



## Walk This Way

Key Steps to an Effective  
Patient Safety Culture

crico

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# What Are Your Obstacles? And How to Remove Them

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*Gerald B. Hickson, MD,  
Vanderbilt University Medical Center*



# Promoting Professionalism: Addressing Behaviors that Undermine a Culture of Safety, Reliability, and Accountability

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Assistant Vice Chancellor for Health Affairs

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## **Sometimes you just recognize a disturbance in the force...**

- **A few seemingly random notices of claim...**
- **A bump in unsolicited patient complaints**
- **A few staff complaints**



# 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

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.



# Professionalism and Self-Regulation

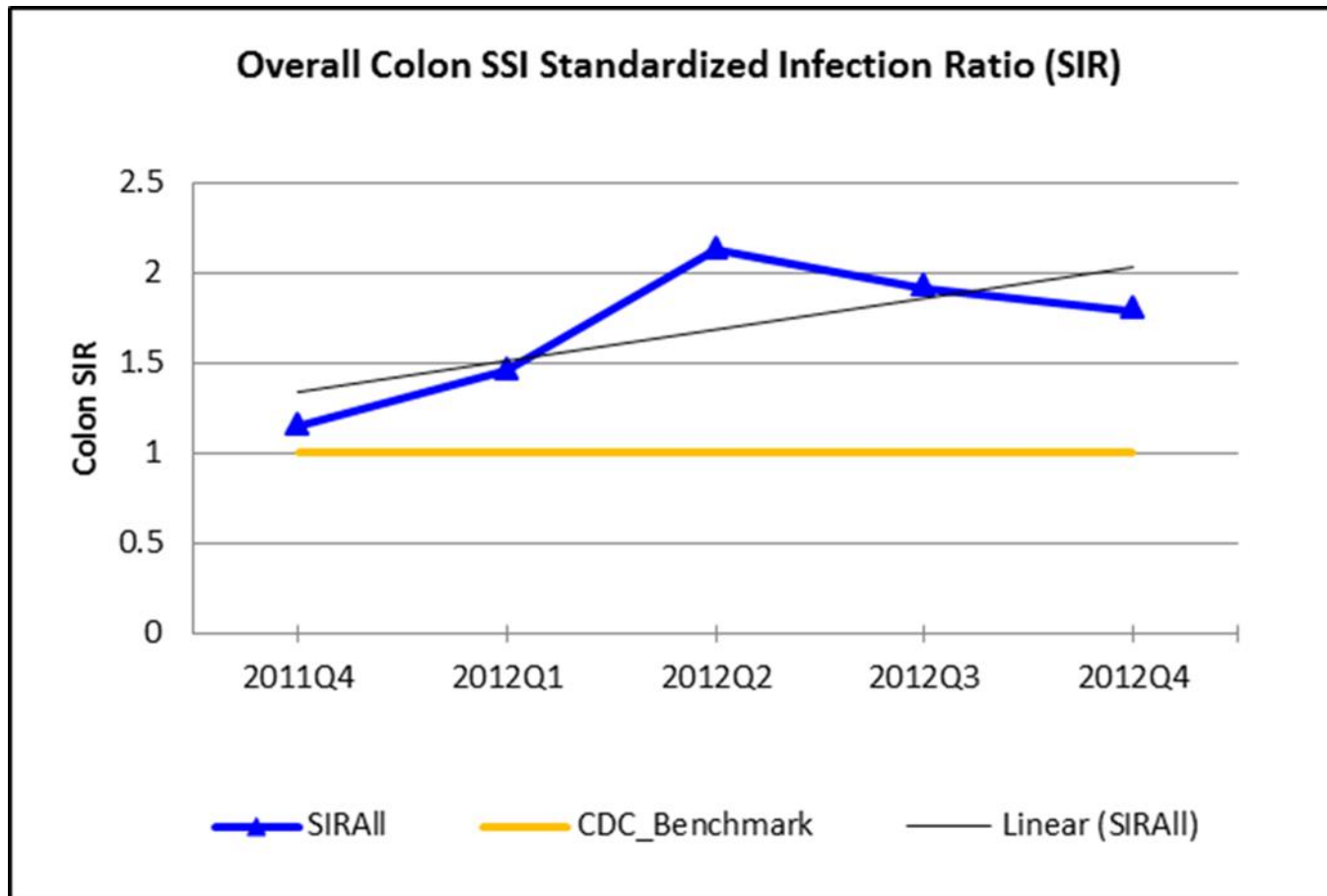
- Professionals commit to:
  - *Technical and cognitive competence*
- Professionals also commit to:
  - *Clear and effective communication*
  - *Being available*
  - *Modeling respect*
  - *Self-awareness*
- Professionalism promotes *teamwork*
- Professionalism demands *self- and group regulation*

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.



# What data exists...

## Post-op infection rates above the national average





# Response: We need a plan

- A multidisciplinary team was charged to assess and evaluate:
  - Current performance
  - Opportunities for improvement
  - Plan development

Project Bundle Rating Scale		Need (1)	Actively developing (2)	Strength (3)	Comments
People	Leadership Commitment			3	
	Dedicated Team		2		Seeking VUH data analyst to join team.
	Champion			3	
Organization	Alignment with Goals			3	
	Policies			3	
	Model for Interventions and Planning			3	
	Resources for Teams			3	
	Measurement and Surveillance Tools			3	
Learning System	Process to Review Data		2		Working to add results to Quality Dashboard.
	Multi-level Professional Training		2		Developing training and roll-out.
			2		
<b>Sum columns</b>		A 0	B 6	C 21	<b>Project Score Guide:</b> > 2.3 : High likelihood of success. 1.9 - 2.3 : Needs additional development < 1.9 : High risk of failure
<b>Project Score ( column total (A+B+C)/10 )</b>				<b>2.7</b>	

**Scoring Rubric**  
 1 (Need) = Not in place, Not confirmed, Conflict exists  
 2 (Actively developing) = Creates some concern, Could be inadequate  
 3 (Strength) = Fully developed, All key pieces in place

**Step 1:** With your team, score the current status of each item using the 3 point scale.

**Step 2:** Add up all of your item scores and divide the total by 10.

**Step 3:** Compare score to the Project Score Guide.

**DRAFT**





# The Plan: Colorectal Bundle

Standardization of care for the colon surgery patient:

- Communication of expectations
- Evidence-based 'Best Practice' bundle 9 elements:
  - bowel prep
  - wound protector
  - change gown and gloves
  - etc.
- Education across service lines
- Ongoing monitoring and compliance measurement
- Monthly review and analysis of surgical site infection
- **Problem Solved**



**So everyone responded in a professional way?**

Well not exactly



# An Opportunity? Insight?

From electronic event reporting system:

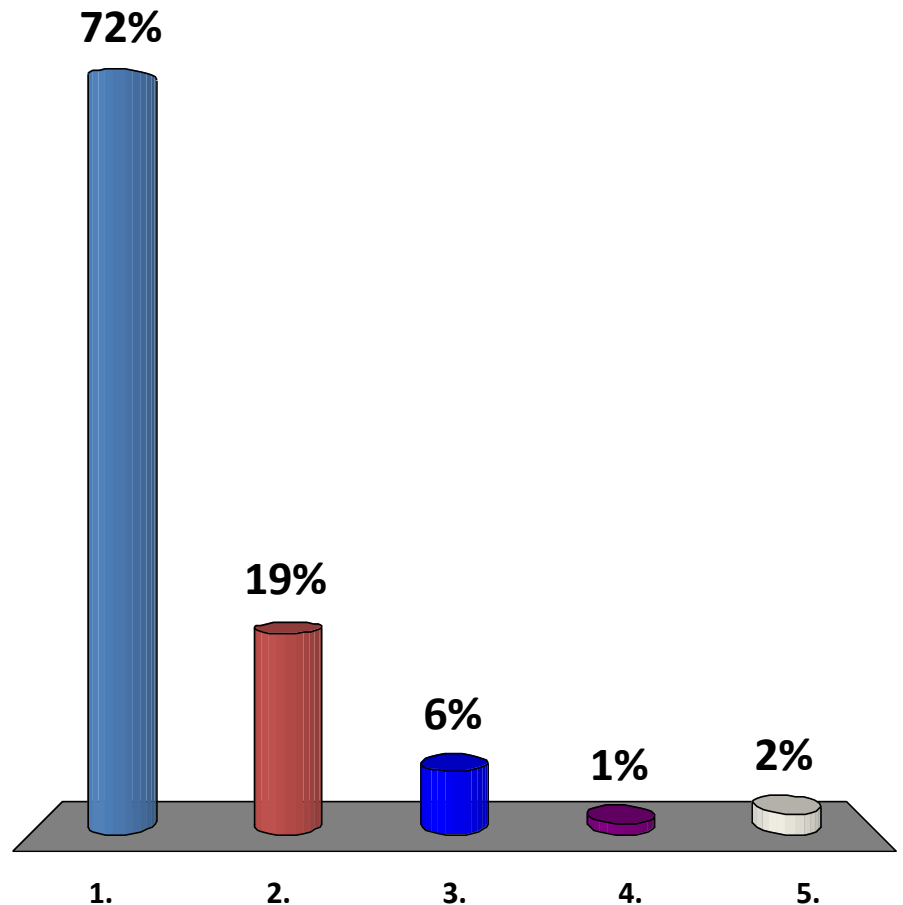
A nurse reports... Dr. XX was performing a transverse colon resection. I stated, “Dr. XX, you need to re-gown per our colorectal bundle”.

Dr. XX replied, “I don’t agree with that element of the bundle and I’m not stopping now to change gowns and gloves.” Dr. XX continued with procedure.



# Does the reported behavior represent a threat to safety?

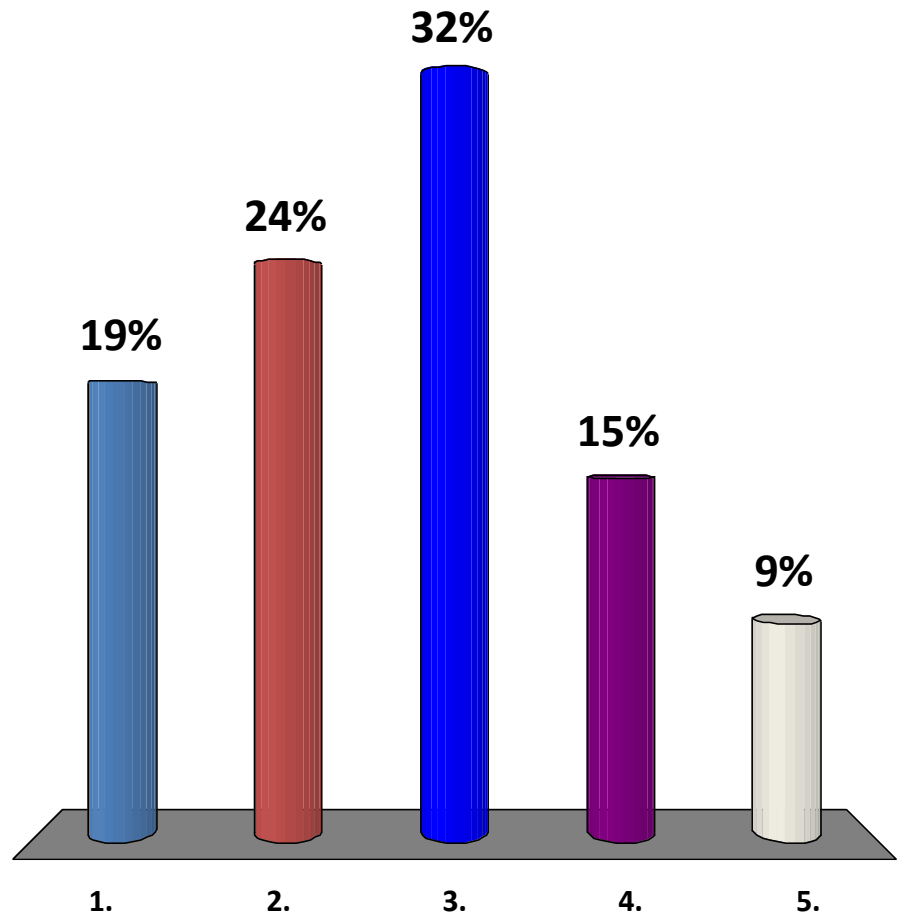
1. Strongly Agree
2. Agree
3. Uncertain
4. Disagree
5. Strongly Disagree





In your microsystem, what % of the time would someone report this event to a responsible party or through an established event reporting system?

