



GME QUALITY IMPROVEMENT AND PATIENT SAFETY NEWSLETTER



MESSAGE FROM THE GME ASSOCIATE DEANS FOR QI & PS



Dear MSHS Residents, Fellows and Faculty,

As the fall season is underway, we hope that everyone has comfortably settled into the academic year. This issue of our newsletter highlights many exciting developments in the realm of Quality Improvement and Patient Safety including new initiatives to improve medication safety and developments to the Mount Sinai Health System Road Map for Action.

To better understand opportunities for improvement in medication safety, a High Risk Medication Administration Survey was recently distributed amongst nurses across The Mount Sinai Health System. The results provided valuable insight which spurred several QI initiatives, two of which are highlighted in this issue including the improvement of barcode scanning functionality and a pilot program to reduce distractions during medication administration and preparation.

The ultimate goal of Mount Sinai Health System's *Road Map for Action* is to ensure a fairer, just, anti-racist, and equitable community for staff, patients, and students. The first strategy in this initiative entails the development of equity dashboards to identify where efforts are needed to achieve this goal. In this issue, Doran Ricks, RN, MSN, MBA (MSHS VP, Data Quality and Stewardship) and Lyndia Hayden, MS, PMP (Office of Diversity and Inclusion) provide details on two equity dashboards that are now available via Tableau.

As always, we try to include inspirational material, especially for residents and fellows. For this issue, Paul Yu (GME Administrator, QI/PS & Well-being) spoke with Derek Mazique, MD, Deputy Chief Medical Officer of Mount Sinai Beth Israel. Dr. Mazique comes to MSBI with many years of QI/PS experience and provided some great insight about his path into hospital administration.

Please make sure to read our new, regular section, *Positive Patient Experiences*, where we share patient comments highlighting the incredible care they receive from our trainees.

Lastly, we share the latest in important QI/PS literature, courtesy of the Agency for Healthcare Research and Quality, as well as MSHS SafetyNet reporting data for the last 12 months. We appreciate everyone's efforts in promoting a culture of safety reporting!

Brijen Shah, MD

GME Associate Dean for QI and PS

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QI Spotlight

Improving Medication Safety in the Mount Sinai Health System

Isabella Royes, Director, Cardiac Services & System Nursing Operations, MSHS
Susan Mashni, PharmD, BCPS, Senior VP, Chief Pharmacy Officer, MSHS

Context

Earlier this year, a nurse in Tennessee was criminally charged with reckless homicide in the death of a patient after making a medication error. While the safety of our patients and staff has always been our top priority at Mount Sinai Health System, the tragic RaDonda Vaught case led us to reinvigorate our medication safety efforts by reviewing our current medication administration processes and investigating opportunities to make our practices even safer.

We knew that we needed to hear from our frontline staff to truly understand where these opportunities for improvement exist. In response, the MSHS System Nursing team developed High Risk Medication Administration Survey, which was completed by nearly 400 nurses across the system and provided their valuable insight about medication safety at Mount Sinai. Below are two of the many initiatives that the MSHS Pharmacy and Nursing Steering Committee implemented in response to our nurses' feedback.

Barcode Scanning Initiatives

To address the main themes that surfaced in the Nursing High Risk Medication Administration Survey, DTP (Digital and Technology Partners Department) has completed targeted sweeps to test, service, and replace broken barcode scanners and batteries as needed. Additional rounding is being scheduled going forward as well as improving processes around purchasing of new devices. The Pharmacy department has a process in place where barcodes are validated as readable and in the library before the medication is released to the units, and this is audited randomly for accuracy. To enhance this process, they have requested additional reports to provide data related to medications that do not scan on a regular basis so they can address the issue in a timely manner. The nursing department wants to ensure staff have the tools they need to safely and efficiently complete their workflows. One of these goals is to ensure each nurse receives a calibrated scanner.

