

## Promoting patient rest



■ Nurse innovators ■ Patient dumping ■ RN nutrition

## QUIET, PLEASE

### Nurses offer strategies to promote patients' rest and sleep

By Susan Trossman, RN

As a child, Pam Ball, BSN, RN, NE-BC, recalls her mother pointing to a sign whenever the family drove past the county hospital that read, “Quiet—Hospital Zone,” and urging the children to lower their voices.

“I thought hospitals were always quiet all the time,” said Ball, who after practicing as a nurse for some 27 years, knows that hospitals generally are far from being quiet places. She points to the beeps of alarms, squeaky wheels of carts, and whirs of air mattresses.

Megan Brunson, MSN, RN, CCRN-CSC, CNL, agrees, adding, “The pumps are often the worst offenders. They are so overly sensitive and ‘smart pumps’ can be too smart. They alarm all the time. We don’t need a 30-minute warning that an I.V. is running low.”

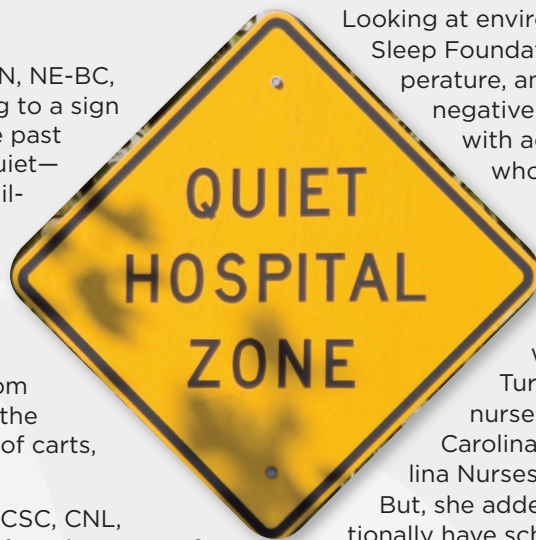
Then there are the loud medication scanners.

“It is the worst to sneak in a room, try and scan an arm band (beep), open the medication cart (beep), scan the bag (beep), hang the bag (beep), reset volume of pump (beep),” said Brunson, president-elect of the American Association of Critical-Care Nurses (AACN), an organizational affiliate of the American Nurses Association (ANA). “The actual intervention is often not the reason the patient wakes up. The sounds from the equipment disturb their rest. We recognize these items are essential to patient safety, but we joke that we wish there was a ‘sleep mode’ on some of the equipment. You can still do all these things, but just take the beep off the medication scanner.”

Because of the importance of sleep to the healing process, Ball and Brunson are among the nurses nationwide who have been looking at innovative and often just common-sense ways to transform hospitals into more restful environments.

#### A fundamental need

Maslow’s hierarchy of needs designates sleep as one of the most basic and critical human requirements. The National Heart, Lung, and Blood Institute affirms that ensuring enough quality sleep at the right times can protect mental and physical health, safety, and quality of life. Further, ongoing sleep deficiency can lead to an increased risk of heart disease, kidney disease, high blood pressure, diabetes, and stroke, as well as a weakened immune system, among other problems.



Looking at environmental factors, a 2015 National Sleep Foundation poll found noise, light, temperature, and mattress type have a greater negative impact on sleep in people dealing with acute or chronic pain than on those who are pain-free.

Those same environmental factors in hospitals can disturb sleep to a heightened level.

“Patients are expecting to sleep when they are in a hospital,” said Turkeisha Brown, MSN, RN, NE-BC, a nurse manager at University of North Carolina (UNC) Hospitals and North Carolina Nurses Association (NCNA) member. But, she added, healthcare professionals traditionally have scheduled many interventions or other types of care around the clock even if patients’ ability to rest suffers.

In other words, patients have to adjust to the rhythm and flow of hospitals, but at what cost?



## Working for better sleep

Barbara Trotter, BSN, RN, CMSRN, co-led a sleep-focused intervention project, which was tested on her adult medical unit and a pediatric unit at the University of Virginia (UVA) Medical Center in Charlottesville. She also was among the nurses who shared their efforts through poster presentations at the ANA Quality and Innovation Conference in March.

