## **Editorial**

## SHEA and JCAHO: Partners in Science

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In the 1980s, there were dramatic changes in the United States healthcare delivery system. All interested parties began to demand greater efficiency and more objective evidence of the quality of care. It became clear to the Joint Commission on Accreditation of Healthcare Organizations (JCAHO) that its historical primary focus on the structures and processes of care could assess the capability of a healthcare organization to provide quality care, but not whether quality care actually was delivered ie, actual performance. To assess performance, it would be necessary to measure the outcomes of the organization's processes, including patient health outcomes. Consequently, in 1986 a major transition in evaluating healthcare organizations began with the Joint Commission's Agenda for Change. The specific objectives of this transition were: 1) revision and reorganization of Joint Commission standards, first, to reduce their number and complexity and refocus them on those clinical, support, management, and governance systems and processes, called "important functions," that are most important to patient health outcomes, and second, to foster continuous improvement in the performance of these functions and in their outcomes; 2) improvement in the survey process to direct greater attention to the effectiveness of collaboration and integration throughout the entire organization in performing these functions and in continuously improving them; and 3) establishment of a national performance measurement system that includes uniform, objective measures of each organization's performance and a resultant reference database that permits comparison with the performance of other

organizations. This last objective will be the focus of this editorial.

JCAHO began its quest for performance measurement capability by developing a series of clinical indicators. The first indicators were developed for obstetrics and anesthesia-related perioperative care. Subsequently, indicator sets were developed for trauma, oncology and cardiovascular care, and medication use and infection control. JCAHO used three main phases to develop its indicators: identification, Alpha testing, and Beta testing. Indicators initially were proposed by multidisciplinary groups of national experts that identified relevant, important, measurable processes and outcomes of care. Alpha testing of proposed indicators evaluated their face validity, established uniform data element definitions, and assessed data availability. Beta testing in 200 to 300 hospitals evaluated data element and indicator reliability, the feasibility of data collection and transmission, data analysis and risk-adjustment methodologies, the form and content of comparative feedback reports, and the validity (ie, utility) of the indicator data. Based on the Beta test, significant improvements were made in the system and the indicators themselves. On January 1, 1994, the Indicator Measurement System (IMSystem) was made available by the JCAHO for voluntary use by hospitals that want to evaluate their performance. The system includes 10 indicators in the areas of obstetrics and perioperative care; in January 1995, 20 oncology, cardiovascular, and trauma indicators will be added. Comparative data in these clinical areas soon will be available from JCAHO through participation in the IMSystem; in 1996, indicators for infection control and medication use will be added. Participa-

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tion in the IMSystem may become part of the JCAHO accreditation process in 1997.

Despite the enormous investment of time and money in developing and testing JCAHO indicators, the job of indicator refinement is never complete. An indicator is not a direct measure of quality; rather, it is a quantitative measure that can be used to measure the performance of functions and processes and their outcomes. These measures can serve as guides to improving the quality and efficiency of healthcare delivery, but interpretation of indicators will not be self-evident. For many indicators, there is no inventory of experience or scientific knowledge that can serve as a reliable basis for understanding the causes of variation in indicator data within or among healthcare organizations. Thus, an institution will not necessarily know how to evaluate alternative processes of care that will achieve improvement, as reflected in the indicators. Further, it is likely that even more efficient and effective measures of the care process and of outcomes will be found over time. Thus, indicators will need to be improved continuously, much as infection control indicators have evolved and improved over the last 20 years to increase the validity of inter-institutional comparisons.

With this in mind, The Society for Healthcare Epidemiology of America (SHEA) approached JCAHO to determine interest in a joint project to study, understand, and improve JCAHO indicators. The Project to Monitor Indicators (PMI)<sup>1</sup> is the result of these discussions. Both JCAHO and SHEA stand to benefit from this collaboration. From the Joint Commission's perspective, the results of PMI will make JCAHO indicators more useful to those institutions participating in the IMSystem. Further, they will aid in better understanding of the relationship between indicators and standards in the Joint Commission accreditation process. PMI will advance the state of knowledge regarding quality measurement and the

relationship between structure, process, and outcome measures of quality. The study will provide the information needed to refine and enhance the indicators to continuously improve their reliability and usefulness.

As a cosponsor of PMI, SHEA should reap great benefits for its investment. SHEA will actively participate in the recruiting of participating institutions, and will help direct studies and determine PMI priorities. These functions are related directly to SHEA's goals to promote epidemiologic research in healthcare. Hospital epidemiologists at all participating institutions will work together to ensure accurate, reliable data; address issues of confounding; and establish causal links between processes of care and outcomes. Results from PMI will be presented, among other places, in Infection Control and Hospital Epidemiology and at the SHEA Annual Meeting. It is hoped that these presentations will entice other health services researchers to join with SHEA and increase the diversity of interests of our membership. Perhaps this project will convince all healthcare epidemiologists that their epidemiological skills can make a real contribution to continuous improvement in the quality of clinical medicine.

Many parties other than JCAHO and SHEA will benefit from this study, including providers, purchasers, payors, and patients. The ultimate beneficiary of PMI will be the patient. An organized comparative study, such as the one proposed, can accelerate the pace of quality improvement in healthcare throughout the United States, and improved care will mean improved patient outcomes.

## REFERENCE

 Kritchevsky SB, Simmons BP, Braun BI. The Project to Monitor Indicators: a collaborative effort between the Joint Commission on Accreditation of Healthcare Organizations and the Society for Healthcare Epidemiology of America. *Infect Control Hosp Epi*demiol 1995;16:33-35.