Efforts to Reduce Distractions During Medication Administration and Preparation

Two or more units at every hospital are currently piloting various initiatives that utilize visual management tools to reduce distractions for clinical nurses while they prepare and administer medications. We want to share with you these visual cues which indicate that a nurse is performing a patient safety sensitive task such as medication administration (see red tape in Figure 1). If you see a nurse within these floor markings, please avoid interruptions or distractions. We would also like everyone to be aware of signage which indicate "quiet" zones (see Figure 2) around medication dispensing systems, as well red flags on medication carts to indicate that the nurse should not be disturbed (see Figure 3). To further aid in this initiative, nurses will be wearing visual cues such as the red coats seen in Figure 4.

Fig.1



Fig.2



Fig.3



Fig.4



MSHS Road Map for Action Strategy 1: Equity Dashboards

Doran Ricks, RN, MSN, MBA (MSHS VP, Data Quality and Stewardship)
Lyndia Hayden, MS, PMP (Office of Diversity and Inclusion)

The Mount Sinai Health System's *Road Map for Action* is a multi strategic initiative with a mission to "evaluate, investigate, and engage in meaningful and sustained action and dialogue; and report back to leadership with specific recommendations that move the system forward to ensure a more fair, just, anti-racist, and equitable community for its staff, patients, and students." Strategy 1 is to create an equity scorecard in order to identify where the MSHS is having success and where more or different efforts are needed. Here, you can read about two equity dashboards which capture Race/Ethnicity & Language data as well as identify potential disparities.

Race, Ethnicity & Preferred Spoken Language data capture

Understanding our patient population is fundamental for efforts to improve equity and to identify potential disparities. As a result, MSHS established the goal of reaching a 90% data capture rate for patients' race, ethnicity and preferred spoken language. In order to facilitate the reduction of the number of patients where their self-identified race, ethnicity and language are "unknown", this dashboard helps users identify those patient care areas where data capture is below the MSHS target of 90%. Below you can see how each hospital site is doing in achieving this target (as of September 28, 2022)

To access this dashboard click [here](#) (the user guide is the last tab at the top - you can request patient data reports here as well).



Race/Ethnicity Data Capture by Facility Percent of Encounters where Race/Ethnicity is IDENTIFIED

Facility	2021				2022		
	Q1	Q2	Q3	Q4	Q1	Q2	Q3
MSB	94.2%	95.5%	96.4%	95.7%	95.6%	96.0%	95.8%
MSBI	89.0%	90.3%	90.6%	90.4%	90.8%	90.9%	90.9%
MSH	97.8%	97.9%	98.0%	97.5%	97.7%	97.7%	97.4%
MSM	93.8%	94.0%	94.5%	94.1%	93.7%	93.9%	94.1%
MSQ	97.9%	96.1%	96.9%	97.1%	96.2%	96.9%	94.6%
MSW	97.8%	97.7%	97.4%	97.0%	97.1%	97.1%	96.6%
FPA/ MS Doctors	85.0%	84.8%	84.4%	84.0%	84.8%	84.5%	84.2%
Network Practices	85.4%	80.5%	76.6%	76.8%	76.9%	77.0%	76.7%

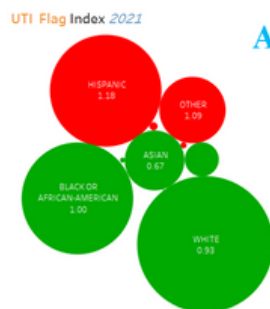
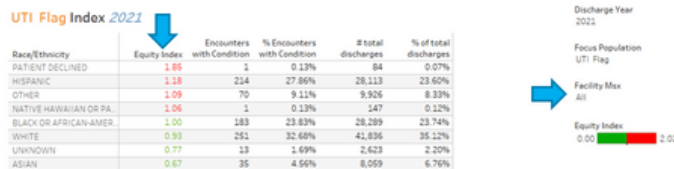
Equity Hypothesis Generator Tool

The Equity Hypothesis Generator Tool uses historical inpatient encounter data to understand potential disparities in inpatient utilization for a number of clinical conditions including: Heart Failure, AMI, Pneumonia, and End Stage Renal Disease. For a given clinical condition, the tool will help users understand if there are disparities in utilization by race/ethnicity, payor, age range, service line or ZIP code. The findings can then be used to further refine hypotheses for further study.

