



# **What makes a high performing health unit?**

*A research report to inform strategic planning at*

*Middlesex-London Health Unit*

## **EXECUTIVE SUMMARY**

### **Why a *Research* Report?**

An important step in the development of a strategic plan is to understand best practices of performance excellence in the local context of the organization. The research report examines local data and literature that aims to describe:

#### ***What makes a high performing health unit?***

This data, along with reflection on feedback from the current strategic planning launch event and information gathered from the previous strategic planning process form the foundation of the research report.

### **Balanced Scorecard for Public Health**

The balanced scorecard for public health helps align performance of an organization around its mission, vision and strategic priorities. The framework facilitates monitoring and assessment of strategy implementation as well as assigns accountability for performance at all levels of the organization. Four important areas to consider in strategic priority development are: health determinants and status; community engagement; resources and services; and, integration and responsiveness (Woodward, Manuel & Goel, 2004).

### **Alignment of Literature and Local Data**

In the research report, local data and research literature were examined under the framework of a balanced scorecard for public health. The intention of this exercise was to present the evidence from the literature and the local context in each quadrant of the scorecard to inform selection of strategic priorities.

### **Findings**

Key findings from the research report show that Middlesex-London is well placed within non-modifiable factors such as population size and board structure to be high performing and improve health outcomes. Modifiable factors such as community engagement, leadership, organizational culture, and external partnerships can be changed to drive public health unit performance. The literature specifically identifies administrative evidence-based practices that drive evidence-informed decision making, which improves modifiable factors and ultimately leads to downstream impact on health outcomes. Information summarized in each of the quadrants informs the strategic priorities in the context of the local community values, attitudes and values of staff, and views from important health unit stakeholders.

### **Next Steps**

The research report presents the characteristics of high performing public health units in the framework of the balanced scorecard for public health to help decision makers formulate strategic priorities for MLHU.

## INTRODUCTION

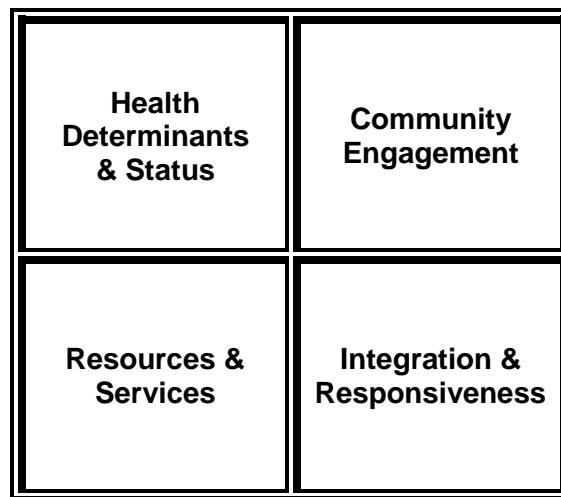
The goal of this research report is to explore evidence-based concepts that describe what makes a high performing health unit. Information drawn from peer-reviewed literature and data about the Middlesex-London community has been compiled to help identify strategic priorities and define activities to enhance performance. The data has been organized by the four quadrants of a Balanced Scorecard for Public Health model proposed by the Institute for Clinical Evaluative Sciences (ICES) (Woodward, Manuel & Goel, 2004).

### *BALANCED SCORECARD FOR PUBLIC HEALTH*

To realize the mission and vision set forth in a strategic planning cycle an organization may use the balanced scorecard to help define strategic priorities and monitor progress through key performance indicators. Originally developed in the 1990's by Kaplan & Norton (1992) for use in private sector, the balanced scorecard prescribes four important perspectives:

- 1) Customer – How do customers see us?
- 2) Internal business – What must we excel at?
- 3) Innovation and learning – Can we continue to improve and create value?
- 4) Financial – How do we look to shareholders?

Realizing that key performance indicators in the private sector differ from those in the public sectors, a modified Balanced Scorecard for Public Health was proposed by the ICES (Woodward, Manuel & Goel, 2004). There are four modified quadrants that could be used to assess public health performance:



The scorecard was subsequently recommended by the Capacity Review Committee in 2005 for use by public health units in Ontario (Tamblyn et al. 2006). Several PHU's followed this recommendation and have used the balanced scorecard or a similar performance management framework. These include: Elgin-St. Thomas, York, Ottawa, Simcoe-Muskoka, Sudbury & District, Perth District, Peel, Huron, North Bay-Parry Sound and Brant County.

