

ASTD 2008 International Conference & Exposition

Session SU219 – When the Bottom Line is Human Life: Evaluating a National Health Care Program

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Session Learning Objectives:

1. Apply the case evaluation framework
2. Apply tips for conducting effective measurement
3. Use recommended strategies to improve program design and delivery, impact and to communicate results

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MORE^{OB} 2 Phase Evaluation Model

Phase 1 – evaluate program impact

CONDUCT A PILOT EVALUATION

- Assess impact on learning, performance, and clinical/business outcomes
- Identify the enablers and barriers to impact
- Identify organizational success factors

USE THE PILOT TO DEVELOP EVALUATION METHODOLOGY

- Acclimatize methodology to the environment and audience
- Refine evaluation instruments
- Refine data collection strategies
- Design the evaluation report
- Develop communication and feedback strategies

USE THE PILOT DATA TO BUILD AN IMPACT MAP

- Identify the most probable impacts
- Describe the chain of impact
- Secure buy-in from the program team

INITIATE ON-GOING EVALUATION

- Modified time series design

Phase 2 – use evaluation results to proactively manage and enhance program Impact

DEVELOP A PARTNERSHIP WITH THE CLIENT FOR PROGRAM SUCCESS

- Communicate success factors to senior administration at program launch
- Use Impact Map to set site-specific performance and business goals

APPEND AN ACTION PLAN TO INTERIM EVALUATION REPORTS

- Identify areas for focus and goal setting for subsequent training
- Map unit needs to Program tools and activities
- Re-align metrics to correspond to unit priorities
- Recommend strategies for enhancing learning transfer and impact

ESTABLISH A DASHBOARD

- Monitors and communicates results at all evaluation levels within any hospital
- Gives all stakeholders “any time” access to Program results and progress
- Enables hospitals to benchmark progress (against own goals, or other hospitals)
- Reinforces results-based focus and enhances participant engagement
- Monitors and communicates results across all hospitals using the Program
- Roll-up data for the community

PHASE 2 – MANAGING AND ENHANCING PROGRAM IMPACT

Stakeholder (WIIS)	Needs/Payoffs	Establishing Measures	Data Collection	Communicating Findings
MORE^{OB}				
Performance Support	→ Use the Impact Map to communicate what is possible?	→ Establish the list of possible measures based on best practice.	→ Provide protocols, tools and an evaluation approach.	→ Refine tools to communicate with stakeholders in the most meaningful way
Client Organization				
Senior leader	→ What is the organizational need or pay off? Or → Why do you want to engage?	→ What key metrics do you want to influence? (what have participants been telling us and provide a list of what is possible)	→ How do you currently measure? → Where is the data? → Other suggestions re data collection?	→ What existing tools for communicating success? (e.g. balanced scorecard other strategic reporting methods) → Align MORE ^{OB} metrics?
Mid-Level administrator	→ Review organizational pay offs – → What issues exist on our unit – do they align with strategic goals? → Are there other issues?	→ Are there other metrics central to the organizational that will demonstrate success?	→ What measures exist currently and how do they relate to the intervention? → What do you currently collect? → What resources do we need to gather data (level 4 and 5)	→ Existing reporting tools (compliance with internal/external standards)
Core Team	→ What performance/learning gaps exist in our unit? → What tools or strategies does MOREOB recommend?	→ Review the roadmap - What are the measures that will demonstrate success to the Core Team? → Do organizational measures align with unit needs? → If not, what are the measures?	→ Agree on measures/instruments/data collection methodology. → Integrate within the role of the core team (focus on level 3)	→ Create the Action Plan → Use the Dashboard to measure and communicate success at all levels
Participant	→ Do my learning needs align with unit and organizational needs?	→ What are key objectives? → What measures are important to me?	→ Actively participate in data collection	→ Access to findings/success

Activity: Matching Program Objectives to Levels of Evaluation

Some of the Program objectives for MORE^{OB} are listed below. At what level of evaluation should each of the objectives be evaluated?

