QUALITY SHOWCASE

A showcase of award-winning programs from District of Columbia hospitals

2022 POSTER EDITION

Hospital Programs

About the Poster Competition | Judging Criteria

Innovation and Replicability

- Use of innovative techniques
- Ability to be adopted by others

Performance Improvement

- Identification and improvement of processes or outcomes
- Use of performance improvement methodologies [e.g. PDCA, lean, six sigma]

Demonstrated Impact

- Measurable improvement to patient safety or quality
- Addresses positive outcome or lessons learned

Graphic Display of Data

- Creative use of visual data (fonts, headings, colors, and white space)
- Tables and graphics clearly tell a story or inform the viewer

Impact of Six Sigma on Verbal Orders Process and Patient Safety Performance Improvement

THE GEORGE WASHINGTON UNIVERSITY HOSPITAL

Elzbieta Kmiecik, DNP EL, RN; Scott Croonquist, DNP, RN; Robyn Smith, BSN, RN

SCAN QR CODE TO WATCH VIDEO

Impact of Six Sigma on Verbal Orders Process and Patient Safety Performance Improvement

Elzbieta Kmiecik, DNP-EL, RN; Scott Croonquist, DNP, RN; Robyn Smith, BSN, RN

The George Washington University Hospital, Department of Nursing

THE GEORGE WASHINGTON UNIVERSITY HOSPITAL

Introduction

- Despite nationwide implementation of electronic health records (EHR), verbal orders (VOs) continue to be widely used posing safety concerns for patients and increasing liability risks to healthcare institutions [1,2,3]. The Joint Commission standards limit VOs to clinical emergencies, or other situations when entering orders in EHR is not feasible[4]. Use of VOs for convenience is discouraged.

- To decrease the frequency of VOs, and improve the VO process and patient safety, an acute care academic medical center in the Washington DC area implemented an institution-wide performance improvement project using Six Sigma methodology.

Study Question

- What is the impact of performance improvement project implementation using Six Sigma methodology on the frequency of VOs, VO process compliance, and the frequency of VO related patient safety events in both before and after intervention groups?

Objectives

1. Determine the frequency of VOs in before and after-intervention groups.
2. Determine the frequency of safety events in before and after-intervention groups.
3. Determine the VO process adherence compliance in before and after intervention groups.

Methods

- **Design**: A quasi-experimental design with two separate groups (before and after intervention). Retrospective EHR review of three months of data for before (Q1 2020) and after (Q1 2021) intervention groups was used.

- **Theoretical Framework**: The Iowa Model provided a theoretical framework. The Six Sigma method: Define, Measure, Analyze, Improve, and Control (DMAIC) guided the analysis and informed improvement initiatives.

- **Population and Sampling**: Convenience sampling was used. All prescriber orders during the study period N=4,058,267 (n=2,054,840 in before and n=2,003,427 in after intervention groups) were included and analyzed for VO frequency and process compliance. VO related safety events reported during the before and after intervention periods were abstracted from the MIDAS repository and included in this project.

- **Intervention:** Locations with the most frequent VOs and VO types were identified (see Figures 1, 2, 3 & 4). Process Mapping, Cause and Effects Matrix, and Failure Modes and Effects Analysis highlighted the key performance indicators and informed the improvement actions:
  - Implementation of standard protocols for prescriber orders in procedural areas
  - Electronic solution for lab specimen re-ordering
  - Allocation of human resources
  - Training, coaching and accountability to address institutional culture

Following the intervention and data analysis, the Control Plan was implemented, including weekly performance data monitoring and performance management.

•**Data Analysis:** Descriptive and inferential statistics were used. Frequencies, ratios and Chi-square statistics were reported. Data analysis was performed using SigmaXL software.

Results (see Table 1.0)

- The decrease in VOs frequency in the after-intervention group was statistically significant (n=665, p=0.0000). Compliance with the VO process decreased in the after-intervention group as compared to the before intervention group (93.7% and 95.9% respectively) but was not statistically significant (p=0.0559). VO process compliance varied between both groups in the step "Prescriber validates verbal order by signing it."

- The number of safety events in the after-intervention group decreased to n=1 but was not statistically significant (p=0.1441).

- The total number of VOs by top 14 locations decreased in the after-intervention group and was statistically significant (n=541, p=0.0108). The total number of top 13 VO types decreased in the after-intervention group and was statistically significant (n=141, p=0.0000). The total number of Cath Lab VOs decreased in the after-intervention group and was statistically significant (n=0, p=0.0000).

Table 1.0

	Before Intervention N (%)	After Intervention N (%)	X^2 (p value)
Total number of orders	2054840 (100)	2003427 (100)	N/A
Number of VOs	3158 (0.15)	665 (0.03)	1562.0 (0.0000)
VO process compliance	3026 (95.8)	623 (93.7)	5.769 (0.0559)
Number of safety events	19	1	2.133 (0.2322) *
VOs by top 14 locations	3018 (96)	541 (81)	6.490 (0.0108)
Top 13 VO types	1868 (59)	141 (21)	119.05 (0.0000)
VOs in Cath Lab	1192 (38)	0	521.20 (0.0000)

Note: The number of VOs was used as a denominator for the VO process compliance, VOs by top 14 locations, top 13 VO types, and VOs in Cath Lab.
*Fisher's Exact P-Value

Figures

Figure 1. All VOs by location (before) n=3158

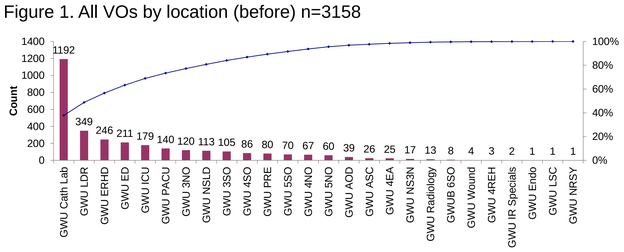


Figure 2. Top 14 VOs locations n=3018 (96%)

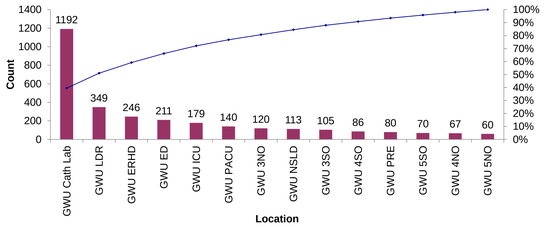


Figure 3. Top 13 VO types n=1868 (59%)

Figure 4. Top VOs for Cath Lab n=1192 (38%)

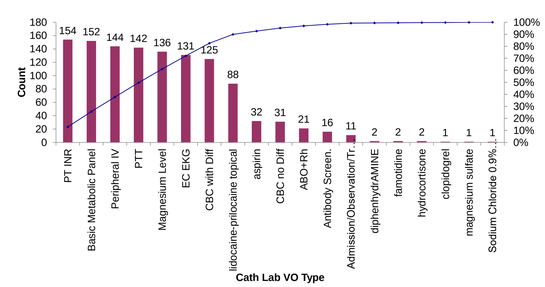


Figure 5. VOs by top 14 locations (before and after)

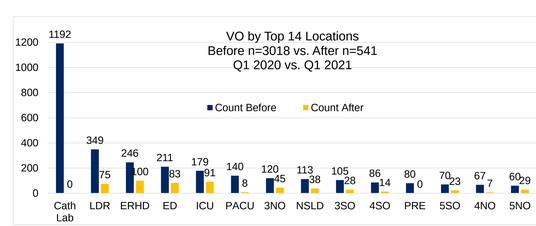
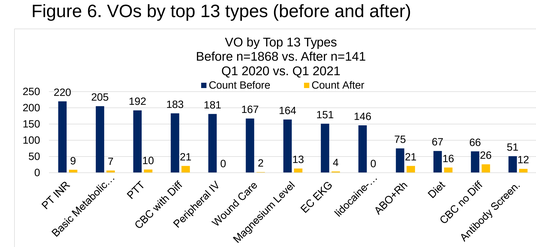


Figure 6. VOs by top 13 types (before and after)



Conclusions

- The initial goal of this project was to decrease the total number of VOs by 50%, increase compliance with VO process steps to 98%, and decrease the number of VO related safety events to two events or less.

- Implementation of Six Sigma methodology resulted in a decrease of VOs by over 78% and decrease in reported VO related safety events to a single event.

- The goal to increase VO process compliance to 98% was not achieved. In all but one of the VO process steps both groups (before and after) demonstrated 100% compliance. For step "Prescriber validates verbal order by signing it," compliance decreased by 2.1% in the after-intervention group. We believe this decrease was related to this goal being added subsequent to project implementation and not achieving the same level of performance monitoring.

- **Business Impact:** The time required by nurses for VO entry was 158 hours ($6316) in the before intervention group. In the after intervention group, this time decreased to 33 hours ($1320), increasing the amount of time nurses could designate to patient care demonstrating, in this project, Six Sigma methodology provided an effective performance improvement tool.

Clinical Implications

- VOs pose a potential safety risk and when utilized, clinicians must follow the VO process in its entirety to ensure 100% compliance
- All clinicians must receive training on VO related policies and practice expectations
- Institutions should periodically evaluate their VO related performance and address systems opportunities to improve safety

Limitations

- A quasi-experimental design, retrospective chart review, and dependence on a clinician's reported patient safety data constituted a major limitation in this project.

Next Steps/Sustainability

- Implementation of the Control Plan, including weekly performance reports, was essential to the sustainability of our success.

References

1. Ahastay, A. (2019, July/August). Despite technology, verbal orders persist, read back is not widespread, and errors continue. *ISMP Medication Safety, 37*(4), 230-233.
2. Moghaddasi, H., Farahbakhsh, M., & Zahtab, H. (2017). Verbal orders in medicine: Challanges, problems and solutions. *JOJ Nursing & Health Care, 1*(5).
3. Nursing Center. (2017, June). Verbal order errors continue. *Nursing Center*.
4. The Joint Commission. (2019). Complete medication order EP revision; Hospital accreditation program.

Acknowledgement

Special thanks to Mr. Solomon Isaac, IT Analyst, for ensuring data integrity, and to the GWUH staff who participated in this project.

Contact: elzbieta.kmiecik@gwu-hospital.com

A Customized Triggers Program: A Tertiary Care Children's Hospital Experience

Children's National

Richelle M. Reinhart, MD; Parissa Safari-Ferra, MHA; Ranjodh Badh, BS; Sopnil Bhattara, MBA, CPHQ; Solomon Abera, PharmD, MSc; Anit Saha, MSHA, MBA; Jessica Herstek, MD; Rahul K. Shah, MD, MBA; Kavita Parikh, MD, MSHS

SCAN QR CODE TO WATCH VIDEO

A Customized Triggers Program: A Tertiary Care Children's Hospital Experience

Richelle M. Reinhart, MD, Parissa Safari-Ferra, MHA, Ranjodh Badh, BS, Sopnil Bhattarai, MBA, CPHQ, Solomon Abera, PharmD, MSc, Anit Saha, MSHA, MBA, Jessica Herstek, MD, Rahul K. Shah, MD, MBA, Kavita Parikh, MD, MSHS

Children's National

Background

- Medical errors are a significant cause of patient harm
- Hospitals rely on traditionally passive, voluntary safety event reporting which may be constrained by **underreporting**, **inequitable** reporting, **limited** ability to improve real-time care
- There are opportunities to improve patient safety using novel tools, including near real-time trigger programs to proactively survey for potential harm
- Children's National Hospital (CNH) pediatric triggers tool program analyzes clinical data captured from the EHR to identify adverse events, near misses, and process improvement opportunities
- Concerns for clinical usefulness included:

OBJECTIVE: Our global aim is to increase program usability to support patient safety and quality initiatives through partnerships with performance improvement and clinical informatics. Our specific aim is to **increase overall trigger signal** from 8% to 16% and sustain for 12 months.

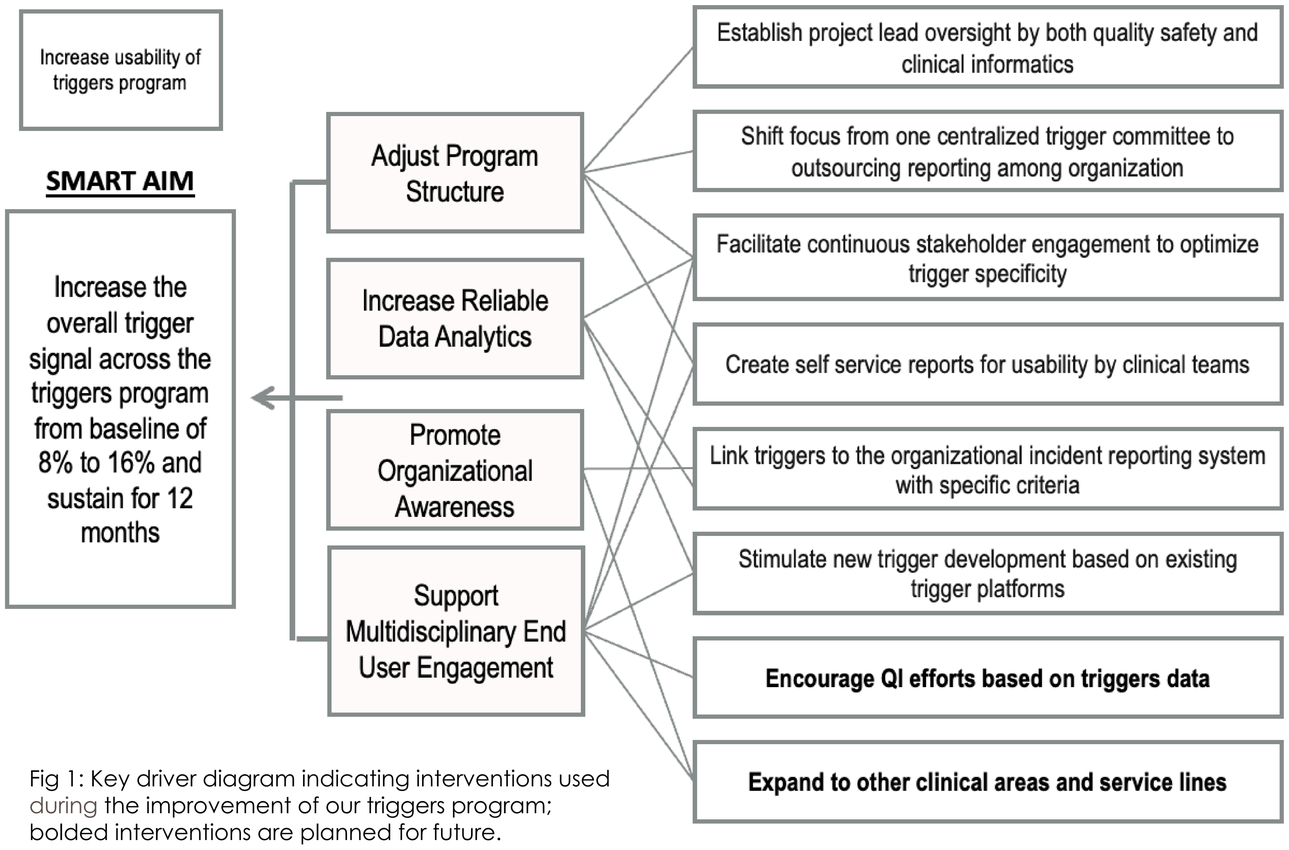


Fig 1: Key driver diagram indicating interventions used during the improvement of our triggers program; bolded interventions are planned for future.

