GME QUALITY IMPROVEMENT AND PATIENT SAFETY NEWSLETTER

MESSAGE FROM THE GME ASSOCIATE DEANS FOR QI & PS

Dear MSHS Residents, Fellows and Faculty,

As 2022 comes to a close, we would like to wish everyone safe and happy holidays. Thank you for all of your efforts in making the Mount Sinai Health System one of high quality and safety.

To begin our last issue of 2022, we included an infographic on the six focus areas of the ACGME's Clinical Learning Environment Review (CLER) and how these are exemplified during our care of patients. Please review these important focus areas as they have an important impact on the quality of care we deliver.

Also in this issue, we are pleased to feature an interesting piece of technology that is currently being piloted in two Mount Sinai Hospital Operating rooms: the Surgical Safety Technologies Inc. OR Black Box®. Celia Divino, MD (The Edelman Professor of Surgery; Chief, MSH Division of General Surgery; Program Director, MSH General Surgery Training Program) describes the OR Black Box® as the future of operating room safety and provided some fascinating insight into how this technology works to improve surgical quality and safety.

Many of you are aware of the weekly Patient Safety Wednesday presentations which provide valuable information on the latest in quality and safety initiatives. In this issue and courtesy of the MSHS Broadcast, we included a recap of two presentations: new infection control measures for C. auris and an updated protocol for IV to PO switch therapy.

In our previous issue, we introduced a new regular section, *Positive Patient Experiences,* where we share patient comments highlighting the incredible care they receive from our trainees. Please see what they are saying!

Lastly, we share the latest in QI/PS literature, courtesy of the Agency for Healthcare Research and Quality, as well as MSHS SafetyNet reporting data for the last 12 months. Thank you again for all of your hard work in promoting a culture of safety, and have a safe and happy new year!

