

THOMAS JEFFERSON
UNIVERSITY HOSPITALS

Nursing Annual Report **2020**



Jefferson Health®

HOME OF SIDNEY KIMMEL MEDICAL COLLEGE





THE JEFFERSON NURSE

Mission

We improve lives through extraordinary nursing care.

Vision and Values

We put people first by creating a caring environment for patients and each other.

We are bold and think differently to find creative and meaningful ways to transform care delivery.

We do the right thing by putting patients at the center of everything we do.

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Transformational Leadership



A Message from the Chief Nursing Officer

WELCOME TO THE THOMAS JEFFERSON UNIVERSITY HOSPITALS (TJUH) 2020 NURSING ANNUAL REPORT.

This year was a year like no other! In spite of the challenges of the global pandemic, Jefferson nurses continue to lead the way in innovation, creativity and grace. In this year's annual report, we celebrate the many accomplishments of our talented nursing staff in our hospital, ambulatory practices, and the community, as well as our impact at home and around the world.

As we continue our work around creating a nationally recognized culture of nursing excellence, this year's report is centered on the key elements of the Magnet® Recognition Program. You will see wonderful examples of caring, compassion and innovation in the areas of Transformational Leadership, Structural Empowerment, Exemplary Professional Practice and New Knowledge and Innovations. Each of these key areas of focus allows us to deliver an outstanding experience that is patient- and family-centered and anchored in quality, reliability and safety.

Each day, our nurses demonstrate our values of putting people first, being bold and thinking differently, and doing the right thing – through their expertise, skill, training and compassion – all key elements of our mission to improve lives. Our strong culture centered on a staff-led shared governance model allows our nurses to be in

control of their clinical practice, develop innovative strategies to meet the complex needs of our patients and their families, and conduct research to further the practice of nursing well beyond the walls of TJUH.

Understanding that each of our nursing care teams is unique, our report highlights several of our key clinical services. In addition, you will learn about how our nurses are meeting the needs of our community through health outreach, education and of course, their incredibly selfless response to the COVID-19 pandemic.

I hope you enjoy reading about the achievements of our amazing nursing staff. They are serving our community in so many remarkable ways, and I am honored to lead this outstanding team of professionals.

With warm regards,

Jeffrey N. Doucette
DNP, RN, FACHE, NEA-BC, FAAN

Senior Vice President and Chief Nursing Officer

A Message from the Nursing Professional Governance Co-Chairs

As past and present Nursing Professional Governance leaders, we want to welcome you to the Thomas Jefferson University Hospitals (TJUH) annual nursing report.

Nursing Professional Governance is a driving force at TJUH. As we continue our journey to becoming a designated Magnet® Center of Excellence for the fourth time, putting us in an ultra-elite category, we turn to our clinical nurses for inspiration and leadership. Nurses at TJUH own their culture and their practice. Clinical nurses are represented at every level of leadership, from the bedside to the Jefferson Health enterprise. We pride ourselves in the fact that clinical nurse leaders sit at the table with the senior vice presidents and the chief nursing officer, making high-level organizational decisions side-by-side.

The pandemic has put a damper on many things, but it has not affected the Jefferson nursing spirit. The nurses at Jefferson have risen to the occasion and beyond. From fearlessly suiting up to provide compassionate and exceptional care to the largest number of COVID-19 patients in Philadelphia, to making the nation smile with videos of music and dancing in a time when smiles were few and far between, nursing at Jefferson is truly in a class all its own.

Join us in reading about our impressive accomplishments in 2020, and look for even greater things in 2021!

Kate Andrews
MSN, RN, CCRN, CNS, JMH MICU
 Former NGB Co-Chair

Erin Kelley, BSN, RN, CCRN, SCRNP
 Clinical Nurse, JHN NICU, NPG Co-Chair

Tara Smith, BSN, RN, CCRN
 Clinical Nurse, Rapid Response Team
 NPG Co-Chair



Above:
 Kate Andrews, MSN, RN, CCRN, Clinical Nurse SICU, (now CNS JMH MICU) Shared Governance Co-Chair, April 2018 – June 2020 with Jeff Doucette, Senior Vice President and Chief Nursing Officer

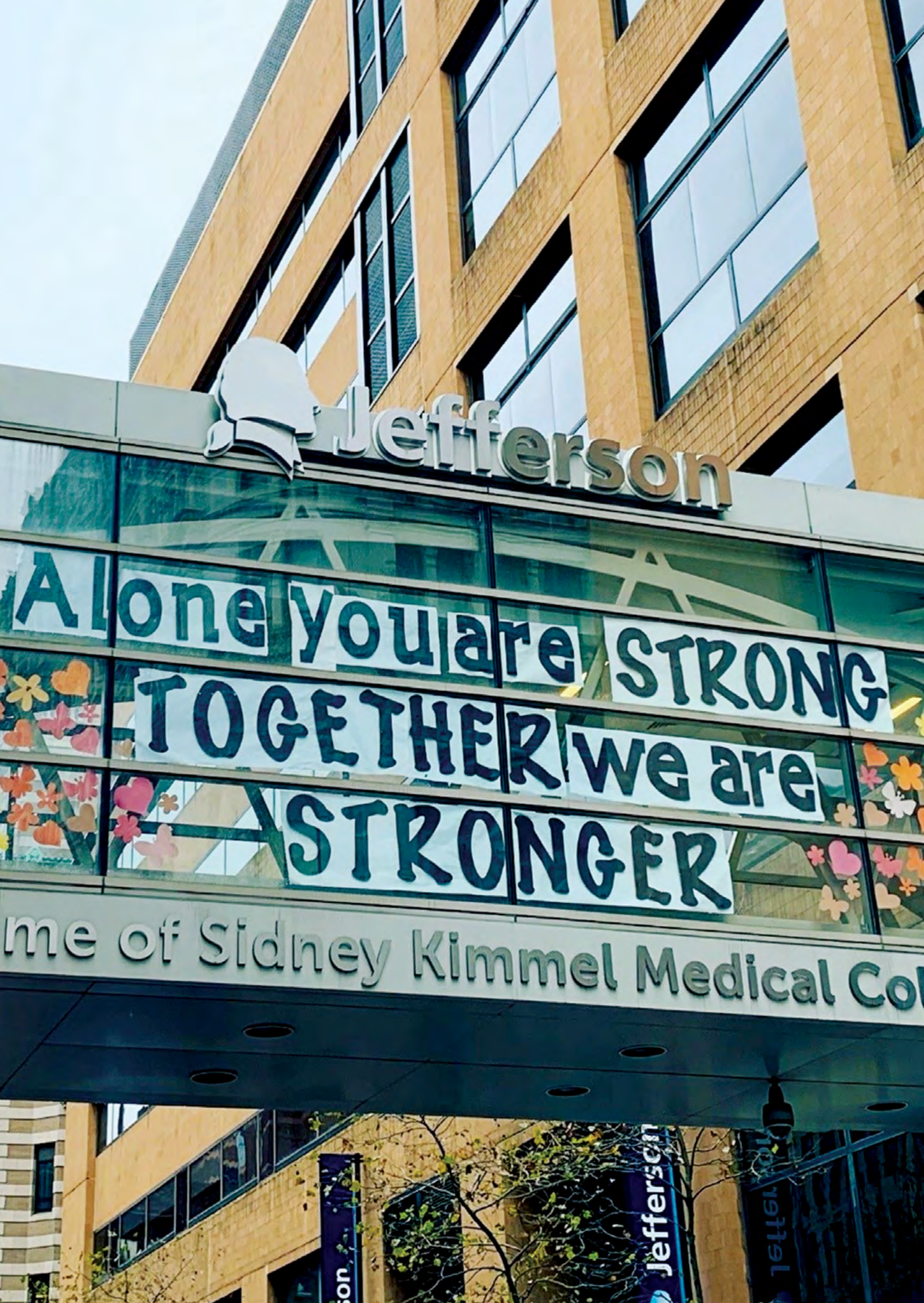
Left:
 Tara Smith, BSN, RN, CCRN, Clinical Nurse RRT and Erin Kelley, BSN, RN, CCRN, SCRNP, Clinical Nurse JHN NICU, Shared Nursing Leadership Co-Chairs, June 2020, with Jeff Doucette, Senior Vice President and Chief Nursing Officer