MORE ^{OB} Program Objectives	Level 1 Reaction	Level 2 Learning	Level 3 Application	Level 4 Business Impact	Level 5 ROI
1. Participants will demonstrate increased knowledge of the principles of high reliability organizations					
2. The number of harm events occurring in the obstetrics unit will decrease over three years					
3. Clinical teams will demonstrate improved effectiveness in managing emergency situations					
4. Improvements to work practices will result in cost savings for the hospital					
5. Participants will demonstrate increased core clinical knowledge					
6. Participants will rate core learning activities as "effective"					
7. The number of elective inductions will decrease over three years					
8. Participants will display respect for the input of all team members regarding patient care					
9. Patient satisfaction measures will improve over three years					
10. Participants will more frequently report No Harm events					


MORE^{OB} Data Collection Plan		
Evaluation Level	Data Collection Method	Key Measures
<p>Reaction and Planned Action:</p> <p>The first level of impact evaluation examines participants' reactions to a training program or change initiative. At this level, the present evaluation assesses the extent to which participants perceived the MORE^{OB} Program and its components as effective in helping them to improve patient safety and the extent of engagement in key activities.</p>	<ul style="list-style-type: none"> - Questionnaire - Focus Groups 	<ul style="list-style-type: none"> - Overall satisfaction - Effectiveness of tools and activities and assessments
<p>Learning:</p> <p>The second level of impact evaluation assesses the extent to which there has been an increase in participants' knowledge and skills or a change in attitudes as a result of training. To assess learning, the present evaluation investigated the impact of MORE^{OB} on participants' perceived confidence and competence in managing high-risk situations and their day-to-day activities and with respect to key attitudes and skills development necessary for patient safety. The evaluation also reviewed test results to gauge actual improvement in participants' core clinical knowledge and skills over the past three years.</p>	<ul style="list-style-type: none"> - Questionnaire - Focus Groups - Core Knowledge – pre and post tests 	<ul style="list-style-type: none"> - Caregiver Confidence - Caregiver Competence - Gains in core clinical knowledge - Gains in knowledge of patient safety principles
<p>Application (behaviour and work process and practice):</p> <p>The third level of impact evaluation in this framework assesses the extent to which newly acquired knowledge, skills and attitudes are <i>applied</i> in the work situation to affect behaviour change or improve individual and team performance. At this third level of impact, the present evaluation assesses the extent to which participants perceive MORE^{OB} as favourably impacting their behaviour on the job in key areas relating to patient safety.</p>	<ul style="list-style-type: none"> - Questionnaire - Focus Groups - Culture Assessment Survey (CAS) - Environmental Scan (clinical outcomes data) 	<ul style="list-style-type: none"> - Culture Change: (taking initiative in problem solving, exhibiting open communication and trust, respecting and valuing team members) - Practice Change: (e.g. management of early labour) - Work Processes: (practice consistency, improved documentation, increased reporting)
<p>Business:</p> <p>The fourth level of evaluation examines the impact of improved performance on business outcomes. This evaluation expands the Kirkpatrick-Phillips model and examines impact on two kinds of outcomes: 1) reducing no harm (near miss) and harm (adverse) events, and 2) business measures (employee satisfaction, patient satisfaction, productivity measures). This assessment is made using several data sources: participant questionnaire data, Environmental Scan data, and claims statistics.</p>	<ul style="list-style-type: none"> - Questionnaire - Focus Groups - Claims Statistics 	<ul style="list-style-type: none"> - Harm and no harm events - Patient satisfaction - Caregiver satisfaction - Productivity/resource utilization - Worthwhile investment - Claims data as available

MORE^{OB} 2 Phase Model – Tips


Phase 1 - Evaluate Program Impact

Conduct a pilot evaluation

- Use when programs are long and complex
- Use to discover the full range of impacts (expected and unexpected), to understand linkages, to assess site differences
- Use questionnaires
 - o *Provide options (hard copy, web, email)*
 - o *Engage front line support to encourage response rate*
 - o *Distribute concurrently with internal activities (i.e. unit staff meetings)*
 - o *Set target return rate (50%) and timeline*
 - o *Provide incentives*
 - o *Follow-up*
- Use focus groups, and interviews—revise and refine your questions as discovery proceeds
 - o *Communicate WIIS*
 - o *Respect that these are very busy people - ensure flexibility with minimal interruption to caregiver/unit priorities*
 - o *Use existing meeting times (early in the morning, late at night)*
 - o *Engage caregivers in small groups according to profession*
 - o *Structure questions and keep it short*
 - o *Arrange and pay for food!*
- Quit when you're not discovering anything new!

