Simulation Center Annual Report 2024

VISION: THE SIMULATION CENTER OFFERS PREMIUM, SAFE, EDUCATIONAL AND QUALITY-DRIVEN OPPORTUNITIES TO SUPPORT AND PROMOTE THE MOST EQUITABLE AND HIGH-QUALITY CARE TO THE PATIENTS OF NYC HEALTH + HOSPITALS.

NYC HEALTH+ HOSPITALS | IMSAL

OUR MISSION

IMSAL's mission is to inspire and promote a culture of NYC Health + Hospitals with a contemporary approach to education and simulation. We do this by applying advanced education and reflective experiential learning techniques to:

- Create design programs to address system needs that is evidence-based, prioritized and responsive to emergencies
- Apply quality improvement and equity lenses to refine process, identify threats and improve patient care
- Develop trainers to grow educational programs

OUR VISION

IMSAL offers innovative, safe educational and quality-driven opportunities to support and promote the highest quality, equitable care outcomes to the patients of NYC Health + Hospitals.

OUR VALUES

- **Mutual Support:** We support one another with integrity, compassion, accountability, and respect to achieve excellence.
- **Innovation:** We cultivate a growth mindset and inspire lifelong learning in other and those we educate.
- **Service:** We facilitate immersive learning experiences to empower all members of our community...to contribute to the common good...to care for themselves and each other...to care for one another.

The Simulation Center Hub
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Building 4, 2nd Floor, Room 200
Bronx, NY 10461

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EXECUTIVE SUMMARY

Michael Meguerdichian, MD
Senior Assistant Vice President

The year 2024 marks the 14th year of existence at the Institute for Medical Simulation and Advanced Learning, and it has been a year of numbers. We have expanded operations, reaching more touch points than ever at the center, while supporting Nursing Fellowships, effectively doubling our utilization. We have initiated programs in collaboration with Behavioral Health and started building infrastructure to grow more programs addressing hiring Psychiatric Health Techs. These programs mark our first curricula to include human simulationists and incorporates their feedback.

Another achievement is our commitment to data. We have shifted the evaluation of our programs from focusing on attendee satisfaction and pre/post knowledge tests to understanding the impact of our educational interventions. Our work within Maternal Mortality Reduction had our team partnering with EPIC data experts to extract specific behaviors and clinical outcomes targeted through our intervention. With this knowledge, we hope to build dashboards to inform future interventions and provide departmental chiefs with insights into performance relative to standards of care.

"We have shifted the evaluation of our programs from focusing on attendee satisfaction and pre/post knowledge tests to understanding the impact of our educational interventions."

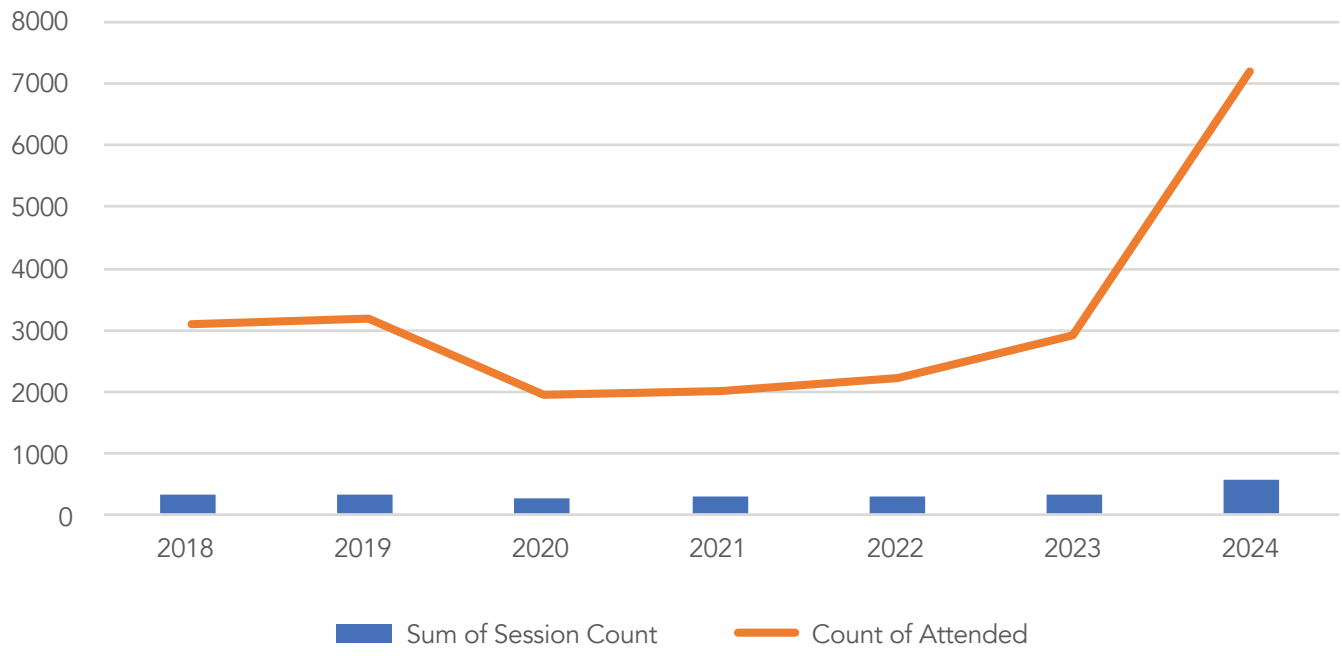
The team has also grown in 2024 with the addition of two new members. We welcomed Morenike Jegede, CMW, to our Maternal Mortality Reduction Program and are excited about her expertise and the added bandwidth to reach all our birthing centers. We also have added Dr. Crystal Wallace-Simpson, a nurse informaticist, who will enhance our efforts to explore both programmatic and clinical impact data to better define our return on investment for the system.

Our annual Healthcare Simulation Symposium, Healthcare Simulation Week, our satellite and Perinatal/Maternal Mini-Lab trainings, nursing fellowship coaching program, and scholarly work are all part of the center's productivity in 2024. We hope this annual report offers some insight to all the accomplishments and builds curiosity to ask more questions and get more involved in all that we do. I'm so very proud of our incredible team of creatives and innovators as we work to move the needle on healthcare quality for our deserving patients.

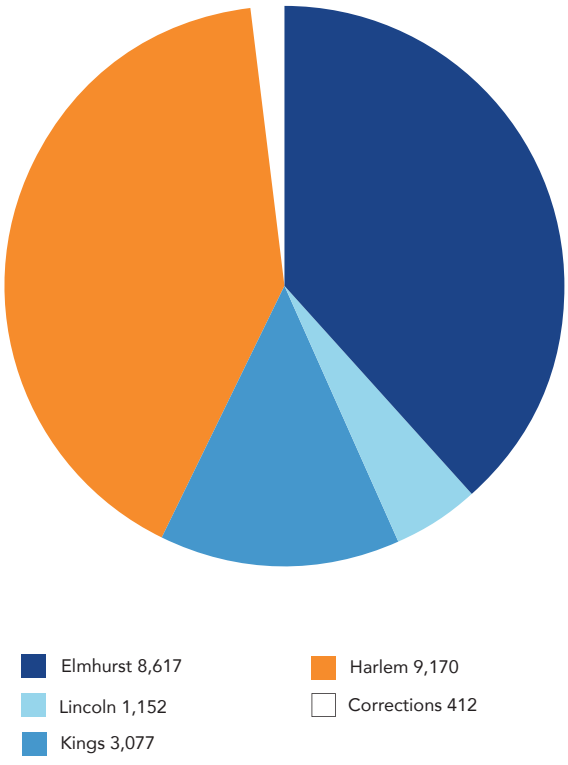
Michael Meguerdichian
Senior Assistant Vice President
NYC Health + Hospitals/Simulation Center

SUPPORTING OUR NYC HHC STAFF

Sim Center Utilization Data 2024



Contact Hours



Simulation Center Hub Utilization

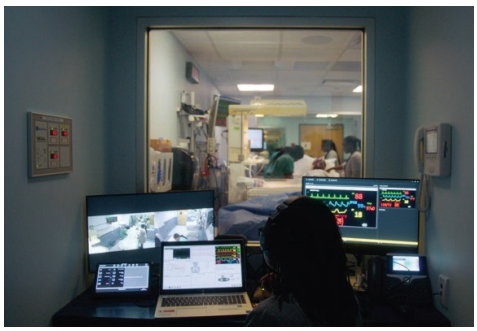
In 2024, IMSAL offered over 50 courses. To illustrate the effective utilization of our facility, we've highlighted a selection of these courses, showcasing their significant impact.

The chart on the next page details some of our most popular courses, distinguished by their high encounter and session counts.

Collectively, these courses generated over 30,000 contact hours. This considerable figure is calculated by multiplying training encounters by the course duration. For instance, take the Advanced Airway course: Its 51 training encounters, when multiplied by the course duration of 3 hours, it contributes 153 contact hours. By totaling the contact hours across all courses, we arrive at the cumulative figure of 31,289 contact hours.

Course/Event	Training Encounters	Sum of Session Count	Course Duration	Contact Hours
Advanced Airway	51	8	3	153
ATLS	84	6	7	588
AWOHHN Maternal Fetal Monitoring	47	4	4	188
Basics Introduction to Debriefing	94	16	4	376
Cardiac Code Team	123	16	3	369
Cath Lab Mock Code Sim	16	1	4	64
Central Line	201	27	4	804
Chest Tubes	14	3	4	56
Code Team 2.0	64	10	3	192
DIVAS	8	1	4	32
EM Attending Sim Bootcamp	8	1	4	32
FUSE	478	21	7	3,346
Grand Rounds	372	29	4	1,488
Introduction to Debriefing	47	7	7	329
Manikin Operations	41	15	3	123
Med Student Sim	36	5	4	144
Nurse Residency Program	236	2	7	1,652
Nursing Critical Care Fellowship	925	66	4	3,700
Nursing EM Fellowship	3044	127	4	12,176
Nursing OR Fellowship	309	35	4	1,236
Opioid Use Disorder Buprenorphine Simulation Pilot	35	1	7	245
Pediatric Advanced Life Support	32	2	4	128
Pediatric Critical Care Skills	25	1	4	100
Pediatric Airway	33	5	3	99
Pediatric Code Team	50	6	3	150
Preventing and Managing Crisis Situations (PMCS)	23	2	4	90
Practice: Airway Management	3	1	4	12
Practice: Central Line	5	1	4	20
Pulmonary Critical Care Simulation Orientation	6	1	7	42
Scenario Design	18	3	7	126
Sim Wars	51	1	7	357
Small Group Sim	217	26	4	868
Sophie Davis Transition to Residency	108	2	4	432
Special Pathogens Trained Observer Simuation	15	1	4	60
Surgical Cut Suit Simulation	110	22	4	440
Surgical PA Skills session	20	5	4	80
Teamwork & Communication	169	18	4	676
Trauma Nursing Core Course	12	2	7	84
Ventilator Management	16	2	3	48
Virtual Reality Simulation: Bronchoscopy	4	1	4	16
Virtual Reality Simulation: Endoscopy	34	31	4	136
Virtual Reality Simulation: Laparoscopy	8	13	4	32
Grand Total	**7,192**	**547**	**189**	**31,289**

SATELLITE CENTERS / MINI-LABS



Elmhurst Hospital Simulation Center

Overview

2024 proved to be another exciting year for the Elmhurst Simulation Center, where we collaborate with an amazing group of simulation educators across the hospital. The center, led by Daniel Lugassy, MD, and Maloree Baxter-Williams, RN, underwent a complete audio-visual system upgrade and renovation. Additionally, we hosted an artist who filmed in our space over several days, and our SIM fair during Simulation Healthcare Week was once again a great success. We continued to offer our regular programs and developed several new initiatives. Below are some staff and programming highlights from 2024 that we're excited to share.

