Addressing Behaviors that Undermine a Culture of Safety

Gerald B. Hickson, MD
Vanderbilt University Medical Center

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Gerald B. Hickson, MD
Sr. Vice President for Quality, Safety and Risk Prevention
Assistant Vice Chancellor for Health Affairs
Joseph C. Ross Chair in Medical Education & Administration

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Financial Disclosure

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Learning Objectives

Upon completion of this session, the participant will be able to:

- Discuss the relationships between behaviors that undermine a culture of safety and suboptimal outcomes.
- Identify a range of behaviors that undermine a culture of safety and describe a "professional accountability pyramid."
- Articulate the essential elements of an organizational infrastructure for addressing behaviors that undermine a culture of safety.

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Pursuing Reliability

Definition: "Failure free operation over time… effective, efficient, timely, pt-centered, equitable"

Requires:

– Vision/goals/core values
– Leadership/authority (modeled)
– A *safety* culture = willingness to report and address
  –Psychological safety
  –Trust

Joint Commission Resources

Institute of Medicine. *Crossing the Quality Chasm: A New Health System for the 21st Century*. Washington, DC: National Academies Press; 2001; Nolan et al. *Improving the Reliability of Health Care*. IHI Innovation Series. Boston: Institute for Healthcare Improvement; 2004; Hickson et al. Chapter 1: Balancing systems and individual accountability in a safety culture. In: Berman S., ed. *From Front Office to Front Line*. 2nd ed. Oakbrook Terrace, IL: Joint Commission Resources;2012:1-36.

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Professionalism and Self-Regulation

- Professionals commit to:
  - *Technical and cognitive competence*
- Professionals also commit to:
  - *Clear and effective communication*
  - *Being available*
  - *Modeling respect*
  - *Self-awareness*
- Professionalism promotes *teamwork*
- Professionalism demands *self- and group regulation*

Joint Commission Resources

Hickson GB, Moore IN, Pichert JW, Benegas Jr M. Balancing systems and individual accountability in a safety culture. In: Berman S, ed. *From Front Office to Front Line*. 2nd ed. Oakbrook Terrace, IL: Joint Commission Resources;2012:1-36.

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Checklists: The Keys to the Kingdom…

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But wait…

The NEW ENGLAND JOURNAL of MEDICINE — Urbach DR, et al. Introduction of surgical safety checklists in Ontario, Canada. N Engl J Med. 2014 Mar 13;370(11):1029-38.

- Policy: adoption of surgical checklists; Ontario
- Compared mortality, surg compl, readmission and ED visits before and after
- Results:
  - Adjusted risk of death **0.71% before** and **0.65% after**
  - Adjusted risk of surgical complications **3.86% before** and **3.82% after**

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Still more…

JAMA Surgery — Reames BN, et al. A Checklist-Based Intervention to Improve Surgical Outcomes in Michigan: Evaluation of the Keystone Surgery Program. JAMA Surg. 2015 Jan 14. doi: 10.1001/jamasurg.2014.2873. [Epub ahead of print].

- Keystone surgery: Checklist-based QI intervention
- 29 MI hospitals; half implemented, half did not
- Adjusted rates of surgical site infections, wound complications, and 30-day mortality.
- Results:
  - Surgical site infections (**3.2% before; 3.2% after**)
  - Wound complications (**5.9% before; 6.5% after**)
  - 30-day mortality (**2.1% before; 1.9% after**)

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I'm getting…

Surgical safety checklists are not associated with significant reductions in operative mortality or complications…

Not worth our time and effort?

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Case: "A Disturbance"

- **The following event was reported to you (an authority figure: Anesthesia Clinical Director, Section Chief or Department Chair) through your electronic event reporting system. Policy defines that you review and follow up.**
  - Nurse X (Surgical Circulator) attempted to call a time out prior to start of a [procedure] on patient, Jane Doe, age 5.
  - Team members did not acknowledge… participated in side conversations and continued prepping…

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Case: "A Disturbance"

- Nurse X tried again
- Dr. Surgeon interrupted, "I think we are all on the same page here…could we please begin," and continued a conversation.

Threat to safety?

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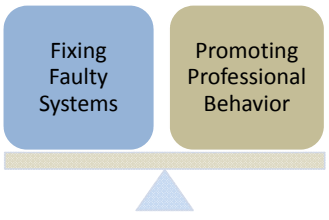
The Right Balance



Joint Commission Resources — Hickson GB, Moore IN, Pichert JW, Benegas Jr M. Balancing systems and individual accountability in a safety culture. In: Berman S, ed. From Front Office to Front Line. 2nd ed. Oakbrook Terrace, IL: Joint Commission Resources; 2012:1-36.SIU

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What are behaviors that undermine a culture of safety?