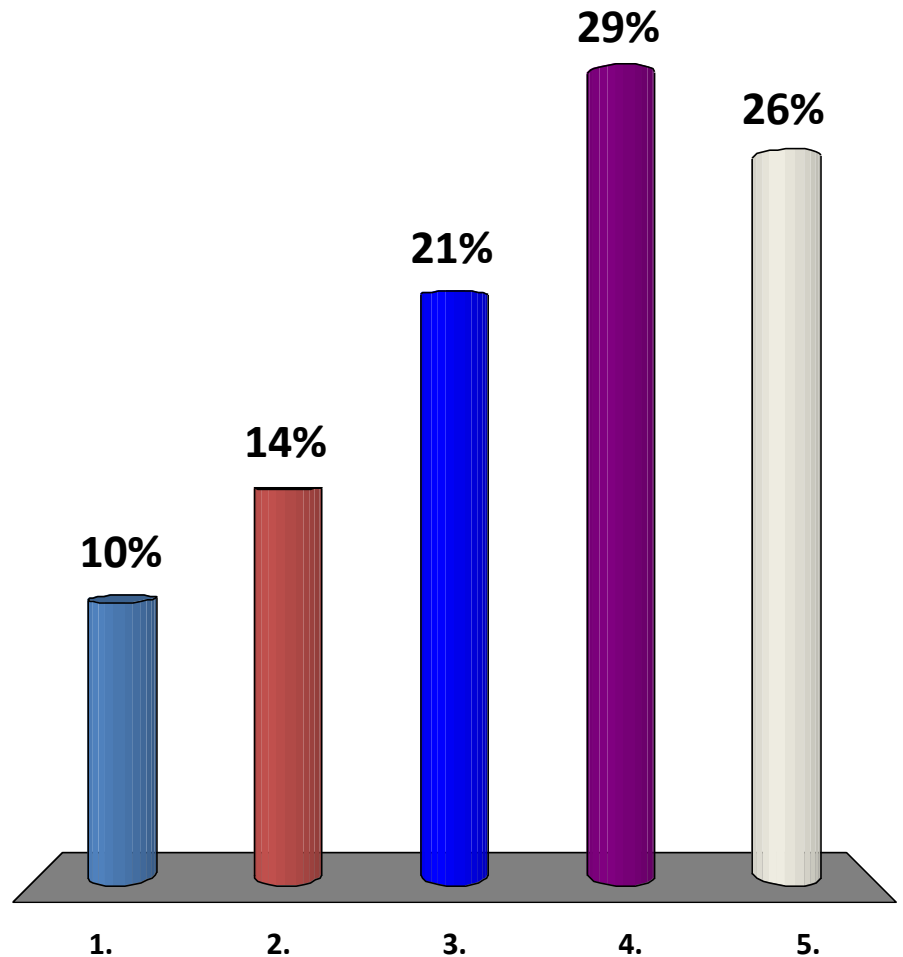
1. 0%-20%
2. 20%-40%
3. 40%-60%
4. 60%-80%
5. 80%-100%





# If reported, what % of time would a leader have a conversation with Dr. X?

1. 0%-20%
2. 20%-40%
3. 40%-60%
4. 60%-80%
5. 80%-100%





# The Critical Question

Do you have a  
reliable and nimble plan to address Dr. X?  
If not, you have a problem.

**You need a plan (people, process and  
technology).**



# Infrastructure for Promoting Reliability & Professional Accountability (PA)

1. Leadership commitment (will not blink)
2. Goals, a credo, and supportive policies
3. Surveillance tools to capture observations/data
4. Processes for reviewing observations/data
5. Model to guide graduated interventions
6. Multi-level professional/leader training
7. Resources to address unnecessary variation
8. Resources to help affected staff and patients

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.





# Definition of *Behaviors That Undermine a Culture of Safety*

**Interfere with ability  
to achieve intended  
outcomes**

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Create intimidating,  
hostile, offensive (unsafe)  
work environment

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Threaten safety  
*(aggressive or violent  
physical actions)*

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

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*It's About* **Safety**



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



# Reports of Unprofessional Behavior

**RN:** ...refused to do a time out before surgery, .... said, *"We're all on the same page here."*

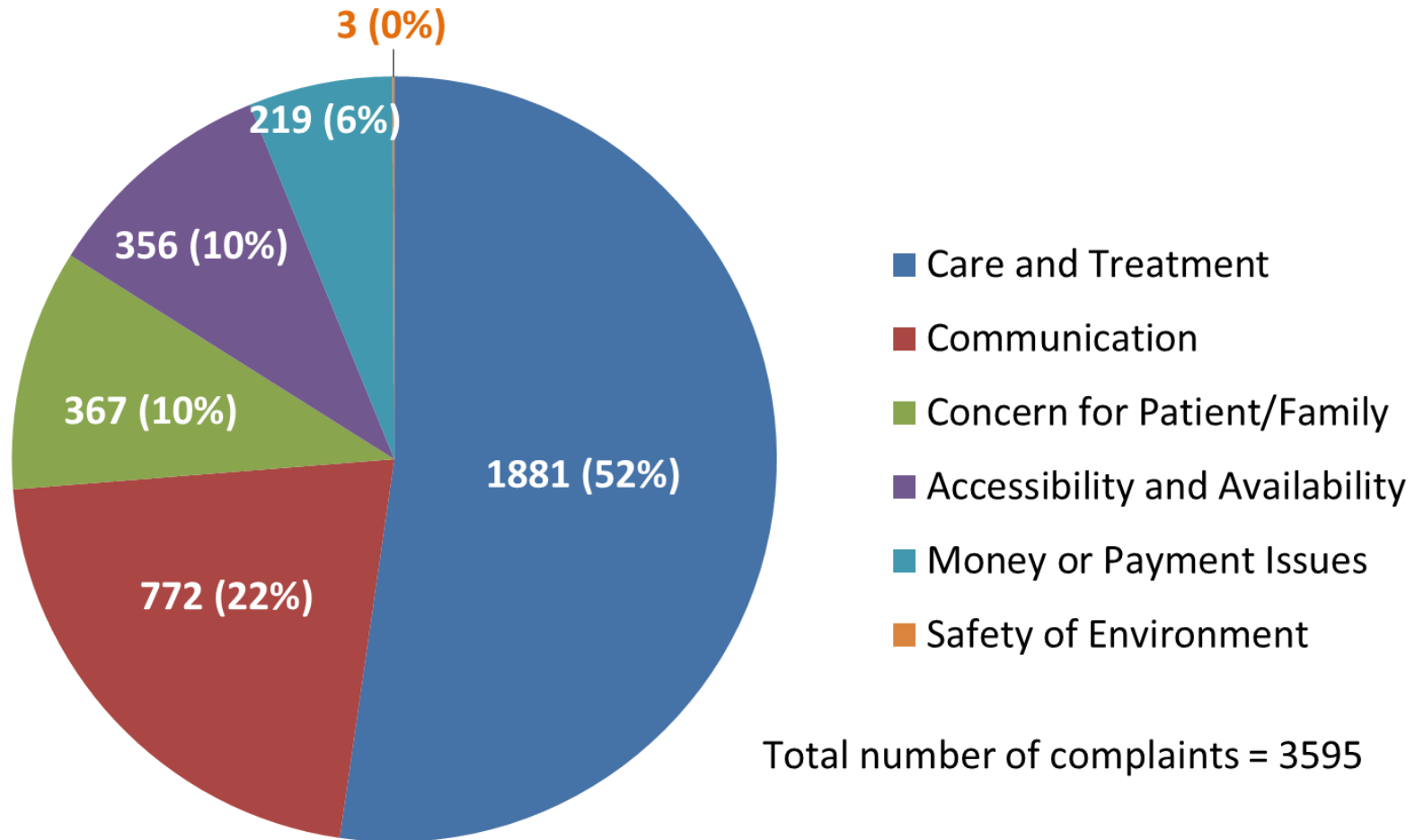
**Patient:** Dr. \_\_\_ misdiagnosed condition. Did no biopsy to make sure he was treating what he thought he was treating.

**RN:** Dr. XX replied, "I don't agree with that element of the bundle and I'm not stopping now to change gowns and gloves."



