

The Journey of the Sunnybrook Clinical Education Balanced Scorecard

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Abstract: Over the last 20 years, balanced scorecards have been increasingly utilized by hospitals to enhance accountability in many domains of clinical care; however, few hospitals actually utilize balanced scorecards for education. This paper will describe a balanced scorecard to measure progress in meeting its educational mandate.

Key words: education, balanced scorecard, learners

1. Sunnybrook Health Sciences Centre

Sunnybrook Health Sciences Centre is Canada's largest trauma centre and has 1.2 million patient visits each year. It is the destination of choice to over 4,000 learners each year in over 30 health disciplines. From its beginnings, as a hospital for Canadian veterans, Sunnybrook Health Sciences Centre has flourished into a fully affiliated teaching hospital of the University of Toronto, evolving to meet the needs of the growing community.¹

As part of an academic health sciences network, Sunnybrook Health Sciences Centre adopted a Balanced Scorecard to align its various units to develop metrics that are both achievable as well as tangible. It was designed to measure success of its education partners and over 4,000 learners.

2. What Is a Balanced Scorecard?

"Balanced Scorecard" is a measurement-based method to simplify a performance measurement framework for grouping existing measures into categories, and displaying the measures graphically, usually as a dashboard. The measures in these systems are usually operational, not strategic, and are used primarily to track production, program operations and service delivery (input, output, and process measures) (Rohm H., 2008).

According to Charles Pineno (2002), the balanced scorecard is a customer-based planning and process improvement system aimed at focusing and driving the change process. It is able to do this by translating strategy into an integrated set of financial and nonfinancial measures that communicates the organizational strategy to the employees and provides them with actionable feedback on attainment of objectives.

Since they first coined the concept of the Balanced Scorecard, Drs. Robert Kaplan and David Norton developed the Balanced Scorecard, a performance measurement system that considered not only financial

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¹ Sunnybrook Health Sciences Centre Website: <http://www.sunnybrook.ca>.

measures, but also customer, business process, and learning measures.

The roots of the balanced scorecard are deep, and include the pioneering work of General Electric on performance management reporting in the 1950's and the work of French process engineers (who created the Tableau de Bord — literally, an instrument panel or dashboard of performance measured) in the early part of the 20th century in France.² The Balanced Scorecard framework is depicted in the following diagram (Figure 1)³:

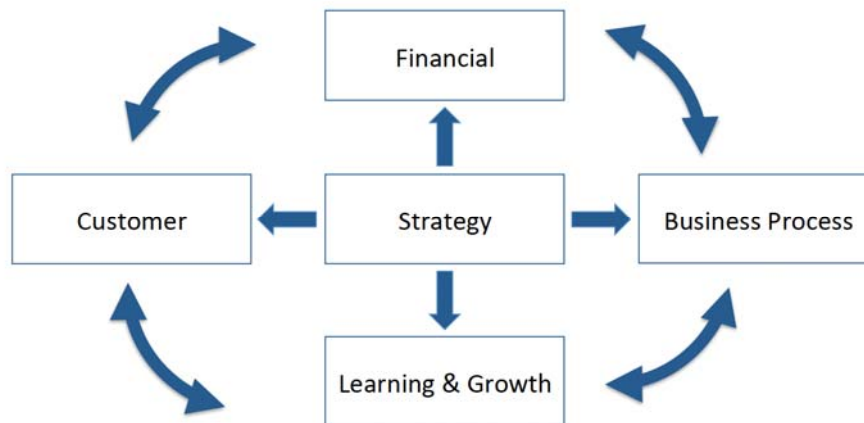


Figure 1 Diagram of the Balanced Scorecard

Cullen, Joyce, Hassall, and Broadbent (2003) proposed that a balanced scorecard be used in educational institutions for reinforcement of the importance of managing rather than just monitoring performance (Karathanos D. & Karathanos P., 2005).

What are the benefits of the balanced scorecard approach?⁴

The benefits of the balanced scorecard have been identified by many organizations:

- Improved organization alignment improved communications, both internally and externally;
- Linked strategy and operations;
- More emphasis on strategy and organizational results; and
- Integrated strategic planning and management.

To quote Stephen Covey, “People and their managers are working so hard to be sure things are done right, that they hardly have time to decide if they are doing the right things.” There exists a difference between doing the right things and doing things right.

