VIEWPOINT

Specialty Society Clinical Practice Guidelines
Time for Evolution or Revolution?

David C. Classen, MD, MS
Division of Epidemiology, Department of Internal Medicine, University of Utah, Salt Lake City.

Leonard A. Mermel, DO, ScM
Warren Alpert Medical School of Brown University, Providence, Rhode Island; and Division of Infectious Diseases, Rhode Island Hospital, Providence, Rhode Island.

Clinical practice guidelines (CPGs) should be the basis for improving the quality and safety of health care. However, despite enormous investment in development and dissemination, many CPGs are not used in the delivery of care. This is often because many CPGs are encyclopedic tomes without recommendations tailored for practical and effective implementation for physicians and health care workers or for patients, without measurement of effect, and often with developmental cycles so protracted that guidelines may be outdated by the time they are ready for application in clinical care.[1]

Because of these and other challenges, there have been repeated calls for CPGs to be developed by public entities such as the National Institutes of Health or Agency for Healthcare Research and Quality. However, despite these calls, most CPGs are currently produced by specialty societies and will likely continue to be so for the foreseeable future. These specialty society guidelines continue to have many shortcomings when evaluated based on the criteria in the Institute of Medicine (IOM) report "Clinical Practice Guidelines We Can Trust."[2,3] There are often limitations in the scientific evidence on which CPGs are based, lack of transparency regarding the methods used by the writing group, ongoing challenges regarding conflict of interest (COI), and inconsistencies among guidelines from different societies.[3] This is especially true in the area of infection prevention, in which more than 10 conflicting guidelines for prevention of catheter-associated urinary tract infections have been issued by different organizations.[4]

> A recent study of 45 CPGs from 14 specialty societies revealed that COIs among panel members were common, but reporting of these members' COI disclosures was not.

A recent study of 45 CPGs from 14 specialty societies revealed that COIs among panel members were common, but reporting of these members' COI disclosures was not.[5] This reaffirms the critical need for specialty societies that develop CPGs to aggressively address COI concerns through standardization and transparency in all aspects of data collection, in the review process, committee administration, and guideline development so that such issues do not detract from the science of the CPGs. Specialty societies should be cognizant of the readers who will aggressively scrutinize their development processes, particularly when recommendations are likely to be controversial.[5]

How should specialty societies respond to the challenging environment for creating a CPG? For specialty societies without the resources to devise a more rigorous approach to CPG development, the answer may be simple—stop developing CPGs. Currently there are few examples of specialty societies whose CPG development process has evolved effectively in response to these shortcomings. The American College of Cardiology (ACC) has a long history of developing CPGs in partnership with the American Heart Association (AHA). Using a well-defined and established development process, these organizations have devoted significant financial resources to underwrite comprehensive CPGs and promote their implementation.[6]

The ACC/AHA guideline development effort is detailed and comprehensive and has produced more than 22 guidelines over the last decade that include more than 3000 recommendations, with final products more than 350 pages in length. Although this is an effective partnership, it can still lead to controversial and difficult-to-implement guidelines that may have COIs, such as the new ACC/AHA Lipid Lowering Guidelines.[7] Although this collaboration is rigorous, these guidelines did not follow all of the IOM recommendations for CPG development. However, a CPG from the American Cancer Society on cancer screening did largely comply with the IOM recommendations for developing CPGs.[8] This highlights the complexity of following the IOM recommendations, although the IOM recommendations are based on consensus, and there are no data that the process recommended by IOM produces superior guidelines.

Most specialty societies cannot afford the financial expense to replicate the ACC/AHA or American Cancer Society experience, and the need for a more economic and streamlined process with a succinct work product suggests another pathway is clearly called for. That pathway is likely to be successful through partnerships with other organizations that have expertise in implementation science, multistakeholder perspectives, and transparency regarding COIs.

An example of such an approach is the Infectious Diseases Society of America/Society of Healthcare Epidemiology of America partnership with The Joint Commission, the American Hospital Association, the Association of Practitioners in Infection Control, The National Quality Forum, and the Centers for Disease Control and Prevention.[9] This collaboration produced the first Compendium of Strategies for Healthcare-Associated Infections, in which not only did all these organizations participate in developing a harmonized approach for the prevention of 6 serious health care–associated infections, but all of the organizations were rep-

Corresponding Author: David C. Classen, MD, MS, University of Utah, 561 E Northmont Way, Salt Lake City, UT 84103 (dcclassen@hotmail.com).

resented as authors of the guideline rather than relegated to serving as reviewers or approvers of already created documents.

