



Robert Wood Johnson Foundation

Adapting Quality Improvement to Public Health

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Highlights and Conclusions

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Adapting Quality Improvement to Public Health

Summary of Facilitator and Reactor Comments

The Robert Wood Johnson Foundation (RWJF) sponsored a meeting focused on adapting quality improvement to public health on February 7, 2007 in Cincinnati, Ohio. This document summarizes the introductory overview, comments of reactor panelists, the application of the meeting's lessons to public health and lessons learned from the meeting. Other information presented at the conference is summarized in written documentation provided that day and is not included in this summary. Those presentations and white papers, as well as this report, are available online on the National Network of Public Health Institutes' website at www.nnphi.org, under the heading of "Our programs: MLC-2: Quality Improvement in the Context of Assessment and Accreditation Programs."

I. Context and History

Quality improvement (QI) began in the early years of the last century as a means of enhancing agricultural practices and yields, and by World War II had been adopted by manufacturing. By the 1970's, principles of quality had improved manufacturing and other industrial processes, and quality control departments were established in many companies. In the 1980's, other settings and sectors adopted "quality" as a discipline, including health care, education, and government.¹

Within the health care setting, early Federal efforts to monitor quality included the Health Care Financing Administration's Medicare Peer Review Organizations which live on as the Centers for Medicare and Medicaid Services' Quality Improvement Organizations (QIOs), and the Agency for Health Care Policy and Research, established in 1989 and reauthorized as the Agency for Healthcare Research and Quality (AHRQ) in 1999. The QIO program assists providers in transforming quality to make healthcare safe, effective, patient-centered, timely, efficient, and equitable. AHRQ is the lead federal agency on quality of care research, with responsibility to coordinate all Federal quality improvement efforts and health services research.

¹ American Society for Quality, www.asq.org, accessed March 7, 2007.

There are also a variety of non-governmental initiatives to ensure quality of healthcare. The Joint Commission (formerly the Joint Commission on Accreditation of Healthcare Organizations) was established as the Commission on Accreditation of Hospitals in 1951. Its mission is to continuously improve the safety and quality of care provided to the public. From its early history of measuring organizational capacity, the focus shifted in the early 1990s to one of measuring performance. In 1986, the National Demonstration Project on Quality Improvement in Health Care was launched, and the Institute for Healthcare Improvement (IHI) was founded in 1991. IHI has become a leading force in improving healthcare quality, having developed the original model for Breakthrough Series Collaboratives with the Associates for Process Improvement. In 1996 the Institute of Medicine (IOM) launched an ongoing effort to improve the nation's quality of care, which included publication of *Crossing the Quality Chasm: A New Health System for the 21st Century* (2001). *Crossing the Quality Chasm* stresses that reform around the margins is inadequate to address system ills.

National performance measures and awards recognizing quality improvement and performance improvement have been developed to motivate and recognize organizational achievements in health care. The National Committee for Quality Assurance (NCQA) has developed the Health Plan Employer Data and Information Set (HEDIS) to measure performance on dimensions of health care and service to allow comparison of health plans. Measures focus on important health issues such as asthma medication use, childhood and adolescent immunization status and breast cancer screening. The National Quality Forum (NQF) is a membership organization created in 1999 to improve quality of care through evidence-based, measurement driven performance improvement and public reporting. It now awards the National Quality Healthcare Award to recognize quality-driven organizations. The Joint Commission annually awards the Ernest Amory Codman Award to health care organizations to recognize achievement in the use of process and outcome measures to improve organizational performance and quality and safety of care.

Public health has increased its own focus on quality and quality improvement over the past two decades. Notable milestones include the IOM reports, *The Future of Public Health*

(1988), which called for efficiency and effectiveness of public health and recommended the adoption of a group of “core functions,” and *The Future of the Public’s Health in the 21st Century* (2002), which said that the public health system should ensure the health of communities by requiring accountability from and among all sectors of the public health system and by making evidence the foundation of decision-making. In 1998 the Centers for Disease Control and Prevention (CDC) initiated an effort with its partners the American Public Health Association (APHA), Association of State and Territorial Health Officials (ASTHO), National Association of County and City Health Officials (NACCHO), National Association of Local Boards of Health (NALBOH), National Network of Public Health Institutes (NNPHI) and Public Health Foundation (PHF) to establish National Public Health Performance Standards to improve the quality of public health practice and performance of public health systems. Standards have been developed for state and local public health systems, as well as local public health governance. While these standards have been helpful for broad public health system assessment, they do not assess the quality of individual health departments or health department processes.