Table 1 provides an explanation of how the Sunnybrook Clinical Education Balanced Scorecard has been incorporated into Sunnybrook Education. Using different measurements, such as: student satisfaction measures, ranking within the University of Toronto affiliated hospitals for the number of structured Inter-professional Education placements, and the number of non-physicians with university appointments provides rankings beyond the walls of Sunnybrook Education.

² The Balanced Scorecard Institute.

³ The Balanced Scorecard, QuickMBA.com, 1999–2010.

⁴ The Balanced Scorecard Institute.

Table 1 Sunnybrook Education — Overview Perspectives as Applied to the Balanced Scorecard Developed by Robert Kaplan & David Norton

1. The Financial Perspective: “How are you doing by your key investors?”

This perspective is measured by using the number of students that are placed at Sunnybrook Health Sciences Centre including those who choose to come here for their learning experience. We also capture the number of learners who use our Sunnybrook Canadian Simulation Centre and those who enroll in Health Literacy workshops through Patient & Family Education.

2. The Customer Perspective: “Do they like what you are providing/producing?”

We have learners from all over the world who apply to Sunnybrook Health Sciences Centre to receive their health education. We are the destination hospital for their health education.

3. The Internal Perspective: “Can you deliver what your customers want efficiently?”

We have implemented measurements by students based on their satisfaction. The Student Experience survey we disseminate to our more than 4,000 students continuously shows us that students are pleased with their placement/rotation at Sunnybrook Health Sciences Centre. Year after year, we exceed the aggregate responses from all of the University of Toronto affiliated hospitals on student satisfaction.

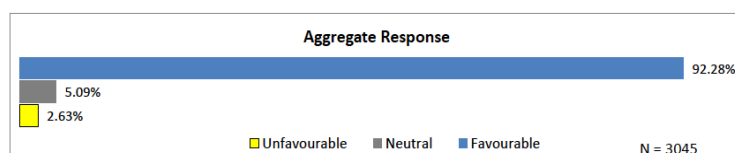
We gather data to report to the Toronto Academic Health Sciences Network using specific questions, such as:

I would recommend a placement here to my fellow students./I would recommend my preceptor(s)/supervisor(s) for future student placements; and I felt prepared to begin my placement after orientation/I felt welcome and accepted as a part of the team.

These results are then compiled and provided in a report that indicates how we are doing. Shown below is a snapshot of the overall results from the Toronto Academic Health Sciences Network. These incorporate results based on all University of Toronto affiliated hospitals and provide our scores showing we are above aggregate.

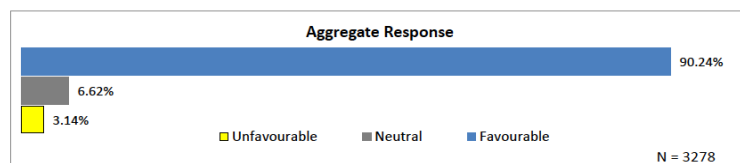
N represents the number of surveys.⁵

Survey Question: I would recommend a placement here to my fellow student.



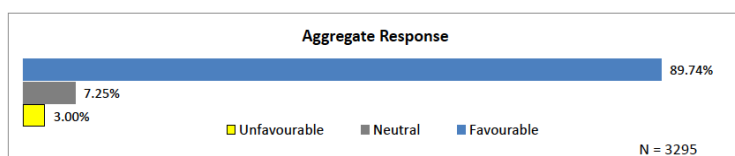
Sunnybrook Health Sciences Centre = 94%

Survey Question: I would recommend my preceptor(s)/supervisor(s) for future student placements.



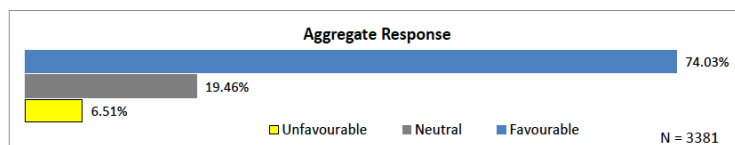
Sunnybrook Health Sciences Centre = 93%

Survey Question: I felt welcome and accepted as a part of the team



Sunnybrook Health Sciences Centre = 90%

Survey Question: I felt prepared to begin my placement after the orientation



Sunnybrook Health Sciences Centre = 79%

4. The Learning Process & Growth Perspective: “Can you continue to improve and create value?”

We are constantly learning innovative ways to teach our learners and support our educators. We listen to their feedback and make changes based on the recommendations they provide. For example, we heard the learners were having difficulty with transportation. We investigated and determined that they required extra shuttle service. We made a case and presented the facts to senior leadership and were granted funding to provide extra shuttle service to our learners.

