PERFORMANCE MANAGEMENT FRAMEWORK

From Inquiry to Improvement

Accountability and Performance Measurement
Working Group

Population Health Assessment and
Surveillance (PHASE) Team

Revised May, 2014

**simcoe
muskoka**
DISTRICT HEALTH UNIT

Table of Contents

Table of Figures

ACCOUNTABILITY AND PERFORMANCE MEASUREMENT WORKING GROUP

Chair: Nikhil Rajaram, PGY5 resident, Public Health and Preventive Medicine, University of Toronto

Members: John Barbaro, Brenda Guarda, Deborah Hardwick, Magda Montagnese

EXECUTIVE SUMMARY

This report outlines the concept of performance management and how it can play an important role at the Simcoe Muskoka District Health Unit(SMDHU). This work was undertaken as a step towards fulfilling SMDHU's strategic direction on Accountability and Performance Measurement.

Overall, current accountability systems and processes at SMDHU operate for different purposes and with different approaches, with a lack of harmonization of methods and management of such systems. As an agency-wide strategy, performance management is a proposed approach to identifying priority standards, indicators and reporting mechanisms for accountability, with the ultimate goal of having such mechanisms feed into a process of continuous quality improvement. Given that performance management may be a novel concept, the aim of this report is to provide key terminology, the rationale for introducing this concept and a framework which encompasses the entire cycle of performance management as it could be applied at SMDHU.

A narrative review of grey literature and published academic literature informs the bulk of this report, with some key recommendations that outline potential next steps to be taken if this approach is agreed to by SMDHU leadership. The concept of a 'culture of quality' is central to the likelihood that this work will result in significant changes for productivity and accountability.

Overall Recommendations

1. That Executive Committee endorses the Performance Management Framework (PMF) and this report as a foundational document for the introduction of Performance Management (PM) at SMDHU.
2. That Executive Committee assumes the role of steering committee for PM responsible for overseeing the implementation of PM work within SMDHU, along with an assessment of potential costs and benefits of continuing with this work.
3. That a subgroup of the Population Health Assessment, Surveillance and Evaluation (PHASE) team remains in place as the Accountability and Performance Measurement Working Group (APMWG) to implement the PM directions from Executive and to support program/initiative teams involved in PM activities.
4. That the focus of the "easy win" accomplishments in all four quadrants identify standards, measures, reporting and quality improvement (QI) activities as alternatives to

the Accreditation process and that the Chief Nursing Officer become a member of the APMWG through the development phase of this project.

5. That the APMWG with Executive guidance develops a communications plan for rolling out PM as an agency-wide strategy in order to ensure buy-in from employees and to avoid misunderstandings about the purpose of performance management.

    Recommend and/or deliver internal knowledge exchange activities to ensure staff and Board members understand the reasons for reporting of PM and are able to see and use the data.

6. That Executive Committee considers the adoption of agency core competencies related to staff knowledge and skills in the areas of PM and QI.

7. That Executive Committee endorses a culture of quality and QI at SMDHU.

INTRODUCTION

Background

In March 2013, the Accountability and Performance Measurement Working Group (APMWG) of the Population Health Assessment, Surveillance and Evaluation (PHASE) team was formed. The purpose of this working group was to address one of the new mandates of PHASE: the development of accountability systems and processes.

It became evident to the working group that although the Simcoe Muskoka District Health Unit (SMDHU) was currently engaging in some areas of performance measurement (e.g. Accountability Agreements (AA) and the Balanced Scorecard (BSC)), these individual efforts were not linked to a common approach, and were not contained within an overall system that illustrated the purpose of each and how each related to the other.

Based on the APMWG's newly developed terms of reference, it was decided that the first step in the creation of a strategy for accountability and performance management at SMDHU was the need to develop a Performance Management Framework (PMF).

Rationale

What is it?

The rationale for the development of an integrated PMF stems from public health systems research, guidance documents, as well as SMDHU's past and current efforts to assess its own performance and hold itself accountable.

The Capacity Review Committee's 2006 report[1] on assessing public health capacity in Ontario is an oft-cited guidance document describing system changes that involve strengthening the workforce, resources, research capacity and, inter alia, accountability of the public health system. Performance management (PM) is described as a systemic approach to demonstrating such accountability. It is an approach to identifying standards of performance in public health, developing novel measures and using existing measures to evaluate how well standards are being fulfilled, and reporting on key measures within and outside of the agency on a routine basis. All of this occurs with the main purpose of informing continuous quality improvement (CQI) as led and steered by Executive leadership. The outcomes of such work would be to demonstrate successes and to identify those areas that require quality improvement (QI).

The 2012-2016 SMDHU Strategic Plan involves Accountability and Performance Measurement as a key Strategic Direction, with the goal of 'demonstrat[ing] efficiency and effectiveness, and enhanc[ing] systems that measure and communicate progress on our priorities, programs and services.'[2] The expected outcomes of this work include the development of key performance indicators, systems to collect and monitor data, and routine reporting to stakeholders and the public for the purposes of monitoring progress. What is missing in this direction is an

articulation of the QI processes that would follow an assessment that might demonstrate areas for improvement as well as excellence in program and service delivery.

Some of the work involved in measuring and reporting on performance is already being done by the agency through its core programs and services as well as through agency-led initiatives. There is an inherent convenience in being able to use information collected for other purposes (e.g. mandatory programs and services, legislated requirements) for the secondary purpose of evaluating performance of the agency. As an example, the BSC (a voluntary agency-led initiative) contains measures such as the percentage of youth who have never smoked a cigarette, which is a measure that was initially developed to be reported as part of the AAs with the Ministry of Health and Long-Term Care (MOHLTC) (an obligatory reporting system). Other such provincially mandated agreements and reporting systems that could produce data for other uses may include, inter alia, Smoke-Free Ontario's program activities, work from the Infectious Disease Control project areas, needle exchange program activities, the work of Healthy Communities in policy development, Healthy Smiles Ontario reports, Haines Food Safety plans and reports, reports on Safe Water and quarterly financial statements.

The data that SMDHU routinely generates and collects can serve multiple purposes, and thus a centralized and harmonized approach to performance management would identify such measures and maximize their utility. In the future, under a performance management system, such measures can be defined and created based on local priorities rather than external obligations, resulting in more meaningful indicators of performance. In addition, and more importantly, reporting on the BSC (of such indicators as percentage of youth smoking) does not necessarily entail any direct remedial or quality improvement action at SMDHU as yet, but in a performance management framework, this data would then be used to examine and pursue quality improvements on program delivery around the agency's tobacco-related work. Indicators of performance can help not only with targeting improvement but also in identifying potential threats to agency performance. Where an expected impact on agency performance may be predicted as a result of changes in budgets, human resources or technological supports available, performance measures can then offer data to confirm or refute such predictions and allow the agency to assess its risks and future directions.