Use the pilot to develop an evaluation methodology (see our templates )

- A complex program evaluation will require multiple data collection methods and instruments to assess the full range of program outcomes
- Integrate stakeholder data collection instruments when feasible
- Develop communication and feedback strategies
 - o *Customize as appropriate to meet the needs of stakeholders*
 - o *Focus on ease of use*
 - *Develop concise summaries of impacts at each level that provide the reader with key information*
 - *Organize results to align with program goals at each level*
 - *Use tables to present quantitative data*
 - o *Provide context and greater meaning through the use of participant quotes/anecdotes*
 - o *Include enablers and barriers to performance*
 - o *Add opportunities for next steps*

<p>Use the pilot data to build an Impact Map (see our template )</p>	<ul style="list-style-type: none"> - Consider this the most important document in your evaluation planning - Use the map to illustrate the impacts of your program at each of the evaluation levels—the “chain of impact” - Get buy-in and sign-off with design and development team - Use the map to guide your evaluation planning - Share it with investors to describe the probable impacts of their investment - Share it with program participants and the training team to maintain focus and track progress - Avoid the “levels lingo” to communicate with groups outside the design and development team—use language in the map that stakeholders will readily understand
<p>Initiate on-going evaluation</p>	<ul style="list-style-type: none"> - Modified time series design - Identify and pursue level 4 measures and indicators <ul style="list-style-type: none"> o <i>Engage stakeholders as partners re access to objective data sources</i> o <i>Use key informants to estimate impacts to productivity (cost avoidance, cost savings) where data not available</i> o <i>Use research sources to align with current approaches in health informatics/economics</i>
<p>Phase 2 – Use Evaluation Results to Proactively Manage and Enhance Program Impact</p>	
<p>Develop a partnership with the client for Program success</p>	<ul style="list-style-type: none"> - Establish relationship/roles and responsibilities at the outset - Include stakeholders from all levels of the organization as appropriate - Recognize achievements
<p>Append an Action Plan to interim evaluation reports</p>	<ul style="list-style-type: none"> - Address barriers and key factors for success - Map needs and implementation plan to metrics - Work together to refine and to develop implementation strategies - Establish a path for moving forward
<p>Establish a Dashboard</p>	<ul style="list-style-type: none"> - Pursue a technical solution to consolidate and manage data sources - Stakeholder with internal and external partnership to communicate and clarify purpose - Make it democratic - Use it to communicate progress, to motivate and to focus team efforts - Align with organizational scorecard

MORE^{OB} Impact Map			
Learning	Unit Performance or Impact on the Job	Clinical Outcomes	Organizational Impacts
As a result of participating in MORE ^{OB} participants will ...	The application of MORE ^{OB} in the caregivers' day-to-day work will ...	The application of MORE ^{OB} in the caregiver's day-to-day work can (for example)...	Changes in the unit's performance can help (for example) ...

SAMPLE REPORT

SUMMARY

Results in this section indicate that participants applied their learning from MORE^{OB} to their jobs to bring about significant changes to unit practice. Questionnaire respondents reported that there has been an improvement in the use of standardized protocols and with respect to communication among caregivers and with patients.

Both questionnaire and focus group respondents identified improvements in the management of emergencies – “we anticipate emergencies, everyone knows what to do” and “I feel I do fewer transfusions now than before”.

Focus group respondents indicated that opportunities exist to further develop the culture of safety including continued strengthening of communication skills and team effectiveness. Comments were consistent across all groups with respect to the need to integrate tools and activities that focused on improving communication between disciplines. Further, reflective learning tools including case review and no harm event reviews were perceived as important ways for the team to work together to further enhance the culture of safety and to focus on key practice issues.

A snapshot of results from the Culture Assessment Survey (CAS) - following Modules 1, 2 and 3 yields a similar pattern of results. Assessment results identify specific behaviours and opportunities that can be addressed to further promote the patient safety culture.