To access this dashboard click [here](#).

For more information, or for any access issues with Tableau, please contact Doran Ricks, RN, MSN, MBA at doran.ricks@mountsinai.org.

MSHS Tool for Generating Disparities Hypotheses



A True 'Step One' for Identifying POTENTIAL Disparities

Visualizations to Put the Data in Better Context
Bubble Size – Represents the relative proportion of IP discharges with UTI DRG for each Race/Ethnicity
Bubble Color – Indicator of whether the prevalence of the condition within a certain race/ethnicity is over- or under-represented

**Get to Know the Mount Sinai Beth Israel
Deputy Chief Medical Officer**

A conversation with Derek Mazique, MD
-Paul Yu, GME Administrator, Well-being & QI/PS



Hi Derek, thanks for taking the time to speak with me. Tell us about your professional background.

Thanks for having me! I'm an Internal Medicine doctor by training, and I still take care of hospitalized patients. In this role here at Mount Sinai Beth Israel, I'm half clinical (hospitalist) and half deputy CMO working with Dr. Barbara Barnett. With my doctor-hat on, and as recently as last week, I was taking care of our Beth Israel patients with a variety of conditions such as diabetes and pneumonia. Prior to coming to Mount Sinai, I was the Associate Chief Quality Officer at New York Presbyterian-Allen Hospital, which is the community affiliate of Columbia. It's located in the Inwood community of northern Manhattan, and has about 200 beds with specialties such as Medicine, ED, Labor & Delivery, and Spine Surgery. Part of my role involved coordinating the quality and patient safety activities at the Allen Hospital, including chairing the root cause analyses for that campus. I was also the physician-liaison for the Joint Commission when they (or other regulatory organizations) would survey the hospital. Lastly, I was also heavily involved with infection prevention and control. When COVID hit I was very much involved in the response, as were so many of us. That job also gave me the opportunity to do "quality-adjacent" things such as "value and health care utilization" as well as some work with insurance companies in developing programs to reduce adverse events in high risk/high claim areas.

That was my first professional Quality job. Prior to that I completed my residency in Internal Medicine at Weill-Cornell. Cornell is unique in that they have a Chief Residency position in QI. I actually got a relatively early exposure to the world of QI - it was this opportunity that really got me thinking that I could incorporate Quality Improvement into my career.

I was actually going to ask what sparked your interest in QI, but it sounds like it landed on you early in your career.

Absolutely, and also when I was medical student I had an opportunity to intern with the ECRI Institute, which is a patient safety think tank based outside of Philadelphia.

It was a really great exposure to patient safety principles and that got me interested systems-level thinking. That interest led me to the Chief Resident in Quality position, which ultimately led me to being recruited by NYP Allen where I became the Chief Quality Officer.

That's interesting! A lot of the other CMO's and other hospital leaders I spoke with for this newsletter have mentioned that they found their role in the QI/PS realm through years of networking and taking on many opportunities presented to them. I see a similarity in your answer as well, although it seems you got your exposure in your training years.

Yes, and I think some of that might have to do with the fact that I was in training when the Affordable Care Act was underway, and so there was a lot of conversation at that time of how physicians can be leaders in QI; how doctors, nurses, and other clinical people can be experts in health care delivery and provide quality care. And so that's really what sparked my interest. By the time I was in medical school and residency, there were already leaders in this area, and there was already an established curriculum. This allowed me to start in this career path a bit on the earlier side.

I know you're relatively new to the position, but I want to ask what you enjoy most about being a Deputy CMO?

You know in some ways MSBI is similar to my last hospital in that they have roughly the same bed capacity and they're both smaller hospitals affiliated with a larger system. I think there's a "family feel" with this hospital. Virtually everybody knows each other. You can troubleshoot problems easily because you have relationships with so much of the team and all of the staff is really engaged and motivated to do well. I have really enjoyed learning from everyone.

