Performance Management in Public Health
A Literature Review

Prepared by
Public Health Foundation

for the Performance Management National Excellence Collaborative
The Performance Management Collaborative gratefully acknowledges the thoughtful contributions of its members in the development of this literature review.

Those most involved in the shaping of this review were Michael C. Jones, William Kassler, MD, Laura B. Landrum and Jack Thompson.

We especially thank the Public Health Foundation whose efforts to assemble a relevant, dynamic, and multi-sectoral literature review have helped ground the Collaborative’s strategic thinking in an evidence base.

Funding from the Robert Wood Johnson Foundation’s program, *Turning Point: Collaborating for a New Century in Public Health*, supports this literature review and the work of the Performance Management Collaborative.
The list of selected literature on performance management was compiled as part of the performance management assessment project that the Public Health Foundation (PHF) was contracted to conduct for the Turning Point Performance Management Collaborative. The objective of this phase of the project was to gather information and examples from the scientific and gray literature about performance management to inform the work of the collaborative, specifically the development of a state public health performance management survey. The literature review approach involved:

1. Reviewing articles and gray literature on the subject.

2. Reviewing publications that focus narrowly on performance management and others that specifically address the subject and closely related efforts, such as performance standards, performance-based budgeting, and accreditation. The review did not focus on individual components of a performance management system, such as cost-analysis, health improvement planning, community health assessments, and internal management assessments.

3. Categorizing literature into thematic areas, and selecting a few “hot picks” (most useful items) for annotation.

4. Using the National Library of Medicine and key informants to identify relevant sources.

The Synthesis section (II) provides an overview of the literature search and review strategy. This section also presents general findings and limitations of the search and review process.

The Annotated Citations section (III) lists “most useful” public health selections (“hot picks”) with annotations for each citation.

Section IV provides a complete list of all public health citations gathered for this review based on the requirements outlined above.

The last section (V) includes annotated citations for relevant literature from other sectors.
Design and Methodology

This section describes the methods used by PHF to identify, organize, select, and annotate literature on public health performance management.

PHF identified the public health and non-public health performance management literature through the methods described below.

Public health scientific and gray literature

- **PubMed search strategy**—PHF worked with National Library of Medicine (NLM) librarians to develop a PubMed search strategy using the most appropriate Medical Subject Headings (MeSH) and terms to capture the public health performance management literature. This search strategy identified most relevant scientific literature but is not exhaustive. See Attachment A for the final search terms and the URL to view the results of this search online.

- **Public Health Foundation references**—Relevant citations from PHF’s database of public health performance standards references compiled in 2000 were reviewed and extracted.

- **Review of national Web sites**—PHF searched the Web sites of the following agencies and organizations: the Centers for Disease Control and Prevention (CDC), American Public Health Association (APHA), Agency for Healthcare Research and Quality (AHRQ) and selected state public health departments. For organizational sites with search engines, PHF used search terms such as “performance management,” and “performance measurement.”

- **Collaborative suggestions**—Relevant literature was identified based on general and specific suggestions made by Collaborative members and informants. These suggestions included peer-reviewed articles, books, government or consultant reports, state and local guides/tools, state scorecard reports, association reports and Web sites.

Relevant literature from other sectors

- **Internet search**—PHF used general Internet search engines and reviewed Web sites to identify gray literature relevant to measuring or managing performance and improving quality or outcomes.

- **Collaborative suggestions**—as described above.

- **Key informants**—PHF contacted leading organizations involved in measuring and managing performance in other sectors, as identified through Web searches and Collaborative suggestions, to provide a selection of references in each sector.
All references were entered into the Reference Manager software, a powerful tool for organizing sources by keywords and categories. References were categorized initially into two areas based on type of publication: (1) scientific articles and (2) gray literature. References for the public health literature were categorized into four broad thematic areas: (1) components of performance measurement and management, (2) performance measurement and management: uses and applications, (3) state roles and (4) local roles. References for the non-public health literature were categorized according to sector: (1) business, (2) education, (3) government, 4) health care and (5) non-profit.

Both external and internal reviews have informed this literature review. The initial list of gray literature was reviewed by three designated Collaborative members (Bill Kassler, Mike Jones, and Jack Thompson) who provided important comments on the design of the literature review and candidates for the top resources, called “hot picks.” The lists of scientific and gray literature were reviewed by PHF staff to determine whether the derived categories were sound and relevant.

