

# Learn It, Lead It, Live It: Strategies for Driving Change to Impact Patient Outcomes

Kathleen Vollman MSN, RN, CCNS, FCCM, FAAN  
Clinical Nurse Specialist, Educator, Consultant  
ADVANCING NURSING LLC, Northville MI  
kvollman@comcast.net



# Disclosures

- Eloquest Healthcare
- Sage Products Inc
- Hill-Rom, Inc

# Session Objectives & Content

- Understanding the driving factors for the need to resuscitate the basics
- Defining the role of an Collaborative Leader
- Skills for making change happen
- Identification of tools/models to lead & add value to frontline practitioners & improve outcomes



**FUN AND INSPIRING**

# Notes on Hospitals: 1859

“It may seem a strange principle to enunciate as the very first requirement in a Hospital that it should do the sick no harm.”

Florence Nightingale

**Advocacy = Safety**

Protect The Patient  
From Bad Things  
Happening on Your  
Watch



Implement  
Interventional Patient Hygiene

# Interventional Patient Hygiene

- Hygiene...the science and practice of the establishment and maintenance of health
- Interventional Patient Hygiene....nursing action plan directly focused on fortifying the patients host defense through proactive use of evidence based hygiene care strategies

**Incontinence Associated  
Dermatitis Prevention  
Program**

**Hand Hygiene**

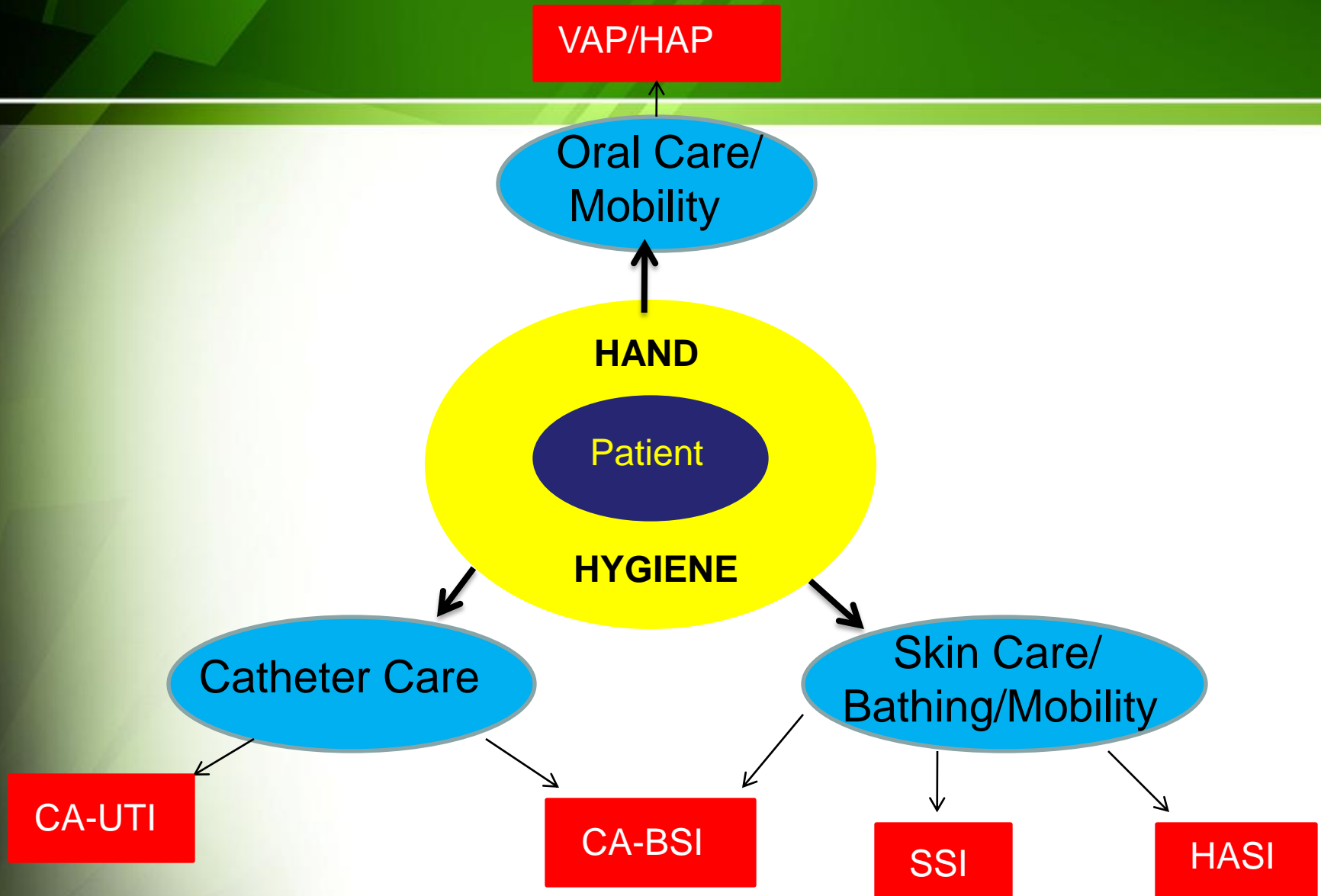
**Comprehensive  
Oral Care Plan**

**Catheter  
Care**

**Bathing &  
Assessment**

**Pressure  
Ulcer  
Prevention**

# INTERVENTIONAL PATIENT HYGIENE (IPH)





# Achieving the Use of the Evidence



# Drive The Vision



**Healthcare Without  
Infections**

# Protecting Patients From Harm

## Estimates

HAI:	<b>1.7 million/year</b>
HAI-related deaths:	<b>100,000/year</b>
Hospitalized patients develop infection:	<b>1 out of 17</b>
Death due to sepsis/septic shock:	<b>700/day</b>
Money spent:	<b>\$45 billion/year</b>
Increase risk of readmission:	<b>27days vs. 59 days</b>