Utilization Data Summary	
Individual Learners	2,467
Learner Visits	210
Learner Contact Hours	8,617*

Programs include: Manikin, Actor-based, and Task trainer simulation; education events; training sessions and more that were run by the Elmhurst Simulation Center in our space and in-situ.

Elmhurst Simulation Center 2024 Highlights

- **Elmhurst Staff in NYC Health + Hospitals IMSAL Fellowship:** We're proud to announce that two more staff members from Elmhurst Hospital are participating in the IMSAL Simulation Fellowship: Dr. Andrew Duarte, MD, an Anesthesiologist, and Maggie Paul, RN, Critical Care Nurse Educator. Both already have exciting ideas for their capstone projects, which are planned for implementation at our hospital after their fellowship graduation. They will join nine other current Elmhurst staff members who have also completed the NYC Health + Hospitals IMSAL Fellowship.
- **Artist Film Exhibition:** Artist Carolyn Lazard created two feature films that premiered at Artists Space in Manhattan in February 2025. Both films were shot on location at the Elmhurst Simulation Center. The first film, *Fiction Contract*, documents a childbirth simulation facilitated by The Maternal Mortality Reduction Program (MMRP), and the second film, Vital, is a work of fiction depicting a Black birthing person's first prenatal visit. artistsspace.org/exhibitions/carolyn-lazard
- **Healthcare Simulation Week, September 2024:** Elmhurst Simulation Center had an in-person simulation fair as part of the Healthcare Simulation Week festivities. Our Elmhurst Hospital Simulation staff helped demonstrate many of our various simulation efforts and programs, including a birthing manikin, neonatal resuscitation, emergent cricothyrotomy, and a Sim Safety "Room of Horrors" where 100+ staff from across all departments competed to find the errors and latent safety threats.
- **New Programs Created in 2024:** Medicine Resident SIM: Paracentesis & Lumbar Puncture; Stroke Code In-Situ SIM; Psychiatry Resident CODE SIM; Nurse New Employee Mock Code; Nursing Skills Fair

**Does not include the Elmhurst OB Mini Lab programs.*

EQUIPMENT UPDATES: COMPLETED IN THE FALL OF 2024, THE ELMHURST SIMULATION CENTER UNDERWENT A COMPLETE UPGRADE AND RENOVATION OF ITS ENTIRE AUDIO AND VIDEO SYSTEM BY THE VENDOR IVCI. EACH SIMULATION ROOM NOW FEATURES A NEW HD MONITOR AND TWO NEW CAMERAS, WHICH CAN BE USED FOR LIVE REMOTE VIEWING AND RECORDING.

Course	Number of Learners	Number of Hours	Number of Sessions	Learner Hours
Ambulatory Care In-Situ	85	2	6	170
ACLS Recertification	10	8	1	80
Anesthesia NEW OR In-Situ	12	2	1	24
Anesthesia Resident SIM	240	1	40	240
ATLS (Advanced Trauma Life Support)	160	8	10	1,280
CPEP Mock Code Training	40	1	3	40
Critical Care - PRONE SIM	10	2	1	20
Cardiology Fellows Central Line & TVP Training	8	2	1	16
ED Stroke SIM In-Situ	20	1	2	20
EM APP Monthly SIM	64	4	8	256
EM Faculty Development SIM	40	2	4	80
EM Intern Orientation (Central Line, SIM)	28	8	1	224
EM MCI Drill with Trauma Surgery	40	2	1	80
EM NYC Health + Hospitals Nursing Fellowship SIM	236	6	12	1,416
EM Resident Monthly SIM	120	5	11	600
NYC Health + Hospitals POCUS Course	40	8	2	320
Radiology In-Situ	15	1	1	15
Medicine Resident Code Team Leader SIM	30	5	6	150
Medicine Intern Orientation	40	5	1	200
Medicine Resident Central Line	14	4	2	56
Medicine Resident SIM Paracentesis, Lumbar Puncture	40	3	4	120
Nursing New Employee Mock Code	366	2	25	732
Neonatal Resuscitation Program	34	8	4	272
Nursing Skills Fair	80	8	1	640
Peds Critical Care Resident SIM	23	3	2	46
Peds ED In Situ	30	1	2	30
Peds Inpatient In Situ	101	2	9	202
Peds ED RN SIM	72	3	9	216
Psychiatry Resident CODE SIM	30	2	1	60
Pulmonary Fellow SIM	56	3	7	168
Peds Inpatient In Situ	101	2	9	202
SICU Resident SIM Airway/Chest Tube	60	2	10	120
Stroke In-Situ SIM	57	1	5	57
Trauma In-Situ; ED & Trauma Surgery	65	1	7	65
Simulation Week Fair	100	4	1	400
TOTALS	**2,467**	**122**	**210**	**8,617**

Lincoln Hospital Simulation Center

Overview

For the 2025-2026 period, our primary goals are to enhance the learning experience for our trainees by increasing the number of clinical simulation sessions offered. We aim to achieve at least one paper submission or publication focused on simulation, and to expand our In-Situ simulation program to a bi-weekly frequency covering all clinical areas of the hospital, including ambulatory care clinics.

Building upon recent achievements, we have successfully established a SimTeam comprised of trained senior residents who now lead and conduct simulation sessions for medical students and junior residents. Furthermore, we have initiated bi-weekly teaching sessions, specifically for medical students, and have increased our capacity for advanced life support training by certifying more attending physicians as ACLS and PALS instructors.

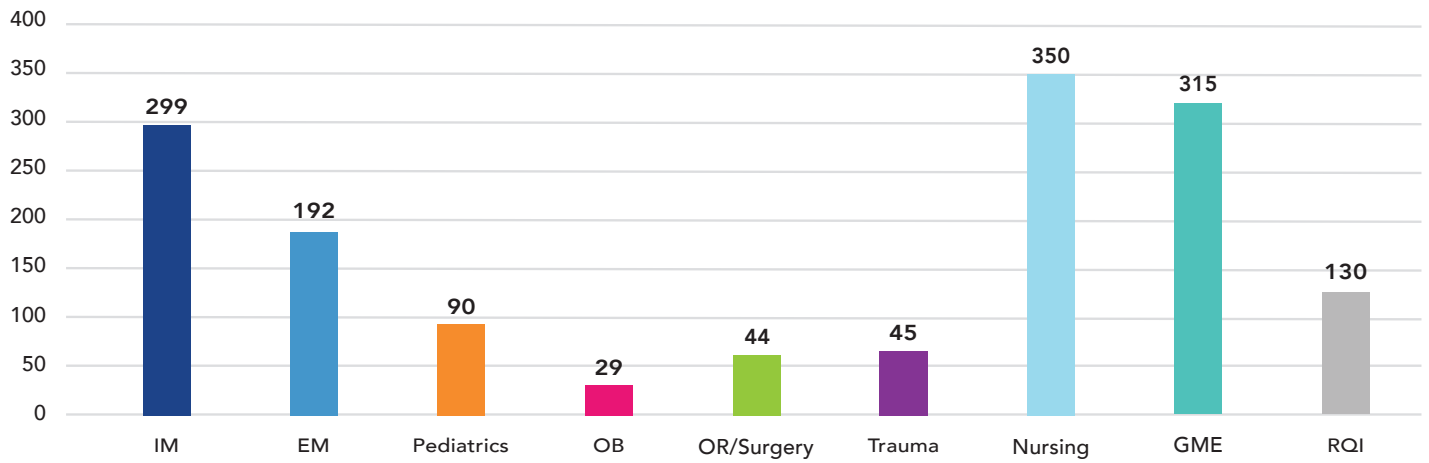
Utilization Data Summary (January – December)

Individual Learners	1,494
Learner Visits	288
Learner Contact Hours	1,152

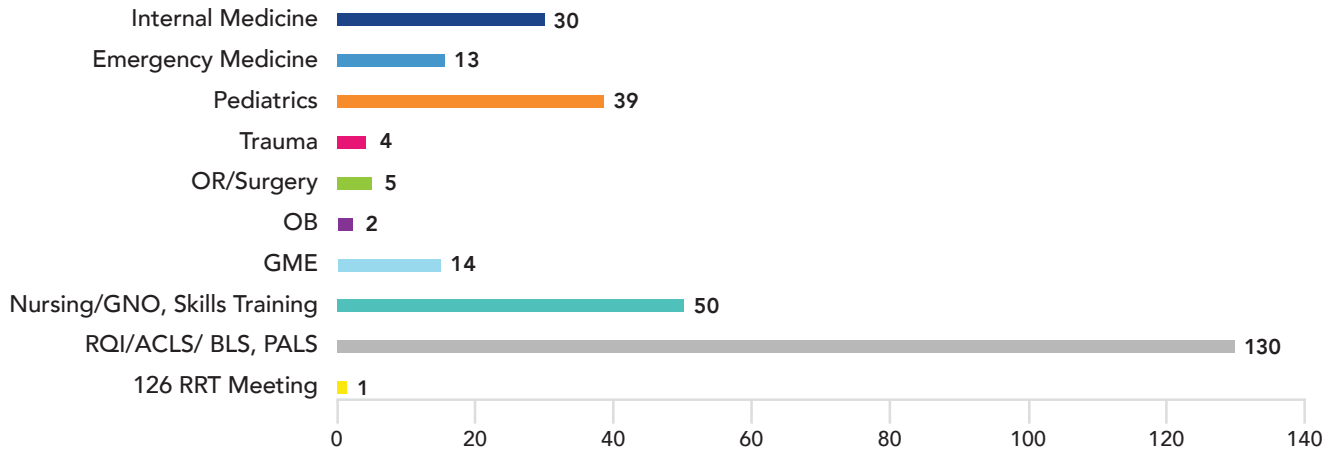
In-Situ Department and Place (January – December)

Department/ Place	5A	5B	PEDS ER	PEDS Clinic	Ambulatory Care
OB	1	1			
Pediatrics			7	1	
Ambulatory Clinics					16

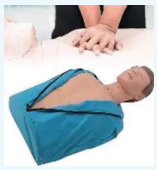
Simulation for Skill Training: Attendance by Department (January through December)

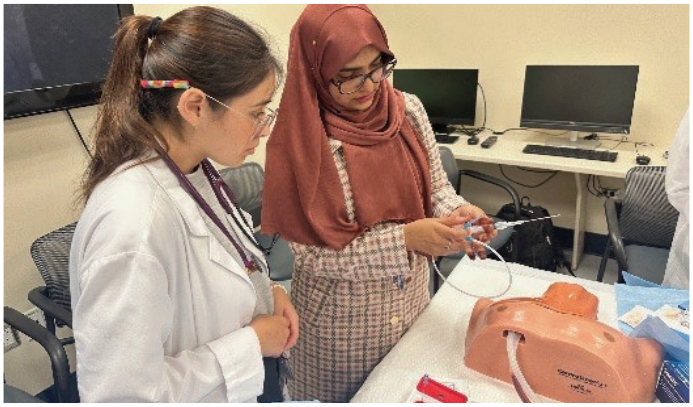


Number of Courses 2024 (January through December)



Lincoln Simulation Center Equipment Purchases for 2024

Equipment		Purpose
	*Sim Man Essential*	Enhances individuals' skills in airway, breathing, cardiac, and circulation management.
	*ASL 5000*	Breathing simulator intended for high fidelity ventilation management training in respiratory care.
	*Sim Junior*	Ranges from healthy talking child to critical unresponsive patient with no vitals.
	*2 RQI*	Resuscitation quality improvement mannequins are used to train healthcare providers in high quality CPR skills.



