Safety First Every Day:
A High Reliability Journey

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VCU Medical Center

BY THE NUMBERS

1125+ Licensed Beds
800+ Physicians
200+ Specialties
14000+ Employees
5000+ Learners

VCU Medical Center:
- MCV Hospitals
- Children’s Hospital of Richmond
- VCU Community Memorial Hospital
- MCV Physicians
- Virginia Premier Health Plan
- Massey Cancer Center

Health Science Schools include Allied Health, Dentistry, Medicine, Public Health, Nursing, Pharmacy

More than 15 affiliated centers and institutes, including the VCU Massey Cancer Center, Virginia’s first NCI-designated cancer center.
We Charted a Different Course: A Journey to High Reliability
**A Decade in Review:**
The VCU Medical Center Reliability Journey

|-------------|----------------|----------------|
| - Challenging the status quo  
- Building the desire/will to change  
- Demonstrating the ability to change | **Transforming culture with safety as a core value** | **Becoming highly reliable in all domains of STEEEP** |
| - “War” declared on nosocomial infections  
- Addressed contaminated blood culture rates  
- Reduced hospital-acquired ulcer rates  
- Improved CMS core measure performance | - Launched **Safety First Every Day**  
- Defined & trained staff on BEEP tools & safety science >13,000  
- Robust root cause analysis  
- Began tracking and reporting serious safety events  
- Safety Star recognitions >200  
- Launched Daily Check-in and Safety Huddles  
- Tres Amigos faculty discussions  
- Safety Coach Program >175 | - Applying reliability principles to all domains of quality (STEEEP)  
- Vendor Alignment: Cerner  
- Chief Safety Officer  
- Robust PI methods, increasing PI capability  
- Integration of learners  
- Vendor/partner alignment  
- **STAR Service** |

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**VCU Medical Center**
LEADERS ACKNOWLEDGE ZERO IS THE GOAL

VISION:
To be America’s safest health system

GOAL:
Zero events of preventable harm to patients, team members, and visitors
NEW APPROACH TO QUALITY: HORIZONTAL INTERVENTIONS ACCELERATE VERTICAL TACTICS

Vertical Interventions
Process, Technology, Programs

Horizontal Interventions
Culture
Safety First Every Day
STAR Service

Culture
Behavior Expectations for Error Prevention (BEEP), STAR Service Behaviors & High Reliability Performance Management & Leadership Practices

Surgical Time-outs
Early Warning System
Sepsis Bundle
Handoff Process

... etc., etc...
Based upon the
Five Principles of High-Reliability Organizations

• 3 Principles of Anticipation  “Stay Out of Trouble”
  – Sensitivity to Operations
  – Preoccupation with Failure
  – Reluctance to Simplify (beware of simple answers to complex problems)

• 2 Principles of Containment  “Get Out of Trouble”
  – Commitment to Resilience
  – Deference to Expertise
NOT JUST SAFETY: RELIABILITY FRAMEWORK

VCU Medical Center Defines Quality as STEEEP:
• Safe
• Timely
• Efficient
• Effective
• Equitable
• Patient-Centered

Institute of Medicine’s six domains of quality.
LEADING HIGH RELIABILITY

1. Leaders Connecting, Messaging, Recognizing:
   – Explicit executive commitments, e.g., call the safety question, tie decisions to safety
   – Executive Safety Rounds
   – Daily Safety Check-Ins
   – Transparency
   – Orientation: New Team Member; Resident – “Walk the Walk”
   – Tres Amigos
   – Safety Fairs

2. Explicit Behavior Expectations: Safety 101/BEEP training >13,000 team members
   – Leaders reinforce desired behaviors: Safety Star recognition

3. Just Culture – Performance Management Decision Tree

4. Focus on System Failures through Robust Cause Analysis
1. Leaders Connecting to Frontline

Evidence-based, High-leverage [big impact, little time investment]

- See & be seen
- Connect to frontline operations
- “Round to Influence” and reinforce behaviors
- Daily Safety Check-in – 15 min., focused
TRANSPARENCY

• Safety event notifications emailed

• Safety event details discussed
  • With Board, Management Meetings, MEC, and staff via CNO Forums, Exec Rounds

• Published “Days Since Last SSE” prominently on Intranet
  • Daily Check-in
  • “Days Since Last” Fall, CLABSI, etc.

• Disseminate lessons learned case studies
NEW TEAM MEMBER ORIENTATION & RESIDENT “WALK THE WALK”
THE CRITICAL IMPORTANCE OF BEHAVIOR

1. **Tres Amigos**: messaging to faculty, calling out behavior that impacts staff willingness to speak up, question, escalate

2. **Code of Conduct**
   process redesign with School of Medicine: “BERT” (Behavioral Event Response Team)

3. **Speaking up for Safety**
   including escalation algorithms/requirements (limb ischemia)
2. **ESTABLISH HIGH-RELIABILITY EXPECTATIONS**

**Behavior Expectations for Error Prevention (BEEP)**

- **High-reliability performance expectations** – for error prevention in all types of work
- **Not** something else to do, but changes HOW we do our work
- 4-hour, interprofessional “Safety 101” training for all team members, physicians, leaders
- 13,000+ trained and continues for all new employees

