

The Evolution of Lean in Healthcare:

From tools and events to coaching and daily improvement

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About Rouge Valley



Rouge Valley Centenary (**RVC**)
2867 Ellesmere Road, Toronto



Rouge Valley Ajax and Pickering (**RVAP**)
580 Harwood Avenue, Ajax

RVHS formed in 1998 as part of a provincial amalgamation of hospitals:

- Scarborough Centenary Hospital, originally opened in 1967, now is **RVC**;
- Ajax & Pickering General Hospital, originally opened in 1954, now is **RVAP**.

Getting to Know Rouge Valley

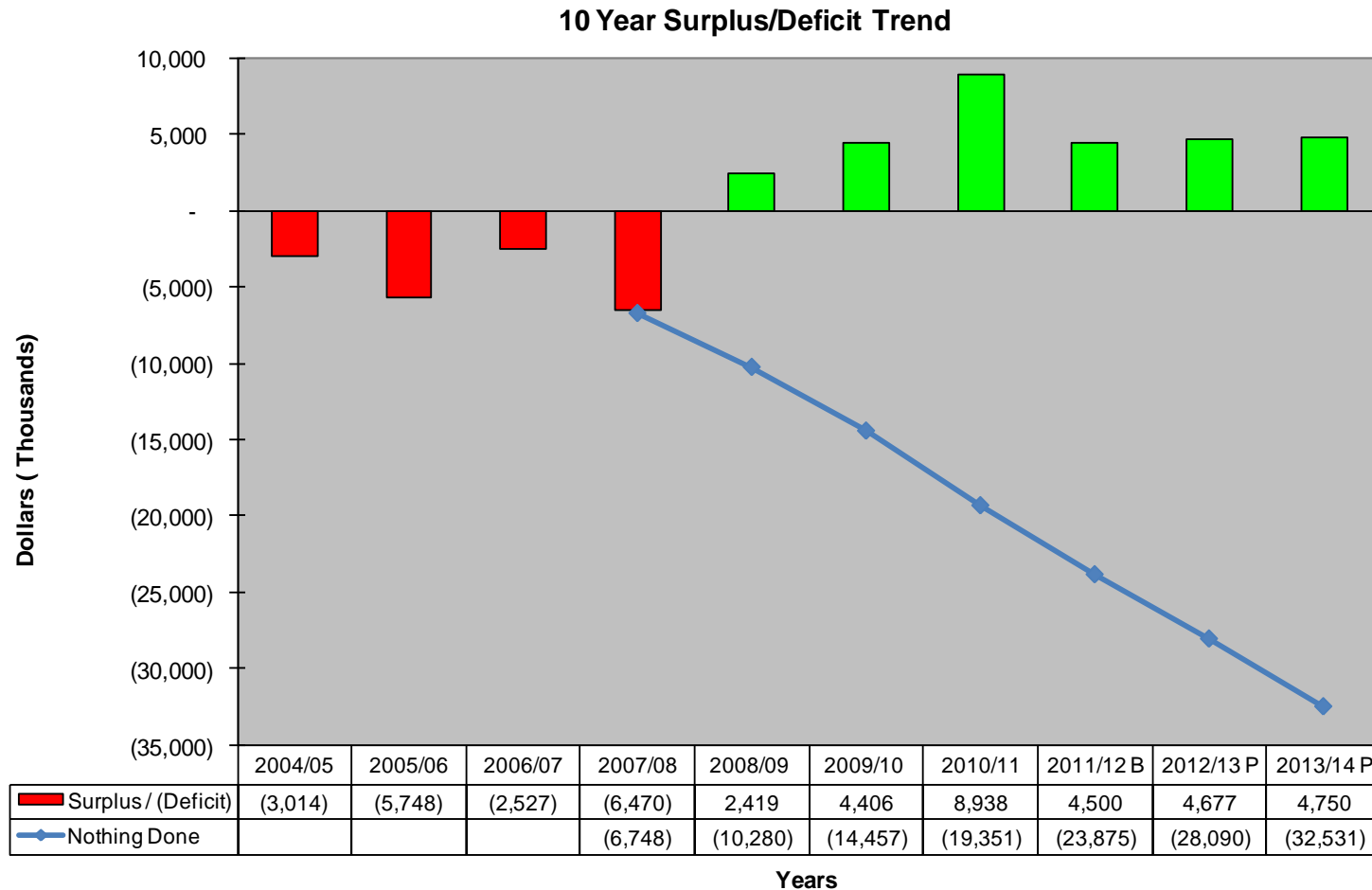
- 2 hospital campuses serving the communities of west Durham and east Toronto
- \$300 million annual budget
- Part of Central East Local Health Integration Network (CELHIN), our funder
- 2,774 staff, 513 physicians

	Rouge Valley Ajax and Pickering	Rouge Valley Centenary	Rouge Valley Health System
Beds staffed and in operation	168	322	490

Hospital visits and services

Emergency visits	56,706	60,104	116,810
Inpatient discharges	8,594	16,388	24,982
Surgical inpatients	1,632	3,353	4,985
Surgical outpatients	5,168	11,245	16,413
Outpatient clinic visits	62,383	136,578	198,961
Births	1,557	2,107	3,664
Cardiac catheterizations	Not applicable	3,444	3,444
Pacemaker implants	Not applicable	259	259
ICD implants	Not applicable	146	146
Angioplasty procedures	Not applicable	1,343	1,343
Hip replacements	91	152	243
Knee replacements	142	271	413
Cataracts	Not applicable	1,153	1,153
MRI scans	1,771	10,668	12,439
Cancer surgeries	318	850	1,168

Our Burning Platform for Transformation



The Early Days of Our Journey

2007

2008

2009

2010

2011

**Board
Appoints
New CEO**

**Strategic Plan
2008 -11
Approved**

**Strategic Plan
2011-14
Approved**

**Peer
Review**

**Financial
Sustainability
Plan Launched**

Lean as our Management Philosophy

The STAR Framework

Corporately Defined Expectations for Lean Deployment and Sustainment

STANDARD

All of the following are in place:

- Process Control Boards
- Performance Trending Boards
- 6S
- A3
- Rounding
- Kaizen Participation
- Leader Training

ADVANCED

All of the following are in place:

- Sustainment of Standard level
- Kamishibai
- Safety Calendar (can be part of Kamishibai system)
- Idea Board with problem-solving huddles
- Department leads and sustains its own kaizen events (at least 2 per yr)

