

# Aligning Performance Management with Corporate Strategy:

A Toolkit for Ontario's Hospitals

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**HOSPITAL REPORT RESEARCH COLLABORATIVE**

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## INTRODUCTION

### Purpose

The purpose of this toolkit is to support organizations to progress from strategic planning to performance measurement and management. The steps outlined in this document will help manage the strategic priorities of your organization.

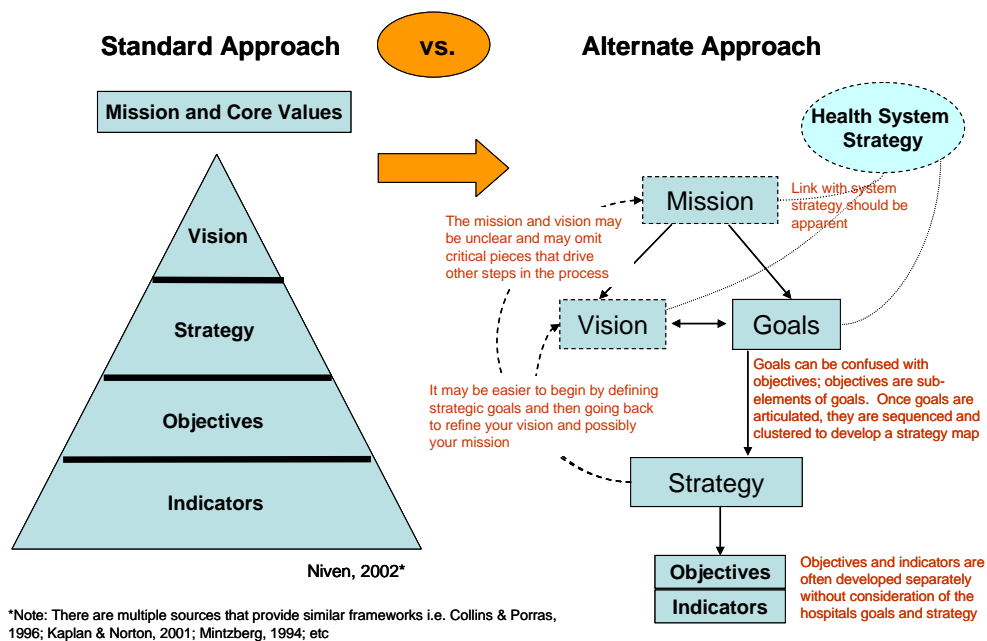
While the business world has focused on strategy for many years, its use in healthcare to meet patient needs and manage overall performance is a more recent phenomenon. An organization's strategy is an articulation of its high level plans designed to provide value to patients and may distinguish the organization from its peers. Once strategic goals are articulated, the balanced scorecard provides a framework that allows an organization to translate its strategy into terms that everyone in the organization understands, making it relevant to their daily activities.

Many organizations have engaged in strategic planning for years, and have fully developed mission, vision and value statements. However, given the relatively recent introduction of strategy into performance management in healthcare, many healthcare organizations have not necessarily included strategic goals or strategy maps in their performance management processes. The introduction of this key step facilitates the development of organizational objectives, and then the selection of measures to monitor progress against these objectives. The articulation of strategy provides the opportunity to align performance management activities with organizational priorities.

The Hospital Report Research Collaborative developed this toolkit in response to requests from a number of Ontario hospitals to assist with the articulation of strategy, the development of strategy maps, and the link between these strategies and quality improvement at their organizations.

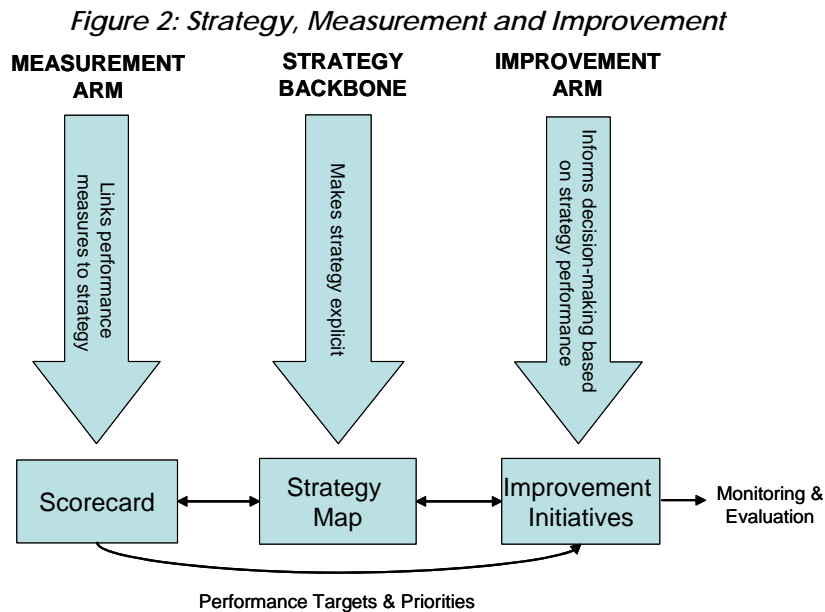
Figure 1 on the following page depicts the typical or standard approach to strategic planning, beginning with mission and core values and ending with the development of indicators. During our work with several organizations that have succeeded in integrating strategy into their performance management systems, it became evident that, in practice, many organizations actually begin with an articulation of strategic goals, and then go back and refine their established vision statement to ensure it is aligned with the defined strategic goals. Both the standard and alternate approaches are depicted in the schematic.

Figure 1: Strategic Planning



While most senior executives and managers within your organization will have a good understanding of performance measurement, they may not be as familiar with all of the tools described in this toolkit and how they can be linked to create value for your organization. This guide was developed to provide an understanding of how to implement strategy-based performance measurement and management at your organization and also to provide some guidance in strategically aligning your organization with broader health system goals.

If we refer to Figure 2, below, strategy-based performance management begins with the development of a strategy map. A strategy map provides a visual articulation of the strategy for a particular sector/organization. The strategy map is then used as a framework to develop objectives and identify performance measures, which when incorporated into a balanced scorecard, allows a balanced approach to measuring organizational progress against stated goals and priorities to determine where action needs to be taken. By understanding how we are performing, we can make informed decisions regarding the allocation of resources and choose quality improvement initiatives that create optimum value for patients.



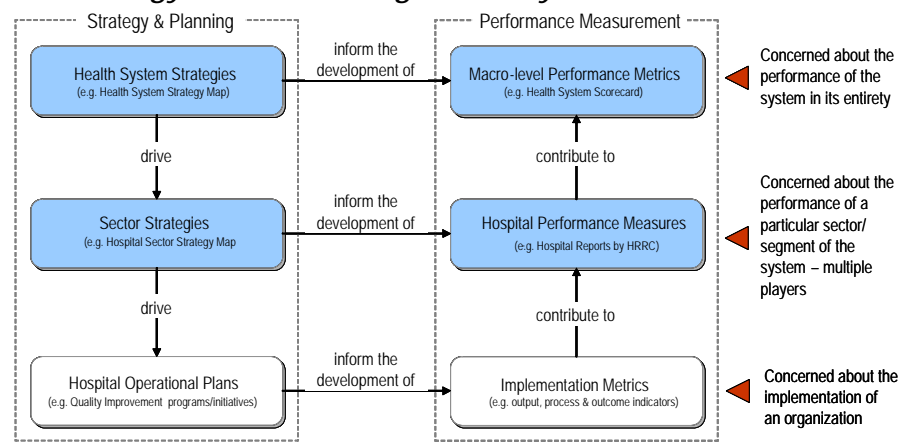
(modified from Health Results Team for Information Management (HRT-IM), Ministry of Health and Long-Term Care)

Taken as a whole, these tools allow an organization to establish goals and priorities and evaluate progress towards these on an ongoing basis. The application of this approach is intended to deepen one's understanding of how the organization is performing by ensuring that selected measures are linked to strategic goals, and that there is informed decision-making about the types of initiatives that will improve performance and thus achieve defined goals. When this approach to performance measurement and management is effectively cascaded throughout an organization, there is synergy and strategic alignment of activities among staff at all levels of the organization.

In its role as steward of the Ontario health system, the Ministry of Health and Long-Term Care has adopted a strategy-based approach to measuring and managing health system performance. This approach will ultimately support the Ministry's commitment to strengthening accountability by ensuring that policies and funded initiatives support improved outcomes.

An individual organization's strategy should, in part, be driven by the goals and strategy of the larger system, which will inform the selection of performance measures and decisions regarding the allocation of resources. The diagram below (Figure 3) illustrates this cascading effect at a system level.

**Figure 3: Strategy Cascades throughout the System and Drives Performance**



(modified from HRT-IM)

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The first section of this guide focuses on the steps necessary to articulate your strategic goals and develop a strategy map. In the second section, we describe how to use a strategy map as your framework to define objectives and to select performance indicators. In the final section, we describe different techniques for communicating your results as well as ways to use your results to improve quality within your organization.

### **Establishing a Team**

Before you begin the development and application of these tools for your organization, you will need to establish a performance management team responsible for planning and developing the work. As this will involve revisiting or possibly renewing your hospital's current strategy, senior managers will be critical to the process. The team should have a balanced set of skills, and include individuals with a thorough understanding of the issues relevant to your organization, knowledge and expertise in performance measurement methodologies and best practices, as well as strong facilitation and analytical skills.