⁵ Toronto Academic Health Science Network TAHSN Education Committee Learner Engagement Initiative: 2013 Survey Results.

3. The Development Journey

The Sunnybrook Education Advisory Council has evolved from the time when the Evaluation and Measurement Committee was formed. In February 2014, we partook in a retreat for the education, professional and research leaders that comprised the Sunnybrook Education Advisory Council membership. The result of this retreat was a cohesive structure that incorporated inclusiveness and collaboration.

The four Committees of the Sunnybrook Education Advisory Council were formed and directed to incorporate a 2-year work plan. The purpose of this was to provide useful methods of collaborating and enhancing the work being delivered within the committees.

The four Committees of the Sunnybrook Education Advisory Council consist of:

- (1) Education Research Unit;
- (2) Technology-enhanced Teaching & Learning;
- (3) Education Capacity Building; and
- (4) Education Excellence & Wellbeing.

The 2-year work plan included the committees' objectives, key priorities and metrics for Years 1 & 2. The end result was a useful and highly beneficial method to gather and deliver results.

On a quarterly basis, the Committees of the Sunnybrook Education Advisory Council met with the Vice President of Education and the Coordinator of the Sunnybrook Education Advisory Council to provide their quarterly updates regarding their progress. This provided an opportunity to present their on-going deliverables, as well as, ideas on collaboration within upcoming projects and/or initiatives.

The objectives for each of the Committees of the Sunnybrook Education Advisory Council were aligned with the Sunnybrook Education Strategic Plan. Bridging the gaps between the Committees allowed for a cohesive partnership amongst the members, further collaboration regarding similar initiatives and breaking down existing silos.

Education Research Unit: to support innovation in education through research and scholarly study of education solutions. The Education Research Unit focused on building the profile and capacity of education research and scholarship at Sunnybrook Health Sciences Centre.

Technology-enhanced Teaching & Learning: to enhance teaching and learning at Sunnybrook Health Sciences Centre through increased accessibility to technology, the Library, Simulation Centre and Learning Management System collaborated in an effort to increase opportunities for ongoing learning, professional accountability, and performance improvement.

Education Capacity Building: the focus of this Committee was to identify, develop and expand initiatives to build capacity within clinical education for diverse health care providers across Sunnybrook Health Sciences Centre.

Education Excellence & Wellbeing: the goal of this committee was to make Sunnybrook Health Sciences Centre the destination hospital for all learners through optimizing the staff and student education experience and promoting personal wellbeing.⁶

During the time that the Sunnybrook Clinical Education Balanced Scorecard was being developed, the Evaluation and Measurement Committee met over the course of 12 months. On a monthly basis, they developed

⁶ Committees of SEAC 2-year Work Plan, 2014–2016.

and refined metrics that would rigorously assess the hospital's performance in the following four discrete educational domains:

- (1) Education Collaboration and Partnership;
- (2) Education Capacity Building;
- (3) Education Excellence, and
- (4) Education Research Scholarship and Innovation.

Metrics were carefully selected based on their meaningfulness and feasibility. Special care was taken to ensure that Sunnybrook Health Sciences Centre leadership and the Vice President of Education supported these metrics.

Each domain within the Sunnybrook Clinical Education Balanced Scorecard contained various key indicators to help assess and measure success. Table 2 provides a high-level viewpoint of the domains that were captured, their indicators, along with their Baseline and Target, as it was originally established.

