Addressing Safe Opioid Prescribing: A Structured Framework for Organizational Needs Assessment

To the Editor: In 2001, *Crossing the Quality Chasm* reported a gap of 17 years between discovery and implementation of improvements. This recognition led to a surge in quality improvement and the new field of "knowledge translation." Since then, a body of literature focuses on different approaches.[1] Yet, implementation of best practices across care teams and geographic regions remains dauntingly challenging despite advances in the science of improvement and solid models for replicating best practices. The challenge lies with the complex interrelationships between clinical processes, work settings, and system changes which generate both intended and unintended consequences.[2,3] The current environment dictates accelerated, if imperfect, solutions.

To address the need for opioid stewardship, we reviewed industrial models for performance evaluation.[4] Nonhealth care enterprises have successfully maintained common standards despite differences in local environments. We then applied these principles through a series of iterative questions for performance needs assessment. The figure outlines the result; a model designed to accelerate Mayo Clinic's response to the US opioid public health crisis, but applicable to nearly any large problem.

To confront crises in health care, problems and goals for successful improvement need to be defined first. Identifying improvable gaps for individual, manageable projects is an imprecise science. For opioid stewardship, the question, "Are expectations clear?" proved a useful starting point. Guideline development and deployment improves clarity. However, while prescribing guidelines provide clarity, simply defining best practice cannot ensure change. Human, environmental, and systems factors significantly influence successful implementation and improvement.[4]

This model provides a path to accelerate improvements. Each step outlines the need for individual projects to improve gaps. Additionally, as the overall problem is improved, the process can be iteratively reexamined for further opportunities. While this framework is useful for identifying gaps both for overarching problems and individual projects, it doesn't specifically define metrics or implementation and control strategies, but reserves those actions for specific projects. Those projects can then deploy problem solving assignments as required. As an iterative model, consideration of each factor in the framework doesn't preclude simultaneous work, allowing flexibility in pace and workload.

In our example on opioid prescribing, this framework offered a useful way to tackle a mammoth problem. We know that patients and health care providers alike are aware of the overprescribing of opioids and genuinely want to do the "right thing." Still, opioid prescribing has not decreased significantly despite that widespread awareness and buyin.[5] Put simply, we don't know why we still prescribe so many opioids. That makes crafting effective interventions nearly impossible, and many efforts have failed to progress, languishing in attempts to define the complex problem as it affects nearly all aspects of clinical care. By using this framework for needs assessment, organizations can systematically identify actionable interventions based on needs as they are recognized.

Kathryn W. Zavaleta, MHSA
Department of Management Engineering & Internal Consulting
Mayo Clinic
Rochester, MN

Casey M. Clements, MD, PhD
Department of Emergency Medicine
Mayo Clinic
Rochester, MN

Potential Competing Interests: The authors report no competing interests.

1. Birken SA, Nilsen P. Implementation science as an organizational process. *Health Care Management Review*. 2018;43(3):181.
2. Dilling JA, Swensen SJ, Hoover MR, et al. Accelerating the use of best practices: the Mayo Clinic Model of Diffusion. *Jt Comm J Qual Patient Saf*. 2013;39(4):167-176.
3. Wilson PM, Boaden R, Harvey G. Plans to accelerate innovation in health systems are less than IDEAL. *BMJ Qual Saf*. 2016;25(8):572-576.
4. Juran J, Godfrey AB. *Quality handbook*. New York, NY: McGraw-Hill; 1999:173-178.
5. Jeffery MM, Hooten WM, Henk HJ, et al. Trends in opioid use in commercially insured and Medicare Advantage populations in 2007-16: retrospective cohort study. *BMJ*. 2018;362:k2833.

 © 2019 Mayo Foundation for Medical Education and Research. Published by Elsevier Inc. This is an open access article under the CC BY-NC-ND license (http://creativecommons.org/licenses/by-nc-nd/4.0/).