Kings County Hospital Simulation Center

Overview

Dr. Daisy Grueso retired as Director of Kings Satellite Simulation Center in July 2024. Dr. Jonathan To took over further responsibilities as Interim Director for Kings Satellite Simulation Center. Dr. To completed a simulation fellowship with IMSAL and started initially as the Simulation Director for the Department of Emergency Medicine. He helped coordinate, organize and execute all Intern Orientation Simulations for Kings County. The transition was difficult given the large amount of upfront responsibilities due to the new academic year, all while simultaneously learning the logistics of the new position, re-organizing the simulation center, restructuring the sign-in process and sifting through the equipment.

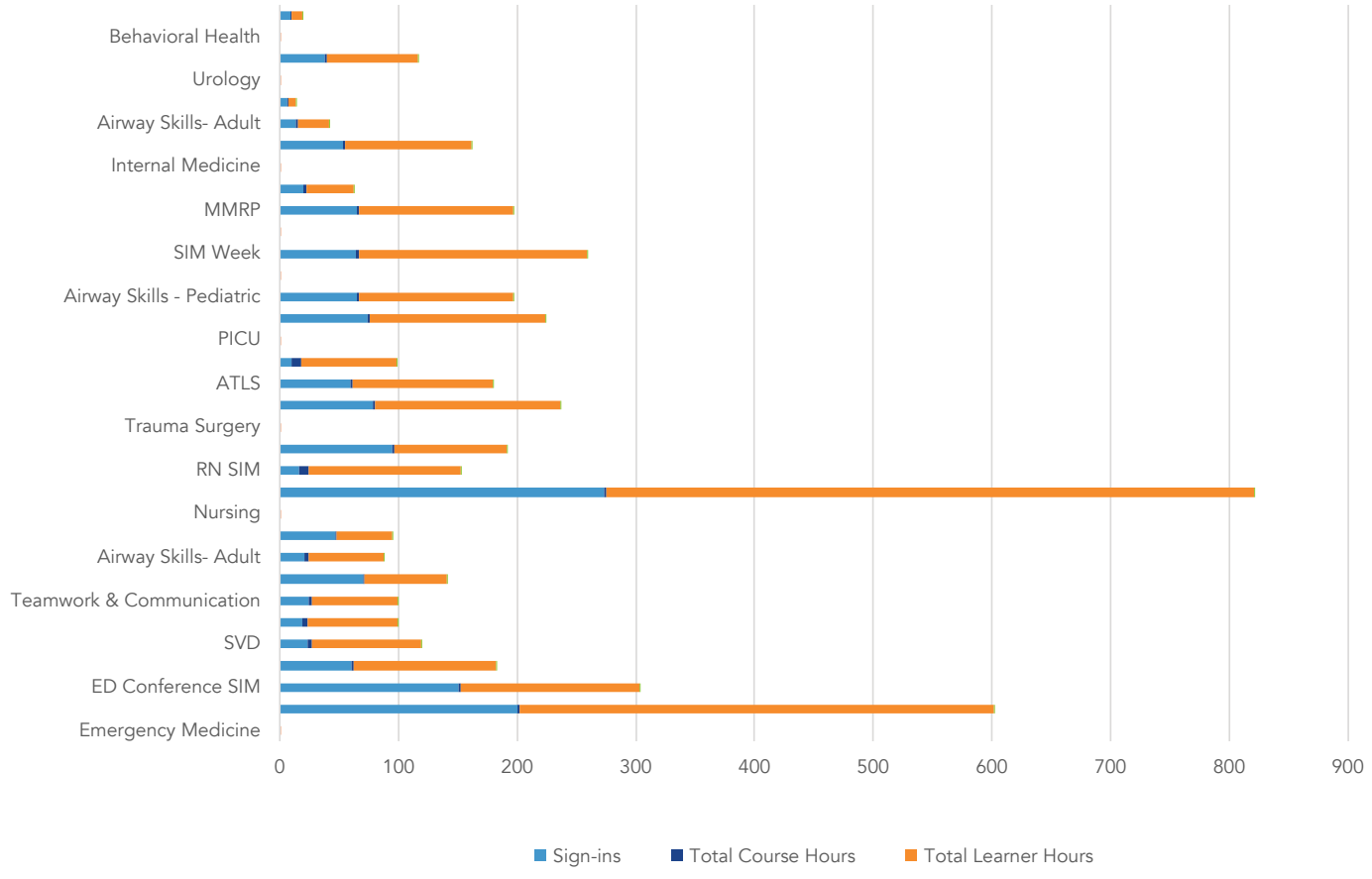
Accomplishments

2024 was an exciting year. We significantly cleaned up and organized the simulation center, updated the simulation equipment list, and obtained new newborn mannequins. We reconfigured the automation of the learner sign-in process to optimize for better functionality and compliance. We also focused on improving the simulation culture and reintroducing defibrillation, transcutaneous and transvenous pacing, resuscitation response scenarios, and vent simulations to certain hospital departments. All this was accomplished while having a successful turnout for Sim Week.

New Programs

- **TCAR (Trauma Care after Resuscitation):** A temporary nursing simulation for trauma accreditation that simulates nursing care after a trauma resuscitation (vent care, Foley management, wound care, etc.).
- **Trauma Peds CPR:** A full-day course offered by trauma surgery department, demonstrating emergency street management for pediatric resuscitations to civilians.

Course Attendance 2024



Kings County Simulation Center Equipment Purchases for 2024

Equipment	Purpose
 *Sim Newborn*	Healthcare training to practice neonatal resuscitation and care skills on a realistic model without risk to a real patient. Pediatric emergencies trainings like defibrillation, intubation, and resuscitation.

Future Directions

Our future directions center on expanding and enhancing our simulation capabilities. Key priorities include the continued improvement and broader adoption of simulation culture and case scenarios across more departments.

We aim to foster interdepartmental collaborations and develop interdisciplinary simulations involving physicians and nurses. To better prepare for complex clinical situations, we plan to design multi-patient scenarios.

Furthermore, we will invest in staff development and acquire ultrasound machines for our USGIV and central line courses. Ultimately, we aim to introduce live defibrillation pediatric cases to enhance critical care training.

Utilization Data Summary (January – December)	
Individual Learners	1,553
Learner Visits	211
Learner Contact Hours	3,077

Harlem Hospital Simulation Center

Overview

In 2024, the Simulation Department continued to grow as a vital part of our institution's mission to deliver high-quality, team-based, patient-centered care. Through innovation, interdisciplinary collaboration, and a commitment to hands-on learning, we empowered clinicians across departments to build confidence, sharpen skills, and elevate patient safety.

New Program Launch: Ultrasound-Guided IV Course

One of the highlights of the year was the successful development and launch of our Ultrasound-Guided IV course. Initially offered to our team of critical care nurses, the course was soon expanded to include emergency department nurses due to overwhelming positive feedback. This hands-on training proved to be an empowering experience, equipping nurses with practical skills and increased autonomy in patient care.

Utilization Data Summary (January – December)	
Individual Learners	1,167
Learner Visits	156
Learner Contact Hours	9,170

Strengthened Partnerships and In-Situ Simulation

Our existing collaboration with the Department of Surgery was further strengthened through in-situ trauma simulation, enhancing team readiness for high-acuity scenarios. These real-time, environment-based exercises brought together surgical, emergency medicine, and nursing teams to practice coordinated responses to critical trauma cases.

Course	Number of Learners	Number of Hours	Number of Sessions	Learner Hours
ACLS	53	10	14	530
Active Shooter Training	49	2	6	98
Advanced Burn Life Support	35	8	1	280
ATLS	284	16	26	4,544
BLS	14	5	8	70
Central Line Placement Skills	2	4	1	8
Crisis Intervention Training	93	4	10	282
CSOM (CUNY School of Medicine) PA Program	6	8	1	48
EKG	26	8	1	208
Fire Safety	4	2	3	8
Grand Rounds	21	2	5	42
HPA Wand Training	15	1	2	15
Mock Codes	33	4	3	132
OB Sepsis	3	1	2	3
OB Sim Fair	70	1	1	70
Opioid Use Disorder	72	3	9	216
Pediatric Simulation	76	1	9	76
PMCS	119	14	14	1,966
Rapid Response Team	77	4	10	308
Resident Education	73	2	14	146
Trauma	3	2	1	6
Ultrasound Guided IV	18	4	5	72
Virtual Reality: Bronchoscopy	13	2	9	26
Virtual Reality: Endoscopy	8	2	1	16
TOTALS	**1,167**	**110**	**156**	**9,170**

Ongoing Support for Residency and Interdisciplinary Teams

The Simulation Center proudly continued to host the Metropolitan-Harlem Emergency Medicine Residency Program, providing dedicated simulation-based learning for residents.

Additionally, the Pediatric ICU team led frequent interdisciplinary simulations, with recent sessions focused on ventilator management and critical care decision-making, helping to reinforce team roles and responses during high-stakes pediatric emergencies.

Opioid Use Disorder Simulation Program

This year also marked the launch of a novel Opioid Use Disorder simulation program, which is being implemented at Harlem as part of a broader system-wide initiative.

The course uses trained patient actors to help providers practice assessing patients affected by substance use, applying harm reduction strategies, and initiating buprenorphine treatment. This program supports our ongoing efforts to provide compassionate, evidence-based care to vulnerable populations.

Simulation Fairs

The Simulation Department hosted two successful simulation fairs at Harlem — one during Black Maternal Health Week in the spring, and another for Healthcare Simulation Week in the fall.

These events were open to staff from every department and discipline, offering hands-on engagement with emergency scenarios and life-saving equipment. Vendors participated to provide education on key tools used in obstetric and other high-risk situations.

Former simulation fellows also played a critical role in organizing and leading these events, using their expertise to promote the breadth of simulation-based education available throughout the hospital. These fairs fostered awareness, interprofessional collaboration, and excitement around simulation as a tool for clinical excellence and team readiness.