Brijen Shah, MD
GME Associate Dean for QI and PS

Daniel Steinberg, MD
GME Associate Dean for QI and PS

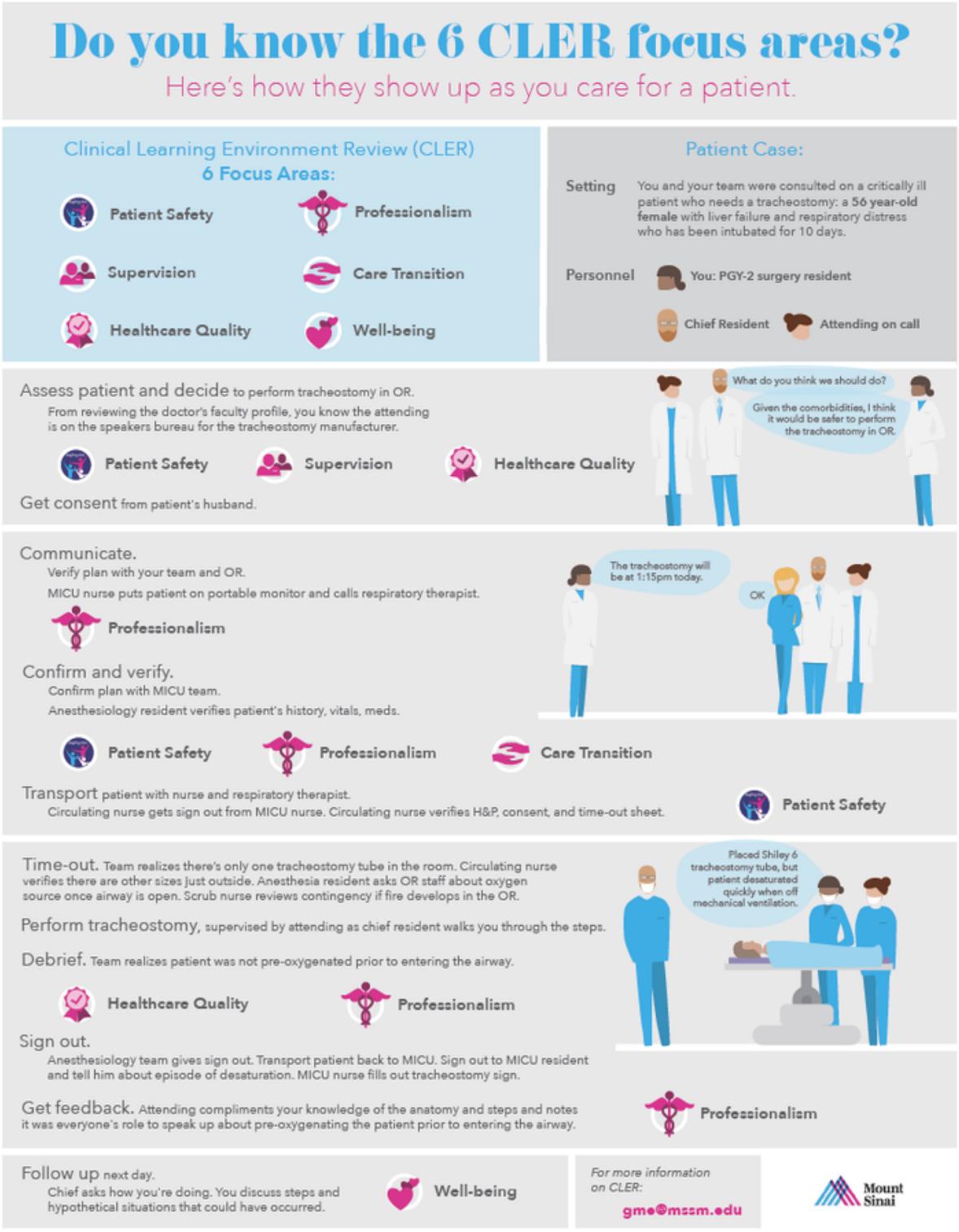
CONTENTS

The Clinical Learning Environment Review Program

Courtesy of the Accreditation Council for Graduate Medical Education

The Accreditation Council for Graduate Medical Education (ACGME) implemented the Clinical Learning Environment Review program (CLER) as a response to a rapidly growing and evolving health care environment. This program is designed to provide ACGME-accredited institutions with feedback that focuses on six areas of the health care environment: **patient safety; health care quality; teaming; supervision; well-being; professionalism**. The overarching goal of this program is to improve the learning environments for residents and fellows as they learn to provide safe and high quality care. Sponsoring Institutions must undergo a CLER site visit roughly every two years.

Here is an infographic detailing how the six focus areas of the CLER program are exemplified in patient care:



The Future of Operating Room Safety: The OR Black Box

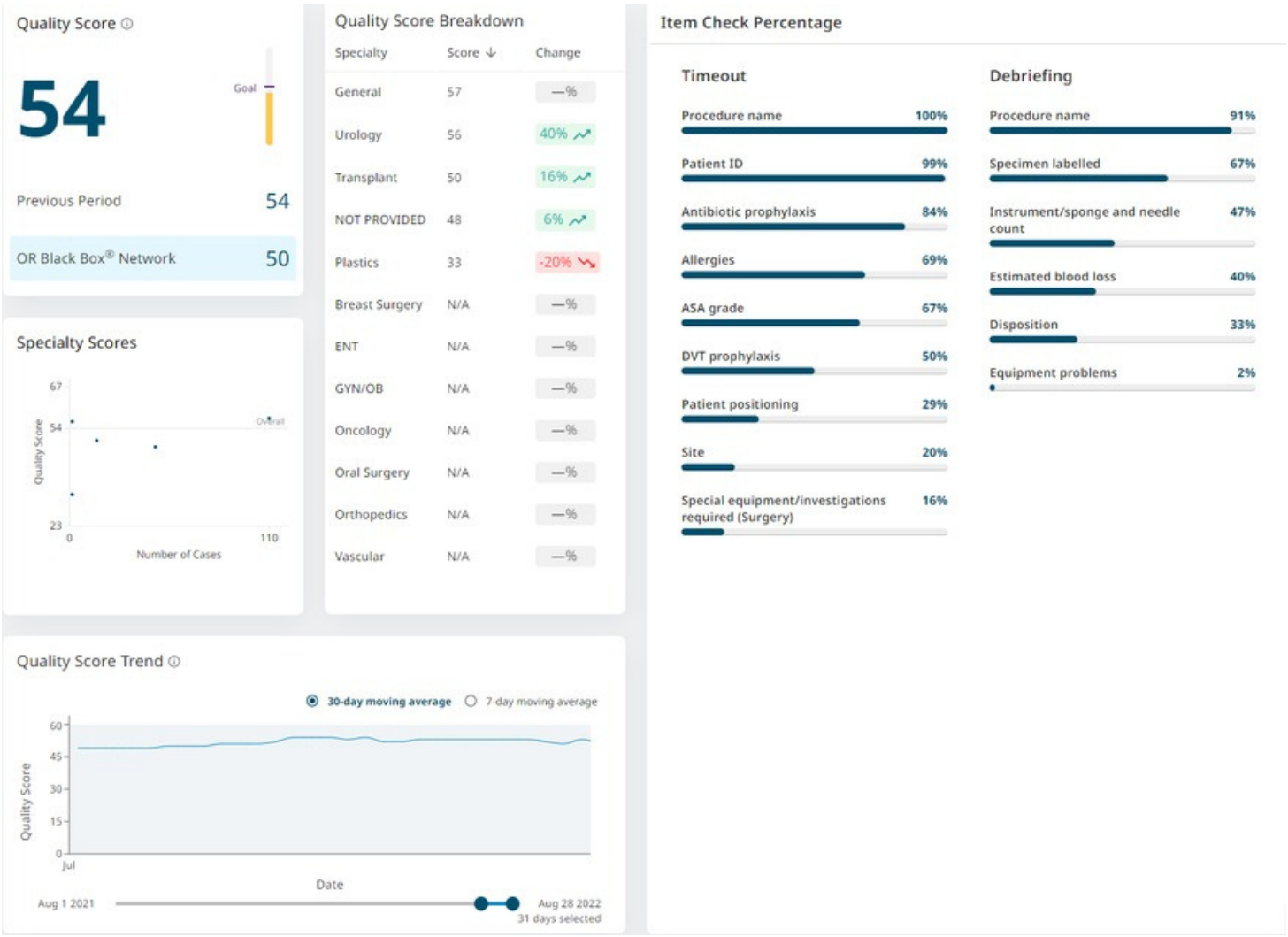
Celia Divino, MD, Chief, MSH Division of General Surgery Adam Souza, Administrative Assistant to Dr. Divino

Screen shot of the OR Black Box Live Video Feed

The OR Black Box® is a network-based quality improvement platform. Similar to the Black Box of an airplane, the repository allows clinicians to live-capture various audio/video and surgical equipment data in the Operating Room (OR). A form of Artificial Intelligence analyzes the information fed into this system, and the data set as a whole is then used to track certain performance metrics in the Operating Room to advance quality initiatives in the Hospital, and to improve surgical safety and patient outcomes. The solution is comprised of Operating Room Sensors and the OR Black Box Integration Engine (software), both of which are supplied by Surgical Safety Technologies Inc.

The OR Black Box is currently being piloted in two operating rooms at MSH. Below you will find data on the black box's "Quality Score" for those surgical specialties that have operated in these rooms during the period of August 1, 2022 - August 28, 2022. This Quality Score is calculated by way of the audio feed. The black box's microphone is able to calculate the percentage of checklist items that are reviewed during Timeout and Debriefing. The score can be compared to the rest of the OR Black Box's network. For this period, MSH scored a 54 compared to the Black Box's network score of 50.

Quality - August 1, 2022 - August 28, 2022



Patient Safety Wednesday Presentations

Courtesy of the MSHS Broadcast Communications

Candida auris: Information for Healthcare Professionals

Sheron Wilson, MPH, RN, CIC, FAPIC, Director, Infection Prevention at The Mount Sinai Hospital presented, "Candida auris: Information for Healthcare Professionals." Candida auris (C. auris) is an emerging multidrug-resistant yeast that persists in the environment and on shared patient equipment. The identification of C. auris requires immediate implementation of recommended infection control measures, which include:

