

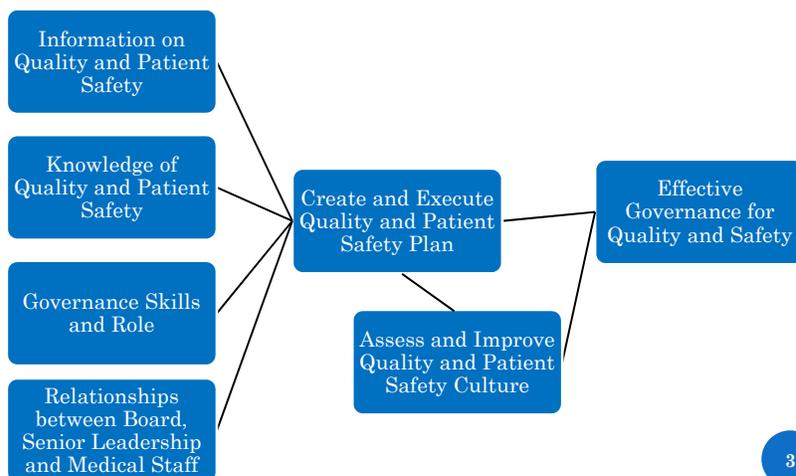
**DEVELOPING EFFECTIVE
MEASUREMENT AND DATA
DISPLAY**

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SESSION GOALS

1. Identify the critical nature of measurement for board's role in quality and patient safety
2. Distinguish the ideal characteristics of effective measurement and data display
3. Analyze the potential gaps between the current state of your board dashboard and the ideal characteristics of measurement and data display

FIGURE 1: DRIVERS OF EFFECTIVE GOVERNANCE FOR QUALITY AND PATIENT SAFETY



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INFORMATION AND DASHBOARDS

- Boards (and often senior leadership) need better information about current performance in quality and safety
- Most boards have limited data on performance, receive a range of reports with varying formats, they cannot critically assess the data and reports they receive and they have difficulty asking good questions about performance
- Key questions to assess the quality of information:
 1. Is the information we receive about quality of care as good as the information we receive about our finances?
 2. Are board members able to ask questions about quality of care that are as good as their questions on finances?
 3. What's our core business?
 4. How well are we doing?
 5. Where do we need to improve?

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WHAT ARE THE ELEMENTS OF AN EFFECTIVE BOARD DASHBOARD?

1. Measures are linked to key strategies and goals
 - How much by when?
2. Provides “big dot” (whole system) measures of system performance related to these strategies and goals
3. Reports data over time in a format that permits quick assessment of progress relative to goal and relevant benchmarks
4. Helps to guide board questions about strategies and performance
 - How good is our care?
 - Is our care getting better?
 - Are we on target for achieving our goals?

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EXAMPLE: IHI WHOLE SYSTEM MEASURES

IOM Dimension	Proposed System Measure
Safe	ADEs/1000 doses
Effective & Equitable	HSMR Functional Outcomes (SF-6 for Chronic disease)
Patient-Centered	Inpatient Satisfaction % patients dying in hospital
Timely	Days to 3 rd next available appointment
Efficient	Health care costs per capita Hospital costs per discharge

