Eliminating Preventable Harm Through Building a Reliable Culture of Safety
Denise Murphy, Main Line Health
A Webber Training Teleclass

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Eliminating preventable harm through building a reliable culture of safety

Denise Murphy, RN, BSN, MPH, CIC, FAAN
Vice President, Quality & Patient Safety

Hosted by Paul Webber
paul@webbertraining.com

www.webbertraining.com February 13, 2014

Objectives

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- Discuss importance of establishing a culture of safety
- Define a reliable culture of safety and three strategies for organizing cultural transformation
- Identify at least three leader methods for enhancing and sustaining reliability
- List five error prevention tools used by heatlh care teams to eliminate human errors that lead to harm
- Review innovative strategies for engaging physicians in with work of building and sustaining a reliable safety culture
- Discuss the results of establishing a reliable culture of safety
- Identify barriers to sustaining cultural transformation

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Safety is our Main Line

3

What do patients expect from us?

- ***Don't hurt me (patient safety)***
- ***Help me (quality patient care)***
- ***Be nice to me (patient satisfaction)***

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Safety is our Main Line

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What do employees expect from us?

- ***Leaders create a safe, high quality work environment (culture of safety + good process design + behavioral accountability = reliability)***
- ***Support when things go wrong ("just culture" - where human error is not punished, system errors are found and fixed, and unsafe behaviors result in appropriate action)***

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What is Organizational Culture?

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- Culture is that set of *beliefs, values and principles* that shape the way individuals and groups within an organization act. It's the often unspoken "*way we do things around here*."
- Culture can be best felt by new individuals in an organization when they "push against" the existing norms.
- And although the culture is generally set by leaders, *it involves every one*… and *takes a long time to change.*
- A culture of safety is embedded when we know that people are doing the safest thing *when no one is watching!*

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What is Reliability Science?

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- The knowledge and understanding of human error and human performance in complex systems.
- Building reliability into systems intentionally to make it easier for humans to do the right thing and harder for them to make mistakes.

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Safety MUST BE INTENTIONAL - It Doesn't Just Happen

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High Risk Situation + High Risk Behavior = Event of Harm

Lucky Photograph © by Craig Orsini

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Reliability Synergy

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Optimized Outcomes

10^{-6}
10^{-5}
10^{-4}
10^{-3}
10^{-2}
10^{-1}

Behavior Accountability
Behavior Expectations
Knowledge & Skills
Reinforce & Build Accountability

Integrated With

Process Design
Evidence-Based Best Practices
Technology Enablers
Intuitive Work Environment
Resource Allocation
Continuous Quality Improvement

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Complementary Strategies

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Codes Outside the ICU
Surgical Site Infections
Central Line Infections
Hand Hygiene
RAPID RESPONSE TEAM
CALL 7-1111
Culture
…and on, and on, and on…

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Three Strategies to Transform Culture

10

Set Expectations
Behavior-based expectations for event-free performance

Educate & Build Skill

Reinforce & Build Accountability
An accountability system to convert behaviors to work habits

MIND THE GAP

All three….in this order!

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Building a RELIABLE Culture of Safety:
The Journey at MLH
and Making the Case for Change

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MLHS Diagnostic Assessment

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MAIN LINE HEALTH DIAGNOSTIC RESULTS 1/2010

Cause analysis documentation from 73 patient safety events occurring January 2006 thru October 2009

Interviews with ~ 565 staff, physicians, and leaders
- Bryn Mawr ~ 148
- Bryn Mawr Rehab ~ 75
- Lankenau ~ 135
- Paoli ~ 82
- Riddle ~ 115
- System Execs ~ 10

Review of documents and outcomes. Tour of facilities.

Review of data from the 2009 AHRQ Safety Culture and Gallup Employee Engagement Surveys

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Inappropriate Acts by Human Error Type

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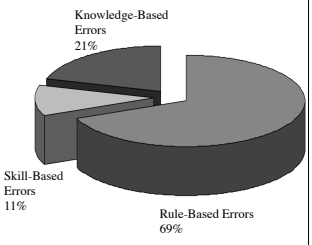

Skill-Based
(Auto-Pilot Mode)
Errors made when performing acts or tasks that require limited or no thought attention.

