Any darn fool can make something complex; it takes a genius to make something simple.

Pete Seeger

A 2002 discussion paper1 clearly outlined the difference between simple, complicated, and complex problems and provided analogies that have become part of our everyday language.

The authors1 characterized simple tasks as being like following a recipe: recipes are essential; they are tested to assure easy replication; no expertise is required, but having some increases success; recipes produce standardized results; and the best recipes give good results every time. They likened complicated problems to sending a rocket to the moon: formulae are critical and necessary; sending 1 rocket increases the odds that the next will be OK; high levels of expertise are necessary for success; rockets are similar in critical ways; and there is a high degree of certainty in the outcome. Complex problems are like raising a child: formulae have limited application; raising 1 child provides experience but no assurance of success with the next; expertise can contribute, but is neither necessary nor sufficient for success; every child is unique and must be understood as an individual; and the outcome is uncertain.

Physicians’ work can be thought of in similar terms. Much of the work of non–family physician specialists can be characterized as complicated (eg, cardiovascular surgeons treating symptomatic coronary artery disease), while that of generalists tends to be complex (eg, caring, as I do, for a population in which more than a third are older than 65 and more than 40% have 3 or more chronic, comorbid conditions). The distinction is not mutually exclusive. Specialists such as endocrinologists often deal with complexity and clinical uncertainty, while family physicians often also deal with complicated problems.

The increasingly complicated nature of specialist care is reflected in the proliferation of clinical practice guidelines (CPGs) in the past 2 decades—scan the National Guideline Clearinghouse or CMA CPG Infobase. Many of these CPGs have been developed for use by family physicians, but as Allan argues in a debate in this issue (page 705),2,3 the current paradigm of CPG development and implementation does not work well for family physicians and their patients. There are many reasons for this, as he outlines, ranging from lack of representation of family physicians7 on primary care CPG panels to the single disease-oriented outcomes of most specialist-driven CPGs. Perhaps the fundamental underlying reason uptake of CPGs developed mainly by non–family physician specialists is poor in family medicine is that CPGs developed primarily for complicated problems do not work well when dealing with the complex problems that family physicians face in day-to-day practice. And family physicians know this.

In October 2015 we published a simplified lipid guideline6 that represents a long-overdue paradigm shift in the development of CPGs in primary care. At least 3 features are unique: the focus is on the patient-oriented outcome of reducing cardiovascular disease risk in a clinically practical way; most of the CPG panelists were family physicians working with general internist and pharmacist colleagues; and the panelists’ financial and other conflicts of interest were minimal, adding to their credibility. Readers have accessed this CPG more than 34,000 times—making it one of our most highly accessed articles, suggesting that there is a profound need for this type of pragmatic guideline that enables family physicians in their complex work.

There are challenges for us and our other specialist colleagues if we are to create this brave new world of CPGs. Family physicians will have to increasingly develop and maintain their skills in critically evaluating the research literature if they are to participate effectively and lead the way in future primary care–driven CPGs. This will have implications for both training and continuing professional development. It will also be crucial to assess the effect of such CPGs on patient care.

For our other specialist colleagues, the implications are also profound. It will mean relinquishing their hold on the “evidence” and force them to work in egalitarian ways with their family physician colleagues. Wong et al consider this in a very thoughtful commentary (page 701).6

Could this mean a substantial culture shift in medicine and the toppling of the hidden curriculum? It is hard to say. We should bear in mind the wise words of Iona Heath in her 2011 Harveian Oration.7 When generalists and specialists work together effectively, each masterfully using their unique skill sets, our patients and our health care systems benefit. Divided we fail.

References