“We have a very high acuity unit,” Trotter said. “There are a lot of interventions that we have to do with no control over their timing, such as giving I.V. meds and antibiotics and taking vital signs. So patients’ getting an uninterrupted night of sleep is definitely a challenge.”

The UVA project involved reducing patients’ light exposure by switching to red lights during the night. In patient rooms on the adult med unit, the much brighter, white night light bulbs in the ceiling were replaced with less intense red light bulbs. Nurses on the pediatric unit used red “hugger” lights, similar to a penlight that wraps around the neck, during their nighttime interventions.

Additionally, all study patients wore an Actiwatch™, which measured specific light color exposure, sleep, and activity. Participants and nurses also were asked their perceptions about using the lights and the Actiwatch.

In terms of project results, both adult and pediatric patients slept better with reduced white lights, but pediatric patients came closer to achieving more restorative sleep. In addition, the red light intervention met the visual needs of nurses and participants 63% of the time.

According to Trotter, patients reported really liking the red lights, and she added this sleep-promotion intervention holds promise for improving health outcomes. After the study, some nurses on the adult unit began using the hugger lights, as well, which gives them better aim and light during certain clinical interventions at night.



Photo credit: coe sweet photography

**Barbara Trotter uses a red hugger light during a nighttime intervention.**

## Addressing squeaks and other noise

At UNC Hospitals, nurse managers Brown and Ball’s project focused on reducing environmental noise. First, they and other members of the project team performed sound testing, walking around units at different times to determine noise levels and chief contributors. They also surveyed patients on factors that were affecting their ability to sleep. On that list were bed noises, alarms, squeaking equipment, and sounds from other patients.

The nurses’ efforts led to a number of changes, including replacing the wheels on the trashcans and squeaky wheels on chairs, repairing malfunctioning motors on beds, switching automatic paper towel machines in the hallways with manual ones, and altering the times floors were buffed.

As for noise from other patients, some of it can’t be avoided. “If someone is admitted in the middle of the night or is hard of hearing, there isn’t much we can do,” Brown said.

Ball, an NCNA member, said that nursing staff also developed visitor rules, such as no overnight stays in semiprivate rooms or loud conversations, which they shared with patients and visitors.

In addition to addressing noise, the team reinforced

the importance of bundling care to reduce sleep interruptions, and staff offered patients warm washcloths after dinner. “That [intervention] really made a big difference to patients, who told us it contributed to their rest,” Brown said.

Nurses and representatives from other disciplines at UNC Hospitals have continued to expand their sleep promotion mission by testing other initiatives.

One interdisciplinary effort is called “Quiet Time,” which occurs from 2 PM to 4 PM and from midnight to 5 AM. It includes dimming lights, closing patient room doors, and talking in lower voices. To bolster this intervention, project team members created “Hushpuppies.” Based on a traditional baby shower game, its aim is to build staff awareness and accountability around noise they generate—often without realizing it, noted Brown and Ball, whose poster also was featured at the ANA conference.

At the beginning of the shift, everyone, including physicians, is given a clothespin. If someone hears one of their peers talking too loud, for example, they take away that person’s clothespin. Whoever has the most clothespins at the end of the shift receives a gift card for coffee.

Hushpuppies works so well because it allows people to address loud conversations or other noise and hold each other accountable in a nonconfrontational way, according to Ball.

Other pro-rest efforts that have been implemented range from asking patients about what aids they use at home to help them sleep, such as extra pillows or listening to music, to conducting bedside shift reports outside the patient room based on patient preference.

“Many of the solutions are basically common sense,” Ball said. And while these initiatives have been successful, Ball and Brown both spoke about the ongoing need to reinforce noise reduction with healthcare team members.

## Quiet in the ICU

When the ICU that Brunson was working in at Medical City Dallas Hospital transitioned to a more flexible, open visitation policy about 7 years ago, they experienced an upswing in the number of people visiting patients and staying longer.

“Patients would regularly express to us that they were exhausted,” said Brunson, CVICU night supervisor. “They would often ask nurses to be ‘the bad guy’ and ask visitors to leave.”