Milstone Am, et al. *Clin Infect Dis*. 2008;46(2):274-281

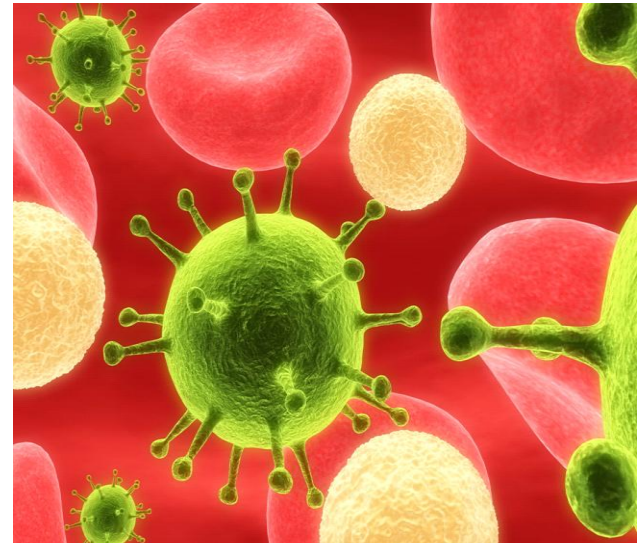
Klevens RM, et al. *Public Health Rep*. 2007;122:160-166

Burke JP, et al. *N Engl J Med*. 2003;348:651-656

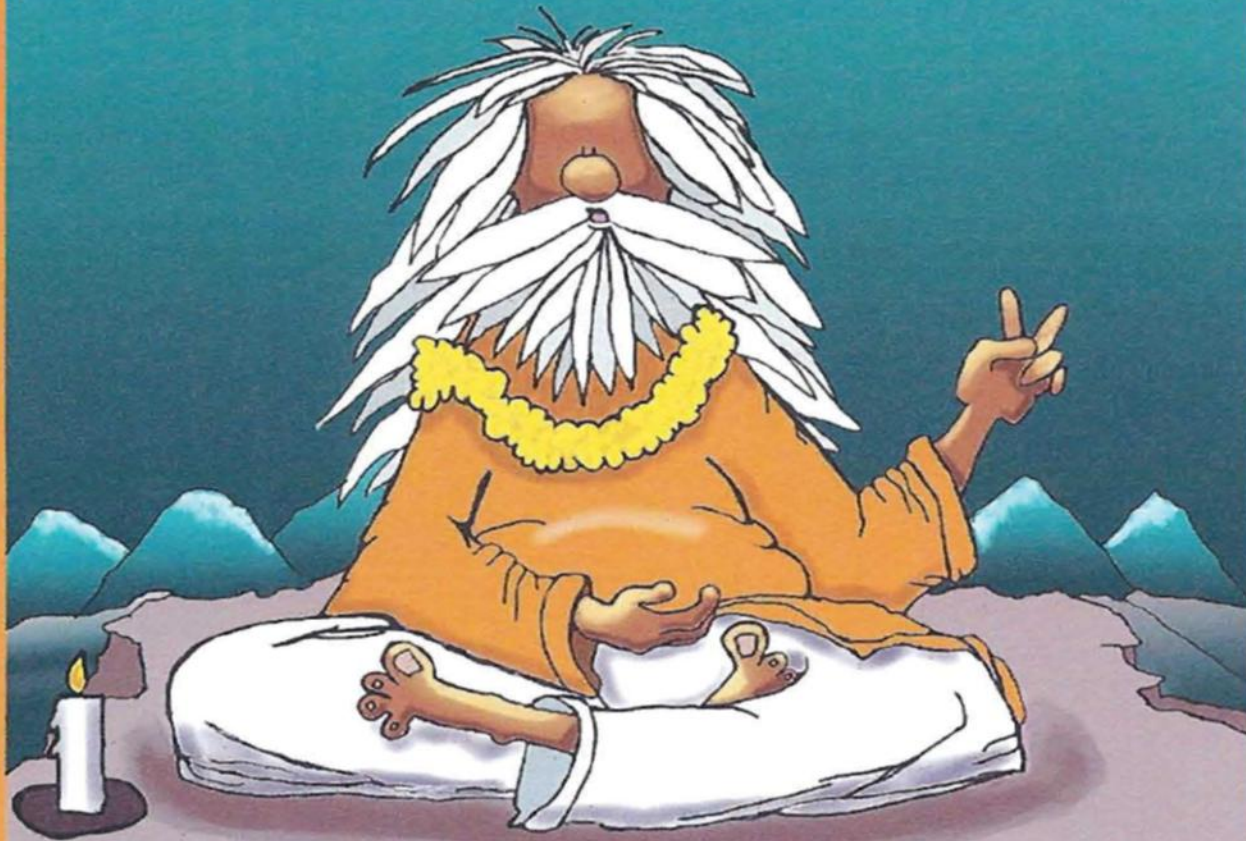
Emerson CB, et al. *Infect Control Hosp Epidemiol*, 2012;33:539-544