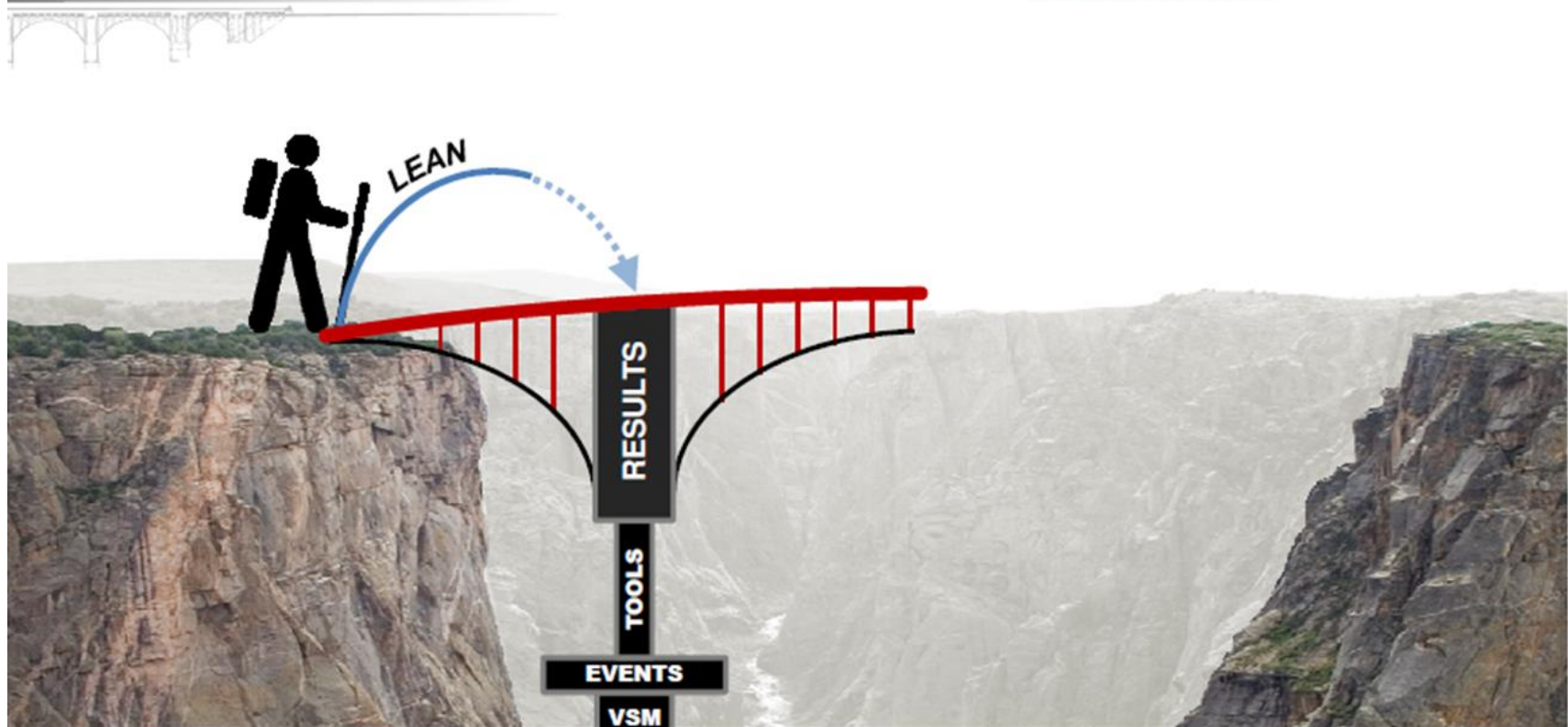
ROLE MODEL

All of the following are in place:

- Sustainment of Standard and Advanced levels
- Internal knowledge sharing (joint kaizen with another dept; facilitator for another dept's Lean event; lead an in-service; internal article or poster presentation)
- External knowledge sharing (e.g. joint kaizen event with external partners; conference presentation; published article)
- Use of one or more higher-level Lean tools (e.g. Kanban, Andon, SMED, etc.)

What have we seen so far?

Tool-Based Architecture



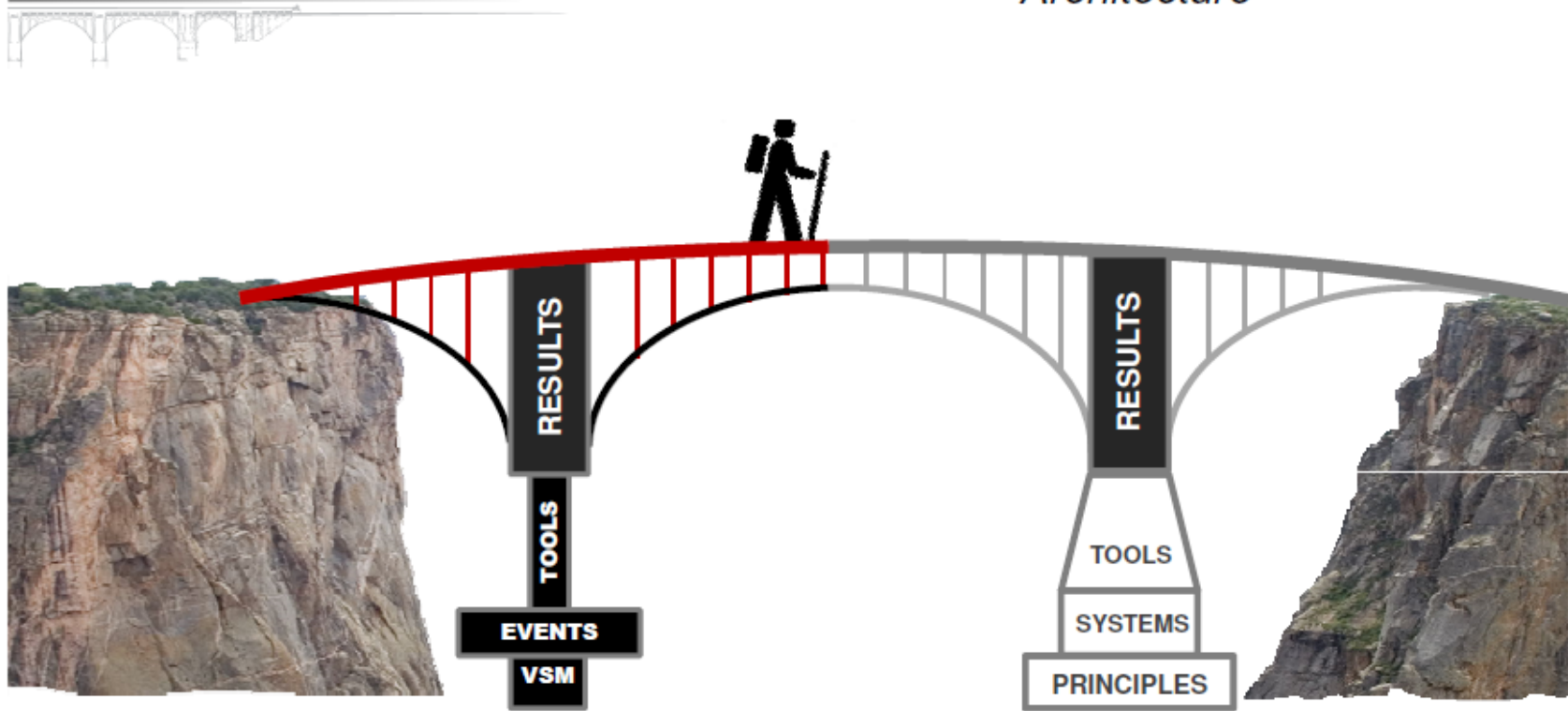
failure is not the opposite of success

failure is the building blocks of learning. It is a mistake to suppose that we succeed through success; we more often succeed through failures. the trick...fail fast!

From: "Assessing and Accelerating Your Lean Transformation - the Shingo Model" Jake Raymer, 2013 Lean Healthcare Transformation Summit

How do we move to...