Correctional Health Services

Overview

The Simulation team at Correctional Health Services is always seeking out creative ways to keep staff engaged in simulation. Although a deficiency in human resources continues to be a challenge, staff are still being afforded the opportunity to practice skills in a psychologically safe environment. We understand the importance of providing the best and safest care to our patients. To this end we will ensure that the mission and vision of the Simulation Center is upheld.

Simulation Week: September 2024

CHS uses every opportunity to bring simulation experiences to the staff.

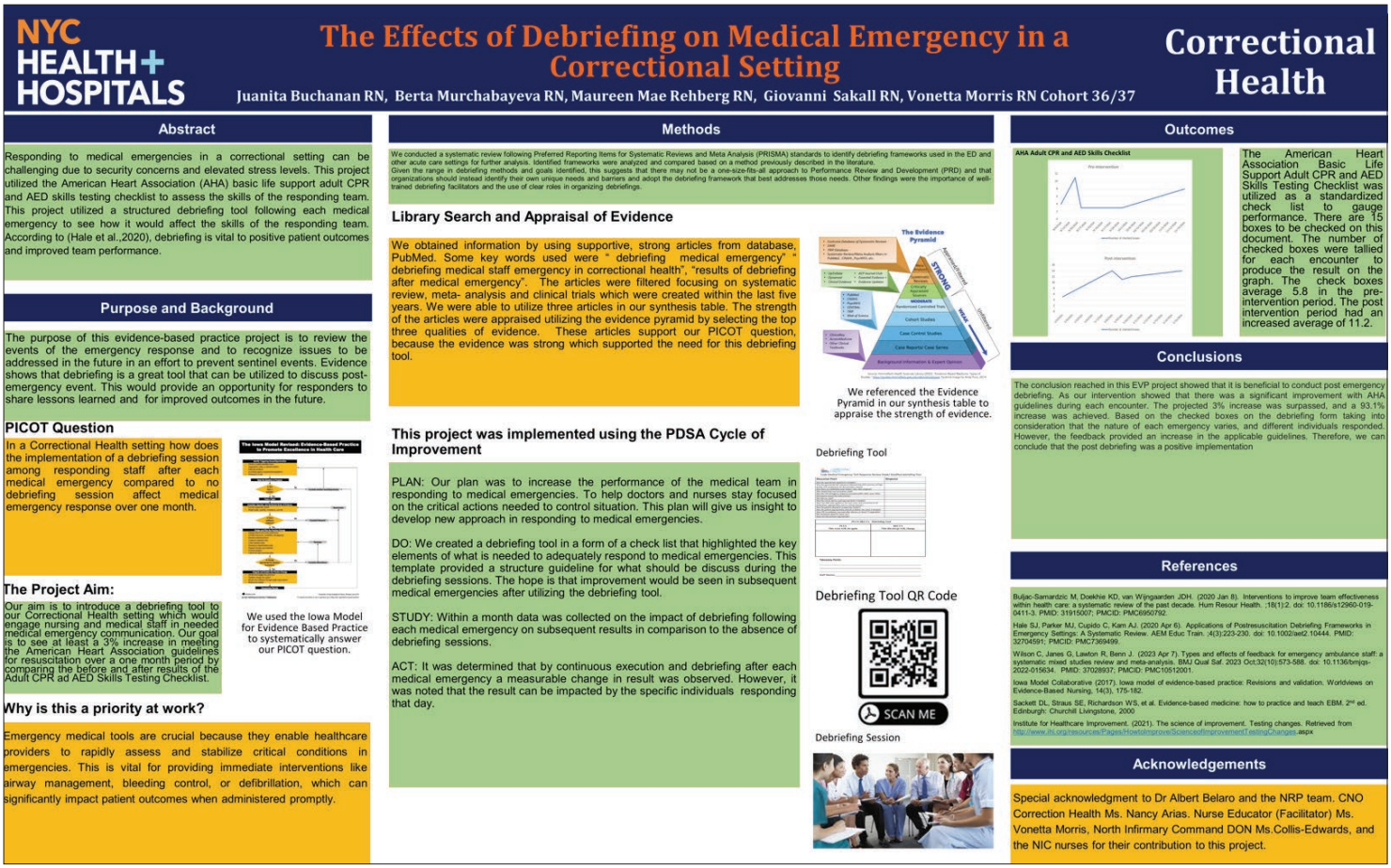
Safe Patient Handling Simulation Fair: December 2024

Correctional Health Services hosted its first Safe Patient Handling Simulation Fair in December 2024. This was a great opportunity for staff to be reacclimated with the equipment while having the opportunity to practice in a safe environment through simulated activities.

Correctional Health Services Nurse Residency Program

Four nurses from Cohort 37 of the Nurse Residency Program from Correctional Health Services did an evidence-based project where they explored this question, "In a correctional Health setting, how does the implementation of a debriefing session among responding staff after each emergency compared to no debriefing session affect medical emergency response over a one-month period."

This project was piloted in one of the Correctional Health facilities with positive results. Insitu simulation was utilized for the before and after results in accordance with American Heart Association standards.



NYC HEALTH+ HOSPITALS

The Effects of Debriefing on Medical Emergency in a Correctional Setting

Juanita Buchanan RN, Berta Murchabayeva RN, Maureen Mae Rehberg RN, Giovanni Sakall RN, Vonetta Morris RN Cohort 36/37

Correctional Health

Abstract

Responding to medical emergencies in a correctional setting can be challenging due to security concerns and elevated stress levels. This project utilized the American Heart Association (AHA) basic life support adult CPR and AED skills testing checklist to assess the skills of the responding team. This project utilized a structured debriefing tool following each medical emergency to see how it would affect the skills of the responding team. According to (Hale et al.,2020), debriefing is vital to positive patient outcomes and improved team performance.

Purpose and Background

The purpose of this evidence-based practice project is to review the events of the emergency response and to recognize issues to be addressed in the future in an effort to prevent sentinel events. Evidence shows that debriefing is a great tool that can be utilized to discuss post-emergency event. This would provide an opportunity for responders to share lessons learned and for improved outcomes in the future.

PICOT Question

In a Correctional Health setting how does the implementation of a debriefing session among responding staff after each medical emergency compared to no debriefing session affect medical emergency response over one month.

The Project Aim:

Our aim is to introduce a debriefing tool to our Correctional Health setting which would engage nursing and medical staff in needed medical emergency communication. Our goal is to see at least a 3% increase in meeting the American Heart Association guidelines for resuscitation over a one month period by comparing the before and after results of the Adult CPR ad AED Skills Testing Checklist.

We used the Iowa Model for Evidence Based Practice to systematically answer our PICOT question.

Why is this a priority at work?

Emergency medical tools are crucial because they enable healthcare providers to rapidly assess and stabilize critical conditions in emergencies. This is vital for providing immediate interventions like airway management, bleeding control, or defibrillation, which can significantly impact patient outcomes when administered promptly.

Methods

We conducted a systematic review following Preferred Reporting Items for Systematic Reviews and Meta Analysis (PRISMA) standards to identify debriefing frameworks used in the ED and other acute care settings for further analysis. Identified frameworks were analyzed and compared based on a method previously described in the literature.
Given the range in debriefing methods and goals identified, this suggests that there may not be a one-size-fits-all approach to Performance Review and Development (PRD) and that organizations should instead identify their own unique needs and barriers and adopt the debriefing framework that best addresses those needs. Other findings were the importance of well-trained debriefing facilitators and the use of clear roles in organizing debriefings.

Library Search and Appraisal of Evidence

We obtained information by using supportive, strong articles from database, PubMed. Some key words used were " debriefing medical emergency" " debriefing medical staff emergency in correctional health", "results of debriefing after medical emergency". The articles were filtered focusing on systematic review, meta- analysis and clinical trials which were created within the last five years. We were able to utilize three articles in our synthesis table. The strength of the articles were appraised utilizing the evidence pyramid by selecting the top three qualities of evidence. These articles support our PICOT question, because the evidence was strong which supported the need for this debriefing tool.

We referenced the Evidence Pyramid in our synthesis table to appraise the strength of evidence.

This project was implemented using the PDSA Cycle of Improvement

PLAN: Our plan was to increase the performance of the medical team in responding to medical emergencies. To help doctors and nurses stay focused on the critical actions needed to control situation. This plan will give us insight to develop new approach in responding to medical emergencies.

DO: We created a debriefing tool in a form of a check list that highlighted the key elements of what is needed to adequately respond to medical emergencies. This template provided a structure guideline for what should be discuss during the debriefing sessions. The hope is that improvement would be seen in subsequent medical emergencies after utilizing the debriefing tool.

STUDY: Within a month data was collected on the impact of debriefing following each medical emergency on subsequent results in comparison to the absence of debriefing sessions.

ACT: It was determined that by continuous execution and debriefing after each medical emergency a measurable change in result was observed. However, it was noted that the result can be impacted by the specific individuals responding that day.

Debriefing Tool

Debriefing Tool QR Code

SCAN ME

Debriefing Session

Outcomes

The American Heart Association Basic Life Support Adult CPR and AED Skills Testing Checklist was utilized as a standardized check list to gauge performance. There are 15 boxes to be checked on this document. The number of checked boxes were tallied for each encounter to produce the result on the graph. The check boxes average 5.8 in the pre-intervention period. The post intervention period had an increased average of 11.2.

Conclusions

The conclusion reached in this EVP project showed that it is beneficial to conduct post emergency debriefing. As our intervention showed that there was a significant improvement with AHA guidelines during each encounter. The projected 3% increase was surpassed, and a 93.1% increase was achieved. Based on the checked boxes on the debriefing form taking into consideration that the nature of each emergency varies, and different individuals responded. However, the feedback provided an increase in the applicable guidelines. Therefore, we can conclude that the post debriefing was a positive implementation

References

Buljac-Samardzic M, Doekhie KD, van Wijngaarden JDH. (2020 Jan 6). Interventions to improve team effectiveness within health care: a systematic review of the past decade. Hum Resour Health. ;18(1):2. doi: 10.1186/s12960-019-0411-3. PMID: 31915007; PMCID: PMC6950792.

Hale SJ, Parker MJ, Cupido C, Kam AJ. (2020 Apr 6). Applications of Postresuscitation Debriefing Frameworks in Emergency Settings: A Systematic Review. AEM Educ Train. ;4(3):223-230. doi: 10.1002/aet2.10444. PMID: 32704591; PMCID: PMC7369499.

Wilson C, Janes G, Lawton R, Benn J. (2023 Apr 7). Types and effects of feedback for emergency ambulance staff: a systematic mixed studies review and meta-analysis. BMJ Qual Saf. 2023 Oct;32(10):573-588. doi: 10.1136/bmjqs-2022-015634. PMID: 37028937; PMCID: PMC10512001.

Iowa Model Collaborative (2017). Iowa model of evidence-based practice: Revisions and validation. Worldviews on Evidence-Based Nursing, 14(3), 175-182.