The Jefferson Nurse: A Transformational Leader in the COVID-19 Pandemic: Improving Lives Together

IN THE YEAR 2020, THE INTERNATIONAL YEAR OF THE NURSE, THE NURSES AT TJUH HAVE DISPLAYED THEIR STRENGTH, RESILIENCE AND UNWAVERING DEDICATION TO CARING FOR PATIENTS AND FAMILIES.

Individually and as teams, nurses have acted as transformational leaders at the bedside in this unprecedented time. Nurses have made unimaginable personal sacrifices in the past year to provide expert and personalized care to patients. They have been on the frontlines, working with physicians and clinical teams, providing nursing interventions for patients participating in multiple COVID-19 clinical trials. We honor and thank all of the nursing teams for their tireless commitment to caring for their patients and caring for each other. The stories featured are only a small representation of the magnitude of nursing's contributions to TJUH's response to the COVID-19 pandemic.



Kristie Bowen, RN, of the Jefferson Methodist Hospital ER, spoke to CBS3 Philly News about her emotional decision to keep her kids with her parents during the pandemic. Kristie hopes that what people will take away from a photo of her saying good-night to her children through a glass door is to "Please stay home. I know it's not ideal right now, but we're seeing the effects firsthand inside the emergency room, and the numbers are rising," she said. "We need to keep everyone safe, and it's the only way we're going to do this."

Jefferson outpatient care nurse **Shaina Kowalick, RN, BSN**, was recently deemed a "Hometown Hero" by 6ABC Action News. For the last four months, Shaina has volunteered her time working at our COVID testing site at the Navy Yard. "I just felt like I needed to do my part, so I wanted to volunteer and help out at the testing site so at least I could somehow help fight this pandemic," said Shaina. Thank you to Shaina and all of our Jefferson heroes!

Alex Chiem, RN, BSN, a clinical nurse on B4 at Jefferson Methodist Hospital had the honor of throwing out the first pitch of the 2020 Philadelphia Phillies season. Thanks to Alex and all of our healthcare all-stars for the great work you are doing every day!

Jennifer Gil, MSN, RN, Clinical Nurse, TJUH ED was one of the first frontline clinicians to receive the first dose of COVID-19 vaccine from Jeff Doucette, Senior Vice President and Chief Nursing Officer in December 2020. Jeff and many other nurse leaders worked tirelessly to assist with vaccine administration for frontline staff and clinicians.

Ellen Showcases TJUH Swab Squad on National Television

Jeffery Salvatore, MSN, RN, CCRN-CMC, a clinical nurse specialist, and a team of Jefferson pool/float nurses became overnight superstars when they took R&B artist Ciara's Level Up dance challenge and the video went viral. Ciara reposted the video to her 25.1 million followers on Instagram, which led to local and national media coverage, including Good Morning America. The morning show also featured the video clip during an interview segment with Ciara and her husband, Seattle Seahawks quarterback Russell Wilson, who are donating more than a million meals during the COVID-19 crisis. 'The Original Swab Squad' Jefferson dancers posted this on Instagram: "Friendly disclaimer — we waste no PPE. We take our jobs, our patients, and the resources we use seriously. However, we also take our team morale and mental health just as serious(ly)."

The teamwork, courage and sense of family that represent all Jefferson Health caregivers were featured in the national spotlight when The Ellen Show showcased Senior Vice President and Chief Nursing Officer Jeffrey Doucette, DNP, RN, NEA-BC, FAAN and a team of TJUH nurses on her April 21 show, and again in November.

A large group of our caregivers — the "Swab Squad" — was featured during the segment with Ellen, who took time to interview various staff members. They shared their heartfelt sentiments about working at TJUH during this difficult time.

During the feature, Ellen announced a \$50,000 donation to our COVID-19 Better Together Fund, provided by Shutterfly. She also surprised our team with a special thank-you message that was recorded by Ciara and Russell Wilson from their home.

The Swab Squad also won a Webby Award for Special Achievement; attained a virtual honor at the closing bell of the New York Stock Exchange; and was honored as Healthcare Heroes on MTV's VMAs.



Jefferson Nursing's COVID-19 Journey

Left, clockwise:

Jennifer Gil, MSN, RN, Clinical Nurse, TJUH ED is one of the first nurses to receive the COVID-19 vaccine. Her shot was administered by Senior Vice President and Chief Nursing Officer Jeff Doucette.

Kristie Bowen, RN, Jefferson Methodist Hospital ER, visits her children.

6ABC "Hometown Hero" Shaina Kowalick, RN, BSN

Alex Chiem, RN, BSN, with the Phillie Phanatic.

Below:

The Original Swab Squad's appearance on Ellen, a screenshot of the nurses' viral video of Ciara's "Level Up" dance, and the Swab Squad, led by Jeffery Salvatore, MSN, RN, CCRN-CMC, accepting their MTV Video Music Award.



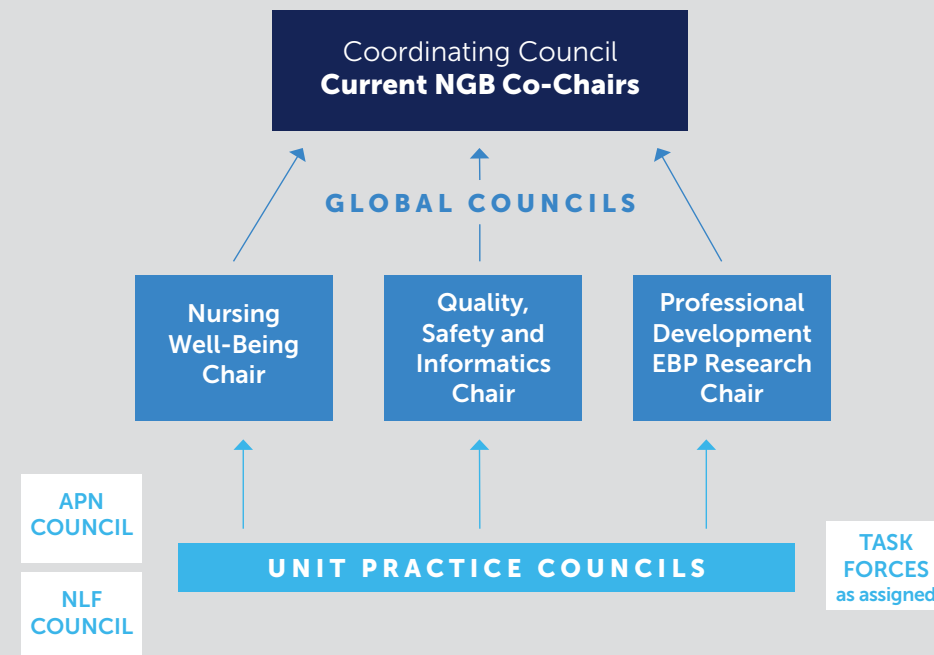
Structural Empowerment

Shared Governance Redesign

In December 2019, over 123 clinical nurses, advanced practice nurses and nurse leaders from TJUH came together to redesign the Nursing Shared Governance structure. A redesign subcommittee was formed and met in January and February 2020 to refine the ideas generated at this retreat. A new design for Nursing Professional Governance was created and revised many times due to the COVID-19 pandemic.