From within the public health literature, PHF selected four “hot picks” in each category. “Hot picks” are articles, books or reports deemed to be the most relevant and useful performance management resources, based on reviewer comments and the Collaborative’s defined needs and interests. The selected public health literature was reviewed by PHF and annotated. Other references are listed in bibliographic format. For non-public health sectors, PHF annotated all selected references related to performance management. No non-public health articles were designated as “hot picks” because the total number of references in each sector category is limited. Following complete annotation, the draft literature review was critiqued by Bernard Turnock, consultant to the project, and submitted to three Collaborative members for their input. Numerous references were added or deleted based on internal and external reviews.

What We Found: Results of the Search

The public health literature search process yielded 90 articles and 44 gray literature documents. The majority of the listed books focus on the theory or design of performance management and the uses of performance management or measurement.

The non-public health literature search process yielded 27 gray literature documents, as well as three peer-reviewed articles recommended by experts. The majority of books and reports focus on models or how to implement a performance measurement or total quality management program. A minority of resources discuss efforts to integrate and use performance data for improvement, or effects of performance measurement on outcomes. The selected articles describe uses of performance management in government generally and in the context of evaluation research.
Limitations

The literature review was not designed to completely review the contents of all listed references for relevance and possible selection as “hot picks.” It is possible that some significant or seminal works are excluded from the “hot picks.” The purposefully narrow focus of the search also yielded results that excluded several ancillary topics such as quality management or measurement, quality of life issues, and health outcomes methods. However, the results of the comprehensive search process yielded a list of relevant literature that is aligned with the specific objectives of the Collaborative in addressing performance management in the public health sector. Although all articles were not reviewed, the public health “hot picks” selections were thoroughly reviewed to provide substantive basis for inclusion. Finally, a few of the identified sources do appear to fit into multiple categories.
A. Components of Performance Measurement and Management


This book by the Institute of Medicine provides a comprehensive discussion of the: (1) process of community health improvement, (2) measurement tools for the process of improving community health and (3) broad framework and performance indicators for policy and operations. The book provides background information on health and its determinants and the social context of performance monitoring. This is a useful book for identifying the policy and theoretical components of community health improvement, performance measurement and monitoring, and management of community health improvement programs.


This book provides a review of performance measurement systems in health care. The authors focus on the design and requisites of a performance measurement system. Topics discussed include: (1) identifying indicators, (2) use of surveys, (3) data collection and analysis, (4) evaluating and managing the performance measurement system and (5) identifying real versus accidental change (the Hawthorne Effect). The book also provides experiences of four health care organizations that have implemented performance measurement systems. This is a useful resource for designing performance measurement strategies.


The authors of this article present the findings of an anonymous expert panel that was convened to discuss the “major goals of performance measurement activities and the most important conceptual and methodological issues yet to be addressed.” The panel was convened by the Centers for Disease Control and Prevention (CDC) as part of the National Public Health Performance Standards Program (NPHPSP). The panel was asked to express opinions about: (1) the overarching goal of public health performance measurement, (2) quality improvement, (3) public health accountability and (4) scientific bases for public health practice. This article is particularly useful for identifying what current scholars and practitioners believe are the core elements of performance measurement and management. A majority of panelists stated that improved public health delivery, governmental accountability and quality improvement ought to be paramount in performance measurement.

This compendium of papers addresses a comprehensive array of public health issues including: (1) public health administration, law and ethics, (2) public health delivery system and practice, (3) public health interventions and research, (4) public health performance measurement, management and improvement, (5) partnerships and marketing and (6) environmental health, disaster preparedness and managed care. Whereas the book provides a considerable collection of background information on public health, part III, which presents articles on "administrative processes and strategies for public health organizations," is the section particularly useful for professionals interested in performance measurement and management. Chapter 18 is directly relevant because it presents an in-depth discussion of the framework for measuring public health system performance. The book is a good resource for all public health professionals because it provides information not just on performance measurement and management, but on all public health practices as well as all aspects of the public health system.