Sackett DL, Straus SE, Richardson WS, et al. Evidence-based medicine: how to practice and teach EBM. 2nd ed. Edinburgh: Churchill Livingstone, 2000

Institute for Healthcare Improvement. (2021). The science of improvement. Testing changes. Retrieved from http://www.ihi.org/resources/Pages/HowtoImprove/ScienceofImprovementTestingChanges.aspx

Acknowledgements

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2024 Simulation Utilization Data

Course	Number of Learners	Number of Hours	Number of Sessions	Learner Hours
Insitu Simulation	220	1	48	220
Stryker Evacuation Chair Simulation Training	72	2	6	144
Code Simulation	24	2	4	48

SIMULATION FAIR 2024

Simulation in Healthcare Awardees celebrate with their awards.

Members of Woodhull's Maternal Mortality Team attending the Annual Simulation Symposium.

Bellevue Nurse Educator and Simulation Fellow Frederika Pierre celebrates receiving a Simulation in Healthcare Award with current and former simulation fellows.

Simulation Fellows Frederika Pierre (Bellevue) and James Villamater (Bellevue) celebrate receiving their Simulation in Healthcare Awards for their contributions to simulation activities at Bellevue.

RESEARCH SPOTLIGHT

A System-Wide Debriefing Quality Initiative Led by Nursing Director Manjola Laci

Nursing Director **Manjola Laci** has been a foundational supporter of our Nursing Fellowships (Emergency Medicine, Critical Care, Operating Room). In this role, she partners with our system's Nurse Educators, offering comprehensive support with simulation logistics, including manikin operations, scenario design, and debriefing.

To foster continued faculty development, Manjola initiated a structured coaching process. Following foundational healthcare simulation training, Nurse Educators began receiving periodic feedback utilizing the Objective Structured Assessment for Debriefing (OSAD) tool. The OSAD tool provides targeted feedback in key debriefing domains, assessing the facilitator's ability to create psychological safety, promote learner engagement, analyze the experience, and diagnose performance gaps. Manjola personally administered the tool and collaborated with colleagues to ensure a robust, multi-perspective feedback mechanism. The systematic collection and delivery of this feedback were specifically designed to refine educator skills. The resulting data documented a significant improvement in the quality of debriefing, directly contributing to more effective learning experiences. We look forward to sharing this work in the near future on scholarly stage, detailing how regular coaching in debriefing can lend to growth in performance.

QUARTERLY PROFESSIONAL DEVELOPMENT PROGRAM

The Quarterly Professional Development Series continued to deepen the knowledge of our simulation family in 2024. April started off strong with an improvisation workshop led by **Amanda Rothman**, focusing on social awareness and emotional intelligence.

Participants explored sensitive topics like biases and other power dynamics in a playful and approachable way, while gaining an appreciation for the diverse strengths of the team.

In May, **Dr. Daniel Lugassy**, the Director of the Elmhurst Simulation Center, led our team through a curriculum development day for our new Opioid Use Disorder (OUD) simulation course. This course is unique as it fully incorporates the use of human simulation—simulation involving the use of a live person—as the basis for the encounters.

The use of live patients brought a new level of realism to the already powerful patient interactions, while also providing firsthand feedback from the patient's perspective to the learners participating in the course. The OUD course is the first of a number of behavioral health-focused courses that will be utilizing human simulation for their experiences.

In December, the team explored feedback and remediation concepts with **Dr. Rebecca Hellmann**. They examined the various motivations behind learning and how to give constructive feedback to a struggling learner.

The team also explored the concept of remediation and how to use simulation as a modality to make information accessible to every type of learner.

FELLOWSHIP PROGRAM

2023-2024 Fellowship in Healthcare Simulation

In January 2024, our 14 inter-professional Simulation Fellows reached the halfway point of their **Fellowship in Healthcare Simulation**. This midpoint marks a pivotal phase in the fellowship year, as fellows begin preparing their capstone projects—a graduation requirement and a key summative assessment of their development as emerging simulation educators.

The capstone is designed to evaluate each fellow's knowledge, skills, and attitudes through a project that demonstrates real-world application and educational impact.

Between January and June 2024, fellows worked closely with simulation faculty to develop and complete their **Capstone Project Portfolios**, advancing their concepts from proposal to implementation. Reflecting the interprofessional and system-wide scope of our program, project topics addressed diverse clinical and educational needs, including:

- *The Hybrid ED Nursing In-Situ Simulation Debriefing Program* – James Villamater (Bellevue)
- *Empowering Patients, Elevating Care: A Collaborative Approach to Psychiatric Treatment Planning* – Sean Paul Carleton (Kings County)
- *Nursing Simulation Academy* – Kiran Ashraf (Kings County)
- *Operating Room Airflow Visualization ABCs: Connecting Air Quality to Barriers and Behaviors in the OR to Elicit Change* – Priya Dhagat (System-Wide Special Pathogens)
- *Developing In-Situ Simulation in the Emergency Department at Queens Hospital* – Andrea Greene (Queens)
- *Virtual Resuscitation Room: Global Health Distance Simulation for Emergency Medicine Residents in India* – Debayan Guha (Jacobi), in collaboration with George Washington University
- *Hemorrhage in Abortion Care: Simulation to Improve Patient Safety and Teamwork* – Virginia Fioribello (Jacobi)
- *Skill Retention in Chest Tube Placement* – Stephany Jaramillo (South Brooklyn Health)
- *Greater Communication and Skills for All: Teamwork and Communication Across Disciplines* – James Knight (Woodhull)
- *Implementation of the Peripartum Hysterectomy Curriculum* – Sepideh Mehri (Bellevue)
- *Maternal Health Collaborative Care SDOH Initiative* – Rochelle Mercer (Maternal Home–Jacobi)
- *Neonatal Resuscitation Program (NRP) Refresher Class* – Chinyere Ogbonna
- *OB STAT Cesarean Section Simulation Drill* – Adrielle El-Dyson Otoo
- *Effective Communication Strategies for Home Health Care Providers: Overcoming Language Barriers* – Marie Previl (Community Care)

We are excited to share that multiple Fellows have since presented their capstone projects at local and international conferences.

Problem Characterization/ Needs Assessment – New graduate nurses often face a challenging transition from academic training to real-world clinical practice. Despite passing licensure exams, many nurses report low confidence in core clinical skills such as auscultation, head-to-toe assessments, and tracheostomy care. In addition to clinical skills, effective communication, psychological safety, and interprofessional readiness are essential but underdeveloped in early practice. These gaps can contribute to compromised patient safety, higher stress levels among novice nurses, and elevated turnover rates. This highlighted a need for immersive, structured, simulation-based training designed to increase clinical competence, foster interprofessional communication, and promote reflective practice in a psychologically safe learning environment.

Program Statement – The Nursing Simulation Academy Program intends to enhance clinical skills, build confidence, and ensure a smooth transition into the role of new graduate nurse by offering hands-on simulation experiences through focused stations (Head-to-Toe Assessment; Cardiac & Lung Sounds; Tracheostomy Care), followed by immersive simulation scenarios and comprehensive PEARLS debriefing sessions.

Learner Objectives – By the end of the simulation academy, all learners will be able to:

1. Differentiate between normal and abnormal cardiac and lung sounds with at least 80% accuracy.
2. Perform a comprehensive head-to-toe assessment on a simulated patient with at least 80% accuracy.
3. Demonstrate safe and effective tracheostomy care under supervision with at least 80% accuracy.

CAPSTONE SPOTLIGHT
Kiran Ashraf, MSN, RN
(Kings County)

Title: Nursing Simulation Academy

Educational Strategy – The Nursing Simulation Academy employs a blended learning approach that combines targeted didactic instruction, hands-on simulation, and structured reflective debriefing to build clinical competence and confidence among new graduate nurses. Learners rotate through three high-impact skill stations—Head-to-Toe Assessment, Cardiac and Lung Sounds, and Tracheostomy Care—each followed by immersive simulation scenarios that replicate real-world patient care challenges. The program culminates in a PEARLS-guided debriefing session designed to reinforce key learning points, promote reflective practice, and identify areas for continued growth. This multifaceted strategy supports skill acquisition, interprofessional communication, and readiness for clinical practice.

Evaluation & Feedback – To assess the impact of the Nursing Simulation Academy on learner confidence and perceptions of the learning environment, participants completed pre- and post-simulation surveys evaluating self-reported confidence across key clinical skills, as well as psychological safety and interprofessional communication. The Nursing Simulation Academy demonstrated substantial gains in learner confidence and psychological safety across critical clinical competencies. Participants showed remarkable improvement in their ability to identify lung sounds, with the proportion feeling very or extremely confident increasing nearly sixfold—from just 10% pre-simulation to over 60% post-simulation. Similarly, confidence in performing tracheostomy care and inner cannula changes soared from under 12% to 65%, with no learners reporting low confidence after the program. Beyond clinical skills, the Academy fostered a psychologically safe learning environment, as evidenced by a 26-point rise in learners who strongly agreed that the space allowed them to make mistakes and learn.

This safe environment translated into enhanced interprofessional communication skills, with the percentage of learners who "always" felt comfortable speaking up in team discussions nearly doubling. Collectively, these outcomes underscore the program's effectiveness in equipping new graduate nurses with the competence and confidence essential for safe, collaborative patient care.

Scholarly Dissemination – The Nursing Simulation Academy is currently being prepared for internal presentation and future external dissemination. Planned scholarly outputs include:

- Abstract submission to the *INACSL Conference or Society for Simulation in Healthcare (IMSH)*
- Manuscript preparation for journals such as *Clinical Simulation in Nursing*
- Poster presentation to share findings and implementation methods across NYC Health + Hospitals sites to support broader adoption

Celebrating a Prestigious Honor: Sean Paul Carleton Receives the Bob Waters Memorial Scholarship

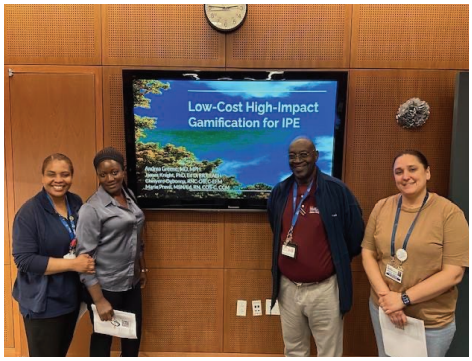
Each year, the Society for Simulation in Healthcare (SSH) awards scholarships to deserving healthcare simulation professionals to attend the International Meeting on Simulation in Healthcare (IMSH). For the 2023–2024 academic year, Simulation Fellow Sean Paul Carleton was honored with the prestigious Bob Waters Memorial Scholarship.

This scholarship commemorates Bob Waters, a visionary advocate for healthcare simulation and a beloved member of the SSH community. Bob became a champion for simulation after witnessing a demonstration at the 2006 American Telemedicine Association meeting. When told that no one had experience lobbying on behalf of simulation on Capitol Hill, his response was immediate and enthusiastic: *"That's where I can help—I'm a lobbyist."* Bob's advocacy and passion left a lasting legacy before his life was tragically cut short by a brain tumor at the age of 55.

In his honor, the Advanced Initiative in Medical Simulation (AIMS) Board and SSH established the Bob Waters Memorial Scholarship Fund to support students, residents, and fellows pursuing careers in healthcare simulation. The scholarship includes full IMSH conference registration, one year of SSH student membership, and a $1,500 travel stipend.

