

C15 Health care quality and safety measures based on administrative data: From development to application

Leader/s: Romano, P.S

Objective and rationale:

The objective of this workshop is to discuss the measurement of hospital quality and patient safety using administrative data, from indicator development to application. Following this workshop, participants will be able to:

1. Assess the validity of indicators of health care quality and patient safety using a scientifically based evaluation framework that incorporates literature review, empirical analysis, and structured clinical panel review.
2. Discuss a specific example of the AHRQ Quality Indicators,^{1,2} which are based on ICD-9-CM coded administrative data, and the USA experience using these indicators in quality improvement and comparative reporting applications. Attendees will be encouraged to consider the US experience in the context of their own health care systems.
3. Discuss a variety of mechanisms for involving and supporting key stakeholders, to make nationally or regionally developed quality indicators based on administrative data more relevant and useful to providers, consumers, managers, and purchasers of health care.

Providers, payers, policy makers, and patients are increasingly demanding information on quality of care to help guide their decisions. Concurrently, progress in electronic data collection has enhanced opportunities to provide data related to health care quality.

Administrative or discharge-based data are readily accessible and representative of large patient populations. Health services researchers have taken the lead in exploring the limitations of and opportunities for utilizing these data sets to illuminate quality concerns. Internationally, many countries collect large datasets similar to the ICD-9-CM coded administrative datasets used in the USA. By examining the process of AHRQ Quality Indicator development, which included a scientifically rigorous evaluation framework, and reviewing how these indicators have been applied in the USA, participants from all countries will gain new perspectives on how administrative data can be used to evaluate health care quality and how the results can inform and improve health care delivery.

Outline for Workshop content:

Development and evaluation of the AHRQ Quality Indicators by the UC-Stanford Evidence-based Practice Center.

This presentation will describe the development and refinement of the AHRQ Quality Indicators, highlighting our implementation of a scientifically based evaluation framework. This framework included: (1) structured literature review to ascertain published evidence of precision, susceptibility to bias, coding validity, and construct validity; (2) empirical analyses using multivariate signal extraction methods to assess precision at the provider level, susceptibility to bias, and construct validity; and (3) structured two-stage review by multidisciplinary clinical panels to establish consensual validity.

Case studies of the application of indicators in provider organizations.

Following the release of the AHRQ Inpatient Quality Indicators (one of three components of the entire Quality Indicator package), The independent application of these quality indicators in Texas and through a New York coalition demonstrated the complexities of use with a heterogeneous population of hospitals for quality reporting and internal quality improvement

Interactive small group discussion on the application of indicators.

Three small groups will discuss the opportunities, complexities, and future of quality indicators based on administrative data for the following applications: (1) comparative reporting, (2) quality improvement, and (3) international uses.

Application of quality and safety indicators: Lessons learned from the AHRQ QI Advisory Committees.

Chair/ Leader:

Patrick Romano, M.D., M.P.H., Associate Professor at University of California Davis, is a physician educator and health services researcher, board certified in both internal medicine and pediatrics. Dr. Romano has participated in expert panels for the Joint Commission on the Accreditation of Healthcare Organizations, the Center for Medicare and Medicaid Services, and AHRQ. Dr. Romano has worked with the California Office of Statewide Health Planning and Development on a series of legislatively mandated hospital performance studies.

Co-leaders/ Presenters:

Denise Remus, Ph.D., R.N., is a senior research scientist at the Agency for Healthcare Research and Quality (AHRQ), leading the Agency's efforts in implementing, analyzing, and evaluating the AHRQ Quality Indicators. She is also involved in evaluating and selecting measures and evaluation methods for the National Healthcare Quality Report and the National Quality Forum (hospital quality measures)

Kathryn McDonald, M.M., is the Executive Director of the Center for Primary Care and Outcomes Research at Stanford University, and Associate Director of the Stanford-UCSF Evidence-based Practice Center (EPC). She has led federally funded projects on health care quality and patient safety including the *Refinement of the HCUP Quality Indicators*; *Measurement of Patient Safety Based on Hospital Administrative Data—The Patient Safety Indicators*; and *Making Healthcare Safer: A Critical Analysis of Patient Safety Practices*