Better suited to the work of public health, this adapted model maintains principles from the Kaplan and Norton model. Understanding our community's needs, ensuring performance excellence, providing an ideal work environment to promote excellence and working with our many partners are public health applications of the four principles outlined by Kaplan and Norton. Evidence about successful strategies in the four areas of balanced scorecard from both the local population data sources and the research literature are outlined below.

### *LOCAL DATA SOURCES*

Key themes from local data were identified that link to the ICES balanced scorecard quadrants and potential areas for strategic priorities. Summaries of each of the local data sources as they relate to the quadrants are presented. The following local data sources were included:

- MLHU staff input from Strategic Plan Launch
- Environics Analytics - Focus Ontario Fall 2013 – (Environics Research Group, 2013)
- 2011 MLHU Discovery Report (Centre for Organizational Effectiveness, 2011)
- A Statistical Portrait of London – Neighborhood Profiles (City of London, 2014)
- Ontario Municipal Benchmarking Initiative – 2012 Performance Report (Ontario Municipal CAO's Benchmarking Initiative, 2013)
- Forum Research – 2012 poll of satisfaction with municipal services (Bozinoff, L., 2012)
- Rapid Risk Factor Surveillance System (RRFSS) data – Familiarity with the Health Unit

### *LITERATURE REVIEW*

In April, 2014 a literature search was conducted with the aim of determining the characteristics and best practices of high performing health units. Details of the search strategy can be found in Appendix A. The results of the literature review are presented by quadrant of the ICES Balanced Scorecard.

There were a number of ways that individual research papers defined high performance outcomes for public health agencies. Some used improved health status, which is the ultimate end goal of public health work. Others used shorter term outcomes such as compliance with established standards or evidence based decision making (EBDM) behaviours. No matter the type of outcome used, all provide some value to this discussion. Kanarek at al. (2006) and Ingram et al (2012) found that performance measures in local public health agencies were associated with health outcomes. Short term outcomes, such as enhancement of evidence-informed practice, will impact the performance of local public health agencies. This will, in turn, impact long term health outcomes of the community.



More specifically, variations in performance were associated with health outcomes of the community served. Brownson et al (2012) connected administrative evidence-based practices with organizational performance. Evidence-based decision making or evidence-informed decision making, as it is termed in Ontario, is essential to effective public health practice.

## CONNECTING THE DOTS

The next four sections provide local context and a research evidence base, framed within the ICES balanced scorecard quadrants, to help identify strategic priorities, define activities and develop recommendations for monitoring sustained progress.

### QUADRANT 1 – HEALTH DETERMINANTS & STATUS



The primary purpose of this quadrant is to identify the need for public health services (Woodward, Manuel & Goel, 2004). The Health Determinants and Status quadrant typically contains measures that make up health status reports, such as rates of disease, morbidity and mortality, and measures of health behaviours and social determinants of health. It is often possible to compare indicators from this quadrant to standard populations such as peer groups or provincial averages. Measures of health determinants and status can be used to assess the relative need for public health services in a health unit and are useful for estimating the potential contribution of public health services on population health outcomes. In isolation this quadrant does not adequately reflect health unit performance since health outcomes are influenced by a number of factors, such as poverty, literacy levels and employment rates, that lie beyond the direct scope of influence and responsibility of local public health units and their boards.

#### What the literature says:

The strongest predictor of public health agency performance, according to a systematic review conducted by Hyde and Shortell in 2012, was size of population served. Brownson (2012) also found this to a very important predictor of performance. Specifically, Mays et al (2006) found that the larger the jurisdiction size, up to a maximum of 500,000 people, was found to be a positive predictor performance.

The socioeconomic status of a community is a strong predictor of health status in a community (Hajat, 2009; Harris, 2014; Hyde, 2012). Addressing the social determinants of health in a community may be one of the most successful methods of elevating health status in the community, although this is not considered to be a short term modifiable characteristic.

#### What the local data says:

The 2013 estimate of population size of Middlesex-London was about 468,000, an ideal population size for the best performance of health unit (Ontario Ministry of Health and Longterm Care, 2013) according to the research cited above.