Once the team has been established, it will be necessary to choose a team leader to act as a project manager and take on the responsibility of coordinating the work processes, timelines, workplans, etc. The team leader will oversee the progressive stages of development, implementation, and uptake of the tools. It may be helpful to assemble the following smaller task groups or teams assigned to the development of each tool:

- Strategy team: Development of strategic goals and strategy map
- Measurement team: Development of objectives and scorecard measures
- Improvement team: Identification and implementation of initiatives to manage performance on an ongoing basis

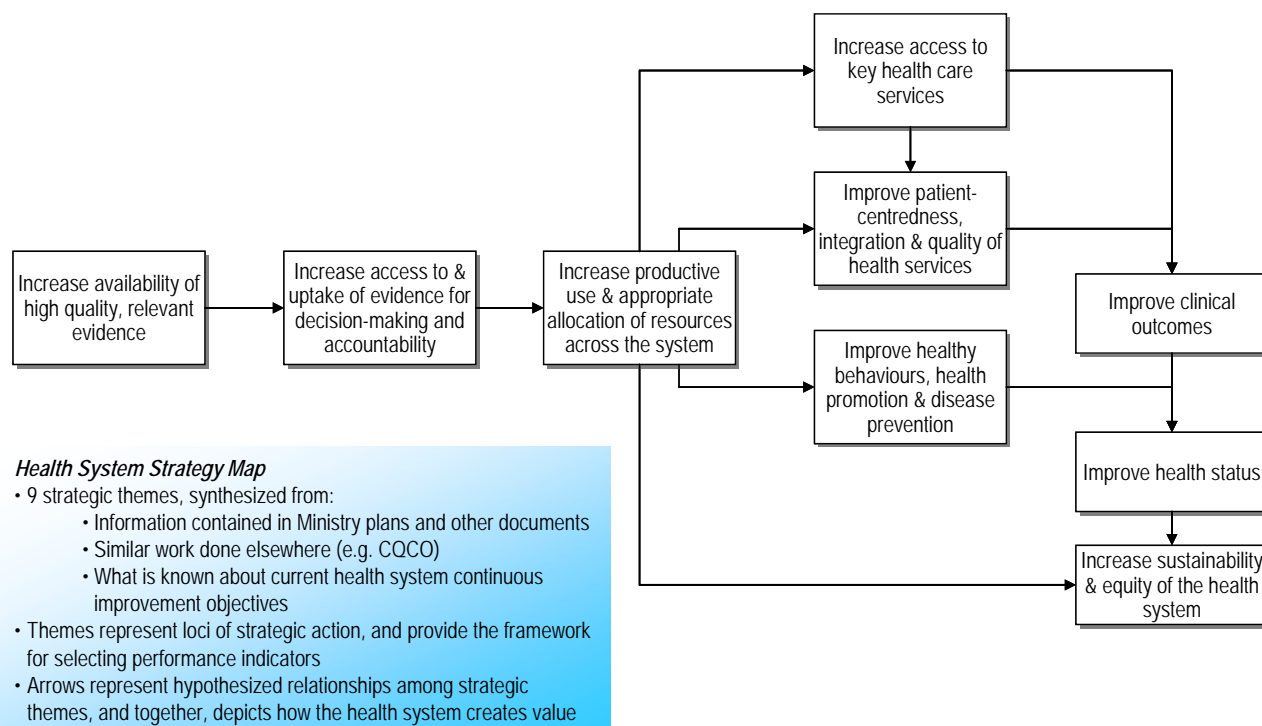
Finally, since successful execution is one of the greatest challenges, senior leadership will be critical to the implementation of the performance management system. Without the leadership and commitment of at least one senior leader, preferably the President/Chief Executive Officer, any attempts to apply a strategy-based approach to measuring and managing performance will most likely fail. It requires effective communication throughout the entire process. Communication is paramount to implementation and uptake, requiring key players at all levels to be on board and to understand how their work and involvement contributes to achieving the goals of the organization. In other words, to be successful, this approach requires buy-in and uptake by all individuals within and across different levels of the organization working together to achieve desired outcomes.

## SECTION 1: STRATEGIC PLANNING

### Understanding Strategy and the Strategy Map

A strategy map is simply a set of strategic goals that are sequenced and clustered based on hypotheses about cause and effect relationships among the goals. In other words, a strategy map formally and visually articulates strategic goals and their hypothesized inter-relationships in a way that demonstrates how value will be created for your organization. For example, obtaining results for one strategic goal will be necessary for, and will contribute to, the success of another goal. The strategy map therefore, illustrates the causal logic underlying your strategy (how one goal influences another). Included below (Figure 4) is the provincial health system strategy map. Each box represents a strategic goal. The arrows represent the hypothesized causal linkages between each of the nine strategic goals of the health system. The map demonstrates, as a whole, that value is created within the system when the first six goals cumulatively contribute to improvement of the portfolio's ultimate goals of improved clinical outcomes, health status, and increased equity and long-term sustainability of the health system. The alignment of the health system to the hospital sector will be outlined in the next section. The hospital sector strategy map is depicted in Figure 9 on page 15 of this report.

*Figure 4: Health System Strategy Map*



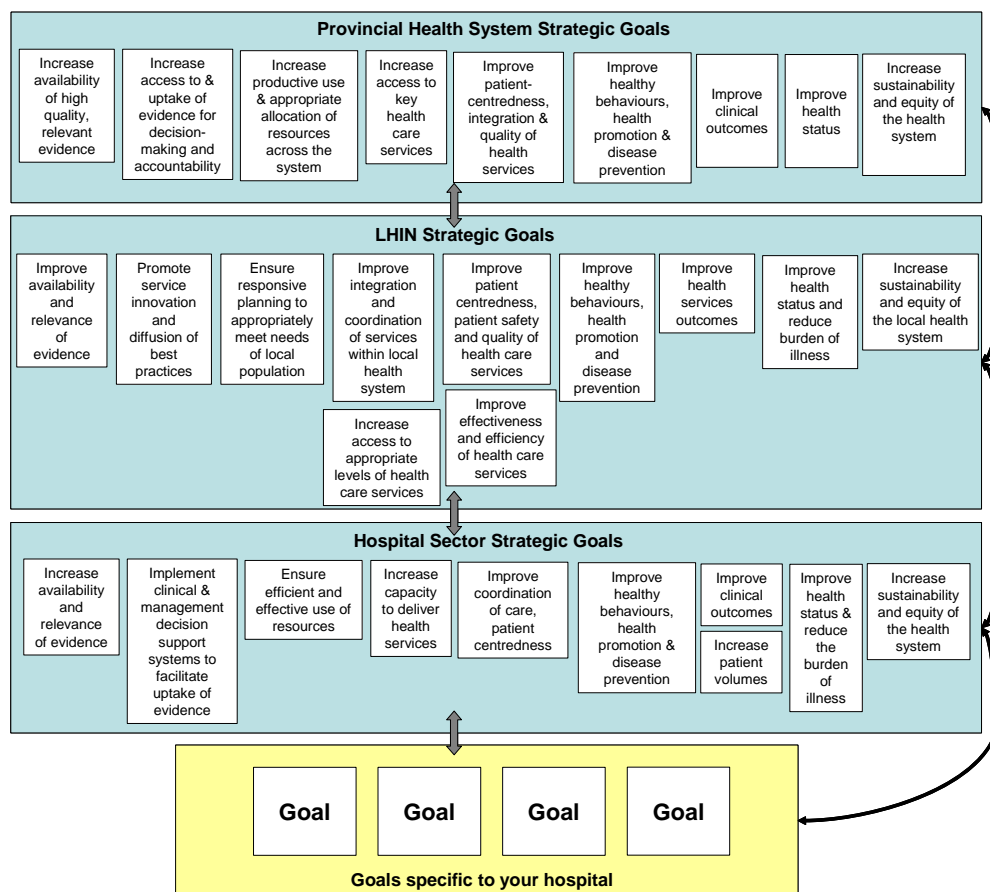
### *What is Strategy?*

Strategy fundamentally reflects how you will achieve your mission and vision, through articulation of goals and objectives that will guide activities to fulfill the aims. Strategy reflects what you intend to do and serves as a reference for identifying what you should not be doing. As such, strategy allows you to optimize the use of your time and resources by focusing your attention on the initiatives and activities that support the achievement of your mission and vision, and that create value for your organization.

In order for your organization's strategy to be effective, it needs to be cascaded throughout the different levels and programs within the hospital, creating strategic alignment at all levels. This ensures that employees throughout the organization understand where the hospital wants to go, how it will get there and how they fit into the plan. Leaders of the organization need to make sure that employees understand their role in the plan so that they understand their own priorities and where to spend time and resources so that all decision-making is aligned. The goals of your organization should also align with those of other key stakeholders in the system (see Figure 5) although, not all of your goals or programs need to align. Below is an example of how the goals of the hospital sector align with the goals of the LHINs as well as the provincial health system.

*STRATEGY REFLECTS WHAT YOU INTEND TO DO AND SERVES AS A REFERENCE FOR IDENTIFYING WHAT YOU SHOULD NOT BE DOING*

Figure 5: Aligning Strategic Goals

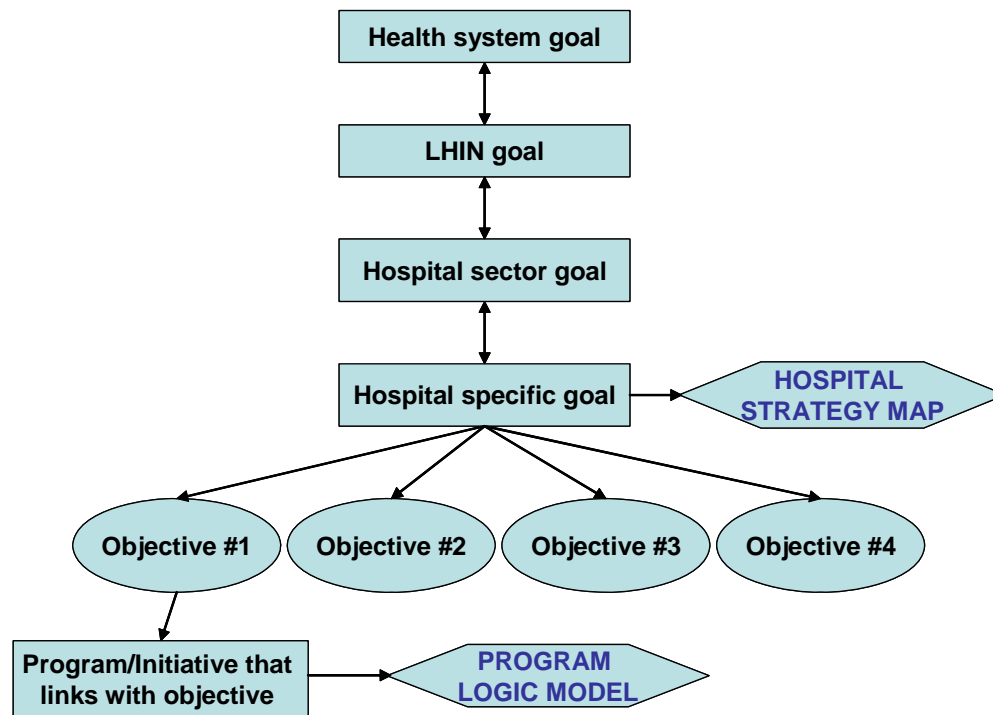


*\*Please note that the goals outlined in this figure are drafts as of April 2006 and may have altered slightly since this time*

### ***Difference between a Logic Model and a Strategy Map***

A strategy map differs from a logic model in that it deals with achievement at a higher, system level. Strategy maps ensure holistic alignment with overall health system goals. A logic model is a systematic, conceptual and visual explanation of what a program is trying to accomplish and the steps by which it believes those objectives will be achieved. Logic models help departments within an organization to develop very program-specific causal relationships and links. Below is a graphic explaining how the logic model fits in with the goals at an organization level (see Figure 6). Many programs within organizations are using logic models to systematically align their objectives. It is important for front-line workers to understand how the actions within their programs logic model fits with the larger strategy of the organization, as well as the system. Logic models represent the daily reality of your organization as it strives to fulfill its strategic vision and will help people truly understand where they “fit” into the “big picture”. At a later stage, you will be asked to complete a worksheet that explains and helps with this alignment process.