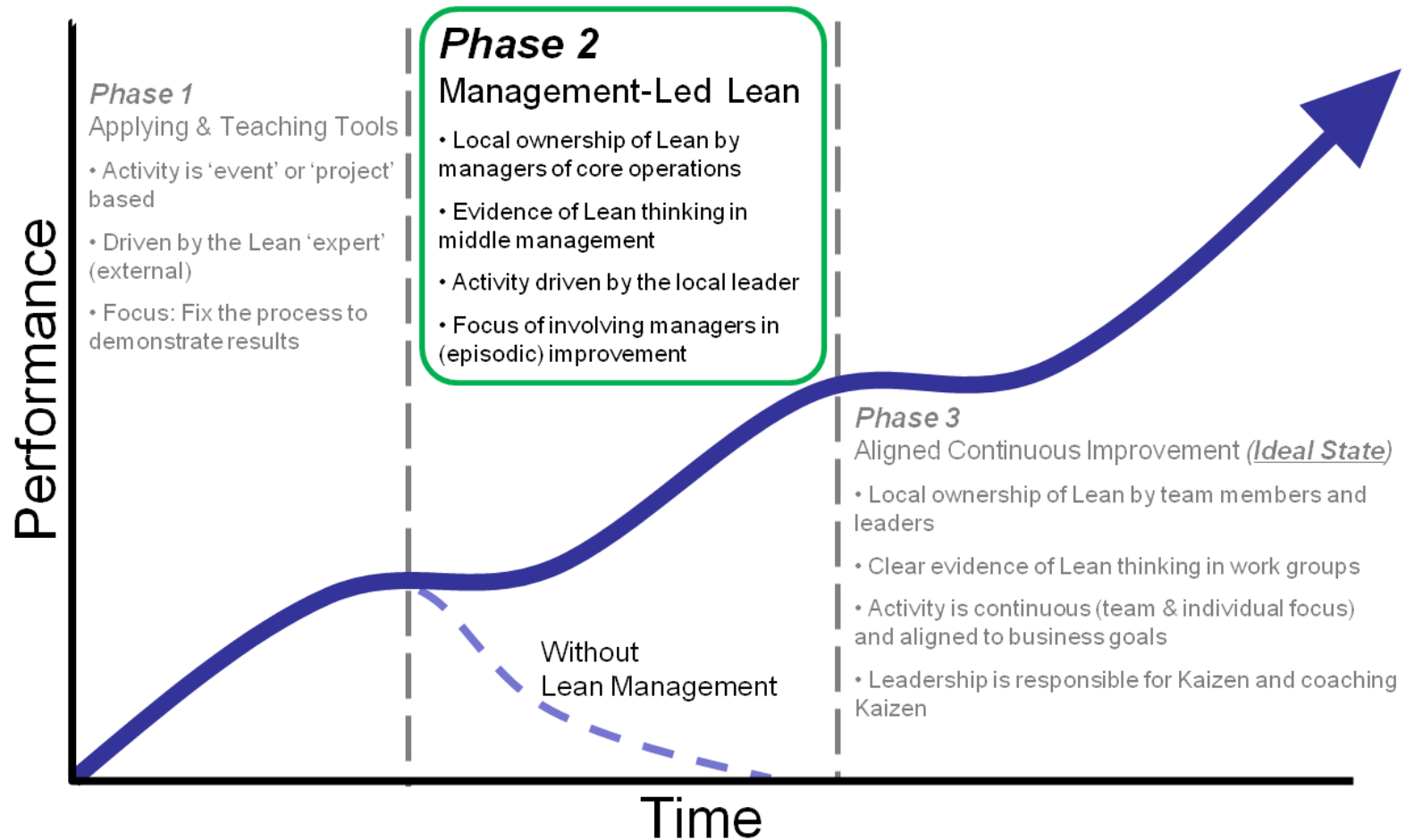
Principle-Based Architecture



the structure is the story

the architecture of what drives results. if we can understand and see the structure
we can engage and adjust the organization to help us get where we want to go...faster

From: "Assessing and Accelerating Your Lean Transformation - the Shingo Model" Jake Raymer, 2013 Lean Healthcare Transformation Summit



RVHS Executive Team identified 2 key areas for corporate development:
Continuous Improvement and Capability Building

Graphic From: J. Liker, 'The Toyota Way to Continuous Improvement'

Objective of the Lean Management System

Our Goal:

*To develop our people to solve problems
and improve performance.*

Developing a Lean Management System

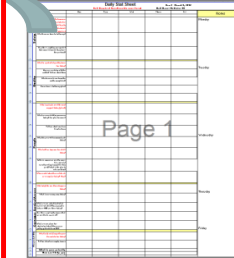
Visual Management

Daily Stat Sheet

Department Performance Board

Staff Improvement Board

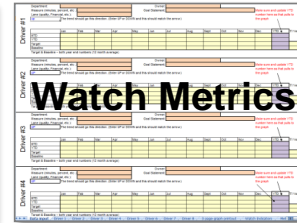
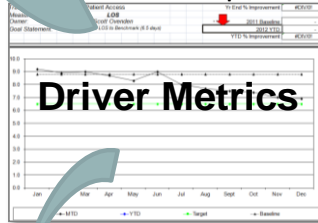
Kamishibai



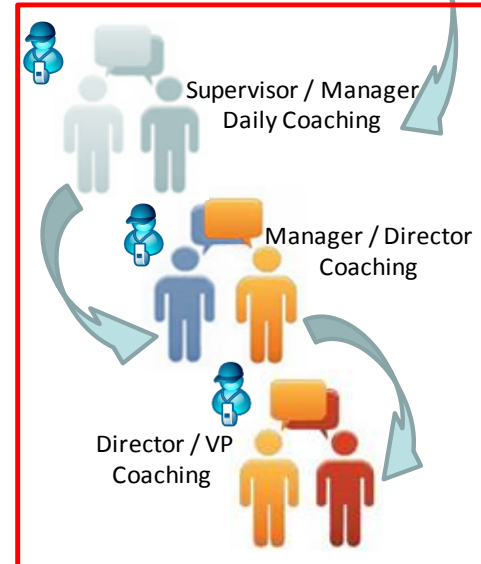
Daily Performance Huddles



Department Scorecard



Monthly Performance Reviews



Developing a Status Sheet



Adapted From: ThedaCare Centre for Healthcare Value

The Daily Status Sheet and Lean Practices

Objectives of Status Sheet

- To proactively plan the day
- To learn and understand the business
- Gain insights for future problem solving
- To better understand coaching needs for staff around problem solving
- To develop our leaders

Linkage to Lean Practices

- Use of Standard work
- Respect for People (Develop our Staff to Solve Problems)
- Create visibility between normal and abnormal
- Developing 'Andon' Systems
- Use of PDSA thinking to solve problems

Structure of the Daily Status Sheet

Manager to Director Daily Status Sheet

VP Daily/Weekly Stat Sheet Kim B.		Department: Inpt Oncology	
Dates		Monday	Tuesday
Daily Measures			
Safety			
How many Patients/Families or staff are at Risk?			
Quality			
Any Quality Opportunities or concerns?			
Falls, bundles, med rec/errors			
Patient complaints/Follow Ups			
People :			
Any Staff with Problems/Barriers?			
Who needs the most support today (weakest link)			
Any Physician or Leadership issues?			
Any thing, staff or provider to recognize or celebrate today?			
Delivery			
Any areas that Demand exceeds Capacity			
For Oncology- Any non- oncology pts on the floor ?			
How many filled beds ?		18 beds	18 beds
How is care management helping to progress care today			
How many discharges planned today?			