A number of potential benefits of PM are outlined by the Public Health Foundation in the US.[3] Such benefits include:

- Better return on dollars invested and better data for illustrating value
- Better alignment of strategic objectives with relevant measures of success
- Greater accountability for funding
- Reduced duplication of efforts
- Better understanding of public health accomplishments
- Increased cooperation and teamwork

- Refocused emphasis on quality, rather than quantity
- Improved problem solving.

What it is not

It is important to clarify that there may be some misunderstanding of what PM refers to and what it does not refer to in this context. Performance management is also a term often used in human resources literature to describe the process of a manager and employee establishing goals and a plan for the employee to achieve them for the purposes of employee development, based on the operational plan of the organization.[4] This is not what is intended by the term 'performance management' in this context, particularly since the focus on an individual employee's performance is anathema to the spirit of the process being about organizational change. It is also important to distinguish PM and performance measurement from program evaluation. These two concepts differ in a number of ways, in that PM occurs *more frequently*, it is *broader* and is less in-depth, it attempts to provide *scores* on performance rather than *reasons* for observed performance, it has its costs *distributed* across a number of programs and it *informs quality improvement* rather than decisions about whether and how to continue operating a program.[5] One additional point of clarification required is the distinction between PM and performance measurement, where the latter is a subset of the work required to complete the former. Performance management is an overarching strategy while performance measurement represents the technical side of how to account for performance. This is discussed in more detail in later sections.

Purpose

The purpose of this report is to outline the benefits of a PMF, explain the proposed SMDHU framework and its four quadrants and recommend adoption of the framework, initially at the agency level.

It is anticipated that this framework will be used to establish indicators so SMDHU can measure performance and quality, and make specific and targeted improvements. Simcoe Muskoka District Health Unit can then demonstrate greater accountability for the services that we deliver and transparency in reporting on how SMDHU's work improves the health of clients and communities.

METHODOLOGY

The APMWG of the PHASE team reviewed published literature and grey literature on the development, use and assessment of performance management and/or measurement frameworks to answer the following question:

What PM framework should SMDHU adopt (either in whole or a version of) that will address the following steps:

- Performance Measurement – supports the tracking of adherence to both internal and external standards using capacity, process and outcome indicators
- Progress Reporting – analysis of data, identifying areas requiring improvement and reporting of achievements
- Quality Improvement – establishment of a program or process to manage change and achieve quality improvement,

and that reflects our ongoing work in the following areas: AAs, BSC, Initial Report on Public Health, Accreditation, Organizational Standards and CQI.

Search

A search was conducted through CINAHL and other indexes for literature published in the last 10 years, using the following keywords:

Keywords: evidence based practice or quality improvement or total quality management or quality indicators, Health care or quality assurance, health care or performance improvement

Total Quality Management/ or Quality Indicators, Health Care/ or performance management.mp. or Quality Assurance, Health Care/

AND

public health.mp. or exp Public Health

AND

Framework or strategy or program

The search returned 26 articles. Articles were excluded if they were published more than 10 years ago, were not written in English or if the primary topic was not public health and/or performance measurement.

A grey literature search was conducted by searching public health unit websites, contacting public health colleagues at other health units, and through the Google search engine using the exact words "public health performance management framework". As a result of this secondary search, 23 additional items were identified through the Public Health Foundation (http://www.phf.org) and the Centers for Disease Control and Prevention (http://www.cdc.gov).

In addition, several documents from selected Ontario public health units (Eastern Ontario HU, Thunder Bay District HU, Region of Waterloo Public Health, York Region Health Services Department and Toronto Public Health) and one county health unit in North Carolina (Cabarrus Health Alliance) were identified through network requests and reviewed.

Review

The initial scan of indexed literature eliminated dated and/or irrelevant documents. The remaining items were individually assessed by members of the APMWG, using a literature review tracking form (Appendix B) as a guide. The group met twice to share the results of the individual reviews.

Those that were assessed as relevant and that scored 'excellent' to 'good' were summarized in a spreadsheet under the following headings:

- Conceptual Performance Management Framework
- Performance Measurement
- Progress Reporting
- Quality Improvement.

Limitations

This process was not a systematic review of literature on PMFs. The topic does not lend itself to research of the type normally found in peer review journals. The initial literature search yielded few published articles that would have met the criteria of a systematic review.

Rather this was a pragmatic scan of existing frameworks for use at the local public health unit level, how they had been used and how they might be used by SMDHU consistently with the PMF recommended by the Capacity Review Committee[1] and used by the MOHLTC.

Of the final 37 documents contained in the summary, 20 are from the Public Health Foundation website and are based on the same Turning Point Performance Management Framework developed between 1997 and 2006, funded by the Robert Wood Johnson Foundation's program, *Turning Point: Collaborating for a New Century in Public Health*. Furthermore, almost all of the PMFs that were reviewed drew from literature prior to 2003, and therefore not included in our review, in which the Core Public Health Issues (1988) and 10 Essential Public Health Services (1994) were identified in the U.S.[6] It may be possible to assume that our scan exhausted available material since there is a high level of repetition in the results. However, the selective and convenience approach taken to locate relevant material does not allow for this conclusion.

INTRODUCTION TO THE PERFORMANCE MANAGEMENT FRAMEWORK

The literature review informed the development of a framework for PM. This framework was derived from common domains of the Turning Point Foundation framework, an approach that has been widely adopted among public health agencies in the United States.[7] The framework also bears resemblance to the PMF presented by the Capacity Review Committee's 2006 report for Ontario.[1] Some additional contextual elements were added to this framework to identify how it would fit with SMDHU. The aim behind the creation of this framework is to identify the key quadrants/domains of PM that will require detailed and informed technical guidance, as well as central Executive-led oversight on setting priorities and on following through with quality improvement initiatives once performance has been measured and reported (Figure 1).

The four external quadrants constitute a cycle of assessment followed by action. Within the realm of central leadership exists several core functions requiring Executive-level input, including:

- Assessing how performance links to the agency strategic plan (keeping the mission, vision and objectives of the agency in mind)
- Analyzing data generated from this framework and leading organizational learning around adopting a performance management approach to future decision-making
- Making decisions around how to best reorient financial, human and technological resources to address areas for improvement identified through performance assessment.