Given the patient satisfaction Hospital Consumer Assessment of Healthcare Providers and Systems survey’s new emphasis on “quietness of environment”

**“Unnecessary noise is the most cruel abuse of care which can be inflicted on either the sick or the well.”**

— Florence Nightingale



and nurses’ own concerns about patient rest, the unit-based council and Brunson developed a quality initiative to decrease noise levels in decibels.

First they evaluated noise levels with a decibel reader and found that the unit was louder than a construction site both day and night, according to Brunson. The Environmental Protection Agency and the World Health Organization recommend a maximum of about 35 to 45 dB for a hospital environment, but the ICU reading was closer to 75 to 85 dB. They also surveyed patients before and after leaving the ICU on the quietness of the environment. The survey and subsequent interventions were only implemented with patients who were cognitively able.

Instead of restricting visitation, Brunson said the staff implemented “quiet time” from 2 PM to 4 PM and 10 PM to 4 AM.

“We gave patients small hospitality kits with ear plugs, eye masks, and a small card explaining our study, and we offered them white noise machines,” Brunson said. Patients and families also were provided with printed materials on the benefits of rest, such as decreased length of stay, prevention of delirium, and the ability of patients to participate in more educational activities and cardiac rehabilitation.

In addition, overnight visitors were asked to honor the quieter environment by not using their cell phones or turning on TVs or bright lights.

“Although we did not find a difference in the noise levels with decibel readings, our study did find a significant difference in patients’ perceptions of the environment, and their stated quality of sleep highly improved,” she said.

These measures continue to be implemented to this day, with an extra hour added to the overnight quiet time period. And Dallas Hospital healthcare team members also implement other measures, including dimming lights, closing blinds, and limiting interventions, unless medically needed, to avoid disrupting patients who are sleeping.

“We have discovered patients and families are receptive to quiet times, if you explain how essential sleep is to overall recovery,” Brunson said.

— Susan Trossman is a writer-editor at ANA.

## Nurse innovators: In their own words

**N**urses are the epitome of innovators. They innovate every shift, whether it's re-taping a tube, repositioning a patient for optimal care, or, more intensively, developing a new process or device to fill a gap or meet a need. Imagine how effective and efficient healthcare would be if we could harness and disseminate every nurse-led innovation.

Many innovations occur in the workplace, but some nurse innovators have taken this to the next level. The American Nurses Association's (ANA's) Bonnie Clipper, DNP, MA, MBA, RN, CENP, FACHE, vice president of Innovation, interviewed three nurse innovators and ANA members. Here are their stories.

**Bonnie Clipper: What started you on the innovation journey?**

**Tiffany Kelley, PhD, MBA, RN, founder & CEO, Nightingale Apps LLC:** We're taught how to be nurses. If someone would have told me that I was ever going to start a business I would have said "no way." However, I identified a problem and solved it. I was completing my MS/MBA and encouraged to apply for a PhD program, which prepared me to be a scientist. Going through the scientific method helped me to refine the problem that I identified and frame it in a way that I could offer a solution.

**Wayne Nix, MBA, RN, RT, CEO & co-founder of RNvention:** Basically, it was a "series of unfortunate events." In hindsight, these turned out to be fortunate events for me. I have always had ideas for products and improvement in processes and I let them dribble out over the years, sharing [them] with various committees, hospitals, and organizations. Often my ideas were met with barriers and when they were of value, I didn't even receive acknowledgment for the solution. My persistence helped me push to what I believed in.

**Rachel Walker, PhD, RN, assistant professor, College of Nursing, UMASS-Amherst, AAAS-Lemelson Invention Ambassador:** It hasn't occurred to me that I am on an innovation journey. I thought of myself as identifying problems or unmet needs, and doing the

work required to address them. It wasn't until I began collaborating much more closely with engineers, computer scientists, and people from our management school at UMASS [University of Massachusetts] that I started hearing what we call the "language of innovation." Until then I'd called it "hacking problems," "designing nursing interventions," or "research and quality improvement." I call myself a nurse inventor, and credit my ability to claim that identity to the nurse innovators/inventors who've come before me (Bessie Blount Griffin, Lupe Hernandez, Lillian Wald), and to those who've been generous with their time and who've mentored me.