Rule-Based
(If-Then Response Mode)
Errors made when performing acts or tasks that require application of rules – accumulated through experience and training – to familiar situations.

Knowledge-Based
(Figuring-It-Out Mode)
Errors made when performing acts related to new or unfamiliar situations that requires problem solving and for which a rule does not exist or is not known.

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Individual and System Causes of Events

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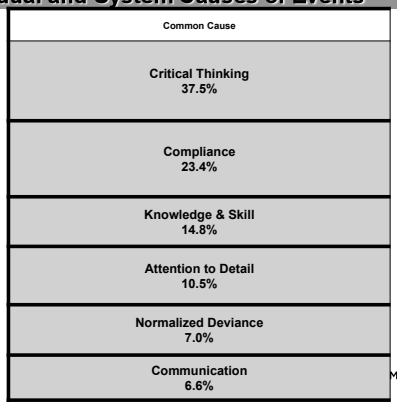

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AHRQ Safety Culture Surveys

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Main Line Health 2010 and 2012, National, and Regional % Positive §

Dimension	Main Line Health, 2012	Main Line Health, 2010	National Average *	Regional Average **
Communication openness	60%	60%	59%	61%
Feedback and communication	63%	60%	62%	61%
Frequency of events reported	62%	60%	60%	61%
Handoffs and transitions	45% ↑	45%	40%	41%
Management support for patient safety	73%	70%	68%	70%
Non-punitive response to error	38%	36%	39%	44%
Organizational learning	72%	71%	71%	69%
Overall perceptions of patient safety	63%	62%	61%	63%
Staffing (adequacy)	55%	54%	53%	54%
Supervisor expectations & actions	72%	72%	72%	72%
Teamwork Across Units	59% ↑	59%	53%	53%
Teamwork within units	80%	80%	78%	79%
Mean Composite Score	62%	61%	60%	61%

* National Database – 94 Hospitals; bed size 500+ ; ** Mid Atlantic/NE Region - 30 Hospitals
↑ Main Line 5% **above** National average ↓ Main Line 5% **below** National average

§ Percent Positive = Agree/Most of the Time **plus** Strongly Agree/Always

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MLHS Crucial Conversation Surveys

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Willing to Speak up when someone at MLHS:

	2008	*2009*
• Breaks Rules, takes dangerous shortcuts	48%	59%
• Shows Poor Initiative	39%	38%
• Demonstrates Incompetence	37%	52%
• Demonstrates Poor Teamwork	34%	35%
• Acts Disrespectful	29%	44%
• Makes a mistake	25%	38%
• Micromanages / Abuses Authority	16%	20%

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Cultural Assessment Conclusions

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- Strong commitment on the part of leaders, staff, and medical staff leaders to improve patient safety.
- Culture accounts for >70% of system causes that led to patient harm or death. Specifically,
  - lack of critical thinking
  - and compliance with documented safe practices.
- A foundation exists for evidence-based MLHS leadership *behaviors* consistent with high-reliability organizations.
- Power Distance (Authority Gradient) exists in most practice areas - surely a problem in some.

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Source: Main Line Health System; January 2010

Cultural Assessment Conclusions

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- Medical staff must support and actively participate in the safety culture change.
- Implementation plan should include high-leverage leadership *expectations and tools*.
- **Safety behaviors for preventing error should focus on:**
  - Questioning attitude and critical thinking through effective handoffs
  - clear team communication
  - intelligent compliance to behavioral expectations and rules that protect patients
  - Peer checking and peer coaching
  - Self-checking before routine acts
  - ***Communication in an authority gradient – empower staff!***

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Source: Main Line Health System; January 2010

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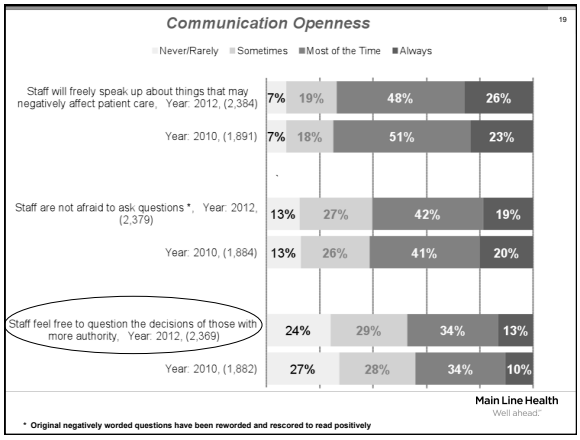