The Nursing Professional Governance purpose statement is: "The Jefferson Nurse is empowered to use the inclusive platform of shared governance to act as a change agent through transformative decision making and evidence-based practice. We are dedicated to this purpose in order to improve patient outcomes across the care continuum and (to) enhance our professional well-being and interprofessional collaboration."

NPG SHARED LEADERSHIP COUNCIL STRUCTURE



3 GLOBAL COUNCILS AND COORDINATING COUNCIL

Scope: Hospital level committees that will identify and act on specific practice areas

NURSE WELL-BEING	QUALITY, SAFETY AND INFORMATICS	PROFESSIONAL DEVELOPMENT, EBP AND RESEARCH
<ul style="list-style-type: none"> • Staffing • Recruitment and retention • Well-being • Interprofessional Relationships • Workplace safety • Awards and recognition • Leadership training 	<ul style="list-style-type: none"> • Nurse Sensitive Indicators (NSI) (IP Committees) • Patient satisfaction (HCAHPS) • Medication safety • Readmissions • EPIC • Downtime education • Technology • Documentation standards 	<ul style="list-style-type: none"> • Patient education • Nurse education • Jefferson Nurse Pathway Program/Residency • New products • Policies and procedures • Publications • Proposed research/IRB • EBP

Nurse Pathway and Nurse Residency Programs

The TJUH Nurse Residency Program (NRP) and Nurse Pathway Program work together to support new-to-practice nurses during their first year at Jefferson. TJUH has been part of the Vizient/AACN Nurse Residency Program since 2007. The program was granted a five-year accreditation by the Commission on Collegiate Nursing Education in 2018. All new-to-practice nurses are enrolled in the program.

Exceeding the evaluation plan goal, the retention of nurses during the first 12 months in 2019 was 97.5 and 99% in 2020. At the completion of the year-long NRP, nurse residents complete a program evaluation survey. For nurses completing the NRP in 2019, the program's overall rating exceeded the national Vizient NRP benchmark. Nurse residents complete a small group evidence-based practice project during the NRP. Madeline Ratfield and Matthew Unger completed an evidence-based practice (EBP) project, "How does boxed breathing as a mindfulness intervention impact stress," which was presented at the August 26, 2020 Shared Governance Meeting. Victoria Ford and Aimee Masino, completed an EBP project, "MICU Zaps VAP," which was accepted at the national Vizient Nurse Residency conference for March 2020. Unfortunately, the conference was cancelled; however, the project was presented locally at the January 22, 2020 Shared Governance Meeting and at the state level at the October 6, 2020 PA Collaborative Annual Summit.

Safety and continuing support led to the NRP going virtual in April 2020. Using the ZOOM platform and myJeffHub (our staff portal), nurse residents were able to meet synchronous with additional asynchronous education. The virtual format included using breakout rooms for small-group discussions and to collaborate on EBP projects. One nurse resident noted on a seminar survey, "I appreciate how involved everyone became with the virtual seminars. Even during a difficult time with so much adjustment, I think we found ways to make this work."

The Jefferson Nurse Pathway program focuses on skill acquisition for nurses in specific pathways such as medical/surgical, telemetry, intermediate, critical care, emergency care, perioperative, maternal/infant health and oncology. This hybrid program combines online learning, seminars and shadow experiences. Since the program began in July 2019, 298 nurses have completed it. Seminars were converted to ZOOM beginning in April 2020. Clinical nurse specialists serve as content experts. Skills seminars are evaluated, and content is further developed from that feedback. Various nurses' comments included, "I thought it was always useful to go over good hospital practice and policy, especially with blood culture levels and when and where to draw on midlines, PICC, and central lines. Very helpful and good review. I learned the policy on the floor but it's good to go over to cement some of the differences and things I need to do as a nurse."

Nursing Professional Development Adaptations for COVID-19

COVID-19 restrictions on gatherings required the Nursing Professional Development department to be innovative in their approach to nursing education. Programs that were previously held in person were quickly transitioned to virtual settings. Interactive technologies, such as Polls, Near Pod, and Kahoot, were utilized to promote engagement in the virtual learning environments. TJUH was able to continue offering quality nursing continuing professional development during the pandemic. We used this opportunity to record

programs, so that many of our live programs are now offered as enduring education in myJeffHub.

TJUH launched Inaugural Nursing Grand Rounds in September 2020. A virtual environment was a huge benefit for this program, as it allowed for nationally recognized nursing leaders to easily share their knowledge with Jefferson nurses. It also allowed our colleagues from across the enterprise to join us in learning from experts.

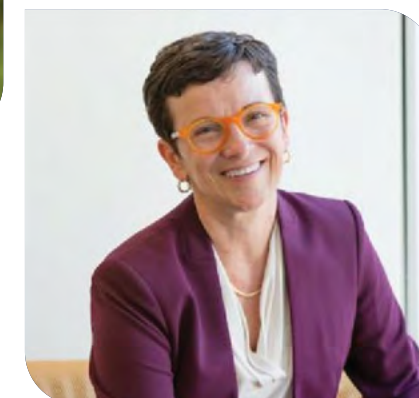
Nursing Grand Rounds Presenters

Below, clockwise:

September 2, 2020 Teri Pipe, PHD, RN
Chief Well-Being Officer – *Mindfulness and Resilience*

October, 7, 2020 Bonnie Clipper, DNP, MA, MBA, RN, CENP, FACHE
Chief Clinical Officer, Wambi – *Innovations Impacting Nursing Practice*

December 2, 2020 Debbie Hatmaker, PHD, RN FAAN
Chief Nurse Officer, ANA Enterprise – *The Registered Nurse: A Leader and Advocate*



Above:

November 4, 2020
Michael Grossman, DM, MSN, RN, NEA-BC
and Jeremy Barnes
*How to Keep the Team Motivated:
Lessons Learned from the World of Sports*

Awards and Recognition



J. Patrick Barnes died at the age of 33 in late 1999 from complications of Idiopathic Thrombocytopenic Purpura (ITP), a little known but not uncommon autoimmune disease. The care Patrick and his family received from nurses while he was ill inspired this unique means of thanking nurses for making a profound difference in the lives of their patients and patient's families.

The DAISY Award Honors a registered nurse each month who exemplifies these caring behaviors. The honoree exhibits exceptional qualities and attributes that reflect the kind of professionalism and skills we value at Thomas Jefferson University Hospitals. Once a year, advance practice nurses and nurse managers are also recognized with DAISY Awards.