- Strict adherence to hand hygiene: Wash hands with soap and water after caring for patient or contact with patient environment.
- Appropriate use of personal protective equipment (PPE): Place patient on special contact precautions for duration of admission and subsequent admissions.
- Assigning patients to private rooms or cohorting with another C. auris patient: Cohort nursing staff caring for C. auris patient when feasible.
- Using dedicated equipment: Disposable blood pressure cuffs, stethoscopes, pulse oximeters, as well as dedicated glucometers, hemodialysis machines, thermometers, mobile computers, etc.
- Minimizing patient movement: Coordinate all patient transport with Infection Prevention and unit leadership. Bedside procedures are preferred.
- Thorough terminal cleaning and disinfection: Use hospital-approved bleach wipes to clean and disinfect the environment and shared equipment.

For further questions, please refer to policy IP – Section E-5.38 Candida auris in PolicyTech.

IV and Central Line Best Practices: IV to PO Switch

Gopi Patel, MD, MS, Hospital Epidemiologist at The Mount Sinai Hospital and Polina Lerner, PharmD, Clinical Infectious Diseases Pharmacist at The Mount Sinai Hospital and Mount Sinai Queens presented, "IV and Central Line Best Practices: IV to PO Switch." Intravenous (IV) to oral (PO) switch therapy is the practice of converting patients from IV medications to PO medications when appropriate oral equivalents are available. Highlights from the presentation included:

- Benefits of IV to PO switch: Switching patients to oral medications can decrease length of stay, IV-related morbidity, central-line associated bloodstream infections, and health care costs.
- Updated policy and protocol: Mount Sinai Health System has updated the IV to PO interchange policy to include guidance regarding when to switch IV medications to oral equivalents in adult patients.
- Pharmacy-driven initiative: Our Pharmacy team will execute the updated policy and note in the chart when a medication has been changed to PO from IV.
- Who can escalate: Anyone on the care team can escalate to the provider to consider PO medications when patients have the ability to eat or take other oral medications.
- Daily assessment: Medications should be assessed daily for ongoing necessity and for potential switch to PO.
- Removal of IVs: Providers should assess and remove idle, nonfunctioning, expired, or compromised IVs.
- PO antibiotics: Some of the most common medications that can be switched to PO are antibiotics.
- Call your local pharmacy satellite if you have any questions.

For further guidance, please refer to policy PH-S 105 – MSHS IV (Intravenous) to PO (Oral) Interchange Protocol in PolicyTech.

We encourage you to attend an upcoming Patient Safety Wednesday, held every Wednesday at noon via Zoom - click here
Passcode: 065487

Positive Patient Experiences

What Patients are saying about MSHS Trainees

Isadora Braune, Patient Experience, Data Strategy & Operations Manager
The Joseph F. Cullman, Jr Institute for Patient Experience

Positive Patient Experiences is a standing section of our newsletter dedicated to celebrating the amazing care MSHS trainees deliver. Here, we will list patient comments (verbatim) which were gathered via paper and electronic surveys. These surveys are distributed to patients who visit the many ambulatory practices across the health system. Click here if you would like to see an example of the survey.

Take a moment to join us in celebrating the latest patient comments about MSHS trainees!

"My experience with this provider was above & beyond my expectations. He is brilliant."
-Comment left for Brandon Needelman, MD, PGY-3, MSH Internal Medicine

"Showed great concern for my condition and what better solutions would work for me."
-Comment left for Adiac Espinosa Hernandez, MD, PGY-6, MSH Pulmonary & Critical Care Medicine

"Dr. K. Davis was friendly and professional. My visit with her was a good experience."
-Comment left for Keithara Davis, MD, PGY-3, MSH Internal Medicine

"Dr. Kononenko was very thorough with examination, patient, did listen and explain everything in detail."
-Comment left for Mariya Kononenko, MD, PGY-3, MSH Internal Medicine

"Dr. Rudshteyn was very professional and thorough. Her calm and gentle manner and her patient explanations Immediately gained my confidence."
-Comment left for Michelle Rudshteyn, MD, PGY-3, MSH Internal Medicine

In the Literature

Courtesy of the Agency for Healthcare Research and Quality Patient Safety Network

Associations of physician burnout with career engagement and quality of patient care: systematic review and meta-analysis.

