INTRODUCTION

The Health Care Authority in its responsibility for preparing the State Health Plan has set forth a framework including a set of issues that will be represented in the plan. The description of the issues includes a set of recommendations. That framework encompasses a definition of quality and several “action steps” to be addressed in the agenda. Those steps will be integrated with other information throughout the report.

The structure for constructing the agenda will be as follows –

• What is quality? Creating a context for the definition.
• Who ought to be engaged in establishing the agenda?
• Does a common framework exist that can be used as the structure for creating the agenda?
• What are the current benchmarks that can be used as “mirrors” for comparison?
• What methodological factors are relevant in this discussion?
• What recommendations follow from this review?

WHAT IS QUALITY?

Quality is a measure of the extent to which the provision of health care services meets established professional standards and is judged as having value by customers who receive the services. Another perspective is the degree to which actions taken or not taken maximize the probability of beneficial health outcomes and minimize risks. Other descriptions included within this broader context include quality as improvement – clinical, financial, functional, organizational, as “managing processes of care” rather than “managing the practitioners,” as the avoidance of error, the underutilization of services, the overuse of services and variation in practice. Can these definitions be retained and applied in the next millennium?

A historical review of quality measurement includes peer review of practitioners, organizational and practitioner compliance with prescribed standards and quality improvement. The extent to which public attention is attuned to quality varies across the historical continuum. A 1990s definition of quality improvement includes measuring processes and outcomes of care rather than practitioners and focusing on clinical, financial, functional, and organizational performance.

The 1990s might be described as the age of “quality renewal.” During this 10-year period, the concepts of total quality management implemented in American industry and outcomes-based quality improvement were applied to health care by Brent James, Donald Berwick, Paul Bataldan, David Blumenthal, Robert Brook, Mark Chassin, David Eddy, Paul Ellwood, Paul Sanazaro, Homer Warner, John Wennberg, John Williamson, David Lansky, David Nash, Alan Tarlow, and John Ware. Considerable energy has been put into building an outcomes-based performance improvement infrastructure including methods and tools for measuring outcomes. At the same time, organizational leaders such as the National Committee for Quality Assurance (NCQA), the Joint Commission for the Accreditation of Health Care Organizations (JCAHO), FACCT Consumer Information Framework, National Association of Children’s Hospitals (NACHRI), and the National Association of Health Plans incorporated outcomes-based performance improvement as the standard for assessing quality of organizations. The process as well as the outcome is important in the identification of quality.

The age of “quality renewal” is a consequence of changes in the health care system. A number of factors create this renewal and include (1) the advent in American industry of “total quality management,” (2) the continued escalation of health care costs, (3) a shift to managed care – clinically and organizationally, (4) the extensive number of people without insurance, (5) focused attention on behavioral risks that...
reduce health status, (6) greater consumer demand for quality information, (7) governmental demand for accountability of practitioners, and (8) the President’s Commission on Consumer Protection and Quality in the Health Care Industry. In 1989, Congress changed the research direction within the National Center for Health Services Research and gave the Center a new name—the Agency for Health Care Policy and Research (AHCPR). The direction changed to outcomes- or evidence-based medicine. The approach was characterized by the development of clinical practice guidelines. Finally, in 1996, President Clinton called for an advisory commission on “Consumer Protection and Quality in the Health Care Industry.” This commission was asked to examine several quality issues, including avoidable errors, underutilization of services, overuse of services, and variation in services. These quality issues encompassed critical factors that precipitated an age of “quality renewal.”

The quality focus will not only continue into the next century but also become a central factor in consumer choice and employer alignment with health plans, practitioners, and organizations that deliver services. Evidence of this is coming from groups such as the Pacific Business Group on Health, the President’s Commission, FACCT, NCQA, and JCAHO. These organizational leaders, researchers and leaders in performance-based improvement convened in May 1999 to assess the status of quality measurement. A couple of messages illustrate the fact that a quality agenda will be a vital part of the next century – a lack of cohesiveness among leaders regarding a common definition of quality and the public’s recognition that outcomes are integral to defining quality.

**Recommendation for defining quality**: Retain the general definition of quality, i.e., a measure of the extent to which health care services meet or exceed established standards and are considered valuable by consumers who receive the services. The term “standards” could be defined as established targets, appropriateness criteria, or guidelines. Further, this definition should be tailored to improve care for the citizens of West Virginia.

**A SYSTEMS APPROACH TO ESTABLISHING A QUALITY AGENDA**

Who are the stakeholders who have an investment in developing a working definition of quality, establishing the standards, selecting benchmarks, and determining what information is vital for consumers in making informed decisions? The stakeholders include consumers, purchasers, health plans, policymakers, practitioners, and provider organizations. The provider organizations include all entities that comprise the continuum of care – ambulatory and institutionally based care, acute and long-term care, and preventative care. Members of each constituency can be identified in West Virginia.