Thanks to this scholarship, Sean Paul was able to travel to San Diego to attend his first simulation conference. There, he not only participated in IMSH but also co-presented with Fellowship Director Dana Trottier and Visiting Faculty Amanda Rothman on a session titled: *"Interrupting 'NO': Improvisation to Rehearse 'Yes' Culture Among Team Members."*

This recognition highlights Sean Paul's commitment to advancing the field of simulation and exemplifies the values that the Bob Waters Memorial Scholarship seeks to celebrate.



2nd Annual Simulation Fellowship Conference

For the second year, we hosted our summative evaluation mock conference: *Collective Competence: Moving from Individual to Collaborative Milestones Mastery.* In small groups, Simulation Fellows practice their milestone of scholarly activity, as they select a focused topic, submit a proposal for review, develop content for a 60-minute hands-on workshop through professional collaboration, and deliver their course to faculty and fellows on the conference day.

Conference presentation criteria mirror that of the International Meeting for Simulation in Healthcare (IMSH) for fellows to have practical experience of simulating the process of submitting a professional presentation.

Across the full-day conference, fellows delivered their workshops entitled:

- *Closing the Gaps: Integrating the Other into Debriefing from SPs to SMEs* by Priya Dhagat, Sean Paul Carleton, Sepideh Mehri, and Stephany Jaramillo
- *Simulation Enhanced-IPE: Gamification for Interprofessional Collaboration* by Andrea Greene, Chinyere Ogbonna, Marie Previl, and James Knight
- *Enhancing Workflow Dynamics through In-Situ Simulations* by James Villamater, Virginia Fioribello, and Kiran Ashraf
- *Crafting Authentic Learning Experiences: Incorporating Social Determinants of Health—a 'SMART' Tank Vignette Workshop* by Adrielle El-Dyson Otoo, Rochelle Mercer, and Debayan Guha

After each presentation, the audience of participants completed a program evaluation of the course and presenting fellows completed self-evaluations of performance. The data from these evaluations were included in their final fellowship evaluations. Since this conference day, two of the four presentation were submitted to the International Society for Simulation in Healthcare conference *Looking Back, Reaching Forward: International Meeting for Simulation in Healthcare*. Congratulations to Sean Paul Carleton, Sepideh Mehri, Stephany Jaramillo, Adrielle El-Dyston Otoo who will be heading to IMSH 2025 to represent our Simulation Fellowship Program!

2024-2025 Fellowship in Healthcare Simulation

On July 15, 2024, The Simulation Center welcomed 16 new fellows into the 2024–2025 Simulation Fellowship cohort. This year's fellows represent a wide range of interprofessional backgrounds from across the health system, including emergency medicine, pediatric emergency medicine, maternal-child health, labor & delivery, infection prevention, anesthesiology, nursing education, behavioral health, child life, and respiratory therapy.

Through intentional recruitment across diverse clinical disciplines, the fellowship continues to expand the reach and impact of simulation-enhanced interprofessional education.

In the first half of the fellowship, fellows participated in collaborative learning experiences covering core areas such as debriefing, simulation methodologies, curriculum design, human simulation, quality improvement, program evaluation, and data analysis. To bridge theory with practice, each fellow initiated at least two targeted needs assessments as part of their Capstone Projects.

These assessments aim to identify and prioritize performance gaps, uncover challenges, and inform the design of effective simulation-based interventions.

While a full review of all 32 needs assessments is beyond the scope of this report, we highlight one particularly illustrative example to demonstrate how a well-designed needs assessment can uncover meaningful insights and perceived learning needs.

Addressing Discharge Education Challenges through Simulation: NCB Needs Assessment Findings

At North Central Bronx (NCB), current fellow Keith Llewellyn conducted a needs assessment titled *Simulation-Based Training for Discharge Education* to evaluate how simulation could enhance patient discharge teaching.

In November 2024, he attended the NCB Nursing Shared Governance Council, where concerns were raised about the variability and effectiveness of discharge education. The assessment survey was completed by 91 healthcare professionals—primarily nurses and respiratory therapists—and revealed significant variability in the time spent on discharge education, averaging 14 minutes but ranging from as little as 3 minutes to as much as 60 minutes per patient. This wide range highlights time constraints as a key barrier, with providers spending markedly different amounts of time with patients.

Other notable challenges identified included limited English proficiency and patients' cognitive or mental status limitations. However, these barriers were predominantly viewed as patient-related, indicating a potential gap in staff confidence or skills in adapting discharge education to meet diverse patient needs. The highest training priorities for improving discharge education were medication administration and tracheostomy care—ranked nearly equally—followed by ventilator management.

Keith plans to leverage these insights to design targeted simulation-based curricula aimed at enhancing discharge education effectiveness, better preparing patients for post-discharge care, and ultimately reducing hospital readmissions at NCB.

2024 SIMULATION FELLOWS

Kiran Ashraf, MSN, RN-BC
Assistant Director of Nursing, NYC Health + Hospitals/ King County

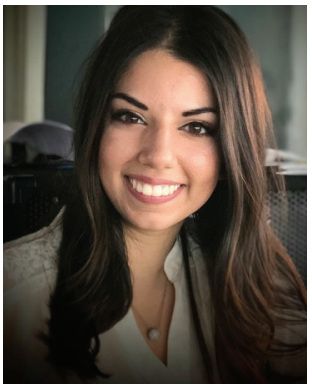
Kiran Ashraf is the Assistant Director of Nursing for the Department of Nursing Education & Research at Kings County Hospital. She started her journey at Kings as an agency nurse. She was then hired as a staff nurse on the Neurology/Stroke unit and soon transitioned to her current position. Ms. Ashraf works collaboratively with Dr. Grueso and the Sims team to deliver multi-disciplinary in-situ simulations to Kings County to optimize the experience for all of the staff.

Sean Paul Carleton, MA, LCAT, RDT
Licensed Creative Arts Therapist, NYC Health + Hospitals/Kings County

Sean Paul Carleton (he/him), MA, LCAT, RDT, is a drama therapist from New York currently working at NYC Health + Hospitals Kings County in the newly opened Extended Care Unit. He has served various populations throughout his time at Kings County including: short term inpatient/adult, long term adult, Partial Hospitalization Program, LGBTQ, geriatric, high medical risk and postpartum depression as well as Dual Diagnosis Specialty Unit: Development/Intellectual Disability and Serious Mental Illness. Before Kings County, Sean Paul worked for Brookdale University Medical Center and supported the redevelopment of Drama Therapy/Creative Arts Therapy programming on their Adult Inpatient Units. He is excited to see the blend of Healthcare Simulation and Drama Therapy and cannot wait to bring more Simulation programming to the Behavioral Health Department at Kings County.

Antoinette Charles, RN
Associate Director of Nursing, Behavioral Health, NYC Health + Hospitals/ Kings County

Antoinette Charles has been a registered nurse for over 10 years. She earned her RN certification from the Borough of Manhattan Community College. After graduating, she began her career in Med-Surg, and transitioned to an outpatient chemical dependency clinic until she joined NYC Health + Hospitals/Kings Behavioral Health service in 2014. During her years in psychiatry, she transitioned from a staff nurse to head nurse to an Assistant Director of Nursing in the nursing education department. Currently, she is the Associate Director of Nursing in Behavioral Health. Over the last five years, she has continued to care for vulnerable patient populations in her community where she has found a love for mentoring, coaching, and teaching new nurses.



Priya Dhagat, MS, MLS (ASCP) CM, CIC
Associate Director of System Special Pathogens Program, NYC Health + Hospitals/ Emergency Management

Priya Dhagat is an Infection Preventionist and the Associate Director of the System-wide Special Pathogens Program within the Department of Emergency Management at NYC Health + Hospitals, overseeing special pathogen preparedness and response efforts across NYC Health + Hospitals frontline healthcare facilities. Additionally, she supports and offers subject matter expertise for infection prevention topics for the National Emerging Special Pathogens Training and Education Center (NETEC). Priya holds a Master of Science degree in Infectious Diseases from Drexel University College of Medicine and a Bachelor of Science degree in Clinical Laboratory Science from Texas State University. She holds certifications in Medical Laboratory Science, Infection Prevention and Control, and Healthcare Emergency Preparedness.

Virginia Fioribello, CNM
Midwife, NYC Health + Hospitals/Jacobi

Virginia Fioribello (she/her) currently works as a midwife at Jacobi Medical Center. With over a decade of experience, she strives to provide individualized care with an 'ask me anything' mentality. Passionate about reproductive rights and bodily autonomy, she also provides abortion care in the Options Clinic. She believes that midwifery care helps to strengthen and support the individual through life's most vulnerable transitions, which in turn helps build the foundation for empowered families and communities. Virginia lives upstate in the woods with her husband (Adam), son (Levi), and two dogs (Fozzie Bear and Mei). She enjoys livemusic, baking challah, scuba diving, and the great outdoors.

Andrea G. Greene, MD, MPH
Attending Physician NYC Health + Hospitals/Queens

Andrea is an emergency medicine physician at Queens Hospital. She recently completed her residency training at Kings County Hospital Center and SUNY Downstate and completed medical school and a masters degree in public health at SUNY Downstate Health Sciences University. Andrea is interested in utilizing simulation to improve communication between and among providers and patients in the emergency department. In addition to learning all about simulation tools for health provider education and skill acquisition, she hopes to spend the year exploring how simulation can be used to deepen our awareness of and involvement in diversity, equity and inclusion in healthcare.

Debayan Guha, MD
Attending Physician, NYC Health + Hospitals/Jacobi

Debayan has lived his whole life in New York City. He completed his undergraduate work at Columbia University and medical school at Albert Einstein College of Medicine. After finishing his residency in emergency medicine at Jacobi Montefiore, he will be staying on as a Simulation Fellow for the upcoming year. Outside of his interests in medical education and emergencies, Debayan enjoys basketball, music, and cooking.

Stephany Jaramillio
Attending Physician, NYC Health + Hospitals/South Brooklyn Health

Stephany Jaramillo is an Emergency Medicine Physician, practicing at NYC Health + Hospitals: South Brooklyn. Her capstone project focused on knowledge retention, specifically to the skill of chest tube insertion. After mastery training for chest tube insertion, learners were re-evaluated, appreciating skill retention at 6, 9 and 12 months. Stephany also worked on ventilator skill training and has submitted an article to MedEd Portal.

James Knight, RT
Director of Respiratory Care, NYC Health + Hospitals/ Woodhull

Healthcare/ Regional Trauma Center 760 Broadway Brooklyn NY 11206. P/S: 375 patient beds. Manage staff of 37. Responsible for Policy development, fiscal budget, Provides leadership in the development of performance standards, represents the hospital internally and externally in its daily operations, complete various hospital audits, evaluates all employee performance, develops and evaluates quality improvement metrics, conducts monthly meetings and delegates appropriate duties to department staff as needed, plans and develops in-service and competency training for staff. EDU: Doctorate in International Educational Development Columbia University (2006), Doctor of Philosophy in Clinical Health Sciences Thornhill University (2007), A/A: American Association for Respiratory Care; American College for Sports Medicine; Faculty, American Heart Association; Basic Life Support Instructor, Regional EMS Council of NY Inc. Current Chair, NYC Health + Hospitals Respiratory Directors' Council, Fellow Americas Essential Hospitals.

