

..... Everything Matters In

Patient Care

**Our Commitment
to Improving Care**



Our mission is to provide the highest quality care to all children. Staff like our clinicians improve care through collaboration, innovation and more.



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Pictured left: A respiratory therapist provides breathing treatment to a patient. Learn more about our respiratory care on page 18.

Commitment to Accountability



Linda Stoverock
DNP, RN, NEA-BC,
Senior Vice President,
Patient Care Services,
Chief Nursing Officer

One of our One Team values at Nationwide Children’s Hospital is being accountable; holding ourselves to the goals and expectations set for us by our Board of Directors and the community at large. Let us reflect on the many ways Nursing at Nationwide Children’s has been accountable in 2016.

We established a goal to hire 95 percent of our budgeted nursing positions, including turnover, by July 2016. We surpassed this goal thanks to the teamwork between our Human Resources recruiters, managers, Professional Development educators and staff. This group worked together to complete the phenomenal job fair last January, many interviews and the new hire process for our incoming employees. Most of all, many thanks to our unit based preceptors and educators who orchestrated many schedules to bring on more than 300 new nurses and additional ancillary staff and Respiratory Therapists.

Early in the year, we committed to opening a new satellite Emergency Department at Lewis Center, scheduled for opening in 2017. This was a huge team effort. Nursing worked internally with many departments as well as external agencies to plan for the appropriate staffing, preparedness for trauma and communication with the main campus. I would like to thank Duane Kusler, MSN, RN, VP of Emergency Services for his leadership and planning with this huge endeavor.

The Inpatient Units worked to establish new scheduling processes and the use of Epic for measuring patient acuity. The project had many big changes from our previous processes. It engaged schedulers, HR payroll, Business Process Improvement (BPI) and EPIC team members in analyzing information to ensure appropriate staffing

workloads. Nursing engagement from all the units, especially charge nurses, was a key component to providing information on appropriate staffing. We are fortunate to have such collaborative partners in Finance, HR, IS and BPI to help navigate our new tools.

Finally, we are halfway through our Magnet Journey, working toward our fourth designation. We have committed to meet the four recommendations from the Institute of Medicine and Robert Wood Johnson for the Future of Nursing. Eighty percent of our new hires have a BSN or higher. Among our overall direct care staff, 76 percent of nurses have a BSN or higher. Many of you have further demonstrated your commitment to pediatric nursing by attaining certification in your specialty area or continuing your education. In addition, we had a banner year for publications and presentations at national and international conferences. Congratulations to each of you who have attained major professional accomplishments by achieving a degree and/or certification, presenting at a national conference or publishing your work. In doing so, you advance the care of patients here at Nationwide Children’s as well as pediatric patients around the world.

At Nationwide Children’s we work as One Team and honor the contributions of everyone. It will take this continued effort and teamwork to set our standards to meet the highest level of recognition by ANCC and achieve Magnet designation for the fourth time. Together we can do this, especially with the level of accountability demonstrated by our teams at Nationwide Children’s! Happy New Year, and peace to you and your families.

Simulation: Practicing to Perfection to Eliminate Preventable Harm

Todd Heslep BSN, RN, Paramedic, C-NPT, Outreach Education Coordinator, Simulation Coordinator
Terri Long, RN, MSN, Director, Outreach Education





The new Livingston Ambulatory Center is set to open today. At the door of your clinic is your first patient, and the newborn appears to be in distress. The registration clerk comes to you and asks, “Are we ready for patients?” Not wanting to turn them away, you bring the patient and the mother back to the room. The respiratory rate is 60 and the oxygen saturation reads 80. You quickly look around the room to start to take care of the situation but cannot find the oxygen masks that would fit the patient. A PCA from the hall yells, “I found it.”

Utilization of simulation can be underappreciated and many of us do not realize how much simulation we are actually doing.

The physician leading the simulation says, “Let’s stop there and discuss.” The simulation team has been tracking the scenario by logging events of this admission with times. The patient is our newborn simulator and the team taking care of the patient is clinic staff getting acquainted with their new environment.

As an organization, Nationwide Children’s Hospital has a commitment to eliminating all preventable patient harm through the Zero Hero program. Anyone who has been working in the health care setting for any time is accustomed to constant change as it relates to improving care and outcomes. Simulation as a method of learning often centers on the aviation industry. Aviation

industry accidents have devastating consequences and are often associated with human error. So to help learn from and mitigate human errors, the aviation industry turned to simulation. Through simulation, members of aviation crews practice, rehearse and make mistakes in a safe learning environment so errors do not have deadly consequences.

Utilization of simulation can be underappreciated and many of us do not realize how much simulation we are actually doing. Simulation can range from high stakes mock codes on very expensive high fidelity patient simulators to practicing central line dressing changes on a polystyrene plate with central catheter

through it. Other simulation areas are the Epic playground in which you can practice documentation in a simulated electronic medical record and basic life support classes when you are practicing chest compression on a manikin. Simulation as a modality of learning allows the learners to make mistakes while building skills. Through a facilitated participant-lead debriefing session, individuals can learn in a safe, non-threatening environment.

