Composite Measures of Health Care Provider Performance: What Works?

New York, New York, December 2, 2015—Composite measures are a relatively new arrival on the performance measure scene. Many federal, state and private organizations are adopting them for quality monitoring, provider profiling, and pay-for-performance programs. But not all approaches to composite measures are alike. In a new study in the December issue of The Milbank Quarterly, Michael Shwartz from the Boston University Questrom School of Business, and colleagues, highlight the advantages and disadvantages of different approaches to creating composite measures and summarize key issues related to the use of the various measures. They point out that because of the sensitivity of results to the methods used to create composite measures, careful analysis is warranted before deciding to implement a particular method.

Background

Since the Institute of Medicine’s 2001 report Crossing the Quality Chasm, there has been a rapid proliferation of quality measures. Composite measures are proving to be a useful complement to individual performance measures since they provide an overview or summary of performance.

The plethora of recently developed performance measures may contribute to confusion and add to the burden of managers and users who want and need simple ways to understand whether and by how much an organization is improving. Composite measures serve multiple purposes and stakeholders. Macro-level measurements can provide a summary of the extent to which management has created a “culture of excellence.” Senior leaders might use them to benchmark their organization’s performance against others. Managers might track a particular service. Patients selecting a provider might find a single number summarizing different dimensions of performance easier to use than a large number of individual performance measures.

Findings

In the study, the researchers look at difference approaches to creating composite measures. For instance, they illustrate the implications of different weighing schemes (opportunity-based weights, numerator-based weights) and some of the best approaches for facility-level measures, and aggregate measures at the patient level. Each of the variety of approaches has advantages and disadvantages, say the researchers. No one approach is superior, although the impact of using one approach or another is likely to be dependent on the data set and the context in which the composite measure is being used.

The researchers note that there is much to learn about how different types of composite measures might differently affect the behavior of key stakeholders, such as senior leaders of hospitals and health plans, payers, providers, researchers, and consumers/patients. “By discussing major issues associated with developing and using composite measures, this article can increase understanding of composite measures and lead to both more informed policy discussions and policy relevant research,” says Shwartz.
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