Thomas Jefferson University Hospitals also offers the DAISY Team Award, which was created by our nursing team in 2012 and is now an official award administered by the DAISY foundation. This award recognizes that while an idea to achieve better patient and family outcomes may start with one individual, it often takes an entire team to implement it successfully. The DAISY Team award is designed to honor collaboration by two or more people, led by a nurse, who identify and meet patient and/or patient family needs by going above and beyond the traditional role of nursing.

THROUGHOUT THIS YEAR, WE HONORED THE INDIVIDUAL NURSES AND TEAMS PICTURED FOR THEIR EXTRAORDINARY COMMITMENT TO OUR PATIENTS DURING THIS UNPRECEDENTED PANDEMIC.

January 2020 Winners



Christine Romano, BSN, RN, TJUH Procedural Pool



Elizabeth Gilbert, BSN, RN MICU/PCU Pool, JMH

February 2020 Winners



Kathleen McLernan, RN, TJUH SICU



Erica Miller, BSN, RN B6, JMH

March 2020 Winners



Colleen Slough, BSN, RN, RN-BC, CCCTM, TJUH 13 Pavilion



Taylor Crocetto, BSN, RN B3, JMH

April 2020 Winners



Jenna Fleekop, BSN, RN, TJUH 7 Center



In-Sook Ryu, MSN, RN, ONC Infusion Center, JMH

July 2020 Winners



Mia Goetz, BSN, RN TJUH INICU



Danielle Kelly, BSN, RN B1, JMH

May 2020 Winners



Karen Franz, BSN, RN, TJUH MICU



Jenna Tibbitts, BSN, RN, PACU, JMH

August 2020 Winners



Ashley Cruice, BSN, RN, CCCTM, PCCN, TJUH INICU



Gabriela Mejia, BSN, RN, PCU, JMH

June 2020 Winner



Emily Marut, BSN, RN, TJUH 5NE

"...the Daisy Award thanks nurses for making a profound difference in the lives of their patients and patient's families."

September 2020 Winners



Margaret Hammond, BSN, IORN, NRP, TJUH 7 Pavilion



Priyanka Patel, BSN, RN, RN-BC B4, JMH

October 2020 Winners



Kara Olszewski, RN, TJUH OR



Salema Davis, MSN, RN B6, JMH

Advanced Practice Nurse Winners



Annemarie Costello, MSN, RN, ONC, LNCC, CCCTM, CNS
TJUH Orthopedics



Mari-Carmen Farmer, MSN, CNM, IORN, WHNP-B, Nurse Midwife
TJUH OB/GYN



Alexis Gonzales, MSN, CRNP
JMH Anesthesia

November 2020 Winners



Lauren Hume, BSN, RN, TJUH 13 Pavilion



Diana Gulyanskaya, BSN, RN, ICU, JMH

Nurse Leader Winners



Esmihan Almontaser, PhD, RN, CPAN, Nurse Manager
PACU & SPU, TJUH



Dawn Berckman, BSN, RN, CNOR, Nurse Manager
APU/PACU/OR, JMH



Stephanie Figueroa, BSN, RN, Nurse Manger, B4, JMH



Jason Smith, BSN, MBA, RN, CMSRN, NE-BC, Nurse Manager, ED, TJUH

December 2020 Winners



Christian Price, BSN, RN, TJUH 3W



Nancy Lutner, MSN, RN, CRRN, B6, JMH

TJUH Oncology Nurse of the Year Award

Megan Brown, BSN, RN, Administrative Charge Nurse, JMH Infusion Center

The award goes to the oncology nurse who practices excellence in the care of the oncology patient which extends past the traditional day-to-day care. The awardee creates an environment of caring, safety, and education for patients, families and staff, and displays the core values of caring over and above what is expected. He/she creates the pathway for excellent outcomes and individualized care for his/her patients and families.



2020 Daisy Team Awards



JHN NICU Team



9 & 10 Thompson TJUH Team



B6 JMH Team



9 & 10 Thompson TJUH Team



13 Thompson TJUH Team



B1 Ace Unit JMH Team

Nurse Participation in Professional Organizations and Volunteering in the Community



Jefferson nurses live the mission, vision and values of Jefferson Health every day by sharing their professional expertise with others outside of the TJUH organization. Even during a global pandemic, Jefferson nurses found creative and innovate ways to stay involved in nursing professional organizations and community

endeavors. Nurses improve the lives of their colleagues every day through their participation in local, national and international professional nursing organizations. Through their volunteer work, Jefferson nurses put people first and did the right thing as they boldly cared for vulnerable populations during the COVID-19 pandemic. The stories featured are only a small representation of TJUH nurses' contributions to professional organizations and the overall health of the community.

The Jefferson Nurse: Leaders in Professional Nursing Organizations

Nicole Bradley, MSN, RN, CCRN-K, RN-BC, Clinical Nurse Specialist, JMH B5, serves as the Secretary of the Board of Directors for Lifecycles Health Center in Camden, NJ.

Ann Michele Coughlin, DNP, MBA, RN, Nursing Supervisor, TJUH, serves on the Pennsylvania State Board of Nursing (PA BON) as a Board Member and Chair. She is a member of the National Council of State Boards of Nursing (NCSBN) and also sits on the College of Foreign Graduate Nursing Society (CFGNS) as a Representative for NCSBN on CGFNS – AllianceBoard of Governors.

Denise F. Diaz, MSN, RN, CPAN, CAPA, PACU Resource Float Nurse, is a board member, Pennsylvania Association of PeriAnesthesia Nursing.

Jeff Doucette, DNP, RN, FACHE, NEA-BC, FAAN, Senior Vice President and Chief Nursing Officer, is a fellow of the American Academy of Nursing and the American College of Health Care Executives. He is an advisor for the Editorial Advisory Boards of the Journal of Nursing Administration and Nursing Management Journal. As a member of American Academy of Nursing, he serves on expert panels on Health Systems and LGBTQ Health Issues. He is a member of the AONE Foundation National Research Committee.

Mary Beth Edger, DNP, MHA, RN, NEA-BC, VP, Patient Care Services, is the secretary for the South-eastern Pennsylvania Organization of Nurse Leaders.

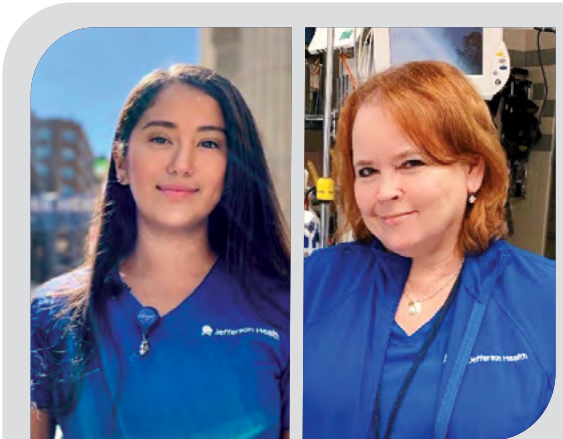
Heather M. Ettl, MSN, RN, CBC, Clinical Nurse Specialist, Nutritional Support is the director of Philadelphia Area Society for Parenteral and Enteral Nutrition.

Mari-Carmen Farmer, MSN, CNM, WHNP-BC, Nurse Midwife, is the President of the Philadelphia Chapter of the ACNM (Philly Metro Midwives). She is also a member of the following committees: ACNM Core Competencies Task Force, Philadelphia Maternal Mortality Review Action Team (Organizing Voices for Action - OVA) Steering Committee and Philadelphia Maternal Mortality Refinement of Actionable Recommendations (ROAR) Team.