Last year I spoke with Dr. Barbara Barnett (CMO of MSBI for readers unaware) and she said the same exact thing about BI having a family feel. That's great to hear you echo that sentiment. So, as someone who has a lot of experience in patient safety and quality going back to your Chief Resident days, how do you think residents and fellows can help with the quality and safety mission of the hospital?

(continued page 6)

The first thing I would suggest is to take advantage of opportunities, even outside of the Sinai system, for example conferences such as the Institute for Healthcare Improvement (IHI). They have a great open school, which I believe is free to register.

Yes, GME pays for an IHI open school subscription so it is free for all residents and fellows!

And there are many other opportunities if your training program allows. For example the ECRI institute was something I was able to do as an elective during my residency. Similarly, I had the opportunity to go to D.C to work with Health and Human Services for a couple of weeks. I think with some digging, you can find interesting opportunities to build your QI/PS skillset.

In terms of getting involved in QI/PS within the Mt. Sinai health system, to start, I would suggest attending RCA's and connecting with your departmental quality and patient safety officer.

Great, and this is advice that is commonly echoed by other hospital leaders I have interviewed, especially getting involved in RCA's. I know the Mt. Sinai Health System is promoting a "just culture" and so having the input of trainees and other staff who are on the frontlines is very important.

Absolutely, and I would say participating in the RCA is great because it allows you to build a "deep dive" mindset when solving a problem. But I also suggest that trainees latch onto Safety Solutions meetings. These meetings are basically asking, "How do we intervene?" after a root cause is identified. That is something I wish I had more training and experience with early in my career. I had a lot of experience with RCA's, but less so with designing an intervention.

And another thing too: going back to how trainees can contribute to the quality and safety mission of the hospital, I recommend getting Lean Six Sigma training.

The Continuous Improvement Academy within Mt. Sinai offers a basic continuous improvement course that actually covers this exact topic.

That's great! I would have loved taking a course like that during my training years.

What advice would you have for someone who is thinking about a career in healthcare administration?

I think a good place to get started is to identify a problem or process that could be improved. Often times, the most innovative solutions come from frontline staff who have identified a problem and can articulate why that is. The next step would be to connect with a senior leader such as a patient safety officer or chief medical officer to brainstorm how to fix it. This is actually very effective in making change. As an example, one of my colleagues noticed a lot of patients were being readmitted because they were reporting not being able to obtain the medications that they were prescribed upon discharge. And because we care about readmissions, we studied this, and it turns out patients were being discharged on medication that either the insurance would not cover (but rather covered some other formulation we weren't aware of) or the pharmacy simply didn't carry it (usually a family-run pharmacy). So from one resident raising this issue, we were able to identify the three most problematic drug classes, which were blood thinners, antibiotics and acid-blocking medication. We then created an intervention where one of our non-clinical colleagues would follow-up with the patient after discharge. Long story short, this is a result of one person raising their hand and saying "this is an issue and we should figure it out." I think this is an easy way for a trainee or even faculty member to get involved in QI administration.

Wow, that's a great example! So I just have one last question. I know that many times work can consume us, especially when holding a leadership position. How do you balance your work and personal life?

That's a great question, and I think there is a lot more conversation now about work-life balance which I think is great. But I have to tell you, I'm terrible at it! I am getting better especially now that I have a five month old daughter, and so the balance is much better since I have a small human to attend to! But all jokes aside, burnout is real and I think the most important thing to know is that everyone has a different threshold with regards to what they can handle. I think it's really important for any person, regardless of their role, to know and recognize the signs of professional burnout and do whatever they can to mitigate it. For me, I really love trying new restaurants and so whenever I recognize that I'm getting burned out, I make sure to carve time for that.

That's great advice and I'm sure most would agree! Thank you so much for taking the time out of your busy schedule to speak with me!

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 new, regular section of our newsletter dedicated to celebrating the amazing care MSHS trainees deliver. In this section, we will list patient comments, verbatim, that they left for their providers 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, highlighted below!