# Factors Impacting HAI's Programs

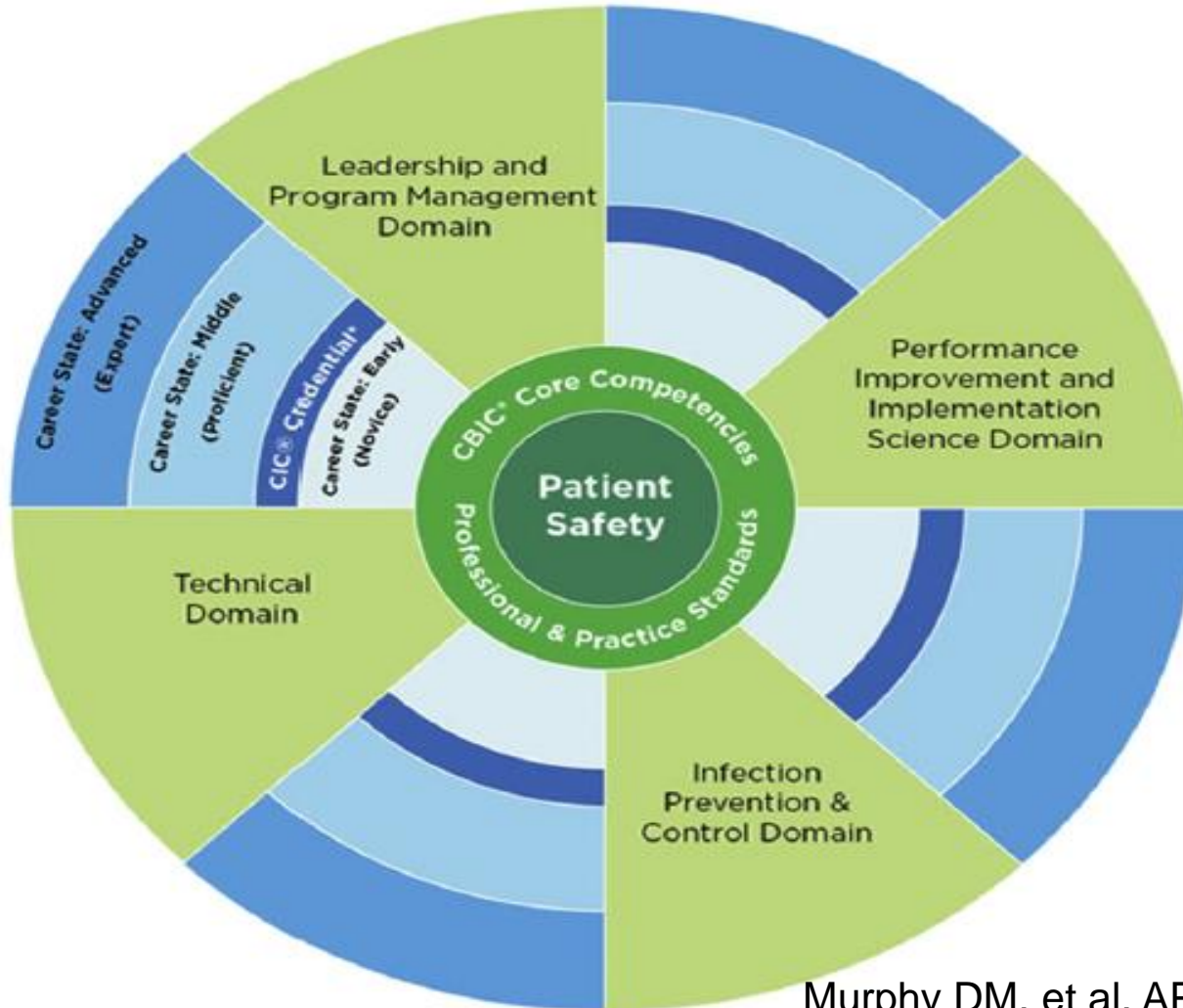
- Factors Associated with Lower HAI's (30% reduction)
  - Integrated infection control program
  - Culture change
  - Leadership/Champion
  - Use of proven best practices
  - HAI surveillance



and  
always remember, my child.....  
only dead fish go with the flow.



# Four Competency Domains



# Leadership Competency Domain

- Leadership: Leadership is based on influence rather than authority and this influences is a consequence of skills in 5 content categories
  - Collaboration
  - Followership
  - Program management
  - Critical Thinking
  - Communication



**Environmental Agitator**

# Why a Collaborative Leader/ Consultant Model Approach?

- Collaborative Leader/Consultant Model Approach
  - Collaboration in the development of policies & procedures
  - Total engagement of specialist and frontline to ensure success
- One-size does not fit all
- Customized solutions & flexible policies
- “You can’t do this” to “how can we help you get things done”
- Commitment to ongoing relationship that fosters earlier preventive involvement



**The only limit to  
what you can achieve  
is the extent of your  
ability to define what  
it is you want and the  
Persistence & Passion to  
get it**

# Personal SWOT Analysis

**STRENGTHS**

**S**

**WEAKNESSES**

**W**

**OPPORTUNITIES**

**O**

**THREATS**

**T**

# Strengths



- **Strengths:** Skills and abilities you possess that will help you get develop the role, utilize your expertise and sustain the passion and commitment
- **Kathleen's:** Professional speaking, love people, skill of networking, my passion for nursing and life, my drive, my organizational skills, ability to juggle multiple things at a time

# Weaknesses

- **Weaknesses:** What skills and abilities I might not possess that I will need to make this happen?
- **Kathleen's:** Creating balance in my life, working with databases, listening skills, and rushing through life without smelling the roses



# Opportunities

A silhouette of a person standing on a hill with their arms raised in a gesture of triumph or achievement. The background is a vibrant sunset sky with orange and yellow clouds against a blue gradient.

- **Opportunities:** What areas exist for potential personal and professional growth that I need to work on in order to succeed?
- **Kathleen's:** Using software for project planning, slowing down to enjoy the journey vs. the end product, realistic negotiation related to times and projects

# Threats

- **Threats:** What are the things that can impede my growth or get in the way of me succeeding?
- **Kathleen's:** self doubt, not listening for understanding, time, over commitment because I can't say no, perfectionism

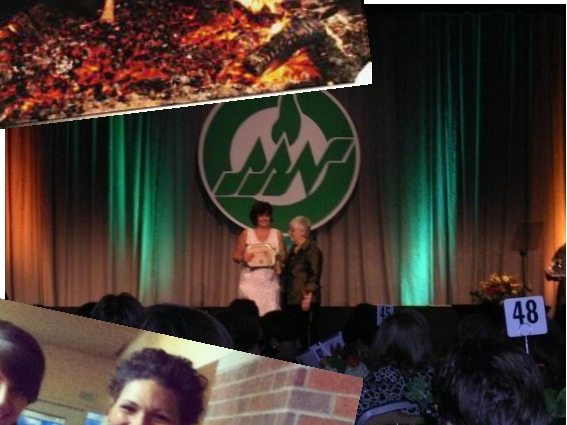
I wake up every morning, torn between a desire to save the whales, attain enlightenment, visit the Dalai Lama or go back to bed.

Makes it kinda hard to plan the day.



DWE

# Bucket Board





# Looking Through A Different Lens



**We Must be Visible at the Frontline!!**

“If your actions inspire others to dream more, learn more, do more, and become more, you are a Leader”

*John Quincy Adams*

# Understanding How You Influence

- Legitimate Power
  - Authoritative power derived from a job, position, or status and held as belonging to the person in such a position.
- Expert Power
  - Based on a person's expertise, competence, and information in a certain area.
- Referent Power:
  - Based on a high level of identification with, admiration of, or respect for the power holder/leader.