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Definition of *Behaviors That Undermine a Culture of Safety*

Interfere with ability to achieve intended outcomes

Create intimidating, hostile, offensive (unsafe) work environment

Threaten safety *(aggressive or violent physical actions)*

Violate policies *(including conflicts of interest and compliance)*

It's About **Safety**

Excepts from Vanderbilt University and Medical Center Policy #HR-027, 2010

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Why are we so hesitant to act?

What barriers exist?
vs.
Why bother acting?

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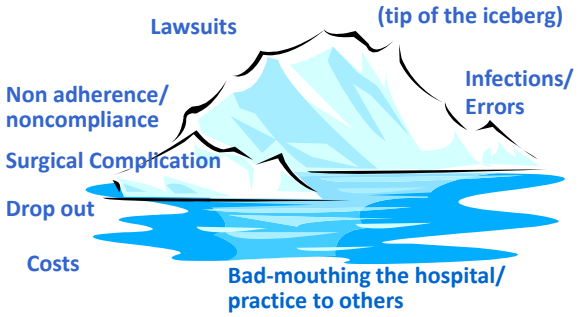
Consequences of Unsafe Behavior: Patient Perspective



Felps W, et al. How, when, and why bad apples spoil the barrel: negative group members and dysfunctional groups., *Research and Organizational Behavior*. 2006; 27:175-222.

Failure to Address Behaviors that Undermine a Culture of Safety

Leads To:

- **Adoption of unprofessional conduct**
- **Lessened trust, lessened task performance** *(always monitoring disruptive person)*
- **Threatened quality and patient safety**
- **Withdrawal**

Felps W et al. How, when, and why bad apples spoil the barrel: negative group members and dysfunctional groups. Research and Organizational Behavior. 2006;27:175-222.

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Respect, trust and team performance

Our latest work:
Patient Complaints & Surgical Outcomes

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Patient Complaints

Clear and Effective Communication

Dr. __ did a very poor job of communicating. He raced through an explanation of what we should expect, then left without giving us a chance to get clarification.

Respectful

Dr. __ didn't listen to me. Dr. __ interrupted me while I was explaining my symptoms and said, "I got it. I already know all I need to know…"

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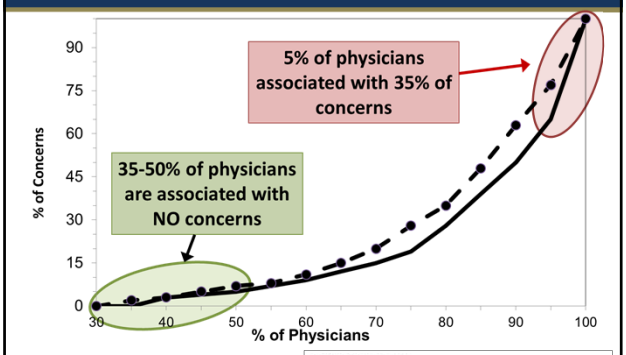
Academic vs. Community Medical Center Physicians



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NSQIP and Pt Complaints

Question: Do Periop Risk Factors moderate the relationship between Patient Complaints and Surgical Outcomes?

Risks: Preop Risk Factors	Patient Complaints: Comp Categories	Outcomes: Surgical Occurrences
ASA Class	Care & Treatment	Intraoperative
Priority Status	Communication	Wound
Wound Class	**Concern for Pt/Family**	Urinary
	Accessibility	CNS
	Billing w/C&T concern	Respiratory
		Other

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Results: Significant relationships between Occurrences & Complaints

- 66 surgeons; 10,536 procedures
- Correlations between pt complaints and occurrences:

Occurrences	Correlation with Patient Complaints
Intraoperative	0.58, p<.001
Wound	0.60, p<.001
Urinary	0.61, p<.001
Respiratory	0.59, p<.001
Other	0.55, p<.001