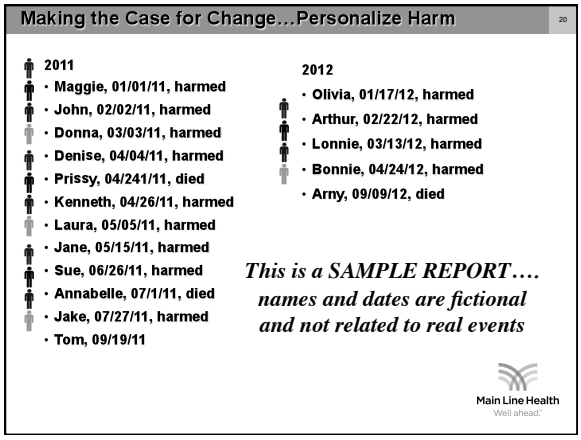

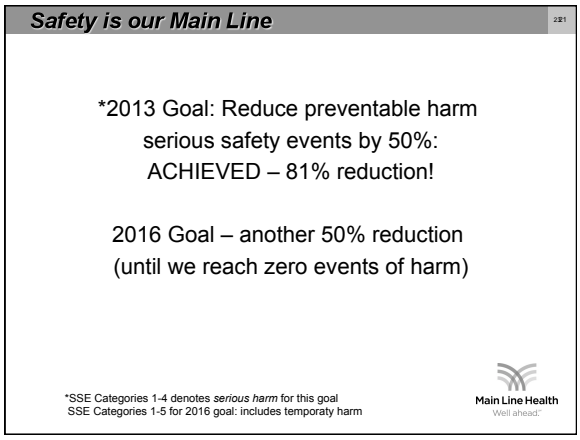

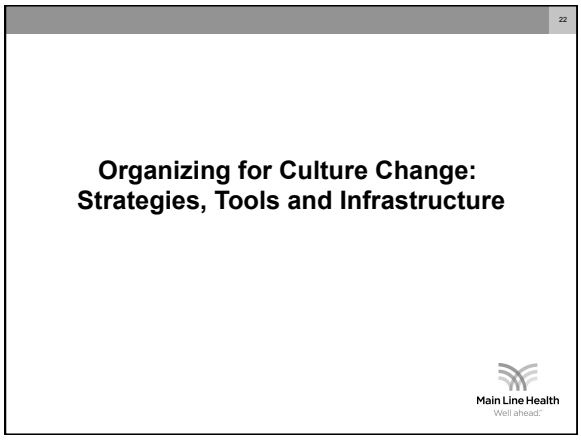

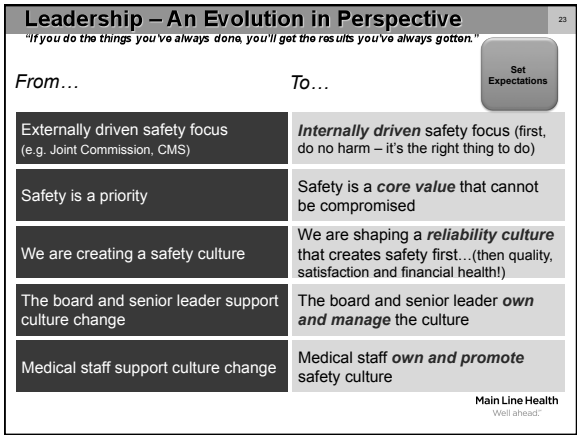

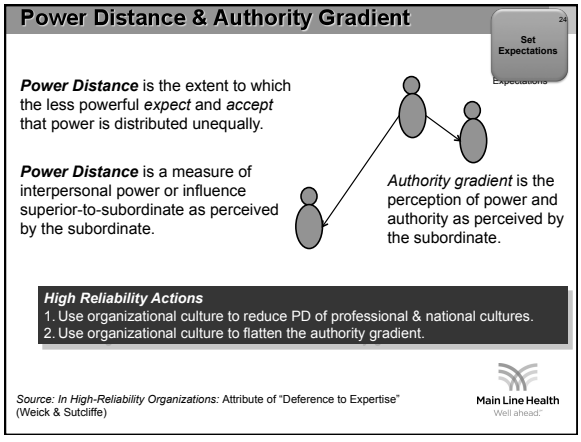

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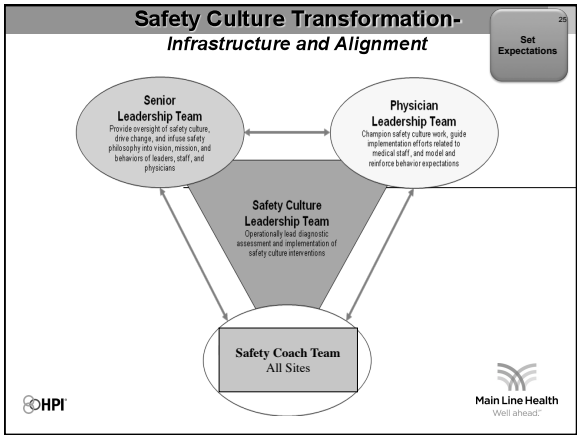