Manager 3S Inpatient Oncology	
Daily Measures	
Safety	
How many patients or staff are at risk?	
infections	
interpreter concerns	
employee injuries	
Quality	
Any quality opportunities or concerns?	
falls, bundles, med. Rec/errors	
Any patient complaints/Follow ups?	
Any equipment or room concerns?	
People	
Any staff with special concerns or barriers?	
Who needs the most support how can we help them?	
Any physician or leadership concerns?	
Any thing, staff or provider to recognize or celebrate today?	
How are you planning on covering lunches and breaks?	
Any care management concerns?	
Delivery (Service and Timeliness)	

Frequency

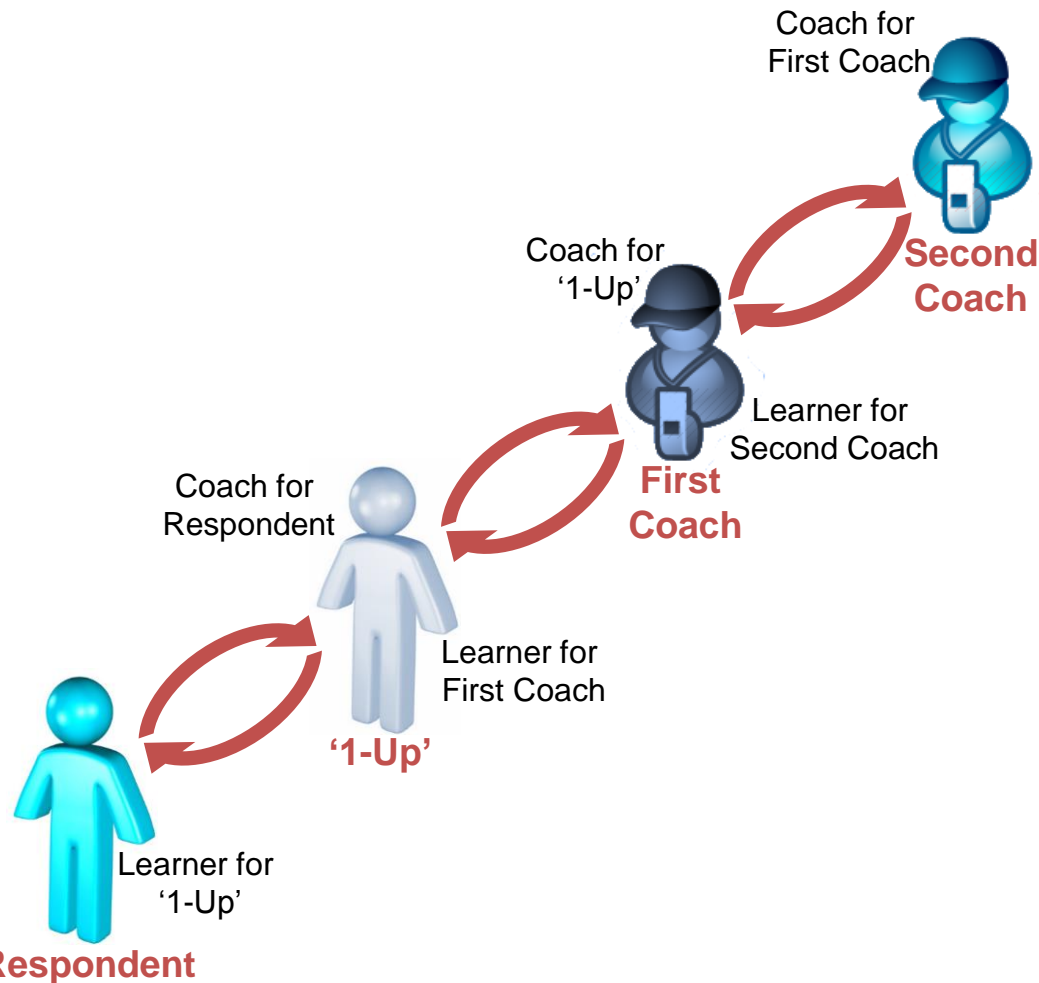
Manager-Charge:
Daily

Director-Manager:
Weekly

VP-Director:
Monthly

Adapted From: ThedaCare Centre for Healthcare Value

Status Sheet: Clarifying Roles



Key Messages:

- The pattern repeats at every level to ensure everyone has the opportunity to get feedback and improve
- In the typical Manager Status Sheet, the *First Coach* would be the *Director* with the TMO providing additional support during LMS training
- In the Manager Status Sheet, the *Second Coach* would be the *VP* or *TMO* during LMS training. The *Second Coach* is focussed on providing feedback for the *First Coach*

Adapted From: The Toyota Kata, Mike Rother

Creating an Area Improvement Centre



Performance Board Structure

Create a single 'lane' of focus for each dimension of corporate performance

Describe goal in a single statement

Chart key performance metric over time to demonstrate current performance level

Post A3 which describes the key initiatives that are focussed on driving improved performance

Department Performance Board

Post current strategic plan as reference

Post framework of key initiatives and Patient Declaration of Values

Post 'top 10' metrics & highlight area of focus

The layout of the board tells the 'improvement story' of the department and each initiative. The information should flow like an A3

Post other related 'process metrics' or initiative implementation information (pictures ect.)

The 'Bottom Up Story' of the Performance Board



Linkage to RVHS Strategy

- Want to visually demonstrate how departmental outcomes link with RVHS objectives

Department Outcome Measure

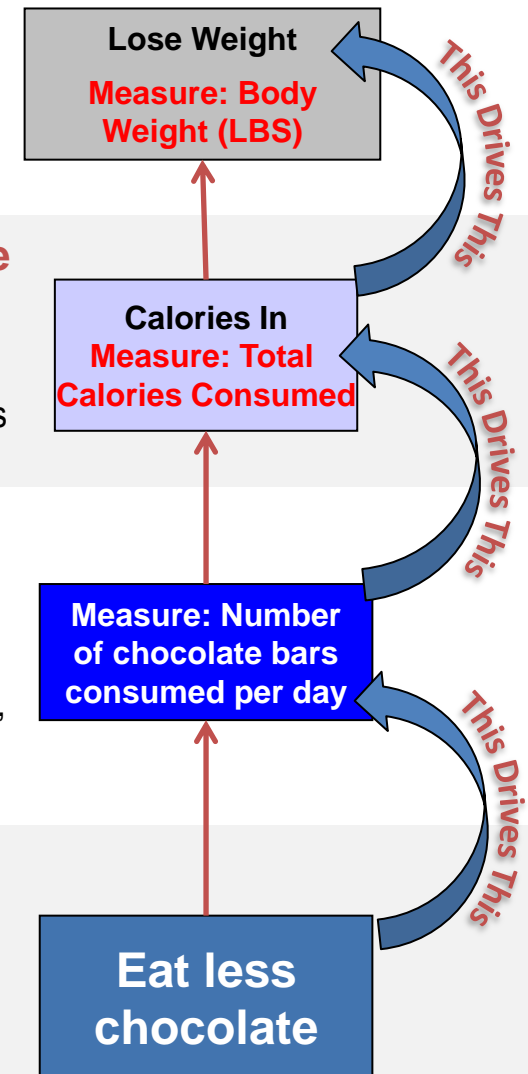
- Tracking performance over time to see variability and support sustainment
- The LMS department scorecard standardizes the display of the outcome measure