Figure 6: Example of Alignment



### Revisit Mission and Vision

*If you don't know where you're going, how are you gonna' know when you get there? (Yogi Berra)*

Developing your goals and strategy map begins with revisiting your mission and vision and determining whether they are truly reflective of the future aims for your organization. Understanding mission and vision is essential to the development of your strategy map. Strategy mapping requires clarity about:

- the problem or challenge you are trying to address (mission)
- the result you expect to achieve through your activities (the vision)
- the signposts that will direct your initiatives and your progress (strategic goals) (Kaplan & Norton, 2004).

Your hospital's mission and vision:

- Provide a foundation and structure for the articulation of strategic goals
- Inspire key players and stakeholders to work together cohesively toward stated goals
- Outline a clear and general direction for change
- Enable the testing and validation of existing strategies and the development of new ones, by measuring how your initiatives and activities contribute to the achievement of your goals.

### **Mission**

Your mission should embody the core purpose of your hospital. It is why you exist. You create tremendous value and encourage productive collaboration when you develop strategic priorities that truly translate your mission. The criteria below (see also Worksheet #1) can guide you in deciding whether or not you need to refine your mission. An effective mission statement should:

- **Inspire change** – your mission statement should reach employees on a visceral level that motivates them to serve the hospital’s purpose.
- **Persevere over time** – strategies and plans will likely change, but your mission should remain stable over time.
- **Be easy to understand** – buzzwords and jargon do not belong in a mission statement.

### **Vision**

The vision statement clarifies an organization’s general direction for change. It is an inspirational statement that articulates your organization’s top priorities, as well as its values. The vision statement describes what the organization intends to accomplish in the next five years and fosters a common understanding for achieving those objectives. Your vision should link your core purpose, as reflected in your mission statement, with the strategy you will execute in the process of achieving your desired outcomes. A transparent and solid vision is essential to directing key players, fueling motivation and driving performance improvement. An effective vision statement defines:

- Areas of leadership or distinctive competence
- The hospital’s intended scope of activities
- How the hospital aims to be viewed by its stakeholders, and
- The hospital’s strongly held values.

*“To pursue the vision means to create organizational and strategic alignment, to preserve the core ideology and stimulate progress toward the envisioned future” (Collins & Porras, 1996).*

Worksheet #2 can help you determine whether or not you need to refine your vision statement.

### **Define your Goals and Objectives of Performance**

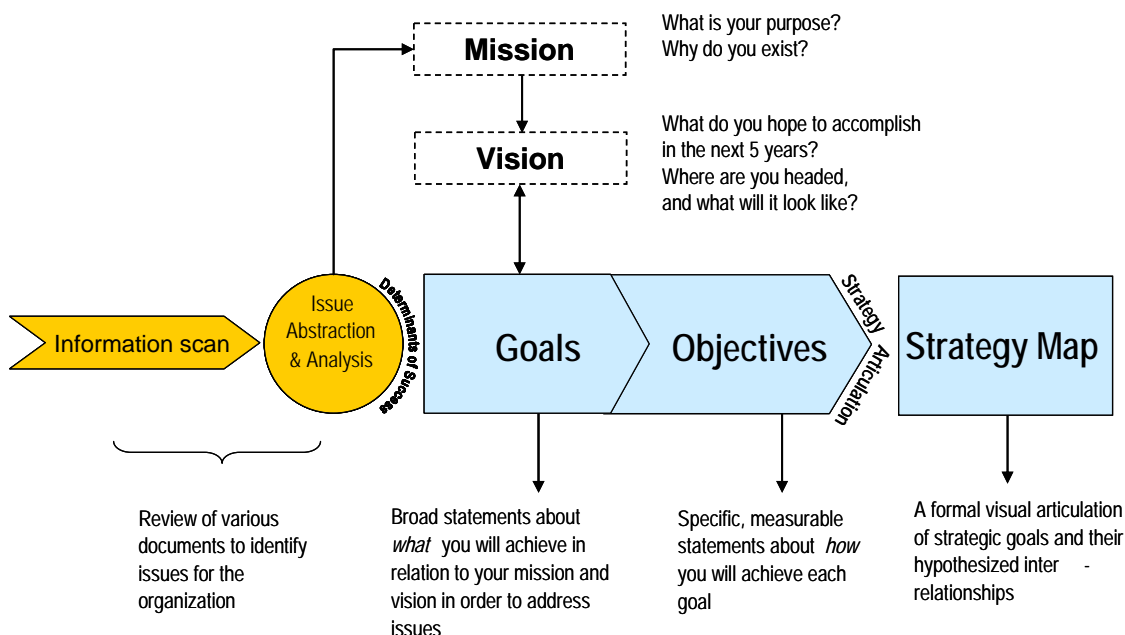
Your next step will be to identify the critical determinants of success for your hospital. These are the goals and objectives of performance (for which measures will be selected to gauge progress).

Figure 7 illustrates the steps to defining your unique set of determinants of success, ultimately leading to the articulation of your strategy. Strategy consists of goals (broad statements about *what* you hope to achieve), and objectives (more specific, measurable statements about *how* you will achieve those goals). The objectives in turn, guide the selection of indicators you will use to measure your progress and the activities or quality improvement initiatives you will undertake to reach your goals. Your strategic goals and objectives therefore constitute your “game plan” for achieving your mission and vision. In other words, strategy translates your mission and vision into specific actions that can later be measured to determine how well you are doing at achieving your stated purpose. Your

**STRATEGY TRANSLATES YOUR MISSION AND VISION INTO SPECIFIC ACTIONS THAT CAN LATER BE MEASURED TO DETERMINE HOW WELL YOU ARE DOING AT ACHIEVING YOUR STATED PURPOSE**

strategic goals and objectives should address the issues you uncovered during your environmental scan.

*Figure 7: Steps to Creating Your Strategy Map*



(modified from HRT-IM)

The following steps will assist you in defining your determinants of success:

**Step 1: Information Scan.** The first step in this process is to create a knowledge base by reviewing various background materials including, but not limited to, the following:

- Existing strategic priorities, goals and objectives
- Policy and planning documents
- Annual reports and business plans
- Sector- and program-specific studies
- Independent reports
- Performance reports (e.g. Hospital Report and others)
- Stated objectives and strategies of health system partners (e.g. MOHLTC, LHIN, etc.)

The information scan should be internal and external. It includes an evaluation (see SWOT below) to assess what your organization is and is not doing and determine what the organization should and should not be doing in the future, based on the review of information. This also gives organizations a chance to refresh their understanding of provincial and regional priorities, and those of other key stakeholders in the system.

### The SWOT Framework

**S**trengths – What do we do well?  
**W**eaknesses – What do we NOT do well?  
**O**pportunities – What should we be doing?  
**T**hreats – What should we NOT be doing?

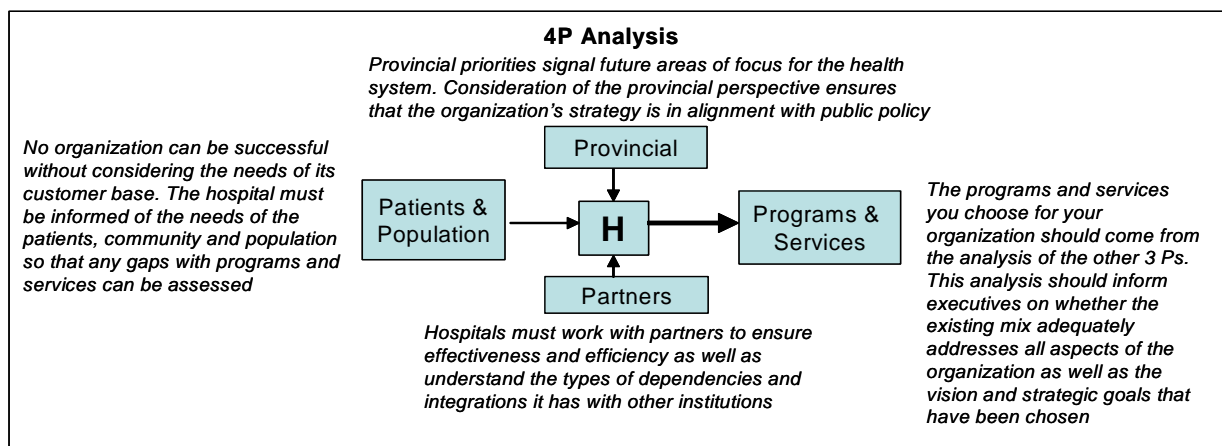
**Step 2: Issue Abstraction and Theme Identification.** To develop an effective strategy map, you will need to conduct an in-depth review of all of the issues that are relevant to and impact on the performance of your organization. This exercise will allow you to identify gaps, interdependencies, trends, and other factors that will influence performance, and will help you develop a strategy that is responsive both to the needs of the population you serve and to the complexities of the environment within which you operate.

A variety of frameworks exist to help organizations understand, arrange and identify the issues affecting their organization. A helpful way of organizing and reviewing materials is to sort the information you have collected into the following categories:

- Hospital-specific issues
- Cross-sectoral issues/Interdependencies with other organizations, and
- System-wide issues that affect your organization.

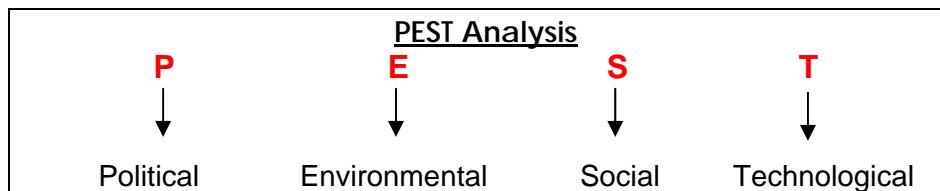
Having categorized the relevant issues, you can apply an analytical framework to further define the overall strategic intentions of your organization (discussed in the next section). These are only recommended approaches – the most appropriate framework for your organization will depend on your specific situation.

The 4P Framework allows you to take four key perspectives into consideration when articulating your strategy, and will help ensure that it is effective, integrated, and responsive to the needs of the population being served and to internal and external factors that have an impact on your performance.



(modified from Porter's 5 forces)

A PEST Analysis is yet another framework that you may choose to adopt for your information scan and issue abstraction:



Identifying external influences within this PEST Framework is a useful way of summarizing the external environment in which an organization operates. Completing a PEST Analysis is relatively simple, and can be done using brainstorming techniques in a large meeting or workshop setting.

**Step 3: Articulate Strategic Goals.** Strategic goals are the highest level of intended measurable results that your hospital can realistically influence, given a specific timeframe and set of resources. They describe *what* you hope to achieve in relation to your mission and vision. These statements of your goals should be clear, concise, and provide direction for performance improvement (e.g., increase, decrease, ensure, etc.). (Refer to worksheet #3)

Translate each of your goals, by articulating a directional statement that also addresses the issues identified through your information scan. Bear in mind that your goals are meant to last the lifespan of your strategy, and should therefore be formulated as broad statements of what you hope to achieve during that time. They should not, however, be so broad as to appear vague. Also, be careful not to confuse goals with objectives – these are more specific, time-limited, intermediate results that contribute to the achievement of your goals – they are “stepping stones” (articulation of objectives is explained in detail in the next two steps). This distinction is important because your objectives may change within the lifespan of your strategy, whereas goals are intended to last the entire lifespan of your strategy (they are in essence the basis for your strategy). Sometimes the difference between a goal and objective can become blurry. A goal is a broad statement that describes what your organization is trying to achieve, whereas an objective states exactly what your organization will do to fulfill that goal.

