Interprofessional Leadership and Collaboration Leads to Reduced Pressure Injuries

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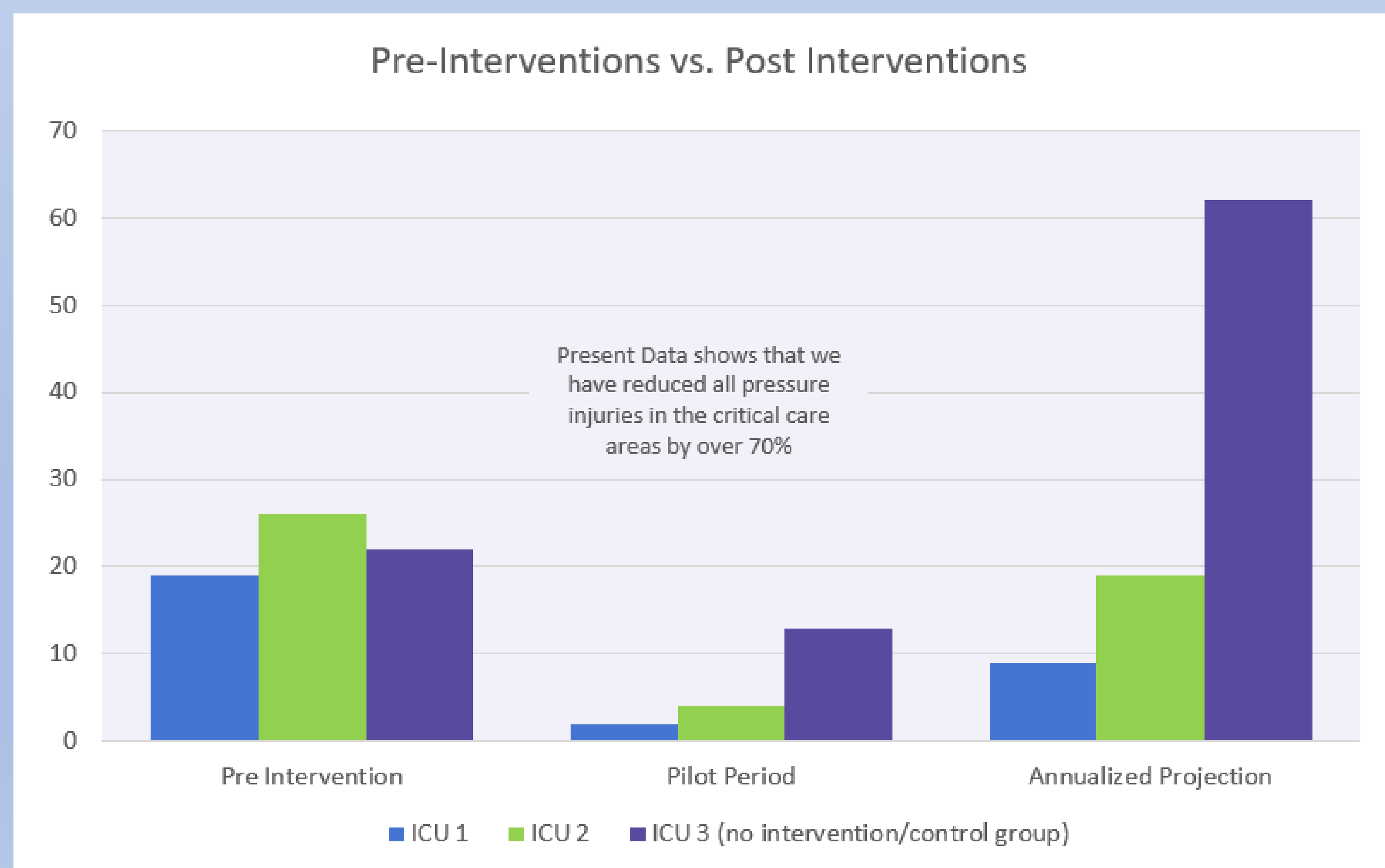
Learning Objectives

- Discuss the benefit of a structured leadership approach to simultaneously address multiple drivers of change.
- Explain the impact of actionable data on developing timely point-of-care interventions.
- Describe critical tactics to engage frontline staff in the performance improvement/change management processes.

Problem

- Hospital acquired pressure injuries (HAPIs) ranked as UMMMC's top patient harm event, with a monthly average of 42.9 incidents in 2019 and 43.2 incidents in 2020 (Figure 1).
- Our UMMMC FY 21 PSI-03 observed to expected rate was 4.2. Although this was a hospital-wide project, internal data indicated the adult ICUs provided the greatest opportunity for improvement.