Bonnie Clipper



Tiffany Kelley



Wayne Nix



Rachel Walker



Wayne Nix holds his all-in-one hand tool to help nurses be more efficient.

**Clipper: Tell us about your innovation.**

**Kelley:** I developed a solution to help make it easier and safer for nurses to access and use information about their patients in an EHR [electronic health record] world. Even with an EHR, I still saw nurses using a piece of paper to manage their patient's information. My solution is an app that allows information to be accessed and entered during shift-to-shift hand-off and throughout the day on a smart phone. It took a while for me to go through all of the steps, including the effort to protect my intellectual property, develop the technology, and address the requirements of HIPAA [Health Insurance Portability and Accountability Act of 1996].

**Nix:** We have created an all-in-one hand tool designed to help nurses be more efficient, as it aids in hand tasks such as cutting, gripping, screwing, and opening various items. Think about how many times nurses have to interrupt their work flow and leave a patient's room because they couldn't unscrew an overtightened I.V. hub, or spent time looking for a hemostat to use for something it wasn't really designed for. This is our way to provide an all-in-one tool that nurses need.

**Walker:** Our team at UMASS-Amherst is working on several projects at the moment, from a self-contained portable system to generate critical I.V. fluids from existing water sources during disasters, eye-tracking approaches to capture otherwise invisible functional impacts of fatigue, and point-of-care detection technology for monitoring elimination of hazardous drugs from the body, to a service similar to a subscription box service designed to promote wellness across diverse communities of cancer survivors.

**Clipper: What advice do you have for aspiring nurse innovators?**

**Kelley:** If you like being creative and managing change, find something that drives nurses crazy and solve it. If it is affecting others, it may really be a problem that needs to be solved. This can evolve into a larger opportunity like a business. Think through your solutions—this takes time and can't be rushed.

**Nix:** As nurses, we are in the trenches and are uniquely positioned to know what equipment and processes can make the delivery of care more effective. It is important to realize that getting into the innovation space is very daunting. But like anything in life, remain persistent and focused and align with those who see your vision and share your values.

**Walker:** Every nurse is an innovator in their own right. The job essentially demands it of us. As an AAAS-Lemelson Invention Ambassador, I give you permission to claim the title of “nurse innovator” or “nurse inventor.” Nurses can take the spark of an idea through to an innovation and create a device, process, or policy, which often depends on timing and the current environment. If you're a nurse who is already innovating and feel supported in that work, consider mentoring others around you. We owe it to ourselves, our patients, and our communities to strive for better care and better systems through nurse-led innovation.

**Resource**

Tucker AL. Workarounds and resiliency on the front lines of health care. *Patient Safety Network*. August 2009. [psnet.ahrq.gov/perspectives/perspective/78/workarounds-and-resiliency-on-the-front-lines-of-health-care](http://psnet.ahrq.gov/perspectives/perspective/78/workarounds-and-resiliency-on-the-front-lines-of-health-care)

**Save the Date**

ANA Quality & Innovation Conference, Orlando, FL, April 24-26, 2019. Plan to attend our onsite Innovation Lab and Nurse Pitch event.



## Healthy Nurse

### MUSC Health, ANA, Sodexo celebrate success of nutrition pilot

Nurses at MUSC Health have tripled their daily consumption of fruits and vegetables as part of a 60-day nutritional pilot this summer that offered healthier to-go food choices on campus. The post-pilot findings reveal that 17% of MUSC Health nurses now consume the five daily recommended servings of fruits and vegetables, and 72% now consume three or more servings. A celebration was held October 9 at MUSC Health, a facility that has achieved American Nurses Credentialing Center Magnet® recognition.

The pilot was supported by Sodexo, a food services and facilities management company committed to improving quality of life and a major partner in the Healthy Nurse, Healthy Nation™ Grand Challenge (HNN), an initiative of the American Nurses Association (ANA) Enterprise.

