THE NATIONAL QUALITY FORUM

A National Framework for Healthcare Quality Measurement and Reporting

A CONSENSUS REPORT

Foreword

With current expenditures of $1.3 trillion per year, healthcare, in the aggregate, is the nation's largest domestic enterprise. Despite its immensity and importance, affecting everyone's life at one time or another, surprisingly little is known about the quality of U.S. healthcare. The snapshots of information that are available are often disconcerting, and there is now widespread agreement that the quality of U.S. healthcare is not as good as it could and should be.

The National Quality Forum (NQF) was established to improve the quality of healthcare by standardizing quality of care performance measures and reporting mechanisms and by otherwise promoting, guiding, and leading quality improvement. Toward the end of achieving these goals through a coherent strategy, the NQF convened the Strategic Framework Board (SFB)–a nine-member group of highly respected quality improvement and relevant content experts–to propose a conceptual framework for healthcare quality measurement and reporting.

Derived from the SFB's work, this report presents 17 NQF-endorsed principles and statements of policy that comprise the beginning of a national framework for healthcare quality measurement and reporting. It provides short-term operational guidance that will be used when selecting performance measures for quality of care indicator sets; it identifies longer-term strategic areas that the NQF will pursue; and it sets forth policy statements that are important to improving healthcare quality.

Achieving consensus on a national framework for healthcare quality measurement and reporting is an important milestone on the road to improvement, but many challenges lie ahead. We thank the members of the SFB for their hard work, and we thank the NQF members for their thoughtful critique of the framework. We now look forward to operationalizing the framework's vision.

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A National Framework for Healthcare Quality Measurement and Reporting

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A National Framework for Healthcare Quality Measurement and Reporting

The National Quality Forum (NQF) is a private, nonprofit, public benefit corporation established to improve the effectiveness and efficiency of U.S. healthcare by standardizing healthcare quality measurement and reporting and by otherwise promoting, guiding, and leading healthcare quality improvement. The NQF is categorized as a voluntary consensus standards setting organization in accordance with the National Technology Transfer Advancement Act (NTTAA) of 1995 and the federal Office of Management and Budget Circular A-110.[1]

Background

In 1998, the President's Advisory Commission on Consumer Protection and Quality in the Healthcare Industry reported on the broad range of quality problems in American healthcare.[2] Among other things, the Commission concluded that widely accepted, standardized quality of care performance measures are essential to a market approach to healthcare. The Commission also concluded that the lack of such measures prevented healthcare providers from comparing the quality of the care provided to national benchmarks and prevented consumers and purchasers from using quality of care information to stimulate healthcare improvement. The Commission recommended the creation of a private organization to address this problem. Subsequently, the Office of the Vice President convened the

[1]Kizer KW. Establishing health care performance standards in an era of consumerism. *JAMA* 2001;286:1213-1217.

[2]The President's Advisory Commission on Consumer Protection and Quality in the Health Care Industry. *Quality First: Better Health Care for All Americans.* Washington, DC: Department of Health and Human Services;1998.

Quality Forum Planning Committee, which proposed a basic governance and operating structure for the National Forum for Health Care Quality Measurement and Reporting (now known as the National Quality Forum or NQF). The NQF was formally incorporated in the District of Columbia in May 1999 and became operational in February 2000.

The NQF's mission is to improve U.S. healthcare so that it can be counted on to provide safe, timely, compassionate, and accountable care using the best available knowledge. The NQF embraces the philosophy that healthcare quality data are a public good and should be in the public domain. Toward this end, members affirm a statement of principles indicating their willingness to use healthcare quality measures and to publicly disclose the results. The NQF also embraces the philosophy that high-quality healthcare is predicated on safe care.

One of the NQF's earliest initiatives was the appointment in December 1999 of a nine-member Strategic Framework Board (SFB) whose purpose was to (1) propose a national strategy for healthcare quality measurement and reporting; (2) articulate guiding principles and priorities for healthcare quality improvement, including the roles of key players; and (3) identify potential barriers to successful implementation of the recommended national strategy and possible solutions to those barriers. The members of the SFB are listed in appendix A.

During its 18-month tenure, the SFB frequently briefed the NQF Board of Directors and members on its evolving views about a national framework for healthcare quality measurement and reporting, obtaining feedback on the ideas as they were developed. In October 2001, the SFB forwarded to the NQF a final Executive Summary of its proposed framework (appendix B). This framework included 17 specific recommendations to be acted on by the NQF. These recommendations were carefully considered by NQF member organizations and the general public, and they were revised in response to the reviews. The recommendations were subsequently voted on and overwhelmingly approved by the NQF membership and in May 2002 by the NQF Board of Directors.

Purpose of the Framework

The purpose of the NQF National Framework for Healthcare Quality Measurement and Reporting is three-fold.

First, it provides a standardized framework for identifying voluntary healthcare quality consensus standards that has been widely endorsed by a broad cross section of the myriad stakeholders concerned about healthcare quality. This nationally endorsed framework will be used as a foundation for many of NQF's activities. It is also available for use by other organizations seeking to improve healthcare quality through measurement and reporting.