**Power is the engine that drives the ability to influence**

*“Setting an Example is  
Not the Main Means of  
Influencing Others....It  
is the Only Means”*

*Albert Einstein*

# Leadership Domain Example

- Reducing HAI's: Lessons Learned from National Collaboratives (Welsh CA, et al. AJIC 2012;40:29-34)
  - 35 hospitals in 5 different regional collaboratives support by AHRQ
  - Lesson learned: understand the resistance, commit to regular communication & join the collaborative, start small and tailor implementation to local cultures, engage frontline staff
- Poster 2013 APIC: A Collaborative Approach to Clostridium difficile Infection Prevention: Utilizing EBP Strategies to Improve Patient Outcomes. (Diane Ross & Team from NCH Healthcare System in Florida)
  - Multidisciplinary team plan and implement 5 core evidence based CDI prevention strategies. CDI PCR assay test implemented (rates increased) over 2 yrs of implementation went from 7.90 cases per 10,000 pt days to 3.73 cases. 52% reduction

# Comfort Zone



# Change & Challenges

Change and growth take place  
when a person has risked  
himself & dares to become  
involved with experimenting  
with his own life

Herbert Otto







Blessed Are The Flexible  
For They Shall Never  
Be Bent Out Of Shape

# IPC Competency Domain

- IP's competencies are the foundation of the IP's development being subject matter experts in epidemiology and natural history of infection
  - Epidemiology and Surveillance
  - Risk Assessment
  - Risk Reduction and Infection Prevention
  - Use & interpretations of dx tests
  - Antimicrobial stewardship
  - Education, Evaluate and Use Research

It is not enough to do your best; you must know what to do, and THEN do your best.

~ *W. Edwards Deming*

# IP: Competency Domain

- Scrub the Hub:

- Scrubbing the access port with an appropriate antiseptic (chlorhexidine, povidone iodine, an iodophor, or 70% alcohol) and accessing the port only with sterile devices.(IA)
- 3 sec, 10 sec showed no difference in reducing bacterial load, 15sec trended towards significance (Simmons S, et al. Crit Care Nurs Q, 2011;34:31-35)
- 3 phase multicenter quasi-experimental study looking at continuous passive disinfection over three time periods; usual practice, CPD, usual practice. Demonstrated 40% reduction in CLA-BSI's (Wright, M et al Am J Infect Control, 2013;41:33-8)
- Quality Improvement Project: CUSP in combination with BSI insertion bundle (7.6 to 2.12/1000 catheter days), added 2% CGH bathing & Maintenance bundle (2.12 to .70 per 1000 catheter days), then CPD .70 to zero per 1000 catheter days (Posa, P. Presented at APIC Annual conference, Fort Lauderdale, 06/13)

*“One’s mind, once stretched by a new idea, never regains its original dimensions.”*

*Oliver Wendell Holmes*





“Even if you are on the right track, you will get run over if you just sit there.”

*Will Rogers*

# Technology Competency Domain

- Surveillance of HAI's requires data collection, collaboration, analysis and dissemination of findings.
  - Information technology support
  - Surveillance Technology
  - EMR & EDW



# Knowledge in Technology

- Electronic data collection is beneficial if the data means something and results in actionable events
- APIC Poster 2013: Facility Level Dashboard Utilized to Decrease Infection Preventionist Time in Disseminating Data (Mayfield J and team from Barnes Jewish Hospital in St Louis)
  - Antiquated and time consuming process for data gathering and reporting
  - Streamline data from ICU's and oncology
  - Utilized data visualization software to create automated dashboard for CLA-BSI and VAP
  - Dashboard included individual unit displays and NHSN benchmarks
  - ↓ amt of time packaging data by 60 to 90 minutes per area per month (11-16 hrs saved)



**You miss 100 percent of the shots  
you never take.” Wayne Gretzky**



# 4<sup>th</sup> Domain: Performance Improvement & Implementation Science

- PI encompasses all of the system projects, team activities that organizations use to achieve the goals
- Implementation science study of methods to promote uptake of clinical research findings and make them the new routine
  - Identification of need
  - Team Assembly
  - Tools & Methods
  - Implementation
  - Measuring success

**Activity without purpose is  
the drain of your resources**



# Translating Evidence into Practice (Johns Hopkins Model)

## Translating Evidence into Practice

- Envision the problem within the larger health care system
- Engage Collaborative multi-disciplinary teams centrally (stages 1,2 & 3) and locally (stage 4)

### 1. Summarize the Evidence

Identify Interventions associated with improved outcomes

Select interventions with the largest benefits and lowest barriers to use

Convert interventions to behaviors

### 2. Identify local barriers to implementation: understand the process and context of work

Observe staff performing the interventions

"Walk the process" to identify defects in each step of intervention implementation

Enlist all stakeholders to share concerns and identify potential gains / losses associated with intervention implementation

### 3. Measure Performance

Select Measures (Process and/or outcome)

Develop and pilot test measures

Measure Baseline Performance

### 4. Ensure all patients receive the interventions

#### Engage

Explain why the interventions are important

#### Evaluate

Regularly assess performance measures

#### Educate

Share the evidence supporting the interventions

#### Execute

Design an intervention on "toolkit" targeted to barriers employing standardization, independent checks and reminders, and learning from mistakes

# 4 E's: Implementation Framework

	<b>Frontline Staff</b>	<b>Team Leaders</b>	<b>Senior Executives</b>
<b>Engage</b>	<p>Ask, how does this make the world a better place?</p> <ul style="list-style-type: none"> <li>– Help staff understand the preventable harm</li> <li>– Share stories about patients affected</li> <li>– Estimate number of patients harmed</li> <li>– Develop a business case</li> </ul>		
<b>Educate</b>	<p>What do I need to do?</p> <ul style="list-style-type: none"> <li>– Convert evidence into behaviors;</li> <li>– evaluate awareness and agreement</li> </ul>		
<b>Execute</b>	<p>How can I do it?</p> <ul style="list-style-type: none"> <li>– Listen to resisters</li> <li>– Standardize, create independent checks</li> <li>– Make it easy to do the right thing</li> <li>– Learn from mistakes</li> </ul>		
<b>Evaluate</b>	<p>How do I know we made a difference?</p> <ul style="list-style-type: none"> <li>– Define measures</li> <li>– Regularly assess measures</li> </ul>		