QUESTIONNAIRE RESULTS

Team effectiveness	Percent who agreed or strongly agreed that MORE ^{OB} has helped team effectiveness in managing situations and emergencies.	69%	Details pg. 31
Managing emergencies	Percent who agreed or strongly agreed that the Program had a positive effect on the management of the following emergencies: Shoulder Dystocia Postpartum Hemorrhage Seizures/Eclampsia	92% 89% 82%	Details pg. 34
Taking Initiative in problem solving	Percent who agreed or strongly agreed that the Program had a positive influence on the following: <i>We take greater initiative to solve problems faced in our daily work without waiting to be told.</i>	69%	Details pg. 31

Action Plan Sample

What is the opportunity or challenge?	What tools or activities does MORE ^{OB} recommend?	How will we implement?	What outcomes do we expect to achieve?
			How will we measure?
Enhancing communication skills	<ul style="list-style-type: none"> • Implement specific communication tools to focus on unit needs (to be determined in conjunction with the Core Team) <ul style="list-style-type: none"> ○ Implement Checklists ○ Implement Hand off for transitions in care ○ Enhanced use of CHAT/SBAR for relaying critical information • Continued integration of drills with emphasis on communication skills development 	<ul style="list-style-type: none"> • To be defined 	<ul style="list-style-type: none"> • Improved communication behaviours • Improved work practices and processes including enhanced documentation on patient charts, hand-offs • Enhanced consistency of communication with patients • Module survey • Other metrics as defined in conjunction with the Core Team
Enhancing team function	<ul style="list-style-type: none"> • Implement the use of specific team tools (to be identified in conjunction with the core team) to develop multidisciplinary problem solving capabilities and enhance team function <ul style="list-style-type: none"> ○ Huddle ○ Debrief • Continued integration of Emergency Drills with a focus both on skills development and on group discussion regarding best practice will allow participants to identify process or practice gaps 	<ul style="list-style-type: none"> • To be defined 	<ul style="list-style-type: none"> • Improved team effectiveness in managing both day-to-day and emergency situations • Improved collaborative problem solving • Improved integration of work practices critical to patient safety (safety briefings) • Enhanced understanding of roles and responsibilities • Improved work process and practice (to be identified) • Module survey • Culture Assessment Survey • Other metrics as defined in conjunction with the Core Team
Enhance work practice and processes for patient safety	<ul style="list-style-type: none"> • Enhance integration of audit to identify areas for practice/process improvement 	<ul style="list-style-type: none"> • To be defined 	<ul style="list-style-type: none"> • Consistent use of evidence-based guidelines

Action Plan Sample

What is the opportunity or challenge?	What tools or activities does MORE ^{OB} recommend?	How will we implement?	What outcomes do we expect to achieve?
			How will we measure?
	<ul style="list-style-type: none"> • Integrate the debrief and/or no harm event review to enhance reflective learning • Identify mechanisms to share best practice – “closing the loop” • Identify and baseline key clinical outcomes as measures of program success 		<ul style="list-style-type: none"> • Increased learning from clinical experiences • Improved use of identified protocols • Enhanced clinical outcomes
Integrating new staff	<ul style="list-style-type: none"> • Identify/prioritize clinical content for review • Establish modified Workshops/OSCEs session to shorten the learning curve • Establish a schedule for drill completion to ensure competencies developed and to ensure effective integration within the team • Implement selected structured communication techniques 	To be defined	<ul style="list-style-type: none"> • Decreased time to proficiency for new staff • Improved confidence and competence for new staff • Enhanced recruitment and retention • Module survey • Track learning scores and confidence ratings • Identify and monitor key organizational metrics

Action Plan Template

What is the opportunity or challenge?	What tools or activities does MORE^{OB} recommend?	How will we implement?	What outcomes do we expect to achieve? How will we measure?
	<ul style="list-style-type: none"> • 		
	<ul style="list-style-type: none"> • 		
	<ul style="list-style-type: none"> • 		
	<ul style="list-style-type: none"> • 		

Needs Assessment Worksheet

Purpose:

This worksheet is to help you identify and prioritize learning and performance needs for *name of unit* and is intended to provide a framework for discussion with the members of your team.

Overview:

The first step is to establish your goals and priorities for the coming year. Once this is in place, the MORE^{OB} Team will work with the Core Team to define key success measures. A hospital-specific dashboard for activity implementation and projected program milestones will be developed.

Core Team training and your implementation plan will focus on providing the necessary tools, strategies and support to meet your goals. In this way, MORE^{OB} will align organizational and unit goals providing administrators and program participants the ability to manage program activities toward achieving the best possible outcomes.

1. Preparation

1. Review the Learning and Performance Report
 - Review and consider the questions below with your Core Team
 - Discuss what is important going forward in your setting
 - Clarify why you want to continue with the Program
 - Consider the list below – what are your areas of greatest need?