Rae Fierro, RN, CNOR, RNFA, JSC Charge Nurse, is the president of the Jefferson Diploma Nurses Alumni Association and the secretary of the Board of Directors Philadelphia Chapter of Association of Perioperative Registered Nurses.

Marjorie Gardner, BSN, RN, CBC, Administrative Charge Nurse, Labor and Delivery, is the vice president of the board of ARC, Philadelphia. ARC is a non-profit advocacy group for individuals with intellectual and developmental disabilities.

Rosemarie Hesser, BS, RN, Clinical Nursing Coordinator for the Department of Electrophysiology, is the co-chair of Philadelphia Regional ICD Support Group.



Jennifer Gil, MSN, RN (left) Clinical Nurse, TJUH ED, is a board member on the American Nurses Association (ANA) Board of Directors representing the voice of direct care nurses, and she is also on the on ANA's Political Action Committee. She is also president-elect for the National Association of Hispanic Nurses (NAHN) in Philadelphia, PA, is chair of NAHN's national nominating committee and serves on the national advisory board for the Nurses Service Organization. Jennifer is also a member of the New Jersey State Nurses Association, Sigma Theta Tau International and the Emergency Nurses Association. She was honored this year on ABC News Hometown Heroes for her community services efforts with NAHN.

Nancy Glatfelter BSN, RN, CEN, TCRN, (right) TJUH ED, is the Philadelphia ENA President Elect 2020/Philadelphia ENA President 2021.

H. Lynn Kane, RN, MSN, MBA, CCRN, Clinical Nurse Specialist, B2 and B3 JMH is the president and on the Board of Directors for the New Jersey Bermuda PeriAnesthesia Nurses Association (NJBPA-NA). She is also the education approver chairperson of the American Society of PeriAnesthesia Nurses National Committee.

Maureen Lewis, MSN, CRNP, CRNFA, CNOR, is the President of the American Operating Room Nurses Chapter 3910.

Stephanie Landmesser, MSN, RN, CCNS, CNOR, Patient safety Officer, JSC, is the President of the Neumann Nursing Alumni Association.

Michelle McKay, PhD, RN, CCRN, Clinical Nurse, SICU, is the research chair-elect, Southeastern Chapter of PA, American Association of Critical Care Nurses. She is also corresponding secretary for Alpha Nu Chapter of Sigma Theta Tau.

Donna Molyneaux, PhD, MSN, CNE, Director of Nursing Research, is the co-chair of the education committee and member of the communication committee for the International Association of Human Caring.

Sarah Portis, BSN, RN, Clinical Nurse, JMH ED, is a Team leader for the Society of Nurse Scientists, Innovators, Entrepreneurs, and Leaders: Microsoft and Johnson & Johnson COVID Hackathon.

John Renzi, DNP, MBA, RN, CCCTM, NE-BC, Director of Nursing Operations and Patient Care Services, JMH, is a board member for the Southeastern Pennsylvania Organization of Nurse Leaders and a Board Member of Jefferson Methodist Hospital.

Felicia Rivera, RN, BSN, OCN, BMTCN, Administrative Charge/Nurse Educator, 14 Pavilion, Bone Marrow Transplant, is the 2020-2022 President of the Southern Jersey Shore chapter of The Oncology Nursing Society.

Andrew L. Thum, MSN, ML, RN, NE-BC, Nurse Manager, 7 W/NW/NC Med-Surg Unit, is a board member for the Pennsylvania Organization of Nurse Leaders and the Southeastern Pennsylvania Organization of Nurse Leaders.

Linda Wright, DrNP, RN, CNN, CCTC, Clinical Manager of Abdominal Organ Transplant, is on the editorial board for the Nephrology Nursing Journal, and the editor for its "Exploring the Evidence" department.

Volunteering in the Community

Throughout her nursing career, **Nora Kramer, RN, MS, CNRN**, trauma injury prevention outreach coordinator/administrative supervisor, has been drawn to working with marginalized communities both here and abroad. Over the years she evolved into a powerful policy voice for these communities and populations. However, she has never lost sight of the individuals for whom she advocates, and works tirelessly, both professionally and as a volunteer, with the poorest residents of North Philadelphia.

Many years ago, while working in Latin America with health promoters, she was profoundly changed when six young girls she had befriended from a local orphanage disappeared overnight. She later discovered they were the victim of human trafficking, and, shockingly, she never saw them again. It is small wonder, then, that she was drawn to the groundbreaking work of the Villanova University Law Institute to Address Commercial Exploitation. Working as part of a team, she has operationalized its pioneering approach into a powerful education program for Jefferson staff who may encounter victims of trafficking. She is well known for her program, has been invited to speak at other hospitals, and has even extended her audience to state troopers. Her trafficking program focuses on training of early identification and safe action steps to be taken to protect these victim in what is often a limited interaction time frame. She has touched hundreds of lives as a result of this initiative.

Her passion and advocacy are broad. In her daily work as Injury Prevention Coordinator, Nora is acutely aware of the number of young people who are killed by gun violence. Coupled with this, in her role as nursing supervisor on the weekends, she finds herself providing comfort to grieving family



Nora Kramer, ASN, MS, RN, CNRN, Administrative Supervisor TJUH

Nora was nominated for the 2020 *HealthImpact* DAISY Nurse Leader Award in Policy.

members immediately following the loss of their loved one to gun violence. Seeing an opportunity to participate in stopping the cycle of violence at a population level, she has liaised with Mothers Bonded By Grief, a quintessential support group where newly grieving family members are linked with other families who have walked this painful road and are, thus, able to provide comfort to each other. Nora has lectured on the existence and effectiveness of this group, and by so raising awareness, has widened their base of support. It is not all tears. In December 2020, under Nora's guidance, Jefferson employees were able to contribute to the group's' first annual holiday party, a beautiful occasion where members were able to help those who had recently lost a child during the holiday season.

As an offshoot of her work on the front lines of inner-city violence, Nora has been instrumental in aligning Jefferson with the National STOP THE BLEED® Program, a vital education program for anyone who might witness an accident victim experiencing serious bleeding. In Philadelphia, where there is a significant number of gun violence victims, this is a crucial program. "STOP THE BLEED" involves traveling to schools and community centers to teach the importance of applying a tourniquet and other first aid measures. Nora has provided over 100 STOP THE BLEED classes. This program has been on hold following the onset of COVID-19 and school closings, so Nora refashioned

it into "Stop the Spread," in which, as a volunteer, she distributes hand sanitizers to the homeless people living in a nearby encampment.

Nora is also committed to the reduction of geriatric falls. She has collaborated with the Philadelphia Corporation of the Aging to promote Healthy Steps for older adults. She provides education to senior groups at churches, libraries and community centers.



Congratulations to **Dottie Groves, MSN, RN**, Education Specialist, JMH, (center) from our Jefferson Methodist Hospital campus for 50 years of service! Dottie graduated from Methodist Hospital School of Nursing in 1970 and has worked at Methodist ever since. Also pictured is Mary Beth Edger, VP, Patient Care Services, and Jeff Doucette, Senior Vice President and Chief Nursing Officer.