# 4 E's: Implementation Framework

	Frontline Staff	Team Leaders	Senior Executives
Engage	<p><i>Ask, how does this make the world a better place?</i></p> <ul style="list-style-type: none"> <li>– Help staff understand the preventable harm</li> <li>– Share stories about patients affected</li> <li>– Estimate number of patients harmed</li> <li>– Develop a business case</li> </ul>		
CLABSI	<ul style="list-style-type: none"> <li>➤ Overview with staff that CLABSI are preventable</li> <li>➤ Review incidence of CLABSI</li> <li>➤ Share CLABSI rate with team and frontline staff</li> <li>➤ Share stories of individual cases of CLABSI from this hospital or unit and impact on the patient</li> </ul>	<ul style="list-style-type: none"> <li>➤ <b>Also share P4P measures</b></li> </ul>	<ul style="list-style-type: none"> <li>➤ <b>Define business case—what does each BSI cost our institution</b></li> </ul>

# 4 E's: Implementation Framework

	Frontline Staff	Team Leaders	Senior Executives
Educate	<ul style="list-style-type: none"> <li>➤ What do I need to do?                             <ul style="list-style-type: none"> <li>➤ Convert evidence into behaviors;</li> <li>➤ Evaluate awareness and agreement</li> </ul> </li> </ul>		
CLABSI	<ul style="list-style-type: none"> <li>➤ Convert evidence into behaviors                             <ul style="list-style-type: none"> <li>➤ Insertion bundle</li> <li>➤ Maintenance bundle</li> </ul> </li> <li>➤ Empower nurses to stop line insertion if best practice not followed</li> <li>➤ Create/update central line policies</li> <li>➤ Change bathing practices</li> <li>➤ Educate medical staff/residents/mid-level providers on proper insertion techniques                             <ul style="list-style-type: none"> <li>➤ Simulation</li> <li>➤ credentialing</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>➤ Define their role</li> <li>➤ Get medical leadership support for stopping line insertion</li> </ul>	<ul style="list-style-type: none"> <li>➤ Ask executives if need assistance with getting products or support from medical staff</li> </ul>

# 4 E's: Implementation Framework

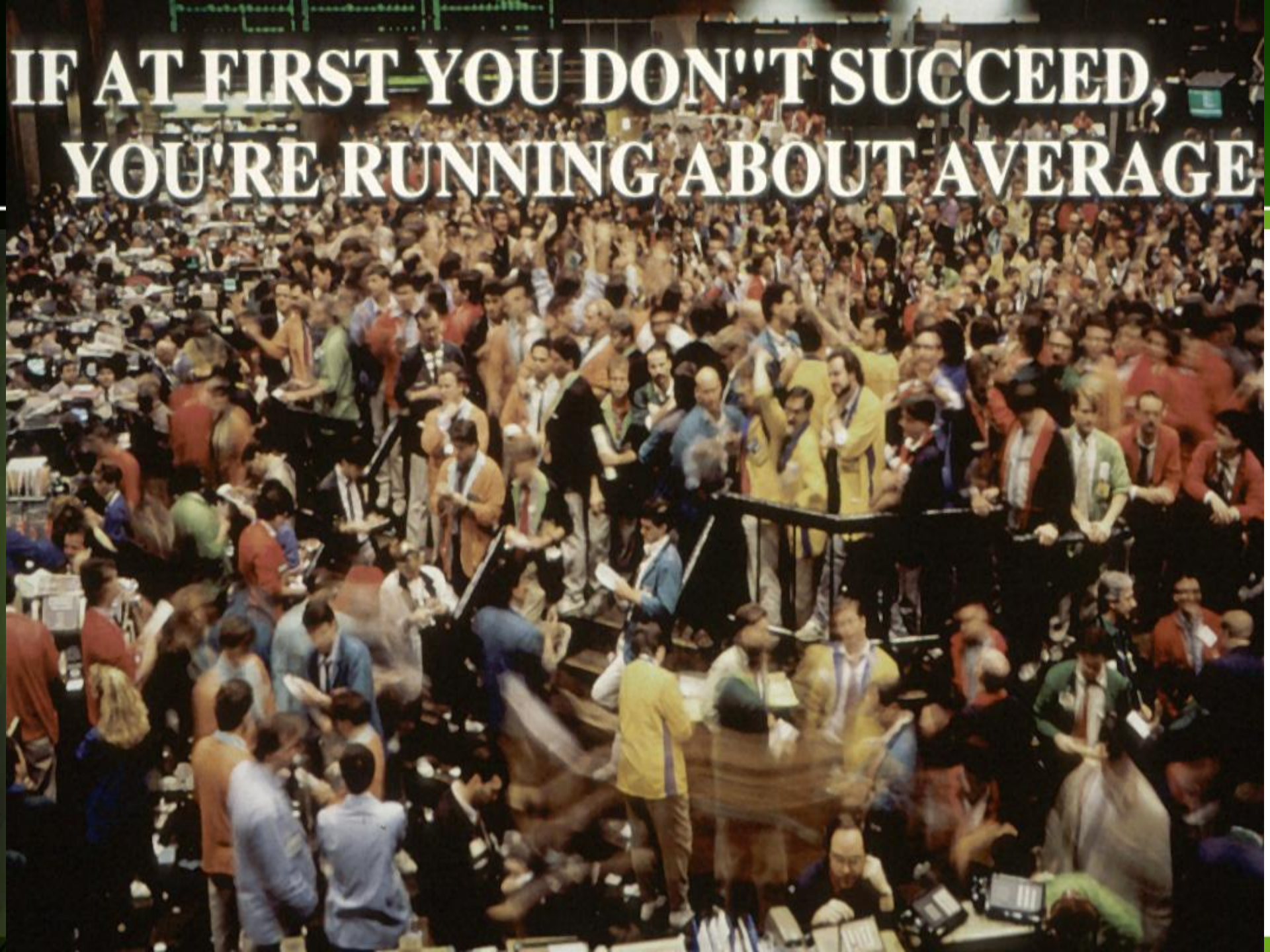
	Frontline Staff	Team Leaders	Senior Executives
Execute	<p>How can I do it?</p> <ul style="list-style-type: none"> <li>– Listen to resisters</li> <li>– Standardize, create independent checks</li> <li>– Make it easy to do the right thing</li> <li>– Learn from mistakes</li> </ul>		
CLABSI	<ul style="list-style-type: none"> <li>➤ Create line cart</li> <li>➤ Develop line insertion checklist</li> <li>➤ Ensure nurse in room during line insertion to complete checklist</li> <li>➤ Establish pre-procedure briefing process</li> <li>➤ Add to multidisciplinary rounds—can this line be removed</li> <li>➤ Learn from each defect---each CLABSI</li> <li>➤ 2% CHG bathing</li> <li>➤ Passive disinfection caps</li> </ul>	<ul style="list-style-type: none"> <li>➤ Hold staff accountable for new process</li> </ul>	<ul style="list-style-type: none"> <li>➤ Remove barriers</li> <li>➤ Support checklist</li> </ul>