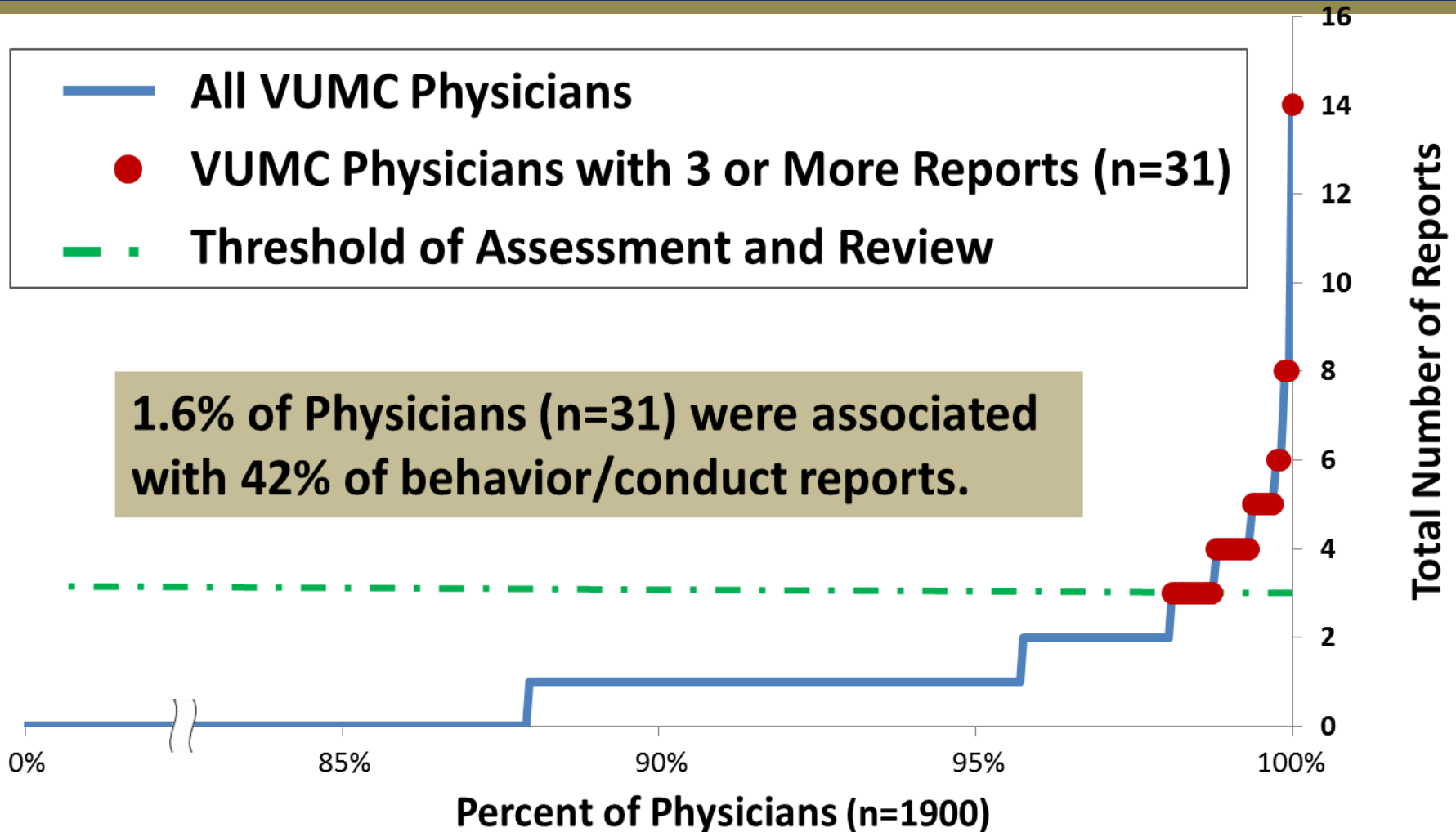
# VUMC Complaints by Type

## Jan 1, 2013 – Dec 17, 2013





# Staff Professionalism Reports about VUMC Physicians – 3 years



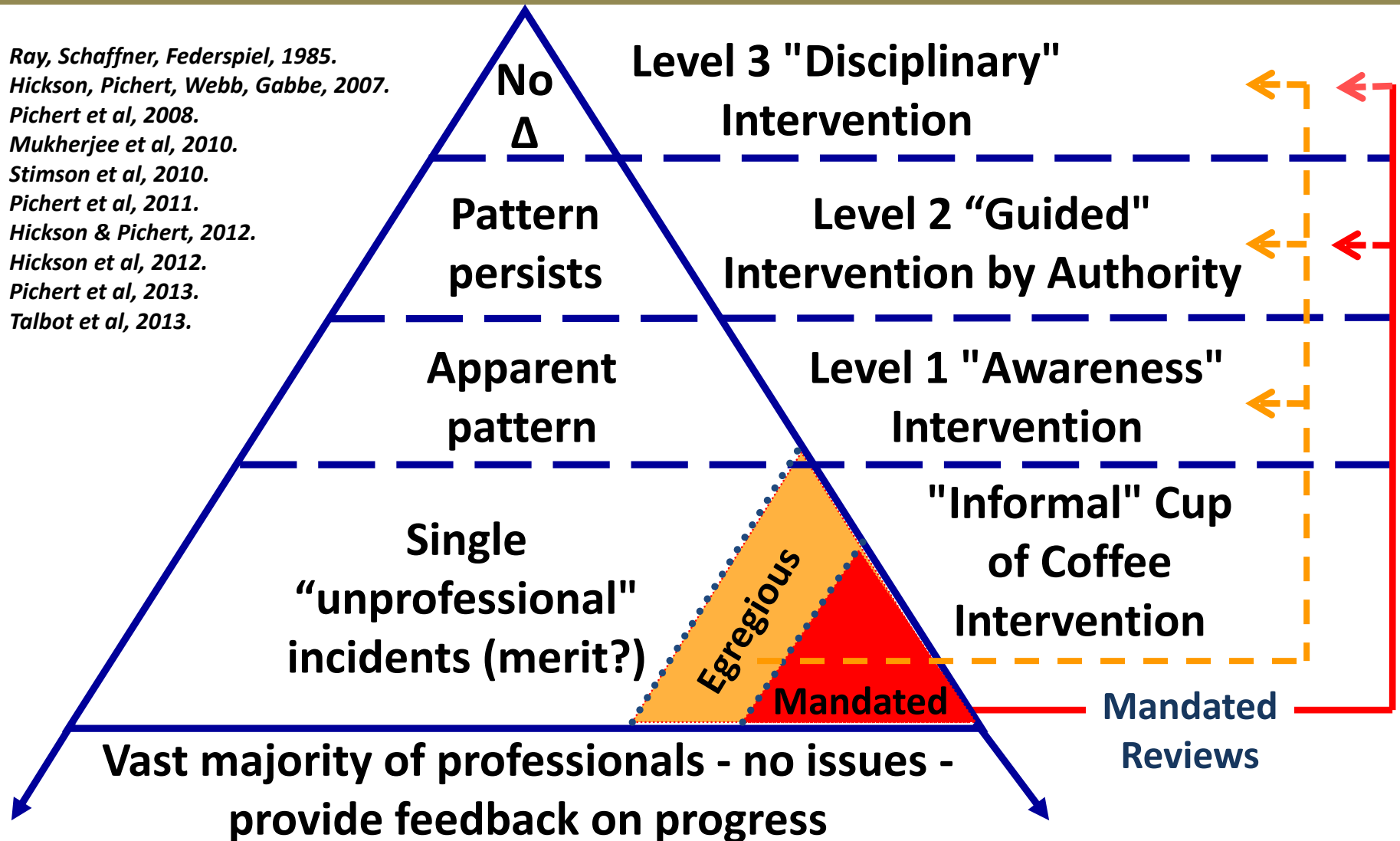
Audit Period: March 1, 2011 – February 28, 2014

This material is confidential and privileged information under the provisions set forth in T.C.A. §§ 63-1-150 and 68-11-272 and shall not be disclosed to unauthorized persons.



# Promoting Professionalism Pyramid

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 & Pichert, 2012.  
Hickson et al, 2012.  
Pichert et al, 2013.  
Talbot et al, 2013.





**So we need to sit down and  
share a cup of coffee with...**



# Med Mal Research Background Summary

- 1-6%+ hosp. pts injured due to negligence
- ~2% of all pts injured by negligence sue
- ~2-7 x more pts sue w/o valid claims
- Non-\$\$ factors motivate pts to sue
- **Some physicians attract more suits**
- **High risk today = high risk tomorrow**

Sloan et al. JAMA 1989;262:3291-97; Brennan et al. NEJM 1991;324: 371-376; Hickson et al. JAMA 1992;267:1359-63; Bovbjerg & Petronis. JAMA 1994;272:1421-26; Hickson et al. JAMA 1994;272:1583-87.





# Patient Complaints

While asking Dr. \_\_\_ about my diagnosis, he responded that my questions were annoying...wouldn't listen and kept speaking over me...

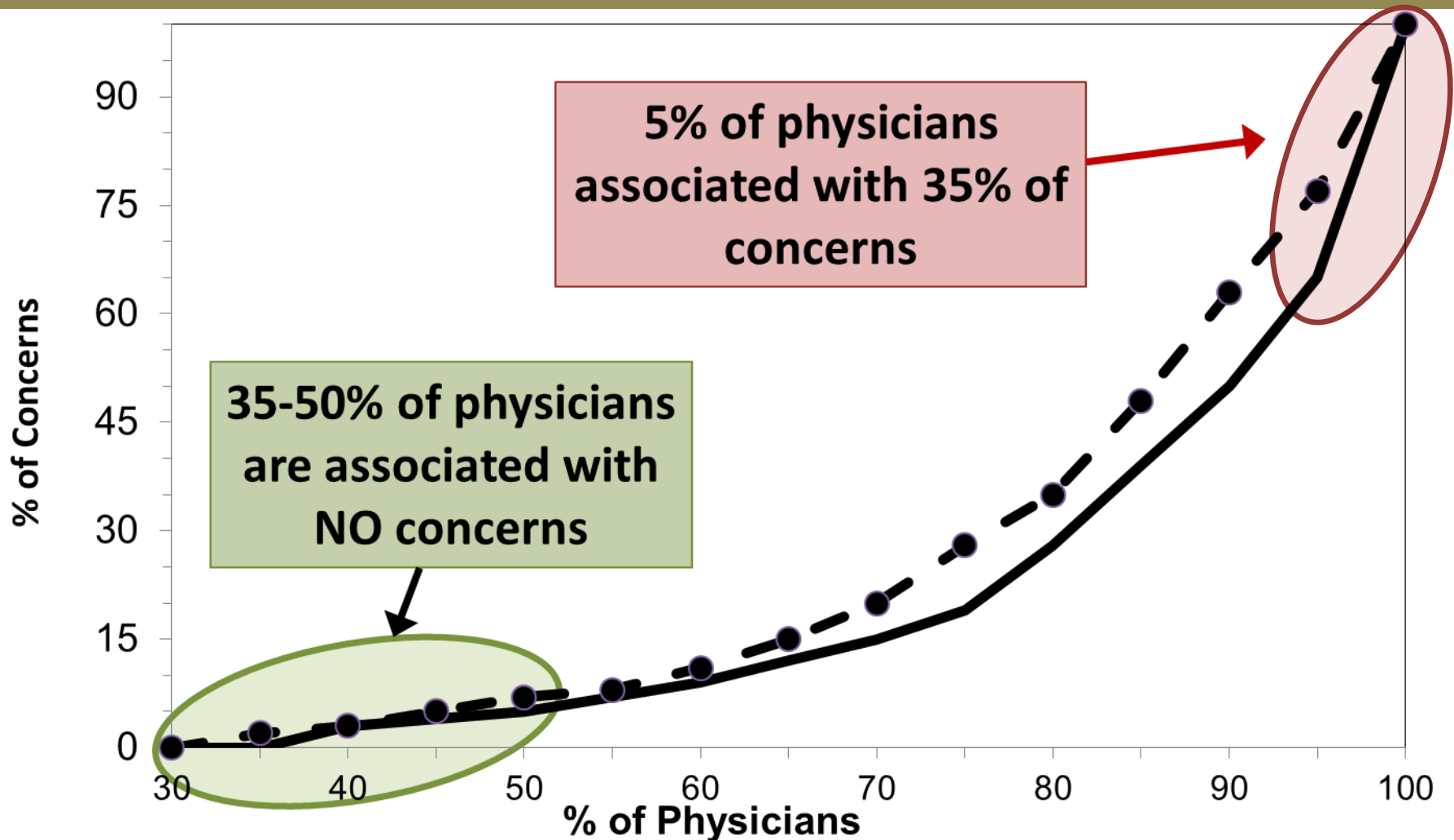
We were so rushed that Dr. \_\_\_ couldn't even explain why they were recommending this treatment plan for my mom over other types of treatments...unacceptable...

Dr. \_\_\_ left me, walked down hall, said to nurse, *"This pt has completely fouled up my day... give her some info, and get her out of here."* I heard everything Dr. \_\_\_ said.



# Academic vs. Community Medical Center Physicians

— Academic Med Ctr    ● Community Med Ctr



Hickson GB et al. *JAMA*. 2002;287(22):2951-7. Hickson GB et al. *So Med J*. 2007;100:791-6.



# Incurred Expense By Risk Category

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

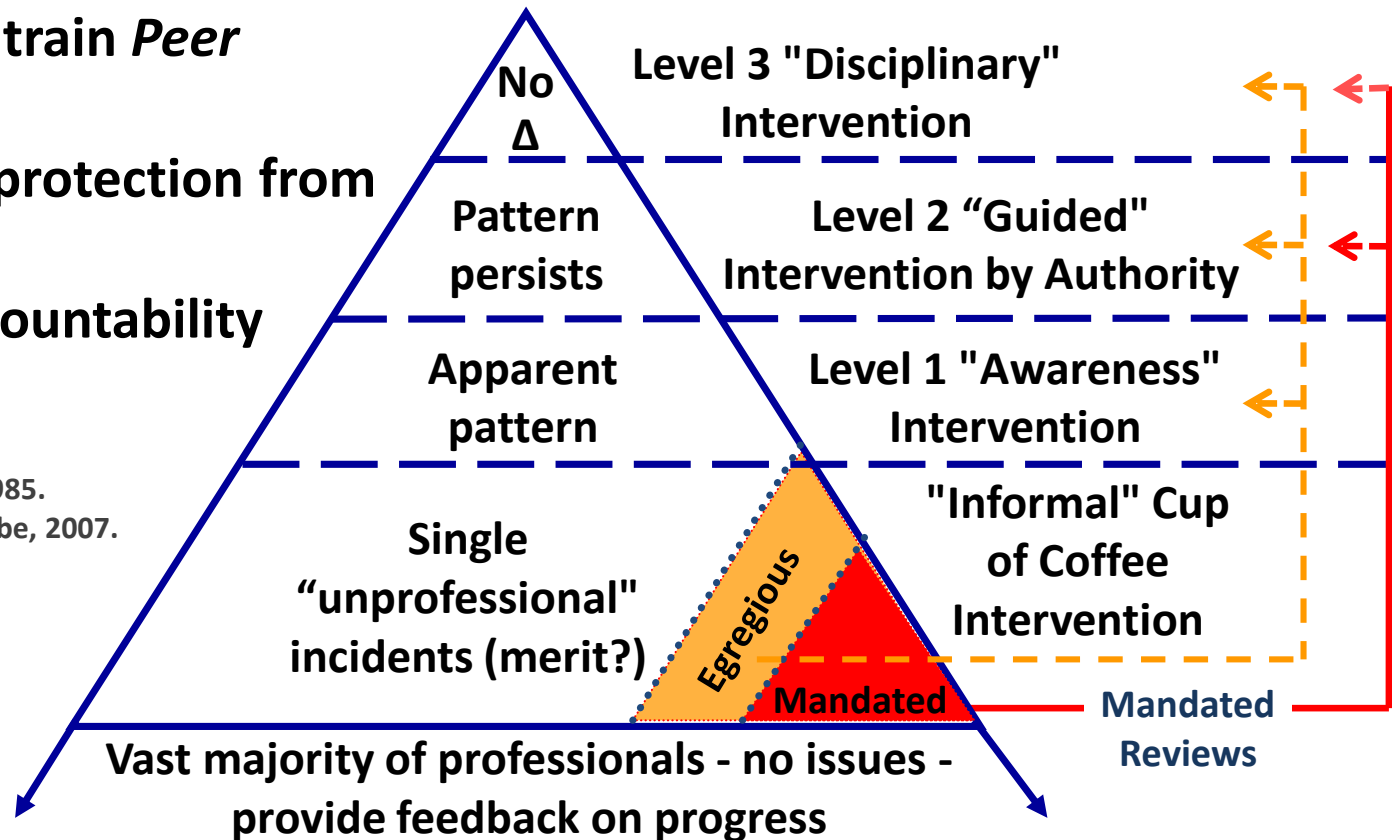
\* In multiples of lowest risk group



# The PARS<sup>®</sup> 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.



# Sample Letter to High-Risk Colleague: Rationale and Standings

February 3, 2014

To: XX, MD

From: Patient Complaint Monitoring Committee  
XXX Health System

Re: Patient Complaints

XX, MD, chair of the Patient Complaint Monitoring Committee (PCMC), has asked me to provide feedback to XX Health System (XXX) physicians who have been associated with relatively high numbers of patient complaints, as reported to the Service Excellence Department. A recent analysis of XXX patient complaints places you among this group of physicians. I would like to share with you the complaint data with which you have been associated. Please be assured I am coming to you as a peer in a spirit of confidential, collegial awareness.

Patient complaints are monitored for several reasons. Patient satisfaction is integral to achieving quality and safety in health care. In contrast, dissatisfaction undermines patient adherence with medical treatment plans, outcomes of care, and patients' willingness to stay with a practice. Furthermore, physicians associated with high numbers of complaints are at increased risk for medical malpractice claims.

XXX is committed to providing the best possible combination of technical and interpersonal patient care, fostering a safe, caring environment, and reducing our collective risk of avoidable claims. To this end, the PCMC was formed under the premise that XXX physicians would want to know if they were associated with a disproportionate share of patient and family complaints. (See *The PARS Program at XXX*, enclosed).