"Dr. E. D. Gutowski was AWESOME, my concerns became hers. Very on point."

-Comment left for Dr. Emily Gutowski, PGY-3, MSH Internal Medicine

"I felt the medical provider seemed genuine and very sympathetic."

-Comment left for Dr. Hanna Goulart, PGY-3, MSH Internal Medicine

"Excellent human being is concerned about my pain & all I communicated to her."

-Comment left for Dr. Sarah Nussbaum, PGY-3, MSH Internal Medicine

"She is very intelligent and great listener."

-Comment left for Dr. Atoosa Ghofranian, PGY-4, MSH Obstetrics & Gynecology

"I was very satisfied with this visit. Dr. Anker is a very good doctor."

-Comment left for Dr. Jonathan Anker, PGY-3, MSH Hematology & Medical Oncology

In the Literature

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

Implementing root cause analysis and action: integrating human factors to create strong interventions and reduce risk of patient harm

Wolf L, Gorman K, Clark J, et al. J Patient Saf. Epub 2022

Human factors play an important role in contributing to and preventing adverse events. This study found that integrating human factors into a new root cause analysis process led to an increase in the number of strong interventions implemented after adverse events.

Trends in adverse event rates in hospitalized patients, 2010-2019

Eldridge N, Wang Y, Metersky M, et al. JAMA. 2022

Improving patient safety in hospitals is a longstanding national priority. Using longitudinal Medicare data from 2010 to 2019, this study identified a significant decrease in the rates of adverse events (e.g., adverse drug events, hospital-acquired infections, postoperative adverse events, hospital-acquired pressure ulcers, falls) over time among patients hospitalized for four common conditions - acute myocardial infarction, heart failure, pneumonia, and surgical procedures.

Employee silence in health care: Charting new avenues for leadership and management

Montgomery A, Lainidi O, Johnson J, et al. Health Care Manage Rev. Epub 2022

When faced with a patient safety concern, staff need to decide whether to speak up or remain silent. Leaders play a crucial role in addressing contextual factors behind employees' decisions to remain silent. This article offers support for leaders to create a culture of psychological safety and encourage speaking up behaviors.

Criminal liability for nursing and medical harm

Maher V, Cwiek M. Hosp Top. Epub 2022

Fear of criminal liability may inhibit clinicians from reporting medical errors, thereby reducing opportunities for learning. This commentary discusses recent legal actions brought against clinicians, including Tennessee nurse RaDonda Vaught, and the negative impact such actions may have on the longstanding disclosure movement.

Quality measures for patients at risk of adverse outcomes in the Veterans Health Administration: expert panel recommendations

Chang ET, Newberry S, Rubenstein LV, et al. JAMA Netw Open. Epub 2022

Patients with chronic or complex healthcare needs are at increased risk of adverse events such as rehospitalization. This paper describes the development of quality measures to assess the safety and quality of primary care for patients with complex care needs at high risk of hospitalization or death. The expert panel proposed three categories (assessment, management, features of healthcare), 15 domains, and 49 concepts.

Positive approaches to safety: learning from what we do well

Plunkett A, Plunkett E. Paediatr Anaesth. Epub 2022

Safety-I focuses on identifying factors that contribute to incidents or errors. Safety-II seeks to understand and learn from the many cases where things go right, including ordinary events, and emphasizes adjustments and adaptations to achieve safe outcomes. This commentary describes Safety-II and complementary positive strategies of patient safety, such as exnovation, appreciative inquiry, learning from excellence, and positive deviance.

