice. Perhaps it is time to take stock of these efforts and ask whether this seemingly rational undertaking has achieved any meaningful goals in advancing health care and whether this massive collective undertaking has been worthwhile. Personally, I am skeptical.

It is important to understand the history and evolution of clinical practice guidelines and see their growth as much in sociocultural as scientific terms. Clinical practice guidelines have the virtue of *prima facie* authority and increasingly are used to set standards of practice. Since the 1970s there has been a massive expansion of clinical practice guidelines grounded in the complex forces shaping late 20th century medicine.<sup>1</sup> One potent force is the need for regulatory standardization of practice in the face of documented practice variations and concerns about professional competence. As Weisz and colleagues conclude:

Every effort to regulate increasingly unwieldy health care systems seems to produce complex mechanisms that require even more rules and conventions in order to function. Accordingly we now have layer upon layer of guidelines and protocols....clinical guidelines remain closely linked to the many other forms of regulatory standardization that aim to bring order, predictability and commensurability to an increasingly vast and heterogeneous domain."<sup>1</sup> (p. 716)

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*Conflicts of interest: authors report none.*

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There are 2 dimensions to the vast and heterogeneous domain: the realm of clinical practice guidelines and the increasingly heterogeneous patient population to which these guideline apply.

The increase in number of clinical practice guidelines is impressive. In 1990 there were 73 entries in PubMed. This grew to 7,508 in 2012. Thousands of clinical practice guidelines are produced annually and several hundred are relevant to family medicine. It has been well established that practicing physicians have limited time to read<sup>2</sup> and well documented that adhering to clinical practice guidelines for common chronic diseases is not feasible given the time permitted to practitioners.<sup>3</sup>

Given the sheer number of clinical practice guidelines promulgated by so many diverse authoritative bodies, it is not surprising that uptake by frontline clinicians is low. This is evident in many studies, including several in this issue of *Annals of Family Medicine*. This lack of integration into practice speaks as much to the limitations of the idea of clinical practice guidelines as to perceived limitations of frontline clinicians in maintaining competence and keeping up with the latest research. Success in implementation and improvement of practice seems particularly resource intensive, as the study by Mold et al demonstrates.<sup>4</sup> Considerable effort was required for modest absolute short term improvement in process indicators. Is there something mistaken about clinical practice guidelines in the first place?

My practice consists of mostly seniors with multiple chronic diseases. I sometimes tease them by asking what their disease and comorbidity is today. This usually brings a quizzical look and request for clarification. I then say I need to figure out which clinical practice guideline to apply, depending on which chronic conditions are most bothersome that day. The jest belies an important and overlooked limitation. Clinical practice guidelines are devised by people with an interest in a single disease for patients who have that particular disease. Recommendations are often made with little or no consideration for other condi-

tions that may plague patients or the priorities they themselves assign to their health conditions.

Multimorbidity is the rule, not the exception, and with age this becomes more true.<sup>5</sup> In Canada, an estimated 40% of patients aged over 80 years have 4 or more chronic conditions.<sup>6</sup> There are at least 20 common chronic conditions that afflict older adults. Consequently one finds there are 4,845 possible combinations of 4 chronic conditions out of 20. It is quite unlikely that any clinical practice guideline will cover this range of possibility in sufficient detail to be directive. It is even less likely that there will be "evidence" from randomized trials that is directive to patients and clinicians and captures this heterogeneity.

Goodman et al attempt to address the problems of creating clinical practice guidelines in the face of an inherently heterogeneous patient population. Their approach, however, runs the risk of adding another layer of complication to the creation of guidelines.<sup>7</sup> Although not explicitly stated by the authors, one possible way forward is to acknowledge the high prevalence of multiple chronic conditions. A second is to be honest about the inflation of uncertainty concerning the harms and benefits of individual therapies as the burden of multiple chronic conditions increases. The utility of any disease-specific clinical practice guideline also declines as this burden increases. Third is the call to increase focus on patient-centeredness. I also suggest seeking alignment of treatment goals among patients, care givers, and clinicians as an important priority.<sup>8</sup> There is also great lack of clarity about the outcomes being pursued with the vast armamentarium of diagnostic and therapeutic power at physicians' disposal. Clarity on desired outcomes in this context is urgently needed.<sup>9</sup>

Perhaps it is time to reconsider the goals of clinical practice guidelines in the context of rethinking the ends of medicine itself in the era of multiple chronic conditions. Clinicians need new skills and tools to provide optimal care for this growing population. An urgent priority is decision aids embedded in clinical practice guidelines to assist patients and clinicians in setting priorities for management choices. Some patients may wish less emphasis on risk reduction, particularly when putative benefits are difficult to discern among multiple competing risks. As well, clinical prac-

tice guideline processes should indicate, in the manner of the Grading of Recommendations Assessment, Development and Evaluation Working Group, how multimorbidity influences the quality of evidence and strength of recommendations being made. Perhaps the energy and industry that has characterized the clinical practice guideline process could be focused on creating these skills and tools. This is a task for which family physicians are ideally suited to take leadership.

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**Key words:** clinical practice guidelines; multimorbidity; evidence-based medicine

Submitted March 20, 2014; accepted March 25, 2014.

**Funding support:** The author received funding support from the Canada Research Chair in Primary Care Research.

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