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Breaking Down Silos to Decrease Advanced Hospital-Acquired Pressure Injuries (HAPI) in a Community Hospital

Research in Action, AAPA 2024

Jennifer Barnett, DMSc (candidate), MPAS, PA-C, DFAAPA, CPHQ

MedStar Franklin Square Medical Center

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Disclosures

- No financial relationships to disclose or Conflicts of Interest (COIs) to resolve.

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Background

- Hospital Acquired Pressure Injuries (HAPI)
  - United States 2.5 million cases[1]
  - Cost $26.8 Billion!! [1]
  - Estimated over $10,000 per patient[1]
    - Mortality 1.5% [1]
    - Increases LOS by 2.2 days on average [1]
- 30% increase in pressure injuries from 2015-2017 [2]
  - PRE-PANDEMIC

1.Padula WV, Delarmente BA. The national cost of hospital-acquired pressure injuries in the United States. International Wound Journal. 2019;16(3):634-640. doi:https://doi.org/10.1111/iwj.13071

2. Padula WV, Black JM, Davidson PM, Kang SY, Pronovost PJ. Adverse effects of the Medicare PSI-90 hospital penalty system on revenue-neutral hospital-acquired conditions. *J Patient Saf.* 2018; 10.1097/PTS.0000000000000517.

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Incentives to Improve

- CMS Star Ratings $$
- Maryland CMS Waiver
  Quality-Based Reimbursement(QBR) $$
- Maryland Healthcare Commission
- Leapfrog Ratings
  - "Never Event" [1]
- Reporting to the Office of Healthcare Quality (OHCQ) Maryland

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1) National Quality Forum Never Events. Accessed April 21, 2024 https://www.qualityforum.org/Topics/SREs/List_of_SREs.aspx#sre4

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Introduction

- MedStar Franklin Square Medical Center (MFSMC)
  - Baltimore, Maryland
  - MedStar is a 10-hospital system Maryland/DC area
- Community Teaching Hospital
  - Comprehensive Stroke Center
  - 338 licensed beds
  - Avg 61,000 ED visits per year
  - Avg 18,000 Annual Admissions

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Our Focus

- AHRQ Patient Safety Indicators (PSI 90)
  - PSI 3 = Advanced HAPI = Stage III and IV, unstageable
- AHRQ guidelines exclusion criteria [1]
  - × Less than 3 days Inpatient
  - × **Present on Admission- same site**
    Deep Tissue Injury (DTI) or Stage III/IV
  - × Severe Burns or exfoliative disorders, OB
  - × Age 18 years and older
  - × End of Life

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1) Patient Safety Indicator 3 (PSI 03) Updated August 2023. Accessed April 18, 2024. https://qualityindicators.ahrq.gov

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Objective

PSI03 Ratio Previous Fiscal Years		
FY 2020	FY 2021	FY 2022
1.67	4.48	4.92

- **Executive Leadership**
  - PSI 3 rates significantly higher than state and national standards
    - 2021 Benchmarking PSI 3 rate 0.62 per 1000 discharges [1]
  - Millions of dollars lost in QBR
  - Requested a team be assembled to Improve HAPI rates down to less than 1/1000 cases
- **Quality Improvement Process- Lean Six Sigma**
  - *Multidisciplinary Team- PA Led*
    - Fishbone/Ishikawa Diagram

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1) AHRQ 2021 Benchmarking PSI 90. Updated July 2021. Accessed April 18, 2024. https://qualityindicators.ahrq.gov/Downloads/Modules/PSI/V2021/Version_2021_Benchmark_Tables_PSI.pdf

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Team

Process Identification/Fishbone

- QI project Lead: Hospital Medicine PA*
- Wound Care Team /Wound Care Nursing Leaders
- Quality and Safety MD and RN
- Geriatrician
- Nurse Leaders
  - ICU/IMC/Med/Surg
  - Surgery/Informatics
- Supply Chain Team/Warehouse
- Physical Therapy
- Nutrition
- Respiratory Therapy
- Pharmacy
- Clinical Documentation Team
- Corporate Data team

Presidents Goal - Steering Committee

- Executive Leaders
  - CNO and AVP Nursing
  - VPMA
  - Senior VP Operations-Supply and Logistics
- Quality and Safety Medical Director
- Nursing Quality Manager
- QI Leader- Hospital Med PA
  - Physician Champion
- Nursing Leaders
  - ICU Nursing Director
  - IMC Educator
  - Wound Care Nurse
  - Nursing Educator Leader
- Corporate Data Team
- Ad Hoc
  - Supply Chain Team
  - Pharmacy
  - Clinical Documentation

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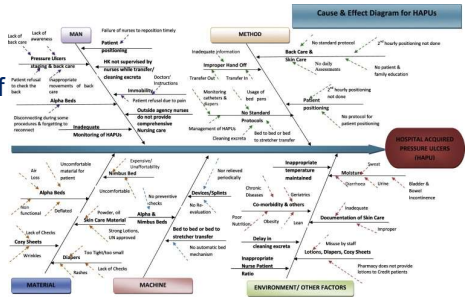
Fishbone