# 4 E's: Implementation Framework

	Frontline Staff	Team Leaders	Senior Executives
Evaluate	<p>How do I know we made a difference?</p> <ul style="list-style-type: none"> <li>– Define measures</li> <li>– Regularly assess measures</li> </ul>		
CLABSI	<ul style="list-style-type: none"> <li>➤ Measure CLABSI rate monthly and share with staff</li> <li>➤ Measure compliance with insertion and maintenance bundles</li> <li>➤ Learn from each defect—review each CLABSI with team and staff</li> </ul>	<ul style="list-style-type: none"> <li>➤ Share at staff meetings</li> <li>➤ Support staff in LFDs</li> </ul>	<ul style="list-style-type: none"> <li>➤ Ask for performance measures</li> <li>➤ Share with board</li> </ul>



**IF AT FIRST YOU DON'T SUCCEED,  
YOU'RE RUNNING ABOUT AVERAGE**



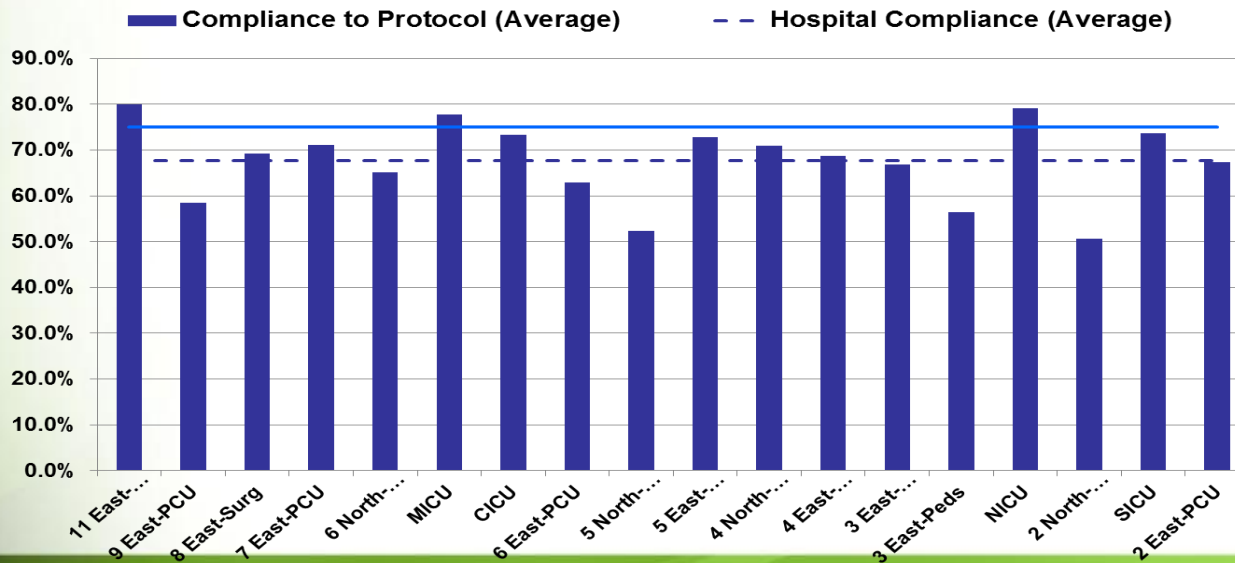
# Implementation Science Examples

- What does it take to change a practice?
  - Human factor engineering
    - Focus on the work systems or the conditions under which persons work
    - Structural work leads to process development then outcome
    - Designs systems to support human performance
    - Force Function behavior: the process of building defenses to avert error or mitigate their effects

The science of human factors: separating fact from fiction.  
Russ, A, et al Quality and Safety in Healthcare. 2013

# Implementation Strategies for Successful Change in Practice

- All lines including peripherals IV's for anyone inpatient
  - If the end user needs to think which lines get them and which don't, less likely to occur
- Excluded ER/OR and procedural areas
  - Limited exposure and less controlled environment



Measuring Compliance

# Drilling Down to the Details

Room #	Patients - If just one patient in room, please indicate with letter A. If more than one in room,, continue to indicate with B, C, etc....	Total Unused Valves (# of valves not connected to cont/intermit IV. Include peripheral, central, continuous lines)	Total Unused Valves w/disinfection caps - (# of disinfection caps placed on available valves)	% of disinfection caps being used	Compliant?		Comments
					YES- 100% of available valves covered with DCs - Indicate with an X	NO- Less than 100% of available valves covered with DC - Indicate with an x	
901	A	2	0	0.0%		X	PIV-Ysites not covered
903	A						
904	A						
906	A						
907	A						
908	A						
909	A						
911	A						
912	A						
913	A						
914	A						
915	A						
916	A						
917	A						
918	A						
919	A						
920	A						
921	A						
922	A	1	0	0.0%		X	Saline lk
923	A	1	1	100.0%	X		Saline lk
924	A	3	3	100.0%	X		All Ysites covered
925	A	1	1	100.0%	X		Saline lk
927	A	1	1	100.0%	X		PICC
928	A	1	1	100.0%	X		Saline lk
931	A	1	1	100.0%	X		Saline lk
932	A	1	1	100.0%	X		Saline lk