Process Measures

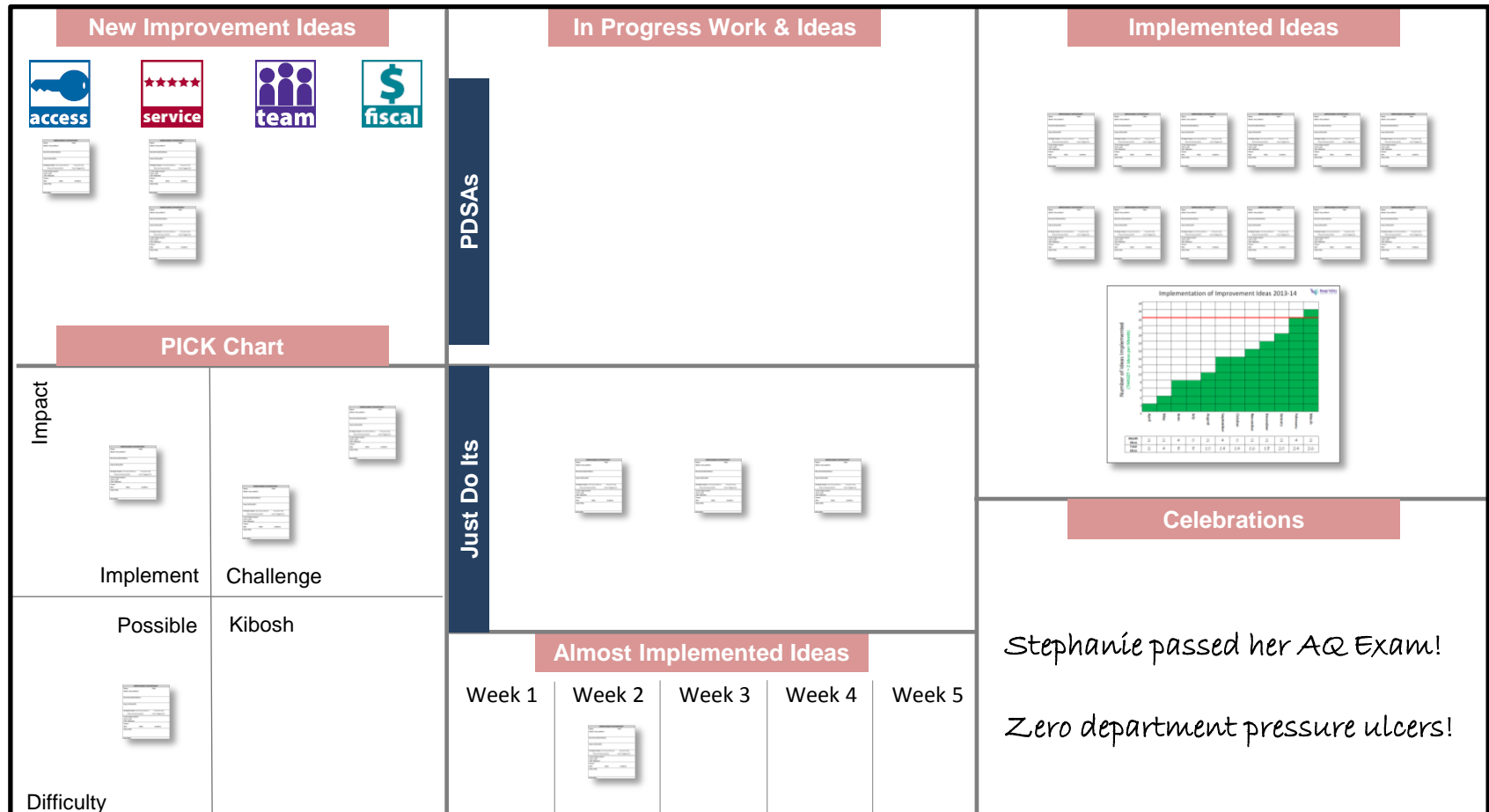
- Process control supports daily management of key drivers
- Primary tools include process control boards, daily run chart, safety cross, Pareto chart and Kamishibai cards

Ideas for Change

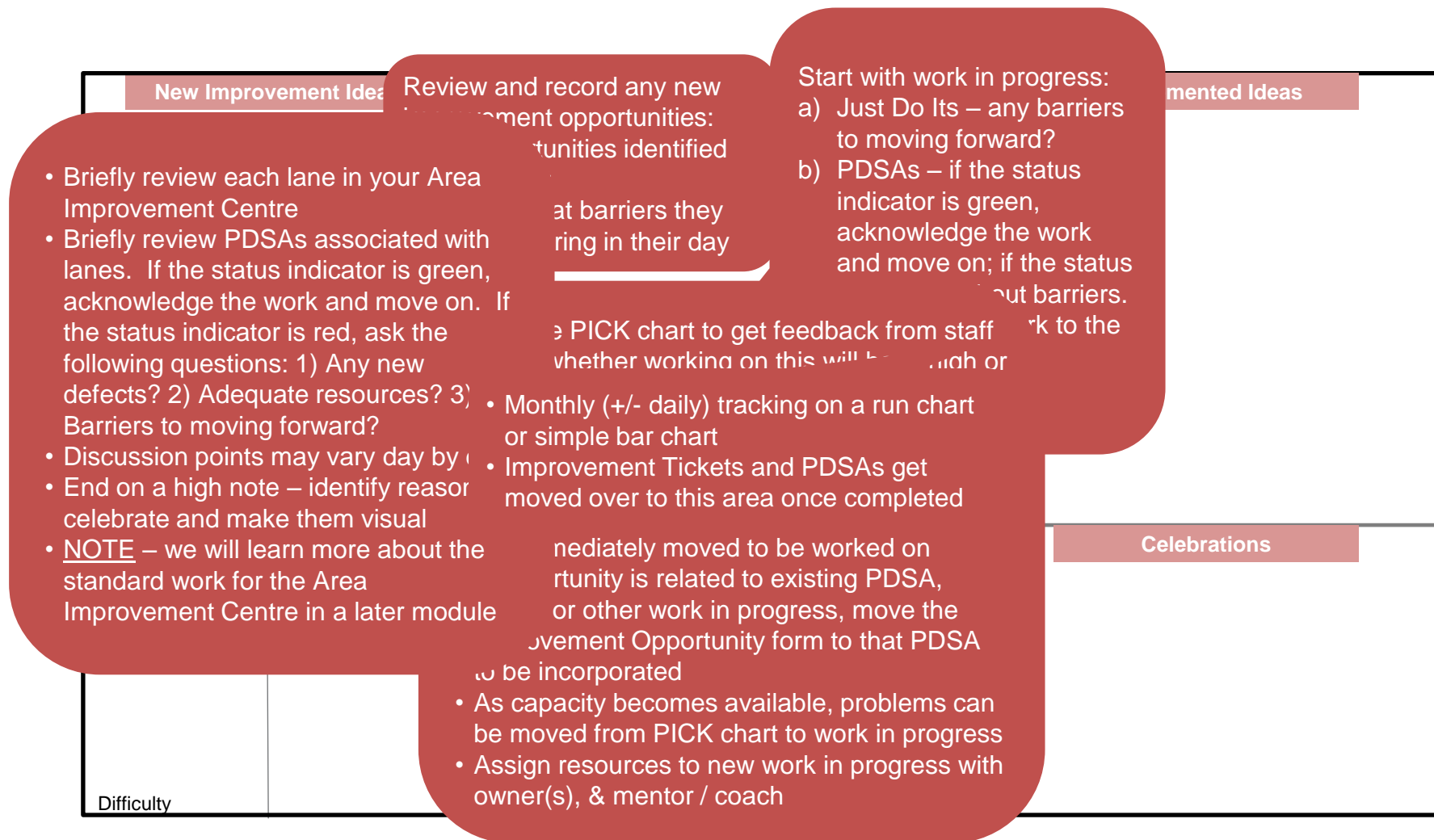
- Countermeasures are developed based on root cause analysis and best practices
- The A3 and 'WWW' are the primary tools to support the team