Examples of Potential Measures for a Hospital

<p><u>Employee</u></p> <p>Voluntary employee turnover Employee Satisfaction Employee Injury Rate Nursing Time at the Bedside Sick Time Overtime Days to Fill Vacancies</p>	<p><u>Clinical Excellence</u></p> <p>Composite Index: Core Measures Timely Childhood Immunization Rates Unplanned Readmissions Composite Index of Screening Performance (Breast, Cancer, Colon) Index: Diabetes Control (Timely Care and HBA1C) Percent of Patient s Receiving Ideal Care Newly Reported HIV Infections Mental Health 30 Day Follow-up Rate</p>
<p><u>Safety</u></p> <p>Adverse Events Percent of Patients Developing a Pressure Ulcer Hand Hygiene Compliance Days Between Ventilator Acquired Pneumonia Codes Outside the ICU Falls Total Infections Hospital Standardized Mortality Ratio (HSMR)</p>	<p><u>Operational</u></p> <p>New Patients Number of Surgical Procedures Physician Recruitment Average Length of Stay Caseload Average Occupancy Physician Satisfaction Success Rating of Key Improvement Projects</p>
<p><u>Patient Perspective (Service)</u></p> <p>Days Wait for Third Next Available Appointment "Would You Recommend?" Score Overall Patient Satisfaction Score</p>	<p><u>Community</u></p> <p>Community Service Budget Spent On Community Programs Media Coverage</p>
<p><u>Finance</u></p> <p>Operating Margin Man-hours per Adjusted Patient Day Cost per Adjusted Patient Day Days in Accounts Receivable</p>	

Source: The Data Guide. Provost and Murray 2010

BOARDS NEED TO ASK TWO TYPES OF QUESTIONS ABOUT QUALITY AND SAFETY

1. How good is our care?
 - How do we compare to others like us?
2. Is our care getting better?
 - Are we on track to achieve our key quality and safety objectives?
 - If not, why not? Is the strategy wrong, or is it not being executed effectively?

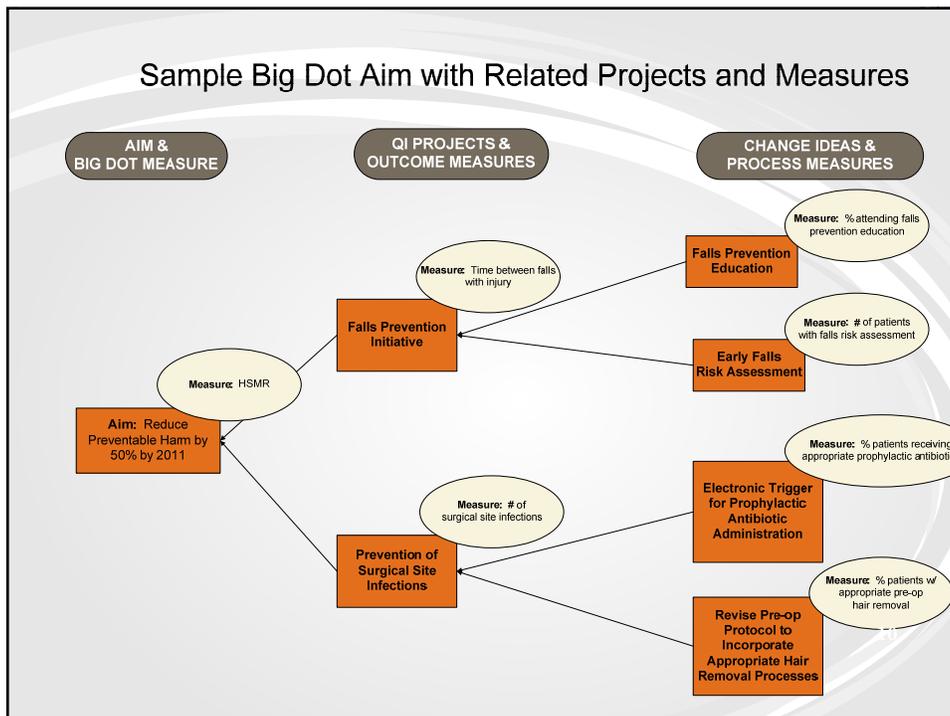
Key point: Use comparative, risk adjusted information to set aims and real time data on organizational performance to track performance on goals

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Adapted from JL Reinertsen

THE BOARD QUESTION “ARE WE GOING TO ACHIEVE OUR AIMS?”
REQUIRES MANAGEMENT TO HAVE A STRATEGIC THEORY

Big Dots <i>(Pillars, BSC...)</i>	Drivers <i>(Core Theory of Strategy)</i>	Projects <i>(Ops Plan)</i>
What are your key strategic aims? How good must we be, by when? What are the system-level measures of those aims?	Down deep, what really has to be changed, or put in place, in order to achieve each of these goals? What are you tracking to know whether these drivers are changing?	What set of projects will move the Drivers far enough, fast enough, to achieve your aims? How will we know if the projects are being executed?