Turning Point, a national program funded by the Robert Wood Johnson Foundation (RWJF), had an overall goal of transforming and strengthening the public health system in the United States to make the systems more effective, more community-based, and more collaborative. The Turning Point Performance Management Collaborative was formed to enhance performance management practices in public health agencies. The Collaborative, which included seven states and a number of national partners, developed a series of products, tools, and learning reports/case studies. These materials included self-assessment tools, a guide for performance measurement, and a survey of performance management in states. The Performance Management Collaborative served an important foundational role in the development of quality improvement in the public health sector.

Quality improvement in public health context is still not well defined. According to results of a 2005 survey of quality improvement efforts of local health departments (LHDs) by NACCHO, approaches to quality improvement vary. The survey assessed the level to which LHDs have performance standards and performance measures, report progress, and have a

quality improvement process. Certain programs are more likely to include evaluation or quality improvement, with Emergency Preparedness being most likely to do so. NACCHO determined that LHDs define quality improvement in a variety of ways. The association is surveying them to learn more. Survey topics will include questions about the extent of QI activities (agency-wide or program-specific), the extent to which QI is a proactive effort of the health department or is performed in response to grant requirement and the elements of the improvement programs. Results of this survey will inform future public health quality improvement efforts.

Current quality improvement efforts in public health include a national focus on accreditation of public health agencies. The Exploring Accreditation project developed recommendations regarding the establishment of a voluntary national accreditation program for state and local health departments. In August 2006, the Exploring Accreditation Steering Committee met and decided that a voluntary national accreditation program is feasible and desirable. RWJF and CDC will fund the creation of a national public health accrediting organization.

It was within this overall context that the Adapting Quality Improvement to Public Health meeting was held on February 7, 2007. Grantees from the RWJF-funded Multi-State Learning Collaborative (MLC2), PREPARE for Pandemic Influenza Collaborative, and Common Ground programs were invited to participate in the meeting. Marlene “Marni” Mason and Leslie (Les) Beitsch served as facilitators of the meeting. Marni is a managing consultant at MCPP Healthcare Consulting in Seattle. Les is Professor of Health Policy and Director of the Center for Medicine and Public Health at the Florida State College of Medicine.

II. Goals of the Meeting

The goals of the Adapting Quality Improvement to Public Health meeting were:

1. To provide an overview of quality improvement in other sectors such as industry, health care, and other governmental sectors and to show how these approaches may be transferable to public health;

2. To provide an overview of quality improvement approaches that are underway in the public health sector and describe their results, successes, and challenges; and
3. To enhance the interactions among selected grantees of the Robert Wood Johnson Foundation that have a focus on improving aspects of the public health system.

III. Summary of panel reactions regarding applicability of quality improvement in other sectors to public health

The first session of the meeting featured presentations of several examples of the application of quality improvement in accreditation in private sector settings by Michael Hamm of Michael Hamm and Associates; QI in police departments by William Riley, PhD, Associate Dean of the School of Public Health at the University of Minnesota; and two specific case studies of applying QI in public health, one highlighting an effort to reduce syphilis in Orange County, Florida by Stacy Baker, MEd of the Public Health Foundation and the other focusing on improving outcomes in public health practice by Joan Brewster, MPA, from the Washington State Department of Health². These presentations were reviewed and reacted to by Fatema Salam of the National Quality Forum, Dennis Lenaway, from CDC's Office of Public Health Practice, and Jim Pearsol, ASTHO's Senior Principal Director for Public Health . Highlights of their comments are provided below.

Jim Pearsol

- All public health quality improvement is local—unit by unit—spark by spark
- QI is all about encouraging people to do what matters to improve their own work.
- Committed leadership is critical to successful QI, but it is also important to give staff hands-on opportunities and tools to make changes.
- Successful tools include team charters with mission, goals, and means defined up front, a senior sponsor, joint management and labor teams, readily available facilitators, clearly identified team leaders and defined team roles.

² All presentation materials can be found on the website of the National Network of Public Health Institutes' website, www.nnphi.org .