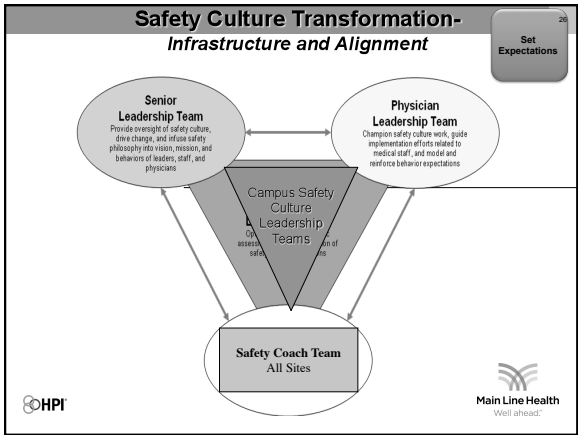

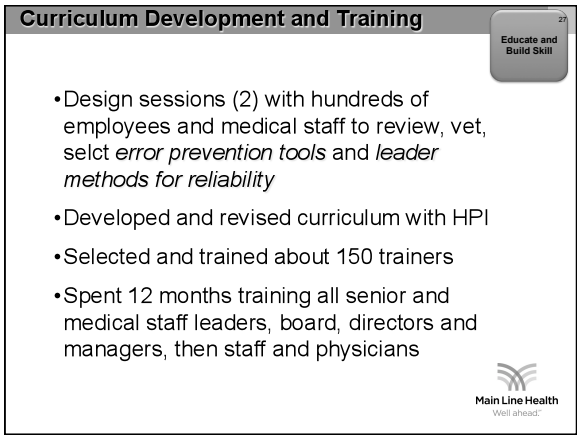

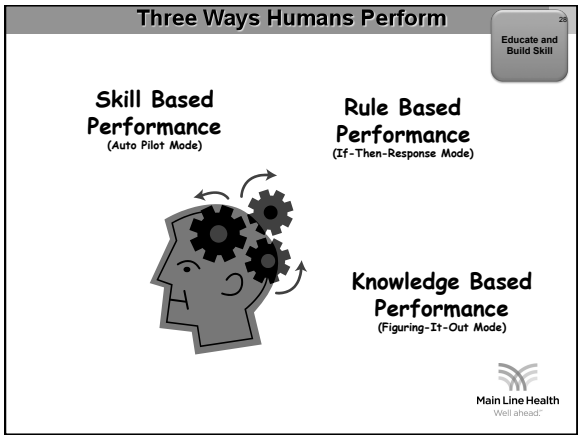

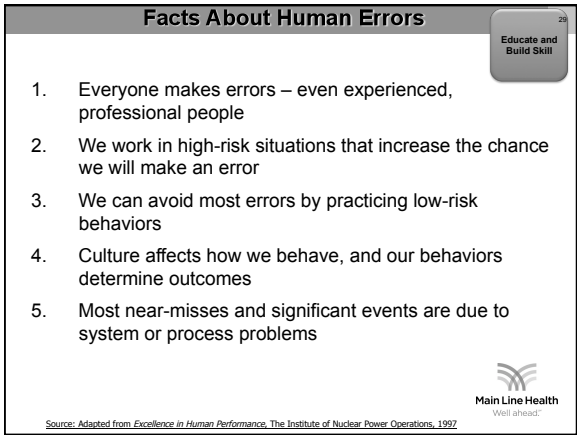

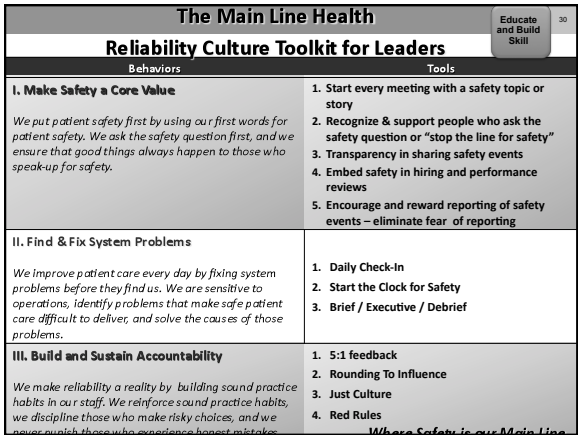

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Leadership for Performance Reliability

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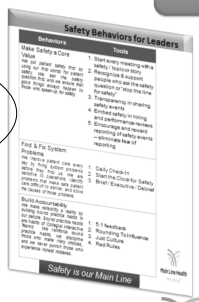
Build and Sustain Accountability

1. Define and demonstrate **safety as a core value**
2. **Find problems** and **fix causes** in systems and processes
   - A. Daily Check-In
   - B. Start the Clock Safety Issues
   - C. Brief/Execute/Debrief
3. Reinforce and build accountability for behavior expectations at the sharp end



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Walking the Deck

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Build and Sustain Accountability

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The Daily Safety Huddle: Typical Agenda

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- Number of days since last *Preventable Harm Serious Safety Event (Includes any new healthcare associated infections or falls w harm)*
- Follow-up reports on previous days action items

Build and Sustain Accountability

- Updates from previous day and night activities – identify any actionable items requiring immediate (start the clock) intervention
- Anything going on today that would impact our patients' safety? Anything we predict could happen in next 24 hours to impact our patients' safety?
- Share great catches and great experience stories.
- Any employee/physician safety concerns that need to be discussed

Start the Clock for Safety

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Build and Sustain Accountability

Cause Exposure Time
Window of potential for harm

- ☑ **Start the Clock** sense of urgency – a *"ticking time bomb"*
- ☑ Mobilize those with the expertise to solve the problem and authority to empower action
- ☑ Actions:
  - Assign Responsibility
  - Set time frame for resolution
  - Schedule follow up report with senior leader and at next day's Safety Huddle