Second, the framework identifies key strategic areas that the NQF will pursue to maximize the potential for improvement once standardized healthcare quality measures are available.

Third, the framework sets forth an NQF-endorsed, consensus-driven platform and statement of principles for healthcare quality improvement in the United States.

Of note, these principles are not requirements that will be categorically imposed on all projects, since all the potential vagaries of future projects cannot be identified at this time. Nevertheless, these recommendations provide explicit Member-based guidance that project Steering Committees should consider and for which Steering Committees shall explain to Members when deviations occur.

Systematic Identification and Standardization of Healthcare Quality Standards

A cornerstone of the NQF's operational strategy is to standardize the myriad measures of healthcare quality that are currently in use. Four principles of the consensus framework will guide NQF projects undertaken to achieve such standardization.

Quality Standard Principle 1: The NQF should establish specific national goals for healthcare quality improvement that:

- are consistent with the six aims for the healthcare system adopted by the Board of Directors in the NQF Purpose Statement–i.e., safe, beneficial, timely, patient-centered, efficient, and equitable;
- will drive the selection and implementation of common measures;
- relate to the products of the healthcare delivery system;
- relate to clinical conditions that are prevalent or have a high risk of disability, suffering, or death or that address cross-cutting issues not specific to a clinical condition but integral to healthcare quality improvement across multiple clinical conditions, systems, or processes;
- represent the needs of diverse populations (including but not limited to minority and ethnic populations, individuals with chronic ailments, urban populations, rural populations, and socio-economically disadvantaged populations);

- are based on evidence or expert opinion that effective clinical care or system and process improvement strategies exist; and
- are supported by expert groups and compelling to relevant constituents.

Quality Standard Principle 2: The NQF should endorse a parsimonious common set of quality measures that is incrementally improved based on feedback from all providers and other key users (e.g., consumers, purchasers, health plans, and payers) of the information. Preference should be given to selecting common measures that:

- are linked directly to a national goal;
- have a clear and compelling use;
- do not impose undue burden on those who provide data;
- help consumers select plans, providers, or treatments; and
- help providers improve the delivery of care.

Quality Standard Principle 3: Measures in the common set should consider, but not require:

- an explicit clinical or structural model;
- for clinical measures, an appropriate registry structure and content for patient identification and data entry by front-line providers;
- specific report formats that are successfully tested with intended user groups;
- for clinical measures, conditions under which risk adjustment is required;
- an assessment of feasibility; and
- audit standards for assessing implementation.

Quality Standard Principle 4: Measures included in the common set should, when feasible:

- use clear, standard, functional definitions;
- collect data once;
- collect data as close to their source as possible by being integrated into the process of care delivery; and
- collect data so that they can be combined, analyzed, and reported to serve a wide variety of purposes.

Strategic Priorities

The identification of standardized healthcare quality measures, in and of itself, cannot ensure quality improvement. Such measures have to be used as part of a concerted, coordinated, and comprehensive strategy. Toward this end, five strategic areas have been identified at this time as important priorities to support and sustain healthcare quality improvement. Attention and resources should be focused on these areas.

Strategic Priority Area 1: The NQF should work with private and public groups to develop and facilitate implementation of a communications strategy to:

- increase public awareness about the nature and magnitude of quality of care problems; and

- identify the actions that the public, health professionals, and institutional providers can take to improve healthcare.

Strategic Priority Area 2: The NQF should lead the effort to ensure that public performance reports are compelling and useful to consumers and purchasers and are designed to support decision-making.

Strategic Priority Area 3: The NQF should define and develop the processes necessary for the timely delivery of widely disseminated performance reports that are targeted to the needs of different audiences and their use (e.g., choice or improvement).

Strategic Priority Area 4: The NQF should adopt as policy that private and public purchasers (e.g., large employers, the Centers for Medicare and Medicaid Services) and payers should require providers (including, but not limited to, hospitals, nursing homes, and physicians) and health systems to routinely and publicly report performance on a common set of measures.

Strategic Priority Area 5: The NQF should develop, pilot test, and then implement a strategy to:

- evaluate the impact of quality measurement and reporting on quality of care;
- remove barriers and negative incentives to quality improvement; and
- establish rewards for quality performance.

Policy Statements

In addition to standardizing quality of care performance measures and identifying strategic priorities, a number of policy changes would help achieve quality improvement. The following eight policy recommendations and statements represent consensus-driven, Board-endorsed views of the NQF on the particular issue addressed. These policy statements may be used in communications with non-members or may

be used as a basis upon which the NQF enters into collaborations with organizations that wish to address a particular issue.

Policy Statement 1: The NQF advocates that all agencies and organizations that request data on healthcare processes and outcomes from providers and plans should commit to reducing the burden of reporting by eliminating redundancy in information collection efforts.

Policy Statement 2: The NQF believes that electronic information systems for healthcare, including but not limited to electronic medical records, should:

- use the NQF common measures as a template for system designs; and
- use the NQF framework for assessing and improving quality as the basis for developing standard data definitions needed for effective use of electronic medical records.

Policy Statement 3: The NQF believes that healthcare professionals' education must include the knowledge and skills basic to quality improvement.