### Behavior Expectations for Error Prevention

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<tr>
<th>Behaviors We Commit To</th>
<th>How We Do It</th>
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<tr>
<td><strong>Pay Attention to Detail</strong>&lt;br&gt;Focus on the task at hand to avoid unintended errors</td>
<td>• Self-Check Using STAR&lt;br&gt;Stop/Think/Act/Review</td>
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<tr>
<td><strong>Communicate Clearly</strong>&lt;br&gt;Ensure that we hear things correctly and understand things accurately</td>
<td>• 3-Way Repeat Backs &amp; Read Backs&lt;br&gt;• Ask &amp; Encourage Clarifying Questions&lt;br&gt;• Phonetic &amp; Numeric Clarifications&lt;br&gt;• SBAR for Effective Requests &amp; Handoffs&lt;br&gt;Situation/Background/Assessment/Recommendation or Request</td>
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<tr>
<td><strong>Have a Questioning Attitude</strong>&lt;br&gt;Think critically and follow expectations to ensure that our actions are the best</td>
<td>• Reflect &amp; Resolve&lt;br&gt;• Know &amp; Comply with Red Rules for Safety</td>
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<tr>
<td><strong>Accountability</strong>&lt;br&gt;Demonstrate a personal commitment to ourselves, our team members, and our patients</td>
<td>• Cross Check Each Other&lt;br&gt;• Encourage Safe Behavior Using 5:1&lt;br&gt;• Speak Up for Safety Using ARCC&lt;br&gt;• Ask a question/Make a Request/Voice a Concern/Use Chain of Command</td>
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REINFORCE THE DESIRED BEHAVIORS

SAFETY STARS

CEO recognition of staff for “every day” safe behaviors

In their work area, with their peers
Genneh Armstrong, Patient Service Representative III, demonstrated a questioning attitude and clear communication when a mother called to reschedule her child’s clinic appointment. Genneh reflected that there was a slight note of concern in the mother’s voice and resolved by asking clarifying questions of the mother to find out if her child was alright.

The mother stated her child would not wake up. Genneh escalated the call to the triage nurse, who had the mother call 911. Paramedics arrived and found the child had a dangerously low blood sugar; they were able to intervene to prevent serious harm. Genneh’s questioning attitude and quick actions resulted in the child receiving emergency care that proved to be life saving.
3. **JUST CULTURE: FAIR RESPONSE TO MISTAKES**

**VCUHS PERFORMANCE MANAGEMENT DECISION TREE**

One of keys to reliability is removing blame while maintaining appropriate accountability—holding individuals accountable for knowing violations but NOT for unintended human error.

**PMDT**© is a tool to guide leaders in distinguishing individual versus organizational accountability (system-driven).

- Helps guide manager thinking away from *who is to blame* to *why did the individual act this way*.
- Nationally recognized
Serious Safety Event Rate
Rolling 12-month rate of Serious Safety Events per 10,000 adjusted patient days

Days Since Last Preventable Lost Limb
1,239
As of Jun 1, 2015
That's >3 years

>50% reduction

*Serious Safety Event (SSE) = deviation from generally accepted practices that results in more than minimal/minor harm. Increased recognition/reporting expected in early culture transformation.
Results

Healthcare Associated Infections
Summary Metrics

Infections/1,000 patient days

86% reduction in healthcare associated infections in ICUs since 2003

Patient Falls with Injuries VCUHS

Contaminated Blood Cultures

75% reduction in contaminated blood cultures since 2003
SYSTEM FOCUS LEADS TO CREATIVE USE OF PEOPLE, PROCESS & TECHNOLOGY
RAM CARE

- Clinical effectiveness improvements to ensure that care is:
  - **R**eliable – deliver evidence-based care consistently
  - **A**ppropriate – deliver the right care at the right time
  - **M**easurable – able to track and monitor clinical, operational, and financial performance

- **Objective:** Reduce unwanted variation, delivering highly reliable best practice care.
- Leverages people, process, and technology.
EXTERNAL VALIDATION OF RELIABILITY JOURNEY

Winner of the 2014 AHA-McKesson Quest for Quality Prize

American Hospital Association – McKesson Quest for Quality Prize®
Hospitals in Pursuit of Excellence
The next leg of our journey...

- Integrate learners into quality and safety improvements
- Hired CSO/Associate Dean for Quality and Safety – Gene Peterson
- Teaching residents the science of improvement (e.g., PDSA)
- Resident-led projects underway:
  - Handoffs
  - Increasing safety event reporting
  - Communication with patients

Leadership Skills
Administrative Skills
Improvement Skills

Non-technical Skills: Decision Making, Task Management, Situational Awareness and Teamwork

Technical Skills: Medical Knowledge and Procedural Skills

Health System Responsibilities to Trainees
THE NEXT LEG OF OUR JOURNEY...

• Continue to challenge norms and historic practices to incorporate evidence-based best practice at every opportunity
• Further integrate patients and families into our high-reliability journey
• Continue vendor/partner alignment with high-reliability practices/principles
WHAT IS THE KEY TO SUSTAINABILITY?

Leaders leading ...

High reliability cannot be passively led.

Do not underestimate the difficulty of the lift.
RELIABILITY WATCH WORDS

- Obsession (with failure)
- Sweat the small stuff
- Build trust
- Challenge the status quo
- Situational awareness
- “Expected” complications
- Beware of simple solutions to complex problems
BY REACHING FOR PERFECTION, WE ACHIEVE EXCELLENCE.

Congratulations to our 10,200 team members for winning the 2014 American Hospital Association—McKesson Quest for Quality Prize®.

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