B. Performance Measurement and Management: Uses and Applications


The Mobilizing for Action through Planning and Partnerships instrument is a "community-wide strategic planning tool for improving health." This tool is intended to be used at the community level to assist public health officials set strategic public health goals and identify community resources for addressing public health needs. The instrument was “facilitated by the public health leadership” and was developed by the National Association of County and City Health Officials (NACCHO) with funding from CDC. The MAPP instrument consists of four key assessment protocols: (1) community themes and strengths, (2) local public health system, (3) community health status and (4) forces of change. The tool is useful for developing strategic action to promote community quality of life and for fostering and maintaining community partnerships.


This guidebook presents a user-friendly narrative on doing performance measurement and management. The author provides a brief and useful discussion of the theory of performance measurement and management in public health. In addition to providing useful definitions throughout the book, the author provides a section on the utility of performance measurement and lists the core elements of an effective performance measurement process. Each chapter also provides “key resources” for readers. The section on “reporting results” is a useful guide on presenting the findings of performance evaluations. This guidebook is an easy read and is a good resource for practitioners.

This book is the product of a panel on performance measures that examined performance measures in a “full range of traditional public health concerns.” The panel used four guidelines to determine the utility of proposed measures. The book presents a general background to public health and provides useful definitions for topics such as public health assessment, public health policy development, public health assurance, health outcomes, risk status, process and capacity, all of which are important concepts in performance measurement and management. The book recommends, based on extensive reviews of performance measures source materials, specific measures to be applied in public health, substance abuse and mental health. This is a good resource for professionals who are implementing performance measurement and are looking for reliable measures that can be applied in specific areas of public health and health care delivery.


This article examines community capacity and partnerships, which are key components of performance measurement and management. Based on focus groups, observation and other secondary data, the authors developed a public health systems improvement plan. Study participants included the Southwest Center for Community Health Promotion, the University of Arizona and Cochise County Health and Social Services. The “plan for action” called for improving communication, supporting local partnerships, creating opportunities for human and financial resources and monitoring change. The article describes reliable processes for improving capacity and strengthening partnerships as part of performance management. This is useful resource for professionals engaged in improving capacity and community partnerships.

C. State Roles


This article describes efforts by the Centers for Disease Control and Prevention (CDC), the Health Resources and Services Administration (HRSA) and five national public health organizations to develop, through a consensus process, state performance measures for public health services. The core theme in the paper is the relationship between state public health agency quality assurance activities and national public health performance measurement. This is a useful paper because the authors present specific components of a state-based public health system quality review process. State professionals will find the discussions of gaps in performance reviews useful.

The authors examine the relationship between state health departments and local health departments in this paper. Representatives of all 50 states and the District of Columbia were surveyed to determine how they assess the performance of local health departments. The article provides specific performance assessment activities performed by states and a description of state agency structures, how performance assessments are developed and designed, perceived barriers to performance assessments and use of performance assessment results. The authors also describe correlates of conducting performance assessments. This is a useful article particularly for state agency professionals looking for ways to improve performance assessment efforts.


These two reports from the Department of Health and Human Services document initiatives in 11 states (Florida, Georgia, Illinois, Massachusetts, Minnesota, Nebraska, New York, North Carolina, Ohio, Oregon and Washington) to implement “results-based systems” for managing public health programs. The report describes the characteristics of states that are actively pursuing performance management systems (pressure for better government, extensive stakeholder involvement and upper-management commitment to the process). The benefits states derive from these systems as well as the challenges to effective implementation are described. These reports are useful for state agencies because they highlight the relationship between federal and state public health agencies in their efforts to establish successful performance management systems. State officials will also find these reports useful because they present recommendations for functional performance partnership approaches, efficient administrative infrastructure, and ways to support information exchange among federal, state, research and academic organizations.

D. Local Roles


The author examines the issue of accreditation for local health departments. The author discusses the Community Health Accreditation Program (CHAP) which uses standards of excellence based on quality improvement activities to accredit public health departments. The author argues that accreditation will provide local health departments with credentials based on national standards and foster self-studies and improvement within local health departments. “Accreditation standards can help clarify roles” and provide opportunities for staff involvement in performance goals. This short paper is an easy read and is particularly useful for local health officials considering accreditation issues within the broad framework of measuring quality and managing health improvement programs.

