Utility of routine data sources for feedback

The paper provides an analysis of cancer-related variables that could be available in a variety of data sources to measure the quality of cancer care in Australia. They range from the least cost-intensive but also the least detailed about cancer treatment to the most cost-intensive and detailed in terms of longitudinality or comprehensiveness.

An early review by Brook et al. compared the usefulness of data sources for internal medicine and surgery. Researchers have time and again been stymied by the cost of gathering data that are not routinely available, especially for quality improvement and accountability. This work extends the effort to include cancer care.

The comments that follow are offered to clarify the manuscript.

Abstract

Methods: The first sentence (and later text) covers a great deal of ground that may not be obvious to readers. The most critical is that guidelines do not provide measures. Guidelines use evidence to describe best practices, but the creation of measures is an exhaustive process in which a numerator and denominator must be specified in sufficient detail to enable others to consistently calculate rates; (for example, identify who should be included or excluded in both numerators and denominator.

The following comments are all discretionary.

The text might be edited to read “…a list of processes.”

A clarification in the following sentences could read “…according to the availability of data. The categories represent increasing cost per variable.”

Results: It is tempting to read the “further…%” as cumulative. However, category 3 is “extended” (that is, longitudinal), so they are not cumulative. The authors might comment on this.

The fourth category seems to be missing in this discussion.

Manuscript text
The authors might note that the most comprehensive sources—record review or observational sources are likely to be the least standardized and comparable.

The 2nd paragraph on California. It is not clear whether the problem was the cost of adding routinely collected variables or the cost of collecting information about specific quality measures. It would be very helpful to distinguish the cost of adding data elements to population based databases vs. the cost of retrieving data for special studies.

Methods: It would be helpful to provide examples of at least the first two types of data sources for readers who are not familiar with Australian databases or to specify whether the categories are intended to include other databases as well, such as US SEER databased, state-based registries, and the National Cancer Data Base (American College of Surgeons).

Results

Population-based registry. It is not clear to me what linkage is being referred to. In the US, for example, SEER is a representative sample, and linked to Medicare fclaims data or those 65 and older. But this is only a partial solution where there is no national database. Is there a different linkage being referred to here?

“…clinical registries…debatable.” An interesting point and it would be helpful to explore the tradeoffs between cost and potential gains.

Discussion

The authors might mention the potential of electronic databases that could “roll up” data elements routinely gathered as part of clinical care as a way out of the conundrum of study-specific data collection.

The authors might note that feedback is essential, but not self-implementing for improvement. The most useful feedback tends to be detailed enough to indicate where clinicians might focus. I believe the logic model being described is the following: evidence to guidelines- to node selection – to measure development – to accurate and timely measurement of compliance–to feedback to hospitals and their clinicians-to clinicians who determine priorities for improvement – to clinicians and staff who develop implementation plans. This would be an iterative process in which repeated measurement shows improvement/no improvement with feedback to clinicians and/or refinement and updating of measures based on new evidence, data availability, and resources.

The authors might mention that a number of cancer-related measures have been developed already that are based on data availability; for example Desch et al., 2008 and the ASCO-NCCN measures.

Various copyediting suggestions are not detailed here.

Level of interest: An article whose findings are important to those with closely related research interests
Quality of written English: Acceptable

Statistical review: No, the manuscript does not need to be seen by a statistician.

Declaration of competing interests:
I declare that I have no competing interests