Quality of Care and Performance Improvement:
An Important New Emphasis Whose Time Has Come

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Background

In December of 2003, the North Carolina Medical Society (NCMS) appointed a Task Force on Quality of Care and Performance Improvement. The NCMS Task Force, consisting of 13 members and six consultants, is charged with "recommend[ing] actions the NCMS [could] take to expedite the employment of available resources to address documented problems with care quality and patient safety in North Carolina." The Task Force has met on a number of occasions since its initial appointment and has reviewed the literature on quality of care and perfomance improvement, looking at the national experience as well as experience in our own state. The Task Force has discussed the range of actions that the North Carolina Medical Society could take to create a safer and more effective healthcare delivery system for our patients. The Task Force is submitting a white paper with specific recommendations on the subject to the North Carolina Medical Society this fall.

At the invitation of the Editor of the *North Carolina Medical Journal*, the Task Force summarized some of the principal themes developed during its early work. Members of the Task Force are contributing papers to the *North Carolina Medical Journal*—papers designed to share these ideas and themes with a broad spectrum of healthcare professionals, healthcare organizations, and policy makers in our state. We hope that these writings will serve as a basis for further discussion of how North Carolina physicians can work in partnership with others to elevate the safety and effectiveness of care available to the citizens of North Carolina.

A Philosophical Perspective on Quality of Care and Its Improvement

From the outset, the Task Force was concerned with a few central ideas that are well described in various literature:

(1) Insofar as there exists a body of knowledge from which medical decisions should be made, there is a presently a lack of consistent application of this knowledge in clinical practice. This is known as the knowledge-practice gap. Clearly any action recommended by the Task Force must incorporate ways to address this issue.

(2) The Task Force was concerned with national (and state and local) publicity related to the volume of errors occurring in routine medical care (particularly since the publication of the national Institute of Medicine report, *To Err is Human*, in 2000).[1] This has raised feelings of alarm and distain among the general public. The publicity has also spawned expectations that healthcare professionals and provider organizations will take specific steps to ensure that these systematic errors are minimized or eliminated. Task Force members recognized the effort to reduce the frequency of errors as an essential component of overall system performance and care quality and that Task Force recommendations must address this issue.

(3) The Task Force has taken the view that quality of care is a broader concept than simply the issue of errors or adverse events (safety). The effectiveness of healthcare delivery—the extent to which desired patient outcomes are achieved—is the other side of the quality coin. The Task Force's recommendations will address the extent to which the delivery of healthcare in general, and the practice of medicine by physicians in particular, achieve desired outcomes. To that end, the Task Force will recommend some initiatives aimed at improving the decisions and actions of practicing physicians.

(4) The Task Force is aware of recently documented care quality deficiencies in the United States, as well as disappointing efforts to address these deficiencies through interventions

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targeted to either individual practitioners or care delivery systems. For example, McGlynn, et al.[2] recently presented data to show that United States adults receive only about half of the recommended care for a group of common acute and chronic conditions and preventive services (a *process* indicator of care quality). Comparisons of key quality of care indicators delivered in 12 United States metropolitan communities show that for 439 indicators across 30 conditions and types of preventive care (representing 52% of the reasons adults use ambulatory care services in this country and 46% of the reasons for which they are hospitalized), on average, adults in these communities were receiving 50 to 60% of the recommended care. These studies, which found considerable variation among communities studied, indicate that there are significant quality differentials among communities with regard to these indicators of service "omission" for which there is solid evidence of appropriateness. Our own North Carolina Teachers' and State Employees' Comprehensive Major Medical Plan has recently disseminated data showing that there are substantial numbers of North Carolina state employees, dependents, and retirees with diagnosed chronic diseases for whom standard, evidence-supported healthcare services are not being provided. Medical Review of North Carolina (MRNC) has shown similar findings with respect to patients discharged from North Carolina hospitals following a myocardial infarction. Clearly there are reasons to examine the patterns of such services for defined clinical entities. It is important to ascertain the extent to which explicit services covered by standard health insurance plans are not provided, even though there is substantial evidence of their appropriateness and effectiveness in the care of specific patients.