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The Main Line Health Error Prevention Toolkit

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I commit to the following… **Safety Behavior Expectations**	*By Practicing the Following…* **Error Prevention Tools**
Attention to Detail *We focus our attention to always think before we act, especially in high risk situations*	▪ **Self Checking Using STAR** **Stop** **Think** **Act** **Review**
Communicate Clearly *We're responsible for professional, clear, and complete verbal and written communications.*	▪ **3-Way Repeat Back & Read Back** ▪ **Phonetic & Numeric Clarifications** ▪ **Clarifying Questions**
Handoff Effectively *We provide effective handoffs of patients, tasks, and materials by taking the time to give appropriate information and ensuring understanding and ownership.*	▪ **Use SBAR to handoff:** ***Situation*** ***Background*** ***Assessment*** ***Recommendation***
Speak up for Safety *We use good judgment at all times to ensure our actions are the best. We use an assertion and escalation technique to act on our responsibility to protect patients & co-workers in a manner of mutual respect.*	▪ **Crucial Conversations** ▪ **Question & Confirm** ▪ **Use ARCC to escalate safety concerns** - ***Ask a Question*** - ***Make a Request*** - ***Voice a Concern*** - ***Use Chain of Command*** ▪ ***Stop the line* for immediate risk!**
Got Your Back! *We make reliability a reality by building our own sound practice habits and in our co-workers. We're accountable not just for our own actions but for our teammates' as well.*	▪ **Peer Checking** ▪ **Peer Coaching**

Where Safety is our Main Line

I commit to paying attention to detail by practicing the tool STAR

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Stop

Pause for 1 to 2 seconds to focus attention on the task at hand

Think

Visualize the act and think about what is to be done

Act

Concentrate and perform the task

Review

Check for the desired result

Self Checking
The most effective way to avoid slips and lapses.
It takes ***only seconds*** to do and reduces the probability of making an error by a factor of 10 or MORE!