Exemplary Professional Practice

Nursing Professional Practice Model

Nursing Professional Practice at Jefferson Health is based on the Quality Caring® Model (QCM) developed by nursing theorist Joanne Duffy, PhD. This model combines the art and science of nursing, and stresses the equal importance of both. With a focus on both quality and caring, the QCM provides nurses with a tangible foundation to build their practice and embed caring into the healthcare environment.

The model places relationships at the core of the nursing process: relationships with patients/families, colleagues, self and community. These caring relationships, combined with evidence-based practice, empower nurses to foster cohesive teams and promote quality care. This conceptual approach allows individuals to feel cared for and cultivates an environment of collaboration.

Eight Caring Behaviors

- *Mutual Problem Solving*: Assists patients and caregivers to understand, learn, and think about their health and illness, and promotes their active engagement in decision-making regarding their care.
- *Attentive Reassurance*: Being attentive to the patient and present in the moment.

- *Human Respect*: Value all individuals through unconditional acceptance, care with dignity, and recognition of individual rights and responsibilities.
- *Encouraging Manner*: Communicate in a supportive manner, with positive thoughts and openness to feelings of others.
- *Appreciation of Unique Meanings*: Recognize that all individuals are a blend of their unique life experiences, and incorporate that knowledge into the relationship.
- *Healing environment*: Provide care that maintains the patient's privacy, safety and control.
- *Basic Human Needs*: Understand that all humans have basic physiological, safety, love/belonging, self-esteem and self-actualization needs, and incorporate these aspects in the plan of care.
- *Affiliation Needs*: Value and engage the family and caregivers, recognizing that all individuals need to feel they are included.

The Jefferson Nurse Professional Practice Model is aligned with the mission, vision, and values of Jefferson Health, and provides a framework for our nurses to serve as patient advocates, putting the patient and family at the center of our work. We strive to improve the lives of those we touch each day.



The Jefferson Nurse
Improving Lives, Together

Patient and Family Education

As COVID-19 submerged our region, multidisciplinary teams worked together to quickly develop patient education. It was made available in our electronic health record, EPIC, in different languages. Rehabilitation medicine partnered with nursing to implement patient exercise videos. These were placed on the Jefferson Health YouTube channel so that patients had quick, easy access both while in the hospital and at home.

Nursing collaborated with EPIC colleagues to continue our efforts to streamline patient education. Our most recent achievement is the availability of the entire Elsevier video library in EPIC, along with QR code technology that enhances the patient experience. Nursing also partnered with EPIC to implement MyChart Bedside mobile, which allows patients to access MyChart Bedside from their personal devices while in the hospital.

Nursing Partners Caring for Patients: Celebrating Patient Birthdays During COVID-19

Each morning, the patient and family relations department staff identify patients who may be celebrating a birthday during their hospitalization. The team creates a birthday card and calls the clinical nurse caring for the patient to inform them that it is the patient's birthday. If diet orders allow, a small birthday cake is delivered at lunch.

The card is delivered with a wooden rose (shown below) or small balloon. Based on isolation precautions, it is presented to the patient or given



to the nurse. If the patient does not have a smartphone, the patient and family relations staff can create a 10 minute Zoom session so the patient can speak with their loved ones.

One patient celebrated her 102nd birthday while here. Her daughter came to visit and we all sang "Happy Birthday" in the hall. We've celebrated over fifty patient birthdays during a time when patient visits were limited due to COVID-19.

Caring Connections During COVID-19

In an effort to provide much needed support to our patients during this pandemic, the Patient and Family Experience Department has offered two new ways to increase communication efforts:

- *Social Zoom Sessions:* thanks to a generous donation of smartphones, patients who do not have access to a smart device of their own can see their loved ones on scheduled 15-20 minute Zoom sessions.
- *Virtual Emotional Support Sessions:* with the support of some very dedicated students trained in Psychological First Aid, any patient in need can share their concerns and fears or simply chat via 15-20 minute Zoom sessions.

John Wise, BSN, RN, CCRN, TJUH SICU helped boost a patient's spirits that was hospitalized for a very long time with a trip to the Gibbon Bridge overlooking the city streets. John then coordinated with the patient's mom and planned a surprise for the weekend. They gathered his friends and family to meet on the street below the bridge. John and the patient's nurse for the day escorted him to the bridge for a heartwarming visit with nearly 50 people.





New Knowledge, Innovations & Improvements

Nursing Research

COVID-19 made 2020 a unique year. In spite of the pandemic, however, the Department of Nursing participated in several research studies. Several of the nursing units collaborated with the COVID-19 clinical trials that began at the onset of the pandemic and are currently in progress. They also participated in the COVID-19 Swab study that Robert Pugliese, PharmD, BCPS, director of Innovation Design, ran as principal investigator.

Nurses from the Department of Nursing collaborated with faculty in submitting proposals for collaborative nursing research. Two studies received the Statton grant.

Camille Irwin MSN, RN, CBC, Carmen Alba MSN, RN, Valerie Clary-Muronda, PhD, RN and Donna Molyneaux, PhD, RN, CNE are the principal investigators on the first Statton grant study, *Use of a hands-free maternal support system to prevent Infant falls: A mixed method feasibility study.*

Eleanor Fitzpatrick, DNP, RN, AGCNS-BC, ACNP-BC, CCRN, CCCTM, CNS TJUH SICU, Anne Delengowski, MSN, RN, AOCN, CCCTM, Director of TJUH Oncology Education, Monika Pogorzelska-Maziarz, PhD, MPH, CIC and MaryLou Manning, PhD, CRNP, CIC, FAAN from Thomas Jefferson University College of Nursing are the principal investigators on the second study, *Nurses advancing the safe and responsible use of antibiotics in surgical intensive care and oncology units.*

Donna Molyneaux PhD, RN CNE, Director, Nursing Research, and John Renzi, DNP, MBA, RN, CCCTM, NE-BC, Director, JMH, are the principal investigators on an NIH intervention study: *Testing the efficacy of family focused care—acute care—evidence intervention trial in patients with Alzheimer's Disease and related dementias.*

John Renzi, DNP, MBA, RN, CCCTM, NE-BC, Director, JMH, is the principal investigator of a study exploring the effects of recognition as a tool to support the nursing workforce.

David Dacanay, MSN, RN, CCCTM, MSRN, NE-BC, B6, JMH, investigated ways to enhance patient satisfaction by using a pre-admission instructional video.

Kate-Lynn Tressel BSN, RN, Clinical Nurse, and **Elissa Harmon, DNP, RN, APHN-BC, CCRN,** Administrative Charge Nurse, both of whom are from the TJUH MICU, are the principal investigators for a study about improving sleep hygiene. They are evaluating the implementation of a sleep bundle to improve sleep hygiene in their patients.

Elissa Harmon, DNP, RN, APHN-BC, CCRN, and **Valerie Seccia, BSN, RN,** administrative charge nurses from the TJUH MICU are the principle investigators for a study about the effects of journaling on decreasing post-traumatic stress disorder.

The Emergency Department is participating in an ongoing study, Deployment of an Emergency Department safety officer as a risk mitigation strategy during the SARS-CoV-2 pandemic. **Scott E James, DNP, RN, MBA, NEA-BC,** Vice President, Patient Care Services, Emergency Nursing, is the principal investigator for this study.