Layout of the Idea Board



Adapted From: ThedaCare Centre for Healthcare Value



Adapted From: ThedaCare Centre for Healthcare Value

Monthly Performance Communication Diagram

Two Options:

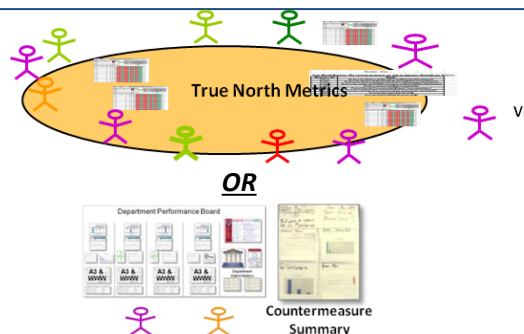
1) Portfolio Leadership Team

The VP and Directors meet to discuss progress on department drivers as it relates to strategic deployment and 'Top 10'

2) VP / Director Huddle

The VP and Director meet at each performance board to discuss progress on department drivers as it relates to strategic deployment and 'Top 10'

VP Monthly Performance Review



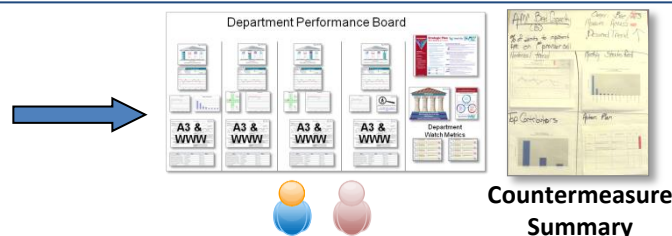
3rd week of the month

- Review of Countermeasures,
- Review strategy and execution tactics
- Review of other projects

Director / Manager Huddle

Director meets with manager (+ other members of the ELT, *if desired*) at their performance board. Countermeasure summaries are presented, and additional resources are allocated if needed.

Director Monthly Performance Review



2nd Week of the Month

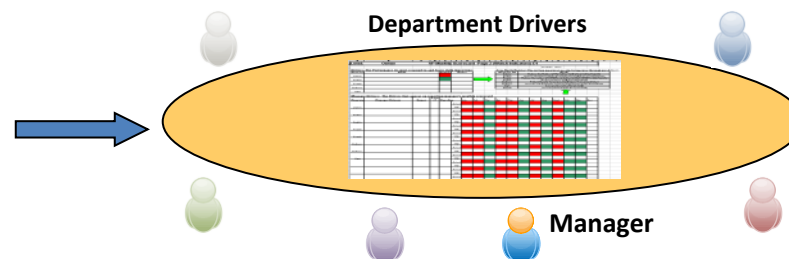
- Lessons Learned
- Review of Countermeasures

... Repeat for each Director

Leadership Team Monthly Performance Review

Leadership Team

The manager meets with leadership team following defined Standard Work around scorecard. When areas are not meeting goal-countermeasures are developed and summarized.

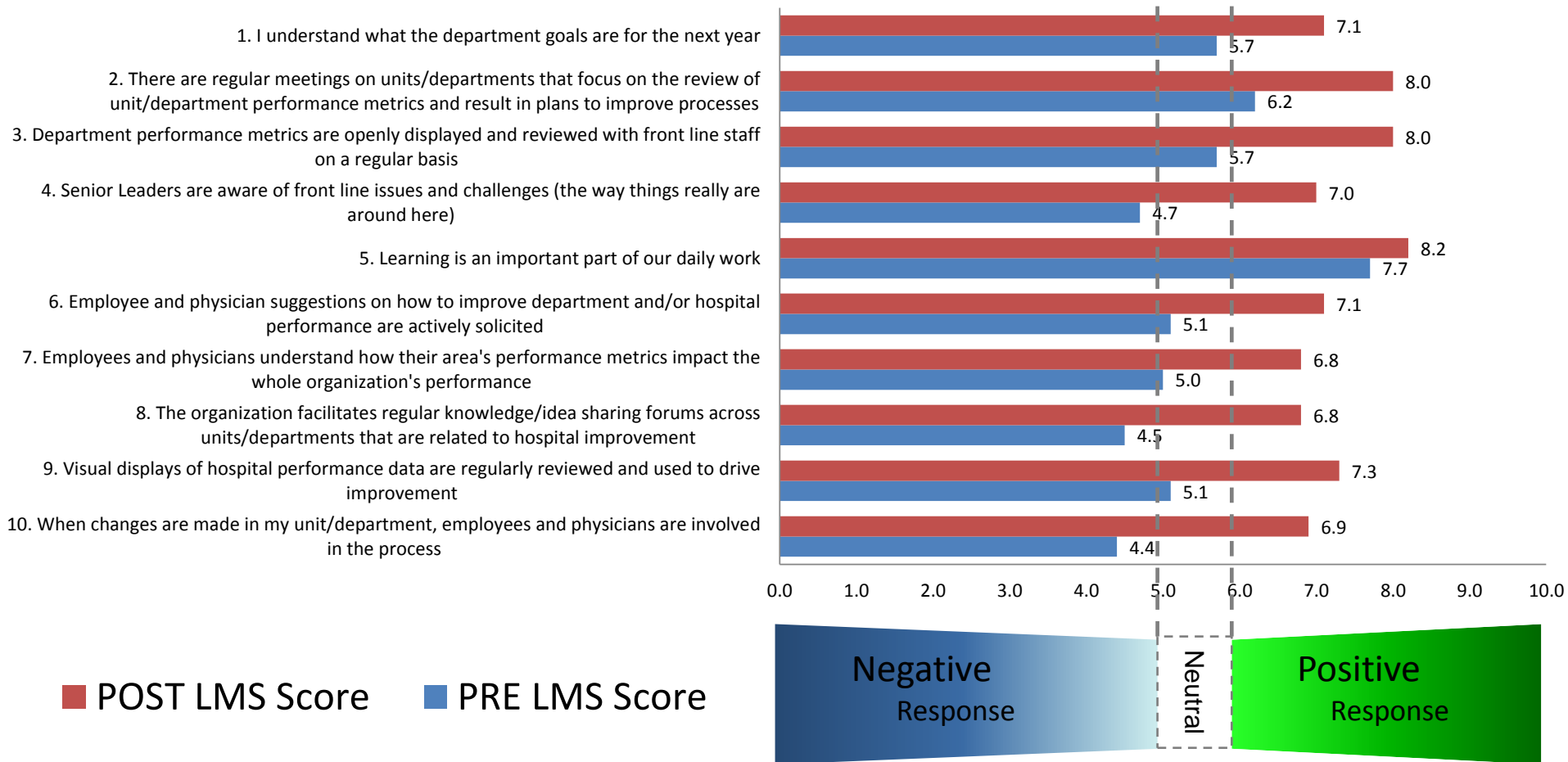


1st Week of the Month

- Lessons Learned Shared,
- Stratification of Red Metrics
- Develop Countermeasure Summaries


... Repeat for each Manager

Wave 1 Staff Feedback (All Model Cells)