Figure 1: Pressure Injuries in Critical Care



Goal

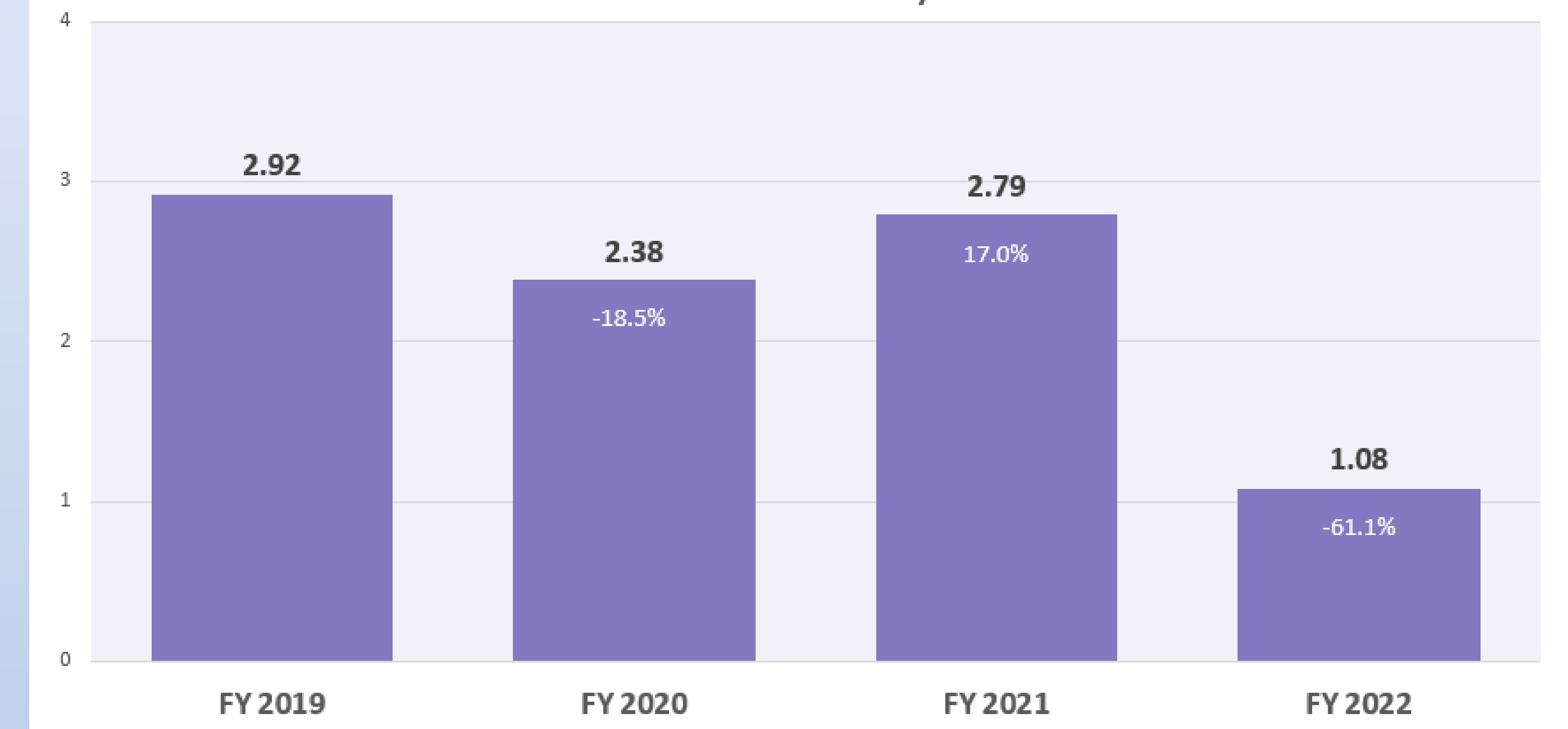
Reduce patient harm by achieving a sustainable reduction in preventable HAPIs.