IS OUR QUALITY GETTING BETTER? ARE WE GOING TO ACHIEVE OUR AIMS?

To answer these questions for Boards...

- The aims should be clearly displayed and understood
- A few system-level measure(s) should be graphically displayed over time
- The measures should be displayed monthly, at worst, and should be close to “real time”
- Measures do not necessarily need to be risk adjusted
- Measures of critical initiatives (projects that must be executed to achieve the aim) should be available if needed to answer the Board’s questions

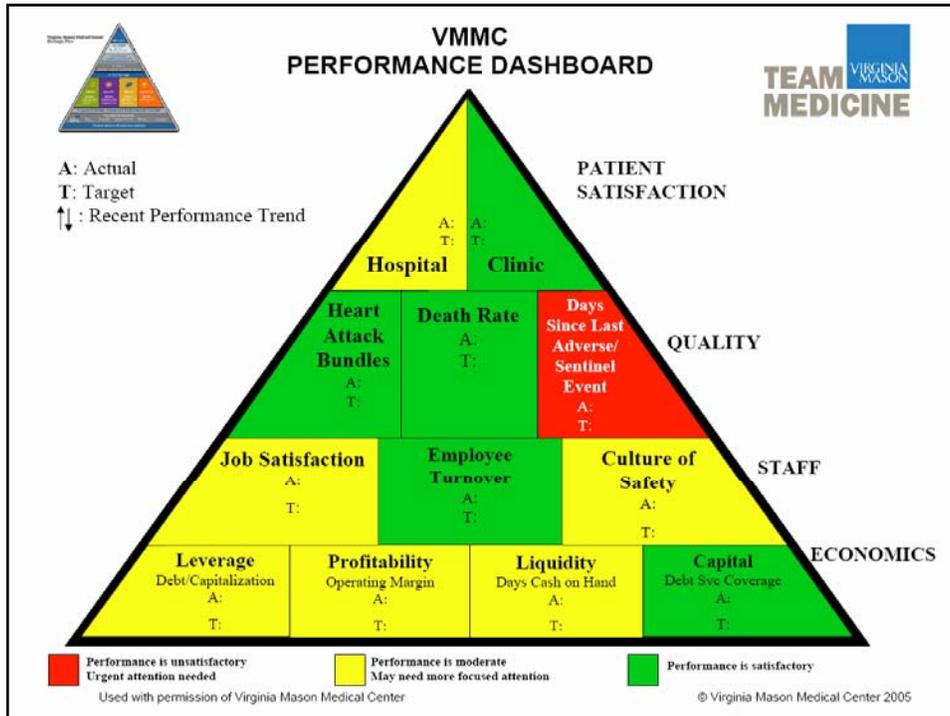
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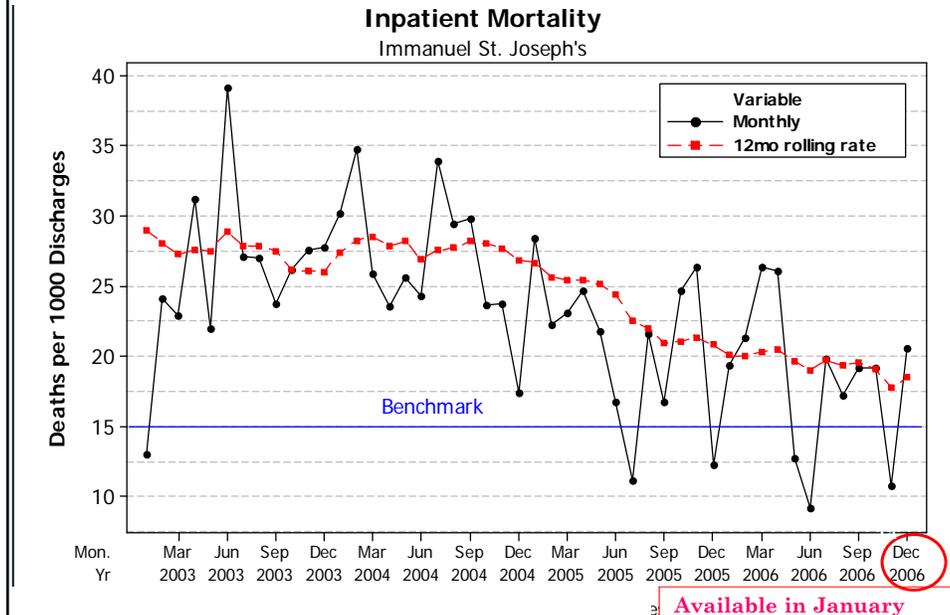
STOPLIGHT REPORTS VERSUS CONTROL CHARTS