- In the near-term, the NQF should encourage licensing and certification boards to include continuous quality improvement processes as part of their certification and re-certification programs.
- Health professionals' schools, curricula, training, and continuing education must include quality improvement principles.

Policy Statement 4: The NQF believes that provider organizations, as well as accrediting and licensure bodies, should ensure that individual providers are able to effectively utilize performance information for decision-making and quality improvement.

Policy Statement 5: The NQF recommends that the federal government fund technical assistance programs for healthcare delivery systems that are moving aggressively to implement quality improvement as a strategy.

Policy Statement 6: The NQF recommends that the federal government convene a national research agenda conference to identify needs, funding strategies, and implementation of a five-year healthcare quality research agenda.

Policy Statement 7: The NQF recommends that federal research agencies and private foundations focus funding on the following areas where gaps exist and needs are clear:

- validity assessment methods;
- priority clinical areas or populations where insufficient quality measures exist;
- improved utility of quality data;
- provider motivations and behavior change;
- actualization of the foundational principle of patient-centered care;
- creation of the requisite informatics infrastructure;
- improved efficiency and impact of quality measurement and reporting methods;
- incentives and payment policies to drive quality improvement; and
- objective assessment of the impact of quality initiatives on health and costs.

Policy Statement 8: The NQF recommends that funding for and investment in quality measurement, reporting, and improvement research and development should have the following goals:

- The budget for the Agency for Healthcare Research and Quality (AHRQ) should be tripled over the next five years.
- A target for national investment in healthcare quality measurement, reporting, and improvement (equal to at least 1% of U.S. healthcare spending) should be established.
- AHRQ should fund research to determine the investments in information systems and other infrastructure development needed to support quality improvement efforts.

Conclusion

The realization that the quality of healthcare in the United States falls short of what it could and should be is not new; neither is the recognition that meaningful progress to improve the quality of U.S. healthcare can be best made when all stakeholders work together. Until now, however, an organizational infrastructure and systematic framework to move forward in achieving these goals have been lacking.

The establishment of the NQF as a unique public-private partnership represents an important step forward, as it provides an equitable mechanism for all stakeholders—i.e., consumers, caregivers, institutional providers, health plans, payers, and research and quality improvement organizations—to develop a common vision for healthcare quality measurement, reporting, and improvement. Achieving broad consensus on a framework and key

guiding principles for re-engineering the U.S. healthcare system through improved measurement and reporting represents a step forward. It is, in fact, a milestone, given the disparate interests that historically have impeded progress in this area. The NQF and its members look forward to the challenges of operationalizing the emerging vision of a healthcare system that provides high-quality healthcare for all Americans.

Acknowledgements

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Appendix A

Strategic Framework Board

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Appendix B

Executive Summary of the Strategic Framework Board's Report

In October 2001, the NQF's Strategic Framework Board (SFB) delivered a final Executive Summary derived from work it had conducted during its 18-month tenure; this Executive Summary included 17 recommendations for NQF members to consider.

As noted in the report, these recommendations were revised based on the comments of NQF members and the public and then approved as consensus positions in accordance with the NQF's Consensus Development Process (v 1.5)[1], which comports with the requirements set forth in the National Technology Transfer Advancement Act (Public Law 104-113) and OMB Circular A-119. The material that follows is the SFB's Executive Summary of papers that it presented[2] or published[3] elsewhere as "A Conceptual Framework for a National Quality Measurement and Reporting System;" the SFB's recommendations in their original format may be found in these materials.

BACKGROUND

A series of reports by distinguished experts[4,5,6,7,8] have come to the same conclusion: There are serious and widespread defects in the quality of healthcare in America. In 1998, the President's Advisory Commission on Consumer Protection and Quality in the Health Care Industry ("the Commission") urged public and private purchasers of healthcare services, consumers, health plans and insurers, healthcare practitioners, and others to join together to implement "a comprehensive plan for measuring healthcare quality and reporting the results of such measures to the public."[9] The Commission recommended the formation of a Forum for Health Care

Quality Measurement and Reporting to identify core quality measures for standardized reporting and promote the focused development of enhanced core measures for the future.

In May 1999, the National Forum for Health Care Quality Measurement and Reporting (NQF) was established as a membership organization responsible for carrying out the recommendations from the Commission. In December 1999, the NQF created a nine-member Strategic Framework Board (SFB) whose mission was to (1) design a national strategy for quality measurement and reporting; (2) articulate the guiding principles and priorities for a national system, including the roles of key players; and (3) identify the potential barriers to successful implementation of a national strategy and possible solutions to those barriers.

Nine experts from diverse backgrounds were appointed to the SFB for an 18-month term. Members of the SFB brought to the table an array of experience and expertise in quality measurement, quality reporting, healthcare delivery, research, healthcare purchasing, accreditation and certification, education, and information technology (IT). The SFB operated independently from the NQF and reported to the NQF Board on a regular basis throughout its deliberations. The SFB conducted its work through face-to-face meetings, conference calls, reviews of the pertinent literature, a series of working papers, and formal and informal interactions with the NQF Board and membership.