Methods

Primary outcome: trigger signal, i.e. the percent of cases identified automatically by the triggers program, representing a true occurrence of a targeted event

- Secondary outcomes: # clinical committees, # incident reports
- Balancing measure: time to create/implement a new trigger

Results

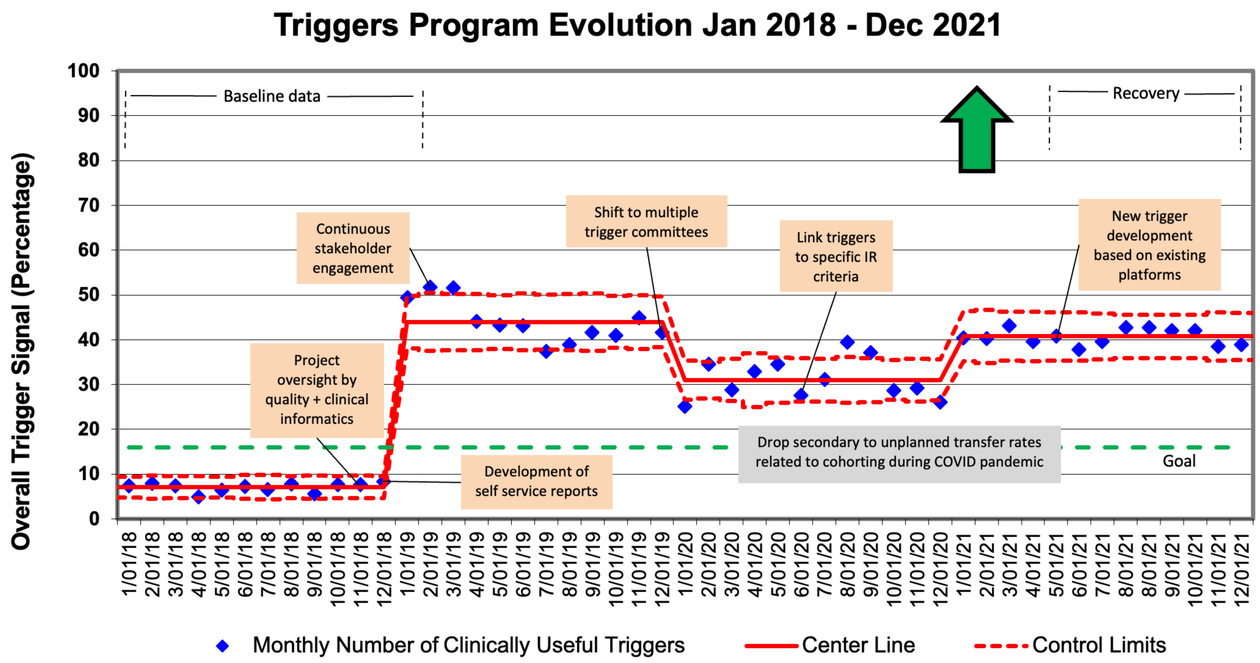


Fig 2: Control chart showing increase in overall trigger signal from baseline (1/2018-12/2018), intervention period (1/2019-12/2019), and sustainability period (1/2021-12/2021).

Trigger Signal Improved

8% → 41% AND SUSTAINED DESPITE COVID-19

Safety Event Reporting Improved

9 → 188 FROM 2017 TO 2021

Program Expanded

NEW TRIGGERS LAUNCHED 4 6→10

Time to Launch Improved

8-12 months → 3-4 months ↓66%

Integrating electronic data with clinical needs promotes a process improvement culture that is the foundation of a **high reliability organization.**

Conclusions

CNH's triggers program highlights successful evolution of a tailored approach to increase clinical usability. Hospitals should implement a quasi-real time, iterative triggers program to identify adverse events and potentially impact real-time patient care. Utilization of such programs requires an iterative, customized approach rather than a "one-size-fits-all," static paradigm to drive patient improvement.

Rising to the Challenge: Reduction in Opioid Use in Weight Loss Surgery Patients

THE GEORGE WASHINGTON UNIVERSITY HOSPITAL

Stephanie Rudert, BSN, RN; Marianne David, MD

SCAN QR CODE TO WATCH VIDEO

Between 2020 through 2022, there will be an overall reduction in opioid use for the bariatric surgery patients.

Rising to the Challenge: Reduction in Opioid Use in Weight Loss Surgery Patients

Stephanie Rudert BSN, RN **Marianne David MD**

George Washington University Hospital

GW HOSPITAL

INTRODUCTION

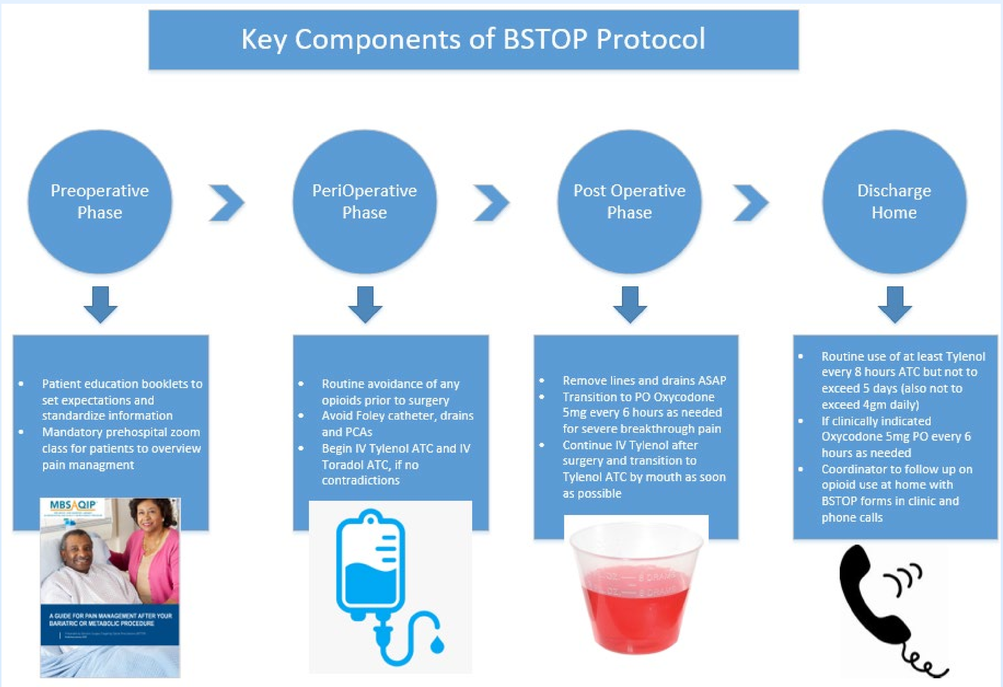
For years, patients and their providers have relied on opioids for pain management after surgical procedures because of their powerful effectiveness and relative ease of use. Opioid use has also become a double-edged sword, fueling what the Centers for Disease Control and Prevention (CDC) describes as part of the distinct wave in the epidemic related to overdose deaths involving prescription opioids. It has become increasingly clear that many patients suffering from opioid addiction and dependence are first exposed to it after surgical procedures. In 2019, the George Washington University Hospital (GWUH)'s Metabolic and Bariatric Surgery Committee (MBSC) decided to enroll in the Bariatric Surgery Targeting Opioids (BSTOP) quality improvement project to reduce opioid use while improving pain management. The BSTOP project was designed and lead by the Metabolic and Bariatric Surgery Accreditation and Quality Improvement Program (MBSAQIP) which is a quality program of American College of Surgeons (ACS).

AIMS/PURPOSE

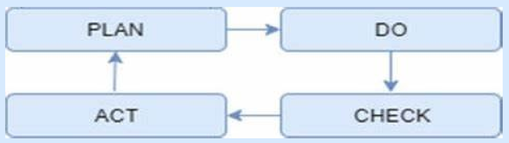
- Goal: Reduce opioid use in weight loss surgery patients between 2020 and 2022.

METHODS

- MBSC adapted key components outlined in the following protocol:

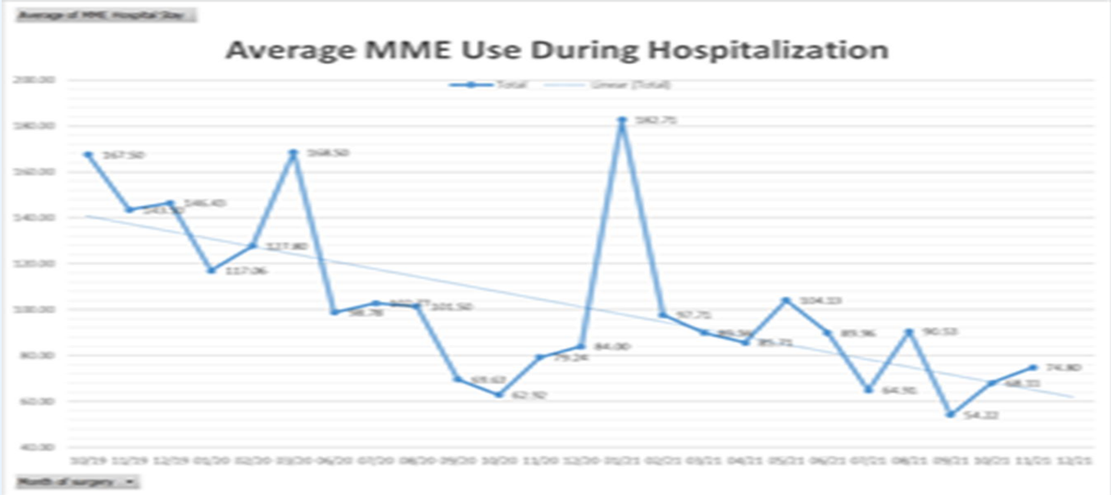


- Baseline opioid use data from October – December 2019 was reviewed to determine trends prior to implementing the new BSTOP protocol in March 2020. The MBSC met three times each year and used the Plan Do Check Act (PDCA) quality framework to discuss process improvements.
- After first cycle of PDCA, the MSBC was able to see the effects of reduction of opioids after discontinuing PCAs. After a second cycle of PDCA, the MBSC saw further reduction in opioid use with the addition of around the clock intravenous Toradol during hospitalization.
- Pharmacist supported project by calculating morphine milligram equivalents (MME) during hospitalization, at discharge and the patient's reported use of opioids at home.

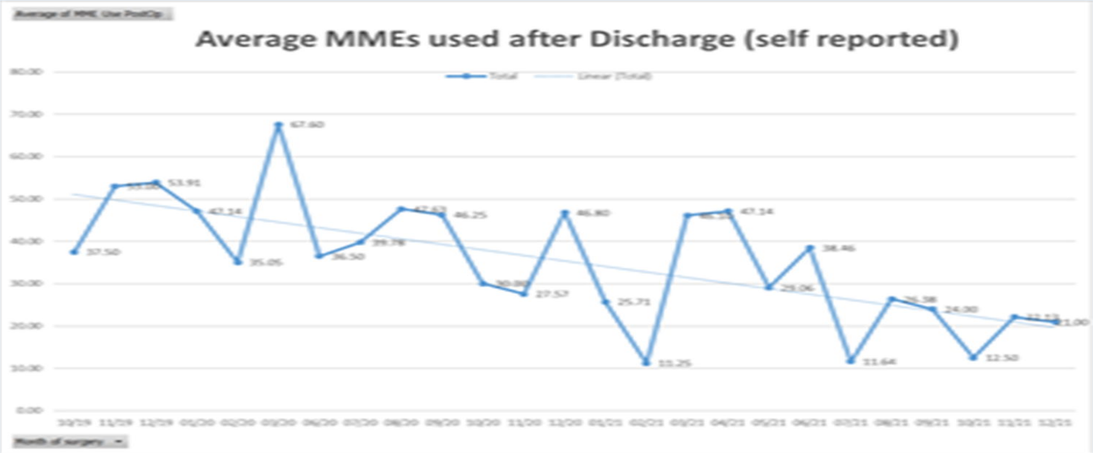


RESULTS

- Opioid usage was reduced during hospitalization after starting the new protocol.