The complaint report analysis was performed by the Center for Patient and Professional Advocacy at Vanderbilt (CPPA), utilizing CPPA's Patient Advocacy Reporting System® (PARS®). During the four year audit period from December 1, 2009 through November 30, 2013, you were associated with 15 complaint reports. Risk scores were calculated for every physician at XXX and then compared to national and local peer group scores. Forty-two percent (42%) of the 6,350+ surgeons in the national PARS® database had no patient complaints over four years. In comparison, your risk score stood out within the highest tier; specifically, it was higher than that of 99% of all surgeons in the database. Compared with other XXX physicians, your risk score is 6<sup>th</sup> highest among physicians in Surgery and 8<sup>th</sup> highest of all physicians in both Medicine and Surgery, placing you at increased risk for medical malpractice claims.

**...high numbers of patient complaints...undermines outcomes...increased risk for malpractice claims...**

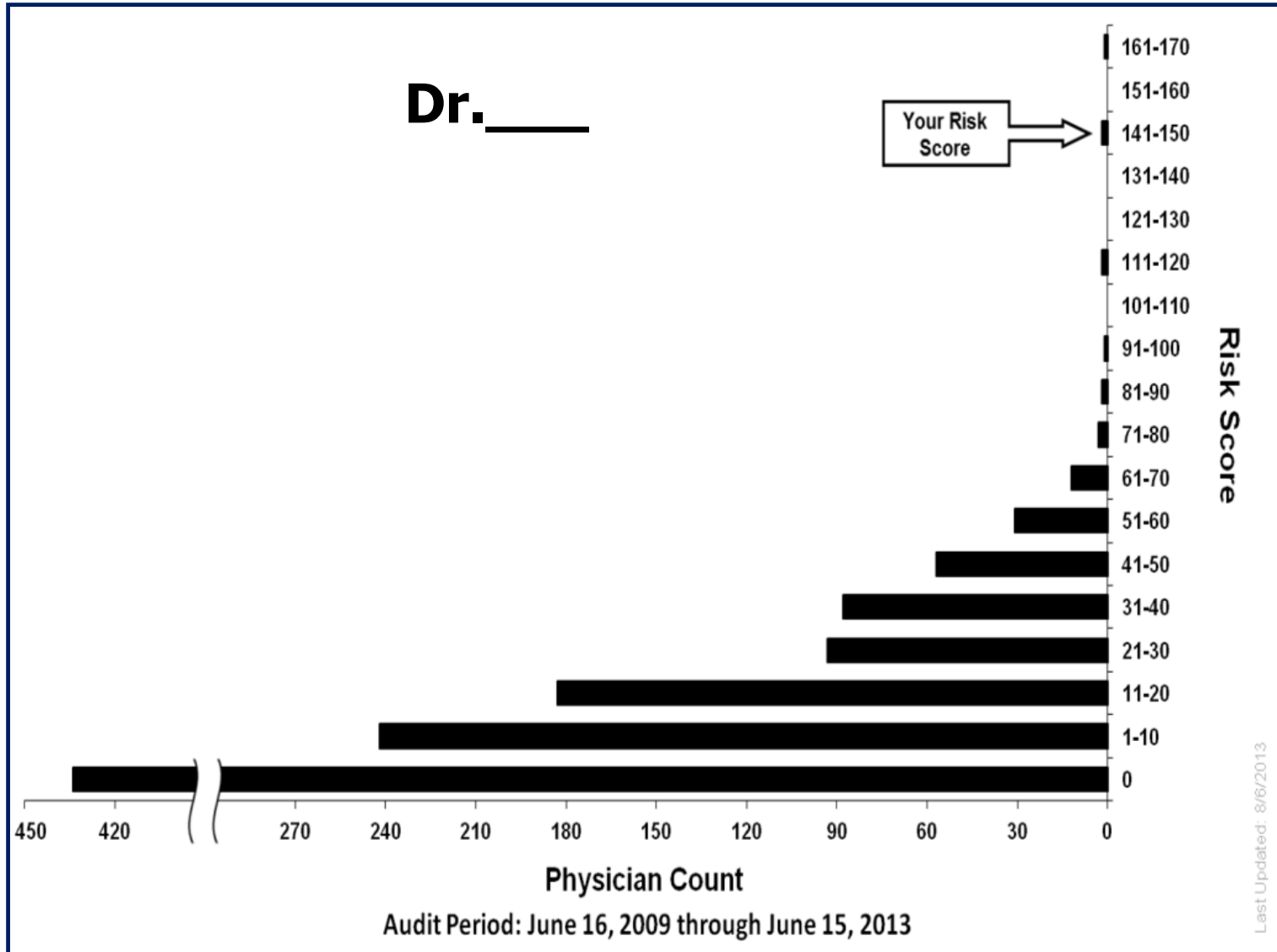
**...committed to provide best care...**

**...you were associated with 15 complaint reports...42% of the 6350+ surgeons in national PARS® database had no complaints...**

**...your risk score is > 99% of surgeons nationally ...2<sup>nd</sup> highest in [organization]...**

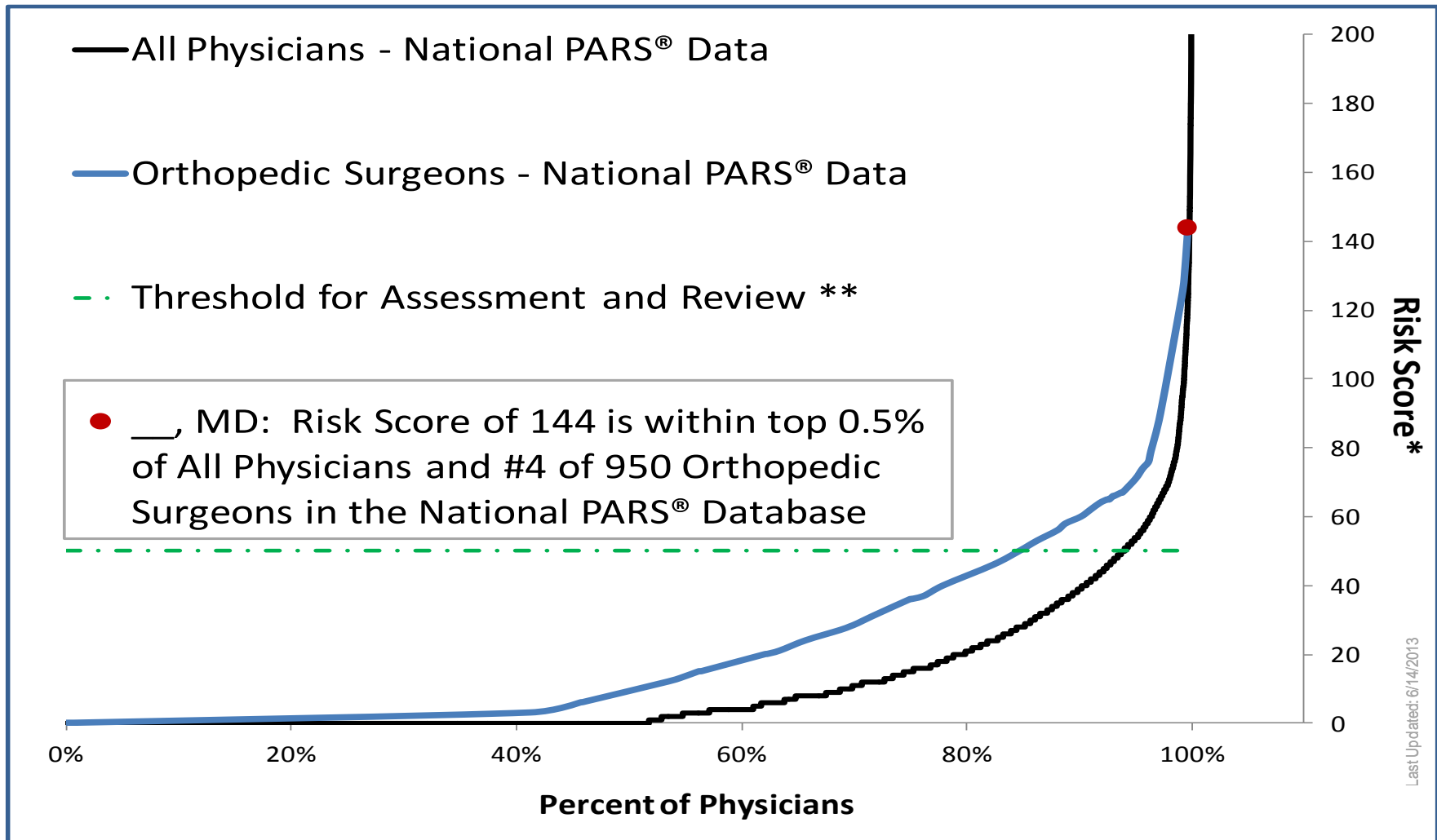


# Local Physician Group Comparison





# National comparison with peers



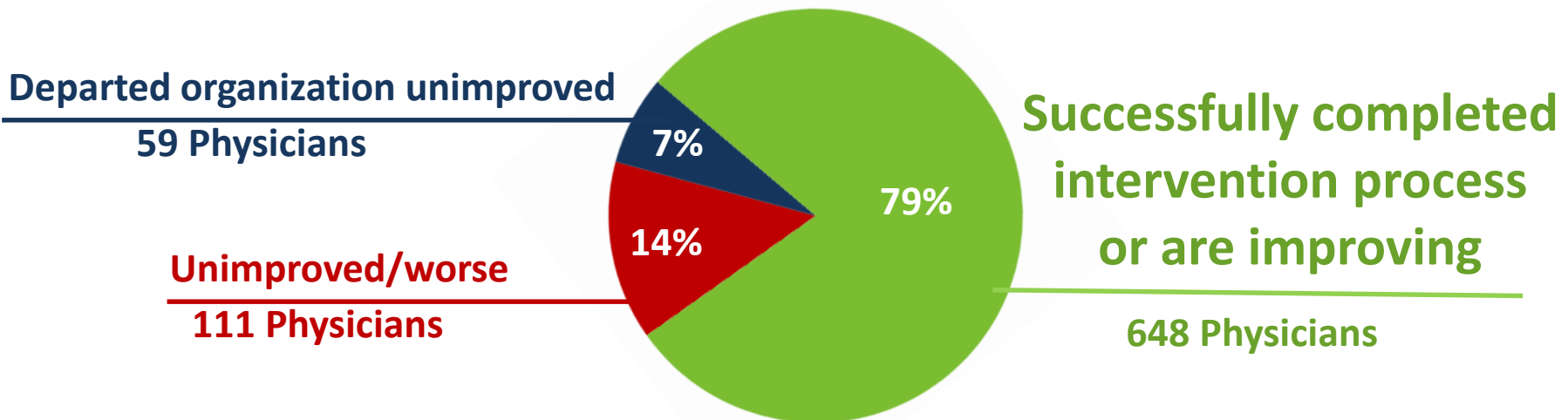
\*Stimson CJ et al. Medical malpractice claims risk in urology. *J Urol*. 2010 May;183(5):1972-1976.

\*\*Moore IN et al. Rethinking peer review. *Vanderbilt Law Review*. 2006 May 1;59:1175-1206.



# Since FY 2000, PARS<sup>®</sup> has identified >1020 U.S. physicians as high risk

<b>Total # of high-risk physicians to date</b>	<b>1027</b>
<b>First follow-up will be in 2014 or 2015</b>	<b>(130)</b>
<b><i>Departed before 12 month follow up</i></b>	<b><i>(78)</i></b>
	<b>819 with follow-up data</b>



Pichert JW et al. An intervention model that promotes accountability: Peer messengers and patient/family complaints. Jt Comm J Qual Patient Saf. 2013 Oct;39(10):435-446.