The framework alone does not describe the nuts and bolts of how to successfully assess agency performance and implement improvements. This work will necessarily occur through an Executive-led committee to provide expert guidance on PM and through management-led discussions and decisions about the various options available to achieve CQI. One of the central and recurring recommendations in the subsequent sections is that Executive Committee leads PM in the organization directing the work of the cross-service Accountability and Performance Measurement Working Group (APMWG) with more specific duties outlined for each domain. In slowly introducing PM as a strategy, some early wins are identified for each domain as pieces of work that can demonstrate progress. The following sections describe domains of the framework in greater detail.

Figure 1: Simcoe Muskoka District Health Unit's Performance Management Framework

Quadrant 1: Performance Standards

The first step in creating a public health PM system is to identify and/or establish the performance standards, targets, goals and objectives that will lead to improved public health practices and ultimately better population health.[8]

Performance standards are objective criteria or guidelines that are used to assess an organization's performance. Standards can be based on: external guidelines or regulations (e.g. Ontario Public Health Standards & the Health Protection and Promotion Act); internal processes (e.g. Strategic Plan); by benchmarking against similar agencies; or by other methods (e.g. input from the community). Performance standards should be aligned with the strategic and operational goals and objectives of the agency.[9]

One of the main purposes of establishing and identifying standards is to examine how standards might inform the development of performance indicators.

EXAMPLES FROM SMDHU'S PERSPECTIVE

The Ontario Public Health Standards (OPHS) and accompanying protocols establish the minimum requirements for programs and services that the health unit is required to deliver. Many performance standards can be derived from these documents.

Accreditation established peer-set principles and standards related to governance, administration and program practices.

Accountability Agreements (AAs) were implemented in 2011 by the Ministry of Health and Long-Term Care (MOHLTC) with all health units in Ontario. AAs include specific performance standards based on the OPHS and associated protocols.

Success in meeting the performance standards identified in the AAs is measured through performance indicators. These indicators have detailed definitions and specific targets (see example below).

Examples from 2011-2013 AA

Performance Standard: *"All high-risk fixed food premises will be inspected not less than once every four months"* (OPHS Food Safety Protocol)

Performance Indicator: *"% of year-round high-risk fixed food premises inspected at least once per trimester"*

Performance Target: *"In 2013, 100% of all year-round high-risk fixed food premises will be inspected at least once per trimester"*

Next Steps:

- The SMDHU Executive Committee oversees the work of the APMWG in the following areas:
  - Developing and clarifying internal standards and expectations
  - Creating an inventory of external standards that SMDHU is held accountable to on a regular basis
  - Identifying aspects of internal and external standards that may help to inform indicator development.

One Early Win (achievable within the next year):

- Accountability and Performance Measurement Working Group reports to Executive Committee describing current performance standards that are already in use for all program and service areas.

Quadrant 2: Performance Measurement

- ▶ Accountability Agreement Indicators
- ▶ Balanced Scorecard
- ▶ Surveillance Data (e.g. IPHIS, RRFSS)
- ▶ Program HR/Finance/Resource Data
- ▶ Service Delivery Data

According to Lichiello, "*performance measurement information helps to set agreed-upon performance goals, allocate and prioritize resources, and inform managers to either confirm or change current policy or program directions.*"[7] Once performance standards have been clearly established, the measurement of performance can occur through the derivation of performance indicators of **capacity, process** or **outcome**. These quantitative measures will help assess if the agency has met the standards established in the first quadrant of the framework.[11]

Performance indicators are needed to measure the success of the agency in achieving their desired level of performance. Performance indicators define specific characteristics or aspects of a performance standard that can be measured (either directly or indirectly). Performance indicators should be: valid, reliable, responsive, functional, credible, understandable, and available. Targets for each indicator should be set at the outset to ensure performance is assessed in an objective manner.[10]

In the process of establishing indicators, stakeholders'

and users' input should be sought. It is suggested that agencies work more effectively when they align their performance measures, activities and spending with their mission, goals and performance standards.[9]

Performance indicators should be defined taking the following attributes into consideration:

- Data is available, reliable and valid (e.g. confidence of its accuracy and that it measures what it is intended to measure)[3,12]
- Data is responsive, functional and credible (e.g. input from stakeholders will help with this attribute)[7,13]
- Measures should be able to identify gaps in performance for compliance with standards as well as performance on new and growing initiatives[11,12]
- Data to be collected should be available for several years into the future to be able to reflect trends[9]
- Baseline data should be collected, and benchmarking should be taken into consideration.[12,13]

Once indicators have been clearly established and defined, a system for consistent collection of the data and the organized reporting should be developed.[14] To establish such systems may require investment in technological advances and changes to work flow.

Next Steps:
- The SMDHU Executive Committee oversees the work of the APMWG in the following areas:
  - Identifying existing PM information that can measure the performance standards or performance indicators already established
  - Defining performance measures that are not currently collected but could be readily available as prioritized by executive direction
  - Establishing a system of data collection that would consistently and continually feed into a centralized location for reporting purposes
  - Creating inventories of existing performance measurement indicators and available data that can be used to measure the indicators. In addition, develop an analysis schedule so that Executive, management and staff understand when to expect data updates.

One Early Win (achievable within the next year):
- Accountability and Performance Measurement Working Group consults with Executive Committee on existing and novel ideal indicators for a pilot program area and the development of a report that describes the most relevant indicators, how they are measured/collected, how they are defined/calculated and how they may change over time depending on the functioning of the program.

Quadrant 3: Reporting of Progress

- ▶ Accountability Agreement Indicator Reports
- ▶ Annual SMDHU Report
- ▶ Focus/Health Status Reports
- ▶ Financial Reports
- ▶ Progress on Strategic Directions
- ▶ Accreditation Reports

Reporting
Provincial Reports, Health Status/Focus Reports, Progress Reporting

An essential component of PM is regular reporting to its stakeholders on the progress made towards the goals and objectives of the organization. Reporting is an accountability function which includes the analysis of performance data and provides feedback of performance information to key stakeholders.[14]

Reporting has two main functions:

1. Accountability – sharing the progress we make towards goals and objectives
2. Quality Improvement – providing feedback needed to those in a position to making adjustments in order to meet the goals, objectives, or targets set.[7]

The purpose of the agency's PM system and the intended users of the performance data drive the way in which an organization tracks and reports progress.[9] In public health, not only are the goals broad based (e.g. improving the health of the public), but also the stakeholders (users of the performance data) are diverse.[7] Stakeholders may include:

- Provincial government and ministries
- Peers – other programs, agencies

EXAMPLES FROM SMDHU'S PERSPECTIVE

Among the many types of reporting required by SMDHU, the agency is required to report to the Ministry of Health and Long-Term Care on:

- Accountability Agreement indicators
- Indicators from the Initial Report on Public Health.