“We are very proud of our nurses and staff who made

the nutrition pilot a success,” said Andrea Coyle, MSN, MHA, RN, NE-BC, MUSC Health Professional Excellence and Magnet® Program director. “It’s been a pleasure working with ANA and Sodexo, both of which share our commitment in creating a healthy environment and offering our nurses and staff solutions they enjoy and will continue using long term.”



**Celebrating better nutrition for RNs, from L-R: Sankar Srinivas, vice president, Marketing-Healthcare, Sodexo; Bonnie Clipper, vice president, Innovation, ANA; Jerry Mansfield, CNO at MUSC, Julie Branham, vice president, Clinical Nutrition, Sodexo**

“Our partnership with ANA on the Healthy Nurse, Healthy Nation™ Grand Challenge is a natural fit,” said Julie Branham, Sodexo North America vice president of Clinical Nutrition. “We stand shoulder to shoulder with nurses every day, supporting each other in helping patients have the best possible experience in hospitals.”

The next HNN quality of life program is planned to take place at CarolinaEast Health System in New Bern, North Carolina, later this year.

## A cold, hard lesson about patient dumping

A 22-year-old woman with Asperger’s syndrome was seen on a frigid night in January 2018 for a fall-related head injury in the University of Maryland’s emergency department (ED). She resisted discharge, so ED nurses called a security guard, who forcibly wheeled her in only a hospital gown to a nearby bus stop despite her obvious mental impairment. A psychotherapist leaving work witnessed the dumping, recorded it, and called 911. This ED staff violated federal law, and the nurses violated their professional obligations.

President Reagan signed the Emergency Medical Treatment and Active Labor Act (EMTALA) in 1986, following horror stories of emergency care denied to people in crisis based on their inability to pay. Before EMTALA, hospitals could legally deny treatment to people whom they determined couldn’t pay, claiming public hospitals and charitable organizations should see those patients.

Federal officials cited the Baltimore hospital for EMTALA violations. Deficiencies included allowing security guards to decide which patients would be seen before providers could, not protecting and promoting patients’ rights, violating confidentiality, not protecting patients from harassment, and failing to provide a safe discharge. The top hospital official apologized and accepted responsibility for the incident.

Bandura’s work on moral disengagement in 2016 describes how good people don’t realize they are acting harmfully. Examples include victim blaming (“wasn’t wearing a helmet”), labeling patients (“frequent flyer”), displacement of responsibility (“following orders”), and rationalizing a greater good (“we need the bed”), among others. Moral disengagement is a systems dilemma. Preventing separation of personal and professional values requires environments with safeguards that uphold clinical competence and professional compassion.

The *Code of Ethics for Nurses with Interpretive Statements* emphasizes nurses’ obligations to actively promote work settings and policies that support and reinforce ethical practice environments. The *Code* also clearly describes our obligations to patients and the public. No excuse for knowingly allowing vulnerable people to be “dumped” against their will exists

within the terms of that social contract. The *Code* calls on us to respect the dignity of every patient, regardless of his or her status or condition. We owe patients the protection of their rights, including the right to safe care and treatment, especially when they are mentally or physically compromised, even if that means standing up to employers or coworkers. ANA’s statement on “The Nurse’s Role in Ethics and Human Rights: Protecting and Promoting Individual Worth, Dignity, and Human Rights in Practice Settings” states: “Nurses strengthen practice environments by refusing to practice in ways that would create a negative impact on the quality of care.” Such duties are non-negotiable.



Too many EDs and first-responders feel the brunt of a shredded social contract, resulting in unstable housing, untreated mental illness, food insecurity, rampant substance use disorder, intractable poverty, social isolation, and growing gun violence. Our *Code* also obliges us not to add patient dumping, neglect, and abandonment to these ills, but to individually and collectively use our moral power to

stand up, speak out, and as Gandhi reportedly said, “be the change we wish to see.”

— Analysis by Eileen Weber, DNP, JD, PHN, a member of the ANA Ethics and Human Rights Advisory Board.