Table 2 Education Balanced Scorecard: A Preliminary Focus

Domain	Indicator	Baseline	Target
Education Research, Scholarship & Innovation	1. Number of education-related grants, publications and presentations produced by all Sunnybrook Health Sciences Centre employees/clinicians		Baseline then increase 3% over 5 years
	2. Number of Sunnybrook Health Sciences Centre employees/clinicians who are involved in at least one education-related grant, publication or presentation		Baseline then increase 3% over 5 years
	3. Amount of money spent through the Education Portfolio on education-related RSI (research, scholarship and innovation)		Baseline hold steady
Education Excellence	1. Percentage of students indicating that their Sunnybrook Health Sciences Centre placement met professional and educational expectations	90%	80%
	2. Percentage of students who would recommend Sunnybrook Health Sciences Centre to other learners	90%	80%
	3. Number of non-physician Sunnybrook Health Sciences Centre staff with a university faculty appointment	181	Increase by 5% over 2 years (to be changed to 2% over 2 years)
	4. Number of Sunnybrook Health Sciences Centre staff nominated for or having won hospital-wide, Academy, College or University teaching awards or for provincial/national/international teaching or education awards		Baseline and then increase by 3% over a 5-year span
	5. Number of Sunnybrook Health Sciences Centre staff promoted in the last year based primarily on teaching or education excellence		Baseline and then increase TBD
	6. Number of physicians promoted in the last year based primarily on teaching or education excellence		Baseline and then increase 2% over 5 years
Education Collaboration and Partnership	1. Top 3 ranking within University of Toronto-affiliated hospitals for number of structured interprofessional education placements		Top 3
	2. Number of Sunnybrook Health Sciences Centre educators participating in education committees at organizations and institutions external to Sunnybrook Health Sciences Centre		Baseline and increase by 3% at the end of a 3-year span
Education Capacity Building	1. Number of staff supported to participate in external and internal education activities		Baseline and the increase by 2% over a 5-year span
	2. Number of physicians supported by their Departments to participate in external and internal education activities		Baseline and the increase by 2% over a 5-year span
	3. Number of educators certified through The Institute for Performance and Learning		Baseline and double current number (from 3 to 6) over a 3-year span
	4. Amount of money spent through the Education Portfolio on tuition to train educators		Baseline and hold

According to the Balanced Scorecard Institute⁷, the definitions for indicator, baseline and target are:

- Indicator: A simple metric that is intended to be easy to measure. Its intent is to obtain general information about performance trends by means of surveys, telephone interviews, and the like.
- Baseline: Data on the current process that provides the metrics against which to compare improvements and to use in benchmarking (obtained from the Government Accountability Office).
- Target: The numerical value of a performance metric that is to be achieved by a given date. Both the metric and the schedule need to be specified for targets. A stretch target is the same thing, but its numerical value is higher, demanding breakthrough performance to achieve.

In strategic management, a balanced scorecard is a comprehensive set of measures that is used to communicate and evaluate the achievement of the mission and strategy of the organization. The balanced scorecard traditionally includes both objective and subjective measures divided into four major areas:

- (1) Financial perspective;
- (2) Customer perspective;
- (3) Internal business process, and
- (4) Learning process and growth perspective (Pineno C., 2002).

The four key perspectives of the balanced scorecard used to measure success are:

- (1) The Financial Perspective: asks the question “*Are you doing well by your shareholders?*”
- (2) The Customer Perspective: asks the question “*Do they like your product and services?*”
- (3) The Internal Business Process: asks the question “*Can you efficiently deliver what your customers want?*”
- (4) The Learning Process & Growth Perspective: asks the question: “*Can you continue to improve and create value?*”

After participating in the creation and implementation of the Sunnybrook Clinical Education Balanced Scorecard, we found that a robust education balanced scorecard is feasible to develop for an academic health sciences centre. The utilization of a group specifically devoted to evaluation and measurement is critically important to ensure that the measures selected are meaningful and feasible to extract. In addition, success in implementation requires significant resources, expertise and a data extraction methodology given the vast size of the institution, and its inter-professional composition.

Once a balanced scorecard has been developed and implemented, all those involved directly or indirectly should consider this “system” to be dynamic and prone to evolve over time. Since its inception, the Sunnybrook Clinical Education Balanced Scorecard is reviewed annually and new indicators are added.

When the Sunnybrook Clinical Education Balanced Scorecard was first created, it gathered metrics based on:

- (1) Top 3 ranking within University of Toronto affiliated hospitals for number of structured Inter-professional Education placements;
- (2) Percentage of students indicating that their Sunnybrook Health Sciences Centre placement met their professional and educational expectations;
- (3) Percentage of students who would recommend Sunnybrook Health Sciences Centre to other learners; and
- (4) The number of non-physician staff (e.g. nurses, social workers etc.) with a University faculty appointment.

⁷ 1998–2016, Balanced Scorecard Institute, a Strategy Management Group company.