# Our latest work:

Patient Complaints & Surgical Outcomes



# NSQIP and Pt Complaints

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

**Risks**

## Preop Risk Factors

ASA Class

Priority Status

Wound Class

**Patient Complaints**

## PARS® Categories

Care & Treatment

Communication

Concern for Pt/Family

Accessibility

Billing w/C&T concern

**Outcomes**

## Surgical Occurrences

Intraoperative

Wound

Urinary

CNS

Respiratory

Other



# Results: Significant relationships between Occurrences & Complaints

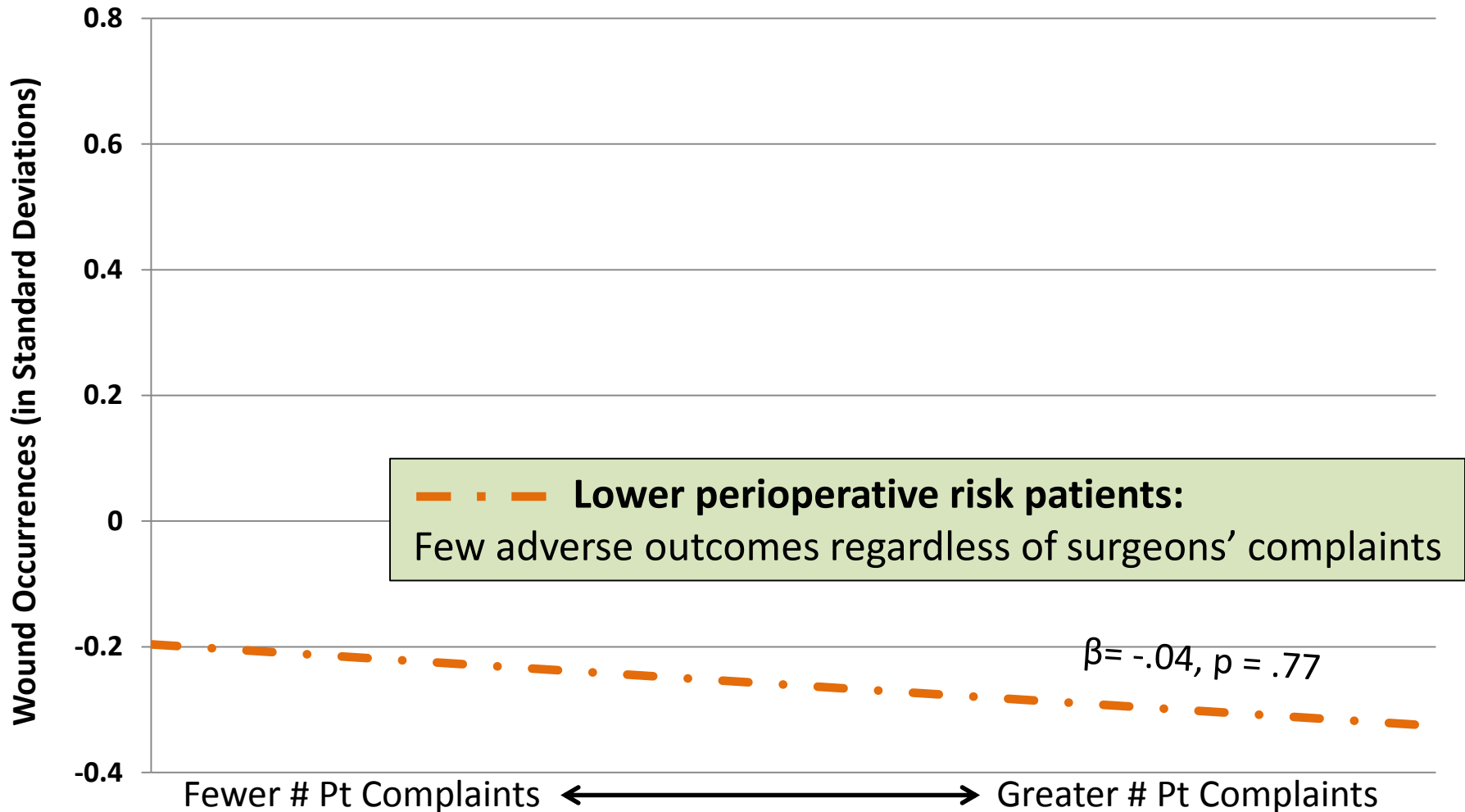
- 66 surgeons; 10,536 procedures
- Correlations between pt complaints and occurrences:

<b>Occurrences</b>	<b>Correlation with Patient Complaints</b>
<b>Intraoperative</b>	<b>0.58, p&lt;.001</b>
<b>Wound</b>	<b>0.60, p&lt;.001</b>
<b>Urinary</b>	<b>0.61, p&lt;.001</b>
<b>Respiratory</b>	<b>0.59, p&lt;.001</b>
<b>Other</b>	<b>0.55, p&lt;.001</b>

**The relationship is moderated by perioperative risk**



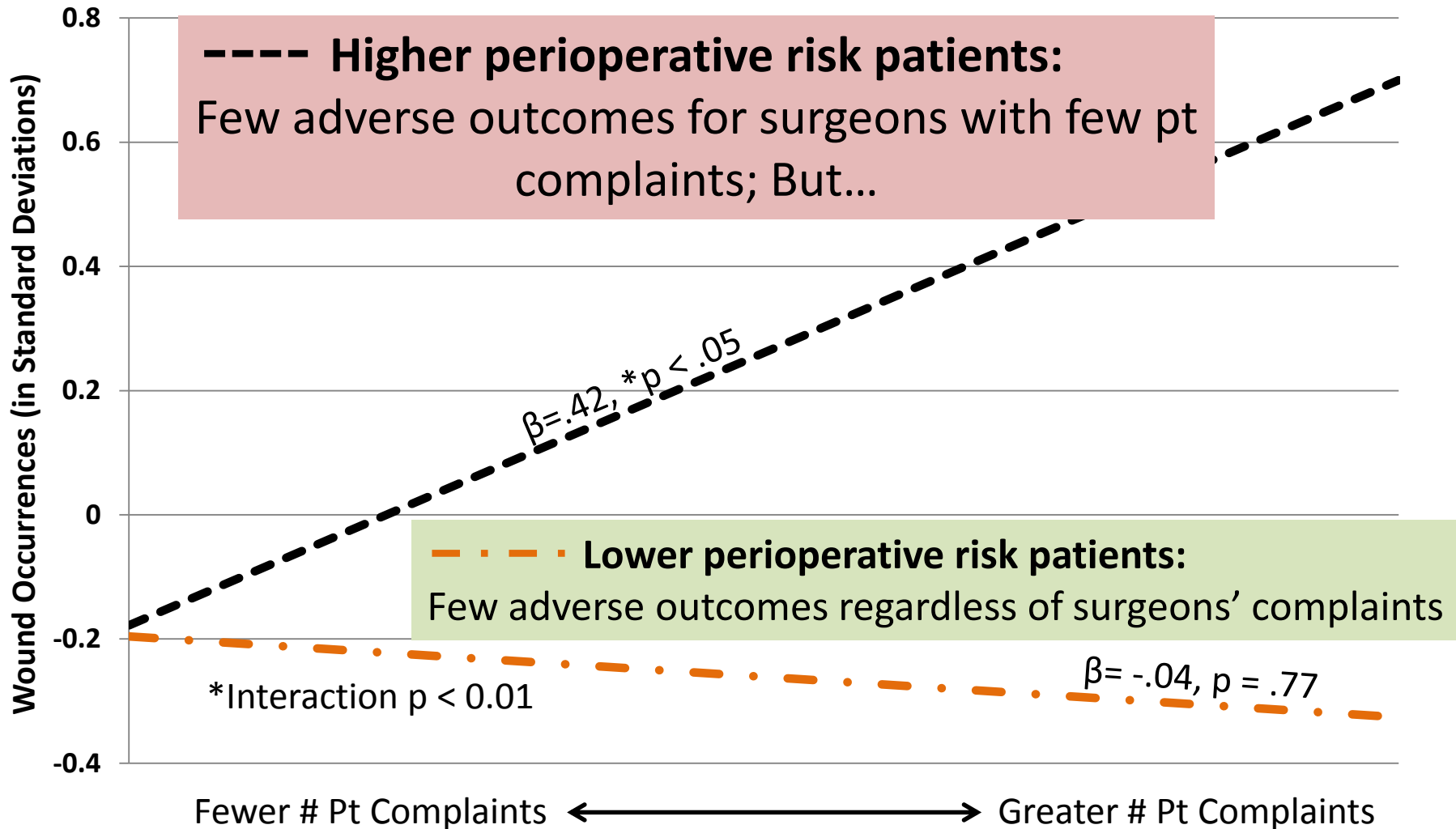
# Regression Analysis Results: Perioperative Risk, Patient Complaints, and Surgical Occurrences\*



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



# 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, Guillaumondegui et al. Submitted, 2014



**So how did the SSI work go?**

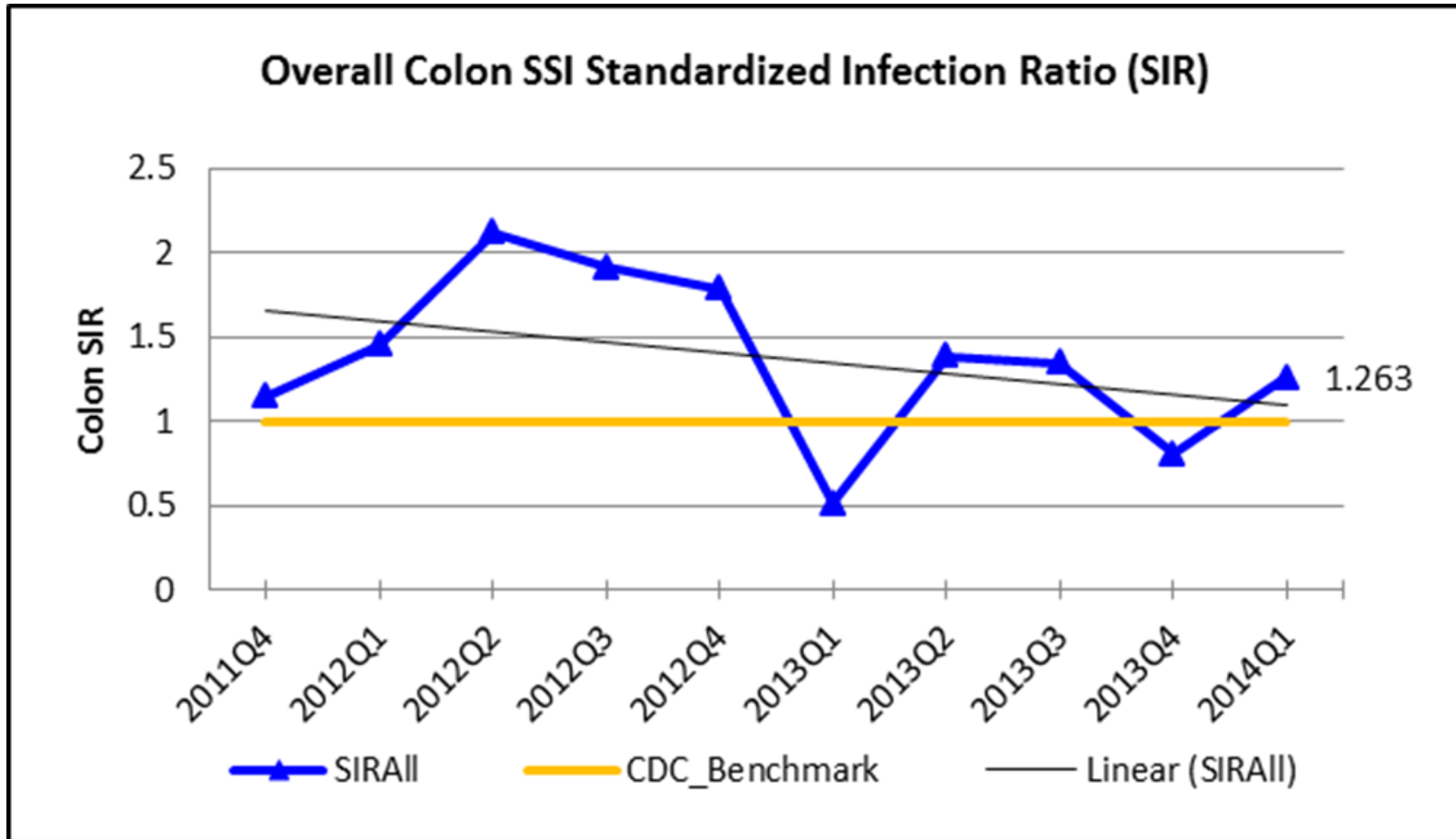


# Colorectal Bundle Tracking

Nine Bundle Elements	Aug 2013	Oct 2013	Dec 2013	Feb 2014
CHG Wipes ordered %	53%	49%	63%	100%
Bowel prep ordered %	77%	91%	100%	100%
Oral ABX ordered %	66%	64%	85%	100%
PreOp glucose done%	33%	42%	83%	82%
Wound Protector %	25%	35%	100%	100%
Bowel isolation technique %	48%	23%	90%	100%
Change gown and gloves %	33%	26%	90%	100%
Post Op O2 documented %			82%	80%
O2 ordered %				70%



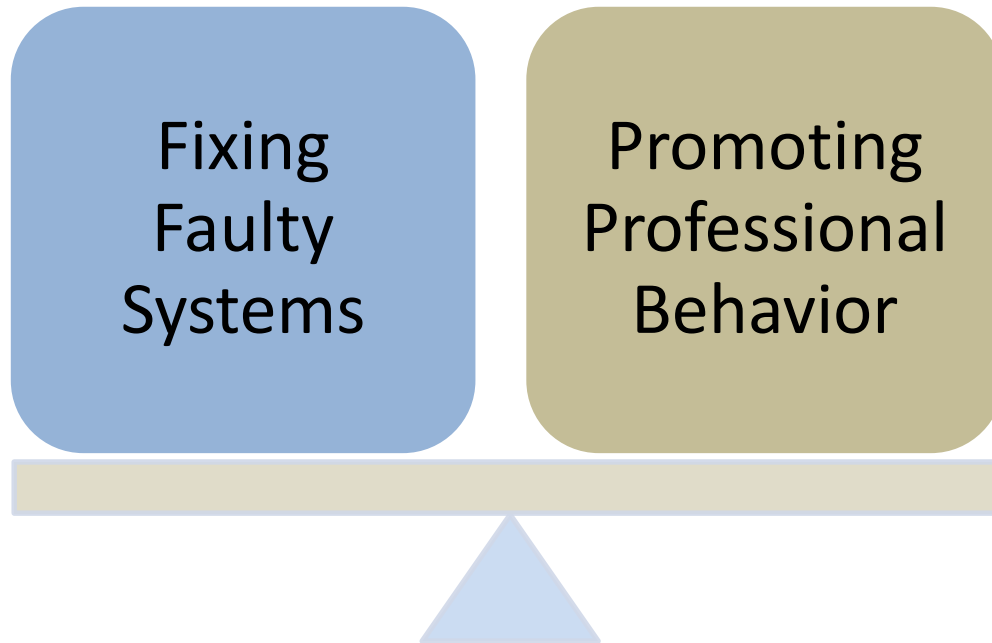
# Moving in the Right Direction







# The Right Balance





[www.mc.vanderbilt.edu/cppa](http://www.mc.vanderbilt.edu/cppa)



So how do you ensure leadership commitment/agreement with your plan?