Frontiers in measuring structural racism and its health effects

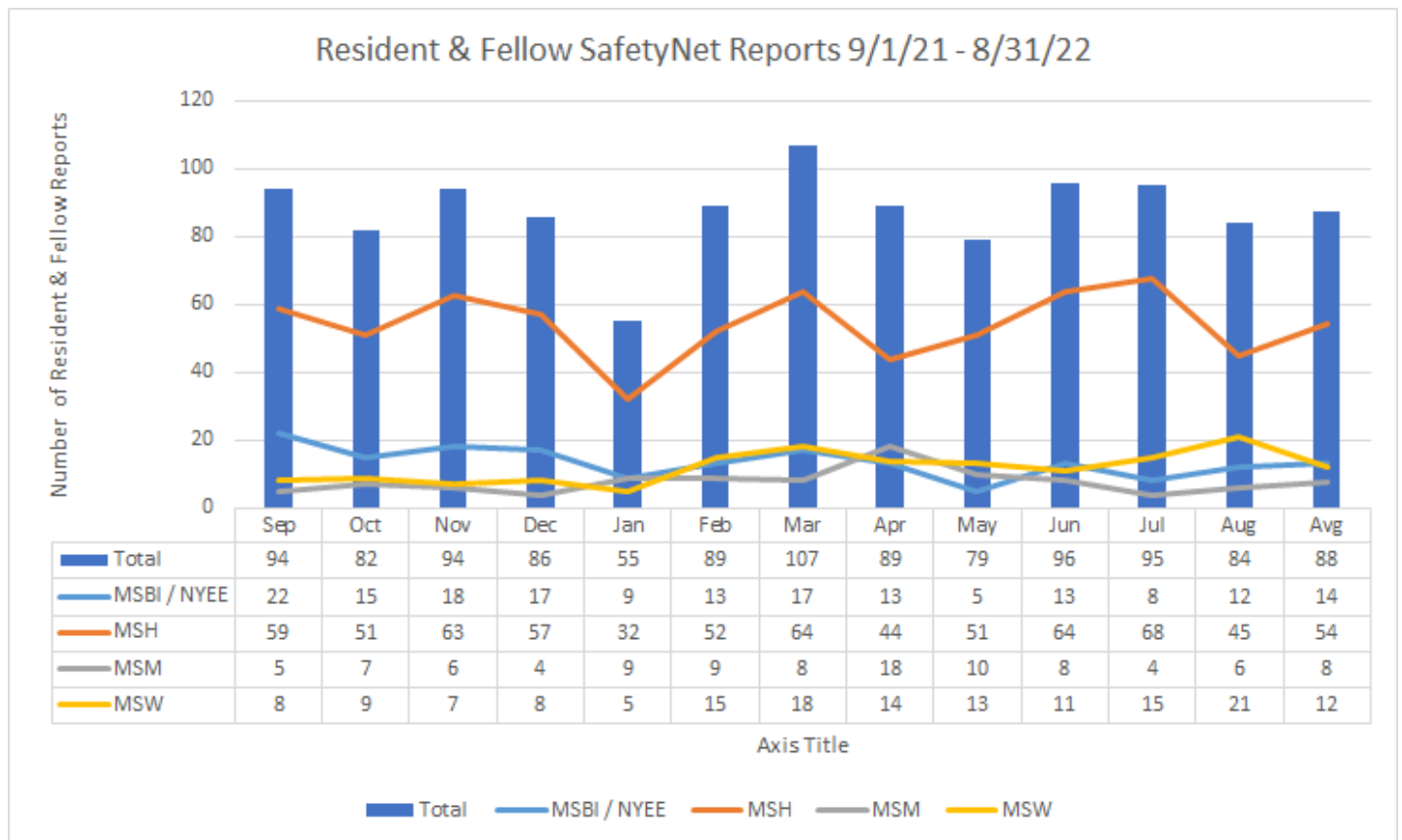
Brown TH, Homan PA. Health Serv Res. Epub 2022

Structural racism, from race-adjusted algorithms to biased machine learning, contributes to and exacerbates health inequities. This commentary calls for developing valid measures of structural racism and a publicly available data infrastructure for researchers. A related study examined the relationship between structural racism and birth outcomes between Black and white patients in Minnesota.



Below you will find SafetyNet resident and fellow reporting statistics for the 12-month period September 2021 - August 2022. The average number of total reports across campuses was 88, with March 2022 having the most reports (likely in part due to the Patient Safety Reporting Challenge week).

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.



[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.