Given the breadth of the mandate of public health it is not possible to prioritize health status topics. Comparison of one topic to another to identify the top priority is an apples to oranges comparison. Rather than highlight key health status issues, the use of health status information

should be considered for decision making in all topic areas of the mandate. Specifically it can be used to determine the needs of the populations served and the impacts of the interventions implemented. It can also be used to estimate baseline measures of outcomes and monitor progress. Local health status and outcomes data on a variety of topics related to the mandate of public health can be found in the [Community Health Status Resource](#).

Socioeconomic status indicators suggest that there is not a large difference between Middlesex-London and Ontario as a whole; however local data shows there are considerable differences in health status by socioeconomic status (SES) and that there is a substantial proportion of the population living in low SES conditions.

Middlesex-London is quite similar to Ontario in areas such as employment, education level and food security. The local population, however, had higher proportions of lone parents, one person households and a lower median income level compared to the province (MLHU, n.d.). Maps of socioeconomic distress indicate that there are vast differences across neighbourhoods. Some parts of [London](#) and [Middlesex County](#) have very high socio-economic distress, a measure combining education, unemployment, lone parenthood and low income, while other areas have very low levels. This is important to note because [local data](#) show that there are great disparities in health outcomes across the SES spectrum in the London region. For instance, the group with the lowest SES had 4.7 times the rate of hospitalizations for chronic obstructive pulmonary disease (COPD) than the group with the highest SES. Those with the lowest SES also had higher rates of anxiety disorders (4.5 times higher), substance-related disorders (4.2 times higher), diabetes (3.5 times higher) than the group with the highest SES. Some health behaviours follow similar trends to health outcomes. The rate of smoking was 2.5 times higher in the group with the lowest SES than in the group with the highest SES. Those with the lowest SES also had higher rates of multiple risk factors (three or more of: physical inactivity, being overweight or obese, smoking, or alcohol bingeing), with the rate being 2.1 times higher than the group with the highest SES (CIHI, 2008).

The population of Middlesex-London is growing, but not uniformly. There is an increasing older adult population while the under 19 demographic has shrunk in recent years. The City of London is culturally and linguistically diverse with Londoners reporting to speak over 48 different languages and backgrounds from 150 distinct ethno cultural communities (City of London, 2014).

## QUADRANT 2 – COMMUNITY ENGAGEMENT



The primary purpose of this quadrant is to understand the views of the community served. This includes input from relevant agencies, health care providers and the general public (Woodward, Manuel & Goel, 2004). The views provided by individuals and stakeholders an organization seeks to serve help to maintain accountability and improve service delivery. Since public health initiatives often target entire populations, the public health balanced scorecard emphasizes community engagement—that is, assessing community awareness and preferences, and ensuring community input into planning and service delivery.

### **What the literature says:**

Higher performing public health units were found to have greater community interaction (Erwin, 2008). Kanarek et al (2006) suggest that a public health department that prioritizes the community's needs and partners with the community will see differences in health outcomes.

### **What the local data says:**

The majority of people in Middlesex-London reported awareness of the health unit. In 2011, Rapid Risk Factor Surveillance System (RRFSS) data indicated nearly three quarters (74.3%) of the population was familiar with the health unit. Over half of respondents (57.3%) reported having ever used a health unit program or service; females and those with children in the household were more likely than others. According to a 2012 survey, 64% of London residents were satisfied with Public Health services, (28% were very satisfied and 36% were somewhat satisfied). This was in line with the 67% average for all the cities surveyed (Bozinoff, 2012). Although the majority are satisfied, the performance of local government agencies and value for tax dollars is a significant concern amongst Londoners (Envionics, 2013). The survey found that 37% of residents felt that public health spending should increase, 49% felt it should stay the same and 9% felt that funding should be decreased.

The 2011 MLHU Discovery Report engaged community partners and volunteers to gather highlights of working with MLHU and priorities that MLHU should consider. Public health service delivery that was high quality, met the needs of diverse and vulnerable populations and is evidence-informed was valued. Partnering with the community to leverage resources, reduce duplication and improve quality was also highlighted. The feedback indicated that it is also important to be responsive to stakeholder concerns and feedback.

### QUADRANT 3 – RESOURCES AND SERVICES



The primary purpose of this quadrant is to understand the amount of resources and services that are delivered within the organization (Woodward, Manuel & Goel, 2004). Some of the measures include financial performance, staff recruitment, retention and development, as well as other factors that influence organizational capacity.