PROGRESS AND CHALLENGES

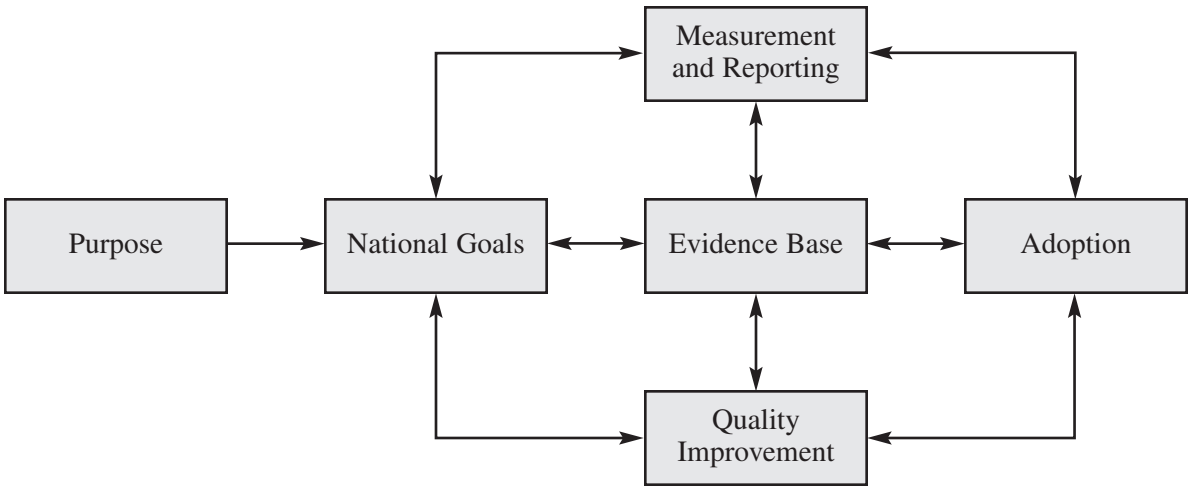
The United States has made significant progress in the last decade in the field of quality measurement and reporting. Public and private purchasing organizations, accreditation organizations, medical societies, researchers, and others have worked hard to develop and implement innovative approaches to measuring the quality of care delivered here and around the world. While efforts to develop effective reporting approaches are still embryonic, consumers of healthcare and their families now have more information available to them about the performance and quality of healthcare institutions, systems, plans, and, to a lesser extent, providers. This ability to measure and report on the quality of healthcare provides considerable reason for optimism about our ability to improve the overall quality of healthcare and the healthcare system. Yet the absence of a coordinated national system leaves the United States with a patchwork of inconsistent and incomplete data that are not sufficient for understanding national quality problems, supporting local quality improvement efforts, or informing the public about its choices and creates an unreasonable burden on healthcare providers and others.

Throughout its deliberations, members of the SFB kept asking two simple questions: What will it take to systematically create national capacity for measuring and improving quality in priority areas? And what will it take to make it happen?

To guide the NQF's work and provide a common vision for its discussions, the SFB has developed a conceptual framework for quality measurement and reporting. This framework provides a vision for how such a system would work, what tasks need to be accomplished, and the responsibilities for participants in the healthcare system. Conceptual and operational factors have been considered (figure 1).

A national quality measurement and reporting system is designed to achieve five goals: (1) Evaluate the degree to which the U.S. healthcare system is providing safe, effective, timely, and patient-centered care; (2) assess whether the delivery of high-quality care is efficient and equitable; (3) enable substantial progress to be made toward achieving established national goals; (4) provide easily accessible information on quality to a variety of audiences, including consumers, purchasers, and providers, to facilitate individual and collective decision-making; and (5) provide information to regulators, purchasers, and providers to support continued improvement and achievement of goals.

FIGURE 1. CONCEPTUAL FRAMEWORK FOR QUALITY IMPROVEMENT



FIVE STEPS TO IMPROVED HEALTHCARE QUALITY

This Executive Summary details five steps that must be taken to improve the quality of healthcare in the United States: (1) setting national goals, (2) choosing a common set of quality measures, (3) investing in IT, (4) reporting quality measures to consumers, patients, providers, and purchasers, and (5) making change happen. Following an outline of these steps are the specific recommendations of the SFB.

Setting National Goals

The first major step toward accomplishing the purposes cited above is the development of national goals for quality improvement. In general, measurements should be derived from those goals. By establishing national goals for quality improvement, the United States will send a powerful message to the public and professional stakeholders that improving healthcare quality is a top national priority. Clearly stated and widely promulgated national goals also call the nation's attention to the importance of continuing attention to quality of healthcare and to focus resources on priority areas. The SFB has developed an illustrative set of national goals to demonstrate the process needed to select such a list (table 1). National goals should be:

- consistent with the aims for the healthcare system proposed by the Institute of Medicine;
- the source of the selection and implementation of common measures;
- related to the products of the healthcare delivery system;
- related to clinical conditions that are prevalent or have a high risk of disability, suffering, or death;
- representative of the needs of diverse populations;
- based on evidence that effective clinical care strategies exist; and
- supported by expert groups and compelling to relevant constituents.