An organizational model that fits with a systems approach is that of a partnership of stakeholders. The partnership would be responsible for developing a strategic plan for implementing the quality agenda as outlined in the State Health Plan. Aims that the partnership might address in its strategic plan include:

- Improve the health status of West Virginians by establishing and monitoring outcomes compatible with the objectives of Healthy People 2010.
- Improve the capacity of West Virginia to measure quality based on research and evidence-based practice.
- Improve the capacity of West Virginia practitioners and organizational providers to adapt to change.
- Improve the capacity of West Virginia practitioners, organizational leaders, and policymakers to make decisions based on information that is based on reliable and valid data.
- Improve the ability of West Virginians to make decisions regarding the appropriate use of health services based on research and evidence-based science using reliable and valid data.
• Improve quality by increasing the ability of patients to take responsibility for their care and participate in making choices regarding their care.
• Improve quality by addressing resource needs that are identified in managing process and outcomes of care, including data on reimbursement and practitioners.
• Improve quality by creating channels of access for those without access to basic health care services.
• Improve quality by addressing health care financing as a central component for delivering services.

Recommendation for a systems approach: A Quality Advisory Council (QAC) should be established that is a private/public partnership of stakeholders from each entity of the care continuum. The QAC would be responsible for developing and implementing the quality plan, establishing statewide standards, identifying and selecting national benchmarks, monitoring selected quality outcomes, and creating a forum for measuring and reporting quality.

Recommendation for infrastructure support for the advisory council: The Advisory Council should be supported with the resources necessary to carry out its mission. Those resource requirements would be related to several variables – the stakeholders, the activity of the stakeholders, and the expertise of the staff. A system is comprised of stakeholders who are responsible for ensuring a continuum of care. That continuum is also affected by other factors, including integration of financing, clinical care management, case management, and community-based care. At present, those forces are not connected in any substantive manner. This reality separates what might be termed the “infrastructure for a continuum” and the realization of an “operational continuum of care.” The infrastructure is currently shaped by reimbursement streams more than any other factor, i.e., the delivery system configuration is more a consequence of how money flows than what is best for ensuring the improved health status of the people.

Recommendation for constructing an “operational continuum of care.” The stakeholders should develop strategies for ensuring a linkage between financing, clinical care management, case management, and community-based care.

FRAMEWORK FOR QUALITY MEASUREMENT

In 1980, Donabedian defined a theoretical framework that can be applied regardless of changing methods of measurement. The framework is that of structure, process, and outcome. Dr. Donabedian defined structure as “the human, physical, and financial resources that are need to provide care.” These resources are essential for providing care but are not guarantees that quality is present. Structure is analogous to the foundation of a house: As a house without a solid foundation is of little value, quality services cannot be rendered without resources. Process is the action necessary to meet the patient’s needs. These actions are with and between patients and providers. Processes are established based on scientific evidence or the ethics and values of society. They are important because the actions result in valued outcomes to the customer. Outcomes are the consequence of a process or action. Outcomes effect change in a patient’s current or future health status, improvements that can be physical, psychological, or social and can include health-related behavioral changes, including satisfaction.

The change seen in the 1990s was not with the framework but with a new approach to measurement based on the science of performance improvement that incorporates the framework of structure, process, and outcome. The major shift with the focus on improvement involves identifying and measuring the process and outcome components of care management. While structural indicators are essential for process and outcome to exist, they are no longer considered the essence of quality.
Process indicators are correlated with the outcome indicators, that is, outcomes are the consequences of processes. Outcomes extend beyond commonly accepted indicators of mortality, morbidity, length of stay, and discharge status to include patient satisfaction and indicators of health status such as immunization rates, sedentary lifestyle prevalence, returns to work, and obesity rates.

Process and outcomes indicators are drawn from the science of evidence-based medicine and applied by a multidisciplinary team. Measurement is data driven, with reported variation analyzed to either improve or maintain the care process. The knowledge gained from this approach is used for improvement at the level of the organization and comparison with external evidence-based standards.

**Recommendation:** The QAC should use the structure, process, and outcome framework to measure quality, including the science of performance improvement in the methodology/design.

### NATIONAL BENCHMARKS

National benchmarks are readily available and can be used in identifying our opportunities for improvement. Benchmarks can be identified for most services across the continuum of care. The following were identified in the literature:

- **ORYX** – developed by the Joint Commission on the Accreditation of Health Care Organizations. The indicators currently used are clinical but will eventually include health status, patient satisfaction, administration, and financial status.

- **HEDIS** – developed by the National Committee on Quality Assurance (NCQA). The current measures are childhood immunizations, adolescent immunizations, mammography rates, cervical cancer screening rates, beta-blocker rates, flu shots for the elderly, advice to quit smoking, prenatal care in the first trimester, diabetic eye exams, and follow-up after mental illness hospitalization. In 2000, HEDIS will expand to include high blood pressure, asthma, chlamydia, diabetes, and menopause management. In addition, NCQA assesses customer satisfaction with their health plans using the Consumer Assessment of Health Plans (CAHPs) instrument. Health plans accredited by NCQA must report customer satisfaction data. A plan’s report will be available soon on the World Wide Web.