Nursing Presentations at Local, National and International Conferences

Jenny Bosley, MS, RN, CEN, CPHQ, Clinical Nurse Specialist, Quality and Safety

"Using Coded Administrative Data to Achieve Compliance with MBSAQIP Standard 6; Capturing Reoperations for Abstraction into the MBSAQIP Registry," podium presentation, American College of Surgeons Quality and Safety Virtual Conference, July 2020.

Kathleen Boyle, BSN, RN, Administrative Charge Nurse, TJUH MICU and Elissa Harmon RN, DNP, CCRN, PHNA-BC, Administrative Charge Nurse, TJUH MICU

"Bridging the Gap: Using Simulation to Improve High-acuity/Low-frequency Skill Competency," Society for Simulation in Healthcare (SSH), August 2020.

Nicole Bradley, MSN, RN, CCRN-K, RN-BC, Clinical Nurse Specialist, JMH B5 and Amanda Rose, BSN, RN Clinical Nurse B5

"The Winning Combination: "PUP" Magnets and Patient Education: One Units Journey to Reduce DTI's," poster presentation, Academy of Medical-Surgical Nurses Virtual Convention, October 2020.

Christine Chmielewski, MS, CRNP, ANP-BC, CNN-NP, Nephrology

"Pruritus: Management and Treatment Landscape," American Nephrology Nurses Association National Symposium, virtual presentation, August 2020.

Jacqueline E. Crawford, MS, CRNP, PPCNP-BC, ACCNS-P, Clinical Nurse Specialist, Nutrition Support and Heather M. Etzl, MSN, RN, CBC Clinical Nurse Specialist, Nutrition Support

"Utilizing a Standardized Central Line Associated Blood Stream Infection (CLABSI) Maintenance Bundle Script to Improve Compliance," poster presented Virtual American Society of Parenteral & Enteral Nutrition National Conference, March 2020.

Christie DiMichele, MSN, RN NEA-BC, Magnet Program Director

"Progressing your Organization's Gap Analysis," podium presentation, Magnet4Europe Virtual Collaborative, December 2020.

Anthony Diorio, MSN, RN, Stephen Kucinski, BA, Stephanie Landmesser, MSN, RN and Monica Young, DNP, MBA, RN

"Do It Right the First Time — Exploring the Benefits of Eliminating Tray Errors," podium presentation, OR Business Management Conference, Weston, Florida, January 2020.

Anne Delengowski, MSN, RN, AOCN, CCCTM, Director of Nursing Oncology, TJUH

"Oncology Bridge Program: Meeting the educational needs of new to practice oncology nurses," and "Oncology nursing within the Enterprise: Coming together to provide quality care," poster presentations, Oncology Nursing Society Virtual Annual Conference, April 2020.

Mary Beth Edger, DNP, MHA, RN, NEA-BC, Vice President, Patient Care Services and Susan G. Miller, RN, MN, CMRP, CVAHP, Senior Director, Enterprise Value Analysis

"Value Analysis Transformation: From 2-way street to Pandemic Lifeline," podium presentation, Association of Healthcare Value Analysis Professional (AHVAP) Virtual Conference, October 2020.

Mari-Carmen Farmer, MSN, CNM, IORN, WHNP-B, Nurse Midwife, TJUH OB/GYN

Farmer, M., Santoro, C." Implicit Bias 101: Promoting Health Equity for WIC Clients." North Philadelphia WIC. Quarterly PD Day, April 2020.

Farmer, M., Escobar, M., Davis, J." Designing an Effective Anti-Racism Workshop for Midwives and Other Clinicians". American College of Nurse Midwives (ACNM), Annual Meeting, Virtual, May 2020.

Farmer, M. "Applying the Principles of Mindfulness to the Practice of Antiracism: A Primer. NJ Affiliate of the American College of Nurse-Midwives (ACNM)," Annual CEU Day, virtual, Sept 2020.

Farmer, M., Escobar, M., Davis, J. "Dismantling Racism in MN. MN Affiliate of the American College of Nurse Midwives" (ACNM), Annual CEU day, virtual, Nov 2020.

H. Lynn Kane, RN, MSN, MBA, CCRN, Clinical Nurse Specialist, B2 and B3, JMH

"PACU to Inpatient Unit: Improving Communication and Process," Podium presentation, New Jersey/Bermuda Perianesthesia Nurses Spring 2020 Virtual Conference, April 2020.

"Online Selective Learning Methods," podium presentation, The New Jersey/Bermuda Perianesthesia Nurses Fall Virtual Conference, October 2020.

H. Lynn Kane, RN, MSN, MBA, CCRN, Clinical Nurse Specialist, B2 and B3, JMH, and Christina Murphy, BSN, RN, Administrative Charge Nurse, B3, JMH

"Improving Patient Flow Process from the PACU to the Inpatient Unit Post-Surgical Procedure" podium presentation, Sigma Theta Tau 31st International Virtual Nursing Research Congress, May 2020.

Diane La Bruno MSN, RN, ACNS-BC, CCCTM, Clinical Nurse Specialist, 13 Pavilion & Kelly O'Connor, BSN, RN-BC, CCCTM

"Preparedness for Surgery" Quality Improvement Project of Patients with Pancreas Cancer and Related Conditions," Poster Presentation, Oncology Nursing Society Virtual Annual Conference, April 2020.

John Renzi, DNP, MBA, RN, CCCTM, NE-BC, Director of Nursing Operations and Patient Care Services, Jefferson Methodist Hospital

"Building a Transgender Surgical Program at a Community Hospital," poster presentation, Vizient Conference, September 2020.

JoAnn Silcox, MSN, RN, CCCTM, Vice President, Patient Care Services, TJUH Oncology

"Care Coordination across the Cancer Continuum: Breaking Down the Barriers," poster presentation, Oncology Nursing Society Virtual Annual Conference, April 2020.

Shelby Van de Zilver MSN, RN, CEN, Clinical Nurse Specialist Emergency Nursing

"The impact of a nurse mentor for new to practice nurses in the Emergency Department," poster presentation, Emergency Nurses Association Virtual National Conference, September 2020.

"Use of online tools can validate knowledge transference to clinical practice in the acute care setting." Sigma and the National League for Nursing Education Research Virtual Conference March 2020.

Nursing Publications

Elizabeth Avis, MSN, RN, CCRN, RRT Nurse and Lois Grant, ASN, RN, RRT Nurse

Avis, E. & Grant, L. (2020) Supraventricular Tachycardia. *American Nurse*. 23 (3) 23.

Janice M Carsello, DNP, CRNP, AOCNP, Lead Nurse Practitioner - Medical Oncology, Adjunct Faculty – JCN

In Trabulsi et al. Chemotherapy and Immunotherapy in Urologic Oncology – ISBN: 978-3-030-52020-5; Chapter titled: "Metastatic Bladder Cancer and the Use of Cisplatin Chemotherapy" by Mille, P. and Carsello, J. (2020)

Maureen DePrince, RN, BA, BS, SCRNP, CCRN

Shah, S. S., Dharia, R., Stazi, J., DePrince, M., & Rosenwasser, R. H. (2020). Rapid decline in Telestroke consults in the setting of COVID-19. *Telemedicine and e-Health*. <https://doi.org/10.1089/tmj.202.0229>

Sweid, A., Hammoud, B., Weinberg, J. H., Oneissi, M., Raz, E., Shapiro, M., DePrince, M., Tjoumakaris, S., Gooch, M. R., Herial, N. A., Zarzour, H., Romo, V., Rosenwasser, R. H., & Jabbour, P. (2020). Letter: thrombotic Neurovascular disease in COVID-19 patients. *Neurosurgery*, 87(3), E400–E406. <https://doi.org/10.1093/neuros/nyaa254>

Weinberg, J. H., Sweid, A., DePrince, M., Roussis, J., Herial, N., Gooch, M. R., Zarzour, H., Tjoumakaris, S., Topley, T., Wang, A., Wydro, G., Durland, L., Elliot, R., Fox, J., Rosenwasser, R. H., & Jabbour, P. (2020). The impact of the implementation of a mobile stroke unit on a stroke cohort. *Clinical Neurology and Neurosurgery*, 198, 106155. <https://doi.org/10.1016/j.clineuro.2020.106155>

Jeffrey N. Doucette, DNP, RN, FACHE, NEA-BC, FAAN

Doucette, J. & Fahey, L. (2020). External Recognition in Quality Improvement. In R. Shah & R. Roberts-Turner, QI on the Fly. (Pending publication).