TABLE 1. CANDIDATE NATIONAL GOALS

Candidate Goal	Related IOM Aim	Priority Clinical Area
Improve the quality of life for persons with depression	Effectiveness (Morbidity)	Depression
Improve the quality of life for persons with asthma	Effectiveness (Morbidity)	Asthma
Reduce mortality from heart disease	Effectiveness (Mortality)	Heart disease
Reduce mortality from breast cancer	Effectiveness (Mortality)	Breast cancer
Reduce the burden of suffering due to Alzheimer's disease among patients, families, and the community	Effectiveness (Burden of illness)	Alzheimer's disease
Improve the provision of compassionate end-of-life care	Effectiveness (Burden of illness)	End-of-life care
Improve the coordination of care for patients with multiple healthcare needs	Patient-centered	Coordination of care
Reduce the risk of developing diabetes and its complications among populations disproportionately affected by the disease	Equitable	Diabetes
Ensure the safe and effective use of medications	Safe	Medication errors
Improve the prevention and treatment of pressure ulcers	Safe	Long-term care

Choosing a Common Set of Quality Measures

The United States should proceed to select a parsimonious common set of quality measures. A balance will need to be achieved between maintaining consistency of measures to allow longitudinal benchmarking and updating of measures to optimize data accuracy and meaningfulness. These measures must:

- be linked directly to a national goal,
- have a clear and compelling use,
- not impose undue burden on those who provide data,
- help providers improve the delivery of care, and
- help consumers select plans, providers, or treatments.

The results of the common set of measures will be used to stimulate quality improvement and to track progress on national goals. The common measure set should originate from a single database, which will reduce burden. Using a common set will facilitate meaningful dialogue between different levels in the healthcare delivery system (i.e., ambulatory, hospital, public health), between different stakeholders, and across geographic areas.

Investing in Information Technology

The U.S. healthcare industry has not yet made a sufficient investment in IT needed to implement a national quality measurement and reporting system. In many ways, this is understandable. The current healthcare system lacks the clear data definitions necessary to allow the industry to move aggressively in this direction. There also is evidence of unnecessary redundancy and rework in current quality

measurement and reporting systems that impose a burden on the industry. To encourage the healthcare industry to act, the SFB recommends the NQF facilitate an industry-wide consensus on "condition-specific, standard data elements that should be included by software developers in all electronic medical record systems." At the same time, all agencies and organizations that request data on healthcare processes and outcomes from providers and plans should commit to reducing the burden of reporting by eliminating redundancy and rework.

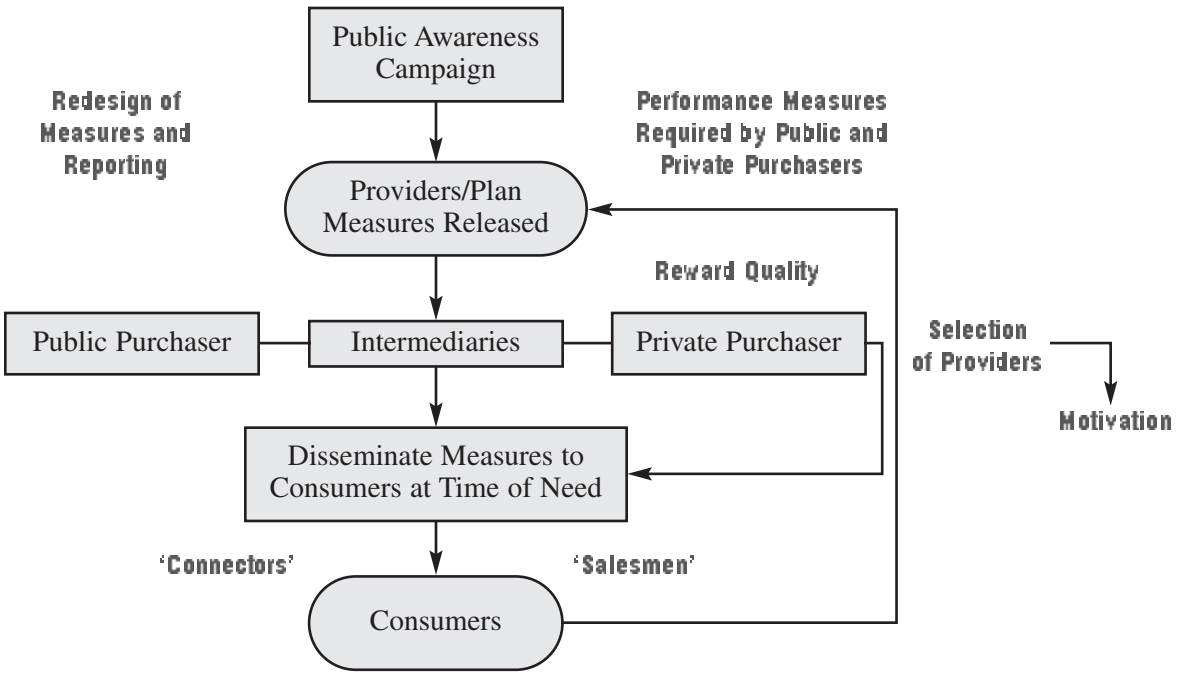
Reporting Quality Measures

In order for quality measurement and reporting to be meaningful, information must be communicated in words and formats that are clear, concise, and compelling to consumers, patients, providers, purchasers, and others. The NQF should define and develop the processes necessary for the timely delivery of widely disseminated performance reports that are targeted to the needs of different audiences and their uses.