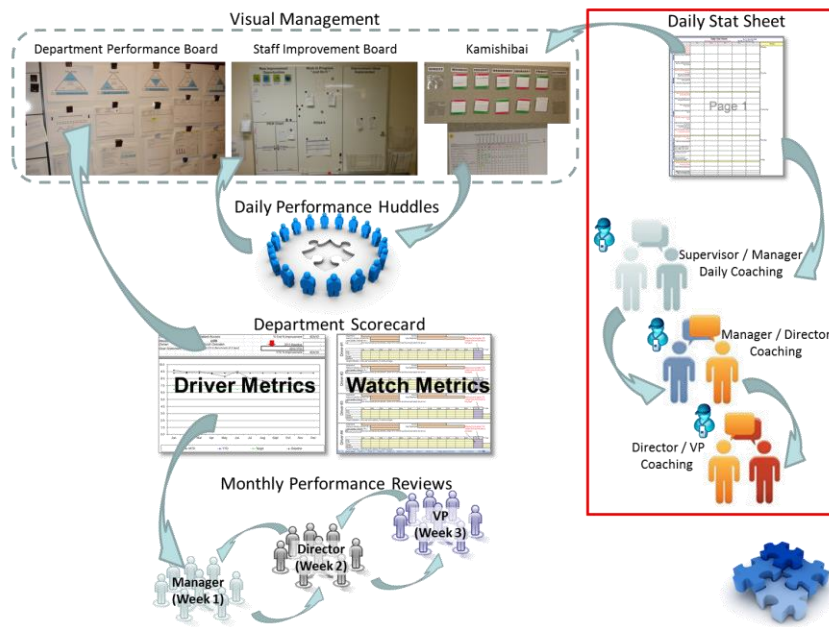
Experience of A Model Cell Support Services: Hospitality

What is “Hospitality”?

- Patient Transport 
- Daily Cleaning 
- Discharge Cleaning
- Patient Meal Delivery 
- Nursing Assistance
- Approx. 300 Multi Skilled Employees

What Can Be Learned From This Model Cell?

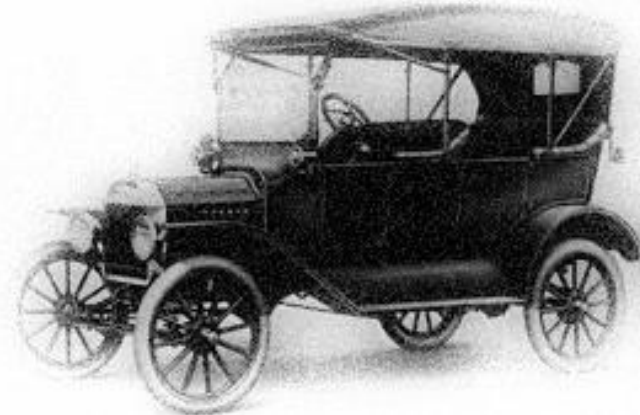
How does the Leadership Management “System” help us with “the problems we are trying to solve”?



First Things First...The Lean Context

After 6 years what does “Lean” mean to us?

- What is required for best patient care?
- What needs to be done to achieve that?
- What is our plan?
- Continuously improve Safety, Quality, Efficiency?



Our Approach

The plan is our foundation on which to build; our approach is...





- Have a Plan
- Visualize the Plan
- Respond to the Plan
- Improve the Plan (safety/quality/efficiency)

Our First Problem!

...and solutions so far

How do you build a Plan when **everyone cleans differently?**

- Develop Standard Work
- Select/Train Master Trainers
- Train 300 Staff
- Sustain

Rouge Valley Health System		STANDARD WORK FLOW				 Rouge Valley HEALTH SYSTEM	
Site:	<input checked="" type="checkbox"/> RVC <input checked="" type="checkbox"/> RVAP	Position:	PSR			Areas:	All Units
Date:	1-Aug-12	Process:	Tier I - Discharge Clean - Single, Double, Quad			Quota/Shift:	Revision No.: 1 Page: 1 of 1
Process Trigger: Patient is discharged.						Process Done: Daily	
No.	Description	1	2	4	Safety Risks		
1	Wash your hands and put appropriate PPE.	1	1	1			
2	Place Virex on toilet & sink - let sit for 10 minutes.	1	1	1			
3	Remove waste and linen from room. (Refer to SOP#1)	20	40	60			
4	Remove gloves, wash hands & reapply clean gloves.	2	2	2			
5	High dust. (Refer to SOP#2)	5	6	10			
6	Wash your hands and put on gloves. Clean and disinfect room. (Refer to SOP#3)	11	14	27			
7	Clean the bed. (Refer to SOP#4)	10	17	45			
8	Thoroughly clean bathroom. (Refer to SOP#5)	4	6	10			
9	Remove gloves/PPE and wash hands.	3	3	3			
10	Make bed & hang privacy/window curtains. (Refer to SOP#6)	35	55	65			
11	Return clean equipment to clean storage.	5	5	5			
12	Dust mop entire room. (Refer to SOP#7)	5	5	10			
13	Damp mop entire room. (Refer to SOP#8)	6	6	12			
TOTAL MINS		108	161	251			

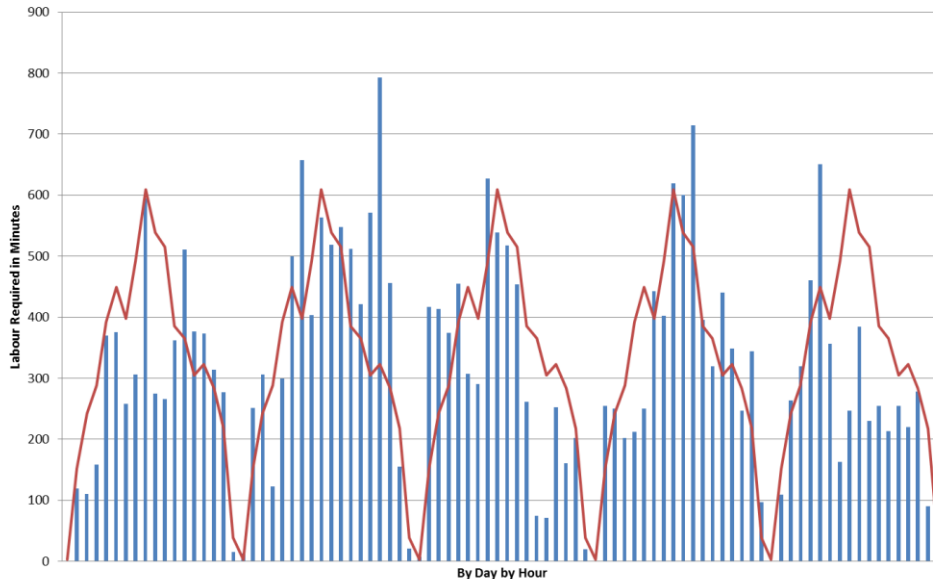
Our Next Problem!