## Continuous Improvement & Sustainability

- Measurement
- Learn from defects
- Review literature
- Tests of change



**The Most Powerful Force of Human  
Behavior is Social Influence**

# Know The Cultures Your are Working In!!!

- SAQ (Safety Attitudes Questionnaire)/AHRQ tool
  - Teamwork
  - Safety
  - Working conditions
  - Job satisfaction
  - Stress recognition
  - Perception of upper management
  - Perception of unit management

Strive for 80%, if  $> 60\%$  SAQ scores correlates to decreases in clinical outcomes

# CUSP & HAI Interventions

## Adaptive /Cultural

### CUSP

1. Educate on the Science of Safety
2. Identify Defects (Staff Safety Assessment)
3. Senior Executive Partnership
4. Learn from Defects
5. Implement Teamwork & Communication Tools

## Technical

### HAI/UTI

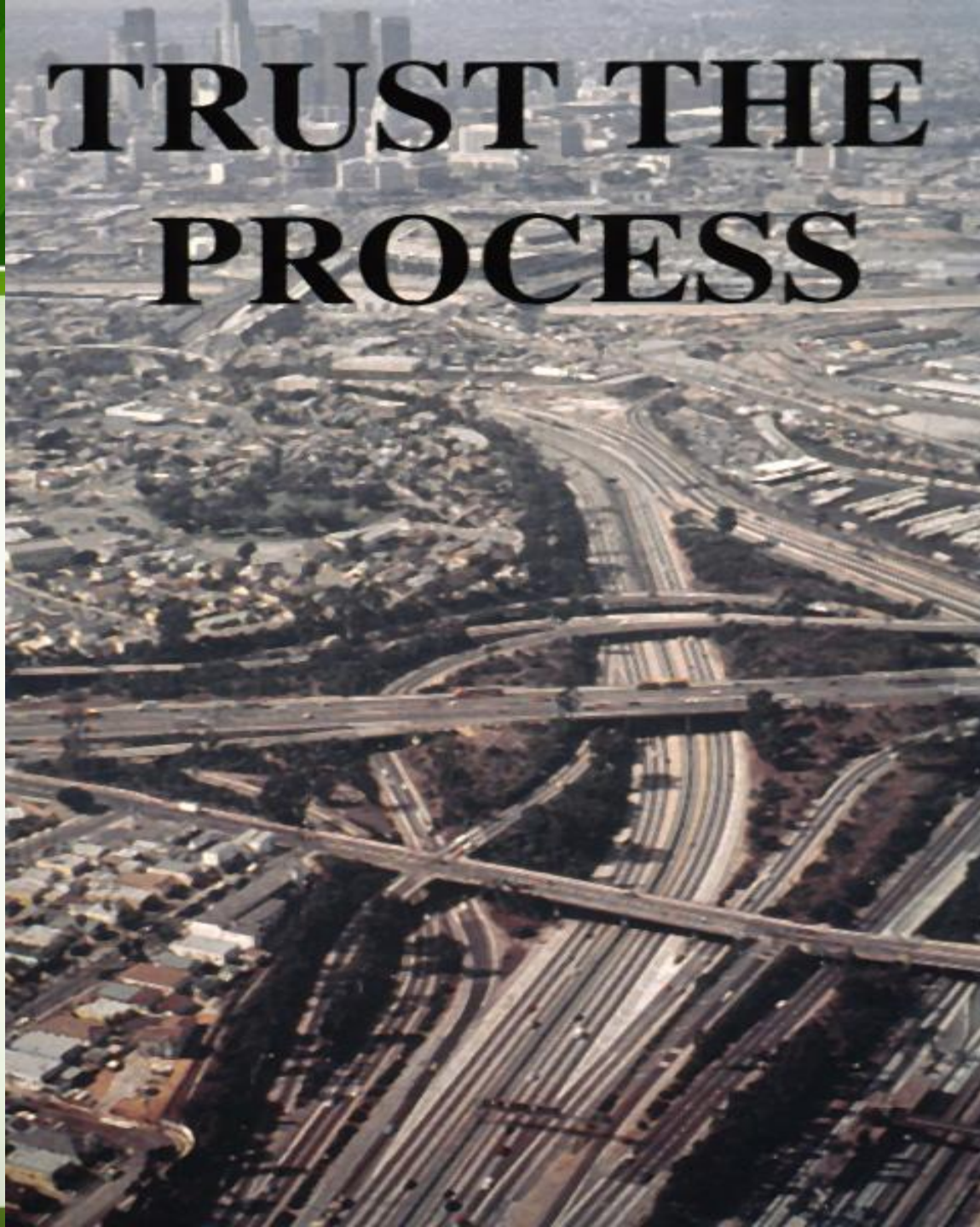
1. Insertion (assess need)
2. Maintenance
  - a. Assessment & Site Care
3. Daily assessment for removal
4. Bathing

*“You gain strength, courage and confidence by every experience in which you really stop to look fear in the face. You must do the thing which you think you cannot do.”*

*Eleanor Roosevelt*



# TRUST THE PROCESS



# Economic Burden of HAI's: Build The Business Case

- Generated point estimates for attributable cost & LOS
- 5 Major Infections=9.8 billion
  - SSI's, CLABSI's, VAP/VAE, CAUTI's, C-Diff
- SSI's (33.7%)
- VAP (31.6%)
- CLA-BSI (18.9%)
- C-Diff (15.4%)
- CA-UTI <1%