**Step 4: Identify and Articulate Objectives of Performance.** Once you have articulated your goals, you can start thinking about your objectives, which are sub-elements of your goals. Keeping your issues in mind, ask your team to identify the components of success for each goal. In other words, what are the intermediate steps that will allow you to achieve each goal? For example, “improving patient safety” may be an objective linked to “improving the quality of health services”. Use the issues uncovered during your environmental scan to inform and help you identify what relevant sub-elements are needed to address the issues within each goal.

While goals articulate *what* you hope to achieve, objectives specify *how* you intend to achieve your goals. Therefore, you need to make sure your objectives are singular, specific, and measurable and realistic steps to achieving your goal(s). They should be clear to everyone and include action verbs like “plan”, “conduct”, “examine”, “collect”, “produce”, “analyze” and “write”.

Keep in mind that the performance indicators you choose for your scorecard (see next section) will be directly linked to your objectives. They will measure how well you are doing in achieving your objectives. Therefore, to support and facilitate the selection of strong and meaningful performance indicators, you will need to develop objectives that are clear and can be understood by all key players. The criteria outlined in Worksheet #4 should be taken into

consideration when articulating objectives. These criteria will help ensure that the objectives your hospital articulate are clear, specific, measurable, and understandable so that accurate and meaningful performance measures can be identified and give you a better understanding of how your hospital is performing.

**Step 5: Validate Goals and Objectives.** Once you have identified your goals and objectives, you should consider validating them with some of your key stakeholders and partners. This is an opportunity for obtaining input and feedback from your constituents, as well as fostering a sense of ownership among them with respect to your strategies. This will facilitate the uptake of your approach within the hospital. Even though such a task may delay development of your strategy map, it should not be overlooked. Not only will it give your team the opportunity to test the relevance of the goals and objectives, it will go a long way towards ensuring buy-in and uptake among your key stakeholders.

As described earlier (Figures 5 & 6), integral to the development of your goals and objectives is the alignment of your hospital's goals with the goals articulated for the hospital sector (i.e. common goals shared by all hospitals) as well as higher level LHIN and provincial health system goals. Worksheet #5 will help you to work through this alignment process. In working through this process, it is important to keep in mind the value in some hospital goals and objectives that are unique to your organization that set you apart and provide you with strategy opportunities. Thus, the intent of this exercise is not to align *all* of your organization's goals to the system level. Although, to be strategically competitive, it is also important for some key goals and objectives to be aligned with the broader system to allow for comparability with other organizations.

### Designing your Strategy Map

Now you are ready to create your strategy map. A strategy map is simply a visual articulation of the sequencing and clustering of your organizations strategic goals. It helps to identify lead and lag goals and to reflect hypothesized relationships among the goals. The following steps will help you and your team to articulate hypothesized relationships among your organization's goals.

**What you will need:** Each goal on a separate sheet of paper (small 'sticky' notes are very useful). The assistance of a whiteboard might be helpful to conduct this step so that you can rearrange the paper and change the arrows among them as you move through the process.

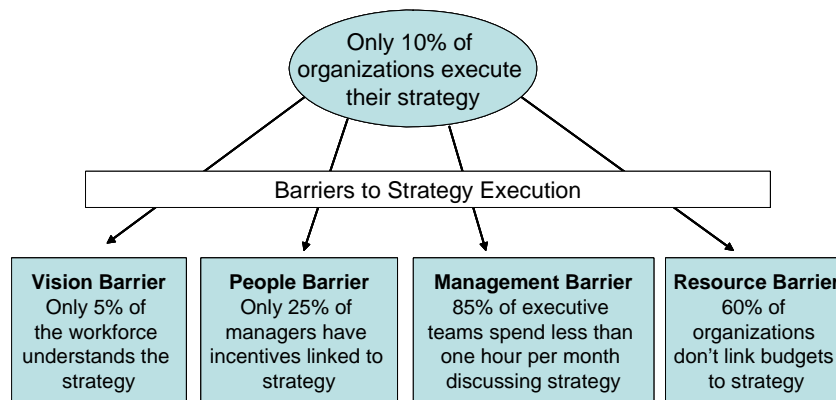
**Questions to ask:** Is there a logical sequence to your goals?  
Is there a cause and effect order that emerges among the goals?  
Does one goal have an effect on one or more of the other goals? If so, which ones?  
If we achieve (this goal), then what? What will it lead to?  
Which goals are enablers, which ones are outcomes: what is/are the ultimate outcome(s) you are striving to achieve?

**What you will do:** Map the relationships. On the white board, draw lines moving from left to right to indicate where the cause and effect relationships among the goals exist. Continue establishing these links until all goals are connected. Be sure to establish all relationships among the goals, bearing in mind that some may be connected to more than one goal. As you start to connect the goals you may see new relationships emerge. Keep refining the links as you see fit. This exercise may take several iterations and several days.

**What to consider:** Does the succession of strategies flow logically? Does it make sense? It is sometimes best to leave the strategy map for a couple of days, coming back to it to see if your hypotheses still make sense. Once your team feels that it has fully and appropriately articulated how the strategic goals are interrelated, it is advisable to share the strategy map with various key players and stakeholders for validation and appropriate modification.

As you will note in Figure 8, there can be several barriers to implementing a strategy within your organization. As mentioned in the introduction to this toolkit, without the leadership of senior management, a successfully integrated and operationalized strategy is difficult to implement.

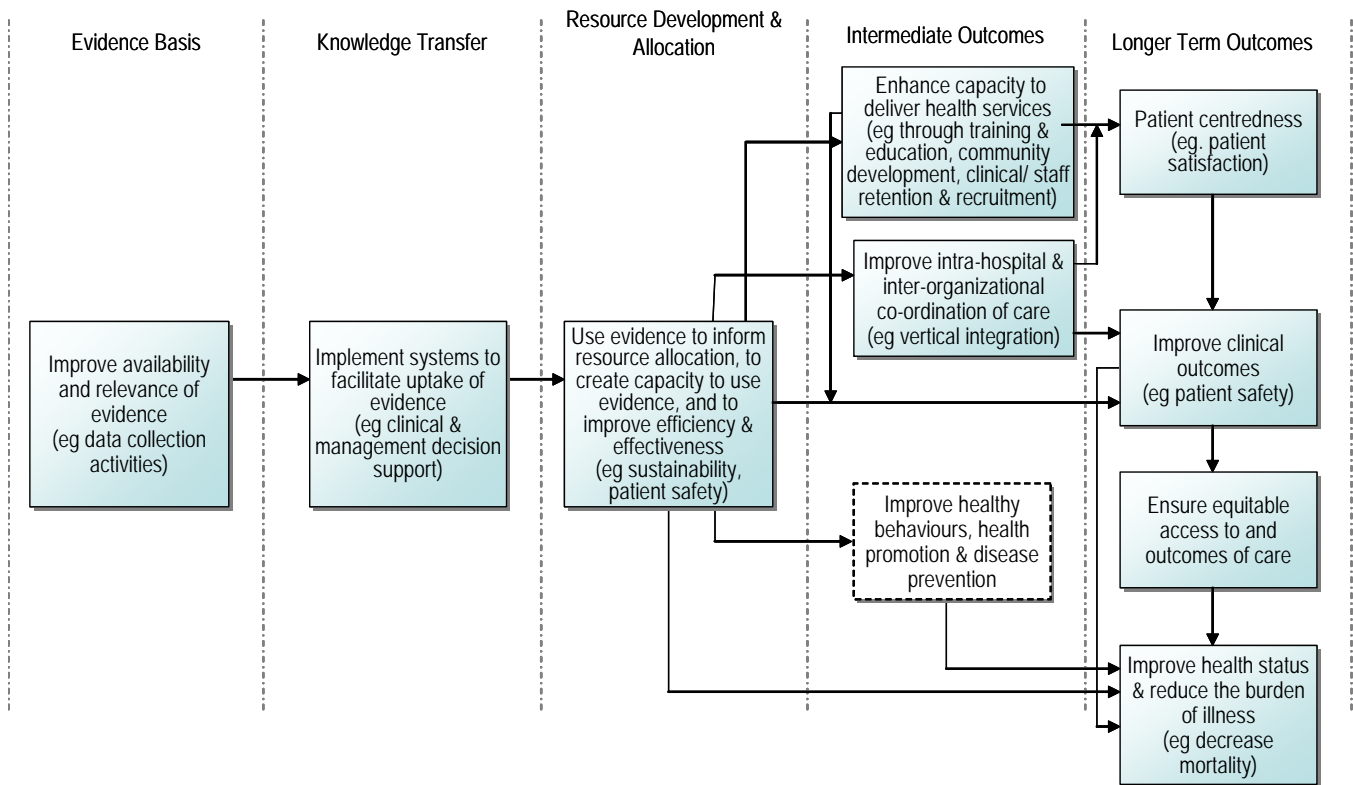
*Figure 8: Barriers to Implementing Strategy*



Niven, 2002

The Hospital Sector Strategy Map is presented below (Figure 9). The arrows represent the hypothesized relationships among the goals. The strategy map describes, through a series of hypothesized cause-and-effect relationships, how the hospital creates value for the patients that it serves. Ultimately, it demonstrates that value is created when hospitals make a positive impact on clinical outcomes and health status. The value of all other goals and their associated actions, such as improving access, using resources more effectively and the like, are enablers intended to effect improvements in these clinical outcomes. There has been preliminary validation of the hospital sector strategy map, however, as it is shared within the field, and potentially used as a foundation by accountability committees involved in defining future indicators for accountability agreements, the goals and relationships may be refined. As well, objectives stemming from the goals will be articulated.