The relationship is moderated by perioperative risk

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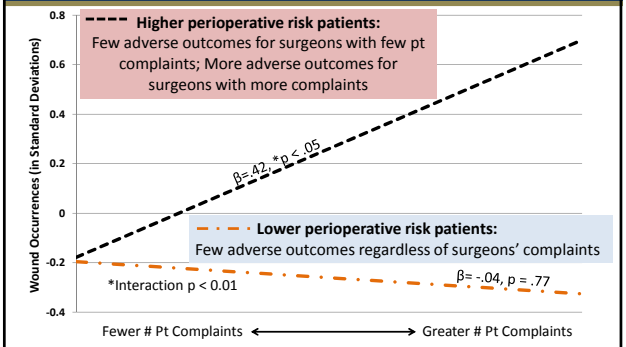
Patient Complaints Moderate the Relationship Between Risk Factors and Surgical Outcomes *



*Wound depicted, same pattern for Urinary, Intraoperative, and Respiratory Occurrences
Analysis controls for # cases sampled. Catron, Guillamondegui et al. Submitted, 2014

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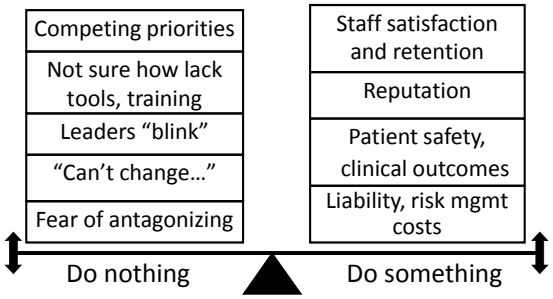
The Balance Beam



Studer Group and Vanderbilt Center for Patient and Professional Advocacy, Unprofessional Behavior in Healthcare Study, June 2009; Hickson GB, Pichert JW. Disclosure and apology. In: National Patient Safety Foundation Stand Up for Patient Safety Resource Guide, 2008; Pichert JW, Hickson GB, Vincent C: Communicating about unexpected outcomes and errors. In: Carayon P, ed. Handbook of Human Factors and Ergonomics in Healthcare and Patient Safety. 2007.

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To "do something"
requires more than a commitment to professionalism and personal courage.

It requires a plan
(people, process and technology).

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Critical Elements

Key Factors	Domains
People	▪ Committed leadership, modeled authority ▪ Dedicated project champions ▪ Engaged implementation team(s)
Policies and Procedures	▪ Clearly articulated organizational values, aligned goals ▪ Enforceable policies, procedures tied to expectations ▪ Sufficient and appropriate resources to achieve goals ▪ Model for tiered interventions
Performance Data & Reviews	▪ Robust measurement, surveillance tools, data ▪ Processes for thoughtful, reliable data reviews ▪ Multi-level training about philosophy, skills, accountability

Hickson GB, Pichert JW, Webb LE, Gabbe SG. A complementary approach to promoting professionalism: Identifying, measuring and addressing unprofessional behaviors. Acad Med. 2007 Nov;82(11):1040-1048. Hickson GB, Moore IN, Pichert JW, Benegas Jr M. Chapter 1: Balancing systems and individual accountability in a safety culture. In: Berman S, ed. From Front Office to Front Line. 2nd ed. Oakbrook Terrace, IL: Joint Commission Resources;2012:1-36.

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Policies will not work if behaviors that undermine a culture of safety go unobserved, unreported and unaddressed

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What Are "Surveillance Tools"?

- Risk Event Reporting System
- Patient Relations Department
- Staff Concerns
- Hand Hygiene Performance
- Surgical Bundle Compliance

Hickson GB, Moore IN, Pichert JW, Benegas Jr M. Chapter 1: Balancing systems and individual accountability in a safety culture. In: Berman S, ed. *From Front Office to Front Line*. 2nd ed. Oakbrook Terrace, IL: Joint Commission Resources;2012:1-36.

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Reports of Unprofessional Behavior

RN: Dr. __ entered the room without foaming in…proceeded to touch area with purulent drainage…I offered a pair of gloves…he took them and dropped them into the trash can

Anesth: Dr. __ rushed…said to team setting up for surgery, "*Let's get going. Skip all the extra business and get the patient in here…*"

RN: In the OR, the team attempted to perform a 'time out'. Dr. __ asked everyone to 'listen carefully,' then began whistling a tune…it was the Mickey Mouse Club theme song.