- Most healthcare boards (and senior leaders) are looking at their performance in tables, not run charts or control charts
- These tables typically report current performance (by quarter or month) to goal or target
- These reports are often “stoplighted” – red, yellow, green
- But the choice values attached to color labels may be arbitrary
- Boards can have a hard time discerning whether the organization is on target
 - Is performance improving?
 - Are we on pace to hit our goals?

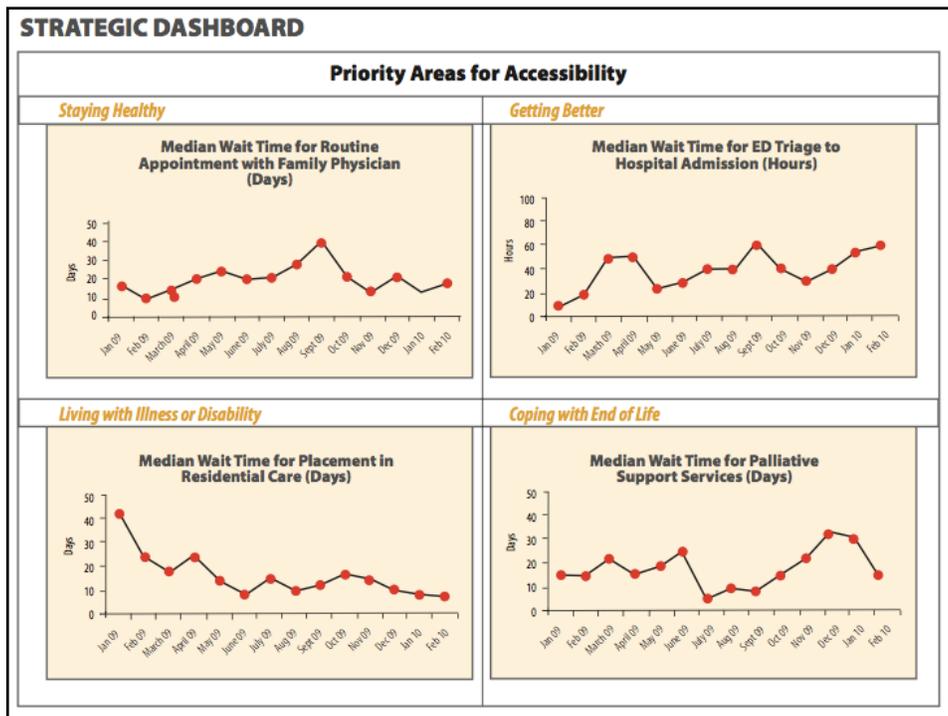
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Example: Immanuel St. Joseph's Mayo Health System Board's answer to the question "Is our mortality rate getting better?"