- Periodic reporting on progress is important and its value cannot be overemphasized.
- Three concepts that may be unfamiliar or avoided in public health that are crucial to QI are transparency, competition, and celebration. The first two can boost the likelihood of making positive changes, and the latter can build morale and excitement about achievements.
- Quality improvement steps can set the stage for movement toward health department accreditation.

Fatema Salam

- Performance measures are critical because you cannot improve what you do not measure.
- Public reporting of measures is an important aspect to ensure improvement and transparency. The importance of public reporting to motivate improvement is a lesson learned by health care that public health can follow.
- One “fantastic” outcome measure is better than having five process measures. Health care QI has shown that success in achieving long-term end states is more important than success in accomplishing multiple episodic events.
- Public health is going to need to determine its level of accountability and its levels of measurement.
- Comparisons from state-to-state and to national data can be important.
- Composite measures increasingly are being used in health care as a means to address issues of small numbers.
- The health care setting has developed a number of validated measures that may be applicable in the public health sector.

Dennis Lenaway

- The success-defining elements of QI—leadership, shared vision, commitment, tools and methods are well known. There is a sense that the tools and methods and their application may be what will sell the QI process within organizations, but the leadership, shared vision, and commitment are the important elements and can make or break a QI process.

- CDC’s health protection goals may provide a natural context and set of measures toward which health departments can strive.
- The National Public Health Performance Standards and MAPP (Mobilizing for Action through Planning and Partnerships) tool have been important resources to promote QI in health departments.
- Schools of public health should begin to include quality improvement training and leadership development in their curricula.
- It will be important to raise awareness among and involve public health partners in quality improvement, since public health is more than what happens in the health department.
- Public health has a range of health outcomes over which it has a range of influence. This means health departments have to wrestle with what aspects of public health can be addressed using QI.
- Health departments should ask of their community leaders, policy-makers, public health partners and the medical community their perception of public health services in their community. If the answer is not to their liking, they need to set goals to remedy those perceptions and motivate their staff and their department to achieve them.

Several notable overriding themes emerged from the three panelists’ reactions to the examples of successful quality improvement efforts. Measurement is critical, but complicated in public health. Health status outcome measures and process measures appropriate to public health need to be developed and benchmarks set. Transparency and public reporting about measures and progress toward reaching them are important. Finally, quality improvement is one tool that health departments can use to prepare for and achieve accreditation.

Further discussion of the presentations of the model QI approaches and the panelists’ reactions resulted in several questions. In particular, a question about recommendations for inclusion in a “Top 10” of public health outcomes for quality improvement sparked salient comments. Dennis Lenaway noted that some of the antecedents for public health issues are the same as those for crime prevention, such as educational attainment and poverty. However, the outcome measures are less similar—for example, recidivism in crime prevention as compared to

specific health outcomes such as control of high blood pressure. To the extent that the two fields can share approaches to QI and common measures, that will be beneficial. However, public health outcomes may be more complex and diverse, particularly when one considers the breadth of the public health system and the need to identify and measure population outcomes, not just individual outcomes.

Jim Pearsol suggested that it would behoove public health to choose the outcomes against which it would like to be measured. He strongly urged that the public health field have the discipline to select a small number of key measures. He commended HRSA for selecting eighteen performance indicators that it tracks in the MCHB information system. He noted that outcome measures as well as a small number of process measures that show how well the system is working could be very important. His specific suggestions for outcomes appropriate for measurement were immunization rates and newborn screening rates. He noted that chronic diseases present particular challenges for population measurement.

IV. Lessons Learned about Quality Improvement and its Relationship to Public Health

Glen Mays, Associate Professor, Chair *Pro Tem*, and Director of Research in the Department of Health Policy and Management at the University of Arkansas for Medical Sciences College of Public Health, summarized the major themes of the day.