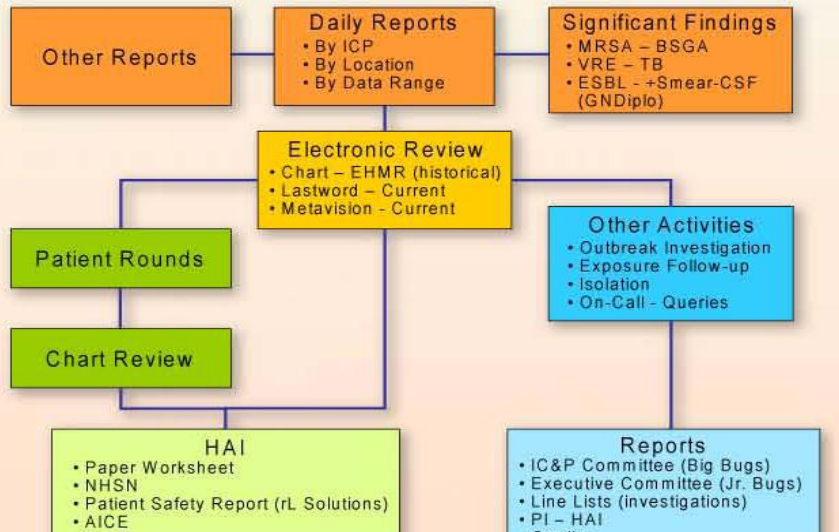
## Per Case Basis

SSI	CLABSI	VAP	CAUTI	C-Diff
\$20,785	\$45,814	\$40,144	\$896	\$11,285

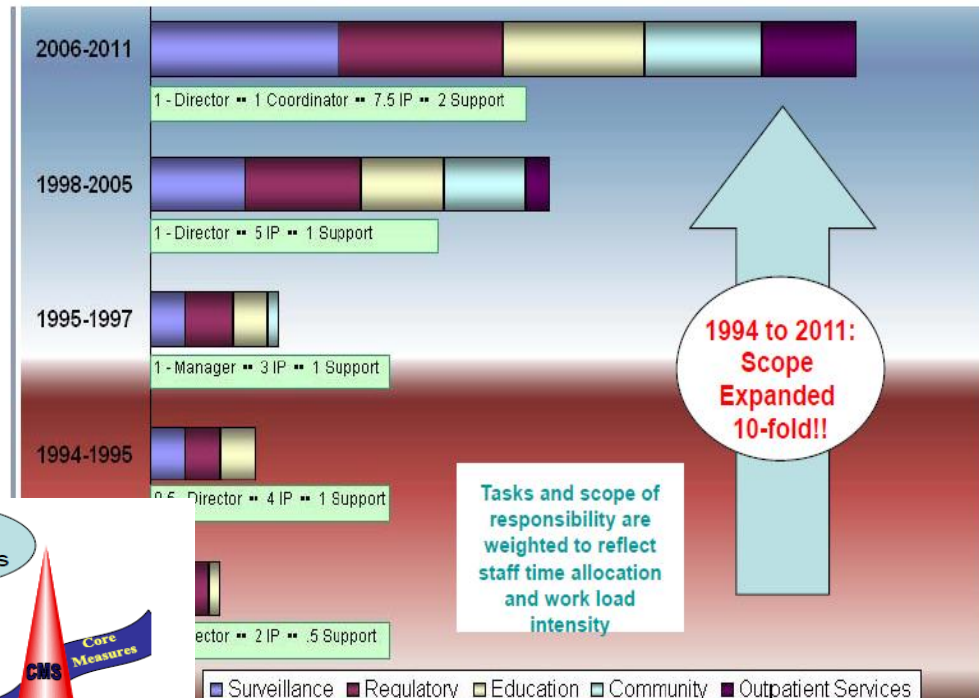
# Lean Surveillance Transformation

Terry Burger & Deb Fry et al Leigh Valley Health Network, Allentown PA

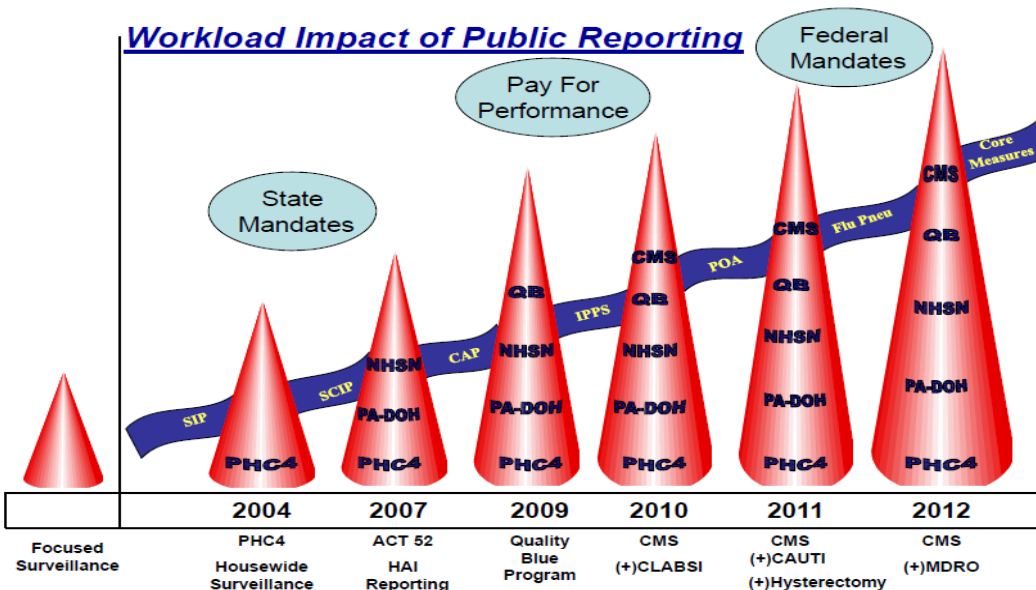
## Process Map



## PERSONNEL-FUNCTION ANALYSIS



## Workload Impact of Public Reporting



- Created Standard Work
- Obtained additional staffing resources
- Purchased electronic devices for IP to be mobile
- Redistributed work assignments

**WHEN WOULD NOW BE A  
GOOD TIME TO DO THIS?**



# Key Take Home Messages

- Self inventory of current skills sets (CHICA Canada)
- Develop a personalized education plan
- Get certified if you are not already-greater understanding & use of the science (Saint S, et al. AJIC;2013:41(2))
- Build a business case for greater resources
- Begin to incorporate the 4 domains of IP competency
  - Join an already established team in the ICU
  - Meet with frontline clinical and administrative leaders
  - Learn the people and the culture

**Make it Happen**



Leap!.....  
And The Net  
will Appear

# Be Courageous

We all are responsible for the safety of our patients.....Be the Collaborative Leader

- “If not this, then what??”
- “If not now, then when?”
- “If not me, then who??”

Sit it Out or Dance