- Reduction in opioid use was also noted patient self reported data after discharge.



- Also, GWUH was able to compare data point BSTOPs to 233 other accredited MBSAQIP bariatric centers that were also enrolled in the initiative which increased provider confidence in the changes to the practice.

	Audit	# of Cases	Average MME Use Per Patient at GWUH
MMEs Used Inpatient	Jan-20	16	117
	Nov-20	18	79
MMEs Prescribed Discharge	Jan-20	16	141
	Nov-20	18	68
MMEs Used Outpatient	Jan-20	↓14	44
	Nov-20	↓14	28

CONCLUSIONS

The BSTOP initiative effectively lowered opioid use in the bariatric surgery patient population during and after their hospitalization. In many ways, pain outcomes were far better than before the project. Prescribers lowered the amount of opioids prescribed and patients also managed their pain effectively with less opioids. Also, fewer opioids were prescribed at discharge leading to less unused, extra opioids. Finally, all patients reported higher satisfaction with their pain management during and after hospitalization. This initiative relied heavily on quality data that helped build buy in from clinicians to maintain compliance with the comprehensive changes entailed in the BSTOP protocol. Clinicians' attitudes towards their impact on the opioid epidemic changed as they actively participated in practice changes that lead to measurable decreases in opioid use.

contact: stephanie.rudert@gwu-hospital.com

Steering the Ship on Opioid Safety: Reducing Opioid Induced Oversedation Events in Hospitalized Patients

Kerry Gray, MS, BSN, RN; Ramon Go, MD

SCAN QR CODE TO WATCH VIDEO

MedStar Georgetown University Hospital

It's how we treat people.

Steering the Ship on Opioid Safety: Reducing Opioid-Induced Oversedation Events in Hospitalized Patients

Kerry Gray, MS, BSN, RN, Clinical Outcomes Coordinator; Ramon Go, MD, EMBA and Medical Director of Acute Pain Service

MAGNET RECOGNIZED AMERICAN NURSES CREDENTIALING CENTER

Background / Aim

Oversedation from opioids is a very serious adverse event that may necessitate a higher level of care and extended hospital length of stay; and if not recognized in time may lead to death.

In recognition of the opioid crisis in our nation, MGUH's Quality and Safety Professional Advisory Council identified the safe use of opioid as a top organizational priority. The interdisciplinary Pain and Sedation Committee was appointed to provide leadership for pain management and safe opioid prescribing practices at MGUH

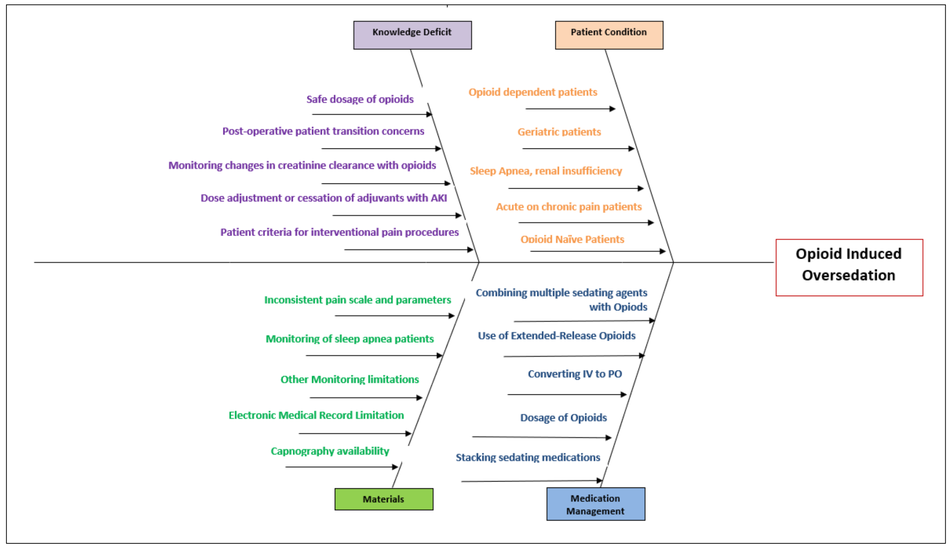
Goal: To evaluate opioid-induced oversedation root causes and develop interventions and practice changes with the goal of an overall reduction in patient harm.

Objectives

1) Identify root causes contributing to oversedation and need for Naloxone administration
2) Describe the various interventions and practice changes with the goal of an overall reduction in patient harm
3) Identify transferrable interventions that may impact processes and outcomes at your organization.

Methods

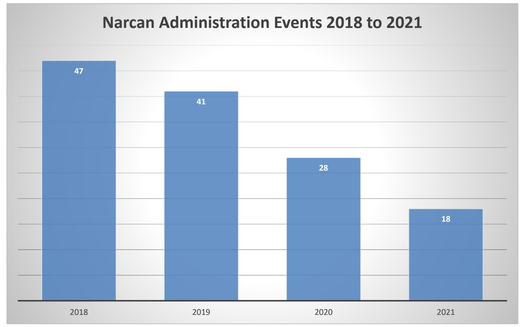
The contributing factors that were identified included: 1. Of high significance, it was noted that within twenty-four hours prior to the event 70% of patients had received both opioids and other sedating medications; 2. Stacking of these various medications together also contributed to development of oversedation; 3. Older adults (age >50) were the majority of patients requiring naloxone; 4. 40-50% of patients were noted to have either an underlying history of renal insufficiency or developed acute kidney injury after admission; 5. A subset of patients had a diagnosis of OSA or were found to be at risk of sleep apnea with the stop bang screening tool completed on admission; 6. Most patients did not have an Acute Pain Service (APS) consult in place prior to the event, although approximately 50% of these patients had a history of chronic pain and were on opioids and other medications at home.



Interventions

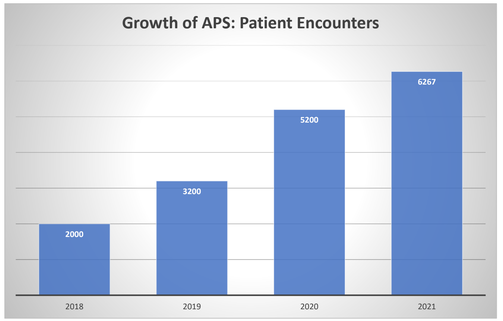
- An interactive dashboard was developed that tracks Naloxone administration trends and issues of concern.
- Multidisciplinary educational sessions were held including morbidity and mortality conferences targeting house staff and nursing. These included deep dives into complex cases, overview of consistent trends, contributing factors, lessons learned and best practices
- The pharmacy developed protocols for conversion of PO/IV medications.
- The electronic medical record (EMR) was enhanced to alert unit pharmacists about an increase in creatinine during the hospital stay for patients receiving gabapentin.
- Pulse-oximetry capability was expanded to additional inpatient units along with increased education regarding monitoring patient sleep apnea and at risk for sleep apnea based on the STOP Bang.
- Additional multimodal and non-pharmacologic interventions for pain were implemented
- Acute Pain Service (APS) expansion led to an increase in number of inpatient consultations.
- Developed patient criteria for interventional pain procedures.
- Regional anesthesia-increased lidocaine and/or ketamine infusion use for surgical spine patients and increased perineural catheter use for limb amputations patients.
- Use of nerve blocks increased as part of multimodal pain management

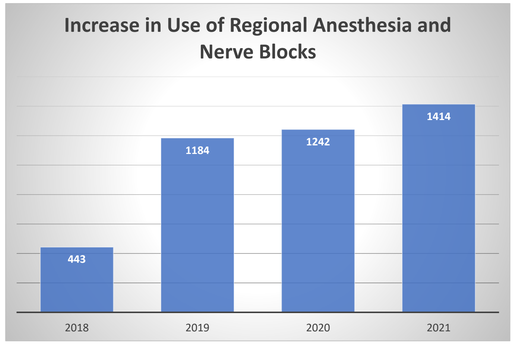
Results



We have **achieved a 60% reduction** in overall Naloxone administrations from FY18 through FY21 (through December) among inpatients, age 18+

Acute Pain Service consultations **increased by 213%** from FY18 through 2021 (through December) among inpatients





Use of regional anesthesia and nerve blocks **increased by 219%,** from FY18 to FY21 (through December) among inpatients

Conclusion

- Oversedation from opioids in hospital patients is a complex issue that requires a robust multi-disciplinary approach to identify root causes and at-risk patients. .
- Education plays a key role in raising awareness around oversedation and promotes best practice regarding pain management. The debrief process provided a plethora of information and identified opportunities for improvement. This paved the way for successful implementation of appropriate interventions that proved to be effective in reducing oversedation.
- Lessons learned for other hospitals include the importance of engaging providers, nursing, pharmacy and other healthcare staff in the event review process, as well as utilization of APS to improve pain management and outcomes for high-risk patients.

References

1. Alfonso, M., & Won, H. (2021, April 8). Safety: increase awareness of obstructive sleep apnea. Retrieved from Outpatient Surgery Magazine: A Division of AORNBrant, J., Stringer, L., Jurkovich, L., Coombs, N., Mullette, E., Buffington, C., . . . Karera, D. (2018, September 15). Predictors of oversedation i hospitalized patients. American Journal of Health-System Pharmacy, 75(18), 1378-1385. doi:10.2146/ajhp170558
2. Bruera, E., & Del Fabbro, E. (2018, May 23). Pain management in the era of the opioid crisis. American Society of Clinical Oncology Educational Book, 807-812. doi:10.1200/EDBK_208563
3. Edwards, J., Wexner, S., & Nichols, A. (2021, November 18). PSNet: debriefing for clinical learning. Retrieved from Agency for Healthcare Research and Quality:
4. Morales, D., Laporta, M., Meehan, A., Schroeder, D., Sprung, J., & Weingarten, T. (2022). Incidence and outcomes of life-threatening events during hospitalization: a retrospective study of patients treated with Naloxone. Pain Medicine, 23(5), 878-886. doi:10.1093/pm/pnab310

Addressing Associate Wellbeing, Supporting Resiliency at MedStar National Rehabilitation Hospital

Rita Penniman, MS CTRS/RRT; Neepa Shah OT/L; Via Strong Psy.D.; Judy Zdobysz MS, CPHQ

SCAN QR CODE TO WATCH VIDEO

Addressing Associate Wellbeing, Supporting Resiliency at MedStar National Rehabilitation Hospital

Rita Penniman, MS CTRS/RRT, Neepa Shah OT/L, Via Strong Psy.D., Judy Zdobysz MS, CPHQ – MedStar National Rehabilitation Hospital

Background

Although employee well-being has been a priority in healthcare settings, the Covid-19 pandemic dramatically increased the strain on workers and the need to support wellness. In the past few years, organizations have seen record numbers of staffing shortages and employee burnout. This can lead to poor morale and decreased safety in the workplace. Targeted staff wellness initiatives can help support resiliency and wellbeing.

MedStar Health (MSH) realized the urgency of addressing staff resilience, and wellness became a priority at the corporate/system level. Each entity in the system was charged with supporting the effort of associate wellness.

In the Spring of 2021, the MedStar National Rehabilitation Hospital (MNRH) Wellness Committee, consisting of an interdisciplinary team, was established. The work began with a focused approach to provide direction, program identity, and promote internal marketing, and provision of resources.

A literature search on dimensions of wellness lead to identification of 6 focus areas.

1. Balance
2. Exercise
3. Relaxation
4. Nutrition
5. Gratitude
6. Fun

Goal/Aim

To provide meaningful resources and activities to support staff wellness and promote resilience at MNRH.

To engage with the MedStar Health Center for Wellbeing and promote wellness and resilience offerings and resources available to all MedStar Health Associates.

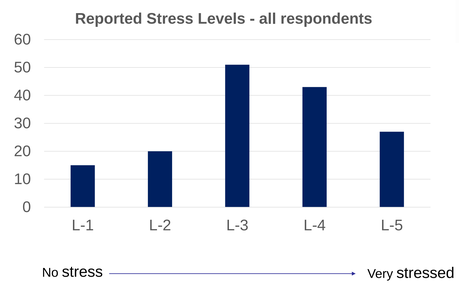
Methods

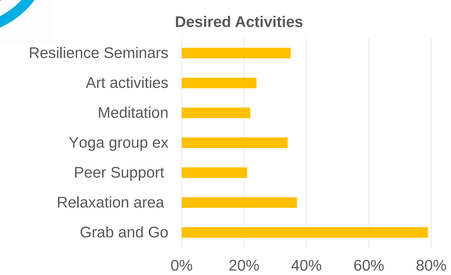
Plan

- Initial staff survey in September 2021
- Identify stress levels
- Identify ways to decrease stress and promote resiliency
- n =161 returned surveys
- Using results, implemented activities associated with focus areas

Do

- Mindful Moments
- Wellness rounds/grab and go
- Gratitude cards
- Walk for Wellness
- Exercise classes at MWHC
- Puppy Parties
- Giveaways





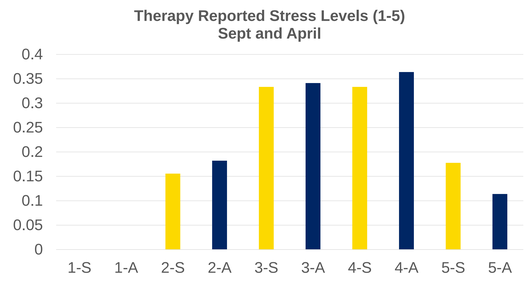
Check

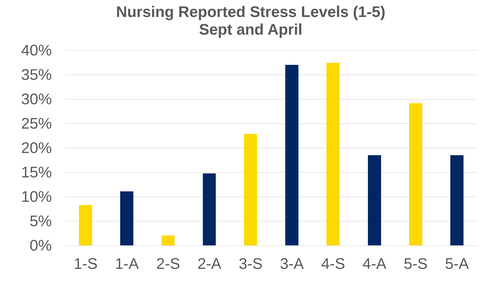
- Regular verbal feedback at events and from departments
- Monthly Wellness committee meetings to discuss feedback
- Conducted re-survey April 2022. n= 80 returned surveys

Act

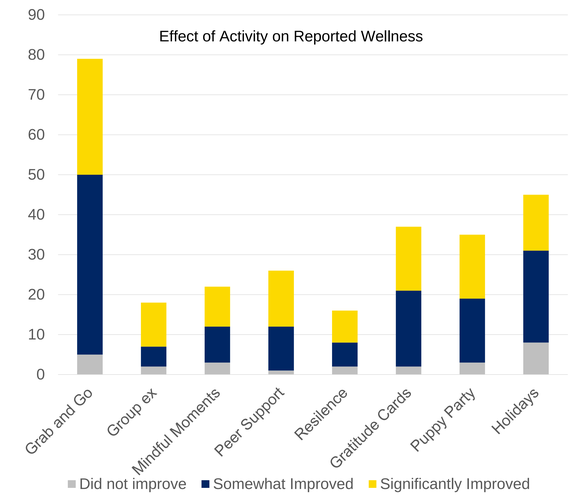
- Changed timing of events to meet different discipline needs
- Formulating plan for: soliciting qualitative feedback,
- Wellness Town hall
- Improved communication formats

Stress Levels reported by Therapy and Nursing (Sept/Apr)





Results



Conclusion

Healthcare workers are diverse population with varying time constraints, role responsibilities, personal factors, cultural factors, etc. Thus, we altered our activity offerings and initiatives to meet their heterogeneous needs. We also ensure that our diverse healthcare roles are represented on the Wellness Committee to best identify staff needs. Brief activities were a good fit in our fast-paced hospital environment. Wellness rounds with treats have been popular as they are quick and allow for in-person connection (listening and resources). Finding the best forum for sharing information has been a challenge and is an area for further growth.