- **Motivation and incentives** are critical to ensure success. Early adopters of new approaches tend to be moved by intrinsic motivation, whereas large-scale uptake will require extrinsic motivation. To date, there have not been strong, clear extrinsic motivating forces in public health. Public health needs to seek out and identify these opportunities and levers. As more early adopters undertake this work, there will be some extrinsic motivation simply from peer pressure from health department to health department.
- **Key elements of success** that influence quality improvement efforts have been identified in areas outside of public health. In addition, some factors inherent to public health can promote success. These include:

- Clear, shared vision at all levels of the organization
 - Strong and supportive leadership
 - Specific and measurable goals
 - Proven and effective interventions and processes
 - External influences such political leadership and champions outside the department.
 - Rich data resources
 - Experience and facility using and analyzing data and in using evidence that can be transitioned into quality improvement competencies
- **Barriers and challenges** to implementation and success of quality improvement efforts remain. Among these are:
 - Lack of clear and established measures. The recommended solution is that the creation of the measures be included as an explicit step in the process.
 - Barriers relative to size of health departments. There appears to be differential likelihood of uptake of quality improvement by size of health department, with larger health departments progressing more quickly. This situation should be investigated to determine whether there are specific issues that can be identified for remediation. Several potential solutions include regional quality improvement efforts, linkages with partner organizations, or pairing with peer agencies to create a critical mass.
 - Many public health agencies are experiencing difficulties transitioning from assessment to quality improvement. Public health has enormous expertise in identifying and uncovering problems. The challenge comes in the need to transition into action. This issue—the difficulty of moving into the action part of the PDSA³ cycle needs further investigation.
 - Existing measurement and performance standards in public health are global and comprehensive. Quality improvement tends to be very specific and breaks processes into small, measurable component parts. Public health needs to bridge

³ PDSA: Plan, Do, Study, Act. From Deming's work in continuous quality improvement.

the gap from broadly defined essential services and performance standards to a more detailed, fine-grained analysis.

- Burnout potential. Health departments have already experienced assessment burnout and preparedness burnout. The public health QI movement needs to anticipate and plan for the potential for QI burnout. One solution might be to make QI an integral part of day-to-day practice, rather than an add-on.
 - Measuring the wrong things. Even though public health agencies collect a great deal of data, they need to be sure that they collect the right data to support quality improvement processes.
 - Multi-dimensional aspect of public health practice. The breadth of scope of public health presents challenges relative to choosing where to focus attention for quality improvement. A potential solution is to target those activities, programs, and services that might be most amenable to quality improvement processes—the “low-hanging fruit.” This will need to be counterbalanced by perceived or actual tendencies to then divert attention and resources away from other important activities of the organization. Finally, public health as a field would benefit from identifying those cross-cutting competencies and capacity areas that would be amendable to a QI approach and therefore benefit multiple program areas.
- **Accreditation interacts with quality improvement** in public health.
 - Accreditation can serve as an extrinsic motivator. Those health departments that seek accreditation will necessarily review outcomes and processes and identify areas in need of improvement.
 - Accreditation can serve as a process enhancement tool by helping to create a body of knowledge that can inform QI. This can occur through use of accreditation measures as QI goals.

V. Concluding Remarks and Lessons Learned

Marni Mason commented that one of the themes of the day had been that of building bridges. Les Beitsch underscored the need to build a number of important bridges: bridges from

the processes that public health agencies do every day to the outcomes they wish to achieve; bridges between and among MLC2 states; and bridges among MLC2, RAND PREPARE and Common Ground grantees to create an even larger learning community. He noted that building bridges between these initiatives and the larger public health community can ultimately influence national public health accreditation efforts. Finally, he underscored Glen Mays' point about the importance of the bridge between quality improvement and accreditation.

Marni concluded with a call to all of the states participating in the workshop to establish high—yet achievable—goals as they begin their quality improvement efforts. She also recommended setting goals that are specific, intentional, and clearly articulated. Her final rallying statement was, “only through courageous commitment can quality improvement efforts be successful!”

VI. Overall Conclusions

The conference presented an array of approaches to quality improvement in other settings and in public health. These examples and case studies showed the variety of approaches to public health quality improvement being taken in state and local health departments across the country. Ongoing evaluation of these approaches will be important to determine which are most salient to specific settings, programs, or work processes.

Speakers and reactors identified certain common fundamental elements of successful quality improvement throughout the day. These included clearly defining measures, identifying appropriate outcomes, building quality improvement into core work processes, leadership and support from management, commitment and buy-in from all staff, leveraging of extrinsic and intrinsic motivators, and celebration of success. These elements will be important to build into all future public health QI processes.

Accreditation was noted as an extrinsic motivator for quality improvement. Another extrinsic motivator that public health may consider for the future is the establishment of a national award program that recognizes quality. The Joint Commission's Codman Award,

NQF's National Quality Healthcare Award and the Florida Department of Children and Families' Sterling Criteria are just three examples of recognition for achievement.