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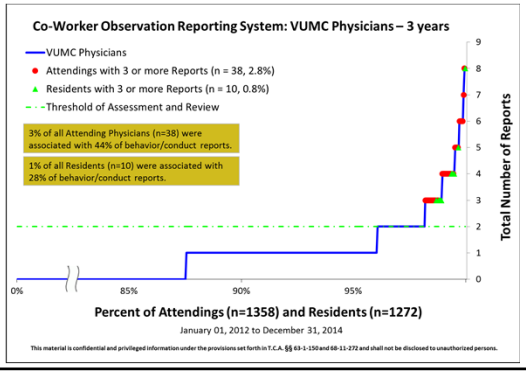
Co-Worker Professionalism Reports about VUMC Physicians over a 3 Year Period



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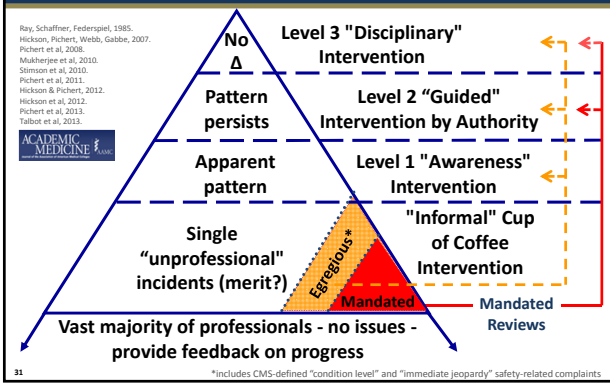
Promoting Professionalism Pyramid



*includes CMS-defined "condition level" and "immediate jeopardy" safety-related complaints

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Does any of this really work?

- Improves physicians' prescribing, clinical decision making[1]
- Reducing malpractice claims and expenses: By greater than 70%[2]
- Improving hand hygiene practices: From 50% to greater than 95% compliance[3]
- Addressing behaviors that undermine a culture of safety[4]

[1]Schaffner W, et al. JAMA 1983;250:1728-1732; Ray WA, et al. Am J Public Health 1987;77:1448-1450; Greco PJ, Eisenberg JM. New Engl J Med 1993;329:1271-1273
[2]Hickson et al. JAMA. 2002;287(22):2951-57; Hickson et al. South Med J. 2007;100(8):791-6; Pichert et al. In: Henriksen et al, editors. AHRQ; 2008: 421-30; Hickson & Pichert. In: Youngberg, editor. Jones and Bartlett Publishers; 2012: 347-68; Pichert et al. Jt Comm J Qual Patient Saf. 2013;39(10):435-46.
[3]Talbot et al. Infect Control Hosp Epidemiol. 2013; 34: 1129-36
[4]Dmochowski et al. Manuscript in preparation, 2014

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Incurred Expense By Risk Category

Predicted Risk Category*	# (%) Physicians	Relative Expense*	% of Total Expense	Score (range)
1 (low)	**318 (49)**	**1**	**4%**	**0**
2	147 (23)	6	13%	1 - 20
3	76 (12)	4	4%	21 - 40
4	52 (8)	42	29%	41 - 50
5 (high)	**51 (8)**	**73**	**50%**	**>50**
Total	644 (100)		100%	

* In multiples of lowest risk group

Moore, Pichert, Hickson, Federspiel, Blackford. *Vanderbilt Law Review*. 2006.

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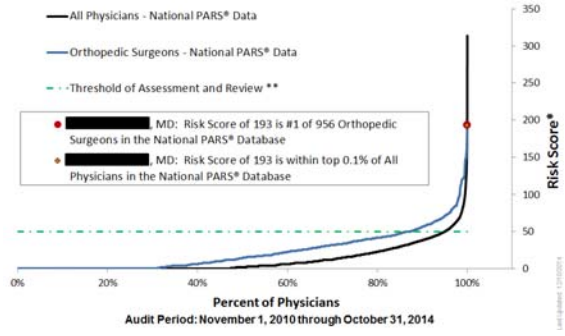
Comparison With Peers Using National PARS® Data



*Stimson CJ et al. Medical malpractice claims risk in urology. *J Urol*. 2010 May;183(5):1972-1976
**Moore IN et al. Rethinking peer review. *Vanderbilt Law Review*. 2006 May 1;59:1175-1206.

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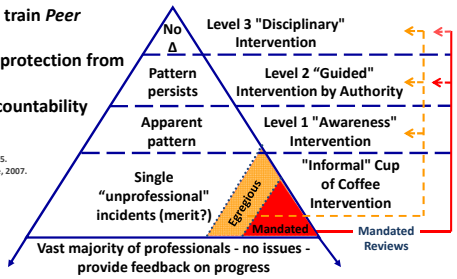
The PARS® Process

Share comparative feedback with tiered interventions using the *Pyramid for Promoting Reliability and Professional Accountability.*

- Identify and train *Peer Messengers*
- Position for protection from discovery
- Promote accountability



References
- Ray, Schaffner, & Federspiel, 1985.
- Hickson, Pichert, Webb, & Gabbe, 2007.
- Pichert et al, 2008.
- Mukherjee et al, 2010.
- Stimson et al, 2010.
- Pichert et al, 2011.
- Hickson et al, 2012.
- Pichert et al, 2013.
- Talbot et al, 2013.