Wellness Committee

MNRH Wellness Committee

- Nursing
- Philanthropy
- Physician
- Psychology
- Quality
- Therapy (PT, OT, SLP, TR)
- Human Resources

Reducing Alarm Fatigue

Sally Gutierrez, MSN, RN, CPHQ; Pamela Paufler, MD; William Bartow, BSN, RN, CCRN; Stephen Blumberg; Duncan Bowling; Casey Cushman, NP; Rose Ann Dunkle, MS, RN, CCRN, NPD-BC; Elizabeth Gardner, RN; Catherine Huber, MSN, RN, CEN; Mark Meshreky; Kristen Nelson, ACNP-BC; Elizabeth Nixon, BSN, RN; Michelle Peters, MSN, RN, CHFN; Shila Shrestha; Jessica Studer, MSN, RN, CCRN; Koryn Stumpp, BSN, RN, CCRN

SCAN QR CODE TO LISTEN TO AUDIO STORY

MedStar Health

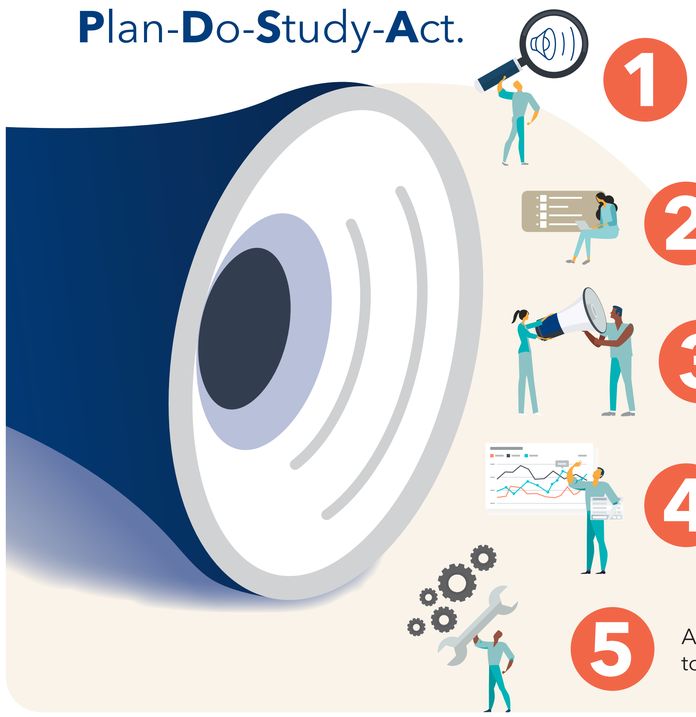
MedStar Washington Hospital Center

Reducing Alarm* Fatigue

*Physiologic patient alarms of centrally monitored devices in the critical care setting

MedStar Washington has established alarm safety as a priority. Alarms on busy critical care units can exceed 100,000 times/month. Excessive alarming can result in alarm fatigue and lead to alarm related safety events. A multidisciplinary team used PDSA to modify alarms and significantly reduced alarm occurrences!

Plan-Do-Study-Act.



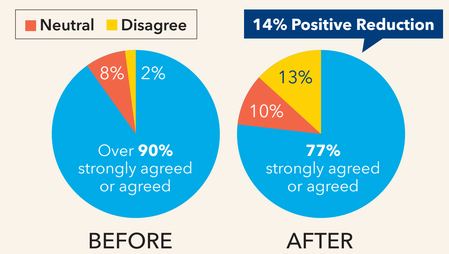
1. Studied alarm limits and priorities, recommended changes to unactionable alarms
2. Assessed staff perceptions of noise and alarm fatigue
3. Applied alarm modifications to 2 critical care units
4. Formalized hospital policy, educated staff and Safety Coaches
5. Applied modifications to all 9 critical care units

GOAL: Reduce nuisance (unactionable) alarms by 50%

AIM: Reduce the number of nuisance alarms in the critical care and intermediate care units while ensuring no risk to patient safety

Staff Survey Before and After Alarm Modifications

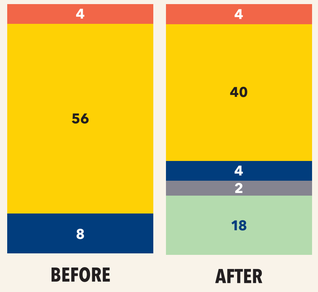
Staff answers when asked: **"On my unit, certain alarms unnecessarily contribute to alarm noise and alarm fatigue"**



Physiologic Alarms* Before and After Alarm Modifications

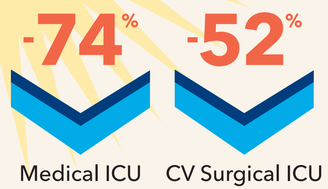
Alarms by Priority Type
- **HIGH:** TRIPLE beep, life threatening, immediate attention.
- **MEDIUM:** 2 beeps or continuous foghorn, rapid intervention
- **LOW:** 1 beep, reassess patient
- **Informational**
- **Off:** no audible sound

No changes were made to any Level One HIGH (Lethal) Alarms.



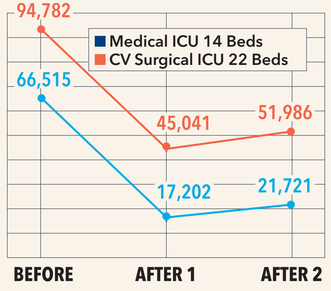
Physiologic Alarm* Occurrences

on 2 Pilot Critical Care Units BEFORE and AFTER Modifications



Modifications were Applied

to all 9 critical care units!



Amazing Alarms OneTeam!

Gutierrez, Sally B., MSN, RN, CPHQ; *Senior Clinical Quality Manager (Author)*

Paufler, Pamela M., MD; *Alarms Committee Lead & Associate Chair Critical Care Medicine*

Bartow, William, BSN, RN, CCRN; *Nursing Director Medical ICU Alarms Committee Co-Lead*

Blumberg, Stephen L., *Senior Director Biomedical Engineering & Clinical Equipment Support*

Bowling, Duncan E., *Patient Care Manager CV Surgical ICU*

Cushman, Casey L., NP, Lead NP; *Quality and Safety Lead Critical Care*

Dunkle, Rose Ann, MS, RN, CCRN, NPD-BC; *Clinical Specialist Critical Care*

Gardner, Elizabeth E., RN; *Patient Safety Consultant*

Huber, Catherine, MSN, RN, CEN; *Clinical Specialist-Emergency Department*

Meshreky, Mark, *Director, Interventional Cardiology/Structural Heart Program*

Nelson, Kristen, ACNP-BC; *Director of Advanced Practice Providers Critical Care Medicine*

Nixon, Elizabeth H., BSN, RN; *Risk Management Consultant*

Peters, Michelle A., MSN, RN, CHFN; *Cardiac Clinical Specialist*

Shrestha, Shila, *Supervisor, Biomedical Engineering*

Studer, Jessica L., MSN, RN, CCRN; *Nursing Director SCVICU*

Stumpp, Koryn, BSN, RN, CCRN; *Nursing Professional Development Generalist*

References

- MWHC Patient Safety Goals (StarPort)
- The Joint Commission National Patient Safety Goals
- Institute for Healthcare Improvement (IHI)

Conclusions

- Engaging a multidisciplinary team to standardize alarm settings resulted in fewer occurrences of alarms and improved staff perceptions about unnecessary alarm noise and alarm fatigue on their units.
- There were 0 patient safety events reported in relation to the alarm modifications
- The successful implementation of this process has potential for adoption across the MedStar Health System.

Next steps

- Replicate the process on all three intermediate care units
- Silence central monitor alarms for end-of-life/comfort care patients
- Repeat the PDSA process to identify other unnecessary alarms and/or nuisance noise

Honorable Mention

Timely Management of Patients with Clinical Concern for Acute Ischemic Stroke

Children's National

Richelle M. Reinharta, MD; Parissa Safari-Ferraa, MHA; Ranjodh Badha, BS; Sopnil Bhattaraia, MBA, CPHQ; Solomon Aberaa, PharmD, MSc; Anit Saha, MSHA, MBA; Jessica Hersteka, MD; Rahul K. Shaha, MD, MBA; Kavita Parikha, MD, MSHS

SCAN QR CODE TO WATCH VIDEO

Timely Management of Patients with Clinical Concern for Acute Ischemic Stroke

Theodore E Trigylidas MD[1], Dana Harrar MD, PhD[2], Nichole McCollum MD[1], Joshua Heffren PharmD, BCPPS[1], Jacob Crossfield PharmD, BCPS[1], Elizabeth Wells MD, M.H.Sc[2], Paola Pergami MD, PhD[2], Kathleen Brown MD[1]

1 - Division of Emergency Medicine, Children's National Hospital, The George Washington University School of Medicine and Health Sciences

2 - Division of Neurology, Children's National Hospital, The George Washington University School of Medicine and Health Sciences

Background

- Pediatric acute ischemic stroke (AIS) is an important cause of morbidity and mortality.
- Early recognition and diagnosis of AIS in children remains a challenge.
- Hyperacute therapies appear safe and effective in children.

Objective

- To improve timely diagnosis of AIS at our emergency department (ED) through the implementation of an interdisciplinary stroke alert team

Methods

Study Design

- Quality Improvement (QI) study designed with plan-do-study-act cycles
- Baseline data collected November 2019 to June 2021.
- Post-intervention data collected July 2021 to November 2022.

Inclusion Criteria

- Patients aged 0 to 18 years presenting to the ED with acute onset focal neurological deficit who received MRI/MRA or CT/CTA as initial imaging in the ED.

Exclusion Criteria

- Trauma, intracranial hemorrhage, metabolic brain injury, symptoms >24 hours.

SMART aims

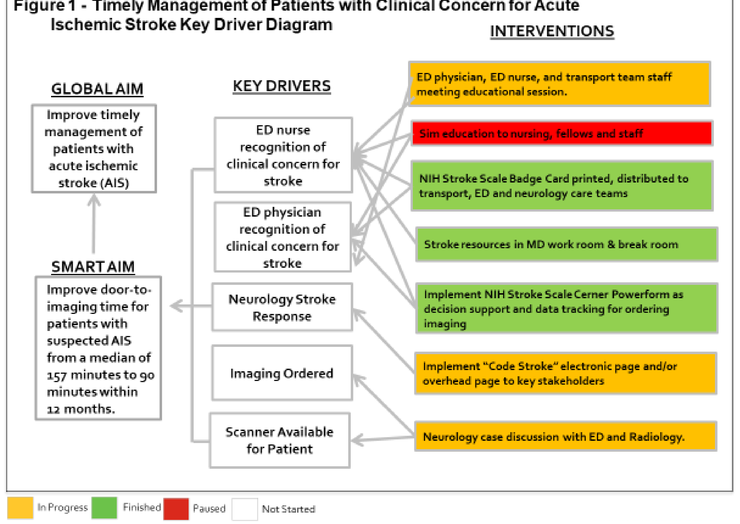
1) Improve median door-to-imaging time from 157 min to 90 minutes by 12 months.
2) Improve percentage of patients triaged at ESI level 1 or 2 by 10% by 12 months.

Interventions

1) 24/7 In-house Neurology fellow (July 2021).
2) Education initiatives to ED nurses and providers (October 2021).
3) Code Stroke paging system (November 2021).

Results

Figure 1 - Timely Management of Patients with Clinical Concern for Acute Ischemic Stroke Key Driver Diagram



Results Cont.