2. Consider the possible items below:

Our need is to:	1 Lowest Need	2 Some Need	3 Greatest Need	Measures
<p>Building Knowledge and Skills</p> <ul style="list-style-type: none"> - Prevent relapse of learned skills - Integrate new staff within our unit - Improve caregiver confidence/competence in managing emergencies - Improve caregiver confidence/competence in managing day-to-day situations - Acquire better understanding of the principles of a high reliability organization - Gain techniques and strategies for enhancing interprofessional communication 				

Our need is to:	1 Lowest Need	2 Some Need	3 Greatest Need	Measures
<ul style="list-style-type: none"> - Gain techniques and strategies for enhancing interprofessional team function - Enhance unit clinical knowledge 				
<p>Enhancing the Patient Safety Culture</p> <ul style="list-style-type: none"> - Expand the team to participant from other units - Take initiative in problem-solving - Reflect on events - Exhibit open communication and trust - Undertake measures to improve safety - Respect the input of team members - Value team members 				
<p>Work Practices and Processes</p> <ul style="list-style-type: none"> - Improve team efficiency and effectiveness to manage emergencies - Improve communication and consultation between hospitals - Improve documentation on patient charts - Improve the team's use of standardized protocols - Improve consistency of practice among caregivers - Increase the use of reporting processes and patient safety 				
<p>Clinical Outcomes</p> <ul style="list-style-type: none"> - Reduce the number of women admitted in the latent stage of labour - Decrease elective induction of labor - Increase the use of partograms - Improve consistency in the approach to fetal surveillance 				

Our need is to:	1 Lowest Need	2 Some Need	3 Greatest Need	Measures
<ul style="list-style-type: none"> - Increase the use of auscultation for fetal assessment for low risk patients - Improve management of emergencies - Shoulder dystocia - Postpartum hemorrhage - Seizure/eclampsia 				
<p>Identify other tools, activities, or goals on which you would like to focus.</p>				

3. Create an Action Plan (to be completed in conjunction with the MORE^{OB} Team)

This final step in preparation for Core Team Training and Program implementation is to map program tools and activities to Unit goals. This will be discussed with the MORE^{OB} Team. Once completed a Program Action Plan and Dashboard will be created that will allow you to track, measure and communicate your success.

Job Aid

Patient Safety/Health Care Web sites and sources

Agency for Healthcare Research and Quality

<http://www.ahrq.gov/>

Institute for Healthcare Improvement

<http://www.ihl.org/ihl>

Managing Obstetrical Risk Efficiently (MORE^{OB})

www.moreob.com

National Patient Safety Foundation

<http://www.npsf.org/>

The Canadian Patient Safety Institute

<http://www.patientsafetyinstitute.ca/index.html>

The Institute of Medicine

<http://www.iom.edu/>

Anne Lazenbatt, *The Evaluation Handbook for Health Professionals* (London and New York: Routledge, 2002)

David L.B. Schwappach “Against the silence: Development and first results of a patient survey to assess experiences of safety-related events in hospital” *BMC Health Services Research*, 8:59 doi 10.1186/1472-6963-8-59 (2008)

J. B. Colla, A.C. Bracken, L. M. Kinney and W. B. Weeks. “ Measuring patient safety climate: a review of surveys”. *Qual. Saf. Health Care*; 14;364-366 doi:10.1136/qshc.2005.014217 (2005)

<http://qshc.bmj.com/cgi/content/abstract/14/5/364>

S.Yelon, L. Sheppard, D. Sleigh and J. Kevin. Ford. “ Intention to Transfer: How Do Autonomous Professionals Become Motivated to Use New Ideas?” *Performance Improvement Quarterly*, 172(2) pp. 82-103 (2004)

Measurement and Transfer of Training sources

Lynette Gillis, *Quality Standards for Evaluating Multimedia and Online Training* (Ryerson, Toronto: McGraw Hill, 2000)

Mary L. Broad and J. W. Newstrom, *Transfer of Training: Action-Packed Strategies To Ensure High Payoff From Training Investments* (Cambridge, Massachusetts: Perseus Publishing, 1992)

Mary. L. Broad, *Beyond Transfer of Training: Engaging Systems to Improve Performance* (Pfeiffer, 2005)

Jack J. Phillips, *Return on Investment in Training and Performance Improvement Programs 2nd Edition* (Butterworth Heinemann ,2003)

Robert O. Brinkerhoff and A. M. Apking , *High Impact Learning: strategies for leveraging business results from training* (Perseus Publishing, 2001)