Sepideh Mehri, MD, MAS-PSHQ
Attending Physician, NYC Health + Hospitals/Bellevue

Sepideh Mehri is a board-certified Obstetrician-gynecologist at NYC Health + Hospitals/Bellevue, where she also serves as director of the simulation. Additionally, she is a Patient Safety Officer and an Associate Professor of Obstetrics & Gynecology at NYU School of Medicine. Dr. Mehri has a special interest in improving the safety and quality of obstetrics and reduction of severe maternal morbidity and mortality. She earned a Master of Applied Science in Patient Safety and Healthcare Quality from John Hopkins University. Her mission is to use simulation-based training to help build a safer future in the health system.

Rochelle Mercer, LMSW
Associate Director of Social Work, NYC Health + Hospitals/Central Office

Rochelle Mercer is a NYS Licensed Master Social Worker. She obtained her Masters in Social Work degree from Adelphi University. Rochelle has worked in various settings within the field of Social Work and has served in various roles, including special projects and managerial duties, within child welfare, mental health, substance use, early intervention. She is currently serving as an Associate Director of Social Work for the Maternal Home Program at NYC Health & Hospitals.

Rochelle strives to provide a supportive and empathic safe space for pregnant women and ultimately anyone she encounters. Throughout her clinical experience, establishing therapeutic alliance with her patients have been invaluable. Rochelle is dedicated to supporting her patients through their self-actualization process, while encouraging the highest level of care and compassion. Motivational interviewing has been her go to tool in ensuring the strength-based perspective is at the forefront of patient care. Rochelle takes pride in her family and her birth place, the beautiful British Virgin Islands. She enjoys community service, singing, dancing and event planning and decor. Her favorite quote is, "Out of the mountain of despair, a stone of hope" (MLK, Jr.). No matter the circumstance, trouble doesn't last always. Her mantra is, know your baseline, stay grounded and remain steadfast in your faith.

Chinyere Ogbonna
Staff Nurse, NYC Health, + Hospitals/Queens

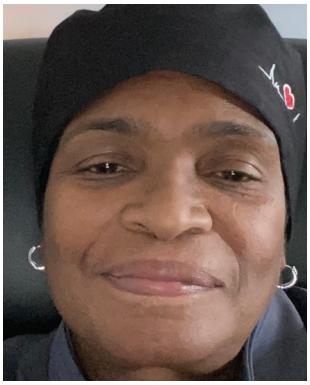
Chinyere is a registered nurse in the Labor and Delivery unit of NYC Health + Hospitals/ Queens for over 15 years. She obtained her associate degree in nursing in 1997 in Nigeria, and her bachelor's degree in the US in 2017, becoming OB-certified that same year. She was appointed as simulation champion of her unit in 2019, and since then has worked with the maternal mortality reduction program team that facilitate simulation in my facility. When she is not working, Chinyere enjoys cooking a variety of international dishes for her family.

Adrielle Asantewaa El-Dyson Otoo, CNM Midwife – NYC Health + Hospitals/North Central Bronx

For Adrielle Asantewaa El-Dyson Otoo, born in Ghana, West Africa to a high school teacher, education has long been a passion. A wife and mother of two, Adrielle is a current member of the NCB simulation team. She received her formal Nursing education at SUNY Buffalo and Midwifery at SUNY Downstate, and has a total of 12 years in the field of nursing, with experience in Med/Surg and Women's Health. With over six years of experience in midwifery as full-scope midwife at NYC Health + Hospitals/North Central Bronx, Adrielle believes that being a Simulation Fellow will prepare her to provide and abridge gaps in knowledge and improve patient care.

Marie Previl, RN
Supervisor of Nurses Health/Home Care – NYC Health + Hospitals/ Community Health

Marie Previl is a Supervisor of Nurses with NYC Health+ Hospitals Community Care. She has a Master's in Nursing Education and has been a Registered Nurse for almost 30 years. During her career, Marie Previl has worked as a Staff Nurse, Long-Term Care Nurse, and Community Health Nurse. She is passionate about providing compassionate and quality care to her patients while remaining mindful of their preferences and needs in the community. Marie Previl is a patient and nurse advocate. She plays a vital role in preparing and coaching new Community Health Nurses. Marie Previl loves gardening, watching soccer, and traveling with her family during her free time.



Sandra Thompson, RT
Associate Respiratory Therapy – NYC Health + Hospitals/Harlem

Sandra has been a New York State licensed Respiratory Therapist for the past 20+ years. She is currently serving as the Clinical Educator and Supervisor for the Respiratory Therapy Service. She provides training for Nurses, Physicians, Respiratory Therapists as well as all other ancillary services within the hospital. Sandra has a Bachelor of Science in Community Health, and holds degrees in Respiratory Therapy and Medical/Surgical Nursing. She is a New York State licensed Respiratory Therapist who plans to take the NCLEX RN exam to assist her in her Simulation Education Training.

James Villamater, BSN
Head Nurse, Emergency Pediatrics – NYC Health + Hospitals/Bellevue

James Villamater is the Head Nurse in the Pediatric Emergency Services in Bellevue Hospital. He has been employed in the Bellevue Emergency Department for 13 years, and has focused his career specializing in pediatric care, including pediatric trauma. Education has been central in his career through preceptorship, where he began incorporating simulation training to improve nursing best practices and patient care with those he orients and his fellow staff members. James has been an instrumental member in the renovation of the Bellevue pediatric trauma slot, and trauma education in his department.

MATERNAL MORTALITY REDUCTION PROGRAM

Reflecting on the Sixth Year of the Maternal Mortality Reduction Program

Reflecting on the sixth year of the Maternal Mortality Reduction Program, the team remained committed to its mission: to reduce preventable maternal deaths and improve outcomes for birthing people. Through simulation-based learning, implicit bias awareness, and collaborative partnerships, we worked to address disparities and critical gaps in maternal care. Despite notable shifting needs and staffing changes, our team adapted, evolved, and achieved meaningful progress across multiple fronts.

2024 First Half: Obstetric Emergency Simulations and Expanded Training

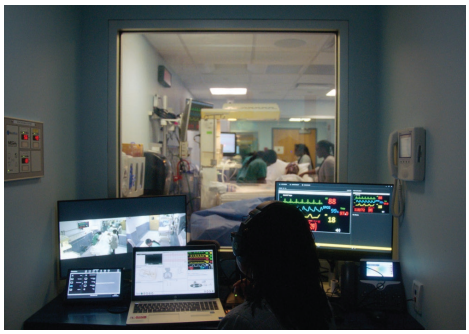
During the first half of 2024, the MMRP team delivered Obstetric Emergency Simulations across our 11 partner facilities. We continued our on-site simulation efforts with multidisciplinary staff, focusing on previous scenarios including Cardiac Arrest, Postpartum Hemorrhage, Shoulder Dystocia, and Hypertensive Disorders.

Additionally, OB Stat simulations were conducted consistently throughout the first quarter of the year to reinforce the OB STAT escalation protocol and interdisciplinary coordination.

These simulations were particularly valuable as we expanded our training focus to include transitions from the Labor & Delivery unit to the operating room and the timing of that process.

Milestones: New Team Member and Engaging in "Two Way"

Toward the end of 2024, the MMRP team experienced two special milestones. First, we were excited to welcome a new member to our team: Morenike Jegede, a certified midwife. Her expertise brings a valuable perspective to our ongoing work, especially as we continue to support simulation efforts across facilities. We're thrilled to have her onboard and look forward to many more impactful simulation experiences with her involvement.



Second, the MMRP team, alongside some of our OB nursing and midwifery partners, in collaboration with Elmhurst Hospital, had the unique opportunity to participate in a short film titled *Two Way,* by creative artist Carolyn Lazard. The exhibition features a childbirth simulation led by an all-Black healthcare team and a Black birthing mannequin named Jada.

The film explores the concept of the "fiction contract"—the mutual understanding among simulation participants to fully engage with the scenario while recognizing its simulated nature. This work critically examines the role of simulation in medical training and how it can be used to confront and address racial disparities in maternal healthcare. We were honored to be a part of such a meaningful project.

Bridging Gaps with Virtual Reality and Comprehensive Training

Throughout the year, MMRP continued to utilize virtual reality as part of the Emergency Department RN Fellowship training, helping to bridge the gap between OB and non-OB units when it comes to maternal emergencies.

These sessions provided in-depth instruction on postpartum hemorrhage management, along with standard procedures for caring for laboring patients who may arrive in the emergency room. In addition to virtual reality and PPH management, MMRP provided content on implicit bias, teamwork, and communication to the ED nursing cohort.

Research Initiatives: Chart Review and Performance Evaluation

On the research front, our team continued a retrospective chart review of Maternal Hemorrhage deliveries between 2020 and 2022, examining the use of uterotonic agents, TXA utilization, massive transfusion protocol, and other targets.

Our ultimate goal is to evaluate the impact of our simulation interventions while creating a tool to check the performance of all our units with a lens toward hemorrhage, to see if we need to polish skills and apply educational refreshers.

2024 SYMPOSIUM

7th Annual Simulation Symposium

The symposium featured several notable speakers who shared their expertise:

- Katie Walker and Dr. Ben Symon opened the conference by discussing the power of relationships in critical care. Their qualitative research explores teachable skills for new teams and draws insights from sports team dynamics that can be applied to healthcare.
- Dr. Daniel Lugassey, Simulation Director and Toxicologist at Elmhurst Hospital Center, highlighted simulation as a strategy for clinicians to improve bedside behaviors and build stronger patient connections, particularly in addressing the opioid epidemic.
- The JoyDew program, in collaboration with Jacobi's Simulation Team, presented their initiative to train providers on engaging with the autistic patient community. This program involved individuals with autism participating in training and providing feedback to emergency medicine providers.
- Dr. Green, Dean of CUNY School of Medicine, shared her experience building a diverse physician workforce. She emphasized that patient comfort with physicians who share their background can significantly improve adherence to healthcare recommendations.

- Dr. Susan Eller concluded the keynotes by presenting her research on psychological safety, defining it as the belief within a group that it's safe to take risks without fear of reprimand. Her qualitative research explored factors that contribute to both psychological safety and harm.

The central theme of Relationship Management permeated all presentations, providing valuable insights that will inform future course development and be applied across all aspects of our work.

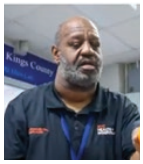
2024 SYMPOSIUM AWARDS AND RECIPIENTS

IMSAL was honored to present six Healthcare Simulation Commendation awards during the 7th Annual Simulation Symposium held on April 24, 2024. These awards honor the wonderful achievements of selected individuals and teams at NYC Health + Hospitals and their unique leadership through simulation activities within the healthcare system.

The following awards were presented:

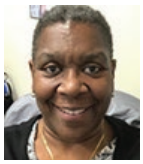

Outstanding Simulation MMRP Program Contribution by an Individual

presented to **Adrian L. Dozier, DNP, MSN, RN, FNP-BC (Lincoln), Frederika Pierre, MSN, RN, FNP-BC (Bellevue)**, for their exceptional leadership and outstanding professional contributions to shaping the role and advancing the practice of obstetrical care to reduce maternal mortality and morbidity.