The authority for the reporting of these data comes from:

- Health Protection and Promotion Act
- Ontario Public Health Standards
- Ontario Public Health Organizational Standards.

Another type of public reporting involves the overall results of the agency level Balanced Scorecard (BSC). The purpose of the BSC is to track progress towards meeting the goals and objectives of the SMDHU strategic plan.

- Other public health organizations, including provincial or local government and private-sector organizations
- Communities served – the people of Simcoe Muskoka, the county, townships and cities, and our partners in the community
- Board of Health
- People at SMDHU who are responsible for carrying out the work.[7]

The Capacity Review Committee recommended building on existing reporting mechanisms, using common data systems in day to day operations, and the production of an annual report for funders and the general public. Such a report should include both health status and performance indicators to ensure transparency and accountability.[1]

Application and/or implementation

In general, the reporting of progress involves intentionally sharing and monitoring performance indicators and outcome results with stakeholders, including leadership entities.

Several U.S. states have adapted the Turning Point Performance Management Framework and have developed plans for applying and/or implementing it. In Minnesota, the state has taken a coordinating role in reporting. To avoid duplication of efforts at the local board level, they use existing public health data.[15] Louisiana has an accountability system which requires performance report cards and accountability reports, which can be viewed by the public.[16]

Kansas[17] and Nebraska[18] state health departments apply the framework through the following steps:

- Developing a system for regular reporting and a regular reporting cycle

EXAMPLES FROM SMDHU'S PERSPECTIVE

Accountability and Performance Measurement is one of the SMDHU Strategic Directions for 2012 – 2016. The goal is to: *Demonstrate efficiency and effectiveness, and enhance systems that measure and communicate progress on our priorities, programs and services.*

Three specific objectives are:

- By February 2013 key performance indicators that demonstrate compliance with public health standards and progress on the strategic plan are identified at the agency, service area and program levels.

- By December 2015 the agency selects and implements electronic systems to collect and monitor data to report progress on key performance indicators.

- Progress on key performance indicators are systematically reported to SMDHU stakeholders and the public at least annually, or as required.

- Analyzing data and documenting the level of progress in meeting performance measures, targets or standards
- Assessing if performance standards are met and if not, considering a formal quality improvement process
- Sharing the report with leadership, stakeholders, etc.

Next Steps:

- The SMDHU Executive Committee oversees the work of the APMWG in the following areas:
  - Creating an inventory of current agency PM reporting requirements and cycles, and recommending changes to voluntary reporting cycles to meet all stakeholders' needs
  - Identifying the IT and human resources necessary to select and implement electronic systems to collect and monitor data to report progress on key performance indicators
  - Overseeing consistency in how data is reported and interpreted for internal and external reports year-to-year, with the expressed purpose of minimizing duplication of efforts and allowing for information to be transferrable to a variety of reporting contexts.

Early Wins (achievable within the next year):

- Accountability and Performance Measurement Working Group reports to Executive Committee on the mandatory and voluntary reporting that takes place at SMDHU (with an overview of the cycles, the audience, the way that information is conveyed and the sources used for collection of data)
- Create an easily accessible section on the intranet where program and service area staff can find the latest Balanced Scorecard and Accountability Agreement statistics.

Quadrant 4: Quality Improvement

Quality Improvement
Review of Measures, QI Methods,
Revision of Current Agency Practices

- ▷ Analysis and Review of Reports and Recommendations for Improvement
- ▷ Strategies for QI (Lean, Six Sigma, Root Cause Analysis)
- ▷ Plan/Do/Check/Act Cycle
- ▷ Revise Capacity and Service Delivery

Continuous Quality Improvement (CQI) is a systematic, organization-wide approach for continually improving all processes that deliver quality services[19] whereas QI processes are those specific activities and actions taken to make the improvements.[20]

Continuous Quality Improvement is a "commitment to systems change to execute a continuous flow of improvements that meets or exceeds the expectations of the customer (communities) and generally includes:

- A link to the organization's strategic plan and goals
- A quality council made up of the organization's top leadership
- QI training for staff
- A mechanism for prioritizing QI projects based on performance data; and
- Supporting and recognizing staff for their QI activities."[21]

As a part of this overall approach, QI processes and activities may include strategies such as Lean and Six Sigma, which are both means to achieving the end of improving quality. These processes and activities will

EXAMPLES FROM SMDHU'S PERSPECTIVE

Quality improvement plans were incorporated into the Accreditation process to address shortcomings identified through on site surveys. An annual review and reporting cycle was introduced to capture improvement activities.

Knowing that 32 of Ontario's public health units are using Hedgehog, SMDHU led the formation of a working group that collaborated with Hedgerow, the developers of the software, to build a customized report for the Food Safety Program. This report, to be used in conjunction with each Health Unit's own database, will extract the information required to accurately confirm the requirements of the Accountability Agreement indicator: *% of high risk food premises inspected once every 4 months while in operation.*

The Sexual Health Program used process mapping to accurately quantify case and contact management timelines and identify areas amenable to increased efficiencies in an effort to achieve the Accountability Agreement target of 100% for the indicator: *% of confirmed gonorrhea cases where initiation of follow-up occurred within 2 business days.*

not be discussed in detail in this report but would necessarily be reviewed in future PM work as options for QI.

In order to achieve the best possible health outcomes, the Ontario Public Health Standards has indicated that Boards of Health must consider CQI when assessing, planning, delivering, and managing their programs and services: *Management of public health programs and services shall require ongoing monitoring of key performance indicators to support continuous quality improvement and evidence-informed public health practice.*

In addition, the Capacity Review Committee recommended that CQI should be the foundation of an effective PM system for public health in Ontario. It links data collection, reporting, monitoring and learning and makes them the cornerstones of an ongoing quality improvement cycle (Figure 2).[1]