- **FACCT (Foundation for Accountability)** – committed to measuring quality and communicating results in a way that makes sense to consumers. This model includes five categories based on how consumers think: (1) the basics, (2) staying healthy, (3) getting better, (4) living with illness, and (5) changing needs. The measures are drawn from a number of different sources, including HEDIS, CAHPS, public health databases, and FACCT’s own outcomes-focused and patient-focused measures. Existing FACCT measures are adult asthma, alcohol misuse, breast cancer, diabetes, major depressive disorder, health status, health risks, and consumer satisfaction. Their goal is to help consumers make purchasing decisions, manage their own health, and learn how to navigate the health care system.

- **SASI (Self-Assessment for System Integration)** – the National Chronic Care Consortium created a self-assessment tool for health care systems to use in planning, implementing, and measuring chronic care integration across their networks. The tool, which costs $2500, identifies nine objectives for chronic care integration relating to governance, management, and information systems, financing systems, high-risk populations, the continuum of services, disability prevention and care management, and seamless care and client involvement.

- **Professional Review Organizations (PRO)** – the Medicare Program’s peer review mechanism designed to improve hospital care. In West Virginia, the PRO is the West Virginia Medical Institute. In 1992, the Health Care Financing Administration (HCFA), through its Health Care...
Quality Improvement Initiative, endorsed the use of uniform outcome measures to assess quality. HCFA is urging PROs to focus on patterns of concern rather than individual problems.

- Patient Satisfaction – a number of different vendors have patient satisfaction instruments. One that is nationally recognized as measuring satisfaction from the customer’s viewpoint is PICKER.
- The National Committee for Quality Health Care published a guide to other findings in February 1999. Twenty different organizations are listed as making a major contribution to the examination of quality issues. Those organizations span the continuum from the United States General Accounting Office to the Institute for Health Care Improvement.

A further development to improve national benchmarks is a partnership among JCAHO, NCQA, and the American Medical Association (AMA) called the “Performance Measurement Coordinating Council.” Its purpose is to standardize performance measurement through a uniform set of measures covering patient care at every step. The measures must be grounded in evidence-based medicine, be valid and useful, and based on collectable data. The first measure will be in cardiology.

West Virginia hospitals accredited by JCAHO are participating in the ORYX process of improving care. The ORYX vendor for the hospitals is the Maryland Hospital Indicator Project. Seventy-two hospitals currently provide care in West Virginia, only 12 of which are not JCAHO-accredited. Of those 12, seven are critical access hospitals.

A West Virginia benchmark is Healthy People 2010, a document containing objectives pertinent to improving the health status of West Virginians. The state objectives flow from the national objectives and are data driven and localized. The work of developing the objectives was accomplished by 29 different work groups including individuals with varied expertise from different sectors of the state. Considerable data characterizing the health status of West Virginians are available through the Bureau for Public Health. Other data resources in the state include the Health Care Authority, Bureau of Employment Programs (Workers’ Compensation), Commission on Aging, provider organizations (not all data are public), Department of Transportation, Department of Revenue (data on alcohol sales), State Police (data on motor vehicle accidents and deaths associated with alcohol), and Kids Count.

The availability of “public” data varies and is specific to each “benchmark” indicator system. However, as consumer demand for quality information increases, so will the requirement for “public” access to data and the results of meeting outcome indicators. Data obtained by NCQA and FAACT will be available to the public via the Internet.

**Recommendation:** The QAC needs to become knowledgeable about the different national resources and work with the West Virginia Hospital Association, Bureau for Public Health, West Virginia Medical Institute, West Virginia Health Care Association, West Virginia Behavioral Health Care Providers Association, and others in making decisions related to benchmarks.

**METHODOLOGY/DESIGN FACTORS**

Performance-based quality measurement will lead to improved outcomes. However, the design includes rigor beyond filing paper work. Design factors associated with performance-based improvement include:

- identification of evidence-based process indicators that will directly affect an outcome;
- use of a multidisciplinary team to make changes when the outcome is not at a desired state;
- reliable and valid data to measure process and outcome indicators;
- information systems that can manage the data, and
- analytical resources to display and interpret the data.
The use of outcomes-based improvement may require specialized resources that are beyond the budgets of many provider organizations. Measuring quality outcomes will require creating a user-friendly system.

**Recommendation:** QAC should assess the critical mass of resources available to provider organizations to fulfill any requirements set forth for quality monitoring. Further, the QAC should examine ways to help provider organizations with improving performance.

**ACCOUNTABILITY FOR QUALITY**

Every person is in some manner responsible for ensuring quality. However, public accountability for shaping a policy agenda rests with the state. Since the state is its citizens, the approach needs to involve a representative group of individuals (stakeholders) working on behalf of everyone. The strategies developed by the stakeholders should be linked to quantifiable outcomes. Without specific measures, the public will have no method to ascertain if the strategies were met.

**Recommendation for accountability:** Accountability for quality should be tracked through measurable outcomes.
RESOURCES

The following list of resources represents a diversity of selections used to develop this agenda. It is by no means inclusive. Several other information sources were used, including organizational materials from NCQA, JCAHO, and others.


Donabedian A. *The Definition of Quality and Approaches to its Assessment.* Ann Arbor, MI: Health Administration Press, 1980.


Virginia Hospital Indicator Information.