Making Change Happen

Creating a national quality measurement and reporting system is an important step toward real quality improvement. It will require sustained and focused national leadership from all sectors of the healthcare industry–public and private–to resolve very legitimate differences and share information at an unprecedented level. Real change also requires that the measures and reports identified actually be used for improvement and selection. Key constituencies in healthcare–including private purchasers, consumers, federal and state governments, health plans, and clinicians and other providers–must commit to obtain buy-in at the local level to "make change happen" (figure 2).

FIGURE 2. ROADMAP FOR CHANGE



OPERATING PRINCIPLES

In taking the above steps toward improved healthcare quality, all involved should apply a basic set of operating principles to guide their work.

Evidence

Clinical and scientific evidence must be the foundation on which a national quality measurement and reporting system is based. A fundamental notion is that we should begin by examining the evidence for any action that is being recommended. It is important to note, however, that developing an evidence base requires a rather significant shift in the health systems' usual methods of operating. The discipline of framing a question, querying the scientific evidence, documenting the results of the query, and formally considering whether action or research is the appropriate next step represents a fundamental change in the way quality measurement and reporting is done today.

Local Buy-in

The SFB believes national and local leadership are needed to assure widespread progress. National leadership is essential for raising the profile of the enterprise. Yet the delivery of healthcare is a local enterprise. Without leadership and buy-in at the local level, national leadership will not produce optimal results. This requires a carefully designed process that integrates "bottom-up" ideas about local priorities with "top-down" setting of national priorities. Skillful application of this process will create a powerful leadership team.

Accountability and Improvement

Measurement and reporting are not ends in themselves but mechanisms for achieving improvements in the quality of care. Information about quality can inform the healthcare system about the need for improvement and can be utilized as a tool in achieving that improvement. It also can assist consumers and purchasers in making informed selections of health plans, clinicians, and providers. A national quality measurement and reporting system is designed to serve both needs–improvement and selection (figure 3).

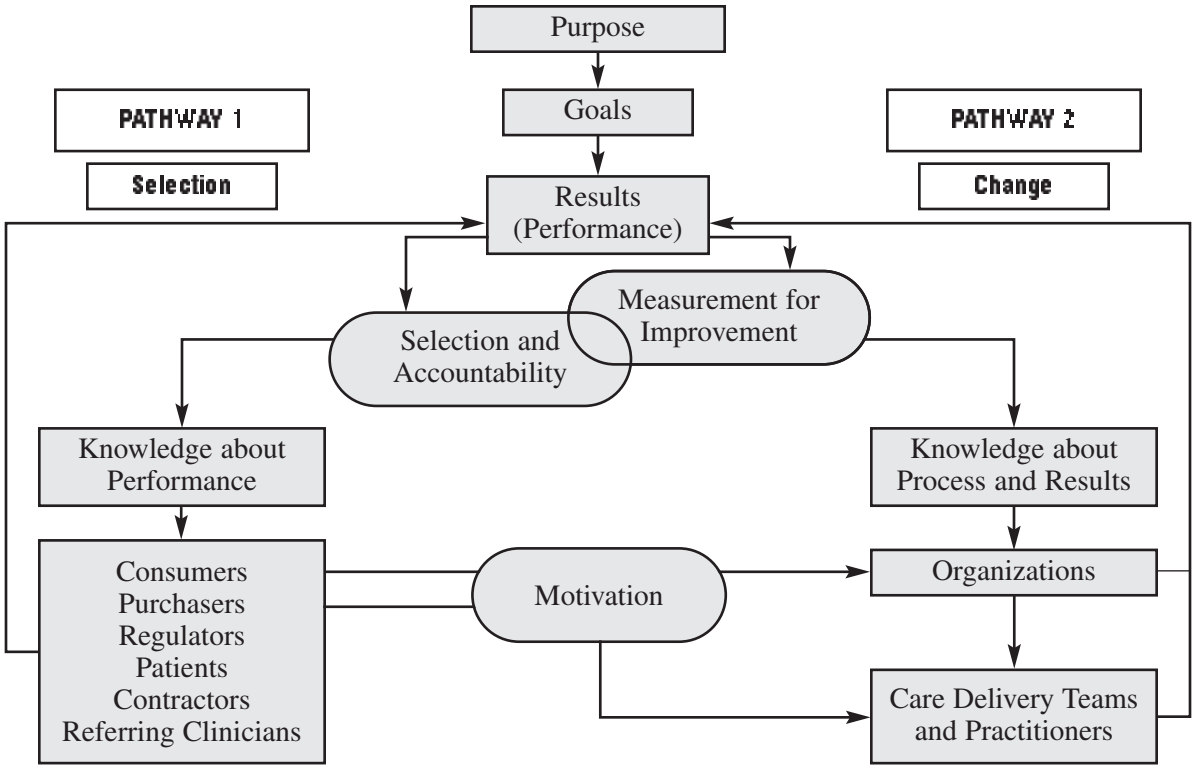
Incentives for Improvement

Rewarding suppliers is as fundamental to making markets work as is the voice of the customer or the flow of information. Rewarding quality also is important for sustaining the motivation of providers and for supplying potential capital for those suppliers who want to continuously improve.