Figure 2: Continuous Quality Improvement
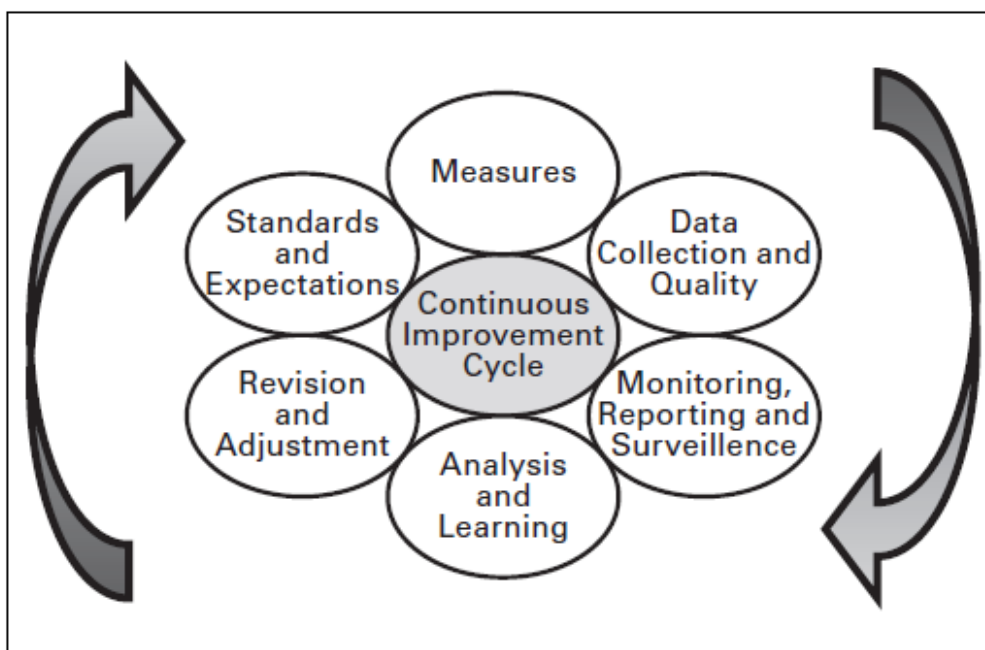
Source: Capacity Review Committee[11]

Finally, the Accountability Agreement entered into between the MOHLTC and SMDHU (January, 2011), states: *The Parties agree to adopt a proactive and responsive approach to performance improvement based on the following principles:*

- A commitment to continuous quality improvement
- A culture of information sharing and understanding; and
- A focus on risk-management.

In August, 2013, Madelyn Law, Assistant Professor from Brock University requested all 36 Ontario Public Health Units to respond to a survey titled State of Quality Improvement in Ontario's Public Health Units.[20] The purpose of this study was to understand the level of maturity in QI process in all local health units in the province. The survey collected information in the following domains:

- QI organizational culture = commitment and collaboration
- Capacity and competency = skills, methods and investment
- QI alignment and spread = integration, authority and value.

Of the 33 responding health unit representatives, 96% agreed that their leaders are receptive to ideas for improving quality (commitment) and 79% stated that staff help solve problems (collaboration). However, in terms of skills, few health unit representatives indicated that their leaders (35%) and staff (17%) are trained in the basic QI methods. Investment in QI is fairly low, with just over one-third of all respondents indicating that their health unit has a QI officer or a QI plan (32%) while one-half of respondents stated that their health unit has a QI committee or team (50%).

The integration of QI in programs and services requires improvement with 43% stating that job descriptions include QI responsibilities, 39% with staff at all levels participating in QI activities, 39% routinely using customer satisfaction information to improve services, and less than half (47%) stating that accurate and timely data is available for QI purposes.

Finally, respondents indicated that their health units value QI. Ninety-three per cent stated that spending time and resources on QI is worth it and 96% agreed that using QI will impact the health of the communities served.

Overall, this survey indicates that local public health values QI and there is strong commitment to its purpose. However, the actual 'doing' of QI in health units is lagging behind. The resources, knowledge and skills to undertake QI initiatives are occurring in less than half of all Ontario public health units.

There are 4 strategies to the effective implementation of CQI in an organization:

1. Develop a strong consumer focus – this includes the needs of both internal and external consumers
2. Continually improve all processes – identify the processes and improve them by using tools such as the Plan, Do, Study/Check, Act (PDSA) Cycle. This cycle helps to answer the following questions: What are we trying to accomplish? How will we know that a change is an improvement? What change can we make that will result in improvement?
3. Involve employees – encourage staff, provide sufficient training, support them, use their work, celebrate accomplishments
4. Mobilize both data and team knowledge to improve decision making.[19]

Leadership support for CQI is a critical element of creating a culture for CQI and to reinforce that CQI should not be viewed as an add on, but as the more effective way to do the work that public health already has to complete. In times of fiscal constraints and higher expectations, it is important for work to be transparent and programs and services to be delivered effectively and efficiently. Ultimately, the use of CQI will lead to better programs and a greater alignment with the health unit's vision and mission.

Next Steps:
- The SMDHU Executive Committee oversees the work of the APMWG in the following areas:
  - Completing focused training in CQI to then champion efforts at SMDHU and ensure efficient implementation of CQI
  - Piloting QI activities at SMDHU to demonstrate potential improvements based on pre-determined goals from Executive leadership.

One Early Win (achievable within the next year):
- Identify a program area with sufficient historic data on performance and apply a QI activity to the area to demonstrate opportunities for improving efficiency.

Leadership

Leadership is the central component of the proposed PMF. Each of the four quadrants require clear, consistent, and visible leadership to be successfully planned and implemented.

Elements of the first three quadrants of the framework (i.e. standards, measures and reporting) have been implemented sporadically at the health unit for specific program areas and under specific reporting obligations. However, examples of application of quality improvement, the fourth quadrant in the PMF, in the agency are quite limited, and it is arguably the quality improvement domain that bears the greatest weight within performance management for creating change. Quality improvement is not possible without a commitment from senior leadership to make the decisions (e.g. budgets, human resources and infrastructure) that are needed to realize true performance improvements.

EXAMPLES FROM SMDHU'S PERSPECTIVE

Senior leaders in the health unit have already begun to take steps to build a culture of performance measurement and quality improvement.

- The 2012-2016 Strategic Plan has identified Accountability & Performance Measurement as one of four strategic goals.

- The Population Health Assessment, Surveillance and Evaluation (PHASE) Team of the Program Foundations and Finance Service has a mandate related to accountability and performance measurement.

- The Balanced Scorecard has been used at the agency and program level since 2010.

Leadership can build off these initiatives to continue to promote a culture of accountability and performance measurement.

Equally important is the dialogue required for establishment of standards, indicators and reporting mechanisms. Executive input is particularly needed when development of novel standards and indicators could allow for the examination of aspects of performance that matter more to the agency than what pre-existing standards and indicators provide. A recurring theme in the literature reviewed is that of a culture of quality. Leadership, especially from senior management, is needed to promote a culture of PM within the agency through fostering teamwork.[22]

The technical aspects (e.g. data management and analysis, development and management of IT systems, etc.) of the PMF can be administered through the APMWG; whereas, the more complex and impactful decisions (e.g. what to do with the information, what goals to set for improvement, when to make broad changes to standards and reporting options) will require Executive oversight.