Using the “Essential Public Health Services” framework, the authors provide an overview of tools for assessing and measuring the performance of local public health systems. The article presents a historical outline of federal, state and local involvement in improving community health. It also presents a discussion of the importance of local public health infrastructure and lists six basic functions of the local health department. The authors also describe collaborative efforts of several national public health agencies in developing essential functional elements of local health systems. This article is useful for local health officials who are engaged in the preparatory stages of performance management. The essential local public health functions can provide a foundation for designing a performance measurement or management system.


This article examines how the participation of agency division directors in the management of local health departments affects the performance of these departments. The author uses data from North Carolina local health departments. The article argues that top management teams (TMTs) enhance local public health infrastructure because they “combine individuals with different, but relevant expertise needed to address public health problems.” Through a survey, the author asked local health officials about the use of TMT in managing their departments. The author describes characteristics of responding agencies and the correlates of successful TMTs in local health departments. The author concludes that TMTs can help local health departments strengthen public health performance and improve community relations. This article is useful for local health officials investigating ways to improve performance management outcomes.


This article examines the effectiveness of local health departments in 1995 in fulfilling the three core functions of public health. The authors surveyed a sample of local health departments on their performance of 20 core practice measures, which were developed with funding from CDC. The authors conclude that local health departments fell short of year 2000 objectives. This article is useful because it provides results of performance measures using widely accepted indicators and highlights the need for building local health department capacity. [Note: The lead author and others wrote a similar article in 1994 in Public Health Reports (Vol 109, No 5:653-658), which is a worthy companion article to the article annotated here.]
Section 4. Relevant Literature from Public Health

(Citations in bold are hot picks.)

A. Components of Performance Measurement and Management

Literature in this category focuses on identifying and analyzing the components of performance measurement and management, and how these components inform an understanding of performance management. A few articles provide broad themes focusing on theory and methods, but other articles focus on specific components.


**B. Performance Measurement and Management: Uses and Applications**

Themes under this topic provide uses and applications of performance measurement and management in particular areas of public health (including population-based health care). A few articles provide specific state or local examples of specific applications (some of which might overlap with the state and local categories provided in this document).


C. State Roles

Literature in this category addresses the role of the state in developing or implementing statewide public health measurement or management programs or activities. Several articles or reports document state efforts in implementing specific components of performance management. The relationship between state and local health departments is also discussed in a few articles. Whereas the literature searches yielded several reports on state efforts, no books were identified.


D. Local Roles

The role of local health departments in addressing local public health capacity or performance is the core topic of the literature in this category. Several articles or reports document local applications of performance management tools. As in the previous section, a few articles discuss the relationship between state and local health departments. The literature search did not identify any books dedicated to performance management at the local health department level.


A. Business


This book focuses on the “mega- (customer/client) level” measures of organization performance improvement by providing tips and techniques for organizational change. Public health professionals will learn steps in performance improvement, including defining objectives, determining results and designing, implementing and evaluating interventions.


This book provides ways to measure and manage achievement of organizational missions, visions and customer and employee satisfaction. The balanced scorecard consists of four sections: (1) clarifying and translating vision and strategy, (2) communicating and linking strategic objectives and measures, (3) planning, setting targets and aligning strategic initiatives and (4) enhancing strategic feedback and learning. The Balanced Scorecard is a management system that can be adapted by public health professionals working on performance management.


Based on the Baldrige Total Quality Management (TQM) model, this book provides examples from 51 “best practice” companies that have implemented the TQM model. Public health professionals can learn from hundreds of real life examples in applying TQM principles.


The “how-to” book on performance improvement offers worksheets, flowcharts, planning guides and job aids. A perfect guide for performance improvement consultants, either internal or external, to a company, organization or governmental agency. This book could be used for skill building and as a resource guide to analyze an organizational environment, diagnose performance problems, identify barriers to performance, select appropriate interventions and measure success.

This book shows how leading companies (e.g., IBM, FedEx, Xerox) have been using the Baldrige Model to achieve not only the prestigious award, but also to improve their “bottom-line,” efficiency, and service. Congress established the Malcolm Baldrige National Quality Award in 1987 to recognize U.S. organizations for their achievements in quality and business performance and to raise awareness about the importance of quality and performance excellence as a competitive edge. Public health organizations can apply the standards necessary to win the award in order to improve their performance and quality of programs.

