

Quality Improvement Methods Can Be Used to Improve Public Health Emergency Preparedness

The term *quality improvement* (QI) has been used broadly by practitioners in various fields to refer to a range of strategies and techniques designed to set goals, measure performance, and apply systematic changes to improve performance and quality. Originally developed in manufacturing, QI methods have since been applied in many fields, although not widely in public health.

RAND sought to help address gaps in the U.S. public health system by showing how QI methods can be used to improve the emergency preparedness of the system. Researchers examined the QI practices used in a small group of public health departments. They found that, although no sites had comprehensive, fully functioning QI processes for public health emergency preparedness, many sites had one or more components necessary for QI.

Other key findings:

- All sites had developed some performance goals and measures for emergency preparedness. However, several health departments noted difficulties in prioritizing performance goals, and many measures were imprecise, lacked clear objectives, or were not relevant.
- Few sites had implemented systematic QI techniques and approaches to understand processes, identify needed changes, and implement improvements. Systematic feedback mechanisms for QI were also lacking.
- Barriers to QI included a lack of resources—especially time and staff—and incentives.

The research led to several recommendations:

- For QI to flourish and become standard practice, changes to the status quo are necessary. A necessary first step is investments to build QI capabilities and development of organizational and leadership capacity.
- QI for public health emergency preparedness will be most successful when integrated into routine practice and into daily work.
- Performance goals and measures should be specific, measurable, relevant, and time-bound. Documentation of key processes is also important.
- Systematic and rigorous implementation of improvement practices is difficult but essential. Formalized procedures can be used to drive process change.
- State efforts should focus on facilitating QI for public health emergency preparedness at the local level; federal grants could be used to incentivize QI at the state and local levels.

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This fact sheet is based on work done within RAND Health documented in *Quality Improvement: Implications for Public Health Preparedness*, by Michael Seid, Debra Lotstein, Valerie L. Williams, Christopher Nelson, Nicole Lurie, Allison Diamant, Jeffrey Wasserman, and Stefanie Stern, TR-316-DHHS, 2006, 72 pp. (available at http://www.rand.org/pubs/technical_reports/TR316/).

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