The expectations for staff, managers and senior leadership should be clearly communicated early and often. This can and should be done in a variety of ways, using both formal and informal channels of communications. It is also essential to allow for two way communication between staff and management with respect to performance standards to enhance staff engagement in the process. An agency performance standards committee, comprised of both management and staff, could be useful in this respect.[20]

With respect to implementation of this framework, visible and strong senior leadership is required to ensure success factors are optimized, risk factors are reduced, and strategic and effective reporting occurs. Senior leaders are best placed to mentor and demonstrate a culture in which:

- The data are routinely collected, critically analyzed, and reported through the alignment of the performance measures with the organization's goals
- Priorities are identified and resources are allotted to structures and systems that require them
- And that action plans are made to address those indicators or outcomes that do not meet standards or targets.[3,7,22,23]

WHAT ARE OTHER ONTARIO HEALTH UNITS DOING TO ADDRESS PERFORMANCE MANAGEMENT?

In creating a framework for PM, SMDHU is taking on an approach that is comparable to what other health units have done. To inform the work of the APMWG, a rapid environmental scan of the PM activities that are currently in place in other Ontario public health units was also conducted. An email was sent to a targeted group of individuals including those who lead/manage QI/CQI at their health units in addition to MOHLTC and academic representatives. Toronto Public Health's (TPH) framework is consistent with the literature reviewed as part of this report and is quite similar to the one that is proposed for SMDHU. Eastern Ontario Health Unit (EOHU) also has a fully developed framework; however, it is driven by CQI, rather than having CQI as one component of the framework. Eastern Ontario Health Unit's quality framework includes 10 dimensions of quality that are divided into three different domains. Thunder Bay District Health Unit (TBDHU) has implemented a Quality Management System that, like EOHU, is centered on CQI. Thunder Bay District Health Unit's framework includes eight principles and 13 elements of quality management. The Region of Waterloo Public Health (ROWPH) has developed a number of standard operating procedures related to accountability and QI; however, a PMF was not obtained. York Region Health Services Department's Healthy Living (HL) Service has created a CQI program whose goal is to ensure that HL programs are planned, assessed and evaluated using evidence-informed practice principles in six CQI-related focus areas: (1) program planning and assessment, (2) logic models, (3) indicator tracking, (4) program evaluation, (5) CQI process, and (6) documentation.

An element in common with all public health units that have started work related to PM and QI is the creation of an agency-wide standing committee to oversee the work. These committees have representation at the Executive, management and staff levels.

CONCLUSIONS AND RECOMMENDATIONS

In summary, the PMF developed by this working group describes a cycle moving from inquiry to improvement. The harmonization of processes that already occur at SMDHU to assess agency performance, combined with the development of novel standards and measures, will allow for a standard application of PM principles in all agency activities.

The domains of the PMF outline the directions that need to be taken and revisited in implementing PM across the agency. Since each domain warrants its own in-depth generation of specific ideas and strategies, the aim of this report was to present more of a general overarching approach to PM. As this work moves forward, the work of the APMWG with senior leadership involvement and input will involve a more in-depth assessment of the standards, indicators, reporting mechanisms and QI activities that fit within the SMDHU context.

One particular area of focus that remains to be studied is the costs and benefits of continuing with the status quo compared with the costs and benefits of implementing PM as an agency-wide strategy. The dedication of staff hours to planning and training, the cost of implementing technological solutions for harmonizing agency data, the additional research required to weigh future options for QI, and the efforts needed to communicate changes within and outside of the agency are all costs that need to be accounted for. These costs would then need to be compared against the potential savings in improving efficiency of workflow, redirection of resources to the most needed areas, reorganizing of work to meet budget constraints and other possible benefits. With the enhancements to the APMWG and with Executive direction, a more specific business case may be developed to guide future decisions on the value added from introducing PM at SMDHU.

The recommendations listed below outline next steps that can be taken to see this work move forward over the next several months.

Overall Recommendations

1. That Executive Committee endorses the Performance Management Framework (PMF) and this report as a foundational document for the introduction of Performance Management (PM) at SMDHU.
2. That Executive Committee assumes the role of steering committee for PM responsible for overseeing the implementation of PM work within SMDHU, along with an assessment of potential costs and benefits of continuing with this work.
3. That a subgroup of the Population Health Assessment, Surveillance and Evaluation (PHASE) team remains in place as the Accountability and Performance Measurement Working Group (APMWG) to implement the PM directions from Executive and to support program/initiative teams involved in PM activities.
4. That the focus of the "easy win" accomplishments in all four quadrants identify standards, measures, reporting and quality improvement (QI) activities as alternatives to the Accreditation process and that the Chief Nursing Officer become a member of the APMWG through the development phase of this project.
5. That the APMWG with Executive guidance develops a communications plan for rolling out PM as an agency-wide strategy in order to ensure buy-in from employees and to avoid misunderstandings about the purpose of PM.
      Recommend and/or deliver internal knowledge exchange activities to ensure staff and Board members understand the reasons for reporting of PM and are able to see and use the data.
6. That Executive Committee considers the adoption of agency core competencies related to staff knowledge and skills in the areas of PM and QI.
7. That Executive Committee endorses a culture of quality and QI at SMDHU.

REFERENCES

1. Capacity Review Committee. Revitalizing Ontario's Public Health's Capacity: Final Report of the Capacity Review Committee. (2006) http://www.health.gov.on.ca/en/common/ministry/publications/reports/capacity_review06/capacity_review06.pdf

2. Simcoe Muskoka District Health Unit. (2012) *Strategic Plan 2012-2016 (website)*. http://www.simcoemuskokahealth.org/Libraries/HU_Library/2012-2016Strategic_Plan_external_web.sflb.ashx

3. Public Health Foundation. Performance Management. Introduction & Applicability to Public Health (PowerPoint presentation)

4. Community Foundations of Canada (2013) *HRCouncil.ca HR Glossary (website)*. http://hrcouncil.ca/hr-toolkit/HRToolkitGlossary.cfm

5. Hatry, H. P. (2013). Sorting the relationships among performance measurement, program evaluation, and performance management. In S. B. Nielsen & D. E. K. Hunter (Eds.). *Performance management and evaluation. New Directions for Evaluation, 137*, 19–32.

6. Milhon K. A Short History of Performance Management in Public Health 1988-2010. National Network of Public Health Institutes. June 14, 2011 http://nnphi.org/CMSuploads/AShortHistoryofPerformanceManagementinPublicHealth.pdf

7. Lichiello, P. 1999. Turning Point: Collaborating for a New Century in Public Health: Guidebook for Performance Measurement. University of Washington Turning Point National Program Office.