- Decrease PSI-03 by 10% from 67 to 60 in FY22

Method

- A Lean continuous improvement approach supported by strong institutional leadership was used. An interdisciplinary steering committee (PI Safer Team) used a collaborative and focused series of data-driven interventions and process changes to drive the reduction. Every point of care – initial patient contact through discharge and coding – generated interprofessional opportunities that contributed to this reduction in HAPIs.
- Structure, process and practice improvements were based on identified drivers including delayed risk assessment, initial HAPI identification, inconsistent mitigation, and medical devices.
- Interventions to address these drivers included; increased WOCN staffing, standard treatment options, education, nurse manager-led interprofessional weekly skin rounds, Four Eyes Skin Assessment, and prophylactic application of a silicone foam dressing to the sacrum. A Clinical Practice Guideline for Critical Care HAPI Prevention now includes these interventions and facilitates sustainability.
- The PI Safer Team benchmarked with peer institutions within the Vizient network to understand best practices from top performers.
- Tailored HAPI data is provided to each level of stakeholder for timely action and feedback.
  - The RN receives clinical feedback during rounds
  - Nurse managers receive unit HAPI updates weekly and can monitor daily on the NM Dashboard, and monthly summaries.
  - The ICU NM HAPI Committee identifies service trends and updates progress towards goals.
  - The PI Safer Team evaluates overall goal and workplan status.
- Providing actionable data to each stakeholder group drives timely interventions that collectively resulted in the change.

Outcomes



- **Multidisciplinary tactics, implemented in November 2020, have led to marked improvements in HAPIs beginning in March 2021. UMMMC has seen more than 75% reduction in serious pressure injuries (PSI-03) over the first 3 quarters of FY 2022.**
- **Simultaneously, the PSI-03 Observed to Expected Ratio was 4.2 for FY 21 and has DECREASED to 1.35 through April of FY 22**
- **Development of Acute Skin Failure CRITERIA**

Key Takeaways

- Acknowledgement of a HAPIs as a "patient" problem requiring team-based care fostered engagement from all stakeholders.
- Structured pursuit of multiple evidence-based point of care interventions simultaneously – developed and implemented by the interprofessional bedside team – demonstrated the greatest sustainable gains.
- Meaningful institutional leadership supporting an interprofessional team and bedside staff can achieve measurable HAPI improvement even during a pandemic.

References
Pressure Injury Advisory Panel and Pan Pacific Pressure Injury Alliance. Prevention& Treatment of Pressure Ulcers/Injuries: Quick Reference Guide. Emily Haesler(ED.). EPUAP/NPIAP/PPPIA: 2019

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Speaker Disclosure
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An Evidence-Based Process is Key to Maintaining Success

New formalized Pressure Injury process started 11/1/2020

In April of 2021 Vizient released Recommendations for Pressure Injury Prevention which validated our new process:

- 15/35 Recommendations we were doing prior to 11/1/2020
- 32/35 Recommendations are current practice since 11/15/2020
- 35/35 Recommendations now being completed

Examples of implemented interventions

- Pressure Injury Steering Committee (Providers, WOCN, Nursing Leadership, Coding, Nutrition, Respiratory Therapy, Quality, Specialist, Process Improvement Specialist
- External Benchmarking
- Photos taken by WOCN and images transferred into EHR
- 4 Eye Assessment on admission, transfer and stage increase
- New proning procedure
- Weekly skin rounds on all critical care patients
- Consult wound nurse for all pressure injuries
- Develop unit-based skin champions
- Identify system failures
- Pocket cards and supply posters
- Redesigned RCA process

Acute Skin Failure

Potentially diagnose acute skin failure when these conditions exist: We have used this diagnosis 3 times in total over an 8-month period

1. Patient suffers from severe acute or subacute illness requiring care (at the time of diagnosis) in an ICU or ED.
2. All appropriate measures for prevention of pressure injury are in place.
3. Optimal efforts at nutrition support, including but not limited to consultation with the Nutrition Support Service, have been made.
4. The patient has EITHER 2 major criteria OR 1 of the major criteria and ALL the minor criteria.

MAJOR CRITERIA – acute failure of the following organ systems:

- Cardiovascular failure requiring either inotrope, vasopressor or mechanical support of the circulation
- Respiratory failure requiring either invasive mechanical ventilation, non-invasive ventilation (i.e., Bipap) or high flow nasal cannula oxygen
- Renal failure requiring acute dialysis either HD, CVVH or AVVH
- Neurological failure with GCS < 10 NOT due to sedation
- Acute Hepatic failure with bilirubin > 4
- Hematological failure with platelets < 100k

MINOR CRITERIA:

- Non-trauma related skin abnormalities also present in non-pressure areas
- Albumin < 3.5
- Unusual shape lesions such as pear, butterfly or horseshoe shape