Adapted from Hickson, Pichert, Webb, & Gabbe. Acad Med. 2007. ©2013 Vanderbilt Center for Patient and Professional Advocacy

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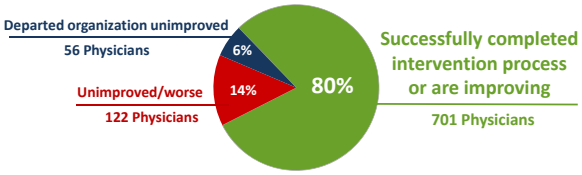
Since FY 2000, PARS® has identified 1160 U.S. physicians as high risk

Total # of high-risk physicians to date	**1160**
Departed before 12 month follow up	**(95)**
First follow-up will be in 2015	**(186)**
	879 with follow-up data



Joint Commission Journal article honored with ABIM Foundation Professionalism Article Prize
"An Intervention Model that Promotes Accountability: Peer Messengers and Patient/Family Complaints"
by James W. Pichert, Ilene N. Moore, Jan Karrass, Jeffrey S. Jay, Margaret W. Westlake, Thomas F. Catron and Gerald B. Hickson.

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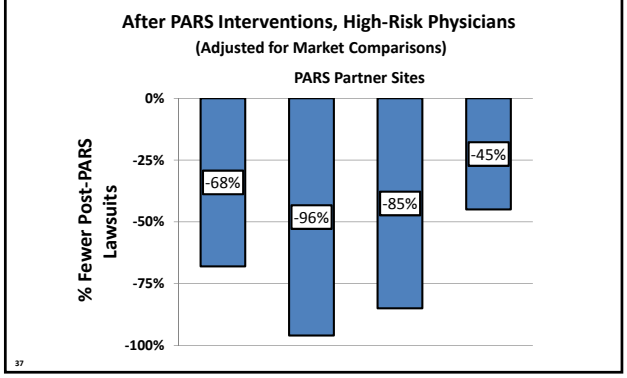
Malpractice Lawsuits Per 100 Physician Years



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But it is not just about individual performance…

Consider the following challenge…

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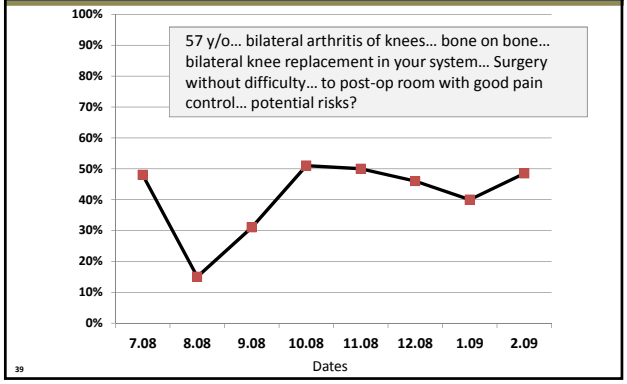
VUMC Hand Hygiene Adherence (%) July 2008 – February 2009



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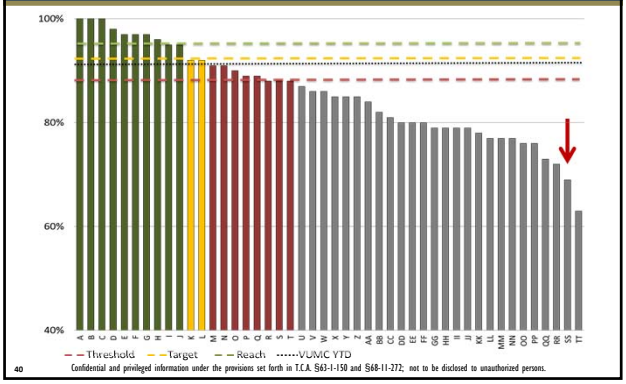
VUH Unit Hand Hygiene Compliance July 1, 2010 – November 30, 2011