8. Performance Measurement Tool for Public Health Policy. Joint report from the American Public Health Association and the Public Health Foundation. http://www.phf.org/resourcestools/Documents/Policy_Performance_Measurement_Tool_FINAL.pdf

9. Public Health Foundation. (2003) *From Silos to Systems: Using Performance Management to Improve the Public's Health*. Robert Wood Johnson Foundation Turning Point National Program Office; Seattle, WA.

10. Performance Management in Public Health A Literature Review. Prepared by Public Health Foundation for the Performance Management National Excellence Collaborative. http://turningpointprogram.org/Pages/pdfs/perform_manage/pmc_lit_synthesis.pdf

11. Public Health Foundation. *About Performance Management*. "T:\Central Services\Health Information\AD03Committee&TaskGroups\PHASETeam\Workgroups\AccountabilityPerfMeasure\LiteratureSearch\Deborah'sAdditionalItems\About_Performance_Management.pdf"

12. Ellis, J. "All inclusive benchmarking." J Nurs Manag. 14.5 (2006): 377-83.

13. Deber, R. et al. Change towards outcome based performance management. An Expedited Synthesis Final Report. April 2011

14. Landrum, L. B. and S. L. Baker. "Managing complex systems: performance management in public health." J Public Health Manag. Pract. 10.1 (2004): 13-18.

15. Minnesota Department of Health, Office of Performance Improvement. New Local Public Health Performance Measures for the Planning and Performance Measurement Reporting System - Executive Summary.

16. Public Health Foundation. Performance Management in Action: Tools and Resources. http://www.phf.org/resourcestools/Documents/PMtoolkit.pdf

17. Kansas PM Application. "T:\Central Services\Health Information\AD03Committee&TaskGroups\PHASETeam\Workgroups\AccountabilityPerfMeasure\LiteratureSearch\Deborah'sAdditionalItems\KansasKS_PM_Application_Overview.pdf"

18. Nebraska PM Application. "T:\Central Services\Health Information\AD03Committee&TaskGroups\PHASETeam\Workgroups\AccountabilityPerfMeasure\LiteratureSearch\Deborah'sAdditionalItems\NebraskaNE_PM_Application_Overview.pdf"

19. Brassard M. Ritter D. The Memory Jogger 2. Tools for Continuous Improvement and Effective Planning. 2010.

20. Law, M et. Al. A Primer on Quality in Public Health: What's needed to Advance CQI in Ontario Public Health?

21. Randolph, G.D. and C. Lea, S., *Quality Improvement in Public Health: Moving from Knowing the Path to Walking the Path.* Journal of Public Health Management and Practice, 2012. **18**(1): p. 4-8.

22. Wang, M. C., et al. "Redesigning health systems for quality: Lessons from emerging practices." Jt.Comm J Qual. Patient Saf. 32.11 (2006): 599-611.

23. Bhandari, M.W., et al. "New Data, Same Story? Revisiting Studies on the Relationship of Local Public Health Systems Characteristics to Public Health Performance." J Public Health Management Practice, 2010, 16(2), 110–117.

24. Tindill, B. S. and Stewart, D. W. (1993) Integration of Total Quality and Quality Assurance. In Al-Assaf, A. F. and Schmele, J. A. (eds) The Textbook of Total Quality in Healthcare. St Lucie Press, Delray Beach, FL, pp. 209–220

25. Buccini, E. P. (July 1993) Total quality management in the critical care environment: a primer. Critical Care Clinics, 9, 455–463.

Literature reviewed but not explicitly referenced in this document

Asch, S. M., et al. "A review of instruments assessing public health preparedness." Public Health Rep. 120.5 (2005): 532-42.

Dilley, J. A., B. Bekemeier, and J. R. Harris. "Quality improvement interventions in public health systems: a systematic review." Am J Prev Med. 42.5 Suppl 1 (2012): S58-S71.

Fraser Health Authority Performance Agreement, 2005 - 2006, http://www.health.gov.bc.ca/socsec/performance.html

Houston Department of Health and Human Services. Performance Management Applications in Public Health. http://www.phf.org/resourcestools/Documents/Houston_PM_Application_Overview.pdf

Landrum, L. B. and S. L. Baker. "Managing complex systems: performance management in public health." J Public Health Manag. Pract. 10.1 (2004): 13-18.

Macinati, M. S. "The relationship between quality management systems and organizational performance in the Italian National Health Service." Health Policy. 85.2 (2008): 228-41.

Meyer, A. M., M. Davis, and G. P. Mays. "Defining organizational capacity for public health services and systems research." J Public Health Manag. Pract. 18.6 (2012): 535-44.

Oklahoma State Department of Health. Performance Management Applications in Public Health. http://www.phf.org/resourcestools/Documents/OK_PM_Application_Overview.pdf

Parameters of a Performance Management Framework: http://humanservices.alberta.ca/documents/pdd-sis-parameters-pmf.pdf

Rohrer, J. "Performance contracting for public health: the potential and the implications." J Public Health Manag. Pract. 10.1 (2004): 23-25.

Scutchfield, F. D., et al. "Public health performance." Am J Prev Med. 36.3 (2009): 266-72.

Southwest Local Health Integration Network. 2006. Performance Management Framework. http://www.southwestlhin.on.ca/Page.aspx?id=3350

Suarez, V., C. Lesneski, and D. Denison. "Making the case for using financial indicators in local public health agencies." Am J Public Health. 101.3 (2011): 419-25.

Turnock, Bernard J., Handler, Arden S. From Measuring to Improving Public Health Practice. Annu. Rev. Public Health 1997. 18:261-82

Vermont Department of Health. Performance Management Applications in Public Health. http://www.phf.org/resourcestools/Documents/VT_PM_Application_Overview.pdf

APPENDIX A: GLOSSARY

(Unless otherwise indicated, definitions come from Lichiello[7])

Accountability - An obligation or willingness to be assessed on the basis of appropriate measures of actions and outcomes with regard to the achievement of workgroup/program/organization or policy purposes.

Capacity - The ability of a work group, program, or organization to carry out the essential public health services, and in particular to provide specific services; for example, disease surveillance, community education, or clinical screening. This ability is made possible by specific program resources as well as by maintenance of the basic infrastructure of the public health system.

Continuous Quality Improvement (CQI) - "A comprehensive management philosophy focusing on continuous improvement by applying scientific methods to gain knowledge and control over variation in work process."[24] In other words: when processes and problems are identified, improved and evaluated, the process of improvement begins again becoming a continuous cycle.[25] The CQI term is interchangeably used in the literature with Total Quality (TQ), Total Quality Management (TQM) and Continuous Improvement (CI).

Goal - An issue-oriented statement of an organization's desired future direction or desired end state. Goals guide an organization's efforts; they articulate the overall expectations and intentions for the organization.