**B. Education**


This report highlights findings from 22 national pilot projects charged with the development of student and staff skill standards. Specific issues, such as development of assessment strategies, accreditation and staff development are discussed. This could be used by federal, state and local public agencies interested in developing and measuring skill standards as part of performance management. This report is available in Adobe format at http://www.ed.gov/pubs/Standards.


This document describes tools that measure public school performance in the state’s municipalities against a statewide set of goals and analyzes problems set forth by the public school system.

**Center on Reinventing Public Education. 2000. How States Can Hold Schools Accountable. Seattle, WA: Center on Reinventing Public Education.**

This report highlights 10 recommendations essential for a school improvement accountability system. The development of the Strong Schools Accountability Model adds school capacity to the traditional reward/incentive approach to performance. This recommended model uses data (test data, school performance data, and observational data) to “triage” appropriate assistance to schools that are: (1) meeting state targets, (2) in progress or (3) in a “Yellow Cautionary Zone.” This model could be adapted to provide assistance to public health organizations. The report is available in Adobe format at http://www.crpe.org.


This report highlights what some schools in Washington State are accomplishing in student performance. Commonalities include: focus on school-wide goals; staff working as a team; improvement strategies unique to their school; targeted resources and a focus on employee attitude. The results and case models can be used to illustrate the importance of involvement of staff in performance improvement. The report is available in Adobe format at http://www.crpe.org.
C. Government


This article discusses the similarities and differences between evaluation research and the performance management movement. Each approach can aid in increasing accountability of programs and human service systems to their customers and stakeholders. Decision-makers can use both approaches in a complementary fashion to obtain more valid and reliable information for improving programs.


This book provides practical advice on using TQM in a governmental setting. Using successful examples (e.g., U.S. Air Force, Treasury Department), this book provides information on implementing TQM and overcoming barriers.


The author describes how evaluation and performance management can be complementary approaches for continuous improvement in the government. The author notes that evaluation research is usually done at specific time intervals while performance management is a continuous process. Administrators will learn the pitfalls of performance management and the contribution of evaluation in improving performance within their organization.


This workbook is designed to help public administrators by providing realistic approaches to performance measurement. This workbook is scheduled for publication in early 2001. Information is available at the Government Performance Project Web site at http://accounting.rutgers.edu/raw/pmg/happening/articles.html.


An important performance measurement resource for both government and human service agencies, this book breaks down steps in performance measurement such as defining objectives, choosing measures, interpreting data, making adjustments and reporting. The book also defines performance measurement in relation to other activities such as program evaluation, auditing, expenditure reporting and quality control. Because of its straightforward definitions, checklists, examples and suggestions, public health professionals and their partners will find this a practical guidebook.


This book will address the interests of those who have assessed their own performance and desire to benchmark against similar agencies or jurisdictions. The step-by-step guide for government and non-profit audiences outlines how to use comparative performance measurement (CPM) to improve management, budgeting, services and policies. The authors provide an overview of ways to use CPM to identify best practices, increase accountability and motivate employees.

This report highlights some of the basic philosophies and methodologies surrounding performance measurement, such as executive involvement, sense of urgency, alignment with strategic direction, conceptual framework, communication, and employee involvement.


The authors surveyed large municipalities (populations over 25,000) to assess their performance measurement systems. Findings suggest that many municipal governments track performance over time and use their missions, goals, objectives, and service standards for developing measures. However, many municipalities are struggling to develop their performance measurement systems, develop useful measures, and involve all levels of employees in the process.


This report highlights strategies based on the experience of seven states using performance management in their workforce development system. These strategies can be adapted by public health leaders interested in using performance management to integrate fragmented programs into a single system, in order to provide better governmental services.


This report suggests that performance problems in the federal government can be covered in four broad approaches. These include: (1) comprehensively reassess what the federal government does and how it does it, (2) reexamine and redefine the beneficiaries of federal programs, (3) improve economy, efficiency and effectiveness of federal operations and (4) attack activities at risk of fraud, waste, abuse and mismanagement. This report is available in Adobe format at http://www.accounting.rutgers.edu/raw/seagov/pmg/resultsmgmt/managing1.html.