4. Evolution

It has since evolved and is directed more broadly across other areas of education. Currently, we capture metrics in the following categories that are aligned with the Education priorities within the following areas:

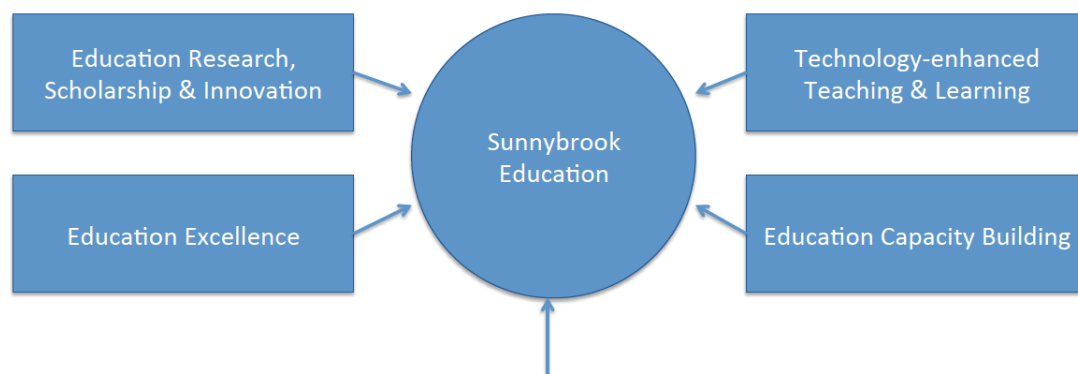
- 1) (1) Simulation
- 2) (2) Learning Management System
- 3) (3) Patient & Family Education

The metrics we use to capture and report on these priorities align within the following indicators:

- (1) Number of Simulation Centre encounters of non-Sunnybrook Health Sciences Centre staff learners;
- (2) Number of Simulation Centre encounters of Sunnybrook Health Sciences Centre staff learners;
- (3) Number of courses completed on the online Learning Management System (LMS);
- (4) Number of staff, physicians, and student learners that have been trained on health literacy principles;
- (5) Number of patients and families who have been served at one of the Sunnybrook learning centres; and
- (6) Number of funded Patient Family Education (PFE) documents produced using a special toolkit based on concepts of health literacy.

5. Sunnybrook Clinical Education Balanced Scorecard

To build and report on the Education Performance at Sunnybrook Health Sciences Centre, the Sunnybrook Education Advisory Council Evaluation and Measurement Committee designed a clinical education balanced scorecard with four domains.



Education Vision:

Education is foundational to inventing the future of healthcare

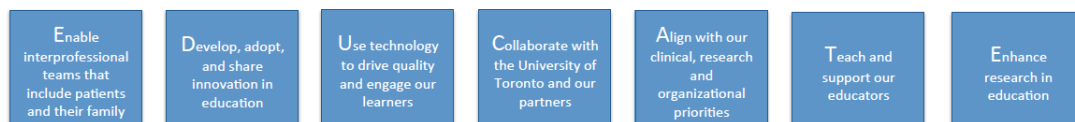


Figure 2 Domains Supporting the Sunnybrook Clinical Education Balanced Scorecard

6. Key Domains

For each perspective, both goals and metrics are required. 4 metrics were selected for Capacity Building, 6

metrics were developed for Education Excellence and 3 metrics were developed for Education Research and Innovation. The Evaluation and Measurement Committee then developed a data extraction tool for each of these metrics to ensure that the relevant data could be compiled and extracted.

Through the work developed through the Sunnybrook Education Advisory Council Evaluation and Measurement Committee, it developed concrete and substantive measurement management tools, including the balanced scorecard. This tool consistently shows progress in the following areas:

- (1) Ranking within the Toronto Academic Health Science Network hospitals for the number of structured Inter-professional Education placements;
- (2) Non-physicians clinical appointments; and
- (3) Student experience.

7. Conclusion

The journey of creating a balanced scorecard was one that requires institutional commitment, support and acceptance. The Sunnybrook Clinical Education Balanced Scorecard is a constantly evolving measurement tool.

Since first incorporating the Sunnybrook Clinical Education Balanced Scorecard, it has evolved from where it initially took shape. Currently, it reports on metrics from the following key areas:

- (1) Simulation;
- (2) Learning Management System; and
- (3) Patient & Family Education.

Information on the creation of the Sunnybrook Clinical Balanced Scorecard has been disseminated at many conferences, both locally and beyond.

Although much has been accomplished in measuring meaningful education activity and impact at Sunnybrook Health Sciences Centre, ongoing efforts are required to ensure that the Sunnybrook Education Balanced Scorecard is accurate, and meaningfully aligns with the overarching Sunnybrook Corporate Balanced Scorecard.

Reference

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