Editorial

Of Guides and Guidelines

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Scientifically based modern medicine is broad, deep, and in constant experiment. Following the literature of this science, recognizing and prioritizing the applications to patient care, choosing the optimum combinations and timing of clinical tests and interventions, and applying these in a timely fashion for today's patient has become increasingly difficult for even the most skilled and focused practitioner. The difficulties in the uniform application of these skills is evident in the marked variation in practice(s) reported in investigations of interventions in different populations in the United States.[1] Attempts to understand these variations and to come to consensus in order to optimize the use of medical care resources has led a broadening group of medical professionals to explore the development and use of various guidelines.[2] It is then a small step from the issuance of such guidelines to their use by various agencies as standards or indicators by which "quality of care" may be explored.

The development of guidelines and their derivative indicators in a practice target area is both deceptively simple and immediately contentious. The topic literature is rarely uniform in either quality of study or details of intervention and almost never in the described characteristics of the population(s) included. The information required for guideline development and their application includes standard nomenclatures and definitions, common classifications, linkages over time, determination of stage, severity, and comorbidities in the host patient, and standard judgments of outcome, including those related to comfort and function. Except for major cooperative studies, similar groupings of sufficient size for comparative analysis are frequently unavailable.

Application of a guideline for evaluation requires, at a minimum, acceptable comparable data in retrievable form, archival data bases for storage, editing, and analysis, and the standard communication links necessary to tie this process together. Group analysis and comparisons over time may then provide the screening feedback critical to recognizing variations that can be studied and linked at the local or personal level to changes (improvements) in the care process for better patient outcomes. Experience indicates that we, as individuals or as institutions, are rarely comfortable as poorly performing outliers and that most often we "self correct" when given the appropriate information and opportunity to do so.

Lacking as we do most of the institutional information tools necessary to carry out the above tasks, frantic as we are for short timeline resolutions, and suspicious as we are of cooperatives that suggest centralization, it is not surprising that we find continuing variation in outcomes and costs beyond biological reason. As one potential solution, Kazlauskas and Nadzam, in the following article, outline the iterative process the Joint Commission on Accreditation of Healthcare Organizations (JCAHO) has undertaken, with representative infection control professionals, to develop and test infection control indicators as a part of its program, Agenda for Change.[3] This program is an attempt by the JCAHO to redirect its accreditation process to improve its monitoring of institutions through the development of indicator-related data sets in JCAHO-supported national data bases and to provide feedback comparisons to cooperating institutions for their use in improving care.

This is a substantial undertaking and one that

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should be applauded by the healthcare community, both for its professional grass-roots-up methodologies and for its goal of continuing review and improvement through data collection, analysis, and feedback. Other initiatives in the form of practice and other guideline efforts are now appearing in the work of many professional groups (Association for Practitioners in Infection Control, The Society for Hospital Epidemiology of America, and Infectious Disease Society of America) and governmental agencies (Centers for Disease Control [CDC] and the Agency for Health Care Policy and Research). These guideline efforts share many of the initial methodologies of the JCAHO programs, forming expert panels, reviewing by semi-Delphi techniques the available literature and its quality, and expressing consensus statements in the form of guidelines for practice. While these alternative guideline efforts may have the advantage of providing a more rapid initial review for distribution of findings, they may fall short of the JCAHO long-term goals in that they will not have the same potential for continuous improvement offered by a monitored archival data base as a focus for comparisons. Guidelines lacking this connection have the potential for rapid aging, requiring repeated ad hoc updating, and may have a significant potential for "Delphi variation" over time.

The renewed vigor in the National Nosocomial Infection Surveillance (NNIS) project of the CDC may provide a parallel environment in another improving data base for infection control professionals.[4] Whatever their professional base, all guideline and data base project groups must recognize and deal with the issues of the quality of data presented for inclusion in the analysis. Re-analysis is possible from data in studies in the peer-reviewed literature, either individually or through meta analysis of groups, but retrospective determination of the quality of data or data collection are seldom possible beyond interpretation of the methods sections of the publication.

The cooperative and monitored data base collections of the NNIS and the proposed JCAHO type allow an ongoing opportunity to define and determine the quality of accepted data but do not assure their presence. However, tests and audits of data contributions may be built into the collection tools and processes, including on-site monitoring on a focused or ad hoc basis.

Efforts like these of the JCAHO suffer significant start-up costs, because only limited surveillance systems and little electronic capture of patient data are available in most institutions. The institutional infection control practitioner provides some resource in infection control indicators collections, but even those who are a part of the more detailed and expansive NNIS collections are finding it difficult to comply with the JCAHO expanded data requirements. In the JCAHO infection control indicator project, β testing is underway and will be useful in further defining standard criteria, content, and methods, as it has been in the three development decades of CDC-assisted infection control process. Common needs in the many indicator groups will define elements for collection that may be efficiently shared for analysis, potentially diminishing some of the surveillance load.

One may predict that confirmatory findings from multiple data bases (NNIS, JCAHO, and the National Center for Health Statistics) will increase the confidence in their general use and aid in the politics of support for their continued development and improvement.

Expanded standardized abstracts of the patient care record and realization of the goals of the National Academy's Institute of Medicine report on the ***Computer-Based Patient Record***[5] will assist the JCAHO and other cooperating professionals' efforts in providing an expanding group of standard data elements in electronic form and an enlarging group of institutions and professionals comfortable with the use of these computerized archival data bases as part of a continuing feedback loop for analysis and direction of improvements in patient care and the linked optimum use of resources to achieve these in our patients.

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