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*I commit to communicate clearly by using the safety tools….** 37

What should we do?
Ensure that we hear things correctly and understand things accurately

Why should we do this?
To prevent wrong assumptions and misunderstandings that could cause us to make wrong decisions

Error Prevention Tools:
*3-Way Repeat Backs & Read Backs
*Clarifying Questions
*Phonetic & Numeric Clarifications

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Clear Communication 38

3 – Way Repeat Backs

When information is transferred... **Use 3-Way Communication!**

1 **Sender initiates** communication using Receivers Name. Sender provides an order, request, or information to Receiver in a clear and concise format.

2 **Receiver acknowledges** receipt by a repeat-back of the order, request, or information.

3 **Sender acknowledges the accuracy** of the repeat-back by saying, **That's correct!** If not correct, Sender repeats the communication.

Train our ears to listen for "**That's Correct**" – it's a codeword for "we understand each other"

A Safety Phrase:
"Let me **repeat that back**…"

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Clear Communication 39

Ask Clarifying Questions

Ask one to two clarifying questions:

- In all high risk situations
- When information is incomplete
- When Information is not clear

Asking clarifying questions can reduce the risk of making an error by 2½ times!

Why…
To make sure that you really understand what's being communicated so that you don't make a decision based on a wrong assumption.

How…
Phrase your questions in a manner that will give an answer that improves your understanding of the information.

A MLH Safety Phrase:
"I have a **clarifying question**…"

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I commit to speaking up for safety by … 40

Using ARCC to Escalate Safety Concerns

Use the lightest touch possible…

Ask a question
Make a **R**equest
Voice a **C**oncern

If no success…
Use **C**hain of Command

If **imminent danger** to a patient or staff exists, use the MLH Safety Phrase **"Stop the line, I need clarity**

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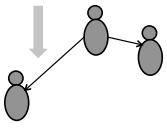
A few comments about ARCC 41

- One of the most effective tools in changing culture
- Helps staff feel empowered, often works if used respectfully without going beyond the "Ask or Request" steps
- Specifically used to reduce the "power gradient" and to promote peer checking or peer coaching. Fear of using these tools remain the two biggest barriers to full culture change.
- Good tool to use for lack of compliance with isolation precautions or hand hygiene. Remember, you usually don't have to go beyond the "ask/request".
- "Stop the Line" is a good tool for use with clinicians not following all of the steps for line insertion. Must be done calmly and respectfully: *"Please stop the line, I need clarity".*

Engaging Physicians – innovative strategies 42

- Safety Culture 101 created by a physician leader/believer
- Focused on Physicians as leaders in culture change
- Focused on 'what was in it for them"
- Promoted conversation and role playing where they could be 'non-physicians' and evaluate common scenarios
- Safety Culture 102 is about embedding tools AND reducing the power gradient. It expands individuals' commitment … and provides safety CMEs!



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Safety Culture 101 - "A Day in the OR"

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Embedding a RELIABLE Culture of Safety:
Making It Stick!

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Culture Embedding Mechanisms

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From *Organizational Culture & Leadership*, by Edgar Schein

Primary Embedding Mechanisms	Secondary Articulation & Reinforcement Mechanisms
• What leaders pay attention to, measure, and control routinely • How leaders react to critical incidents and organizational crises • Observed criteria by which leaders allocate scare resources • Deliberate role modeling, teaching, and coaching • Observed criteria by which leaders allocate rewards and status • Observed criteria by which leaders recruit, select, promote, retire, and excommunicate organizational members	• Organizational design and structure • Organizational systems and procedures • Organizational rites and rituals • Design of physical space, facades, and buildings • Stories, legends, and myths about people and events • Formal statements of organizational philosophy, values, and creed

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Peer Coach, Role Model, Leadership Liaison