#### **What the literature says:**

Allocation and expenditure of resources was found to be one of the most important predictors of performance (Brownson, 2012). Several authors found that the presence of a local board of health with policy making authority was associated with positive performance of essential public health standards (Hyde & Shortell, 2012; Brownson, 2012). These factors are considered to be fairly difficult to modify in the short term. Funding models and board structure are part of complicated systems beyond the control of the local public health agency.

The majority of modifiable factors that affect public health agency performance or health status of the population are relevant to the Resources and Services quadrant. Four of five major administrative domains that affect an organization's ability to conduct evidence based decision making fit in this quadrant as: workforce development; leadership; climate and culture; and, financial (Brownson, 2012). Erwin (2013) emphasizes that a full understanding of these factors is a necessary step in improving the competency of the workforce in administrative evidence based practices.

Sosnowy (2013) found strong leadership and workforce capacity to be associated with EBDM. Hajat et al. (2009) note that the presence of an experienced staff with diverse training, including some outside of public health, is positively associated with high performance. Brownson et al. (2012) indicated that to improve EBDM in the current workforce it is key to have in-service training in quality improvement and EBDM in a multidisciplinary setting. The training must be aligned with the work being done by staff. Further workforce development indicators were; use of knowledge brokers, interactions to share learning and incorporation of process-improvement activities.

Leadership features such as higher academic degrees for leaders (Hyde & Shortell, 2012; Brownson, 2012; Bekemeier, 2012; Ransom, 2012) are critical for performance. Improved performance was seen when leaders operated within a management team and used non-hierarchical decision-making while incorporating employee input (Erwin, 2008). The leadership must also support quality improvement and EBDM initiatives for that culture to permeate throughout the organization (Orton, 2011). Over the long term common terminology should be adopted in the organization.



Organizational climate and culture has been described by Brownson (2012) as consisting of access and free flow of information, support for innovation and having an orientation to learning as the three administrative evidence based practices. This areas is the least likely to be present in local health departments indicating it may be one of the more difficult to influence (Brownson, 2014)

Financial recommendations to enhance EBDM include using diverse funding sources, allocating resources to quality improvement and EBDM and incorporating transparent financial processes (Brownson, 2012).

### **What the local data says:**

As described in the literature by Erwin (2008) staff input in decision making enhances performance. The following themes were identified from the staff responses at the launch of the strategic plan regarding what we must do: increase health unit awareness; ensure relevance to current work; think broadly and long term; be innovative; be evidence-informed; and, ensure evaluation. The main themes that describe how the strategic plan should be developed were: create authentic engagement; communicate at all phases of the strategic plan; be transparent in our process; and, follow-through on the plan.

The Ontario Municipal CAO's Benchmarking Initiative (2013) creates benchmark data to be used by municipal staff to improve service and value for the community and allows councils, boards and management staff to improve performance. The OMBI report suggests development of metrics for operational performance in the areas of accounts payable, general government, information technology and payroll.

In the 2011 MLHU Discovery Report, the Leadership of MLHU provided feedback on highlights of working for the MLHU, described their vision for MLHU in ten years' time and provided feedback with respect to priorities that MLHU should consider. Strategic Priorities that were identified included: 1) organizational effectiveness and culture that is defined by planning and follow-through, efficacy and accountability, leadership and management models that break down silos, up-to-date technology and strong communication; and 2) developing funding priorities in tight fiscal environments and acknowledgement of political concerns that could prove challenge to MLHU at all levels.

## QUADRANT 4 – INTEGRATION & RESPONSIVENESS



The primary purpose of this quadrant is to describe partnerships, collaboration, coordination and the capacity to be integrated with the health care system and responsive to community needs (Woodward, Manuel & Goel, 2004). This primarily relates to the structural capacity of public health to integrate into the associated health care system as well as the capacity to continually transform services in response to evolving needs, issues and evidence. This is linked to the ability to work with other healthcare sectors and community agencies, a commitment to research and continuing professional development, and emergency preparedness and response.