Multidisciplinary groups, made up of members from all of the organizations, developed CPGs in less than 18 months. The resulting CPGs were concise, evidence based, graded, and designed for ease of implementation at the hospital or health-system level. These CPGs included sections on what works, what does not work, and what might work in special circumstances. Each CPG had a section on accountability, emphasizing that implementation must be orchestrated by hospital administrative leadership. Each guideline also included a section on process and outcome measures specific to the CPG. In addition, every CPG was modified with the help of patients to create patient-specific guides for use by patients in implementation. Based on their initial success, these CPGs were recently updated in a highly expedient fashion.

Conclusions

The IOM has strongly suggested that the current approach to development of CPGs is flawed and fundamentally needs a new approach.[3] Despite repetitive calls from many stakeholders for other entities to develop CPGs, to date, little has changed in the way most current CPGs are developed. Because of the many challenges in the current process, it will be difficult, if not impossible, for specialty societies to completely redirect the CPG development process to be effectively led by other entities.

Therefore, to create CPGs that the public trusts, that clinicians and patients can readily implement, and for which compliance can be easily measured, the CPG development process should continue to be led by specialty societies but with a new model that integrates other stakeholders, including patients. Specialty societies will need to use a consortium process in which authors are not just from the specialty society ranks and the focus is on concise, rigorously evidence-based, highly practical, implementation- and measurement-focused CPGs with COI transparency. This approach could be disseminated broadly and adopted so that specialty society CPGs can be effectively used in critical efforts to improve the quality and safety of care and reduce cost.

ARTICLE INFORMATION

Published Online: August 3, 2015. doi:10.1001/jama.2015.7462.

Conflict of Interest Disclosures: The authors have completed and submitted the ICMJE Form for Disclosure of Potential Conflicts of Interest. Dr Classen reported that he is owner of Pascal Metrics, a patient safety organization; serving as a consultant to Mentice; coauthoring a number of sections of the Compendium of Strategies to Prevent Healthcare-Associated Infections in Acute Care Hospitals and guidelines for the Infectious Diseases Society of America and the Healthcare Infection Control Practice Advisory Committee; and serving as chair of the National Quality Forum Committee on Patient Safety Common Formats. Dr Mermel reported coauthoring a number of sections of the Compendium of Strategies to Prevent Healthcare-Associated Infections in Acute Care Hospitals and guidelines for the Infectious Diseases Society of America and the Healthcare Infection Control Practice Advisory Committee.

REFERENCES

1. Pronovost PJ. Enhancing physicians' use of clinical guidelines. *JAMA*. 2013;310(23):2501-2502.

2. Reames BN, Krell RW, Ponto SN, Wong SL. Critical evaluation of oncology clinical practice guidelines. *J Clin Oncol*. 2013;31(20):2563-2568.

3. Institute of Medicine (US) Committee on Standards for Developing Trustworthy Clinical Practice Guidelines; Graham R, Mancher M, Miller Wolman D, Greenfield S, Steinberg E, eds. *Clinical Practice Guidelines We Can Trust*. Washington, DC: National Academies Press; 2011.

4. Henig O, Yahav D, Leibovici L, Paul M. Guidelines for the treatment of pneumonia and urinary tract infections: evaluation of methodological quality using the Appraisal of Guidelines, Research and Evaluation II instrument. *Clin Microbiol Infect*. 2013;19(12):1106-1114.

5. Bindslev JB, Schroll J, Gøtzsche PC, Lundh A. Underreporting of conflicts of interest in clinical practice guidelines: cross sectional study. *BMC Med Ethics*. 2013;14:19.

6. Jacobs AK, Anderson JL, Halperin JL, et al; ACC/AHA Task Force Members. The evolution and future of ACC/AHA clinical practice guidelines: a 30-year journey: a report of the American College of Cardiology/American Heart Association Task Force on practice guidelines. *Circulation*. 2014;130(14):1208-1217.

7. Lopez-Jimenez F, Simha V, Thomas RJ, et al. A summary and critical assessment of the 2013 ACC/AHA guideline on the treatment of blood cholesterol to reduce atherosclerotic cardiovascular disease risk in adults: filling the gaps. *Mayo Clin Proc*. 2014;89(9):1257-1278.

8. Brawley O, Byers T, Chen A, et al. New American Cancer Society process for creating trustworthy cancer screening guidelines. *JAMA*. 2011;306(22):2495-2499.

9. Yokoe DS, Mermel LA, Anderson DJ, et al. A compendium of strategies to prevent healthcare-associated infections in acute care hospitals. *Infect Control Hosp Epidemiol*. 2008;29(suppl 1):S12-S21.