Figure 2a - Door-to-Imaging Time per Encounter with Concern for Acute Ischemic Stroke - X Chart

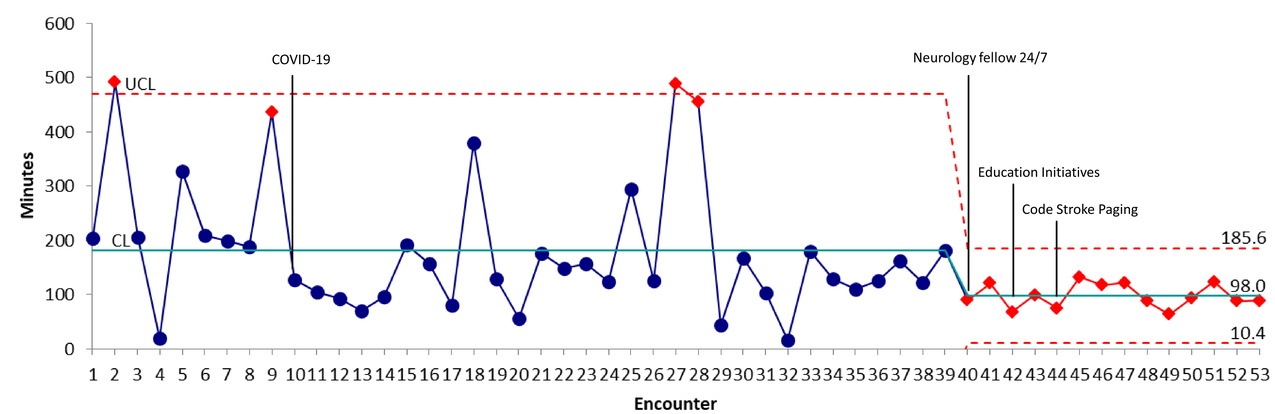
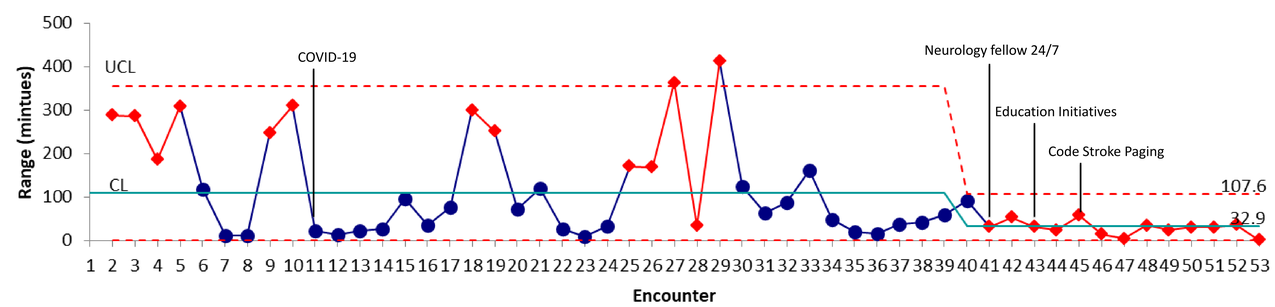


Figure 2b - Door-to-Imaging Time per Encounter with Concern for Acute Ischemic Stroke - mR Chart



- 39 and 14 pre- and post-intervention encounters were seen during the study period.
- 3 patients had confirmed AIS on imaging, none received hyperacute therapies.
- Median door-to-imaging time improved from 157 minutes to 92 minutes.
- Median door-to-CT/CTA decreased from 139 minutes to 109 minutes.
- Median door-to-MRI/MRA decreased from 173 minutes to 89 minutes.
- Percentage of patients triaged at ESI level 1 or 2 increased from 67% to 79%.

Conclusions

- Stroke alert teams decrease median door-to-imaging time in children and can help to ensure more patients with AIS are within therapeutic window for hyperacute therapies.

Honorable Mention

Best Practice Clinical Immersion Framework: A Pilot Study

Children's National

Simmy King DNP, MS, MBA, RN-BC, NE-BC, CHSE; Bethany Cieslowski DNP, MA, RN, CHSE;
Denise Pope PhD, RN; Devora Winkfield PhD, FNP-BC

SCAN QR CODE TO WATCH VIDEO

Best Practice Clinical Immersion Framework: A Pilot Study

Simmy King DNP, MS, MBA, RN-BC, NE-BC, CHSE, Bethany Cieslowski DNP, MA, RN, CHSE, Denise Pope PhD, RN, Devora Winkfield PhD, FNP-BC

Background

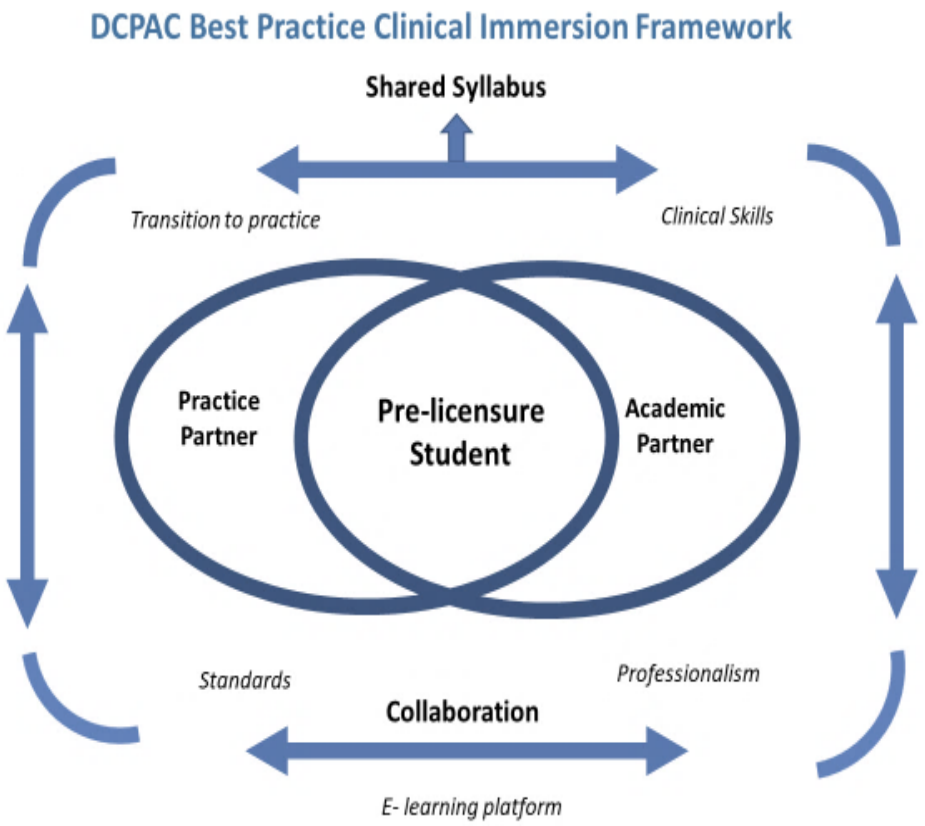
- The academic practice gap has been well documented in nursing literature for over four decades.
- While academic nursing has a long history of requesting clinical experiences for nursing students, these placements are not easily obtained, especially in pediatrics.
- The COVID-19 pandemic exacerbated the already limited availability of pediatric clinical experiences for nursing students.

Opportunity for Innovation

- In response to the continued need for pediatric clinical experiences a free-standing academic pediatric hospital and 3 academic nursing programs collaborated to form the District of Columbia Practice Academic Collaborative (DCPAC).
- The collaborative aimed to address the unmet demand for clinical experience and to provide academic credit to students hired for the hospital's practice-based internship.

Approach

The DCPAC collaboration resulted in the design and implementation of a pilot study to evaluate the outcomes of a best practice clinical immersion framework using a shared clinical syllabus and e-learning platform.



Outcomes

All eligible participants completed all course requirements and were awarded 90 hours of clinical practice by their nursing program.

Pre-post quantitative showed significant improvement in:

- communicating with patients (p = .013)
- comfort delegating tasks (p= .019)
- less difficulty in documenting in electronic medical record (p= .009)
- opportunities to practice skills and procedures (p = .005)
- comfort in communicating and coordinating with care (p= .04)
- preparation for clinical practice through simulation (p = .025)
- knowing how to care for a dying patient (p= .032)

Keywords that emerged from qualitative analysis

Conclusion

This innovative collaboration created a structure and process that enabled nursing students to receive clinical practice and academic credit while employed in a practice-based internship program. Further, this best framework can be easily adapted among practice/academic partnerships in all clinical areas.

References available upon request

Honorable Mention

Improving Intensive Care Unit Nurses' Knowledge on Delirium Through a Quality Improvement Initiative in an Inner-City Hospital

Felix W. Wireko; John Gharbin; Joseph Roxane; Adeyinka O. Laiyemo; Alem Mehari

Improving Intensive Care Unit Nurses' Knowledge on Delirium through a Quality Improvement Initiative in an Inner-City Hospital

Felix W. Wireko, John Gharbin, Joseph Roxane, Adeyinka O. Laiyemo, Alem Mehari

Background

- Delirium is a common clinical syndrome observed in Intensive Care Unit (ICU) patients.
- It is associated with increased morbidity and mortality and is considered an independent risk factor for long-term cognitive impairment.
- Prevention, early diagnosis, and management of delirium are critical in preventing the deleterious effects and improving patient outcomes.
- Despite available guidelines on routine screening for ICU delirium, delirium is largely underdiagnosed owing to nonadherence to these guidelines.
- Lack of formal education on delirium and validated screening tools have been cited as significant barriers to delirium screening by nurses.
- The accuracy of validated delirium screening tools is user-dependent, with decreased sensitivity and specificity to <50% when performed incorrectly.
- Critical care nurses are strategically positioned to assess delirium, and evidence suggests education on delirium and screening tools improve nurses' knowledge and confidence in delirium recognition.
- A prior study at this study site revealed that only 32% of nurses were confident with delirium recognition. Only 19.23% used validated screening tools with a lack of education on delirium and validated screening tools as one major barrier to screening for delirium

Objectives

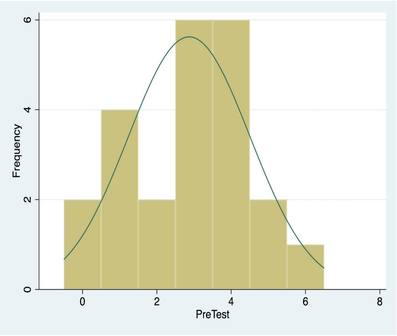
- The primary objective is to increase ICU nurses' knowledge on delirium and validated screening tools to improve delirium assessment in critical care patients
- To measure the impact of delirium educational session among participants using a pre and post test methodology

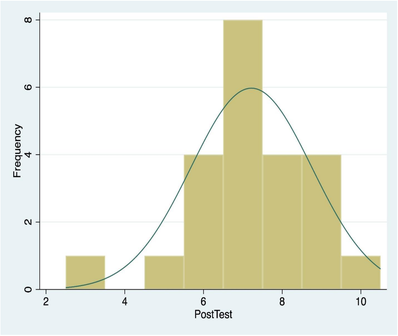
Methods

- **Design**: Quasi-experimental study design
- **Setting**: Howard University Hospital Medical Intensive Care Unit
- 23 intensive care nurses where randomly selected to participate in one-hour in-person educational teaching session for delirium in intensive care patients.
- Training was focused on improving nurses' knowledge of delirium and validated screening tools.
- A 10 question pre-and post-test was administered to participants to evaluate knowledge of delirium and the impact of the educational session.
- Data collected during the session was analyzed using STATA (StataCorp. 2021. *Stata Statistical Software: Release 17*. College Station, TX: StataCorp LLC)
- Paired sample t-test was used to find significance between pre and post test scores

Results

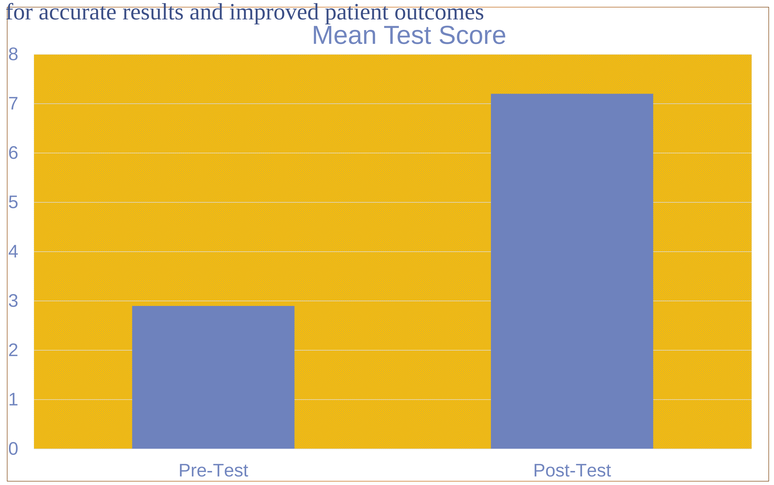
- Out of 10 questions, the mean pre-test score was 2.9 (95% CI: 2.2-3.6)
- The post-test mean score was 7.2 (95% CI: 6.6-7.9)
- There was statistical significance between the pretest and post test means with a mean difference of 4.3 (3.4-5.3, *p*-value <0.001)





Discussion

- This study demonstrated that educational sessions on delirium and validated delirium screening tools improve nurses' knowledge of delirium assessment, as evident in the pre-and post-test scores.
- This increase in knowledge will enhance the proper use of the validated screening tools for accurate results and improved patient outcomes



Conclusions

- ICU delirium is a common but preventable syndrome. Nurses will be adequately equipped to prevent and accurately detect delirium for improved patient outcomes with the necessary education and training.
- A collaborative effort among all healthcare workers, including physicians, nurses, physical therapy, nutritionists, and others, is critical to prevent and manage delirium
- The next phase of this quality improvement project will focus on resident physicians and assess for knowledge retention and impact of these educational sessions among the nurses.