### What the literature says:

Hyde and Shortell (2012) and Cilenti (2012) found that partnerships with universities and other academic institutions were associated with improved performance. This finding was echoed by the review done by Brownson et al. (2012) suggesting that partnerships not only with academia but also with hospitals, community organizations, social services, private businesses and law enforcement are important. This is the last of Brownson's five key domains that enhance administrative evidence based practices. Halverson et al (1996) indicated that engaging outside agencies in planning of program and service delivery is significantly related to public health performance. The longer that public health agencies have been engaging in partnerships, the better their performance metrics related to partnership development (Downey, 2013).

### What the local data says:

In the 2011 MLHU Discovery report community partners were asked a series of questions about the quality of their working relationship. The following themes stood out:

- Increasing communication with partners will help develop already strong relationships.
- There needs to be a more concrete understanding of how partnerships work and how they are structured. Partnership agreements are a means of defining these relationships.
- Ensuring staff consistency and availability helps to build trust and familiarity over the long term with partners.
- MLHU should also strive to understand community needs and the work that our partners do in the community.

## NEXT STEPS

Review of the research findings and local data by Senior Leadership and the Strategic Plan Advisory Committee will facilitate the development of a balanced scorecard and help to identify strategic priorities for MLHU. Once the quadrants and priorities are drafted and validated, staff will be engaged to define activities and develop recommendations for monitoring progress on the priorities.

## REFERENCES

- Bekemeier, B., Grembowski, D., Yang, Y., & Herting, J. (2012). Leadership matters: local health department clinician leaders and their relationship to decreasing health disparities. *Journal Of Public Health Management & Practice*, 18(2).
- Bozinoff, L. (2012). Quebec City tops poll of city services second year in a row: Burnaby, Mississauga, Sherbrooke, Oakville round out top five. *Forum Research*. Toronto, ON. Accessed October, 2014 <http://www.oakville.ca/assets/general%20-%20town%20hall/MunicipalServicesPoll2012.pdf>
- Brownson, R., Allen, P., Duggan, K., Stamatakis, K., & Erwin, P. (2012). Fostering more-effective public health by identifying administrative evidence-based practices: a review of the literature. *American Journal Of Preventive Medicine*, 43(3), 309-319.
- Brownson, R., Reis, R., Allen, P., Duggan, K., Fields, R., Stamatakis, K., & Erwin, P. (2014). Understanding administrative evidence-based practices: findings from a survey of local health department leaders. *American Journal Of Preventive Medicine*, 46(1), 49-57.
- Canadian Institute for Health Information (2008) Reducing Gaps in Health: A Focus on Socio-Economic Status in Urban Canada. Accessed January, 2012 <https://secure.cihi.ca/estore/productFamily.htm?pf=PFC1090&lang=en&media=0>
- Centre for Organizational Effectiveness. (2011). Middlesex-London Health Unit Discovery Report (Working Document). Accessed October 2014.
- Cilenti, D., Brownson, R., Umble, K., Erwin, P., & Summers, R. (2012). Information-seeking behaviors and other factors contributing to successful implementation of evidence-based practices in local health departments. *Journal Of Public Health Management & Practice*, 18(6), 571-576.
- City of London. (2014). A Statistical Portrait of London – Neighborhood Profiles. Accessed October 2014. <http://sire.london.ca/agdocs.aspx?doctype=agenda&itemid=29170>
- Downey, L., Thomas, W. A., Gaddam, R., & Scutchfield, F. (2013). The Relationship Between Local Public Health Agency Characteristics and Performance of Partnership-Related Essential Public Health Services. *Health Promotion Practice*, 14(2), 284-292.
- Environics Research Group. (2013). Focus Ontario Fall 2013 Survey – City of London. Accessed October 2014. <https://www.london.ca/city-hall/Civic-Administration/Service-Areas/Documents/Focus-Ontario-Fall-2013-Survey.pdf>
- Erwin, P., Harris, J. K., Smith, C., Leep, C. J., Duggan, K., & Brownson, R. C. (2014). Evidence-Based Public Health Practice Among Program Managers in Local Public Health Departments. *Journal Of Public Health Management & Practice*, 20(5), 472-480.
- Erwin, P. (2008). The performance of local health departments: a review of the literature. *Journal Of Public Health Management And Practice: JPHMP*, 14(2), E9-E18.