...solutions to follow

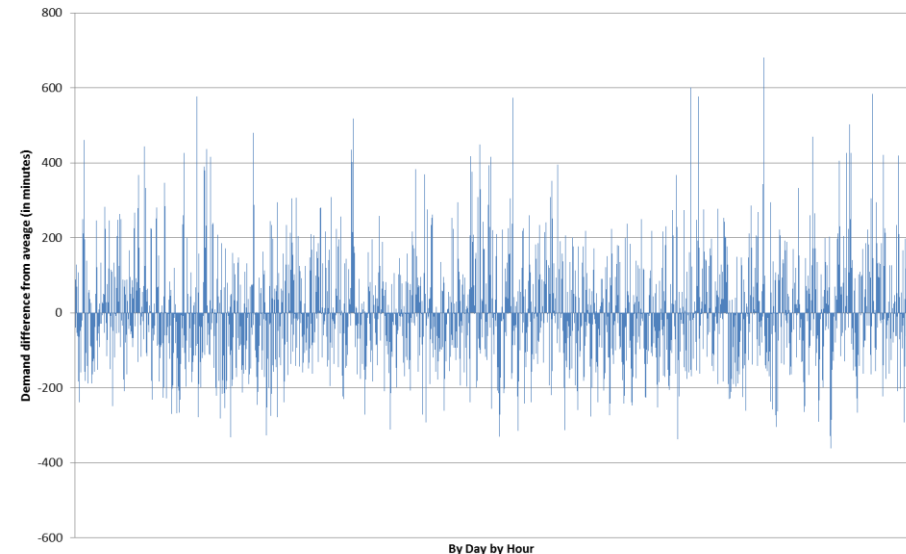
How do you build a Standard Plan when the day is so **unpredictable**?

- The day depends on who comes in the door

Work Volume (discharge clean, isolation clean, transport)
RVA June 3 - June 24 2013 (weekdays only)



Work Volume Difference from Average
(discharge clean, isolation clean, transport)
RVA Jan 1 - June 24 2013 (weekdays only)



Our Next Problem!

... solutions so far

Maintaining flow

- 75% of the day is predictable
- 2 different tactics
- Staff and plan to 75%
- Additional staff move to multi-skilled pool
- 75% exceeded – send in reinforcements
- Problems now separated



Yet Another Problem!

...and solutions so far

Everyone is so spread out, how can we **see if the plan is working?**

- Call Centre tracking (actual vs. plan)
- Maps and door magnets
- Control boards
- Colour coded carts/equipment



Another Problem Still!

...and solutions so far

A Supervisor has 55 direct reports, how can they **monitor all this**?

- Leader Standard work
- Group Leaders
- Red/Yellow Pager



Introducing LMS

...congratulations you have been selected

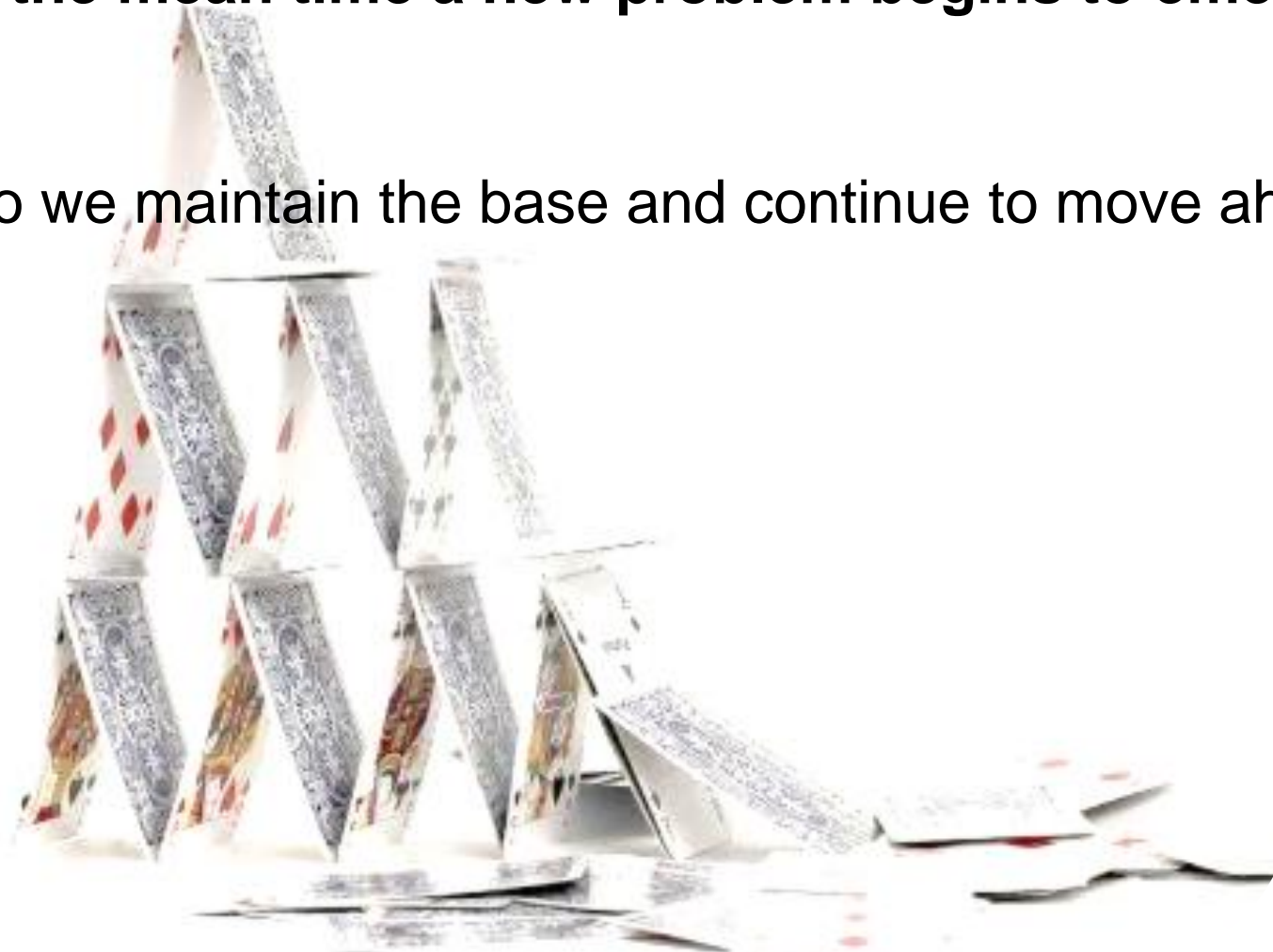
Initial thoughts on being selected as a pilot site?

- **Distraction** from implementing the plan
- Need **Standard Work** not indicators (yet)
- Focus needs to be plan; **process = outcome**
- Staff ideas will not be **focused**
- Out of sequence; **process then management**
- Either way – ok, sure, we'll do it – so we start.

Big New Problem

... in the mean time a new problem begins to emerge

“how do we maintain the base and continue to move ahead?”



Defining the Big New Problem!

... ok so it took 6 why's!

- Why is the plan not always followed?
- Lack of front line passion for it – why?
- Leadership has not fostered passion – why?
- We may not really know how – why?
- We are still managing the old way – why?
- We are comfortable with it – why?
- We haven't practiced anything else

Can LMS Help?

... maybe this “distraction” can help with our problem



LMS as a Solution

... a new way of thinking

- Process is performed by people
- People are the process
- Develop people to develop the process
- Not one before the other

How LMS Helps

... changing the way we manage

- Build Leadership discipline
- Develop Leaders as coaches
- Practice implementing ideas
- Build ownership/passion of process
- Build PDCA know how

“Habit is the most effective form of motivation”

LMS Purpose?

... how does LMS help solve our problem

Builds “people capacity” for:



LMS Next Steps?

... what's next for Support Services... now that we kind of get it

- Pilot expanded
- LMS in other “plan” cell
- “Plan” and LMS together forever
- Grow future Leadership from within

Thank You!

Session Code: ThP/11

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