Outstanding Support by a Simulation Stakeholder

presented to **Levaughn McCloud (Kings County)** for his ongoing care and maintenance the learning environment at the Satellite Simulation Center at Kings County, thereby improving the learner experience and satisfaction.



Outstanding Simulation Program by a Simulation Fellow Graduate

presented to **Maureen P. Samuels, MSN, RNC-NIC (Harlem)** for her ongoing leadership and successful delivery of simulation education activities, and her unwavering partnership with the Simulation Satellite Center at NYC Health + Hospitals/Harlem.

Outstanding Simulation Event

presented to **James Villamater, BSN (Bellevue)** for developing, filming, and editing an impactful 2023 Simulation Week Video showcasing healthcare simulation education across NYC Health + Hospitals Bellevue.

Outstanding Simulation Program Contribution by an Individual

presented to **Jessica Pohlman, MPA, MEd (Central Office-Simulation Center)** for her leadership and dedication to systemwide healthcare simulation operations, from partnering with high level stakeholders to collaborating with local leadership to ensure safe and effective delivery of simulation programming.

Simulation Center Director of Operations Jessica Pohlman celebrates receiving her Simulation in Healthcare Award with colleagues.

Outstanding Simulation MMRP Program by a Healthcare Team

presented to **NYC Health + Hospitals/ Woodhull** for their resilience and dedication to improve maternal outcomes through enhancing teamwork and communication, and their continued passions to implement action items for the benefit of the unit and birthing moms.

We congratulate all of the amazing 2024 Simulation in Healthcare award winners!

NURSING FELLOWSHIP

In February 2024, Manjola Laci, MA, RN, CCRN, was appointed Director of Nursing at IMSAL. Her responsibilities include managing the Emergency Department (ED) nursing fellowship and facilitating the launch of new fellowships. Under her direction, IMSAL successfully initiated the Critical Care Fellowship in April 2024 and the Operating Room (OR) Fellowship in July 2024.

Furthermore, IMSAL provided RN Educators with specialized curriculum covering Debriefing, Scenario Design, and Manikin Operation. This training aimed to equip educators with the skills necessary to effectively design, implement, and debrief simulation scenarios. Ongoing feedback and coaching were also provided to optimize teaching methodologies and improve participant learning outcomes.

Nursing Fellowships Currently Running at the Simulation Center:

- ED Nursing Fellowship May 2023 – Present Jan 2025 cohort 22
- Critical Care Nursing Fellowship April 2024 – Present Jan 2025 cohort 9
- OR Fellowship July 2024 – Present Jan 2025 cohort 5

Critical Care Fellowship in Action – Pulmonary

To enhance nurse educator training, IMSAL developed a toolkit with evidence-based resources. This toolkit aims to support educators in fellowships and residencies, and will be shared with collaborators. It includes:

- **PEARLS Debriefing Tool**: For structured debriefing.
- **OSAD Tool**: For debriefing self-assessment.
- **Simulation Scenario Evaluation Tool**: To assess scenario quality.
- **IMSAL Sim Template**: For structured scenario design.
- **Simulation Best Practice Slides**: For creating a safe learning environment.
- **Updated Sim Center Prebrief**: To guide learner orientation.
- **Comprehensive Guidelines**: Covering all training phases.
- **Guidelines:** Step-by-step understanding of everything from check-in to set up, dry run of scenarios, etc.

Data on Center Utilization for 2024

Course/Events	Session Count	Training Encounters	Course Hours (Duration)	Contact Hours
Courses developed to support nurse educator professional development on creating and executing simulation scenarios				
Basics Introduction to Debriefing	9	54	4	216
Introduction to Debriefing	5	23	7	161
Manikin Operations	14	39	3	117
Scenario Design	3	18	7	126
Sessions and training encounters by nursing fellowships				
ED Nursing Fellowship	127	3,044	4	12,176
Nursing Critical Care Fellowship	65	923	4	3,692
Nursing OR Fellowship	35	309	4	1,236
Center utilization by nursing residency program				
Nurse Residency Program	2	236	7	1,652

Pre- and Post-Survey Results for Critical Care and OR Nursing Fellowship

IMSAL enhanced Nursing Fellowship educators' skills through training in debriefing, simulation design, and manikin operation, supplemented by mentorship and resources. A survey, conducted before and after training, demonstrates significant educator growth, as presented in the accompanying PowerPoint. The results/ PowerPoint demonstrate the following:

- Increased confidence in creating scenario objectives in both critical care and OR
- Increased confidence in scenario design in both critical care and OR
- Increased confidence in running a scenario/manikin operations/pivoting during a scenario in both critical care and OR
- Increased confidence in debriefing in both critical care and OR
- Offer insights into barriers associated with delivering the fellowship
- Offer insights into opportunities for further development

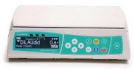
The PowerPoint includes a case study with an example of the OSAD (a validated tool used for debriefing) at the start of a nurse educator's experience, and highlighting the growth after cohort 3.

This work is very much aligned with growing the quality of our nurse educators throughout the system. We are continuing this effort at the simulation center and we are starting to think about how to scale it to create opportunities for other nurse educators joining in the Spring and Fall 2025.

Massive Transfusion Protocol in the OR

OR Fellowship Set up Environment

Nursing Fellowship Equipment Purchases for 2024

Equipment		Purpose
3 Braun IV Pumps		Practicing intermittent and continuous delivery of parental fluids, medications, and blood products.
2 Mayo Adjustable Stainless Steel Trays		Small, moveable table that is designed to hold sterile instruments and supplies during surgeries.
Malignant Hyperthermia Cart		Used to identify patient risk of MH and preventing an MH crisis.
CAC Cart		A mobile set of drawers equipped with life-saving medications, equipment, and tools required during critical emergencies, such as cardiac arrest or respiratory failure.
Post-Partum Hemorrhage Cart and Blood Products		Well stocked cart that allows clinical staff to have quick access to equipment, supplies, and medications needed for moms who are at risk for excessive bleeding following a delivery.

UPCOMING NURSING FELLOWSHIPS FOR 2025

★

NICU FELLOWSHIP SPRING 2025

★

PACU FELLOWSHIP FALL 2025

PUBLICATIONS AND PRESENTATIONS

Publications

Meguerdichian MJ, Trottier DG, Campbell-Taylor K, Bentley S, Bryant K, Kolbe M, Grant V, Cheng A. When common cognitive biases impact debriefing conversations. Adv Simul (Lond). 2024 Dec 18;9(1):48. doi: 10.1186/s41077-024-00324-0. PMID: 39695901; PMCID: PMC11656545.

Saggar V, O'Donnell P, Moss H, Yoon A, Lutz C, Restivo A, Ahmed O, Guha D, Jafri F, Singh M. Effectiveness of a virtual reality trainer for retention of tourniquet application skills for hemorrhage control among emergency medicine residents. AEM Educ Train. 2024 May 8;8(3):e10986. doi: 10.1002/aet2.10986. PMID: 38738183; PMCID: PMC11079436.

Presentations

IMSH 2024 – Developing a Novel Framework for the Creation of Large-Scale Trauma Simulations #117 Poster Presentation (Authors: Meshel, A; Bentley, S.)

Creating Complex Team Simulation: Quality Improvement Methodologies to Design a Large-Scale InSitu Experience – Workshop (Presenters: Meshel, A.; Grueso, D.; Bentley, S.; To, J.; Greene, A.)

Interrupting "No": Improvisation to Rehearse "Yes" Culture Among Team Members – Workshop (Presenters: Trottier, D; Rothman, A; Carleton, S)

Blind Spots in Debriefing: Implicit Bias and What to Do About It – Workshop (Presenters: Meguerdichian, M; Blankenship, Z; Trottier, D; Campbell-Taylor, K; Bryant, K; Grant, V; Charnetski, M; Cheng, A; Sarabosing, J)

Developing Scripted Debriefing Tools to Facilitate Dialogues on Implicit Bias – Workshop (Presenters: Trottier, D; Blankenship, Z; Meguerdichian, M; Yusaf, T; Jaramillo, S; Ashraf, K)

Expecting the Unexpected: Developing Educator Strategies to Respond to Learner Curveballs During Course Delivery – Virtual Experience/asynchronous (Presenters: Trottier, D; Campbell-Taylor, K; Yusaf, T)

ChatMD: A Novel Artificial Intelligence Chatbot to Simulate Code Status Discussions – Asynchronous Learning Presentation (Presenters: Lichter, J; Trottier, D)

Postpartum Hemorrhage – Low-resource Model for Surgical Management – Workshop (Presenters: Grueso, D; Yusaf, T; Mehri, S)

Hot Topics: Evaluating Curriculum on Maternal Substance Use Disorder and Implicit Bias – Presentation (Presenters: Yusaf, T)

LOOKING FORWARD

As healthcare simulation strategies gain wider adoption across the system, the immediate need for launching robust satellite programs and constructing dedicated simulation spaces at every institution is not being met. In response, IMSAL is strategically restructuring itself as a service-based program. This means that for high-utilization disciplines, we will develop both the human resources and equipment necessary to support robust quality improvement and educational training initiatives.

Moving forward, the structure will initially include four service areas. The first is the core team's service, which focuses on central office training initiatives, including courses such as Central Line and Code Team Training, among many others. The Maternal and Perinatal Health Service will leverage the expertise of the Maternal Mortality Program while also facilitating quality improvement projects related to these disciplines. The Nursing Service will support Nursing Fellowship training and develop/support programs specifically targeting nursing. Finally, the Behavioral Health service arm will focus on trainings partnered with the Department of OBH, including the Opiate Use Disorder Program, Psychiatric Social Health Technician Program, and Violence Prevention Program. Each service arm will target specific outcomes and data points to drive its initiatives and demonstrate success.

If this model proves successful, IMSAL could expand into other areas. The most likely service arms on the horizon include a Quality Improvement Consultation Service line, offering resources to our Quality and Patient Safety colleagues for performing rapid experiments and evaluating process improvements. Another possible service line is Anesthesia, as the evolving technology of ventilator simulators has expanded the potential content that can be trained experientially.

This new strategic approach does not completely abandon the hub-and-spoke model but rather serves as a temporary measure until the system has the capacity to support individual satellites capable of providing high-quality simulation experiences. As this new strategy empowers our staff, I am excited to see the innovative contributions their brilliant minds will produce in the coming year!

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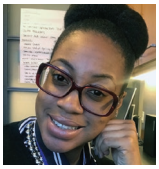

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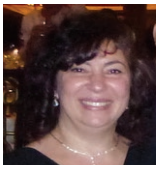

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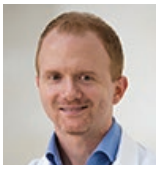

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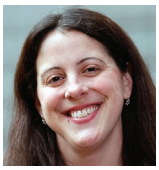

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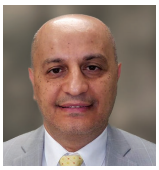

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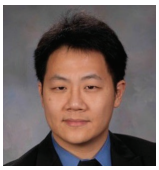

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