Hajat, A., Cilenti, D., Harrison, L., MacDonald, P., Pavletic, D., Mays, G., & Baker, E. (2009). What predicts local public health agency performance improvement? A pilot study in North Carolina. *Journal Of Public Health Management & Practice*, 15(2), E22-33. doi:10.1097/01.PHH.0000346022.14426.84

Harris, A. L., Scutchfield, F., Heise, G., & Ingram, R. C. (2014). The Relationship Between Local Public Health Agency Administrative Variables and County Health Status Rankings in Kentucky. *Journal Of Public Health Management & Practice*, 20(4), 378-383. doi:10.1097/PHH.0b013e3182a5c2f8

Halverson, P., Miller, C., Kaluzny, A., Fried, B., Schenck, S., & Richards, T. (1996). Performing public health functions: the perceived contribution of public health and other community agencies. *Journal Of Health And Human Services Administration*, 18(3), 288-303.

Hyde, J., & Shortell, S. (2012). The structure and organization of local and state public health agencies in the U.S.: a systematic review. *American Journal Of Preventive Medicine*, 42(5 Suppl 1), S29-S41. doi:10.1016/j.amepre.2012.01.021

Ingram, R., Scutchfield, F., Charnigo, R., & Riddell, M. (2012). Local public health system performance and community health outcomes. *American Journal Of Preventive Medicine*, 42(3), 214-220. doi:10.1016/j.amepre.2011.10.022

Kanarek, N., Stanley, J., & Bialek, R. (2006). Local public health agency performance and community health status. *Journal Of Public Health Management & Practice*, 12(6), 522-527. Kaplan, R., & Norton, P. (1992, January 1). The Balanced Scorecard - Measures that Drive Performance. *Harvard Business Review*.

Kaplan, Robert S., and David Norton. "The Balanced Scorecard: Measures that Drive Performance." *Harvard Business Review* 70, no. 1 (January–February 1992): 71–79

Middlesex-London Health Unit (n.d) Community Health Status Resource. Accessed December, 2014 <http://communityhealthstats.heathunit.com>

Ontario Municipal CAO's Benchmarking Initiative. (2013). 2012 OMBI Performance Measurement Report. Accessed October 2014. <http://www.ombi.ca/resources/?did=121>

Orton, L., Lloyd-Williams, F., Taylor-Robinson, D., O'Flaherty, M., & Capewell, S. (2011). The Use of Research Evidence in Public Health Decision Making Processes: Systematic Review. *Plos ONE*, 6(7), 1-10.

Rapid Risk Factor Surveillance System, Ontario, Canada, (2011).

Ransom, J., Schaff, K., & Kan, L. (2012). Is there an association between local public health department organizational and administrative factors and childhood immunization coverage rates?. *Journal Of Health & Human Services Administration*, 34(4), 418-455.

Sosnowy, C., Weiss, L., Maylahn, C., Pirani, S., & Katagiri, N. (2013). Factors affecting evidence-based decision making in local health departments. *American Journal Of Preventive Medicine*, 45(6), 763-768. doi:10.1016/j.amepre.2013.08.004.

Population Estimates [2013], Ontario Ministry of Health and Long-Term Care, IntelliHEALTH Ontario.

Tambyln, S., Hyndman, B., Bewick, D., Chow, L., Hicks, T., Munter, A., Nolan, L., Papadopoulus, A., Pascal, C., Di Ruggiero, E., Underwood, J. & West, D. (2006). Revitalizing Ontario's public health capacity: the final report of the Capacity Review Committee. Toronto, Ont: Capacity Review Committee.

Woodward G, Manuel D, Goel V. (2004) Developing a balanced scorecard for public health. ICES, Toronto, Ontario.

## APPENDIX A

Databases searched included Academic Search Premier, MEDLINE, Health Business Elite, CINAHL Plus with Full Text for all English language publications between 1994 and 2014.

The search strategy was as follows: (((TI ((local or municipal\* or city) N3 ("health unit\*" or "health department\*" or "public health"))) OR AB ((local or municipal\* or city) N3 ("health unit\*" or "health department\*" or "public health"))) AND ((framework\* or model\* or accomplished or characteristic\* or "best practice\*" or excellence or "high perform\*" or distinction or distinguish\* or quality or qualities or attribute\* or factor\*))) AND ("public health administration" or "public health practice"))

## COVER PHOTOGRAPHY

Courtesy of Tourism London.