Teaching Quality

Continuous quality improvement is the responsibility of all members of the healthcare team. Yet many healthcare professionals and other healthcare leaders have not received training in these principles or have been trained only as the result of specific projects conducted by the institution for which they work. The inclusion of quality improvement in certification and re-certification will enhance the rapidity with which these skills are acquired by the individuals who need them.

FIGURE 3. TWO PATHWAYS TO QUALITY IMPROVEMENT



Continuing Research

Our investment in research has contributed a great deal to our understanding of the quality problems in the U.S. healthcare system. Further investment and greater focus is needed to allow us to learn more in these key areas:

- measurement methods and tools,
- use(s) of quality performance data,
- organizational and cultural factors,
- information and informatics, and
- impact evaluation/research.

CONCLUSION

The members of the SFB have had a remarkable opportunity to collaborate on the design of a national quality measurement and reporting system that can fundamentally improve the way healthcare is delivered. The ideas proposed here build on a tremendous body of work by researchers, providers, purchasers, consumer advocates, accreditation organizations, and others who have devoted their time and energies to improving the quality of healthcare. The challenge that lies ahead is to put these ideas into practice. Change is possible, but it will not be easy. Making these changes will require substantial new investments by many sectors of society. In the long run, however, those investments will more than pay for themselves. The ideas and proposals described here provide a road map. Now there must be a shared commitment to making the journey.

RECOMMENDATIONS

SETTING NATIONAL GOALS

1. The NQF should establish a set of specific national goals for healthcare quality improvement that:
   a. Are consistent with the six aims for the healthcare system proposed by the Institute of Medicine;
   b. Will drive the selection and implementation of common measures;
   c. Relate to the products of the healthcare delivery system;
   d. Relate to clinical conditions that are prevalent or have a high risk of disability, suffering or death;
   e. Represent the needs of diverse populations;
   f. Are based on evidence that effective clinical care strategies exist; and
   g. Are supported by expert groups and compelling to relevant constituents.

CHOOSING AND USING QUALITY MEASURES

2. The NQF should develop a parsimonious common set of quality measures that is continually improved based on feedback from providers and other key users of the information. To be selected, common measures must:
   a. Be linked directly to a national goal;
   b. Have a clear and compelling use;
   c. Not impose undue burden on those who provide data;
   d. Help providers improve the delivery of care; and
   e. Help consumers select plans, providers, or treatments.

3. All agencies and organizations that request data on healthcare processes and outcomes from providers and plans should commit to reducing the burden of reporting by eliminating redundancy and rework.

4. Measures in the common set must include:
   a. An explicit clinical model;
   b. An appropriate registry structure and content for patient identification and measurement by front-line providers;
   c. Specific report formats that have successfully passed testing with intended user groups;
   d. Conditions under which risk adjustment is required; and
   e. Audit standard for assessing implementation.

5. Measures included in the common set will:
   a. Collect data once;
   b. Use clear, standard, functional definitions;
   c. Collect data as close to their source as possible by being integrated into the process of care delivery; and
   d. Collect data so that they can be combined, analyzed, and reported to serve a wide variety of purposes.

6. Electronic medical record developers should:
   a. Use the NQF common measures as a template for system designs; and
   b. Use the NQF framework for assessing and improving quality as the basis for developing standard data definitions needed for effective use of electronic medical records.

COMMUNICATION AND EDUCATION

7. The NQF should work with private and public groups to develop a communications strategy to:
    a. Increase public awareness about the nature and magnitude of quality problems; and
    b. Identify the actions that the public, health professionals, and institutional providers can take to improve healthcare.

8. The NQF should lead the effort to ensure that public performance reports are compelling and useful to consumers and are designed to support decision-making.

9. The NQF should define and develop the processes necessary for the timely delivery of widely disseminated performance reports that are targeted to the needs of different audiences and their uses (e.g., choice, improvement).

MAKING IT HAPPEN

10. Private and public purchasers (e.g., large employers, CMS) should require providers (hospitals, nursing homes, physicians) and health systems to routinely and publicly report performance on a common set of measures.

11. The NQF and its Member Councils, should develop, test, and implement processes that will:
    a. Evaluate the impact of quality measurement and reporting on quality of care;
    b. Remove barriers and negative incentives to quality improvement; and
    c. Establish rewards for quality performance.

12. Health professionals' education must include the knowledge and skills basic to quality improvement. Actions include:
    a. Licensing and certification boards should include the principles of continuous quality improvement processes as a condition of certification and re-certification.

13. Provider organizations should ensure that individual providers are able to effectively interpret and utilize performance information for decision-making and quality improvement.

14. AHRQ should be funded to develop a program of technical assistance for healthcare delivery systems moving aggressively to implement quality improvement as a strategy.