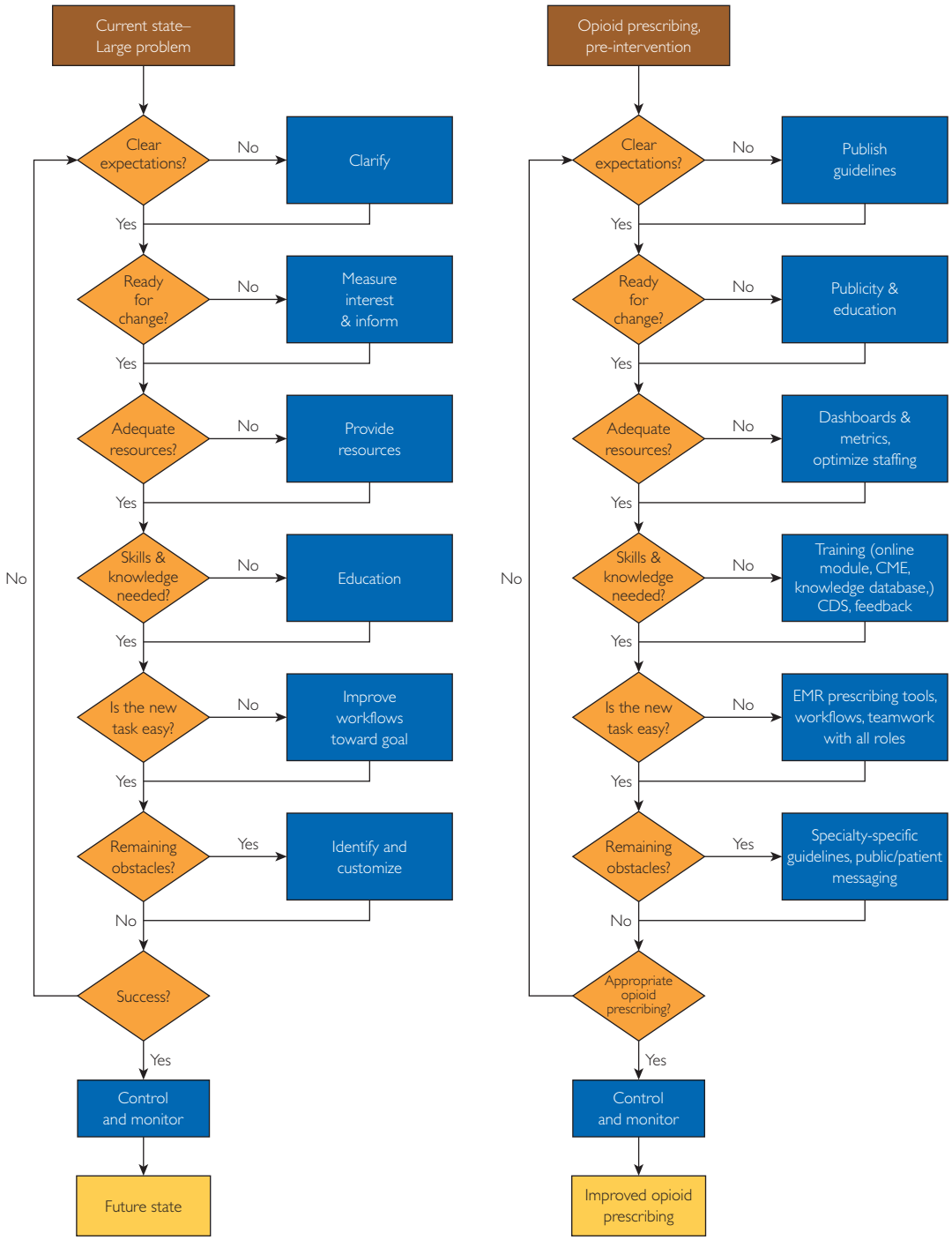

FIGURE. Conceptual framework for needs assessment for improving large problems in health care. CDS = clinical decision support; CME = continuing medical education; EMR = electronic medical record.