- Example of fishbone
- Ours
  - Not as pretty



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1.Loria G, Margaret JS. Project zero towards nursing never events - reduction of hospital acquired pressure ulcers. Apollo Medicine. 2012;9(3):282-286. doi:https://doi.org/10.1016/j.apme.2012.06.007

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Timeline

- September 2022 Identified Need Leadership Team defined
- November 2022 to January 2023 Multidisciplinary Team Assembled; Fishbone development
- February 2023 SILOs Identified; Gap Analysis Presented to New CNO
- March 2023-June 2023 Gathering Momentum; Data Analysis/Event Reviews
- June 2023 Reduction of PSI 03 Presidents Goal for FY 24; First Presentation to Executive Leadership
- July 2023 – Present Steering Committee; Event Reviews Process Changes -PDSA Cycles

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SMART Improvement= DMAIC

- Scope
  - Advanced HAPI
- Measure
  - Patient Safety Event Reporting
  - Engaged Corporate Data Experts
- Analyze
  - Event Reviews
- Rethink
  - Low-hanging fruit vs larger issues
- Track
  - More detail, and real-time

- Affinity Diagram
- A version of the PICK chart
- Modified Kaizen
  - Not one RPIW

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1) Medstar Health Performance Improvement Model Accessed April 21, 2024 https://www.medstarhealth.org/innovation-and-research/performance-improvement/process-improvement-services

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Data

AHRQ Patient Safety Indicator 03, Pressure Injuries, Ratio & Rate Trend

Facilities: MFSMC

	Q1 FY 21	Q2 FY 21	Q3 FY 21	Q4 FY 21	Q1 FY 22	Q2 FY 22	Q3 FY 22	Q4 FY 22	Q1 FY 23	Q2 FY 23	Q3 FY 23	Q4 FY 23	Q1 FY 24	Q2 FY 24*
Ratio Obs. (per 1,000)	1.26	1.25	1.71	4.31	1.27	2.50	3.04	3.56	0.89	1.70	1.67	1.27	0.85	0.00
Ratio Exp. (per 1,000)	0.48	0.50	0.49	0.46	0.49	0.52	0.57	0.53	0.55	0.58	0.58	0.57	0.59	0.61
Rate Cases (#)	3	3	4	10	3	6	7	8	2	4	4	3	2	0
Rate Patients (#)	2,207	2,394	2,344	2,319	2,370	2,404	2,303	2,248	2,243	2,347	2,401	2,363	2,353	849

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WOW! But How?

Breaking Down Silos

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Breaking Down Silos

- Nursing and Wound Team
  - PIPS
  - Staging
- RN and Provider (MD/PA/NP)
  - Communication
  - Documentation
- Clinical Documentation and Providers
  - Post D/C
- Policy vs reality
  - Four eyes/eight hours
- Ownership
  - Nursing Leaders and Educators
  - Physician and Nursing Leaders

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How We Broke Down Silos

- All HAPIs (all stages)
  - Patient Safety Event (PSE)
  - Event reviews
    - Multidisciplinary with exec leaders
    - Share learnings
- System Level Education
  - RN/Providers
  - Staging and management
  - 4 Eyes Policy
  - How to use Camera Capture
- VPMA/CNO Camera Capture required BEFORE placing wound care consult
  - Virtual triage/assessment
- WOC RN
  - PIPS
  - staging advanced HAPIs
  - WOC Rounding
    - Tushy Tuesdays
    - Wound Wednesdays

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Ownership

- Nursing/Physician Leaders accountable
- Reporting to the OHCQ became a team effort
- Interdisciplinary Rounds
  - RN/Provider discussion daily
- DNP projects
  - Turning/reminders in ICU
  - Camera Capture for Boarding Patients (POA)

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Documentation

- POA
  - Camera Capture
    - RN for all wounds noted
    - Before ANY consult
  - Chart Review/CRISP
  - Site Identification
    - Ischium/buttock/sacrum
  - Deep Tissue Injuries
- Clinical Documentation Team (CDI)
  - Real time review of any possible HAPI
  - Query Provider
  - Link Wound care and Provider documentation
    - OK to document "POA status clinically unable to determine"

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Silos - Prevention

- Capital Expenses
  - New Beds- SAVED $$
    - Renting vs purchasing
    - Heel Boots
- Everyone out of bed!!!!
  - LPN/RN Model
  - Physician Externs
  - Physician Leaders at Rounds
- Border Foam Dressing
  - All ICU/IMC
  - At risk based on Braden Scores 18 or less
- Barrier Creams
  - Wound care recs vs stock

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Conclusions

- Reduced stage III/IV/unstageable HAPIs from 4.92 per 1000 patient days to less than 1.0 within 2 years!
- Identified Barriers and broke down silos
- Process Ongoing!

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References

1. Padula WV, Delarmente BA. The national cost of hospital-acquired pressure injuries in the United States. International Wound Journal. 2019;16(3):634-640. doi:https://doi.org/10.1111/iwj.13071
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7. Medstar Health Performance Improvement Model Accessed April 21, 2024 https://www.medstarhealth.org/innovation-and-research/performance-improvement/process-improvement-services

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Thank you!

Questions?

jennifer.l.barnett@medstar.net

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