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Safety Coach Duties

- Training & education:
  - Initial
  - Monthly meetings – 1 hour per month
    - Plan monthly targets, program focus, & coaching methods
    - Receive ongoing education and coaching materials – becoming the unit subject matter experts on patient safety
    - Regular attendance is expected
- Duties include: **4 hrs per month per coach completed during your regular working hours**
  - Rounding (behavior observation or interviews)
  - Environment of care monitoring
  - Facilitate habit formation
  - Feedback & reinforcement
  - Collect concerns from staff
  - Collect Safety Success Stories

Bridges gap across the "power gradient"

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Physician Safety Champions

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DUTIES:

- Study, design and implement improvements to processes already identified as challenges
- *Model patient safety behaviors* and coach colleagues
- Report observed adverse events, near misses and good catches
- Select and develop new patient safety leaders

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Monthly – Great Catches

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Patient Safety Success Story

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Thanks to Deb, RN
Lankenau Medical Center

P: What potential harm was averted? CLABSI

S: What was the situation? A resident in the ICU was about to begin a central line insertion without assistance. The Unit Secretary was rounding and saw the resident struggling with the full drape, becoming frustrated and throwing the drape to the floor. Since the steps to line insertion are posted in the ICU, the secretary knew that the full drape was a critical infection prevention step. She asked the question, "Dr. Jones, can I get a nurse in here stat to assist you?" When no response, the Secretary requested, "Dr. Jones, can you please hold on just 30 seconds while I clean my hands and pop my head next door to alert Nancy (RN) that you need help?" Dr. Jones stopped, agreed to wait for assistance and use a new drape to fully comply with the CLABSI bundle steps.

S: What safety behavior did the employee use to intervene? How?

The Unit Secretary used **ARCC** to get Dr. Jones' attention. She first asked a question, then escalated to make a request (please stop while I find assistance). She helped Dr. Jones do the right thing for the patient by speaking up for safety!

St: Was the *s*tory shared with others?

Yes, it was shared with Lankenau's Safety Committee, Leadership Assembly and was selected the Great Catch for September

We're using our Safety Behavior Tools to Prevent Harm to patients!

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Safety Behavior	Success Stories
Speak Up For Safety	808
Attention To Detail	773
Got Your Back	304
Communicate Clearly	237
Handoff Effectively	73

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Main Line Health Red Rule

Build and Sustain Accountability

Patient Identification

Verify[1] and Match[2] patient identification using name and date of birth (or MR #) before any patient encounter where patient identification is a safety imperative for the procedure or task to be completed.

1. Verify by having patient verbalize their name and date of birth **OR** visualize it on their wristband.
2. Match patient to a source document (for example – order, prescription)

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Results and Summary

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MLH Safety Culture Roadmap

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For Building & Sustaining Safety Culture Change

Task Implementation → Engraining & Sustaining

Culture Change Preparation	Diagnostic Assessment	Intervention Implementation	Accountability Systems	Process Alignment	Hardwiring the Change
Board & Senior Leaders Establish Safety as Core Value	Safety Culture Survey	Safety Behaviors for Error Prevention	Operational Leaders Establish Safety as Core Value	Align Existing Work Processes	Integration with Vision, Mission, & Values
Executive Sponsor	Common Cause Analysis of Past Events	Education & Training of Leaders, Staff, & Physicians	Safety Metrics & Control Loops	Integration with Process Improvement Methods	Integration with Strategic & Annual Goals
Medical Staff Sponsor	Document & Data Review	Red Rules for Safety	Leadership Method Application	Integration with Cause Analysis & Lessons Learned	Integration with Hiring Processes
Safety Culture Lead & Team	Diagnostic Interviews	Leadership Method for Performance Excellence	Behavior Observation & Coaching		Integration with Orientation & Training Processes
Vertical Communication Infrastructure	Results & Interventions Recommendations Report	Cause Analysis Program Improvement	Safety Success Stories		Integration with Performance Review Process
Alignment with Key Stakeholders & Programs		*Other Diagnostic-Based Interventions*	Safety Coaches		

✓ Complete
➔ In Progress/Next Focus

Safety Culture Effectiveness = Plan Effectiveness x Implementation Effectiveness

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MLH Preventable Harm Serious Safety Events