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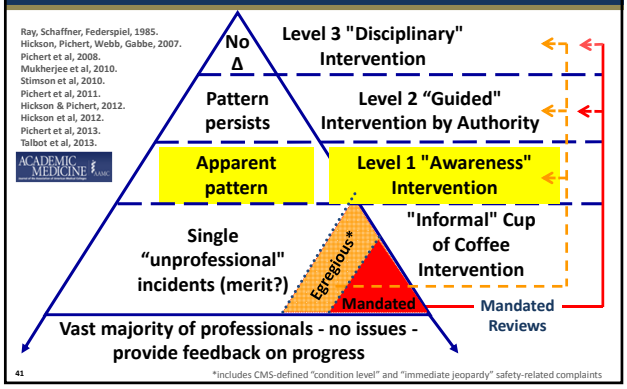
Promoting Professionalism Pyramid



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Awareness Letter

We are all committed to minimizing the risk of healthcare-associated infections. Performing hand hygiene is the most important action we can take to reduce the spread of these infections to our patients and ourselves. For FY11, VUMC's reach goal for hand hygiene is 95% compliance.

For November 2010, ***your area's*** **compliance rate was 35%, and for FY11-to-date, 47%.**

A member of our Pillar Goal Committee team will contact you to schedule a time to meet so we may partner in achieving increased hand hygiene in your area.

Bold, red font for demonstration only

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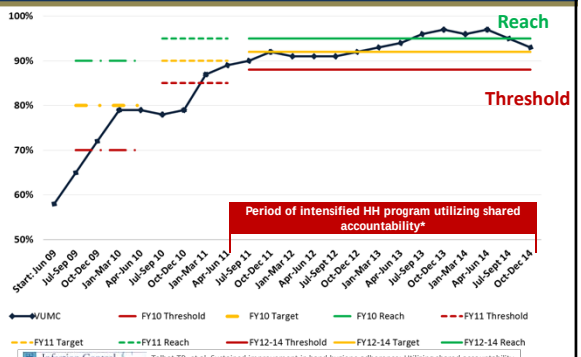
VUMC Quarterly HH Compliance June 2009 – December 2014



Infection Control Hospital Epidemiology

Talbot TR, et al. Sustained improvement in hand hygiene adherence: Utilizing shared accountability and financial incentives. Infect Control Hosp Epidemiol. 2013; 34(11, Nov): 1129-1136

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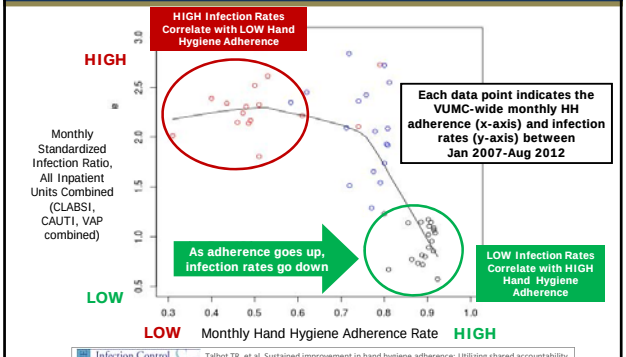
Hand Hygiene Improvement Strongly Correlates with Low Infection Rates



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Estimated Infection Control Impacts Following Interventions to Promote Accountability

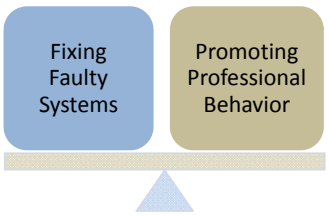
Infect-ion	FY10 Pre HH Interv. (baseline)	FY11-13 Expected # Infect'ns	FY11-13 Actual # Infect'ns	# Fewer Infect'ns Over 3 Yrs	Mean Attrib Cost/ Infection*	Est. 3-Yr Savings
Clabsi	172	516	138	378	$22K	$8.3MM
VAP*	151	302	132	170	$24.5K	$4.2MM
SSI	298	894	669	225	$19K	$4.3MM
CAUTI-ICU	111	333	248	85	$1.5K	$0.1MM
		Estimated Savings		**858 infections**		**$16.9MM**

*VAP Surveillance ended mid-FY13

Estimates based on data in: Perencevich, et al. SHEA Guideline. Raising standards while watching the bottom line: Making a business case for infection control. Infect Control Hosp Epidemiol. 2007;8:1121-1133.

45

So before you throw away your checklist…



Joint Commission Resources

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- Professionalism demands *self- and group regulation*

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Let Us Hear Your Comments and Questions

Now or Later

www.mc.vanderbilt.edu/cppa

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