References

- Marino, J. M. and Yegneswaran, B. (2016). Delirium screening in the ICU, Nursing Critical Care, 11(4). Available at: doi: 10.1097/01.CCN.0000484685.15575.53
- Pandharipande, P. P., Girard, T. D., Jackson, J. C., Morandi, A., Thompson, J. L., Pun, B. T., Brummel, N.E et al., (2013). Long-term cognitive impairment after Critical Illness. N Engl J Med 2013; 369:1306-1316, Available at: DOI: 10.1056/NEJMoa1301372

Honorable Mention

Peer-to-Peer Point-of-Care Ultrasound Training in Internal Medicine Residency Program: A Pre-Post Pilot Study and Quality Improvement Initiative

Mpey Tabot-Tabot, MD; Daniel Larbi, MD; Alem Mehari, MD

SCAN QR CODE TO WATCH VIDEO

Peer-to-Peer Point-of-Care Ultrasound Training in Internal Medicine Residency Program: A Pre-Post Pilot study and Quality Improvement Initiative

Mpey Tabot-Tabot, MD[1,2], Daniel Larbi, MD[1,2], Alem Mehari, MD[1,2,3]

[1]Howard University Hospital, [2]Department of Internal Medicine, [3]Department of Pulmonary Critical Care

INTRODUCTION

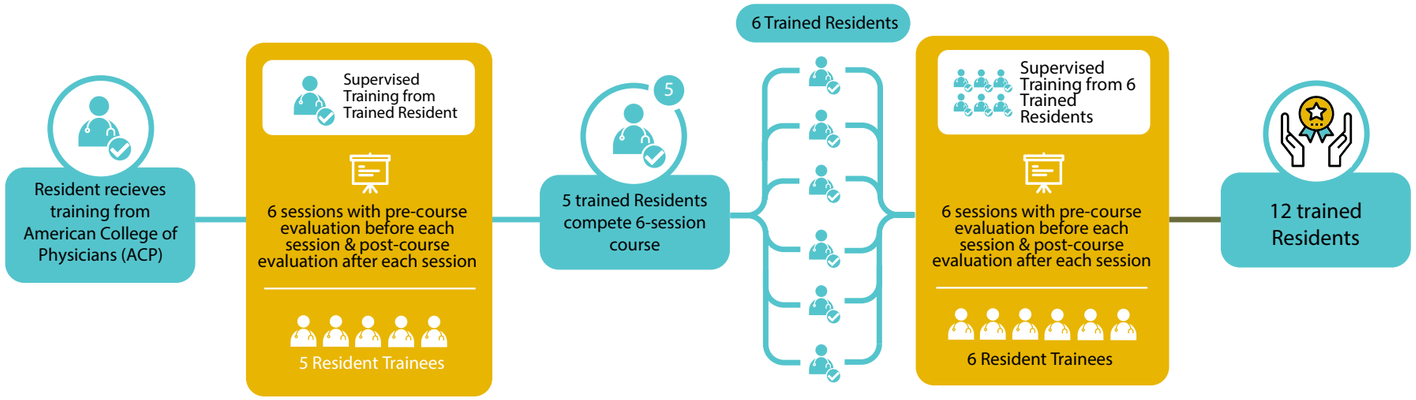
Point-of-care ultrasound (POCUS) is the use of ultrasound by the clinician at the patient's bedside and helps make care decisions. It can be divided into diagnostic and procedural POCUS. Diagnostic POCUS is evolving in the internal medicine world. It has been shown to improve diagnostic accuracy with improvement in physical examination skills and decrease time to diagnosis.

The lack of trained faculty and availability of equipment are some of the barriers in creating a POCUS curriculum for Internal Medicine trainees. Here we discuss a quality improvement project using a peer-to-peer training approach to start a POCUS training in Howard University Hospital internal medicine residency program.

METHOD

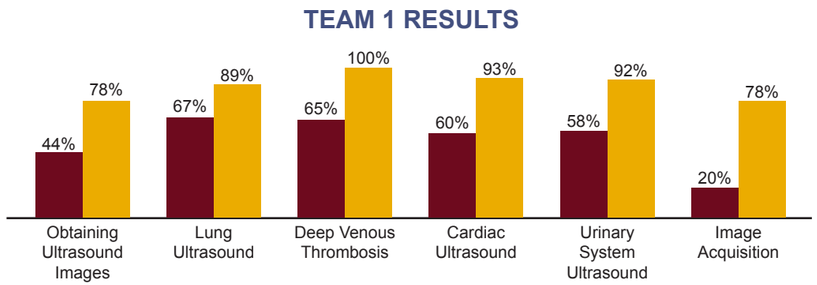
A pre-assessment survey was sent out to all internal medicine residents (PGY 1-PGY3), n=76, to assess interest, knowledge, and the utility of POCUS in patient care practice. Two six-week sessions were held, running from December 16th, 2021, to March 10th, 2022. Six residents in each group (n=12) who consented and were able to complete the training sessions were included in the analysis. The instructors included an internal medicine resident who had attended a POCUS training course by the American College of Physicians (ACP), supervised by an echocardiography board-certified cardiology fellow, pulmonary critical care fellows, and an attending physician. Each of the first team of participants taught a session for the second team of participants.

Pre-course and post-course evaluations were sent out to the participants. Each session was divided into didactic and bedside training for a period of 2hrs. Sessions focused on the basics of ultrasound, knobology, probe identification and selection, image acquisition techniques and interpretation, and normal ultrasound anatomy and pathology identification.

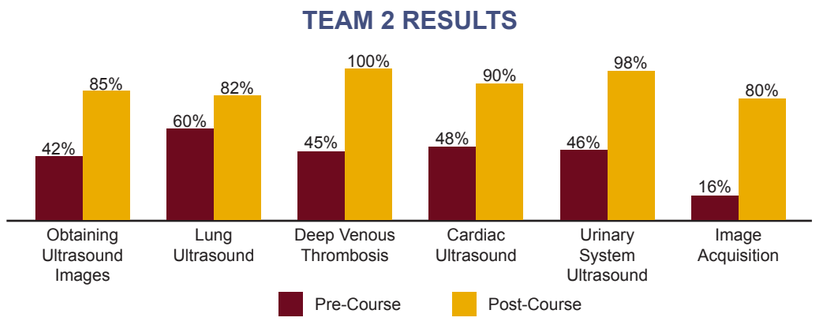


RESULTS

On the pre-assessment survey, 91.49% of residents reported no formal training as the main challenge to using point of care ultrasound. The resident's scores of the pre- and post-course evaluations for the first team is shown below.



100% of the trained residents reported that they were comfortable teaching. Below is the pre and post course evaluation for the second team.



CONCLUSION

The results show that a dedicated peer-to-peer teaching approach improves sonographic knowledge and is an effective strategy for teaching POCUS to Internal Medicine residents. This approach may allow broader adoption of POCUS in medical education, especially when faculty expertise is limited. Medical practice is currently changing with the use of POCUS. It takes medicine to a whole new level with its low cost, high impact use of technology at the patient's bedside.

CONTACT

Mpey Tabot Tabot, MD • Internal Medicine Resident • Howard University hospital, Washington D.C.
Email: mtabot@huhosp.org • Phone: (607)-761-3314

Honorable Mention

Identifying Nurse Burnout in the Intermediate Care Setting Through Peer Intervention: Iowa Model of Evidence Based Practice

Yewon Jee, RN; Brigette Stump, RN; Evelyn Emordi, RN; Angel Davey, RN

SCAN QR CODE TO WATCH VIDEO

Identifying Nurse Burnout in the Intermediate Care Setting through Peer Intervention: Iowa Model of Evidence Based Practice

Yewon Jee, RN; Brigette Stump, RN; Evelyn Emordi, RN; Angel Davey, RN

[1]Department of Nursing, MedStar Washington Hospital Center, Washington DC, [2]MedStar Health Research Institute, [3]Hospital, Location

MedStar Washington Hospital Center

MedStar Health Research Institute

Iowa Model of Evidence-Based Practice

Background

- Triggers
  - A rapid drop in staffing as a result of pandemic stress/burnout on nurses has led to increased fatigue and burnout of remaining nurses.
  - There is evidence to correlate medical mishaps and errors with increased fatigue and burnout amongst RNs.
- Strategic alignment: Identifying and intervening when an RNs stress level begins to elevate allows for a decrease in stress, leading to long term increased job satisfaction and decreased burnout.
- Stakeholders: patient population, RNs, management/leadership

PICO Clinical Question

PICO: For nurses, how does implementation of the Stress First Aid Model, compared to current practice, affect job satisfaction over the course of 45 days?

Review of Evidence

- 54% of nurses report moderate burnout; increasing emotional exhaustion and cynicism scores increasing incrementally with time (Kelly, Gee, & Butler, 2021).
- Prior to the pandemic, healthcare worker burnout was prevalent in the ICU and ED, however, it is now widespread through all levels of care. The increase in burnout will lead to a rapidly depleted workforce (Simubark et al, 2020).
- Nurses are exposed to situations or events that can be extremely stressful, even traumatic; making a significant or fatal medication error; facing a difficult patient loss; being involved in contentious interdisciplinary discussions; challenging interpersonal relationships; or experiencing workplace violence, burnout, compassion fatigue, or moral distress (Morales & Brown, 2021).
- Under traumatic circumstances, nurses become what Albert Wu has termed “second victims.” They are forgotten, silent sufferers—even possibly contemplating suicide (Morales & Brown, 2021).
- Stress first aid is built upon five evidence based elements that have been linked to better functioning after stress across a number of settings (Watson & Westphal, 2020).

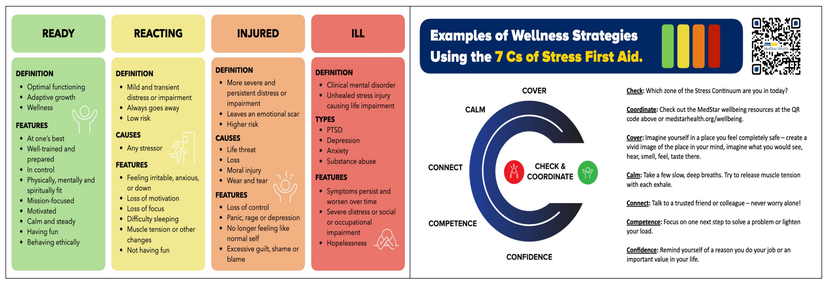
Implementation

Setting & Participants

- Clinical area: This project was conducted in a neuro intermediate care area as well as a neuro med-surg unit, with a wide range of acuity across patient assignments and an increased risk for alarm fatigue. The nurses involved are assigned to severely understaffed units, an additional factor when examining burnout risk.

Practice Change

- Implementation of the Stress First Aid Model
- Unit staff received education on this model in huddles and in-services
- Unit staff received badge buddies which included information on the Stress Continuum, the Stress First Aid model, and a QR code to hospital Wellness Resources
- Badge Buddy affixed with a tag for staff to indicate their current stress level. Facilitators assigned per shift to assess peer stress and intervene appropriately.



Procedures

- Intervention Methods & Materials: Using a PDSA framework, a self-reporting tool, paired with facilitators aimed to identify vulnerable RNs and intervene to de-escalate their individual stress level and help them to refocus.

Outcomes

- Clinical Outcome: Professional satisfaction/climate survey with likert scale questions
- Process Outcome: Participation of nurses, audits conducted

Outcome Measurement Procedures

- Professional satisfaction survey administered electronically to staff pre-intervention and again after the 6-week implementation period

Outcomes

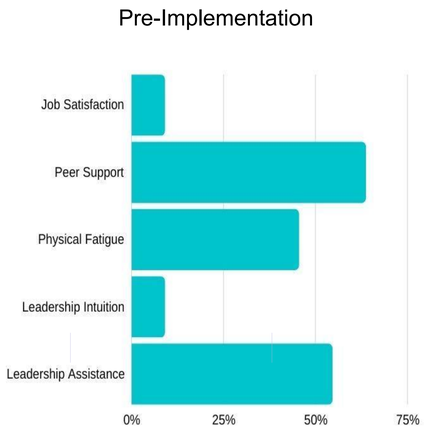


Figure 1. Prior to implementation, a majority of nurses reported feeling unsupported in their stress response, often identifying themselves beyond the reactive stage of the stress response at the beginning of their shift.

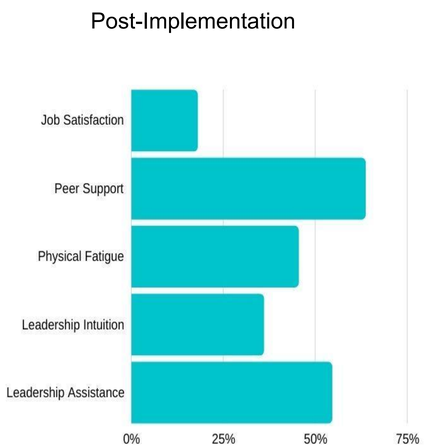


Figure 2. Notable increases were identified in leadership intuition, peer support, and of highest value to preventing burnout, job satisfaction.

Evaluation

- As the units faced increasing shortages throughout the holiday, and alternatively became covid mitigation units, participation lagged.
- While effective in helping facilitators to identify vulnerable nurses and render appropriate aid at the time, and positively impacting contributing factors to burnout, the overall impact on burnout was modest.

Limitations

- Ongoing staffing shortages (for facilitators)
- PPE obstructing the badges (especially with high numbers of COVID patients)
- Participation: High turnover impeding on consistency, increased use of float pool staff who were not briefed on the intervention
- Length of study; burnout is not an acute onset problem, and reversal requires ongoing intervention

Next Steps/Sustainability

- High potential for positive impact
- Increased buy-in from unit staff necessary

References

De Oliveira, S. M., de Alcantara Sousa, L. V., Vieira Gadelha, M., & do Nascimento, V. B. (2019). Prevention Actions of Burnout Syndrome in Nurses: An Integrating Literature Review. *Clinical practice and epidemiology in mental health : CP & EMH*, *15*, 64–73.