RESEARCH AND DEVELOPMENT

15. HHS should convene a national research agenda conference to identify needs, funding strategies and implementation of a 5-year agenda.

16. Federal research agencies and private foundations should focus funding on the following areas where gaps exist and needs are clear:
    a. Validity assessment methods;
    b. Priority clinical areas or populations where insufficient quality measures exist;
    c. Improving the utility of quality data;
    d. Provider motivations and behavior change;
    e. Actualization of the notion of patient centered care;
    f. Creating the requisite informatics infrastructure;
    g. Improving the efficiency and impact of quality measurement and reporting methods; and
    h. Objective assessment of the impact of quality initiatives on health and costs.

17. Funding for and investment in quality measurement, reporting, and improvement research and development should have the following goals:
    a. The budget for the Agency for Healthcare Research and Quality (AHRQ) should be tripled over the next five years.
    b. The NQF should establish a target for national investment in healthcare quality measurement, reporting, and improvement (e.g., 1% of U.S. healthcare spending).
    c. AHRQ should fund research to determine the investments in information systems and other infrastructure development necessary to support quality improvement efforts.

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REFERENCES

1. *The National Quality Forum's Consensus Development Process.* <www.qualityforum.org> Jan. 25, 2002.
2. Berwick D, Cassel C, Coye MJ, Galvin R, Hibbard J, James B, Leatherman S, McGlynn E, Smits H. *Draft Report of the Strategic Framework Board.* Washington, DC: National Quality Forum;April 2001.
3. Berwick D, Cassel C, Coye MJ, Galvin R, Hibbard J, James B, Leatherman S, McGlynn E, Smits H. *Medical Care* (supplement). In press, 2002.
4. Institute of Medicine, Committee on the Quality of Health Care in America. *Crossing the Quality Chasm: A New Health System for the 21st Century.* Washington, DC: National Academy Press;2001.
5. Chassin MR, Galvin RW, et al. The urgent need to improve healthcare quality: Institute of Medicine National Roundtable on Health Care Quality. *JAMA.* 1998;280:1000-1005.
6. Schuster MA, McGlynn EA, Brook RH. How good is the quality of healthcare in the United States? *Milbank Q.* 1998;76:517-563.
7. Institute of Medicine. *To Err is Human: Building a Safer Health System.* Washington, DC: National Academy Press;1999.
8. President's Advisory Council on Consumer Protection and Quality in the Health Care Industry. *Final Report to the President of the United States, Quality First: Better Health Care for All Americans.* Washington, DC: Department of Health and Human Services;1998.
9. Ibid.

Appendix C

Members*

CONSUMER COUNCIL

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Consumer Coalition for Quality Health Care
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*As of March 2002, when the NQF Consensus Development Process voting for this report was initiated.

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National Association of Health Data Organizations
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National Pharmaceutical Council
Peer Review Organization of New Jersey
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Appendix D
Consensus Development Process: Summary

The National Quality Forum (NQF) is a voluntary consensus standards organization. The NQF brings together diverse healthcare stakeholders to develop consensus on core measures of healthcare quality. The primary participants in the NQF consensus process are NQF member organizations. These include:

- consumer and patient groups;
- healthcare purchasers;
- healthcare providers and health plans; and
- research and quality improvement organizations.

Any organization interested in healthcare quality measurement and improvement can apply to be a member of the NQF. Membership information is available on the NQF website.

Members of the public with particular expertise in a given topic may also be invited to participate in the early identification of draft standards as technical advisors or Steering Committee* members. In addition, the NQF consensus process explicitly recognizes a role for the general public to comment on draft standards and to appeal quality measurement standards adopted by the NQF. Information on NQF projects, including information on NQF meetings open to the public, is posted on the NQF website *(www.qualityforum.org)*.

Each project the NQF undertakes is guided by a Steering Committee (or Review Committee) composed of individuals from each of the four critical stakeholder perspectives. With the assistance of NQF staff and technical advisory panels and the ongoing input of other NQF members, a Steering Committee conducts an overall assessment

*For this document, the Strategic Framework Board is functionally comparable to a project Steering Committee.

of the state of the field in the particular topic area and recommends a set of draft measures, indicators, or practices for review, along with the rationale for selecting them. The recommended measure set is distributed for review and comment, first to NQF members and then to the general public.

Following the comment period, a revised product is distributed to NQF Members for voting. The vote need not be unanimous within or across all Member Councils for consensus to be achieved. If a majority of members within each Council do not vote approval, staff attempt to reconcile differences among members to maximize agreement, and a second round of voting is conducted. Proposed products that have undergone this process and have been approved by at least two Member Councils after the second round of voting are forwarded to the NQF Board of Directors for consideration. All products must be approved by a vote of the NQF Board.

Affected parties may appeal standards approved by the NQF Board of Directors. Once a measure set has been approved, the federal government may utilize the information for standardization purposes in accordance with the provisions of the National Technology Transfer Advancement Act of 1995 (P.L. 104-113) and the Office of Management and Budget Circular A-119.

Standards are updated as warranted.

For this report, the NQF Consensus Process, version 1.5, was in effect. The complete process can be found at *www.qualityforum.org*.

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