This report summarizes the Government Performance and Results Act (GPRA). In addition, the report identifies four stages of performance measurement process and how they correspond to the GPRA requirements. This report could be useful for government agencies developing performance measures, analyzing results, and evaluating their programs. Available in Adobe format at http://accounting.rutgers.edu/raw/seagov/pmg/resultsmgmt/index.html.
D. Health Care


This book provides an organization-wide model for improving quality and performance in health care organizations. Improving awareness, measurement and management of performance is covered.


Using case examples, the authors discuss why healthcare organizations need data organization and how to conduct a data inventory. They also provide suggestions for implementing a continuous quality improvement effort with tools and guidelines for finding, interpreting, presenting and using data.


This report offers an overview of national and state level managed care quality assessment efforts. A useful tool for state officials looking to collect, combine, present and disseminate performance measurement data.


This book outlines the standards for managed care organizations to receive National Committee for Quality Assurance (NCQA) accreditation. An appropriate tool for anyone interested in understanding performance in the managed care field or preparing for NCQA accreditation.


This book offers a collection of 225 performance-based measures. With a user-friendly format, NLHI profiles each indicator, identifies which are appropriate for different health care settings, and identifies domains of performance, conditions or procedures that are covered by these measures. This book could be useful for public health clinical settings or community-based health care facilities.


This book provides a background on the Health Plan Employer and Data Information Set (HEDIS), why the measures are important, and the science of health care quality management. The narrative features a description of the eight domains of HEDIS and how performance measurement is crucial to each. This could be used by public health leaders interested in using HEDIS measures for performance improvement.


This book looks at a multidisciplinary approach to performance improvement (PI). PI tools, suggestions, and barriers are illustrated through case studies. JCAHO PI standards help hospitals systematically approach performance through four processes: designing processes, monitoring performance through data collection, analyzing current performance, and improving and sustaining that improvement. This resource could be adapted for public health services or training on performance in clinical settings.
E. Non-Profit


This book offers a brief history of TQM and the philosophy of management. The author describes achieving improvement through teamwork, brainstorming, cause/effect diagrams, check sheets and Pareto analysis. This could be used as a source of background information before undergoing more detailed training or planning in TQM.


A step-by-step manual for non-profit organizations focusing on program outcomes, measurable indicators, identifying data sources, analyzing findings and using outcome information. This manual provides examples of worksheets, task lists and issues in developing data collection instruments. This could be used by managers of public health programs or agencies seeking to measure performance of non-profit contractors.


This book reviews current design and use of performance measurement, describes the context surrounding design and implementation, and discusses best practices. Topics include outcome measurement, performance management for state and local public health agencies, performance results, information technology, clarifying goals and reporting results.
National Library of Medicine PubMed Search Strategy

The Public Health Foundation worked with librarian staff of the National Library of Medicine to develop a PubMed search strategy to capture public health performance management literature.

The URL for the search strategy appears below. To view recent (past five years) abstracts for articles in PubMed related to public health performance management, simply copy and paste the URL into any Internet browser.

For an alternative search method, you can visit the Healthy People 2010 Information Access Project at http://nnlm.gov/partners/hp/infrastructure.html and use their search feature. Click the red button by Healthy People 2010 objective 23-11 to search PubMed for journal articles related to public health performance.

**URL**

Note: For convenience the URL appears on separate lines. When you type it into your browser, do not break any of the lines.

http://www.ncbi.nlm.nih.gov:80/entrez/query.fcgi?cmd=PureSearch&db=PubMed&details_term=%28%28united%20states%22%5BMeSH%5D%20Terms%29%20AND%20%28%28public%20health%20administration/standards%22%5BMeSH%20Major%20Topic%5D%20OR%20public%20health%20practice/standards%22%5BMeSH%20Major%20Topic%3Anoexp%5D%29%20OR%20public%20health/standards%22%5BMeSH%20Major%20Topic%3Anoexp%5D%29%20AND%20%28%28performance%20standards%22%5BMeSH%20Major%20Topic%3Anoexp%5D%29%20AND%20%28%28process%20assessment%22%5BMeSH%20Major%20Topic%3Anoexp%5D%29%20OR%20%28%28outcome%20assessment%22%5BMeSH%20Major%20Topic%3Anoexp%5D%29%20

**Search Terms**


Field: All Fields

Limits: 5 Years, English