Figure 9: Hospital Sector Strategy Map



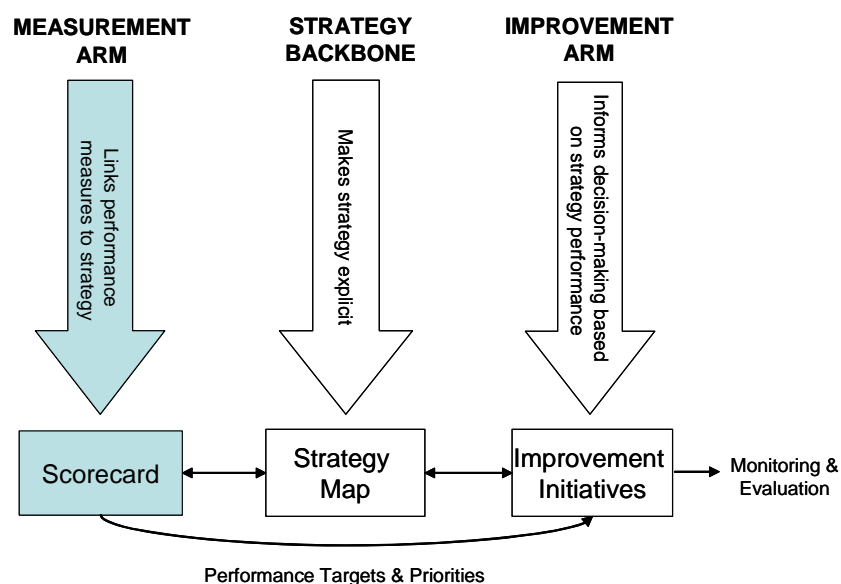


## SECTION 2: PERFORMANCE MEASUREMENT

### Understanding Performance Measurement and the Balanced Scorecard

A comprehensive scorecard (the measurement arm) allows a system, sector, organization, or program to measure its performance along a number of different strategy-based dimensions. The strategy map, which articulates the hypothesized inter-relationships among the chosen dimensions, also provides the framework for the selection or development of performance indicators to be reported in a balanced scorecard. The selection of performance indicators is designed to accurately reflect the strategic goals you are trying to achieve. Scorecard results can be used for multiple purposes including organizational strategic planning, organizational accountability, and the monitoring of performance improvement, over time. The measurement arm highlights the process of identifying, validating and calculating indicators for a scorecard, which is, dependent on the strategy backbone.

*Figure 10: Highlighting Measurement*



(modified from HRT-IM)

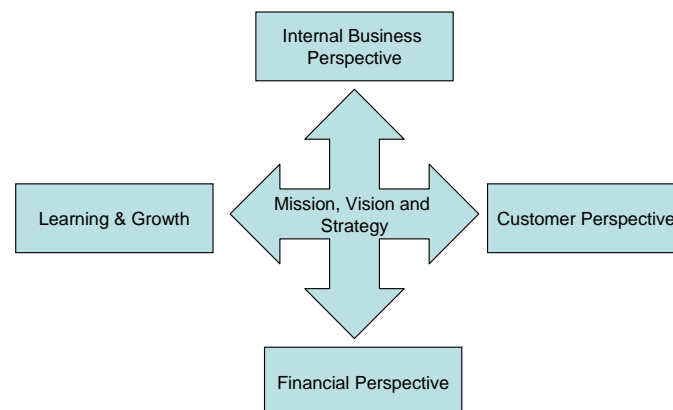
Indicators to support your goals and objectives can be identified through a variety of existing sources, or can be developed by the organization. However, there is little value in investing time in indicator development if the work has already been done by others. This section outlines the sources from which these indicators might be found. Once you have a list of potential indicators, there will need to be some discussion and decisions around which indicators fit best with your strategy map. Prioritization of indicators leading to final indicator selection is important. If your organization cannot find indicators that correspond to a goal within the strategy, there are several references available that can help you with the indicator development process (see reference section as well as [www.hospitalreport.ca](http://www.hospitalreport.ca)).

### ***The Traditional Balanced Scorecard***

*“The Balanced Scorecard provides managers with the instrumentation they need to navigate to future competitive success” (Kaplan & Norton, 1996).*

The traditional balanced scorecard approach was pioneered by Kaplan and Norton (1996). Many different types of organizations have utilized this approach for performance reporting and improvement. Historically, most for-profit organizations base their performance strictly on financial measures. While the balanced scorecard includes these traditional financial measures, it also responds to the need for a more rounded evaluation of organizations, particularly one that appreciates and considers investment in customers, suppliers, employees, processes, technology, and innovation. The approach has also been used by a variety of not-for-profit organizations, including health care organizations. The balanced scorecard provides a translation of an organization’s goals and objectives into a comprehensive set of performance measures. The traditional balanced scorecard (see Figure 11) measures organizational performance from four perspectives: finance, customers, internal business processes, and learning and growth.

***Figure 11: Four Perspectives of the Balanced Scorecard***



The balanced scorecard is more than a random collection of financial and non-financial performance measures. Rather, it is founded on the mission, vision and strategy of the organization, and is thus, a vital part of a strategic management system. It can help to reinforce and communicate the organization’s strategic objectives throughout the organization, and will assist in setting indicator targets, aligning strategic initiatives, and will allow the organization to measure its success in achieving its goals. The scorecard works as a framing tool to help an organization draw attention to the processes that are most critical to achieving high quality performance for customers and stakeholders and the outcomes that define high quality performance for these target groups.

The concept of balance is integral to the scorecard, and pertains to three main areas of measurement:

- Balance between financial and non-financial indicators of success
- Balance between internal and external stakeholders, and
- Balance between lead (process) and lag (outcome) indicators.

In selecting performance indicators to measure each of your specific goals and objectives, it is important to first understand what types of indicators are available to you and how you can evaluate them as potential candidates for inclusion in your scorecard.

## Performance Indicators

Performance indicators are measures used to determine whether objectives are being met and strategies successfully achieved. Performance measures provide a reliable basis for assessing change over time. Refer to Worksheet #6 for help on how to work through your indicators.

### *Types of Performance Indicators*

Performance indicators assess health care structure, process, and outcomes (Donabedian, 1988):

- **Structure** refers to the static or technical aspects of patient care (e.g., committee structure, number of nurses)
- **Process** refers to the steps taken in caring for the patient (e.g., assessment and treatment protocols for wound care)
- **Outcome** refers to the impact on the health status of the patient or population (e.g., incident pressure ulcers, survival rates after a hospital stay for acute myocardial infarction)

*LAG INDICATORS  
GENERALLY REPRESENT  
PAST PERFORMANCE  
(E.G., PATIENT  
SATISFACTION) WHILE  
LEAD INDICATORS ARE  
THE PERFORMANCE  
DRIVERS THAT LEAD TO  
THE ACHIEVEMENT OF  
LAG INDICATORS*

Performance indicators can be lead or lag in nature:

	<i>Lead</i>	<i>Lag</i>
<b>Definition</b>	Normally measuring processes and activities that drive performance	Focused on performance in the long-term
<b>Examples</b>	<ul style="list-style-type: none"> <li>• Hours spent with patient</li> <li>• Nursing workload</li> </ul>	<ul style="list-style-type: none"> <li>• Patient Satisfaction</li> <li>• Unit cost</li> </ul>

### *Select Your Indicators*

Once you have completed the above steps, you are ready to proceed with the selection (and potential development) of performance indicators. The following steps require some consideration:

- Step 1:** Review objectives within each strategic goal.
- Step 2:** Select the most robust performance indicators to measure objectives.
- Step 3:** Evaluate the necessity of each indicator and map onto goals and objectives.
- Step 4:** Evaluate the scientific strength of measures.

The list below is meant to help organizations develop a broad list of indicators. The goal is to gather a list of potential indicators for consideration in your Scorecard.

Organization	Address
Hospital Report Research Collaborative	<a href="http://www.hospitalreport.ca">www.hospitalreport.ca</a>
Canadian Institute for Health Information (CIHI)	<a href="http://www.cihi.ca">www.cihi.ca</a>
Statistics Canada	<a href="http://www.statcan.ca">http://www.statcan.ca</a>
Canadian Council on Health Services Accreditation (CCHSA)	<a href="http://www.cchsa.ca">www.cchsa.ca</a>
Agency for Health Research and Quality (AHRQ)	<a href="http://www.ahrq.gov/query/query.htm">www.ahrq.gov/query/query.htm</a>
National Guideline Clearinghouse	<a href="http://www.guideline.gov">www.guideline.gov</a>
Australian Government Department of Health	<a href="http://www.health.gov.au">www.health.gov.au</a>
Health Canada	<a href="http://www.hc-sc.gc.ca/english/">www.hc-sc.gc.ca/english/</a>
RAND Corporation	<a href="http://www.rand.org/research_areas/health/">www.rand.org/research_areas/health/</a>
The Commonwealth Fund	<a href="http://www.cmwf.org">www.cmwf.org</a>
World Health Organization (WHO)	<a href="http://www.who.int/en/">www.who.int/en/</a>
Joint Commission on Accreditation of Healthcare Organizations (JCAHO)	<a href="http://www.jcaho.org">www.jcaho.org</a>
National Health Service (NHS) Department of Health	<a href="http://www.dh.gov.uk">www.dh.gov.uk</a>
Institute of Medicine	<a href="http://www.iom.edu">www.iom.edu</a>
Health Plan Employer Data and Information Set (HEDIS)	<a href="http://www.ncqa.org/Programs/HEDIS/">http://www.ncqa.org/Programs/HEDIS/</a>
National Institutes of Health (NIH)	<a href="http://www.nih.gov">www.nih.gov</a>

These will allow an organization to track performance over periods of time such as quarters and years. These are different than the types of measures that will be used for determining whether a specific quality improvement initiative is resulting in improvement, the kind of monitoring that needs to occur on a daily, weekly and monthly basis. This type of measurement is detailed further in a later section.

Once you have a comprehensive list of potential indicators developed, the refinement of the list and eventual selection of key indicators will likely involve a process of discussion, negotiation and collaboration between program managers and key stakeholders. The following questions require some consideration:

- Which indicators or mix of indicators will best help you measure success in achieving your strategic goals and objectives?
- Which indicators are feasible and affordable to report on?
- Which indicators are needed most and by whom? (e.g., program managers, policymakers and other stakeholders).

Not all of the potential indicators identified will be of equal importance and will thus need to be prioritized according to some measure of importance. Your final set of indicators should be sufficiently concise to ensure they get calculated, reported on and attended to, yet sufficiently

comprehensive that they cover the range of objectives articulated and present a balanced perspective of performance. Criteria for further prioritizing indicators may be required.

### Criteria for Indicator Selection and Evaluation

The following list of criteria could be used to assist in your selection of indicators:

Criteria	Definition
<b>Valid &amp; Reliable</b>	<ul style="list-style-type: none"> <li>Measures what it is intended to measure, covers relevant domains and has predictive power</li> </ul>
<b>Intelligible &amp; Interpretable</b>	<ul style="list-style-type: none"> <li>Easily explained and commonly understood by the target audience for which it is intended</li> </ul>
<b>Availability / Accessible</b>	<ul style="list-style-type: none"> <li>Data and indicator should be readily available for the areas and time periods required</li> </ul>
<b>Importance &amp; Relevance</b>	<ul style="list-style-type: none"> <li>Directly relevant to the objectives and deemed important by key stakeholders.</li> </ul>
<b>Comparability</b>	<ul style="list-style-type: none"> <li>Common to other constituencies so that you can compare your performance with other hospitals</li> </ul>
<b>Measurable &amp; Feasible</b>	<ul style="list-style-type: none"> <li>Ability to measure and translate with respect to calculation and use</li> </ul>
<b>Assists in Decision-making</b>	<ul style="list-style-type: none"> <li>Results useful and valuable for decision-making purposes</li> </ul>

If your organization is required to identify and/or develop new indicators, a variety of processes can be undertaken, from very simple to very complex. The more complex processes follow the plan undertaken by the Hospital Report Research Collaborative which includes a systematic literature review, development of evidence-based tables, expert panels, and finally technical steps in assessing feasibility, appropriateness for reporting, etc. It is unlikely that many hospitals would choose to undertake these complex processes; however, for those that might be interested, much of the process has been documented and can be found on the Hospital Report Website ([www.hospitalreport.ca/whatsnew.html](http://www.hospitalreport.ca/whatsnew.html)).