So how do you ensure leadership commitment/agreement with your plan?

**It's not YOUR plan, it is OUR plan**

<b>Project Bundle Rating Scale</b>		Need (1)	Actively developing (2)	Strength (3)	Comments
People	Leadership Commitment	1			Need another meeting with CMO and CEO
	Dedicated Team				Seeking VUH data analyst to join team.
	Champion		2		
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<b>Project Score ( column total (A+B+C)/10 )</b>				<b>2.5</b>	

**Scoring Rubric**  
 1 (Need) = Not in place, Not confirmed, Conflict exists  
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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



# Building Consensus

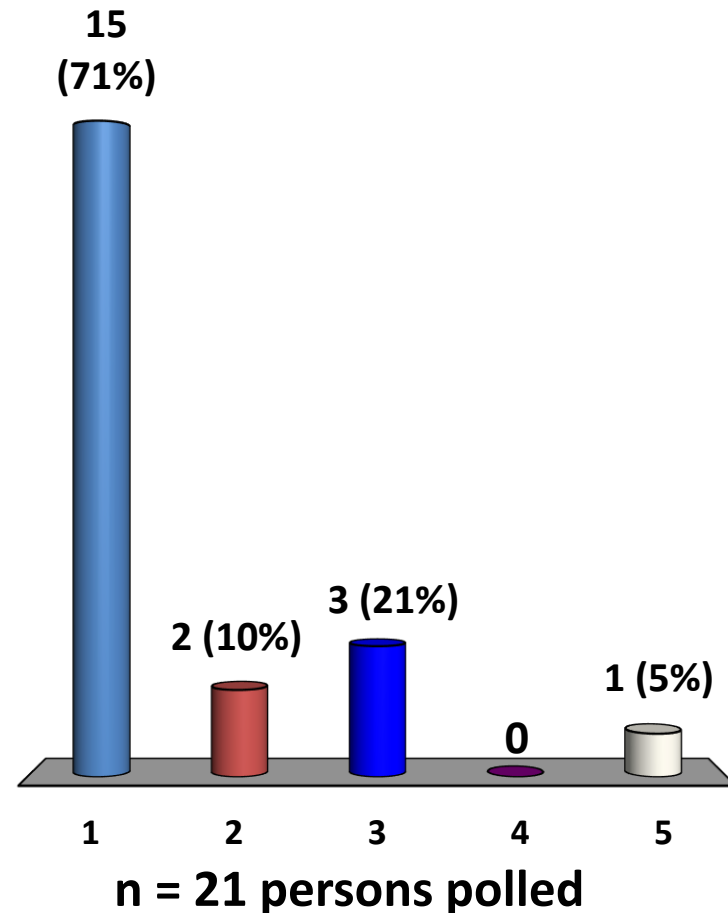
- **How do you get consensus about addressing the human element when there may not be national standards?**
- **You ask a few questions...**

“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.”



# Professionalism concerns should be shared with the associated attending.

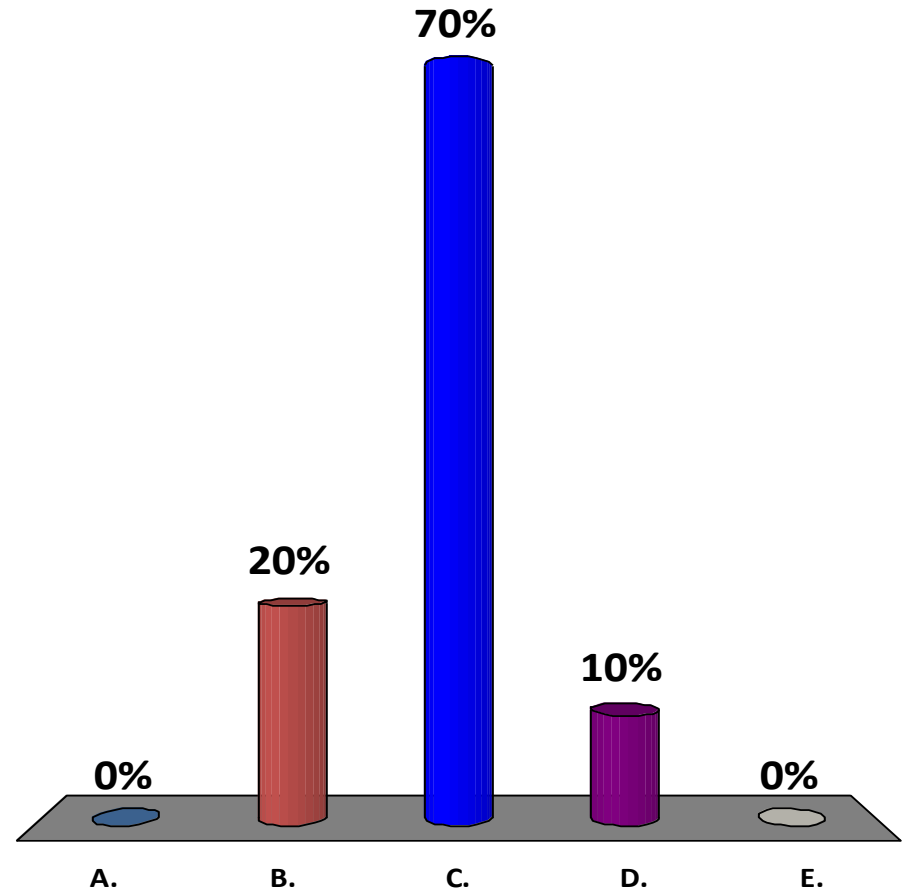
1. Strongly agree
2. Somewhat agree
3. Not sure
4. Somewhat disagree
5. Strongly disagree





# Do you want to see and deliver complaints vs designate a trusted colleague to review and deliver?

1. Just me
2. Both trusted colleague and me (shared model)
3. Trusted colleague, who shows me any report felt to be “special”
4. Just trusted colleague until there’s a pattern
5. Something else



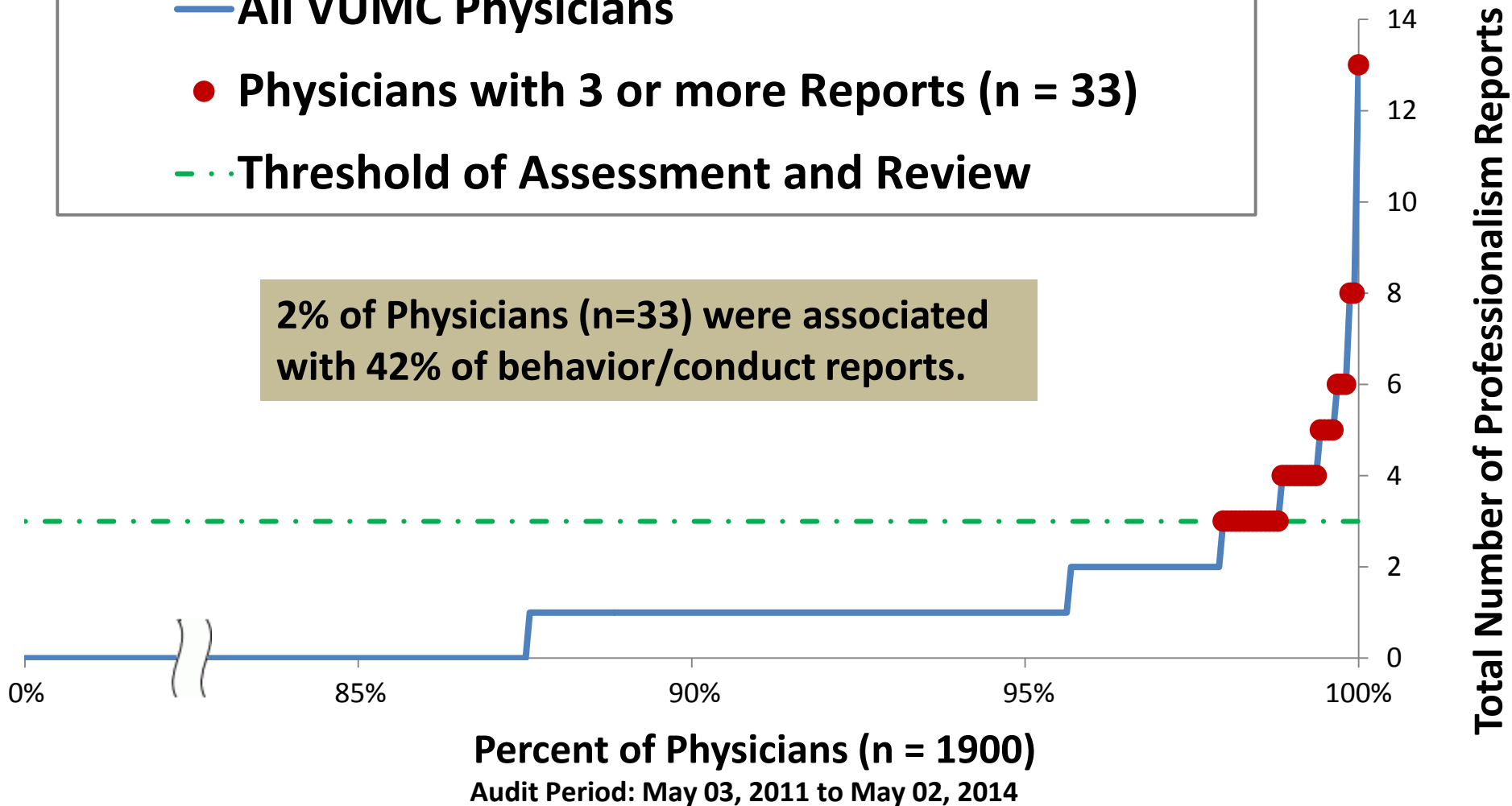




# Co-Worker Observation Reporting System: VUMC Physicians – 3 years

- All VUMC Physicians
- Physicians with 3 or more Reports (n = 33)
- · - Threshold of Assessment and Review

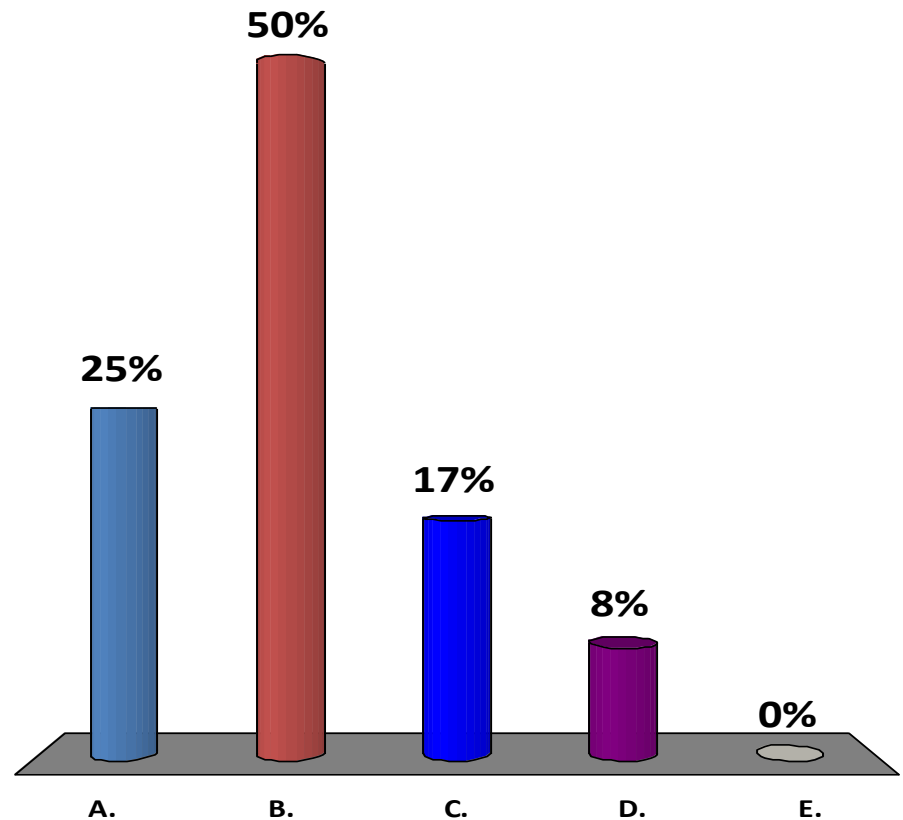
2% of Physicians (n=33) were associated with 42% of behavior/conduct reports.