### Selected references

- Centers for Medicare & Medicaid Services. Statement of deficiencies and plan of correction. U.S. Dept of Health and Human Services. February 21, 2018. [assets.documentcloud.org/documents/4416434/University-of-Maryland-Medical-Center-survey.pdf](https://assets.documentcloud.org/documents/4416434/University-of-Maryland-Medical-Center-survey.pdf)
- Elhady Y. *Patient Dumping*. U.S. Commission on Civil Rights. September 2014. [usccr.gov/pubs/docs/2014PATDUMPOSD\\_9282014-1.pdf](https://usccr.gov/pubs/docs/2014PATDUMPOSD_9282014-1.pdf)
- Friedman E. The law that changed everything—and it isn’t the one you think. *Hospitals & Health Networks*. April 5, 2011. [hhnmag.com/articles/5010-the-law-that-changed-everything-and-it-isn-t-the-one-you-think](http://hhnmag.com/articles/5010-the-law-that-changed-everything-and-it-isn-t-the-one-you-think)
- McDaniels AK. Federal regulators say University of Maryland hospital violated rules in patient dumping case. *The Baltimore Sun*. March 20, 2018. [baltimoresun.com/health/bs-hs-um-hospital-violation-20180320-story.html](http://baltimoresun.com/health/bs-hs-um-hospital-violation-20180320-story.html)

# Nurse leader shares insights on preparation for board service

As part of its ongoing initiative, sponsored by the Rita & Alex Hillman Foundation, to recognize nurses in board leadership roles, the American Nurses Foundation interviewed Madeline Bell, MS, BSN, president and CEO of Children's Hospital of Philadelphia. Bell serves on several boards of directors, including the Comcast Corporation, Federal Reserve Bank of Philadelphia, Chamber of Commerce for Greater Philadelphia, the Children's Hospital Association, and the Children's Hospitals' Solutions for Patient Safety.

### What are some capabilities and attributes beyond those related to healthcare that nurses bring to the business world?

The versatility of what nurses have to do in the course of a day builds character and the ability to function at a very high level. Nurses develop the ability to routinely assess crisis situations, take in a variety of different data points as team members, decide when to call in somebody with a different skill set, and accomplish tasks within time constraints. These abilities align well with being a capable executive and board member.

Being empathetic to our patients and families is also a really strong skill for nurses. For board service, this translates to being empathetic to customers, shareholders, and other stakeholders, and being able to put yourself in their shoes.

### What advice would you offer to other nurses about the value of board service?

I think that board service is a really good way to build your skill set and your network, which is important to your organization and your own professional development. I also think it's a good way to give back the skills that you already have. For many nurses like me who've "grown up" in hospitals and health systems in the nonprofit world, it's a way to show your value outside of where you've spent your career. For me, this reinforced that nursing is a versatile career that allows you to build on everything you learned at the bedside.

### Where do you believe you've had the most influence as a member of the Comcast board?

Healthcare is a major expense for every company. As the CEO of a large healthcare organization, I bring the perspective of where healthcare is moving in the future and how employers and providers can improve patient outcomes and reduce costs. That's an important perspective to bring to the board.



Madeline Bell

With my operating experience and experience as a CEO, I also know what it's like to run an organization and to make big strategic and financial decisions. And I certainly have the perspective of being a woman, so I bring some diversity of thought and experience. I sit on the audit committee and the governance committee and am engaged in both of those activities in my own organization and on other boards. I can reflect on and bring perspective to some of the top issues boards deal with, such as succession planning, cyber security, and enterprise risk, based on my own experience.

To read the full interview and learn more about the initiative, visit [nursingworld.org/foundation/programs/nurses-on-boards/nurse-leader-spotlight-profiles](https://nursingworld.org/foundation/programs/nurses-on-boards/nurse-leader-spotlight-profiles)

## Interested or currently serving on a board? Be counted

All boards benefit from the unique perspective of nurses to achieve the goals of improved health and efficient and effective healthcare systems at the local, state, and national levels. Help ensure at least 10,000 nurses serve on boards across the United States by 2020. If you serve on a board, or are interested in future board service, visit [nursesonboardscoalition.org](https://nursesonboardscoalition.org) and be counted.