(5) The Task Force recognized that there are arguments with the current emphasis on evidence-based approaches to medical practice, particularly as this movement has led to the promulgation of so-called "clinical guidelines" pertaining to the care of patients with particular conditions or diagnoses by various professional, third-party, and governmental agencies. Even so, few can deny the merit of disease management strategies. These strategies have attempted to encapsulate clinical guidelines in an organized and cost-effective strategy for managing the care of large numbers of individuals who have similar clinical diagnoses/conditions and for whom it is possible to standardize both the patterns of healthcare encounters, related services, and pharmaceutical usage. Despite these advances, the fact remains that there is a substantial lack of evidence, by any criteria used, to evaluate the effectiveness of many of the treatments and strategies for disease management in use today. Hence, there is a continuing need for the development of the clinical evaluation science base of contemporary medical practice. The fact that randomized, placebo-controlled research evidence does not yet exist (or perhaps cannot ever be developed) to support every clinical procedure or maneuver does not mean that clinical decision making has to sit idly by and remain non-responsive to the needs of patients. But, where such evidence is available, or where it can be amassed, it should be used to shape the clinical decisions of those on the frontlines of medical practice.

(6) The Task Force took heart from recent reports from studies in the United Kingdom and elsewhere indicating that for those clinical procedures *actually performed* or prescription medications *actually ordered*, the majority seem to be procedures and prescriptions for which there is evidence from randomized, controlled trials or convincing non-experimental evidence with high consensus among clinicians that these procedures or treatments are actually "evidence-based." for example, Mulligan, et al., reported in *The Lancet* that a *post hoc* analysis of 100 consecutive patients in a single medical ward in Oxford, England found 82% of the patient management interventions "...were based on high quality scientific evidence."[3]

Similar retrospective findings have been reported from internal medicine departments in Canada,[4] for dermatology outpatients in Denmark,[5] hematology-oncology clinics in the United States,[6] and thoracic surgical practice in Buffallo, New York.[7] The literature is rapidly growing in this regard, and these are only illustrative of the range of clinical situations where evidence-based approaches have been shown to be implemented. The point is: though the conduct of randomized clinical trials of every procedure or maneuver in medicine and surgery is a practical impossibility, there is substantial data available to show that not only is there a growing body of literature offering evidence of effectiveness of common medical and surgical procedures, but there are also data to show that the procedures being performed are ones for which there is supporting evidence of effectiveness.

The Value of Quality Improvement

The Task Force grappled with the question of establishing the *economic value* of quality improvement (the so-called "business case" for quality). This question comes up most often in discussions among purchasers of group health insurance (e.g., large employers) or among insurers themselves who ask whether investments in quality improvement programs or initiatives yield a financial benefit to those who either purchase or insure healthcare for defined beneficiary populations.

The Task Force believes that despite the difficulties of establishing the "business case" for quality improvement, the fact that there are usually clearly demonstrated health and economic benefits to those served constitutes a sound reason for the North Carolina Medical Society to lead the way in promoting the improvement of quality of care and the performance of healthcare systems in our state. We plan to do so in the interest of benefiting the health and healthcare available to all North Carolinians.

This special issue of the Journal begins with a two substantial Issue Briefs. The first is prepared by prepared by two colleagues affiliated with Medical Review of North Carolina, the federally-designated Quality Improvement Organization (QIO) serving

North and South Carolina. Drs. Meera Kelley and Ross Simpson have offered a comprehensive overview of key health policy issues surrounding the problems of quality improvement and assurance. The second is by Drs. Sharon Hull, Leila Kahwati, Elizabeth Kanof, and Ms. Jennifer Proko. It offers a detailed discussion of how considerations of quality may be integrated with mainstream clinical practice in primary care. Their reviews are followed by papers on: data and information systems essential to quality improvement by Mr. Robert Weiser and Dr. Christopher Mansfield; evidence-based medicine by Drs. Charles Willson and Hadley Callaway; disease management approaches to quality improvement by Drs. John Mangum and Conrad Flick; educational programs addressing quality of care by Drs. Stephen Willis, Thomas Pulliam, and Thomas Bacon; efforts to make quality of care efforts "patient-centered" by Drs. Allen Dobson and Michelle Jones; and a summary paper on how quality of care and performance improvement efforts are mutually reinforcing by Drs. Noel McDevitt, William Walker, and Gordon DeFriese.

We are grateful to the authors of the papers appearing in this special issue of the *North Carolina Medical Journal*, most of whom are members of the Task Force on Quality of Care and Performance Improvement appointed a year ago. The preparation of these papers, and the deliberations which have led to their collection in this issue of the Journal, reflect the intensity of interest among these Task Force members, but also provide a template and a roadmap for further quality improvement initiatives taking place in our state. **NCMJ**

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