# How many non-mandated reports over 36 months suggests a need for chair review and an “awareness” intervention with an individual physician?

- A. 2 reports
- B. 3 reports
- C. 4 reports
- D. 5 reports
- E. > 5 reports





# Co-worker Observation Reporting System Process

- 1** Professional conduct concern submitted by clinician/staff per reporting policy
- 2** After risk mgt. review, report is shared with leader
- 3** Trained messenger shares report with clinician
- 4** CPPA codes all reports/ identifies patterns based upon leader determined guidelines
- 5** Awareness intervention folders prepared for meetings by messengers
- 6** CPPA tracks progress and shares subsequent reports with leader



# FY 2014 results addressing professionalism

## 1900 Clinicians

2

reports required formal review

213

“cups of coffee” shared

25

clinician awareness interventions  
completed

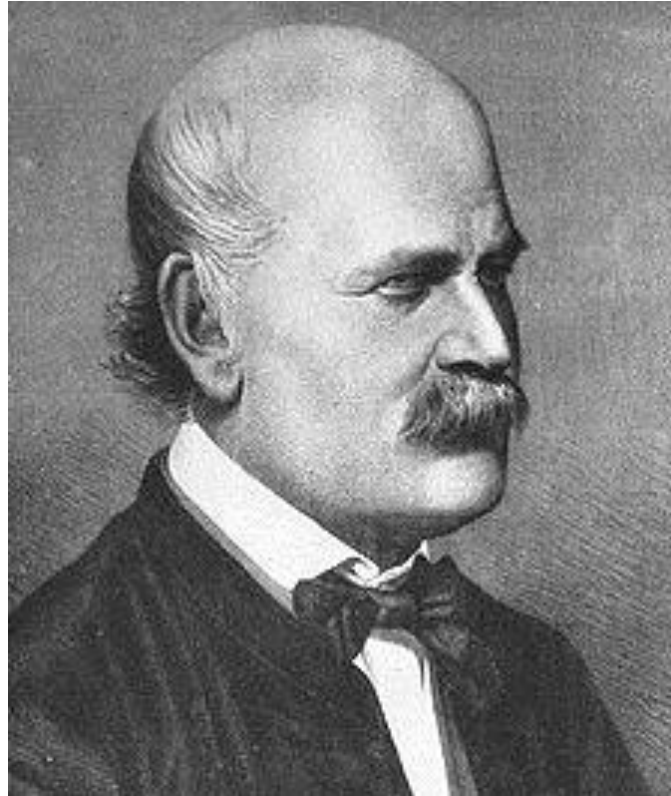
5

faculty had a subsequent report within  
4 months after intervention



# Professional Accountability

**Who is this man?**

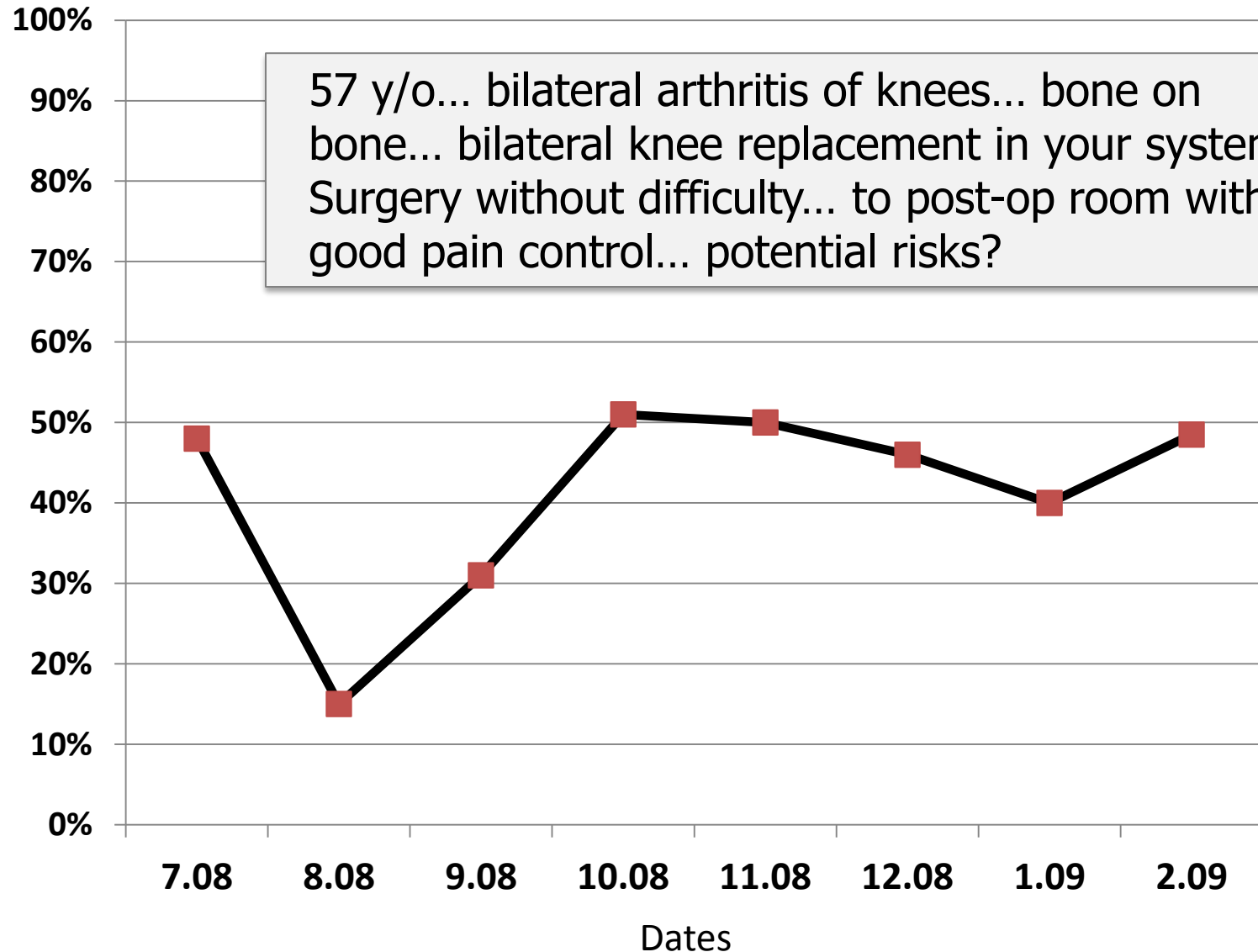


**He had a good idea...**



# VUMC Hand Hygiene Adherence (%)

## July 2008 – February 2009





# A Call for Clean Hands: Vanderbilt Hand Hygiene

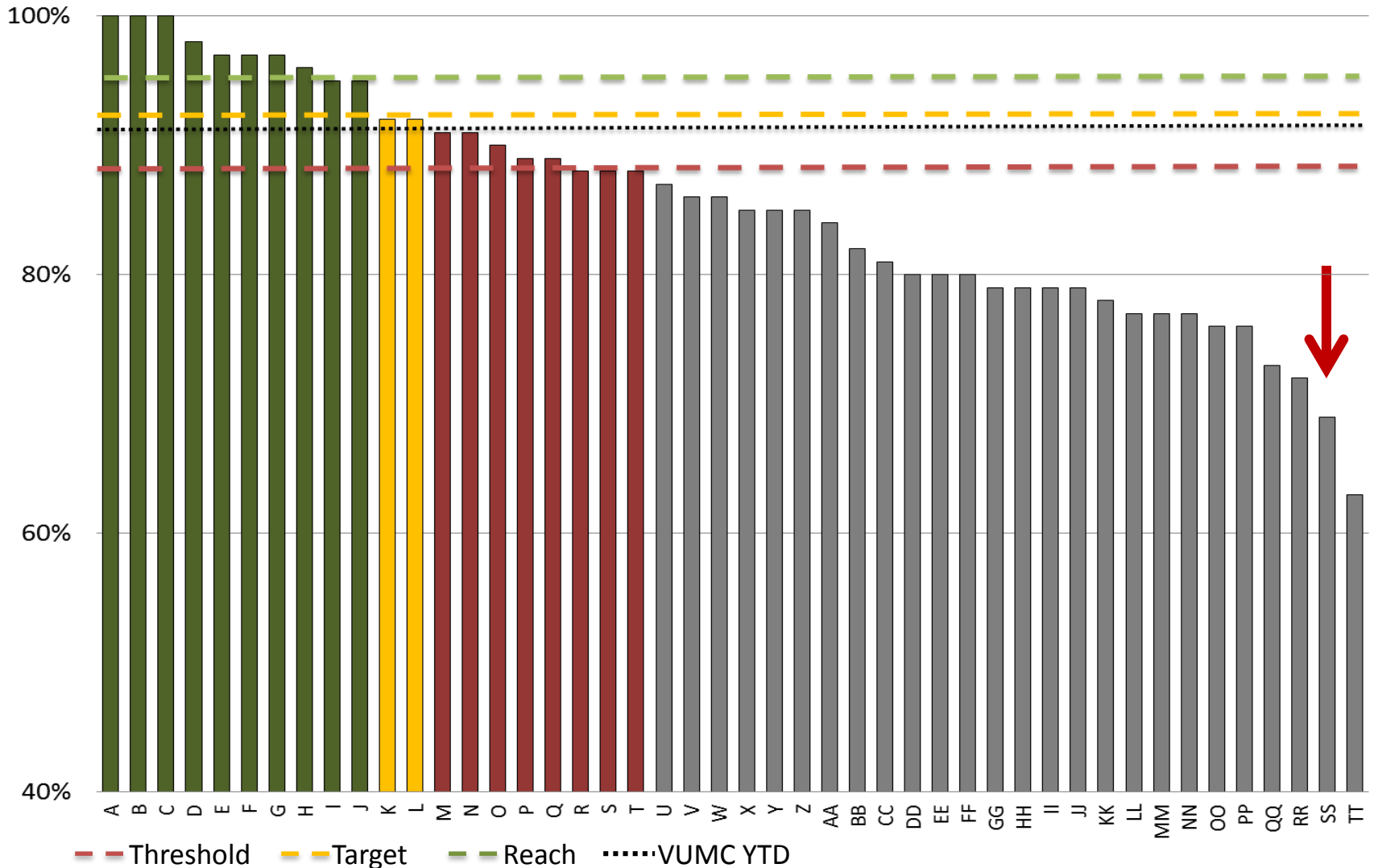
Tom Talbot, MD, MPH  
Nancye Feistritzer, RN, MSN  
Titus Daniels, MD, MPH  
Claudette Fergus, RN, BA  
Gerald Hickson, MD, the  
Hand Hygiene Committee and the  
Leadership Review Task Force