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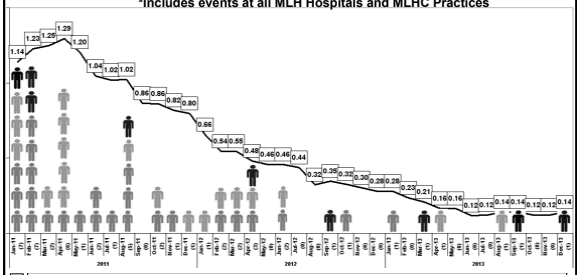
January 2011 – December 2013
***Includes events at all MLH Hospitals and MLHC Practices**



SSE 1: Death

SSE 2: Critical, life-changing harm with no expected change in clinical status including permanent loss of organ, limb, or function

SSE 3: Significant harm with no expected change in condition yet not sufficiently severe to impact activities of daily living (ADL) or business functioning. Includes permanent reduction in physiologic reserve, disfigurement, or impaired or aided sense or function

SSE 4: Critical, life-threatening harm yet lasting *for a limited time* with *no permanent residual*; requires prolonged transfer to a higher level of care or monitoring, transfer to a higher level of care for a life-threatening condition, or additional surgery/procedure/treatment

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Eliminating Preventable Harm Through Building a Reliable Culture of Safety
Denise Murphy, Main Line Health
A Webber Training Teleclass

Challenges in Sustaining Cultural Improvement

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- *Safety Culture*: we've made safety our core value, reducing patient harm significantly. How do we sustain this culture?
- How do we improve staff perceptions that an accountable and a "just" culture align?
- We must recognize complacency and "drift" from culture of safety - respond to underlying causes…
  - poorly designed processes and systems
  - reluctance to adopt simple but proven safety behaviors (e.g., STAR…takes seconds but can reduce risk for error x10; ARCC can respectfully enforce compliance, but inhibited by **power gradient**)
  - distraction due to competing priorities; manager, staff and physician burnout
  - Leader practices don't change – leaders don't lead for high reliability
  - Medical staff "support" safety rather than "own" safety

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Summary – A Just and Reliable Culture of Safety

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- ✓ Creation of a culture of safety must be intentional: safety is *the* core value…it trumps everything else.
- ✓ Reliability results from the intersection of good process design and behavioral accountability.
- ✓ Leaders lead for reliabilty…using tools that make a just culture of safety visible to everyone, every day.
- ✓ In a just culture, mistakes are not punished. At the same time, leaders hold everyone accountable for safety and everyone *accepts accountability* for safety (reciprocal accountability).
- ✓ Staff also commit to speaking up for safety, even in the presence of a power distance/authority gradient, when they see unsafe practices.

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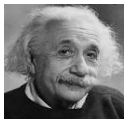
"The world is not a dangerous place because of those who do harm, but because of those who look on and do nothing."

» **Albert Einstein**



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QUESTIONS?

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See videos at
http://webbertraining.com/denise-murphy-videos.php

APPENDIX –
1. Error Causation:
Descriptions for Individual v. System Failures

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Individual and System Causes of Events

Common Cause	Evidenced by: (*individual* failures modes)	Most likely caused by: (*system* failure modes)
Critical Thinking 37.5%	• Tendency to focus on details of task rather than big picture • Lack of awareness of situation & that it could be deviating from desired path	• Skill weakness in judgment &/or decision-making • Lack of guidance / tools to support standard action or collaborative decision-making
Compliance 23.4%	• Careless, informal or casual attitude toward following rules or expectations • Choices to shortcut procedures, often due to perceived burden	• Cultural weakness in reinforcing expectations of self & team accountability for performance • Ineffective use of peer checking
Knowledge & Skill 14.8%	• Lacking sufficient experience in specific tasks to assure performance reliability	• Variation in monitoring and oversight of novice practice to assure correct or compliant actions
Attention to Detail 10.5%	• Preoccupied, weakly formed habits, and inattentive practices leading to skill based errors	• Cultural weakness in reinforcing expectation of self checking • Lack of cues and reminders integrated in work environment & procedures
Normalized Deviance 7.0%	• Behavior sharply different from generally accepted standards in a variety of actions	• Cultural weakness in reinforcing expectations of self & team accountability for performance stds
Communication 6.6%	• Ineffective use of clear communication tools to avoid inaccurate assumptions	• Cultural weakness in reinforcing communication tools with unclear information

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