Kelly, L. A., Gee, P. M., & Butler, R. J. (2021). Impact of nurse burnout on organizational and position turnover. *Nursing outlook*, *69*(1), 96-102.

Morales, Crystal MS, BSN, RN; Brown, Mary-Michael DNP, RN, CENP CE: Providing Care for Caregivers During COVID-19, AJN, American Journal of Nursing: May 2021 - Volume 121 - Issue 5 - p 38-45 doi: 10.1097/01.NAJ.0000749752.80198.c0

Rasha Simubark et al. Monitoring Burnout in the Intensive Care Unit and Emergency Department during the COVID-19 pandemic: the Saudi Arabian Experience. Middle East Journal of Nursing 2020; 14(2):12-21. DOI: 10.5742/MEJN2020.9379

Watson P & Westphal R (2020). *Stress First Aid for Healthcare Workers*, National Center for PTSD.

Acknowledgements

- We extend our gratitude to our educators, peers, and MWHC supporters for their support with this research endeavor.
- Funding for materials graciously provided by Neurosciences Intermediate Care Unit
- Contact: angel.n.davey@medstar.net

Honorable Mention

Safety Awareness Month at the Psychiatric Institute of Washington

PIW
Psychiatric Institute of Washington

Tracy Meyer, MD; Nicole Parker, MSN, RN; Alexa Sobeck, LICSW; Dody McClain, MHA; Paige Casto, BS

SCAN QR CODE TO WATCH VIDEO

SAFETY AWARENESS MONTH AT THE PSYCHIATRIC INSTITUTE OF WASHINGTON

Tracy Meyer, M.D., Nicole Parker M.S.N., R.N., Alexa Sobeck L.I.C.S.W., Dody McClain M.H.A., Paige Casto B.S.

BACKGROUND - Psychiatric Institute of Washington (PIW) currently provides 130 beds to care for some of the most vulnerable patients in the city who are experiencing acute mental health crises and PIW services account for approximately 50% of the city's acute mental health care needs at any given time. PIW recognizes that the utmost importance of inpatient acute psychiatry care is **safety**. What started as a small idea to provide incentives for staff to commit to quality patient safety checks, quickly grew into an idea to encompass all important safety topics that affects patient and staff experience in the form of a Safety Awareness Month.

OBJECTIVES - 1) Improve measures of safety including safety check compliance, patient aggression rates, incident and Good Catch reporting; 2) Re-educate staff on the most pertinent PIW policies & procedures related to staff and patient safety; 3) Recognize staff who exemplify extraordinary work ethic and commitment to safety at PIW.

METHOD -

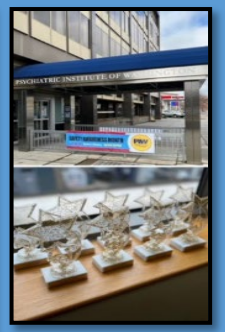
1) **COMMITTEE FORMATION AND PLANNING** – The Safety Month Committee met twice weekly throughout December 2021 to plan for Safety Awareness Month scheduled for January 2022. January was the month chosen as Safety Awareness Month to intentionally signify a fresh and inspiring start to the New Year.
2) **CALENDER OF EVENTS & ACTIVITIES** – Pertinent topics were mapped out on a calendar and related activities and events were planned to support and educate on the topic of the day. Safety Awareness Month was kicked off with a Safety Pledge commitment by staff and a Safety Month T-shirt for all staff.
3) **EDUCATION MATERIALS** – Tip sheets, interactive activities, and educational handouts were created for each daily topic to highlight parts of hospital policies related to safety. An education booth was staffed by leadership twice a day to distribute materials and engage staff in live discussions and demonstrations.
4) **QR CODES, NOMINATIONS, & DATA COLLECTION** – Camera reviews and unit rounds were done by leadership to monitor improvement. Staff nominated "Safety Champions" and "Good Catches" to recognize peers who prioritized safety. Finally, a Feedback Survey QR code was set up to measure staff satisfaction.
5) **AWARD CEREMONY & STAFF RECOGNITION** – Ten staff were nominated by their peers and honored as "Safety Champions" by members of their unit treatment team. The final ceremony included drawing of raffle prizes and recognizing all award winners with certificates from the CEO of the hospital.

SAFETY AWARENESS MONTH

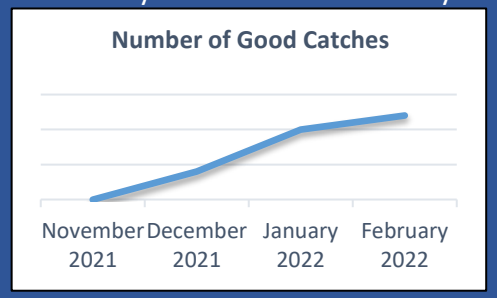
January 2022

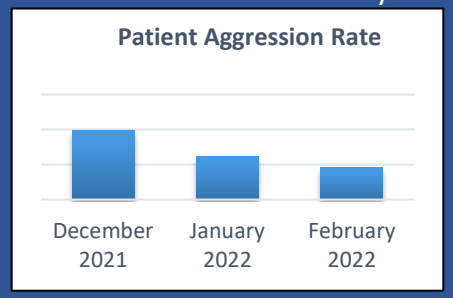
Activity of the Week	Monday	Tuesday	Wednesday	Thursday	Friday
Best Safety Poem Winner receives: 10 Raffle tickets & mini trophy	3 CULTURE OF SAFETY KICK OFF & T-SHIRTS	4 INCIDENT REPORTING ★	5 CODE LAVENDER ★	6 SECLUSION & RESTRAINTS (BLUE PACKETS) ★	7 CODE BLUE & CHANGE OF CONDITION ★
Best Safety Poster Winner receives: 10 Raffle tickets & mini trophy	10 SAFETY CHECKS & HALLWAY MONITORING ★	11 PRECAUTIONS - SI	12 PRECAUTIONS - AGGRESSION	13 PRECAUTIONS – SAO	14 PRECAUTIONS - ELOPEMENT
Unit Champion Voting	17 MILIEU MANAGEMENT	18 LOCKED DOORS & ACTIVE TREATMENT ★	19 ROOM SWEEPS, LINEN MANAGEMENT, & UNIT CLEANLINESS ★	20 CONTRABAND ★	21 BODY SEARCHES
Crowning of Unit Champions & Group Photo Winner receives: Trophy Amazon Gift Card	24 1:1 OBSERVATION LEVEL ★	25 HANDLE WITH CARE & VERBAL DE-ESCALATION	26 WRIST BANDS Best Unit= Popeye's Party!	27 ON/OFF UNIT PRIVILEGES	28 SELF CARE ★
Raffle Winner Receives: New Apple Watch 7 Series! Good Catch of the Month: $50 Amazon Gift Card	31 AWARD CEREMONY FEEDBACK SURVEY & FOOD TRUCK				UHS

★ = opportunities to earn raffle tickets



RESULTS - Initial data following Safety Month showed improvements in safety measures in several areas including: 1) safety check compliance increased by 55%, 2) patient aggression decreased by 119%, 3) patient incidences decreased by 43.9%, 4) good catch reporting increased by 200% and 5) 90% of staff felt safety month was "extremely helpful" based on the feedback survey.





CONCLUSION – The journey of fostering a culture of safety at PIW will be an ongoing focus of the PIW leadership team. Through COVID and beyond, PIW is committed to continuing work on this important initiative to improve quality of care and safety for all patients and staff. In coming months, the Safety Month Committee plans to meet with Safety Champions and other leaders at PIW to discuss ideas and next steps on how to implement safety for the hospital in the most effective, measurable, and innovative ways.

Honorable Mention

Quality Assurance & Performance Improvement (QAPI) Plans

SIBLEY MEMORIAL HOSPITAL

JOHNS HOPKINS MEDICINE

Sharon Powell, MS, RN, CPHQ

Background

CMS requires all hospitals to have a Quality Assurance and Performance Improvement (QAPI) Plan. The QAPI Plan guides the organizations performance improvement efforts and is intended to specify the purpose and scope for the QAPI initiatives of the organization. The plan should reflect input from all roles. Goals should be specific, measurable, actionable and relevant with a timeline for completion. Responsibility and accountability must be integrated into the plan. Sibley has a very robust QAPI plan in place for the organization.

Objective

To ensure that the organizations key quality and performance goals are extended into departmental quality assurance and performance improvement goals, plans and initiatives and that they are communicated to and understood by staff.

Methods

Each department developed its own specific QAPI Plan

- implemented July 2021
- based on the strategic quality goals of the organization
- focused on the processes associated with that department
- based on PDSA (plan, do, study, act) process
- Patient Safety & Quality department staff supported departments

Plan Development

- multidisciplinary approach
- Decision Tree form used to identify problem-prone issues and key priorities
- priorities listed on the QAPI Plan
- leaders confirmed consistent with the key strategic goals
- target goals set and an accountable individual assigned

QAPI Plan Implementation

- data collection and identification of root causes
- actions taken as causes identified
- measurement continues to ensure actions are effective
- PDSA cycles continue until success is established

Reporting

- report twice per year to the Quality Safety Service (QSS) Committee
- standardized reporting on QAPI plan, areas of focus, opportunities, data, and results
- presented by the department leader or their representative

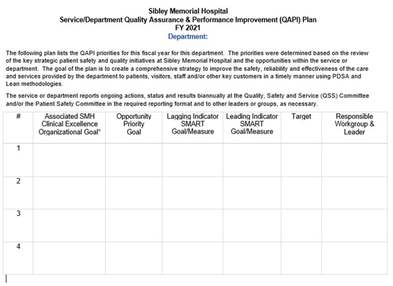
Presentation and Education

- each department has a standardized Alignment Board located in visible area
- displays goals and current status for each part of operational plan
- utilize graphics to inform on clinical, service, workplace, and operational excellence
- QAPI plans reflects the Clinical Excellence portion of the operational plan
- weekly rounds by Leadership on the four categories of the operational plan

Results

This process has been highly successful.

- Every department now has a Department QAPI plan
- 57 out of 59 departments have functional operating plans and alignment boards
- Alignment boards are standardized and include the QAPI Plan, data and results
- Executives have rounded on 100% of departments
- One set of rounds focuses on QAPI Plans
- Questions:
  1. What is the department working on?
  2. What is the current status and what progress has been made?
  3. What are the barriers?
  4. What can leadership do to assist?
- Staff are frequently included and provide information, make inquiries, and offer suggestions
- A scribe is responsible for taking notes on items requiring escalation to the executive team
- Items are entered into a database and forwarded to the executive team and monitored by the Performance Excellence department to ensure follow-up occurs
- Feedback on items and their status are provided to the department
- Numerous issues identified and many of these were conveyed by staff

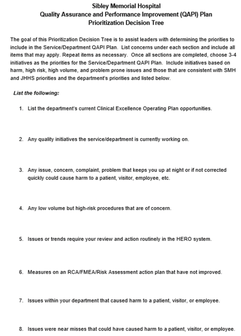


Sibley Memorial Hospital
Service/Department Quality Assurance & Performance Improvement (QAPI) Plan
FY 2021
Department:

The following plan lists the QAPI priorities for this fiscal year for this department. The priorities were determined based on the review of the key strategic patient safety and quality initiatives at Sibley Memorial Hospital and the opportunities within the service or department. The goal of the plan is to create a comprehensive strategy to improve the safety, reliability and effectiveness of the care and services provided by the department to patients, visitors, staff and/or other key customers in a timely manner using PDSA and Lean methodologies.

The service or department reports ongoing actions, status and results biannually at the Quality, Safety and Service (QSS) Committee and/or the Patient Safety Committee in the required reporting format and to other leaders or groups, as necessary.

#	Associated SMH Clinical Excellence Organizational Goal*	Opportunity Priority Goal	Lagging Indicator SMART Goal/Measure	Leading Indicator SMART Goal/Measure	Target	Responsible Workgroup & Leader
1						
2						
3						
4						



Sibley Memorial Hospital
Quality Assurance and Performance Improvement (QAPI) Plan
Prioritization Decision Tree

The goal of this Prioritization Decision Tree is to assist leaders with determining the priorities to include in the Service/Department QAPI Plan. List concerns under each section and include all items that may apply. Repeat items as necessary. Once all sections are completed, choose 3-4 initiatives as the priorities for the Service/Department QAPI Plan. Include initiatives based on harm, high risk, high volume, and problem prone issues and those that are consistent with SMH and JHHS priorities and the department's priorities and listed below.

List the following:

1. List the department's current Clinical Excellence Operating Plan opportunities.
2. Any quality initiatives the service/department is currently working on.
3. Any issue, concern, complaint, problem that keeps you up at night or if not corrected quickly could cause harm to a patient, visitor, employee, etc.
4. Any low volume but high-risk procedures that are of concern.
5. Issues or trends require your review and action routinely in the HERO system.
6. Measures on an RCA/FMEA/Risk Assessment action plan that have not improved.
7. Issues within your department that caused harm to a patient, visitor, or employee.
8. Issues were near misses that could have caused harm to a patient, visitor, or employee.