Regardless of the process undertaken, you might want to consider documenting the following information for each indicator under consideration:

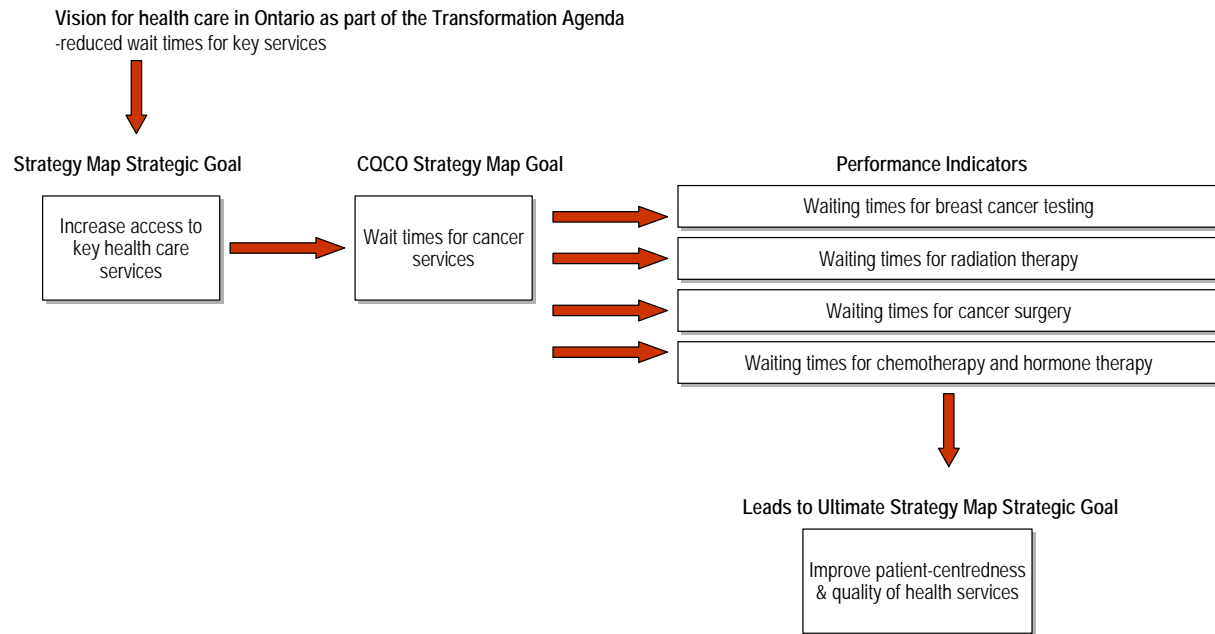
- Rationale for inclusion
- Description of where the indicator has been used (*i.e. source*)
- Levels of evidence (where available)
- Definition of indicator (*i.e. numerator, denominator*)
- Description of data source and potential data quality issues
- Other potential problems
- Capacity for benchmarking (comparing to standards, other jurisdictions, organizations, etc.)
- Capacity for trending (looking backward and going forward)
- Description of how the indicator might work in conjunction with other indicators
- Interpretation, in terms of desirable state for the indicator

#### **Example: Process of Selecting Indicators for a Sector-Specific Scorecard**

The following example shows how strategy cascades from the health system level (*i.e.*, the Ontario Health System Strategy Map) to a health sector-specific level. The Cancer Quality Council of Ontario has a well developed strategy map and process of quality measurement and reporting on system-level cancer care performance indicators (see Greenberg, Angus, Sullivan & Brown, 2005 for a detailed description of their methodology). Figure 12 demonstrates the link between the Cancer Quality Council of Ontario's goal with respect to improving wait times for

cancer services and the health system goal of increasing access to key health care services. Performance indicators specific to cancer care wait times were selected for reporting.

**Figure 12: Example of Goal Alignment**



(Source: Cancer Quality Council of Ontario and HRT-IM)

### **Calculate Your Indicators**

Once you have decided on the indicators you will use in your scorecard and identified the data sources and collection methods you intend to use, you will need to calculate the results for the indicators. Statistical packages such as SAS and SPSS are good choices for dealing with both simple and complex data sets. Excel can also be used for many advanced analyses. It is advisable to have resource personnel within your organization to assist with data calculation. Alternatively, these services can be outsourced.

### **Data Quality**

Data quality is an important aspect to consider when measuring performance. If your organization is using primary data sources (i.e. survey-based data) to support your indicators, you should have a process in place for data cleaning. Regardless of whether your organization is using primary or secondary data, it is important to be aware of data quality concerns and limitations. These issues should be taken into account when determining whether to use an indicator, when interpreting results and when using the data for decision-making purposes.

The following logic check outlines some questions to be considered once your set of proposed indicators has been selected:

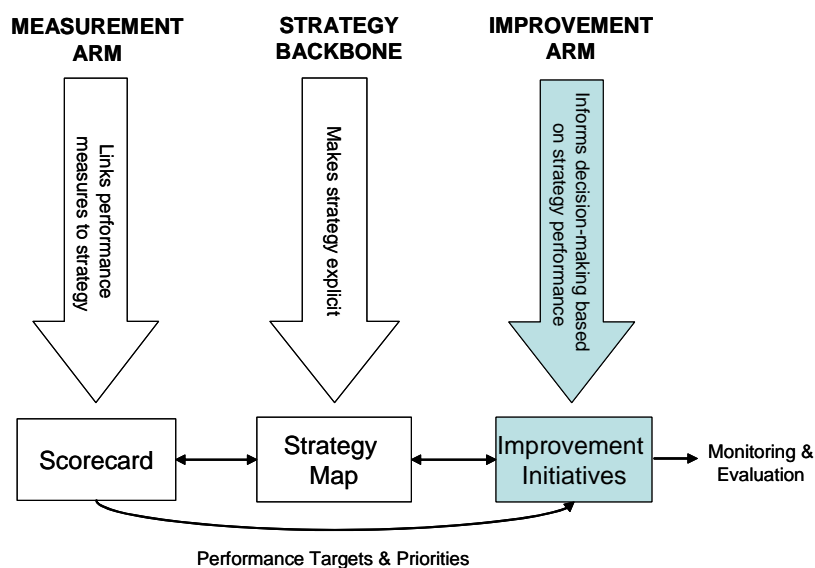
**LOGIC CHECK*****HOW DO WE KNOW WE'RE USING THE RIGHT INDICATORS?***

- 1) ARE OUR STAKEHOLDERS LIKELY TO FIND THE RESULTS OF THIS INDICATOR USEFUL?
- 2) DOES THIS INDICATOR RELATE TO THE HOSPITAL'S STRATEGIC PRIORITIES AND TO THE DEFINED OBJECTIVES?
- 3) IS THIS INDICATOR RELEVANT TO A PROJECT/SERVICE WITHIN OUR HOSPITAL?
- 4) CAN THIS INDICATOR BE USED TO JUDGE PERFORMANCE (EG. HIGHER IS BETTER)?
- 5) DOES THIS INDICATOR HAVE A VALID AND RELEVANT BENCHMARK?
- 6) IS THIS INDICATOR RELATED TO ANY OTHER INDICATOR(S) IN YOUR SCORECARD?
- 7) DO YOU HAVE A MIX OF LEAD AND LAG INDICATORS?



## SECTION 3: IMPROVEMENT INITIATIVES

Figure 13: Highlighting Improvement Arm



(modified from HRT-IM)

### Communicate Your Results

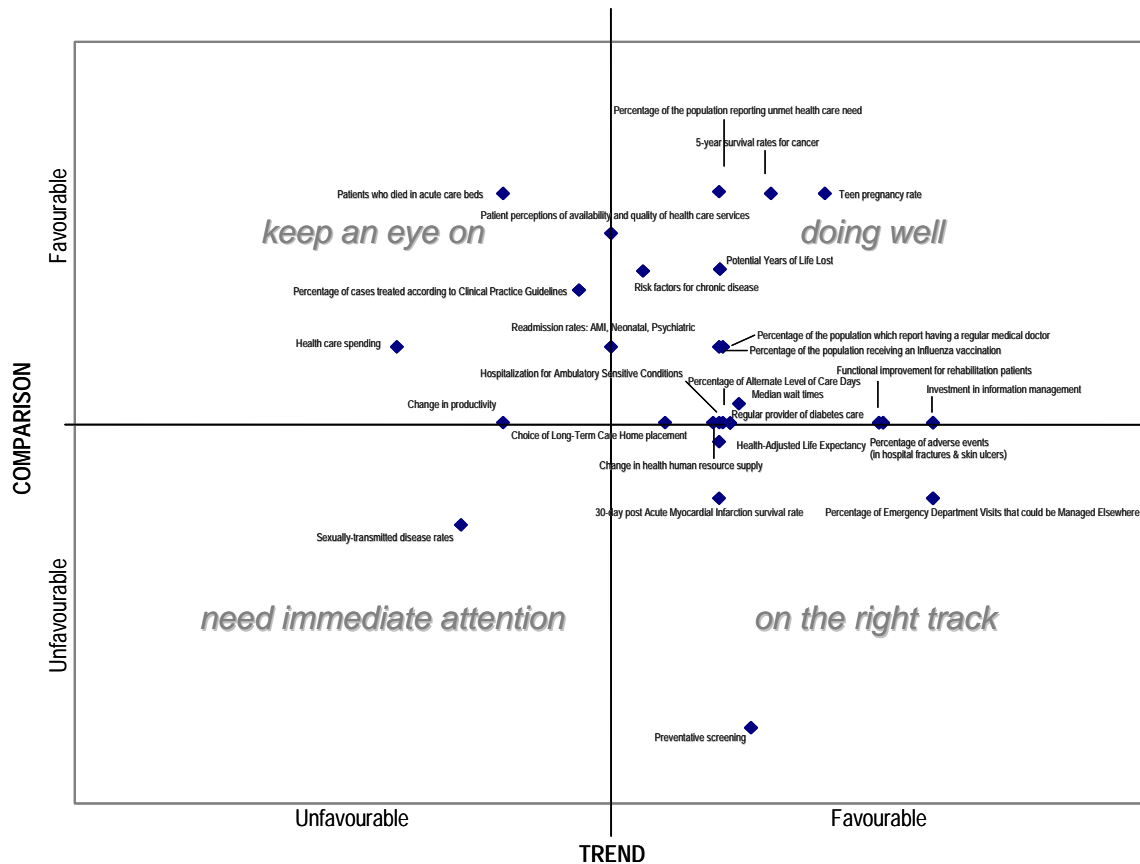
Once results for the indicators have been calculated, you will need to think about how to present and interpret them. With the evolution of the balanced scorecard from a measurement system to a management and communication tool, many organizations are choosing to utilize visual and technological solutions to portray their scorecard details. It is a good idea to test different formats and pilot them with various stakeholders to ensure that the presentation is useful and can be easily understood.

