Discover the #1 Hidden Harm in Your Hospital

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Are you ready to boldly look beyond reportable patient harm?

ONLY THE COURAGEOUS NEED APPLY!

THIS FLIPPED CLASSROOM DESIGN WILL PROVIDE COMPELLING NEW EVIDENCE OF THE NATIONAL INCIDENCE AND SIGNIFICANCE OF NON-VENTILATOR HOSPITAL-ACQUIRED PNEUMONIA (NV-HAP).

AFTER EXPLORING THE FACTS ABOUT NV-HAP, PARTICIPANTS WILL WORK IN SMALL GROUPS TO DESIGN A PRACTICAL TAKE-HOME PLAN TO ADDRESS NV-HAP IN THEIR OWN HOSPITALS.
Objectives

- Describe the significance of NV-HAP for your hospital, including incidence, mortality, length of stay, 30-day readmission, and cost.

- Explain new evidence in pathophysiology and prevention of NV-HAP and discuss why all hospital patients are at risk.

- Design an implementation blueprint to prevent NV-HAP including a return on investment, gap analysis, and specific interventions.

Getting to know you and each other

* This PowerPoint is an overview of the L14 session. The session is interactive, therefore participants will be provided with a complete PowerPoint after the session.
Organization for the Day

- Part 1: Hidden epidemic and patient harm
- Part 2: Learning about the incidence/ rates in your hospital and economic impact
- Part 3: Etiology of hospital-acquired pneumonia: Where does it come from?
- Part 4: What can be done to prevent NV-HAP?
- Part 5: Translational science: So, now what?
- Part 6: Did it work? Measurement and Sharing Results

One must always be aware, to notice, even though the cost of noticing is to become responsible.

Thylias Moss
Part 1:

Hidden epidemic and patient harm

Let’s begin:
The story of May and how we began this journey

- May is a 57 year old grandmother who develops non-ventilator hospital acquired pneumonia (NV-HAP)
- Why does this keep happening?

Photo: Emma Winn Healthy Elderly http://www.fhms.surrey.ac.uk/nutritionandbone/swiss.html
Share a story about pneumonia from your hospital or life

We knew VAP was a problem, but what about NV-HAP? It is a problem too?

- How much non-ventilator pneumonia was occurring in the hospital?
- Was it happening in other hospitals?
- If so, who was “at-risk”?
- Can it be prevented? How?
What does the literature say?

- Examine the review of literature tables
- What are they suggesting about NV-HAP?
- How serious is the problem?

Centers for Disease Control and Prevention

- Included for the first time in its top TEN public health concerns:

  Healthcare-associated infections

CDC (2015) Prevention Status Report
“HAP in Nonvented Patients: The Next Frontier”

DR. MICHAEL KLOMPAS AT HARVARD

July 2016, Infection Control and Hospital Epidemiology (JOURNAL)

LEADING CAUSE OF SEPSIS IS PNEUMONIA – ABOUT 50% OF SEPSIS CASES START WITH PNEUMONIA

Part 2:

Learning about the incidence/rates in your hospital and economic impact
Calculate: for first half of 2016

1. Rate per patient discharges

2. Rate per patient days

3. Costs (* cost estimates for just for increased length of stay)

Incidence of NV-HAP:
A 3-hospital systems study (2012 used 2010 data)

- Sutter Medical Center:
  - 24,482 patients; 94,247 patient days
  - 115 NV-HAP
- Total estimated annual effect:
  - $4.6 million (add money factors)
  - 23 deaths
  - 1035 days
HAPPI®
Hospital Acquired Pneumonia Prevention Initiative

IMPACT
HAPPI-2 Preliminary Analysis

- 22 U.S. hospitals
- 1300 NV-HAP
  - 18.4% mortality
  - 60% occurred on Med/Surg units
  - 26% transferred to ICU *
  - 33% transferred to ICU died
  - 34% admitted from home were discharged to a higher level of care*
  - 20% readmitted within 30 days*
  - * All cost factors

By Preventing NV-HAP we also Address Common Quality Metrics:

- Mortality 18.9%
- ICU utilization 66%
- Length of stay 4-9 extra days
- 30 day Readmission 19.3%
- Long term morbidity 34% discharged to SNF
- Sepsis >50% of all HAP
- Cost $28K-$40K
Part 3:

Where does the pneumonia come from?

Individual brainstorm

No worries about answers – just get some ideas down

Part 4:

- What can be done to prevent NV-HAP?

- 1-2-4 SHARING

- Rank ideas in importance
Gap Analysis

- How is your hospital doing?
- GAP analysis
- Share and pair

What have we learned?

- Pneumonia - occurring in nonventilated patients in All types of hospital systems
- Patients are at risk on ALL types of hospital units
- Costing significant number of lives and dollars
- Preventive nursing care is missed
Part 5:

SO, NOW WHAT?
IMPLEMENTATION SCIENCE

Achieving the Use of the Evidence:
Education is necessary but never sufficient to make and sustain change

Factors Impacting the ability to Achieve Quality Nursing Outcomes at the Point of Care

Skills & Knowledge
Resources & System
Value

Attitude & Accountability


# Behavior Change Science

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## Who’s on your team?

* Alone we can do so little; together we can do so much. *
Part 6: So did it work?
Measuring and Sharing Results

What about patient and families engagement?

- **Rapid fire**: List 5 ways to engage patients and families with a HAPPI program in your hospital

- Two minutes
- Put your notes on the wall
Return on Investment

- What to measure?
- What are your stakeholders interested in?
- What outcomes are important?

Return on investment: What does prevention mean?

- Between May 2012 and December 2014
- we avoided 164 cases of NV-HAP
  - $5.9 million saved
  - 31 lives saved
  - 656-1476 extra days in the hospital avoided
Post operative NV-HAP (all adult inpatient surgery)
Incidence 6 months pre oral care vs. 6 months after

NV-HAP ↓ 70% from baseline!
How to Share Results

Write or draw idea(s), each one on a separate piece of paper

Administration (blue)
Staff (green)
Patients (yellow)

Fold the paper, put it in the jar on the table

Draw one at a time, and discuss how it could work at your hospital too.

“Based on numbers from the CDC and NVHAP incidence studies, we estimate that reducing NVHAP by even 50% in the U.S. will save 53,000 lives, 170,000 patient days, and $3.4B annually.” (Commitment statement, PSM Summit 2016)
Getting Started

- What can you do:
  - 7 days from now
  - 3 months from now
  - 6 months from now

Harvest what you have learned so far….

- Reflect: what have you learned so far?
- What was new or updated?
- And now: “so what” (why is it important and what are the implications)
- Pair-Share-Repeat
Recommendations to Address NV-HAP:

- Measure baseline NV-HAP
- Gather an interdisciplinary team
- Base interventions on Gap Analysis findings
- Focus on one intervention at a time, beginning with the most modifiable risk factors
- Use a scientific model to change behavior
- Monitor process and outcome measures
- Provide feedback
- Celebrate and share your successes

We hope you remember:

- NV-HAP is more common than VAP, costing patient lives and organizational dollars.
- Patients with NV-HAP die due to the PNA – this is different from VAP, where patients die with the PNA
- Monitoring for NV-HAP and prevention programs must rise to the same level of attention as other HAIs
- Providing basic evidence-based care such as oral hygiene, early mobility, and PPI reduction, can prevent NV-HAP at your hospital.

“Preventing pneumonia and saving lives, one clean mouth at a time.” (2012 HAPPI Vision Statement)
References

- CDC (2005). Guidelines for preventing HCAHAP.