Saskatoon Health Region Performance Dashboard								
Reporting Date: August 19, 2010		<75% of target Corrective action required		75-99% of target Corrective action of discretion		100% of target Monitor		
SHR Strategic Direction	Dimension	Performance						
		Q1 09-10 Apr-Jun	Q2 09-10 Jul-Sep	Q3 09-10 Oct-Dec	Q4 09-10 Jan-Mar	Q1 10-11 Apr-Jun	Target a=SK, b=SHR	Benchmark (In development)
Transforming the Care and Service Experience	QUALITY							
	Access: The ease with which services are reached & the degree to which clients are able to obtain care promptly & in a coordinated fashion							
	% of Target Volume Achieved							
	Diagnostic Imaging - CT (all Levels)	110%	103%	104%	107%	101%	100%*	-
	% Patients Meeting Target Wait Time							
	Emergency - % CTAS Level 2 (15 min)	42%	48%	53%	61%	63%	80%*	-
	Surgery - % Priority Level IV (12 months)	81.0%	79.8%	78.2%	82.7%	pending	90%*	-
	Mental Health & Addiction Services % Urgent Enrolments (7 days)	73%	52%	58%	57%	62%	60%*	-
	Efficiency: The optimal use of available resources to yield maximum benefits or results, & avoid waste							
	# Patients in acute care awaiting LIC placement on last day of the Quarter (average daily census)	72 (759)	83 (752)	47 (758)	38 (762)	70 (762)	26*	-
	Safety: The degree to which processes avoid, prevent, & ameliorate adverse outcomes or injuries that stem from those processes							
	Methicillin-Resistant Staphylococcus aureus (MRSA) Rate per 1000 patient days (Urban acute & Rural Acute-only sites)	0.56	0.64	0.51	0.52	0.41	0.47*	-
Effectiveness: The degree of achieving desirable outcomes, given the correct provision of evidence-based services to all who could benefit, but not to those who would not benefit								
Hospital Standardized Mortality Ratio (HSMR)	87	90	79	93	pending	80 or below*	-	
Client-Centred: The extent to which planning, delivery, & evaluation of care & service is respectful of & responsive to client needs, values & preferences & ensures client involvement in decision-making								
% with Highest Score for Best Possible Hospital (Patient Experience survey Inpatient Acute care)	27.9%	28.0%	30.4%	25.9%	pending	18D	15	



RECONCILING STRATEGIC FOCUS WITH OVERSIGHT RESPONSIBILITIES

- If boards focus on identifying a few strategic aims and associated big dot measures, then how do they maintain oversight on the full range of performance for the organization?
 - Trying to review all performance is futile and frustrating
 - But some board members are uncomfortable about losing touch with the activities and outcomes across programs and services

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How do you deal with complexity while maintaining focus?

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COMMON FLAWS IN DASHBOARDS

- Too many measures
- Measures are not clearly related to strategies
 - No system-level measures or mixture of system and project
 - Project-level measures (often about one unit, disease, or department on the Board's dashboard)
 - Hodge-podge of system, driver, and project measures leaves Board confused about what's important
- Static measures (so the Board has to take management's word that "we are on track to achieve our aims")
- Confusion about comparison measures versus "how are we doing measures"
- Low, unclear standards for "green" (so the Board becomes complacent despite significant opportunities for improvement!)
- No data available to assess improvement over time (so Board doesn't know if we are track to meet goals)

Adapted from JL Reinertsen

HOW DO YOUR QUALITY DASHBOARDS MEASURE UP?

In small groups examine a board quality dashboard asking the following questions:

1. Are the key quality and patient safety strategies easily identifiable?
2. Are the current targets and performance evident on the data displays?
3. Does the data display indicate progress relative to goals?
4. Do we know how good our care is relative other others?