Hodkinson A, Zhou, A, Johnson J, et al. BMJ. Epub 2022.

Clinician burnout is a significant issue that can impact patient safety. This systematic review and meta-analysis showed physicians with burnout were significantly more dissatisfied with their jobs, were more regretful of their chosen career path, and had higher intention to leave their jobs. The association between burnout and patient satisfaction, patient safety, and professionalism is also discussed.

Challenges and strategies for patient safety in primary care: a qualitative study.

Yuan CT, Dy SM, Yuanhong Lai A, et al. Am J Med Qual. Epub 2022.

Patient safety in ambulatory care settings is receiving increased attention. Based on interviews and focus groups with patients, providers, and staff at ten patient-centered medical homes, this qualitative study explored perceived facilitators and barriers to improving safety in ambulatory care. Participants identified several safety issues, including communication failures and challenges with medication reconciliation, and noted the importance of health information systems and dedicated resources to advance patient safety. Patients also emphasized the importance of engagement in developing safety solutions. A recent PSNet perspective discusses patient safety challenges in ambulatory care, particularly during the COVID-19 pandemic.

The effect of a system-level tiered huddle system on reporting patient safety events: an interrupted time series analysis.

Adapa K, Ivester T, Shea CM, et al. Jt Comm J Qual Patient Saf. Epub 2022.

Tiered huddle systems (THS) include staff at all levels of the organization- frontline healthcare workers, managers, directors, and executives- and have been shown to increase adverse event reporting and improve safety culture. This US health system implemented a three-level THS in hospital and ambulatory settings to increase event reporting. Based on an interrupted time series analysis, reporting increased for total safety events, including near misses.

Developing the Safer Dx Checklist of Ten Safety Recommendations for Health Care Organizations to address diagnostic errors.

Singh H, Mushtaq U, Marinez A, et al. Jt Comm J Qual Patient Saf. Epub 2022.

Diagnostic error continues to be a significant safety problem. Using a multimethod approach, this study developed a checklist of ten high-priority practices for diagnostic excellence which healthcare organizations can implement to address diagnostic errors. Priority practices include promoting speaking up behaviors through a just culture and psychologically safe environment; patient and family engagement in identifying, understanding, and addressing diagnostic safety concerns; and using multidisciplinary perspectives (including human factors and informatics) to understand factors contributing to diagnostic safety events.

Improving communication and response to clinical deterioration to increase patient safety in the intensive care unit.