The following two examples illustrate different methods of presenting the results. The first is taken from the Ontario Health System Scorecard and the second is from the e-Scorecard developed by the Hospital Report Research Collaborative.

The first example (Figure 14) illustrates four quadrants of performance results designed to provide a quick 'at a glance' interpretation of the scorecard indicators. The four quadrants reflect performance based on two dimensions: 1) improvement over time along the horizontal axis; and 2) comparative results demonstrating an organization/region compared to other jurisdictions. This presentation provides a good summary of results for a number of indicators – those in the top right quadrant are indicators with good results, while those in the bottom left are indicators that require attention.

When thinking about how to present your findings, you need to think about who your audience is and what you hope to achieve by showing them the results. You will likely want to show different aspects of your results depending on what you hope to achieve. For example, if you are aiming to standardize performance within your hospital, you may want to stratify the analysis of particular indicators to highlight variation across programs within the hospital.

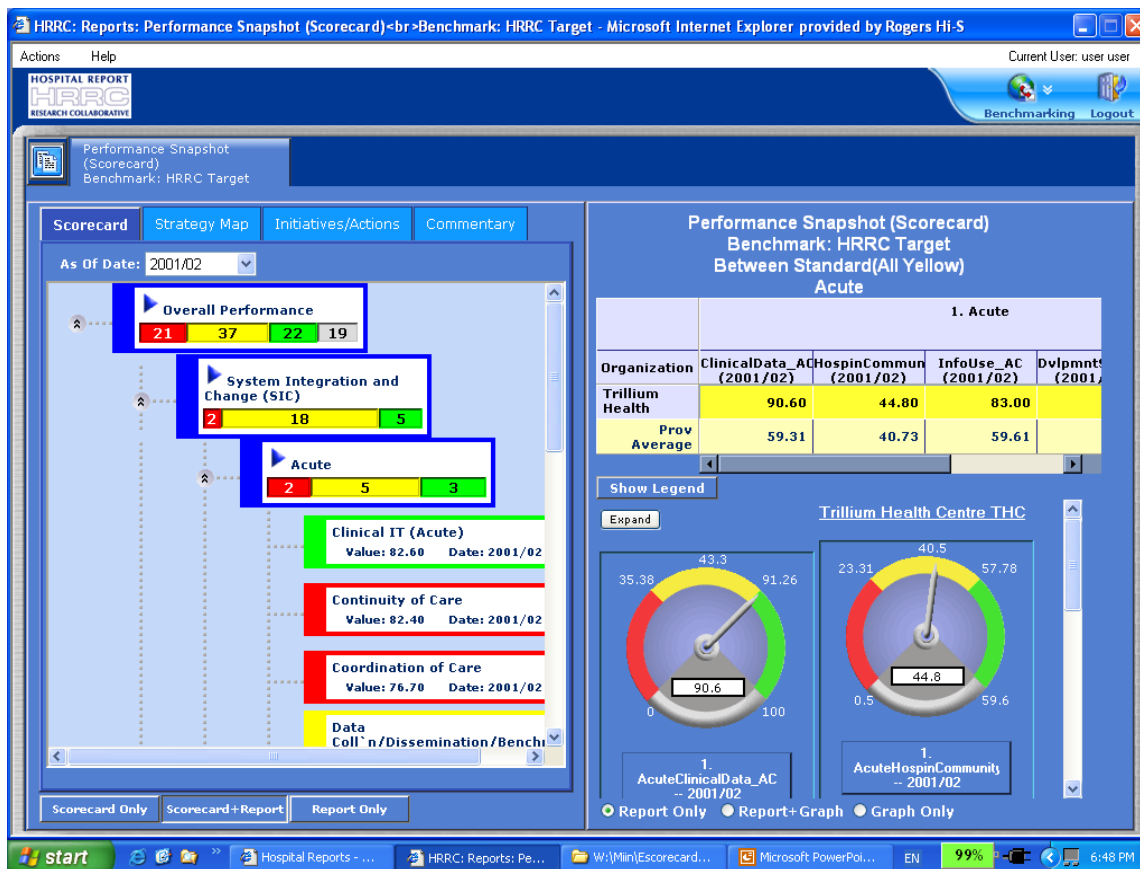
Figure 14: Managing Health System Performance through Scorecard Results



(Source: Health Results Team for Information Management)

The second example (Figure 15) illustrates the e-Scorecard developed by the Hospital Report Research Collaborative in collaboration with ABS Systems Consultants Inc. The e-Scorecard is a password protected, multi-dimensional application that provides standard and custom reports, including a range of graphics as well as more advanced tools that can be used by decision-support analysts. This tool allows hospitals to track their own progress over time, as well as providing comparative information across other hospitals in Ontario.

Figure 15: Screenshot from e-Scorecard Tool



(Source: Hospital Report Research Collaborative)

## Identify Quality Improvement Initiatives

*It would be nice if all quality issues could be solved at once, but the truth is that improvement is an evolutionary process. Since you simply can't fix everything at the same time, this places a premium on the ability to set priorities (American Health Consultants, 2003).*

How do organizations interpret the results of indicators to decide on future initiatives? With the large volume of information that hospitals receive regarding indicators, it is understandable that hospital managers and clinicians often feel overwhelmed and question how to select items to focus on for further study or improvement. The Hospital Report Research Collaborative produced a Guide to Indicator Selection Methods that summarizes several methods that can be used to select indicators for further evaluation and quality improvement initiatives. An example of some of the criteria that can be utilized in such a prioritization exercise is available in the appendix. Whatever criteria your hospital uses to identify indicators/initiatives to focus on, it is imperative that the indicators/initiatives selected are aligned with your organization's strategic priorities. Please refer to worksheet #7 to help with the selection of an initiative that aligns with your organizations objectives.

## Using the Scorecard for Quality Improvement

Performance measures can be used in two ways. The first is to identify areas for potential improvement, often part of the internal scan that facilitates the identification of strategic goals for the hospital. Once priorities are established, the hospital should be identifying quality improvement initiatives that will enable the organization to succeed in achieving goals and objectives. Once a quality improvement initiative has been implemented, the scorecard indicators can be used to monitor progress on a quarterly and annual basis. However, other measures are needed to monitor progress on specific projects on a daily, weekly and monthly basis.

Communication is key if a variety of clinical/program teams are to use the scorecard indicators to monitor their progress on an ongoing basis. All staff need to understand how their work contributes to the hospital's overall performance and the achievement of its strategic objectives. It is advisable to hold regular meetings and education sessions to ensure that everyone understands the Scorecard results, and to facilitate the implementation of action plans in areas where performance requires improvement. It is also important to celebrate success and reward innovations within your hospital that come about as a result of this process. Recognizing best practices that are contributing to improvements will facilitate staff and stakeholder motivation, and will support spread across the organization.

*IT IS IMPORTANT TO CELEBRATE SUCCESS AND REWARD INNOVATIONS WITHIN YOUR HOSPITAL THAT COME ABOUT AS A RESULT OF THIS PROCESS. RECOGNIZING BEST PRACTICES THAT ARE CONTRIBUTING TO IMPROVEMENTS WILL ENSURE STAFF AND STAKEHOLDER MOTIVATION*

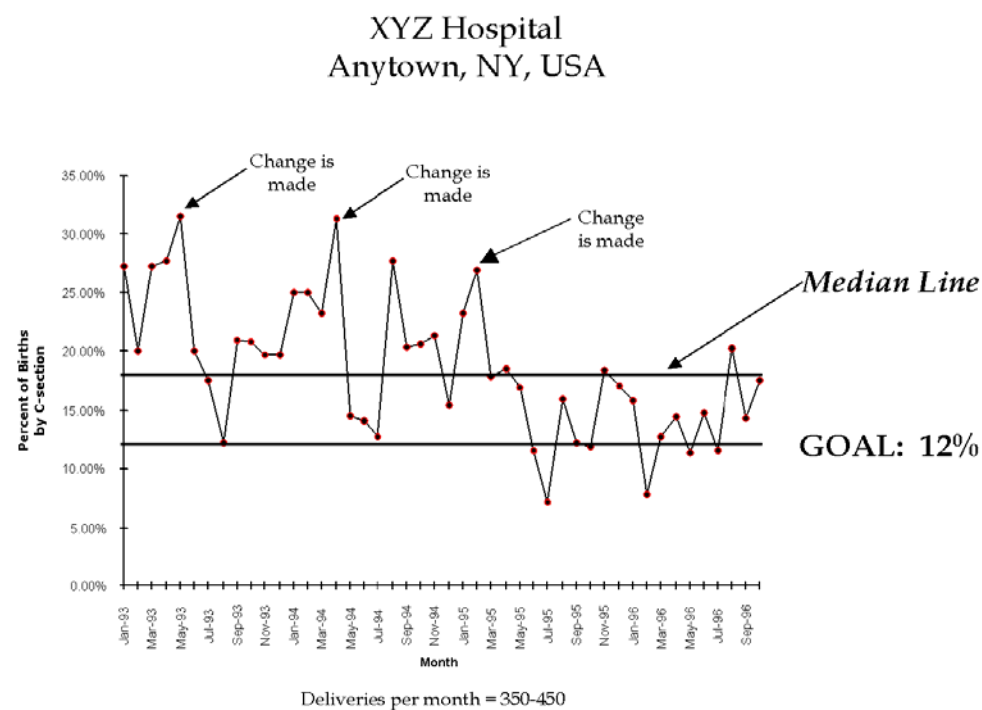
### *Evaluate the Results of Quality Improvement*

Run charts and control charts are tools that can assist in measurement of quality improvement to ensure that the changes a team is implementing are resulting in improvement (see Figure 16). By including upper and lower limits, you can determine whether the resulting changes are statistically significant, or whether the changes are simply what might be expected as a result of random variation in processes. (Refer to the Saskatchewan Health Quality Council's *Quality Improvement Toolkit* for a good discussion on this topic and examples of control charts).

Using run charts has a variety of benefits:

- They help improvement teams formulate aims by depicting how well (or poorly) a process is performing.
- They help in determining when changes are truly improvements by displaying a pattern of data that can be observed as changes are made.

Figure 16: Example of a Run Chart



(Source: Institute for Healthcare Improvement)

There are a variety of different types of models that can be implemented to improve quality. One of the more popular models is Plan, Do, Study, Act (PDSA) Cycles of improvement. After your baseline is established, you can begin a Plan, Do, Study, Act (PDSA) Cycle as part of your quality improvement plan. The Institute for Healthcare Improvement has based their Breakthrough Series on rapid cycle improvement, using the PDSA cycle. The first step in this process is to define the problem or area requiring a quality improvement effort. A combination of methods can be used to define the specific area that requires improvement including brainstorming with key stakeholders, fishbone diagrams, or process flow maps.