Mari-Carmen Farmer, MSN, CNM, IORN, WHNP-B, Nurse Midwife, TJUH OB/GYN

Schwarz, J.G., Froh E., Farmer, M.-C., Oser, M., Howell, L.J., and Molderhauer, J.S. (2020). A Model of Group Prenatal Care for Patients with Prenatally Diagnosed Fetal Anomalies. *Journal of Midwifery and Women's Health*, 65: 265-270. <https://doi.org/10.1111/jmwh.13082>

Caitlin Harley MSN, RN, CCRN, SCRNP, CCCTM Clinical Specialist JHN Neuro ICU

Zavodnick J, Harley C, Zabriskie, K, et al. (October 23 2020) Effect of a Female External Urinary Catheter on Incidence of Catheter-Associated Urinary Tract Infection. *Cureus* 12(10): e11113. doi:10.7759/cureus.11113

Diane La Bruno MSN, RN, ACNS-BC, CCCTM, Clinical Nurse Specialist, 13 Pavilion, Kelly O'Connor, BSN, RN, CCCTM, Clinical Nurse JHN Infusion Center and Jamie Weigand, BSN, RN-BC, CCCTM, Clinical Nurse, 13 Pavilion

O'Connor, K., La Bruno, D., Rudderow, J., Cannaday, S., Yeo, C., and Yeo, T. (2020) Preparedness for surgery: Analyzing a quality improvement project in a population of patients undergoing hepato-pancreatic-biliary. *Clinical Journal of Oncology Nursing*, October 2020 Vol. 24,(5), E65-E70.

Michelle Lasota BSN, RN, Clinical Nurse, Oncology

ASCO Publications American Society of Clinical Oncology Educational Book titled Bringing Lift to Death: The Need for Honest, Compassionate, and Effective End-of-Life Conversations Authors: Amy R. MacKenzie, Michelle Lasota www.ascopubs.org. She also wrote a paper Death, Grief and Funeral in the COVID age that was published on covidpaper.org.

Michelle A. McKay PhD, RN, CCRN, Per Diem Staff Nurse, 4W SICU

McKay MA, Todd-Magel, C, Copel, L. (2020) Factors associated with the risk for falls in PACE participants. *Geriatric Nursing*, 41(5), 571-578. Doi: 10.1016/j.gerinurse.2020.03.002 PMID 32199737

Donna Molyneaux, PhD, MSN, RN, CNE, Director of Nursing Research

Birkhoff, S., McCulloh, Nair, J., Monturo, C., Molyneaux, D., Rochman, M., Sawyer, A., Moriarty, H., (2020) Increasing nursing research capacity: The roles and contributions of nurse scientists within healthcare systems in the greater Philadelphia region. *Journal of Applied Research*.

Okonkwo,H., Bryant, R., Milne J., Molyneaux D., Sanders J., Cunningham G., Brangan S., Eardley W., Chan G., Waldo M. (2020) A blinded clinical study of SEM scanner 200, a capacitive sensing device, for early detection of pressure injury compared to visual skin assessments. *Wound Care and Regeneration*.

Jason Smith BSN, MBA, RN, CMSRN, NE-BC, Nurse Manager, TJUH Emergency Department

Saati, A., AuA.,Chu,T, Davis, R. L., Singla, R., MD; Smith,J., White, J.L, MD; Lewiss, R. E. (2020). Creating an efficient point-of-care ultrasound workflow. *POCUS Journal*, 5(2) <https://doi.org/10.24908/pocus.v5i2.14429>

Linda Wright, DrNP, RN, CNN, CCTC, Clinical Manager of Abdominal Organ Transplant

Wright, L. (2020). Basic immunology: An overview, *Nephrology Nursing Journal*, Vol. 47, No. 4.

Nursing Innovation

QUALITY HUDDLE DASHBOARD: KEEPING PATIENTS SAFE

Launched as a pilot in February 2020, the huddle and dashboard help to call out special nurse-sensitive indicator care that needs to be completed (Foley care wipes, fall precautions, CHG bathing, etc.). The huddle and dashboard also alerts and aligns the entire nursing team about current individual patient-safety issues.

This new and powerful tool and process provides nursing leaders, clinical nurses and the entire interdisciplinary team with up-to-date real time leading metrics vs. lagging metrics as the Nurse Sensitive Indicator scorecards provide. This huddle now has become a standard practice at all shift changes on every inpatient unit. It enables the entire team to be engaged in provided each patient with a safe, high-quality and individualized interventions and plan of care.

Jefferson nurses demonstrate the quality huddle dashboard.



Bob Keough, BSN, RN, Administrative Charge Nurse, TJUH MICU

BOB KEOUGH, BSN, RN, PARTNERS WITH COLLEAGUES TO PROVIDE VITAL PPE DURING THE COVID-19 PANDEMIC

When it comes to personal protective equipment (PPE), specifically for airborne protection, healthcare workers frequently use what's known as a PAPR unit, which is a hood that uses a lithium battery-powered fan to blow purified positive-pressure air to the wearer's hood. In April 2020, a glitch in the PAPR design was discovered. When healthcare workers disconnected their battery packs from the suit, a single piece repeatedly broke. While it may sound like a minor problem, it's anything but that, as it renders the suit inoperable. The battery case was on backorder for many months, so the devices could not be used.

Bob Keough, BSN, RN, Administrative Charge Nurse, TJUH MICU partnered with Dr. Ed Jasper and an outside vendor to 3D print these parts after confirming with the company that the part was not

patented. At first, Bob tried to glue and use epoxy to fix the component, but transitioned to 3D printing when that did not work.

This process eventually transitioned to the Jefferson Health Design Lab and students who teamed up with engineers from a Fishtown fabricator, FKB Studio, to print this component. Bob assured that battery packs were repaired, bringing vital PPE to nurses and healthcare workers that were caring for critically ill COVID-19 patients. The effort was so successful that replacements were used at TJUH, and the team launched Project PAPR, an open-access website that includes a link to their 3D printer code so other hospitals could print their own components.

Thanks to Bob's innovative thinking and partnership with his colleagues, vital equipment was functional and this solution was shared with other healthcare organizations. Thank you, Bob, for making a huge difference during the pandemic to assure your colleagues had PPE to care for the most critical patients!

PHILADELPHIA, PA

THOMAS JEFFERSON UNIVERSITY HOSPITAL
JEFFERSON METHODIST HOSPITAL
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