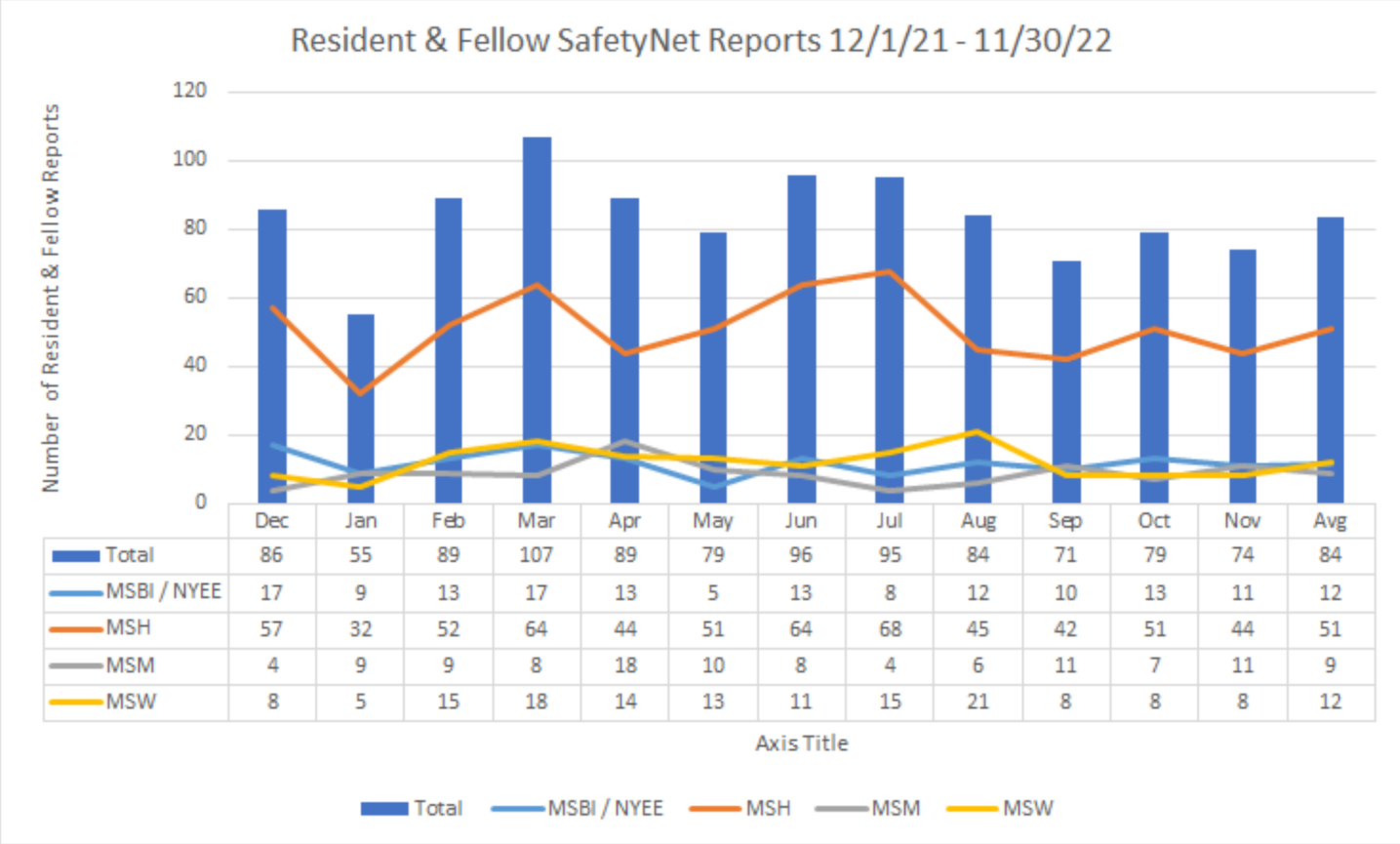
Liu SI, Shikar M, Gante E, et al. Crit Care Nurse. 2022

Lack of communication between providers can contribute to failure to rescue. Following a series of deaths due in part to not identifying clinical deterioration in a timely manner and/or not escalating care, this surgical intensive care unit (SICU) implemented an interdisciplinary quality improvement intervention. The intervention consisted of educating nurses on conditions necessitating escalation, multidisciplinary rounds with night staff, and an escalation document in the electronic health record (EHR).

SafetyNet

Below you will find SafetyNet resident and fellow reporting statistics for the 12-month period December 1, 2021 - November 30, 2022. The average number of total reports of all sites was 84, a slight dip since we last reported for our September/October issue. The total reports of all sites during the months of September, October and November 2022 were below the total average for the 12-month period. March continues to be the month with the most reports likely due to the yearly reporting challenge.

For those residents and fellows who recently joined us, you should have been oriented to **SafetyNet** as part of your onboarding. We hope that you will engage with the system and help us in our efforts to continue to develop a culture of patient safety reporting.



	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Avg
Total	86	55	89	107	89	79	96	95	84	71	79	74	84
MSBI / NYEE	17	9	13	17	13	5	13	8	12	10	13	11	12
MSH	57	32	52	64	44	51	64	68	45	42	51	44	51
MSM	4	9	9	8	18	10	8	4	6	11	7	11	9
MSW	8	5	15	18	14	13	11	15	21	8	8	8	12

I entered a report and want to know what happened

A spreadsheet of all residents and fellow entered reports has been posted on New Innovations. You can find your report and the name of the contact(s) for who is handling the case. If the case went to a root cause analysis, the results of the root cause analysis can be found in the spreadsheet as well.

Residents, fellows and faculty are always encouraged to reach out to Daniel Steinberg (MSBI/NYEEI/MSMW) or Brijen Shah (MSH) with any questions.