QSS REPORTING SCHEDULE 2021

Months	Service	Departments	Leadership Reporting
Jan/Jul	**Nutrition** EVS Emergency Management **Safety & Security** Plant Operations Clinical Engineering, Transportere	**Nutrition, Dietary** EVS, Linen Emergency Management, Safety, EOC Committee **Safety, Security** Plant, ICRA Clinical Engineering, Transportere	**Yolanda Mullings** Robert Jerrell Cagle Orso **Madeline Cooper** Tim Overholtzer Jose de la Barre, Shanae Wyatt
Feb/Aug	**OB Gyn; Women and Newborne** Nursing Nursing Professional Development & Education **Specialty Groups** Radiology, Imaging, Cardio-vascular, Sleep Pharmacy	**OB/Gyn, WIB, FCCU, Labor & Delivery, SCN** Magnet, NSRQI, Nursing Quality Education, Training, Professional Development Stroke, Sleep, Special Programs, Bariatrics Radiology, Imaging, Interventional, Cardio-vascular, Sleep Center, IR Pharmacy, Med Management, Antimicrobial Stewardship, Pain Management, Opioids	**Dr. Beckerman, Alexia White** Dr. Laura Hendricks-Jackson Allison Steinburg **Felicia Hiatt** Dr. Kimberly Mark Collins, Jervon Lassiane, Dr. Johnson Dr. Abale, Julion Neuler
Mar/Sep	**Patient Safety & Quality** Medical Staff Affairs Human Resources **Risk Management** Patient Relations IT	**Patient Safety, Quality, PSCC, Sepsis** Medical Staff Affairs, Infection Control Committee Human Resources (TJC, DMS, etc.) **Risk Management** Complaints, Grievances, Pt Experience IT	**Dr. Abale, Sharon Povrall** Dr. Abimbolaoye, Dr. Abale, Jen Berry Dr. Abale, Jervon Rogers **Barb Wesch** Marianne Biorek, Angela Crowley Ed Grogan
Apr/Oct	**Medicine, Hospitalists, Medical Units** Medical Oncology Palliative Care **Radiation Oncology** The Renaissance Grand Oaks	**Medicine, Hospitalist, 6A, 7A, 7B** Oncology, 2A, Infusion Palliative Care, Chaplaincy **Radiation Oncology** Skilled Nursing Assisted Living	**Dr. Rollin, Dr. Lee, Christine Inglisa** Dr. Levy, Dr. Dorilla, Onyinye Mbgwu Dr. Padiyara **Elizabeth Tatman, Dr. Zeville** Dr. Sidiee, Mary Barney Katelyn Grant
May/Nov	**Emergency** ICU/PCU Behavioral Health **Case Coordination** Admissions	**ED, ED Providers** ICU, ACU, Intermediate, Resuscitation Committee Psychiatry, Behavioral Health, 7N **Case Coordination, CBW Committee** Admissions, Registration, Pt Financial Services	**Dr. Wilda, Dr. Rose, Najeeba Brown** Dr. Rose, O.Dr. Brennan, Dr Dunick Dr. Mishaele, Faheda Rivet **Dr. Bullick, Martha Anoka** Sharon Donnelly
Jun/Dec	**Surgery & Perioperative** Orthopedics Lab & Pathology **Rehab**	**Surgeons, OR, PACU, SMAC, Endo, 2A, Sterile Processing** Orthopedists, ER Pathologists, Lab, Blood Utilization PT, OT, ST, RT	**Dr. Ammerman, Tamekia Langston** Dr. Goldsmith, Cathy Pulford Dr. Tilney, Deborah Williams **Jessica Barron, James Thomas**

3/15/21

Conclusion

Implementation of the Departmental QAPI Plan has been an effective way to increase focus on strategic quality initiatives. Partnering departments with the SMH Patient Safety and Quality Department staff was remarkably successful in the development of the plans. This partnership has continued supporting the department's efforts and reporting. As the organization moves into phase 2 of the reporting process there is now an increased focus on data and action items to ensure goal improvement. The current goal is to sustain the process and ultimately ensure that continued actions serve to achieve the organization's quality goals.

References

Guide for Developing a QAPI Plan. https://www.cms.gov/.../QAPI/Downloads/QAPIPlan.pdf

QAPI Tools. https://www.cms.gov/.../QAPI/qapitools

Honorable Mention

Bundle Up: Improving Compliance with Sepsis Bundles in Rapid Response Patients

U.S. Department of Veterans Affairs

Veterans Health Administration

Washington DC VA Medical Center

Susan Barba, MD; Jesse Theisen-Toupal, MD; Cherinne Arundel, MD; Jessica Logan, MD

SCAN QR CODE TO WATCH VIDEO

Bundle Up: Improving Compliance with Sepsis Bundles in Rapid Response Patients

Susan Barba MD, Jesse Theisen-Toupal MD, Cherinne Arundel MD, Jessica Logan MD
DC VA Medical Center

Problem & Aim

Problem: Evidence based treatment of sepsis includes early evaluation and treatment by completing certain bundles of orders rapidly. These bundles of orders should be completed at the very least within 3 hours and ideally within 1 hour. At the DC VA Medical Center, in patients who have rapid responses called for evidence of severe sepsis, the sepsis bundle is completed within 3 hours in only 39% of cases and in 1 hour in 0% of cases.

Aim: In patients at the DC VA Medical Center admitted from 7/1/20 to 5/1/21 who have a rapid response called with concern for sepsis, improve compliance with the 1 hour bundle from 0% to 50% and 3 hour bundle from 39% to 100%.

Sepsis Bundle
1. Lactic acid
2. Blood cultures x2
3. 30cc/kg bolus of fluids
4. Administration of broad-spectrum antibiotics

Measure:

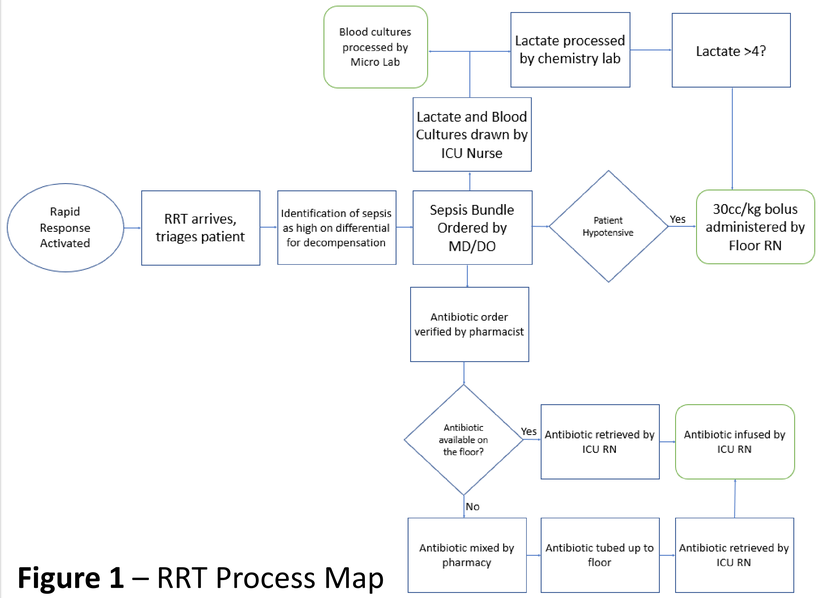


Figure 1 – RRT Process Map

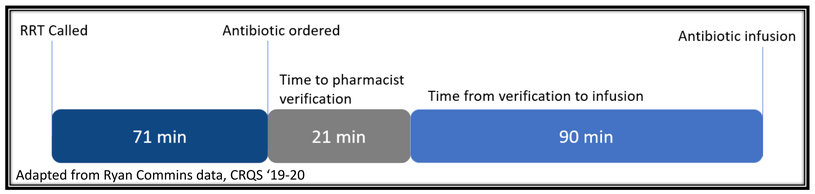


Figure 2 - Study of 17 RRTs from 7/2019-3/2020

Root Causes (5 Why's):

1. Time to Antibiotic infusion
2. Time to Antibiotic Order Placement

Analyze:

Interventions:

1. 8/2020 – Confirm antibiotics are supplied to PYXIS
2. 1/2021 – Resident education initiative

Metrics:

Process Measures: time to completion of the sepsis bundle (time to each component), # of RRTs

Outcome Measures: In-Hospital mortality, In-Hospital mortality secondary to sepsis

Balancing Measures: broad spectrum antibiotics de-escalated at 48 hours, cultures with antibiotic-resistance at 6 months, c. difficile positive at 6 months

Improve:

Table 1 – Results

Total number of RRTs from 7/1/2020 – 5/1/2020	146
Total number 2/2 sepsis	25
Percent 2/2 sepsis	17.1%
Antibiotics ordered	25 (100%)
Antibiotics infused within 1 hour of order	2 (8%)
Antibiotics infused within 3 hours of order	17 (68%)
Average Time to Antibiotic Infused from Order	2.48 hours
Fluids ordered	17 (68%)
Lactate ordered	24 (96%)
Blood cultures ordered	23 (92%)
Average Time to Bundle Completion	3.78 hours
Mortality during hospitalization	10 (40%)
Mortality during hospitalization 2/2 sepsis	4 (16%)
Broad spectrum antibiotics de-escalated at 48 hours	8 (32%)
Presence of antibiotic resistant infections at 6 months*	3 / 11
Presence of C.diff infection at 6 months*	1/ 11

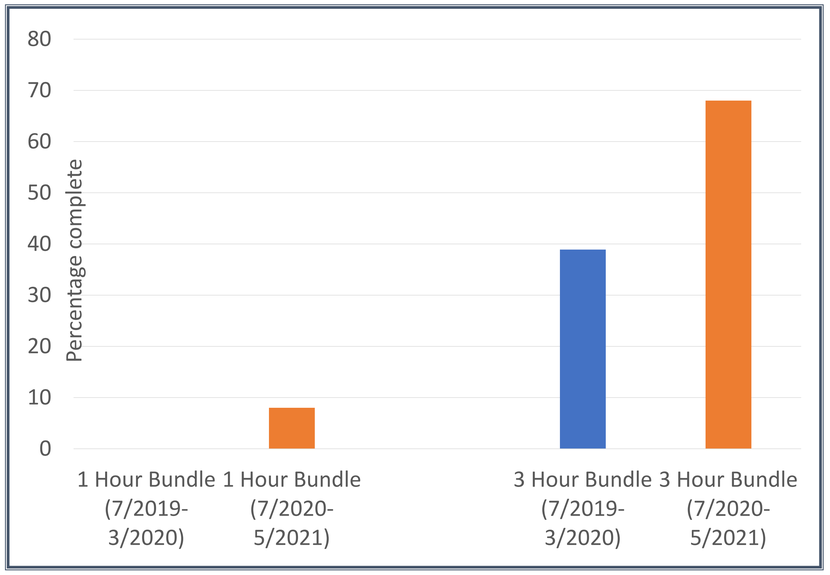


Figure 3 – Percent Meeting 1 & 3 Hour Targets

Improve Continued:

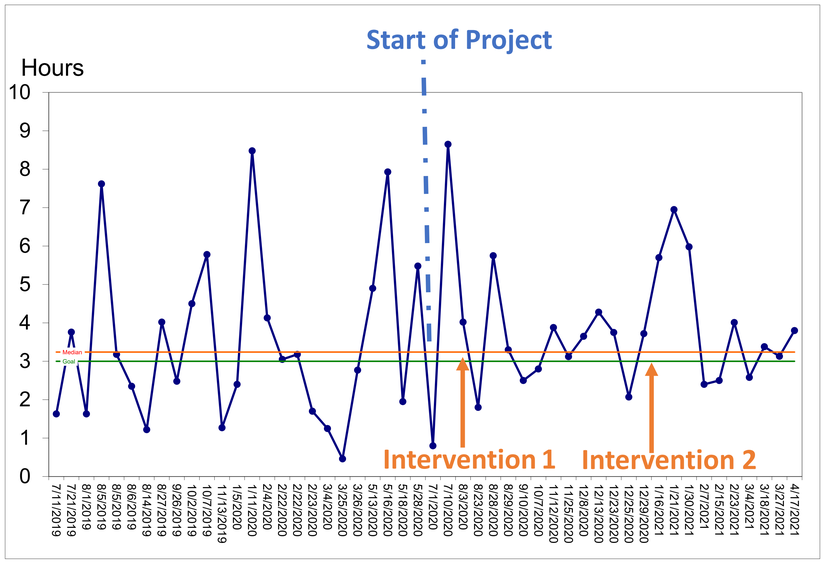


Figure 4 – Overall Time for Sepsis Bundle

MICU Subgroup Analysis

Table 2 – MICU Transfers (7/1/2020-5/1/2021)

All RRT Reasons	41% (58/144)
RRT Secondary to Sepsis	64% (16/25)

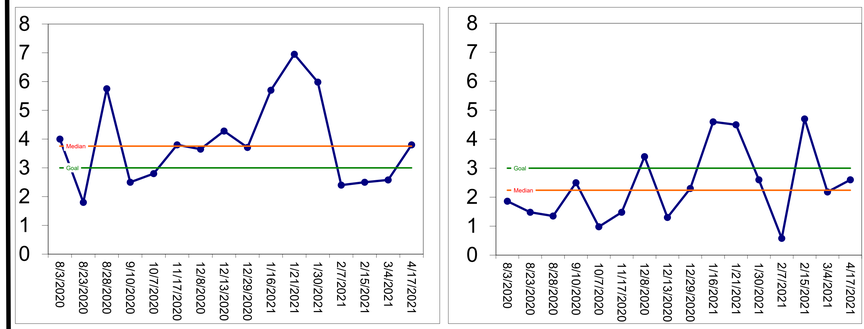


Figure 5 and 6 – Time to Antibiotics from RRT with MICU Transfer, Time to Antibiotics from Order with MICU Transfer

Next Steps & Lessons Learned

Next steps:
1. Focus on MICU transfers (recreating Process Map)

Lessons Learned:
- Educational initiatives result in frequent drift in practice.
- Continuous adaptation is required in dealing with an evolving system, particularly when so many stakeholders are involved.

District of Columbia Hospital Association

1152 15th Street, NW | Suite 900 | Washington, DC 20005 | (202) 682-1581 | dcha.org

DCHA is the unifying voice for hospitals and health systems in the District of Columbia and works to advance health policy to strengthen the District's world-class health care system to ensure that it is equitable and accessible to all.