The following definitions of the PDSA cycle components have been adapted from the Saskatchewan Health Quality Council's *Quality Improvement Toolkit*:

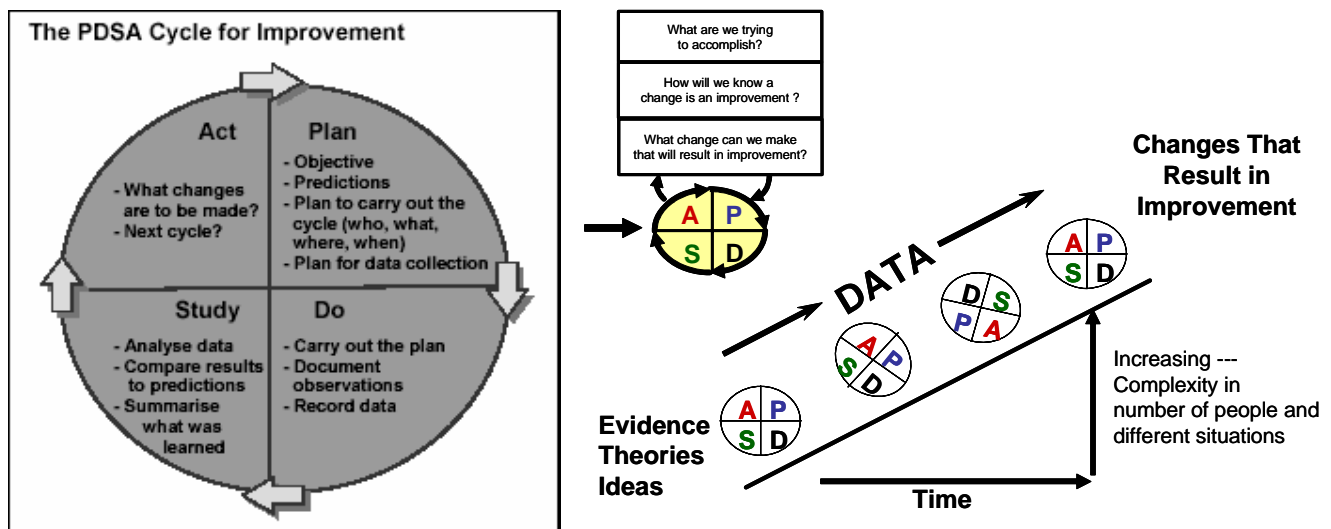
- PLAN** Define your objective. Make a prediction. Develop a plan to carry out the cycle (who, what, where, when), and decide how you will collect the data. Define who will do what by when, and what results will indicate that an improvement has been made.
- DO** Carry out the plan.
- STUDY** Based on your measurements, did you achieve the objectives of your plan? What worked? What did not?
- ACT** If the test (i.e., plan) is successful, plan another cycle on a larger scale or under different conditions. If the test is unsuccessful, test a different hunch by devising a new plan and running through the PDSA cycle again.

Multiple ramps, each using PDSA cycles, can be run simultaneously to expedite quality improvement results. In planning a successful project, it is important to define your aim (objective) and to define the measures that will allow you to determine whether or not a change is actually reflective of performance improvement. Keeping your PDSA cycles relatively small in scope and duration will facilitate implementation and encourage quick wins within your organization. It is also important to utilize a team approach, encouraging all levels of staff to become involved. Finally, it is important to reward success. Examples of PDSA worksheets can be downloaded from the Saskatchewan Health Quality Council website at [www.hqc.sk.ca](http://www.hqc.sk.ca). Figure 17, developed by the Saskatchewan Health Quality Council, outlines the key steps involved in the PDSA Cycle. There are three key questions that you need to address:

*KEEPING OUR PDSA CYCLES  
RELATIVELY SMALL IN SCOPE  
AND DURATION WILL  
FACILITATE IMPLEMENTATION  
AND ENCOURAGE QUICK WINS  
WITHIN YOUR ORGANIZATION*

- What are we trying to accomplish?
- How will we know that a change is an improvement?
- What changes can we make that will result in improvements?

Figure 17: The PDSA Cycle



## Set Performance Targets

*"There is always a best way of doing everything" - R.W. Emerson.*

As Niven (2002) suggests, *the Balanced Scorecard is incomplete without a set of targets to motivate and encourage performance*. A target is a clear statement of planned results (including outputs and outcomes) to be achieved within a specified timeframe, against which reported results can be compared. Targets can be developed based on an organization's own performance, industry standards, articulated customer preference, or the performance of a comparable organization (Management Board Secretariat, 2004). The Institute for Healthcare Improvement recommends aiming high and aiming wide. This means setting your indicator targets high and spreading improvement initiatives across an organization so that the organization has a reasonable chance of positively impacting its scorecard indicators.

*THE BALANCED SCORECARD IS INCOMPLETE WITHOUT A SET OF TARGETS TO MOTIVATE AND ENCOURAGE PERFORMANCE*

Benchmarking results against those of other organizations can provide valuable resources for quality improvement ideas. Once you fully understand processes of care within your own organization, site visits to organizations that score highly on an indicator that your organization has not done well on can provide creative ideas for change. In order to benchmark effectively, it is important to ensure that you are comparing 'apples to apples'. In other words, use consistent indicators and follow agreed-upon methodologies when developing and selecting your indicators and in making your comparisons. It is also important to focus on all aspects of an organization's operations rather than just one element because the results for a best-in-class organization may result from numerous determinants. Thus, replicating only one element of an organization's formula may lead to isolated improvements.

## Manage the Change

Change management is essential when transforming performance within your organization. Effective change management can help an organization view change as an opportunity to strengthen its performance while, at the same time, provide guidance in creating and maintaining the necessary cultural and operational adaptation.

There are four fundamental processes to creating change within your organization:

1. Clarify the reason(s) for change.
2. Keep all levels of the organization informed about the change process.
3. Measure and reward the desired change; and
4. Monitor and follow-up periodically to reinforce the organizational benefits of the change.

One way to assess the effectiveness of these processes is to continually ask the following questions:

- Can all levels of the organization understand what is being changed and why?
- Can all levels of the organization describe the plan for change and any changes to that plan?
- Can all levels of the organization explain the direct and indirect rewards s/he will receive for making progress toward the change?
- Can all levels of the organization identify ways in which the change will be maintained?

Overall, change management is an effective tool for hospitals to use in meeting today's challenges in the hospital and the larger healthcare system.

The Institute for Healthcare Improvement has identified seven levers for success:

#### **7 Leverage Points for Successful Quality Improvement**

- Set system level aims/priorities and oversee their achievement at the Board
- Align aims/priorities, indicators and Quality Improvement initiatives
- Channel attention to the aims and indicators throughout the organization
- Engage an effective and committed team
- Engage the CFO in achieving the aims
- Engage physicians in achieving the aims
- Ensure staff have the capability necessary to achieve the aims

Bullets one, two and seven link directly with the key messages included in this toolkit. These include: setting high level goals at the senior level in the organization, align services, indicators and QI initiatives with these goals and ensure that staff have the resources necessary to work with the organization to achieve the goals. Projects that are not aligned to organizational priorities are unlikely to get the attention and resources necessary to succeed over the shorter and longer terms. Leadership is key, as is alignment and communication from the level of the Board to the front-line of the organization.

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## GLOSSARY OF TERMS

**Accountability** – an obligation to render an account for a responsibility that has been conferred.

**Balanced Scorecard** – the translation of an organizations strategy into a comprehensive set of performance measures that provides the framework for a strategic measurement and management system.

**Benchmarks** – the process of comparing an organization's processes, products or services against those of a higher performing organization.

**Cascading** – Refers to the process of filtering and aligning your strategy and scorecard throughout all levels of the organization and larger system. A high-level system scorecard should be reflected at the sector and organization level.

**Control Chart** – statistical tools for determining whether or not a process is in control.

**Lag Indicator** – Focused on performance in the long-term.

**Lead Indicator** – Normally measuring processes and activities that drive performance.

**Logic Model** – a systematic, conceptual and visual explanation of what a program or policy is trying to accomplish and the steps by which it believes those objectives will be achieved in the real world.

**Mission** – The core purpose of your organization; why you exist.

**Objectives** – concise statements that describe the specific things you must perform well if you are to successfully implement your strategy.

**Performance Indicator** – Quantifiable standards used to evaluate and communicate performance against expected results.

**Performance Management** – describes the entire process; using the knowledge created in your strategy and scorecard to make informed management decisions and drive performance.

**Performance Measurement** – the process of developing measurable indicators that can be systematically tracked to assess progress made in achieving predetermined goals and using such indicators to assess progress in achieving these goals.

**Quality Improvement** – an approach to the study and improvement of the processes of providing healthcare services to meet needs of clients.

**Run Chart** – used to track a performance indicator over a period of time.

**Strategic Goals** – A list of ambitions that your hospital aspires to achieve; aligned with your overall organizational purpose.

**Strategy Map** – A formal, visual articulation of your strategic goals and their inter-relationships.

**Targets** – Clear statement of planned results to be achieved within a specific timeframe.

**Vision** – An inspirational statement that articulates your main prioritized goals as well as your values



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## Improvement

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## **APPENDIX – Example of Selection Criteria**

### *Performance*

- An obvious first choice for picking an indicator for closer scrutiny is the hospital's performance on that indicator, either relative to other hospitals or in absolute terms. "Below average" performance in Hospital Report means that, relatively speaking, a hospital is not doing very well on that indicator. This is enough for many hospitals to make it a priority.
- Note that an indicator may not be classified as "below average" because it was not statistically different than the mean, but the indicator value may still be low, relative to the mean. In such cases, the indicator might still be considered for selection.
- Few Hospital Report indicators have absolute standards associated with them. So, average performance relative to peers may not be good enough if everyone is doing relatively badly. There are some clinical and financial indicators, for example, where performance across the system should be better; a hospital might want to consider some of these indicators as well, especially if it has few other poor performing indicators. Organizations with strong quality cultures are striving to achieve targets of 90-95% on indicators.

### *Mission/Vision/Strategy*

- Indicator is critical to a hospital's mission and vision (e.g. patient satisfaction).
- Indicator is critical to a strategic goal (e.g. horizontal integration with other providers).
- Indicator reflects an issue for a particularly important patient population (e.g. new immigrants).
- Indicator reflects processes of importance to key groups (e.g. physicians, board members).

### *Clinical Quality*

- Indicator reflects access
- Indicator reflects an opportunity to substantially improve clinical care.
- Indicator reflects increase in patient clinical outcomes.

### *Cost of Poor Quality*

- Indicator measuring risk to patients or safety issues.
- Indicator where improvement might lead to decreased costs.
- Indicator reflecting many patients being affected.
- Indicator reflects lack of regulatory compliance.

### *Feasibility*

- Indicator can be easily understood and results applied to particular hospital processes.
- Appropriate and available personnel to address issue.
- Executive leaders from organization are supportive of project related to this indicator