Mission Statement - A comprehensive yet concise statement defining what a work group/program/organization does, for whom, how, and why.

Objective - A measurable target that describes specific end results that a service or program is expected to accomplish within a given time period.

Outcome - A change, or lack of change, in the health of a defined population that is related to a public health intervention – such as educational classes, tests or clinical procedures, or complaint investigations. Outcomes can be of three types:

1. **Health Status Outcome -** A change, or lack of change, in physical or mental status.
2. **Social Functioning Outcome -** A change, or lack of change, in the ability of an individual to function in society.
3. **Consumer Satisfaction -** The response of an individual to services received from a health provider or program.

Performance Management - The use of performance measurement information to help set agreed-upon performance goals, allocate and prioritize resources, inform managers to either confirm or change current policy or program directions to meet those goals and report on the success in meeting those goals.

Performance Measure - The specific quantitative representation of a capacity, process, or outcome deemed relevant to the assessment of performance.

Performance Measurement – The second step in a four step performance management framework; the selection and use of quantitative measures of capacities, processes and outcomes to develop information about critical aspects of activities, including their effect on the public. It involves the regular collection and reporting of data to track work produced and results achieved.

Performance Standard – The first step in a four step performance management framework; a generally accepted, objective standard of measurement such as a rule or guideline against which an organization's level of performance can be compared.

Process - The things that are done by defined individuals or groups – or to, for, or with individuals or groups – as part of the provision of public health services. Process means all of the things we do in public health practice; for example, conducting educational classes, performing a test or procedure, investigating a complaint, crunching data, meeting with community groups.

Quality Improvement (QI) – The fourth step in a four step performance management framework; establishment of a program or process to manage change and achieve quality improvement in public health policies, programs or infrastructure based on performance standards, measures and reports.

Reporting Of Progress - The third step in a four step performance management framework; in general, the reporting of progress involves intentionally sharing and monitoring performance indicators and outcome results with stakeholders, including leadership entities.

Stakeholder - Any person, group, or organization that can place a claim on or influence the work group/program/organization's resources or outputs; is affected by those outputs; or has an interest in or expectation of the work group/program/organization.

Strategic Planning - A continuous and systematic process whereby an organization makes decisions about its future, develops the necessary procedures and operations to achieve that future and determines how success is to be measured.

APPENDIX B: LITERATURE REVIEW TEMPLATE

Literature Review Research Questions

What performance management framework should SMDHU adopt (either in whole or a version of) that will address the following steps:

- Performance Measurement – supports the tracking of adherence to both internal and external standards using capacity, process and outcome indicators.
- Progress Reporting – analysis of data, identifying areas requiring improvement and reporting of achievements.
- Quality Improvement – establishment of a program or process to manage change and achieve quality improvement.

and that reflect our ongoing work in the following areas: Accountability Agreements, Balanced Scorecard, Initial Report on Public Health, Accreditation, Organization Standards and continuous quality improvement.

Decision to be Made: Adoption/creation of a SMDHU Performance Management Framework and supporting systems that address the requirements of the Ontario Public Health Organizational Standards and Ontario Public Health Standards to maintain a commitment to continuous quality improvement.

Reviewer:

Review Date:

Articles/Publications

Reference/Citation (copy and paste info from email sent July 29th):

Type of document (i.e. article, systematic review):

Please answer the following questions to determine relevance of the document:

(Note: If you answer "No" to any of these three questions please do not review the document and return with the completed forms.)

1)   Is the document written in the English language?

2)   Was the document written in the last 10 years – between 2003 and 2012?*

Exceptions are possible- if you feel the document is relevant regardless of date please review and briefly explain your reasons for inclusion below.

```
┌─────────────────────────────────────────────────────────────────┐
│                                                                   │
│                                                                   │
│                                                                   │
└─────────────────────────────────────────────────────────────────┘
```

3)   Is one of the primary topics of the document focused on public health and/or performance management principles?

Once you have had a chance to read the article, please answer the following questions – and consider these questions when completing the rest of the review:

Literature Review Question

4. Does the article or document discuss: (Y/N)

    a. Performance management in health care?
    b. Performance management in public health?
    c. Evaluation of performance management principles/framework in health care?
    d. Evaluation of performance management principles/framework in public health?
    e. Recommendations for adoption of performance management framework in health care?
    f. Recommendations for adoption of performance management framework in public health?
    g. Best practices for implementation in public health?

5. Are there are any other topics discussed which you feel are relevant to answering the literature review research questions? (i.e. theory, future research needs, etc).

Please list below:

```
┌─────────────────────────────────────────────────────────────────┐
│                                                                   │
│                                                                   │
│                                                                   │
└─────────────────────────────────────────────────────────────────┘
```

6. What is (are) the research question(s) of this study? Or what is the main topic of this document?

```
┌─────────────────────────────────────────────────────────────────┐
│                                                                   │
│                                                                   │
│                                                                   │
└─────────────────────────────────────────────────────────────────┘
```

7. Identify the type(s) of performance management principles discussed:

```
┌─────────────────────────────────────────────────────────────────┐
│                                                                   │
│                                                                   │
│                                                                   │
└─────────────────────────────────────────────────────────────────┘
```

8. Identify populations of interest/target audience(s) discussed:

☐ Public Health Staff
☐ Municipal or Regional Government
☐ Provincial Government
☐ Federal Government
☐ Health Care Organization
☐ External Clients
☐ Other:

[ ]

9. Identify key research findings and/or conclusions (i.e. How does this article or document contribute to answering the literature review research questions?):

[ ]

Answer y/n, provide details as deemed necessary:

a. Was the setting and/or program adequately described?

[ ]

b.Were the methodologies well described?

[ ]

c.Were the methodologies appropriate to the research question?

[ ]

d.Is there evidence that the results are accurate?

[ ]

e. Is there evidence that the results are valid?

[ ]

f.Do the results cover everything in the methods section?

[ ]

g.Are the limitations identified?

[ ]

h.Are the results appropriately interpreted and are other possible interpretations of the results considered?

[ ]

10. Identify implications and/or recommendations for practice:

[ ]

11. In what way does the setting(s) and/or program(s) evaluated or studied differ from the SMDHU situation?

[ ]

12. What are the limitations to generalizing from the results, interpretation and recommendations in the document to SMDHU?

13. What of our literature review questions remain unanswered?

14. Identify relevant resources or references discussed in the document (Please list additional references below):

a. Please identify which of these resources or references should be further reviewed?

15. Other relevant information (i.e., applicability to local public health practice):

16. Overall assessment of the article/report:

☐ Excellent
☐ Good
☐ Fair
☐ Poor

Other comments/reasons: