The Future is Now: Designing Your Practice to Impact Patient Outcomes

Kathleen Vollman
ADVANCING NURSING THROUGH KNOWLEDGE & INNOVATION

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Disclosures

- Subject matter expert CAUTI, CLABSI, HAPU, Sepsis, Safety culture
- Consultant and speaker bureau
  - Stryker's Sage business
  - Potrero Medical
  - Beckman Coulter
- Baxter Advisory Board
- Atlas Lift tech Advisory Board

Session Objectives

- Compare and contrast narrow and expanded views of nurse's patient advocacy role and identify keys basic nursing care that prevent harm
- Understand and integrate the components of the mnemonic SAFETY into your practice
- Design your practice using the SAFETY concepts to impact one nurse sensitive indicator where sustainable outcomes have not occurred


ABOUT US


S
Self
A
Advocacy
F
Fundamentals
E
Evidence
T
Team
Y
Yes, I Will

S

Self

Number 1 Respected Profession

Nursing

Gallup Poll: 82% Honesty &
Ethical Rating

So Why Don’t We Feel Respected?

Reclaiming Professional Respect

Work Environment

Quality of Care You Provide to Patient & Families

What Behaviors or Communications Make You Feel the Recipient of Respect?

Feeling of Respect or Not being Respected

- Respected
  - Feeling listened to
  - Feeling revered for their knowledge
  - Feeling trusted
  - Feel part of the group
  - Being acknowledged
  - Sense of belonging/contributing
  - Persons look out for each other and their support
  - Fairness
  - Free to speak
  - Opportunities to excel

- Not Being Respected
  - Disregarded
  - Not revered
  - Not trusted
  - Not supported
  - Not recognized
  - Closed conversation
  - Speaking in a tone that is demeaning
  - Ideas and opinions not considered a value priority
  - Unsafe, guarded, pressured, put down

Bournes DA, et al. Nursing Science Quarterly, 2009;22(1):47-56

Respect

Self Respect

Self Respect

Internal Dialogue

External Dialogue

The Road to Respect

I spoke.

You listened.

I felt valued and honored.

You shared your opinion.

I trusted your wisdom.

The circle of respect was complete.

We saw in each other's eyes are common humanity.

Now, moving to a zone of mutual affirmation, we felt safe to trust and learn and nurture in the give-and-take of life.

Yasmin Morais 2006

A Advocacy

Advocacy

- Advocacy can be seen as a deliberate process of speaking out on issues of concern in order to exert some influence on behalf of ideas or persons.

http://en.wikipedia.org/wiki/Advocacy accessed 03/05/2009

Broaden the Definition of Advocacy

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

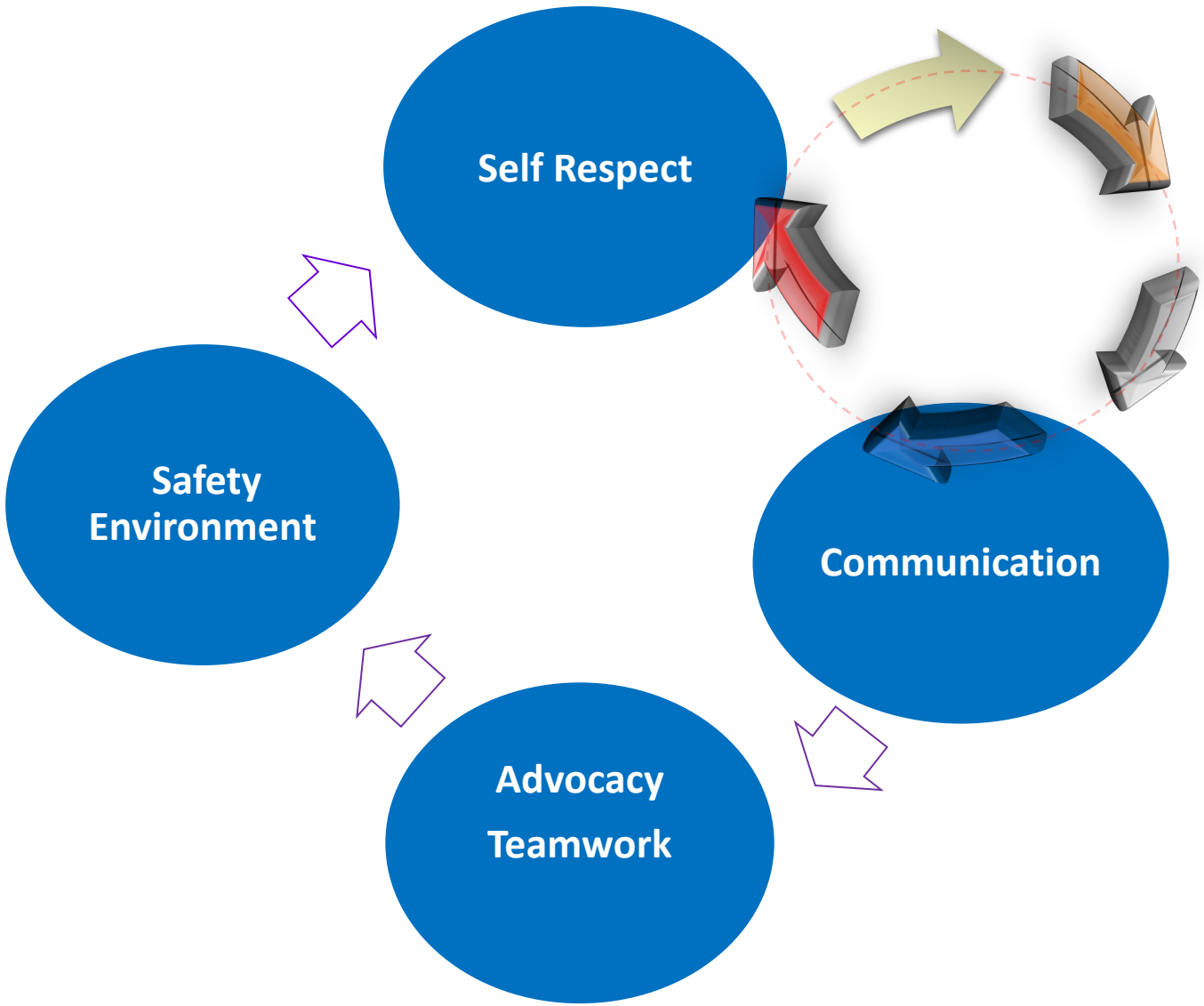
Florence Nightingale

Advocacy = Safety

Patient Advocacy/Safety Related to Clinical Practice

- Nurses knowledge of the Evidence based care
- Ability to deliver the care to the right patient at the right time, every time it is needed
- The ability to communicate patient concerns in a concise, data driven manner and take appropriate action
- Understanding that I am the voice of the patient

Why Effective Communication May Be Challenging for Nursing



The Silent Treatment: April 2011

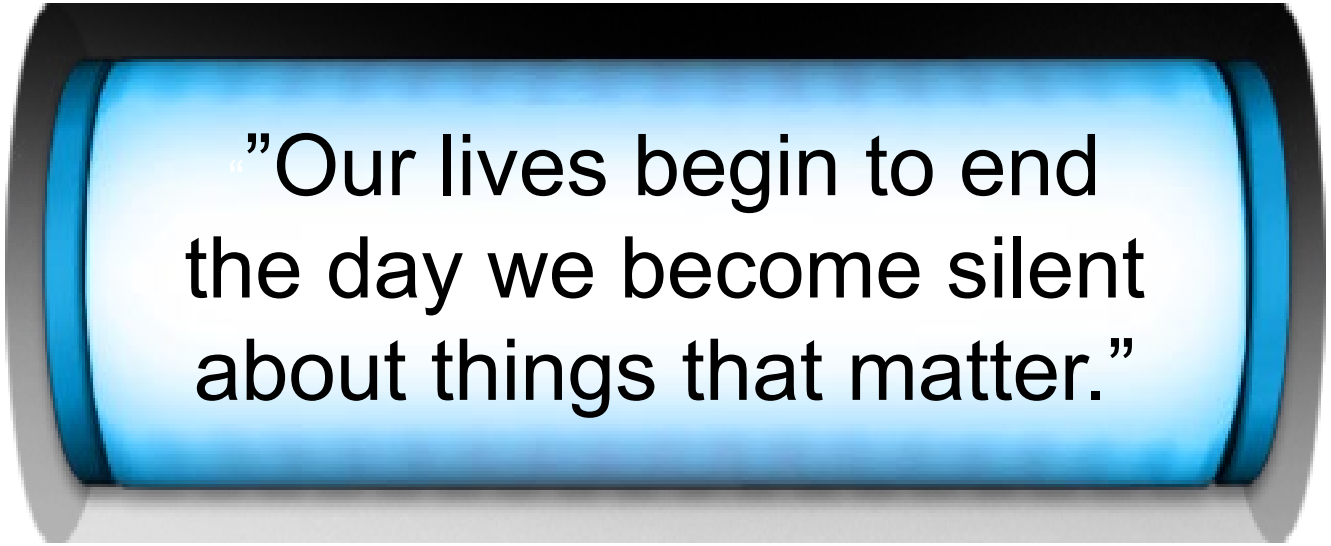
- 85% of workers reported a safety tool warned them of a problem that may have been otherwise missed & could harm a patient
- Safety tools include: handoff protocols, checklists, COPE, automated medication dispensing machines.
- 58% said they got the warning, but failed to effectively speak up & solve the problem
- 3 “undiscussbale” issues: dangerous short cuts, incompetence & disrespect (4/5 nurses)
- 1/2 say shortcuts lead to near misses
- 1/3 say incompetence leads to near misses
- 1/2 say disrespect prevented them from getting others to listen or respect their opinion
- Only 16% confronted the disrespectful behavior

http://www.silenttreatmentstudy.com

What Happens When You Speak Up!!

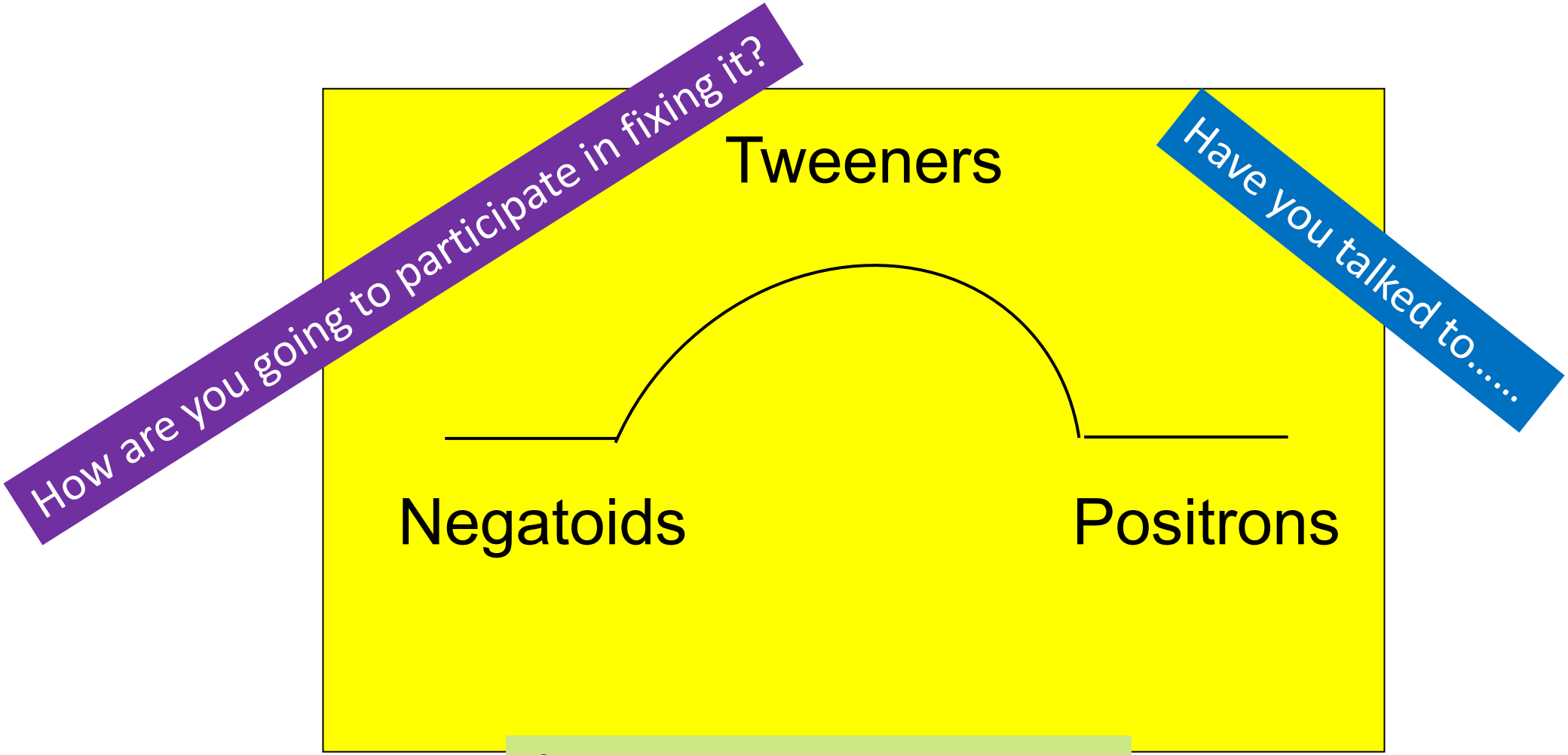
- 16% of healthcare workers who raise these crucial concerns observe better patient outcomes, work harder, are were more satisfied and are more committed to staying in their jobs.

www.aacn.org/WD/Practice/Docs/PublicPolicy/**SilenceKills**.pdf
http://www.silenttreatmentstudy



Martin Luther King Jr.

Understanding Your Culture & Communication Strategies



If you Permit it you Promote it

A good word is an easy obligation; but not to speak ill requires only our silence; which costs us nothing.

John Tillotson

Courage

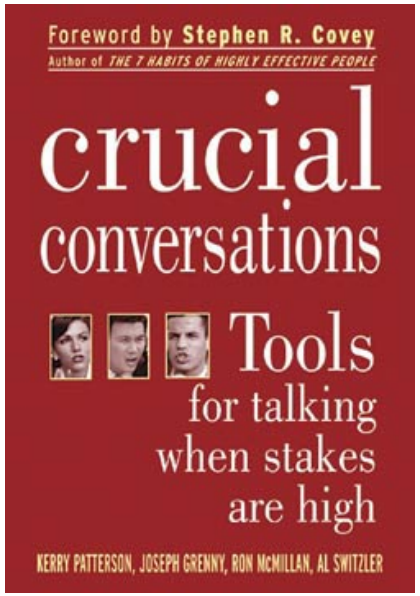
"Courage is what it takes to stand up and speak. Courage is also what it takes to sit down and listen."

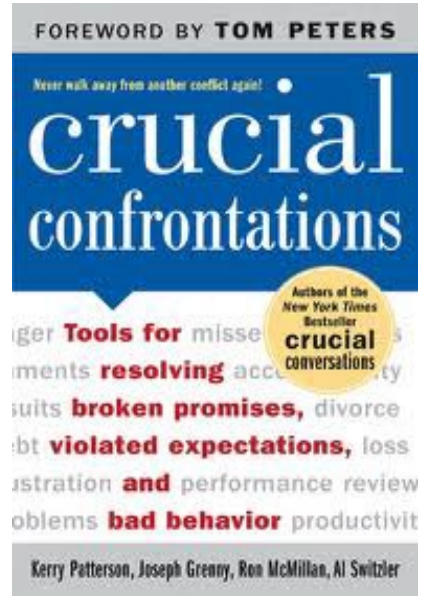
Winston Churchill

What to Do Individually?

- Prevent from occurring through training on effective communication
- Deal in real time to prevent staff or patient harm
- Initiate post event reviews, action and follow-up
- Make it as transparent as possible
- Zero-tolerance policy and procedure
- Intervention strategy: code white

Communication Training





Communication Strategies

- Tools to help structure communication
  - SBAR for communication with Doctors: Situation, Background, Assessment and Recommendation
  - CUS Words: I am Concerned, I am Uncomfortable, This is not Safe

Use CUS words when assertion of your communication fails…things go wrong…concern expressed but mutual decision not reached or proposed action doesn't happen in time frame agreed upon

What to Do Individually?

- Prevent from occurring through training on effective communication
- Deal in real time to prevent staff or patient harm
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- Intervention strategy: code white

Fundamentals

Missed Nursing Care

- Any aspect of required patient care that is omitted (either in part or whole) or significantly delayed.
- A predictor of patient outcomes
- Measures the process of nursing care

Kalish, R. et al. (2012) Am Jour Med Quality, 26(4), 291-299.

Hospital Variation in Missed Nursing Care

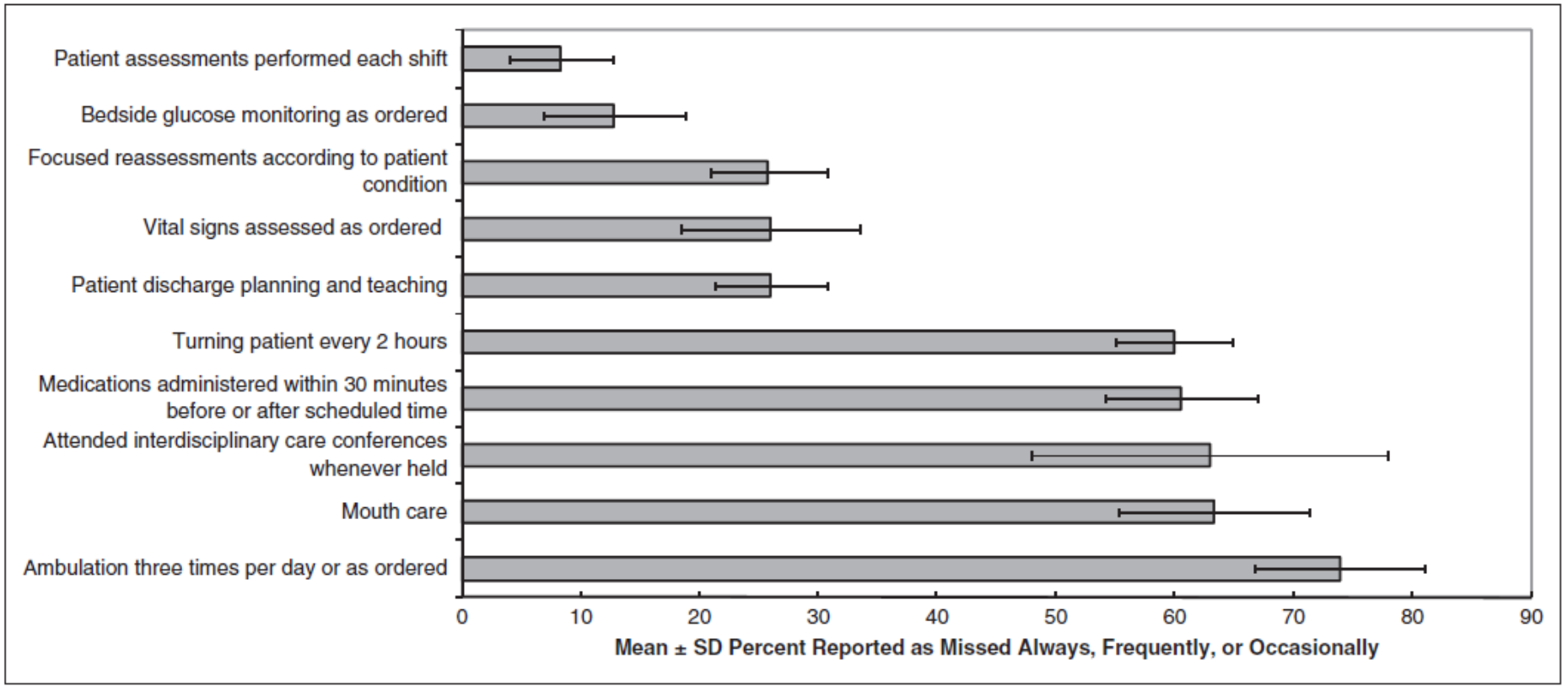


Figure 2. Elements of care most and least frequently missed. The solid bars represent the means across all 10 hospitals, and the range lines indicate the standard deviations.

Kalish, R. et al. (2012) Am Jour Med Quality, 26(4), 291-299

Patient Perceptions of Missed Nursing Care

Table 2. Elements of Nursing Care by Ability of Patient to Report and Extent Missed*

	Fully Reportable	Partially Reportable	Not Reportable
			■ Patient assessment ■ Surveillance ■ IV site care
Frequently Missed	■ Mouth care ■ Listening ■ Being kept informed	■ Ambulation ■ Discharge planning ■ Patient education	
Sometimes Missed	■ Response to call lights ■ Response to alarms ■ Meal assistance ■ Pain medication and follow-up	■ Medication administration ■ Repositioning	
Rarely Missed	■ Bathing	■ Vital signs ■ Hand washing	

* IV, intravenous.

Kalisch, B et al. (2012). TJC Jour Qual Patient Safety,38(4), 161-167

Protect The Patient From Bad Things Happening on Your Watch

Implement
Interventional Patient Hygiene

INTERVENTIONAL PATIENT HYGIENE

Hand 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

Catheter Care

Bathing & Assessment

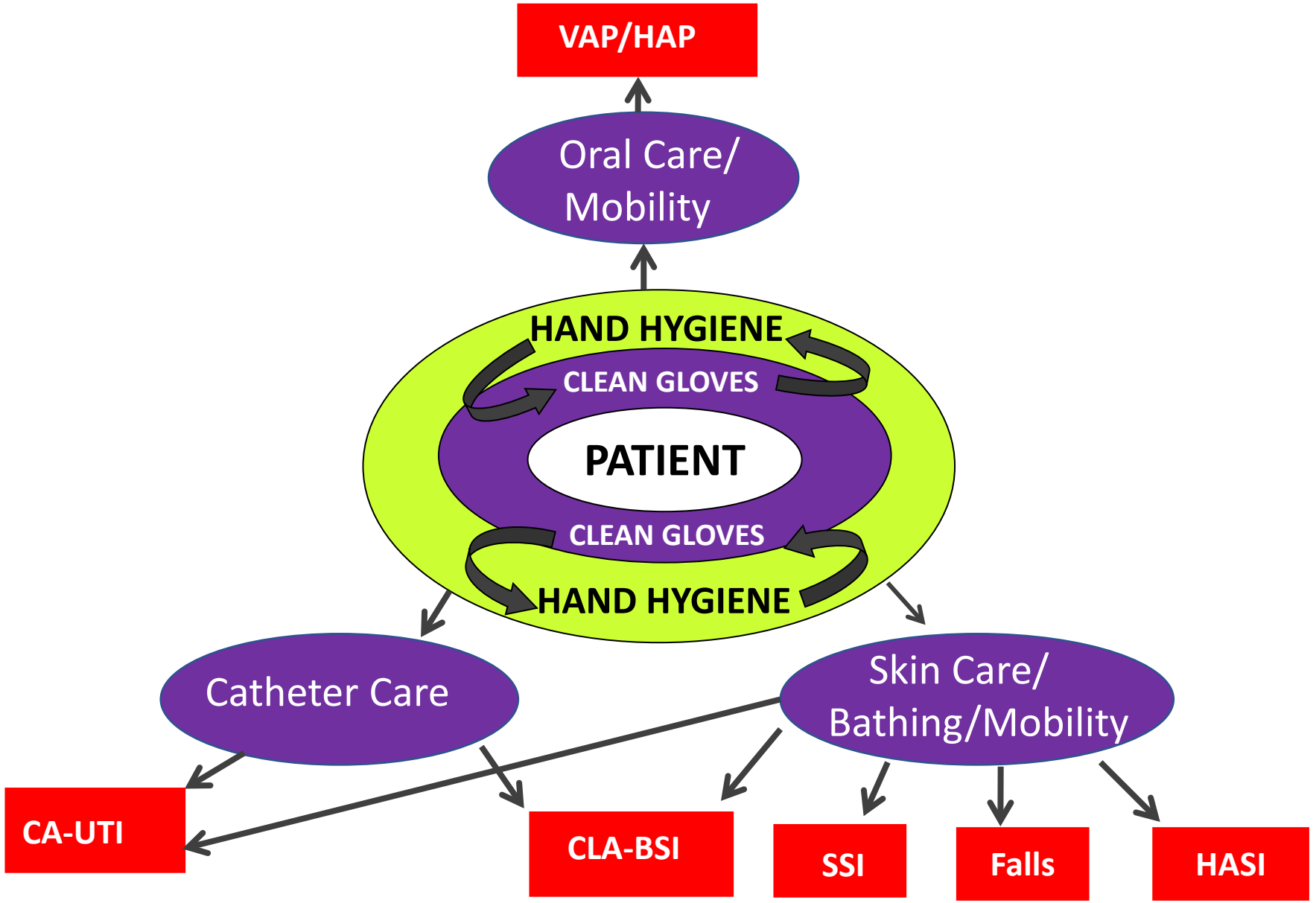
Comprehensive Oral Care Plan

Incontinence Associated Dermatitis Prevention Program

Pressure Ulcer Prevention

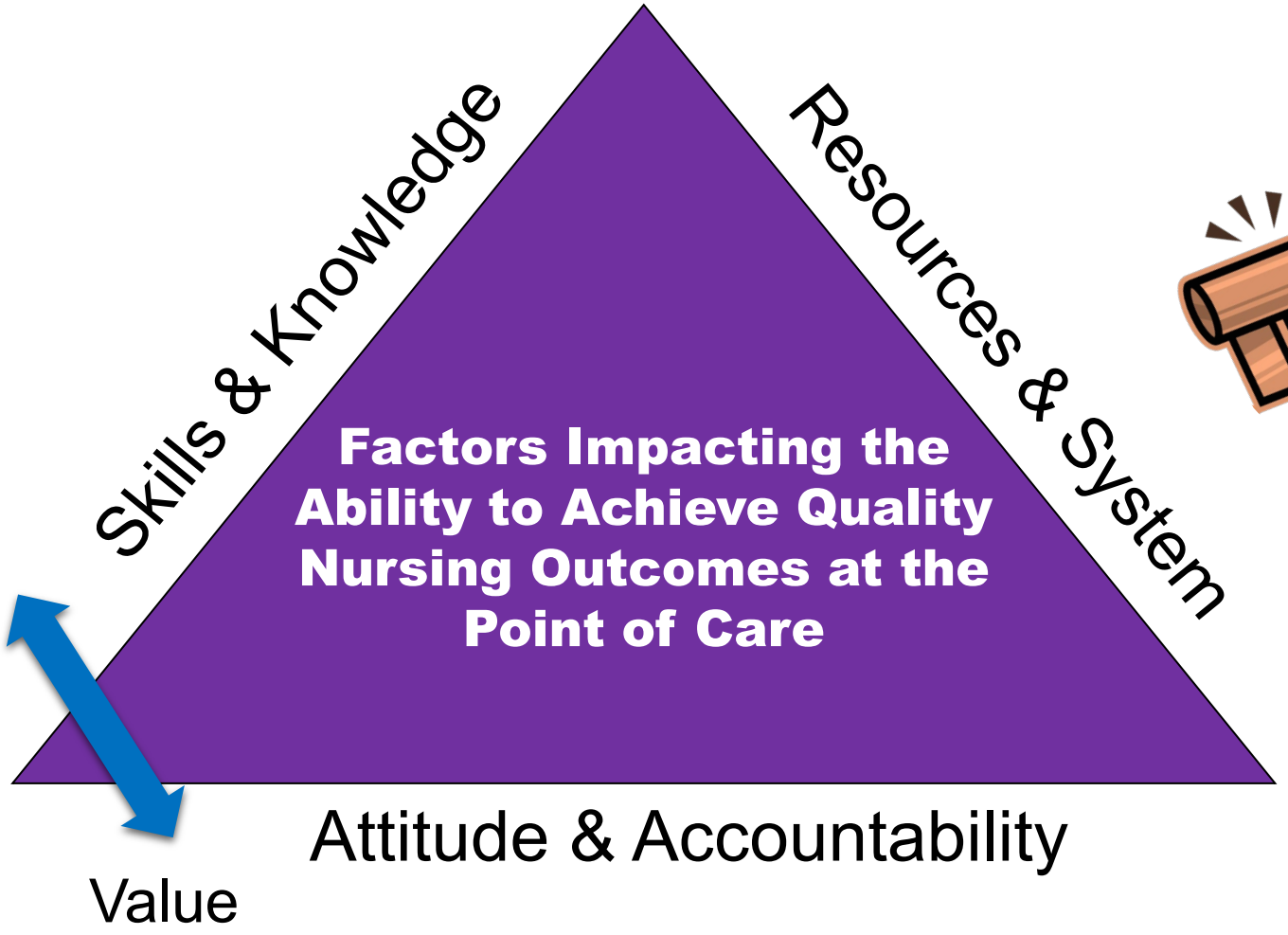
Vollman KM. Intensive Crit Care Nurs, 2013;22(4): 152-154

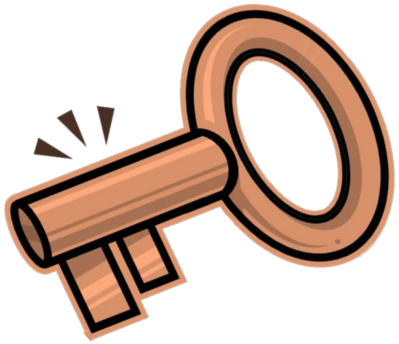
INTERVENTIONAL PATIENT HYGIENE(IPH)



Vollman KM. Intensive Crit Care Nurs, 2013;22(4): 152-154

Achieving the Use of the Evidence





Vollman KM. Intensive Crit Care Nurs, 2013;22(4): 152-154

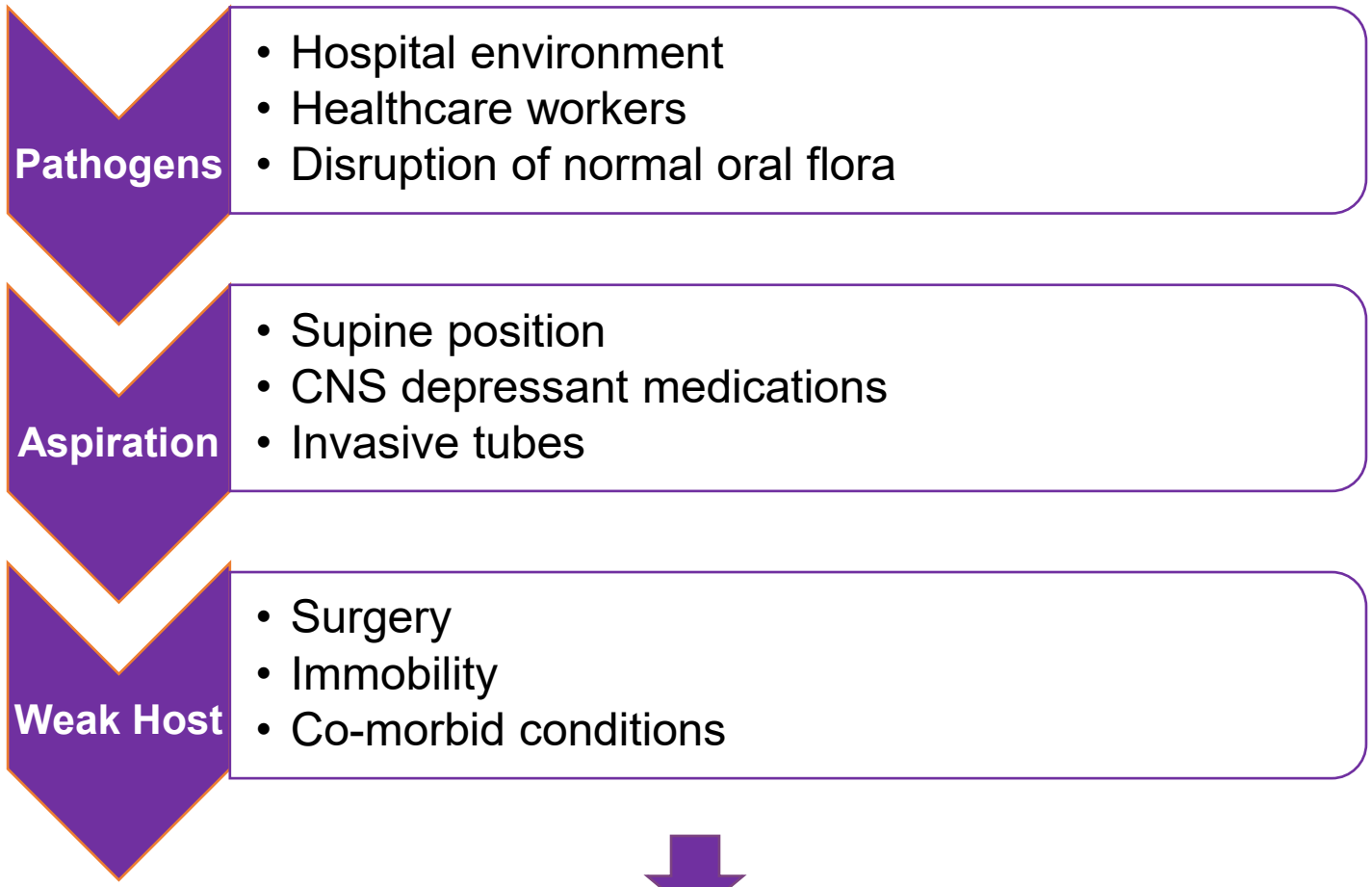
Preventing NV-HAP Through Evidence Based Fundamental Nursing Care

Build the Will: NV-HAP Causes Harm

- HAP 1st most common HAI in U.S.[1,2]
- 1 in every 4 hospital infections are pneumonia[1]
  - 60% non-ventilator
- Increased mortality →15.5%-30.9%[3]
  - 8 ½ x more likely to die than equally sick patients who did not get non-vent HAP[4]
- Increased morbidity → 50% are not discharged home[5,6,7]
  - Extended LOS → 7-9 days[5,6,7]
  - Increased Cost → $36K to $54K per case[6]
  - 2x likely for readmission <30 day[5,6]
  - 46% ↑ ICU utilization[5,6]
  - Increase antibiotic utilization[8]

1. Magill SS, et al. NEJM 2018;379:1732-1744
2. Strassle PD, et al. Infect Control Hosp Epidemiol. 2020 Jan;41(1):73-79.
3. Giuliano K, et al. Am J of Infect Control. 2018;46:322-327
4. Micek ST, et al. Chest. 2016 Nov;150(5):1008-1014.
5. Baker D, Quinn B et al. J Nurs Care Qual, 2019 1-7
6. Giuliano K, et al. Am J of Infect Control. 2018;46:322-327
7. Davis J et al. Pa Patient Safety Advisory, 2018;15(3)
8. Lacerna CC, et al. Infec control & Hosp Epidemiology 2020;41, 547-552

Risk Factors for Pneumonia

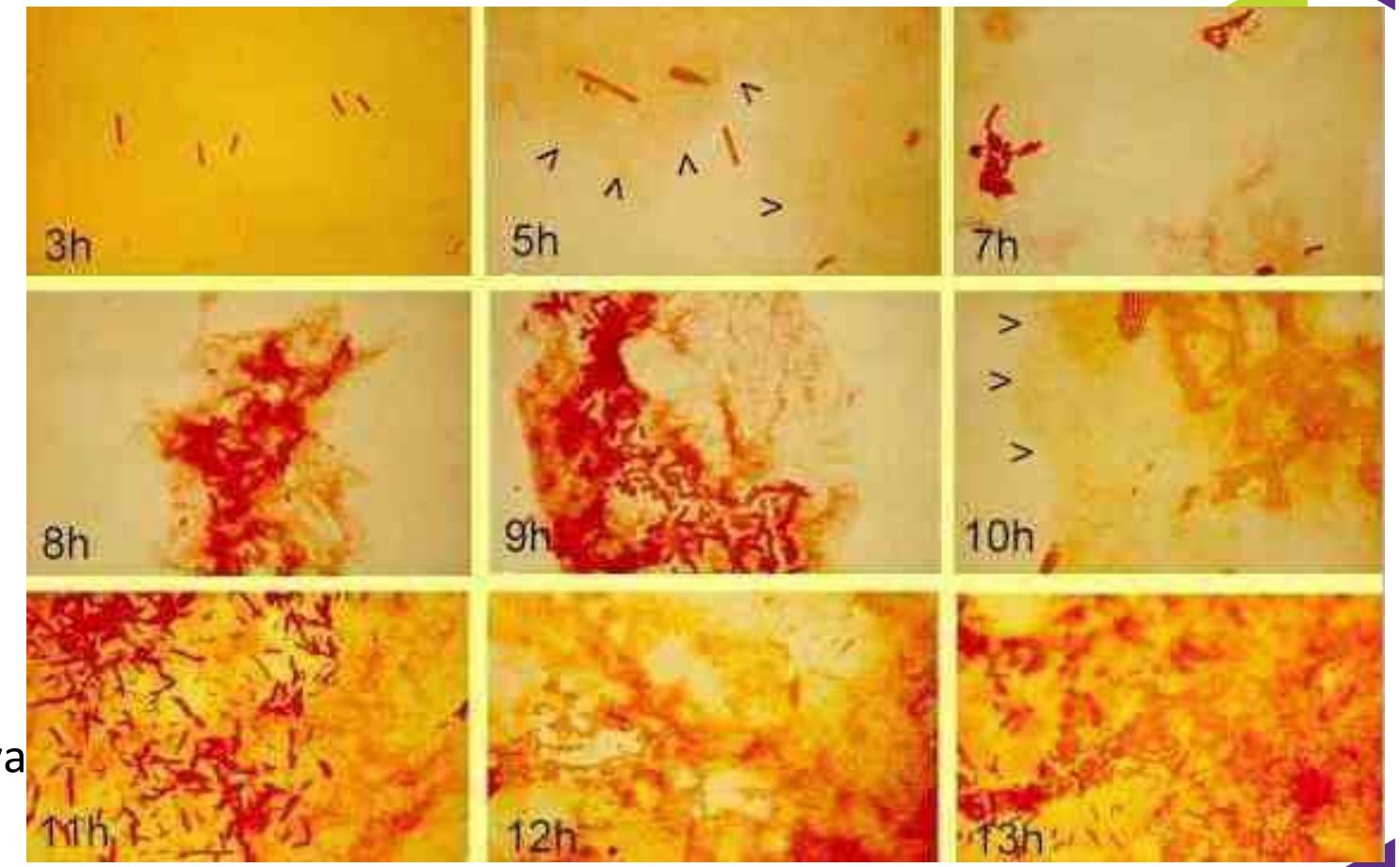


Quinn & Baker. (2014). *J Nsg Scholarship, 46*(1), 11-19.

Slide courtesy of Barb Quinn

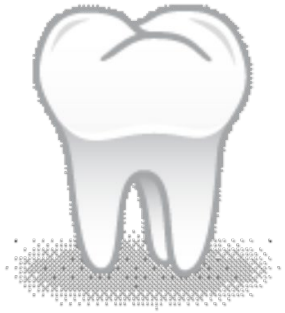
Where does Pneumonia Start: Oral Bacteria during Hospitalization & Illness

- Oral cavity
  - > 1 billion oral microbes
  - 700-1000 species
  - Replicate's 5 x in 24hr period
- Disruption of Microbiome
  - Plaque, gingivitis, tooth decay
  - Reduced salivary flow/change in pH
- 24-48 hours for HAP pathogens in mouth
- If aspirated =100,000,000 bacteria/ml saliva into lungs



Scannapieco FA, Stewart EM, Mylotte JM.. *Crit Care Med. 1992;20:740-745.*
Langmore, S. et.al. (1998) *Dysphagia. 13,* 69-81
Loesche, W. 2012
http://helios.bto.ed.ac.uk/bto/microbes/biofilm.htm

Oral Cavity & VAP



- 89 critically ill patients
- Examined microbial colonization of the oropharynx through out ICU stay
- Used pulse field gel electrophoresis to compare chromosomal DNA
- Results:
  - Diagnosed 31 VAPs
  - 28 of 31 VAPs the causative organism was identical via DNA analysis

- 49 elderly nursing home residents admitted to the hospital
- Examined baseline dental plaque scores & microorganism within dental plaque
- Used pulse field gel electrophoresis to compare chromosomal DNA
- Results
  - 14/49 adults developed pneumonia
  - 10 of 14 pneumonias, the causative organism was identical via DNA analysis

Garrouste-Orgeas et. al. Am J Respir Crit Care Med. 1997;156:1647-1655
El-Solh AA. Chest. 2004;126:1575-1582

NV-HAP SMCS Research Findings: 2010

24,482 patients and 94,247 pt days

Incidence:

- 115 adults
- 62% non-ICU
- 50% surgical
- Average age 66
- Common comorbidities:
  - CAD, COPD, DM, GERD
- Common Risk Factors:
  - Dependent for ADLs (80%)
  - CNS depressant meds (79%)

Cost:

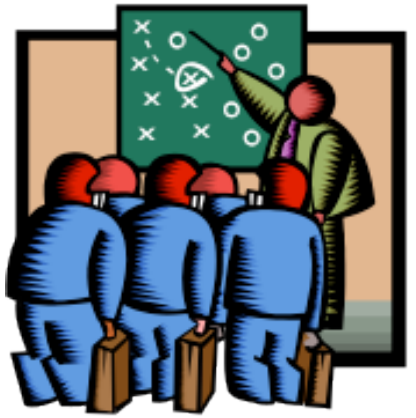
- $4.6 million
- 23 deaths
- Mean Extended LOS 9 days
- 1,035 extra days

Quinn, B. et al. Journal of Nursing Scholarship, 2014. 46(1):11-19

SMCS HAP Prevention Plan

Phase 1: Oral Care

- Formation of new quality team: Hospital-Acquired Pneumonia Prevention Initiative (HAPPI)
- New oral care protocol to include non-ventilated patients
- New oral care products and equipment for all patients
- Staff education and in-services on products
- Ongoing monitoring and measurement
  - Monthly audits



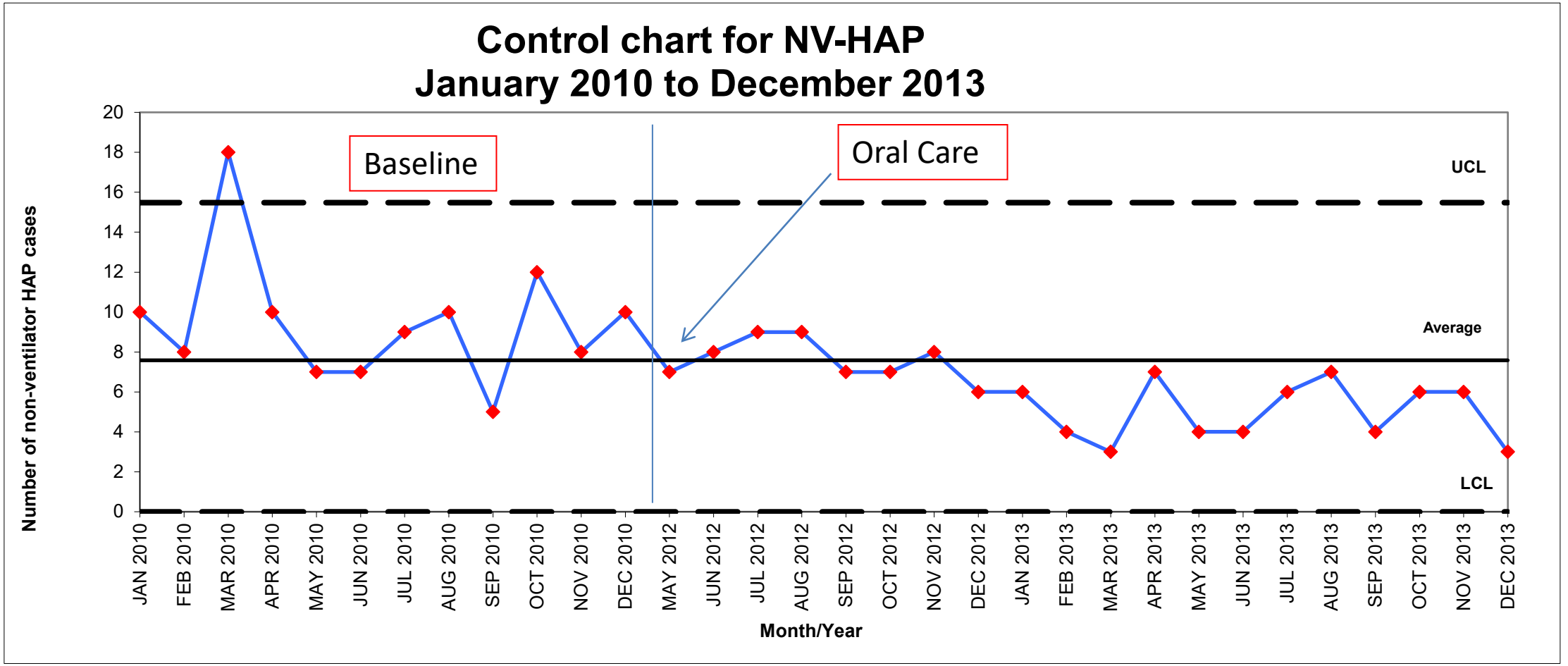
Quinn B, et al. J of Nursing Scholarship, 2014, 46(1):11-19

Protocol – Plain & Simple

Patient Type	Tools	Procedure	Frequency
Self Care / Assist	Brush, paste, rinse, moisturizer • Soft-bristled toothbrush • Toothpaste with dentifrice • Antiseptic mouth rinse (alcohol-free) • Moisturizer (Petroleum-free)	Provide tools Brush 1-2 minutes Rinse	4X / day
Dependent / Aspiration Risk	Suction toothbrush kit (4)	Package instructions	4X / day
Dependent / Vent	ICU Suction toothbrush kit (6) • CHG for vent & cardiac surgery patients	Package instructions	6X / day
Dentures	Denture cup, brush Cleanser Adhesive	Remove dentures & soak Brush gums, mouth Rinse	4X / day

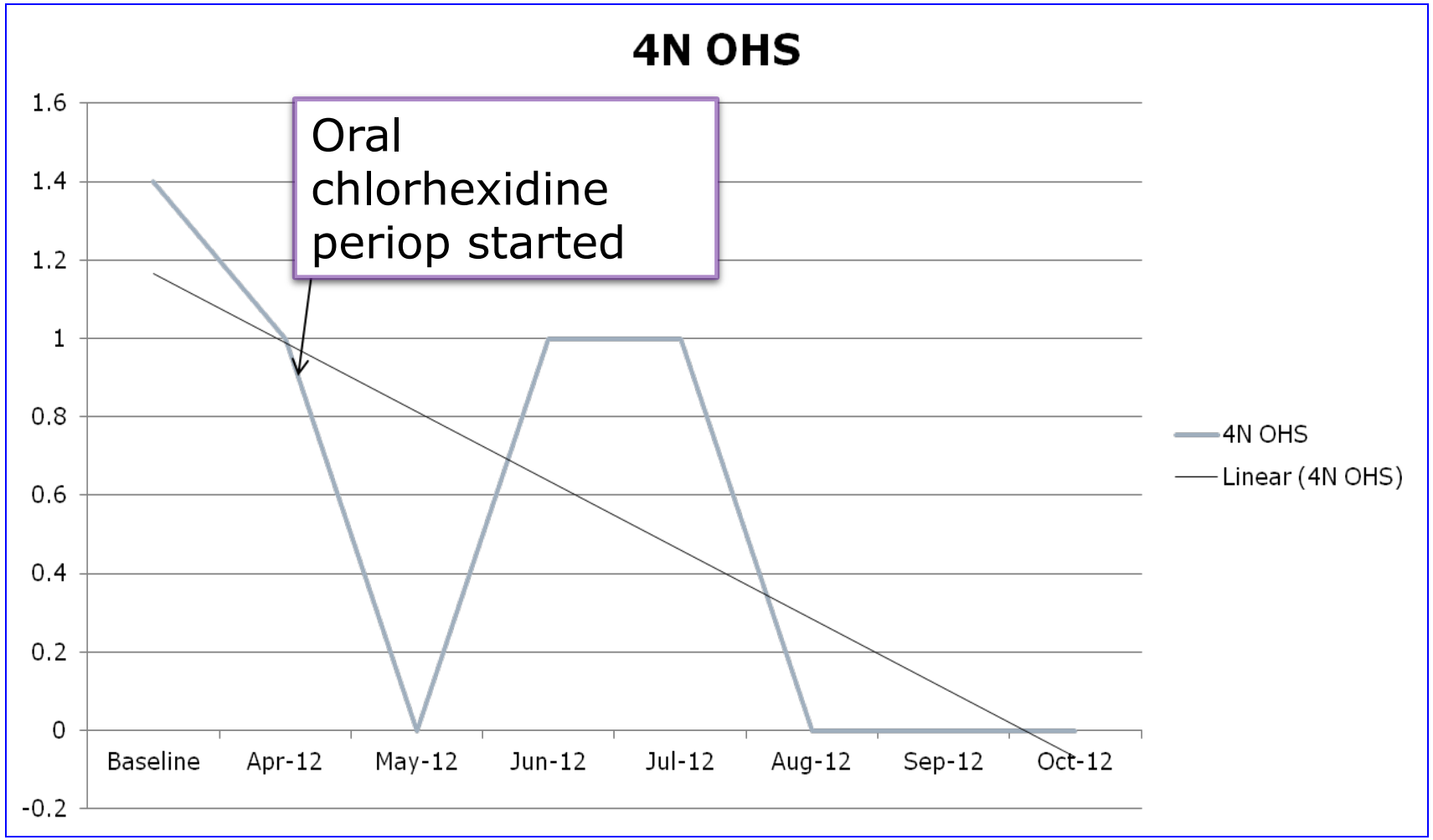
Quinn B, et al. J of Nursing Scholarship, 2014, 46(1):11-19

NV-HAP Incidence
50 % Decrease from Baseline



Quinn, B. et al. Journal of Nursing Scholarship, 2014. 46(1):11-19

Open Heart Surgery Patients: NV-HAP Reduced 75%



Used with permission from Barbara Quinn

Return on Investment

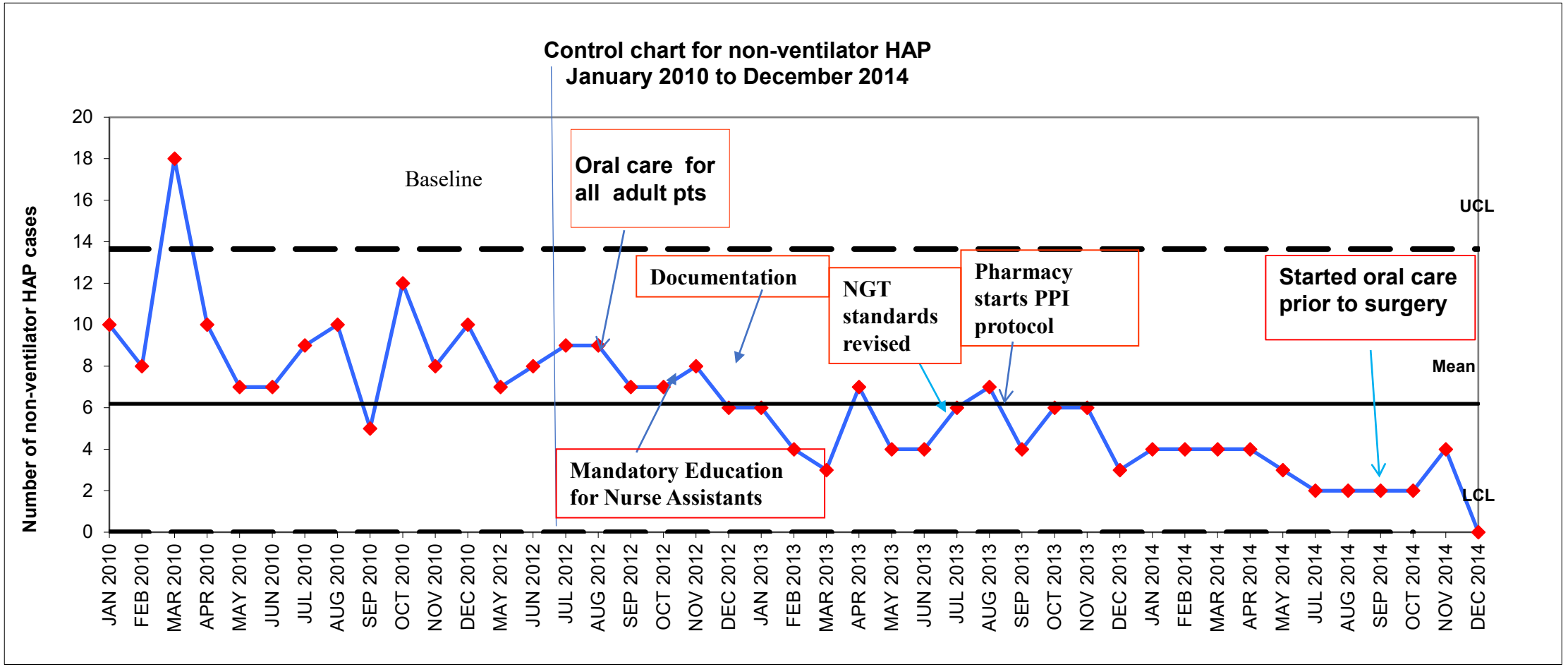
- 60 NV-HAP avoided Jan 1 – Dec. 31 2013
- $2,400,000 cost avoided
- - 117,600 cost increase for supplies
- $2,282,400 return on investment

8 lives saved

PRICELESS

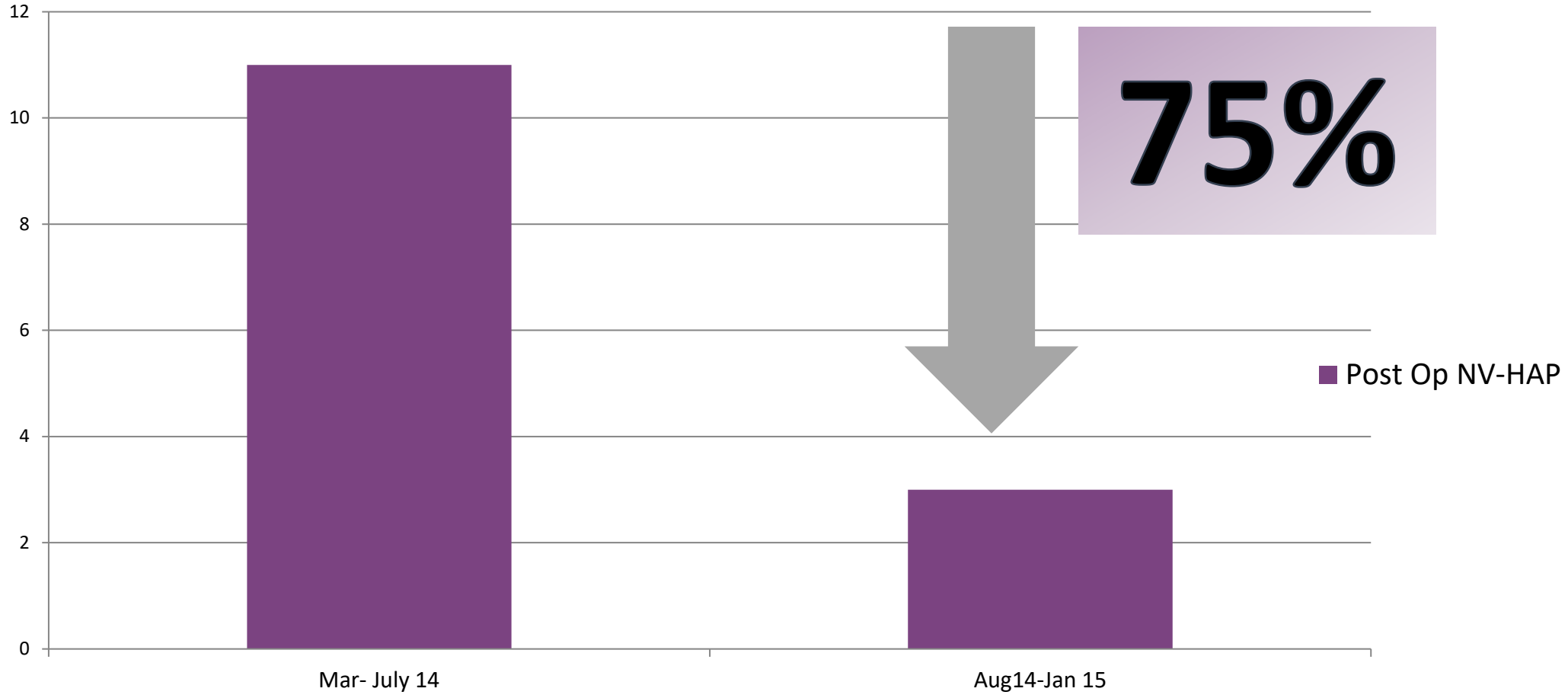
Quinn, B. et al. Journal of Nursing Scholarship, 2014. 46(1):11-19

NV-HAP ↓ 70% from baseline!



Quinn B, Presented at AACN NTI, Houston, Tx, 2017

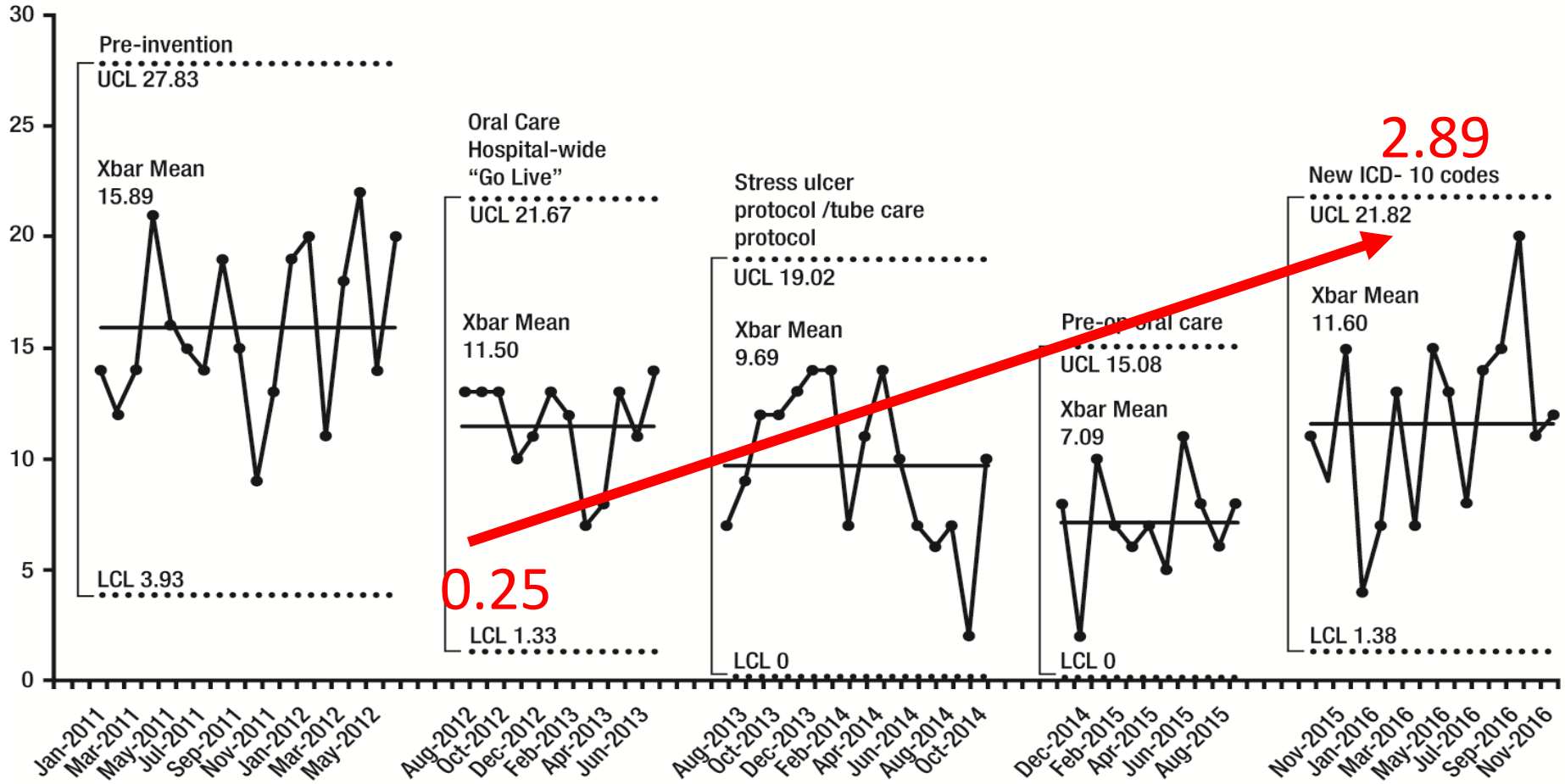
Post-Operative NV-HAP (all adult inpatient surgery) Incidence 6 months Pre-Oral Care vs. 6 Months After



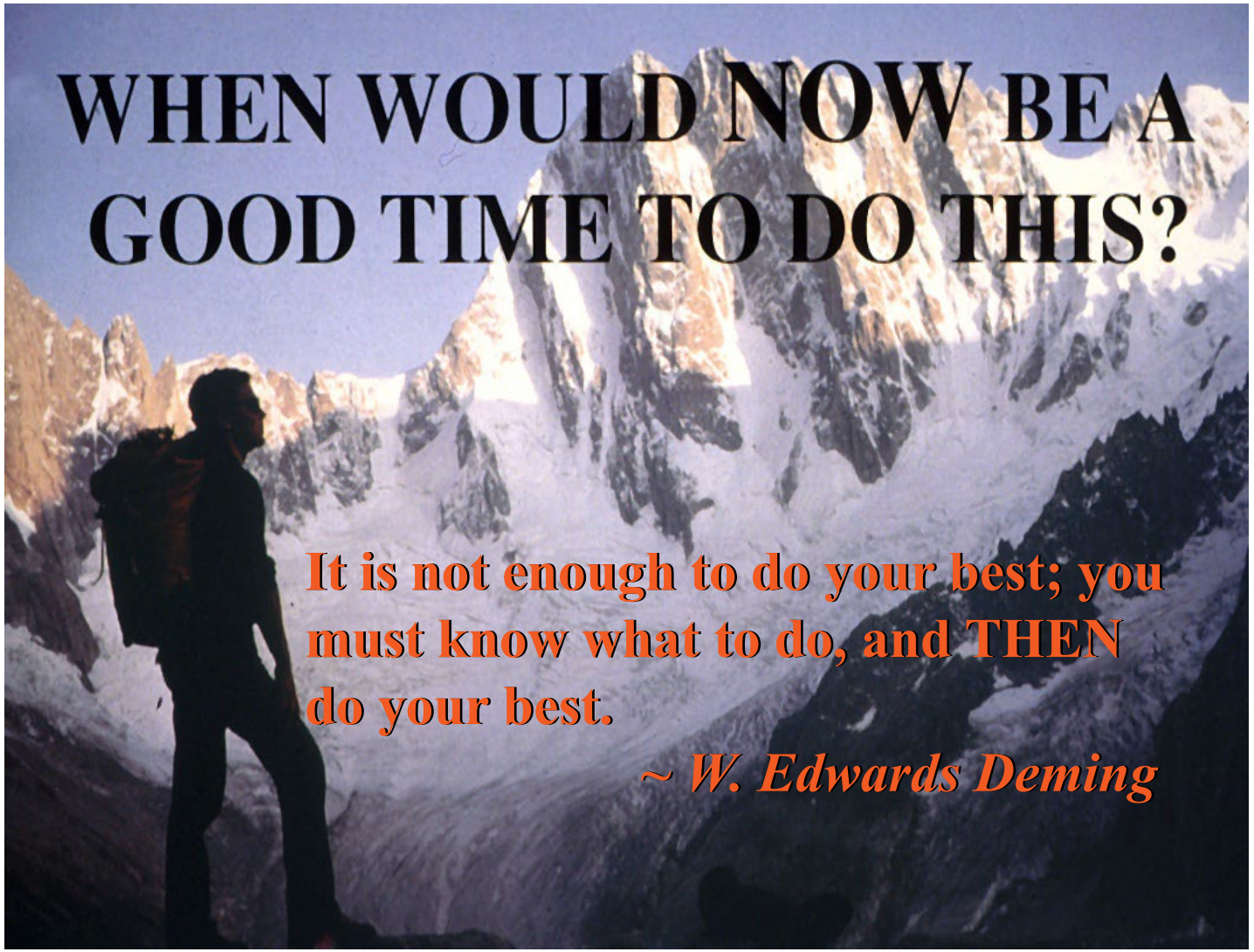
Quinn B, Presented at AACN NTI, Houston, Tx, 2017

Sustainability Hospital Wide Oral Care from .25 to 2.89 (almost 3x a day)

Figure 1: Statistical process control R and X-bar-charts:
International Statistical Classification of Diseases and Related Health Problems (ICD) codes (3 standard deviations)



Baker, Quinn, Ewan, Giuliano (2018) Sustaining quality improvement: LT reduction of NVHAP. J Nurs Care Qual, 1-7.

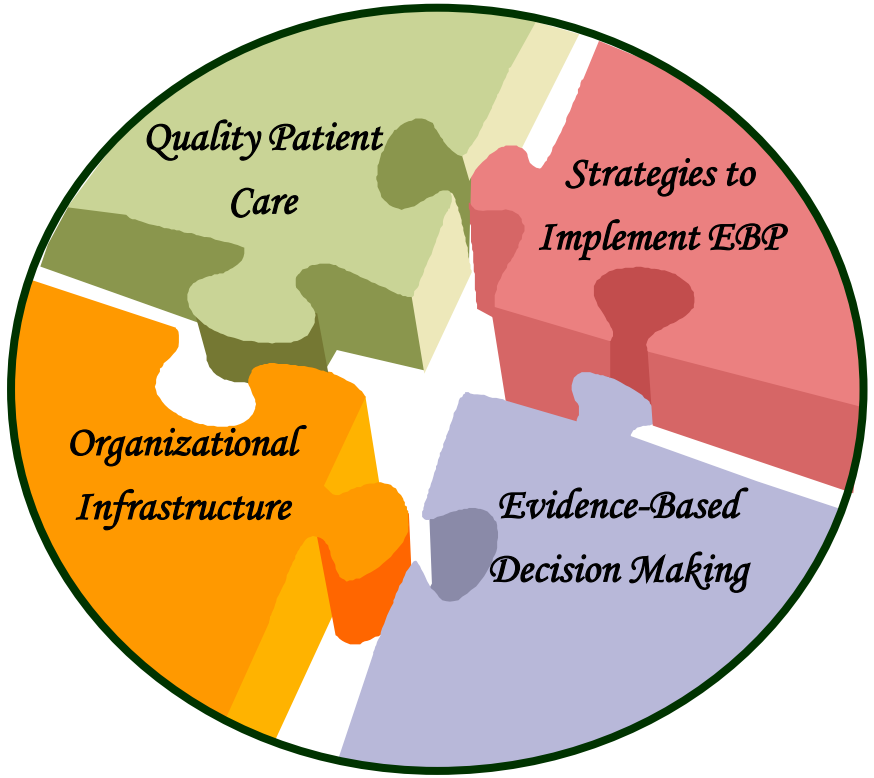

WHEN WOULD NOW BE A GOOD TIME TO DO THIS?
It is not enough to do your best; you must know what to do, and THEN do your best.
~ W. Edwards Deming

E Evidence

Evidence-Based Practice

- “Patients who receive care based on the best and latest evidence from well-designed studies experience 28% better outcomes.” (Heater, et.al. 1988. Nursing interventions and patient outcomes: A meta-analysis of studies. Nursing Research, 37, 303-307)
- It takes as long as 17 years to translate research findings into practice (Balas & Boren, 2000, Managing clinical knowledge for healthcare improvements pp.65-70 . Germany: Schattauer Publishing Co.)
- Without current best evidence, practice is rapidly outdated, often to the detriment of patients.

Melnyk, B. (2005). Evidence-based practice in nursing & healthcare, pp. 4-6, Philadelphia, Lippincott, Williams & Wilkins.



Evidence-Based Practice

What is Good About EBP!!!

- Firm foundation to do the right thing
- Improved patient outcomes
- Basis for interventions
- Basis for evaluation
- Ability to talk in a similar language with other disciplines
- Methods allow correct and more expedient movement of evidence into practice


Activity without purpose is
the drain of your resources

We Make a Difference in Quality & Safety

- Increase nurse staffing was associated with; lower hospital related mortality, lower cardiac arrest, lower hospital acquired pneumonia in the surgical population, lower episodes of failure to rescue, lower UTIs, lower G.I. bleed/shock, lower falls & rates in hospital acquired pressure ulcers
- The risk of hospital deaths would increase by 31% or roughly 20,000 avoidable deaths each year if all hospitals had 8 patients per nurse instead of 4 (JAMA 2002)
- When nurses case managed children with asthma there were fewer absences from school
- 11% improvement in failure to rescue (HealthGrades 2009 Report)

We Make a Difference in Quality & Safety

- Home care/discharge planning/APRN's; lower length of stay, lower healthcare costs, fewer hysterectomies
- Patients in CCU with better nurse work environment experienced a 11% lower odds of 30-day mortality (Kelly DM Crit Care Med 2014)
- Patient satisfaction directly correlated to registered nurse satisfaction (HCAHPS)
- 10% ↑ in the # of RNs ↓ lung collapsed by 1.5%, pressure ulcers 2%, Falls 3%, UTI < 1% (Urich Med Care 2003, 41(1):142-152)
- Nurse's effect explained 7.9% of variance in patients' clinical condition during their hospital stay (Yakusheva O, et al, HSR, 2014)

Patient Safety Strategies Strongly Encouraged for Adoption with Moderate to High Evidence

- Preoperative and anesthesia checklists to prevent perioperative events
- Bundles with a checklist to prevent CLA-BSI
- Interventions to reduce use of urinary catheters; stop orders, reminders or removal protocols
- Bundle to prevent ventilator associated pneumonia
- Hand hygiene
- Multiple component initiative to prevent pressure ulcers
- Prophylaxis intervention for venous thromboembolism
- Using real-time ultrasonography for placement of central catheters

Alspach JG. Crit Care Nurse, 2013;33(3):9-12

Patient Safety Strategies Encouraged for Adoption with Moderate to High Evidence

- Interventions to reduce patient falls
- Using clinical pharmacist to reduce adverse drug events
- Documenting patient preference for life-sustaining treatment
- Obtaining informed consent prior to medical procedures
- Team training
- Medication reconciliation
- Using surgical outcome report cards
- Rapid response systems
- Computerized provider order entry
- Using simulation training and patient safety efforts

Alspach JG. Crit Care Nurse, 2013;33(3):9-12

Team

There is no “I” in TEAM…but there is a “ME”

Path to High Performing Teams

- Team Leadership
- Mutual performance monitoring
- Backup behavior
- Adaptability
- Team orientation

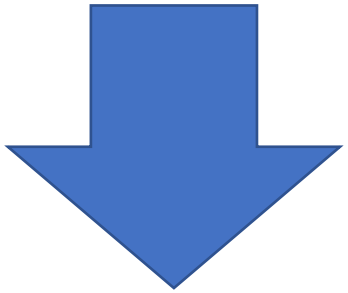
- The leader directs & coordinates team activities
- Team members monitor each other performance
- Team members anticipate & respond to one another's needs
- Team adjust strategies based on new information
- Prioritize team goals over individual goals

O'Leary KL, et al. J Of Hosp Med, 2012;7(1):48-54

Tools and Strategies to Improve Communication and Teamwork

- Structured Handoff
- Huddles
- Daily rounds/goals
- Pre-procedure briefing
- Checklists

Hospitals With High Teamwork Ratings



- Higher patient satisfaction
- Higher nurse retention rates
- Lower hospital costs

O'Leary KL, et al. J Of Hosp Med, 2012;7(1):48-54

Tools Don’t Create Safety

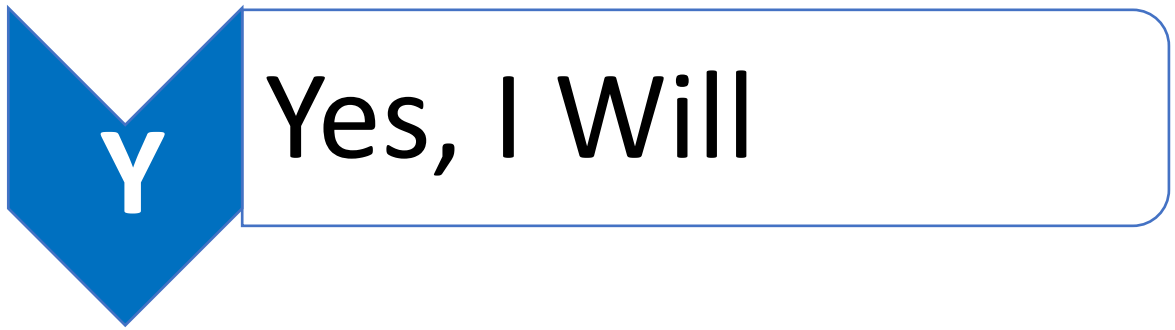
People Do!!!

The Silent Treatment, April 2011

The Most Powerful Force of Human Behavior is Social Influence

"Setting an example is not the main means of influencing others.…It is the only means."

Albert Einstein


Y
Yes, I Will

Yes, I Will

Focus on Achieving Nurse Sensitive Outcomes &
Commit to a Culture of Safety & Accountability

Yes, I Will

Be the Power of One

“ I am only one, but still I am one.

I cannot do everything, but still I can do something.

I will not refuse to do the something I can do.”

Helen Keller

Yes, I Will

"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

Yes, I Will

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

Herbert Otto

Yes, I Will

Kathleen Vollman
ADVANCING NURSING THROUGH KNOWLEDGE & INNOVATION

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