# VUH Unit Hand Hygiene Compliance

## July 1, 2010 – November 30, 2011

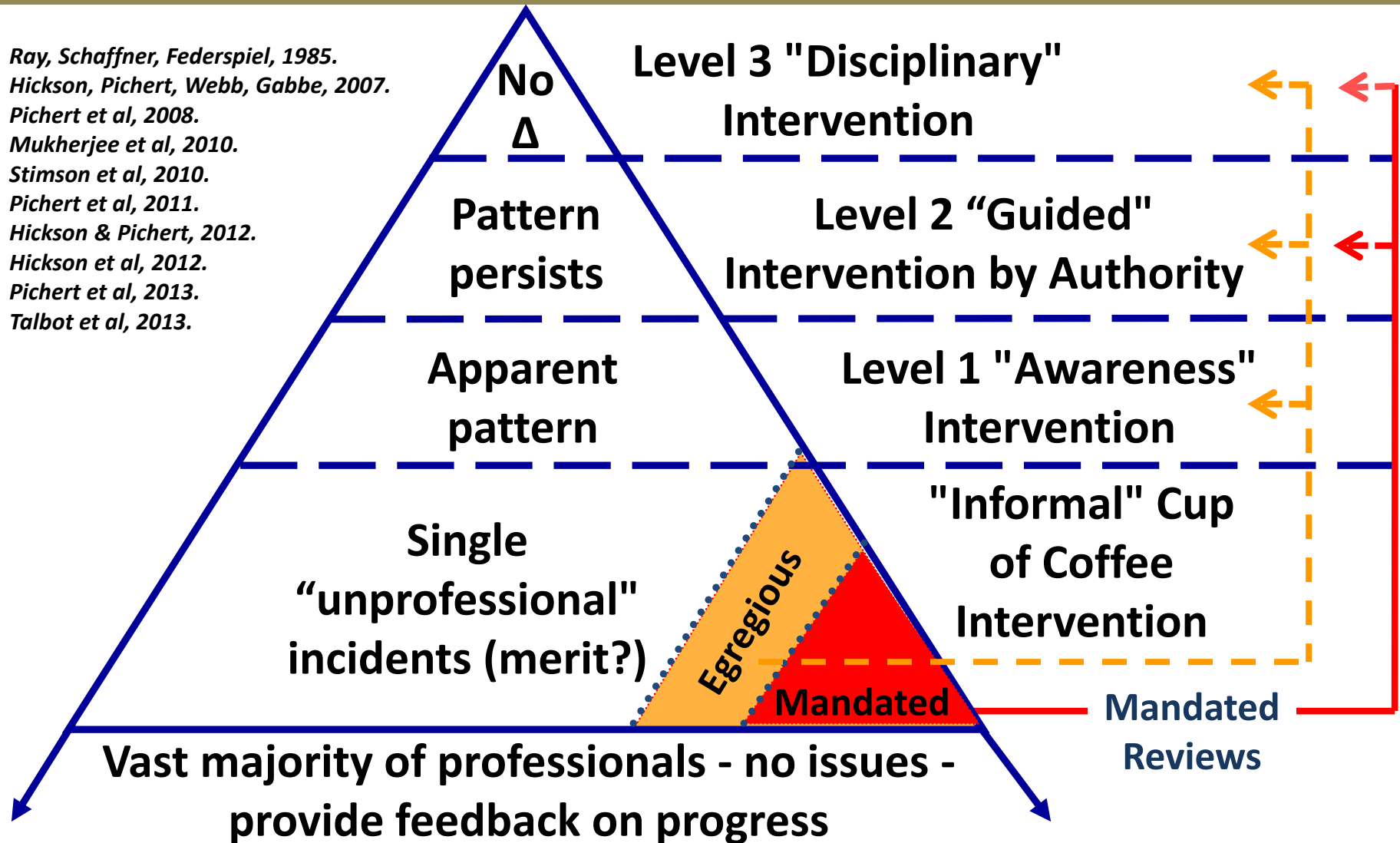






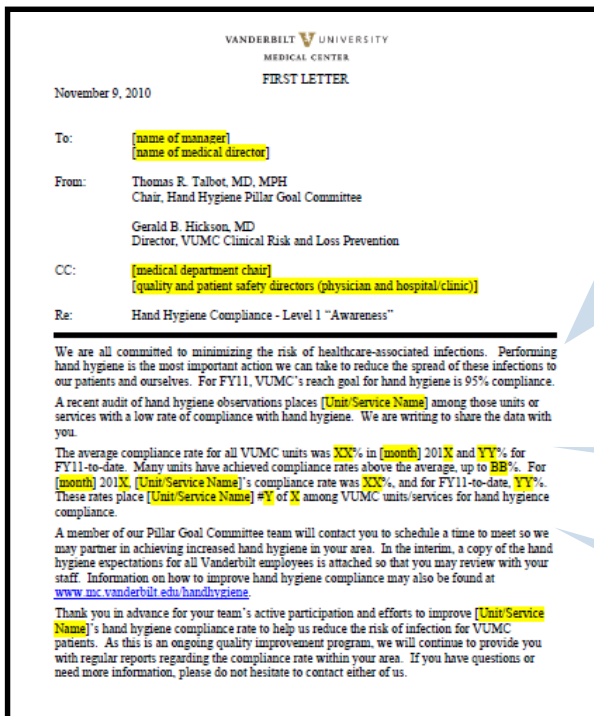
# Promoting Professionalism Pyramid

Ray, Schaffner, Federspiel, 1985.  
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Pichert et al, 2011.  
Hickson & Pichert, 2012.  
Hickson et al, 2012.  
Pichert et al, 2013.  
Talbot et al, 2013.





# 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

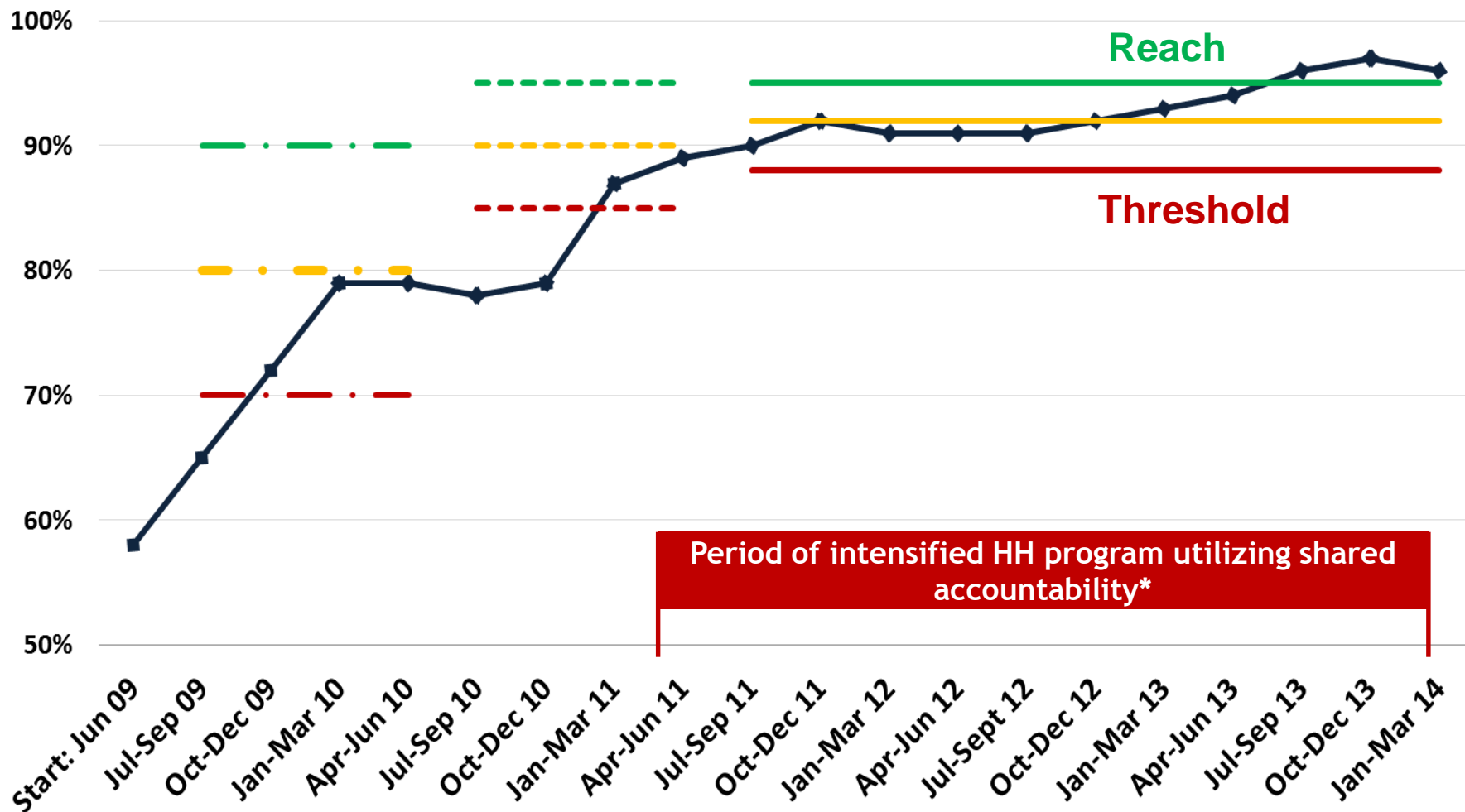


# Anticipate Various Reactions

- No dispensers...
- Dispensers in the wrong/inconvenient location...
- This special area has dispenser outside closed door but none inside...
- It's not our team, it's the
  - Consult physicians
  - Residents
  - Traveling nurses
  - Dietary staff, transporters...
- **Many others**



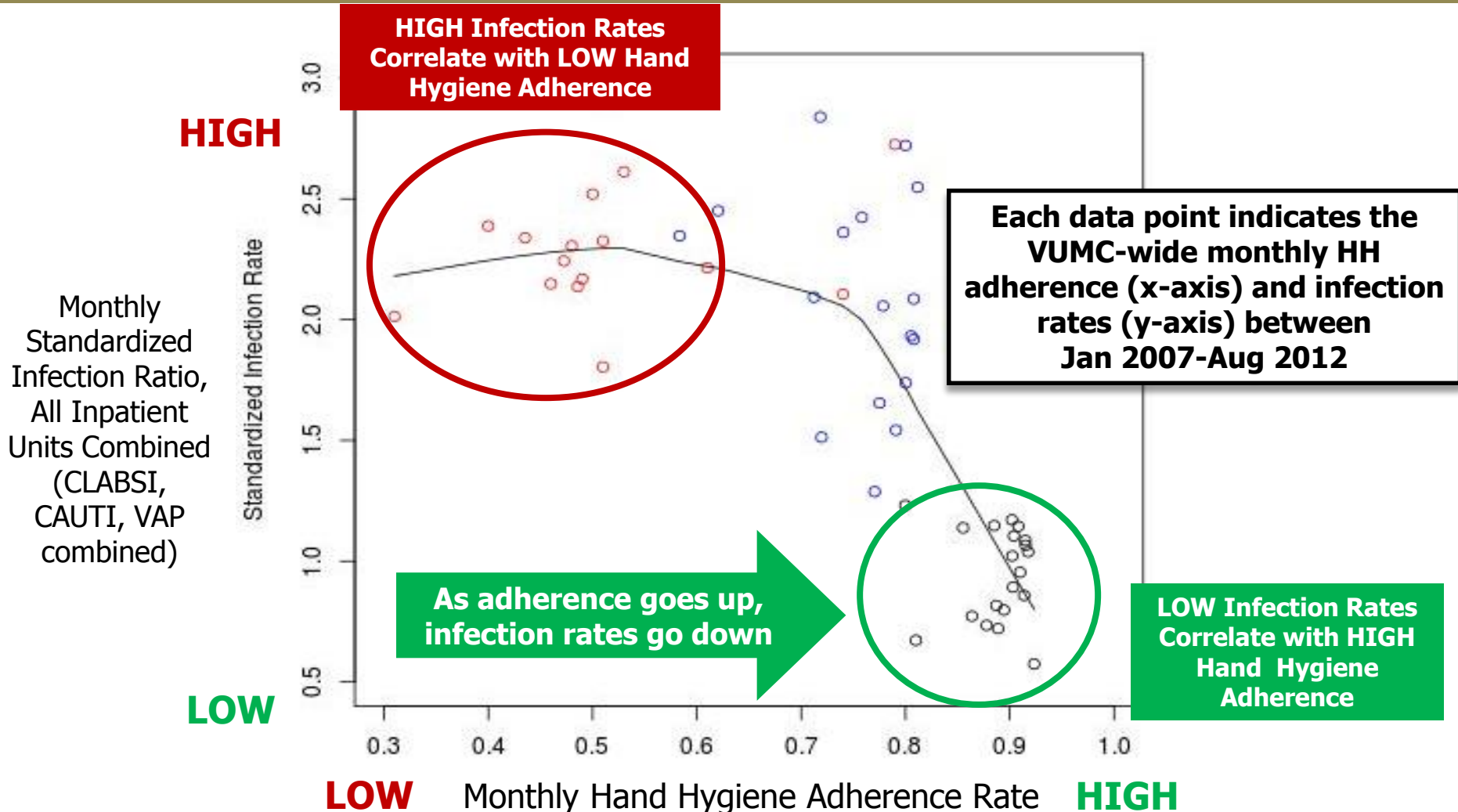
# VUMC Quarterly HH Compliance June 2009 – Mar 2014



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



# Hand Hygiene Improvement Strongly Correlates with Low Infection Rates



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



# VUMC Infection Control Savings

Infection Type	FY 2010 Pre-HH Intervention	FY 2011 (# fewer infections)	Mean Attributable Cost/Infection*	\$\$ Savings Estimate
CLABSI	172	65 ( <b>107</b> )	\$22,000	\$2,354,000
VAP	151	76 ( <b>75</b> )	\$24,500	\$1,837,500
SSI	298	283 ( <b>15</b> )	\$19,000	\$285,000
CAUTI-ICU	111	88 ( <b>23</b> )	\$1,500	\$34,500
<b>Totals</b>	<b># Fewer Infections</b>	<b>220*</b>	<b>Estimated Savings</b>	<b>\$4,511,000</b>

\*Estimated total reduced LOS = 2,584 days; 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.