When simulation lead by Dr. DJ Scherzer started at Nationwide Children's in 2007, two rooms were built and two simulators were tethered to the room. No ability to take these simulators out of the room existed. Due to new technology the simulators travel to anywhere at Nationwide

Children’s and throughout the state. In situ means in the environment that we care for our patients’ and realism is a integral part of simulation. Patient care providers having the ability to utilize simulation to practice low frequency, high risk events in the patient care environment leads to improved patient outcomes for these events.

As Nationwide Children's grows, so does the need to test our new environments prior to “real” patients being admitted. This is a part of our Patient/Family Centered Strategic Plan Do Not Harm Me. During the 2012 new tower build, simulation was a part of unit orientation and also a part of identifying major safety hazards and latent safety threats, both of which can do harm to our patients if not recognized. Major

Patient care providers having the ability to utilize simulation to practice low frequency, high risk events in the patient care environment leads to improved patient outcomes for these events.



safety threats are defined as things that could impede response time to an acute life-threatening event if uncorrected. Latent safety threats are defined as system-based threats to patient safety that can materialize at any time and are unrecognizable by health care providers. The simulation team, at that time lead by Dr. Tensing Maa, identified five major safety threats and 28 latent safety threats. Identification of safety threats is the first step to providing improved outcomes and eliminating preventable harm.



During simulation in the 2012 new tower, the simulation team identified **5 MAJOR SAFETY THREATS & 28 LATENT SAFETY THREATS**

Our volume of simulation sessions has grown from a few sessions a month to nearly 70 per month. Our sessions range from full courses such as Pediatric Fundamentals of Critical Care Support (PFCCS) to mock codes on

the floors during off-shifts. One of our courses, Cues of Deterioration, originated in 2011 when the hospital adopted the Pediatric Early Warning Score (PEWS) as a way to identify early deterioration in our patients. This course has now been taken by over 80 percent of our nursing staff. This course continues to grow and has been offered to our regional affiliate hospitals, along with a new course focusing on Ambulatory Setting, it is used to identify patients that are deteriorating in an outpatient setting. These simulation sessions prepare our staff to “navigate my care” for the patient.

Simulation sessions monthly offerings have grown from **A FEW TO 70**

Simulation can be used for so many things from Keep Us Well regional hospital simulation sessions to Treat Me With Respect and donation after cardiac death. All forms of simulation, from low fidelity to high fidelity, can be used in order to provide our patients with the safest environments and the best outcomes.



Parent Perspective

Always Searching for a Solution

Aleksandra Leijenhurst-Le Belle

When my son Kaya was born, I knew deep down inside that something was wrong. The doctors, however, waved it away and said I was just worrying since our oldest daughter had passed away due to a congenital heart defect. As Kaya grew older we began to notice differences. A friend of mine pointed out that his crawling was unusual and suggested I have him seen by a doctor. At the age of three, doctors discovered Kaya had muscular dystrophy. We were devastated and desperate not to lose another child. It took almost a year to find out that Kaya had Limb Girdle Muscular Dystrophy type 2D (LGMD2D). LGMD2D causes weakness of the muscles in the hip, shoulder and abdomen. The severity of the disease varies greatly between individuals.

The day Kaya was diagnosed, I was urged to act and find a way to save my child. I was ready to do anything for my little boy and would go to the end of the world if I had to. Living in the Netherlands left us with very few options. There were only 11 other children diagnosed with LGMD2D in the Netherlands, with research money going towards diagnoses with the largest patient populations. We were told there was no treatment and that my son would be in an electric wheelchair by 10 years old. I had to find something. It was a matter of life — my son's life. Every evening when my kids went to bed, I would search the internet trying to find information and a cure for my son.

Finally, what we were hoping for, for so many years, happened. The summer of 2015, we received a phone call from Nationwide Children’s Hospital. Kaya was eligible to participate in a trial. We were so excited and finally had hope for a brighter future. The day we signed the consent forms was a bit scary as we realized there were some risks and like any other trial, uncertainty. We found reassurance as Dr. Jerry Mendell and the rest of the team answered all of our questions and concerns and ultimately shared the same goal: to find a cure.

Kaya received his first gene transfer therapy with a low dose. Quickly after the gene transfer, Kaya felt some muscles he had never felt before. I will always remember the fortune cookie we had with our dinner that night which read, "You will soon gain something you have always wanted." It could not be a coincidence; Kaya’s life was changing for the better. His energy increased as well as his quality of life. While he used to rely on a wheelchair to get around, Kaya is now walking and can even climb trees.

This entire experience not only made Kaya’s muscles stronger, it also made him a much stronger person. I came to Columbus with a young boy who was told nothing could be done. Now, I have a 14-year-old who has changed both physically and mentally. The doctors have not only taken care of his muscle disease, but also his total being. We still hope and believe the other muscles will be treated in time. Even if Kaya stays the way he is, we are more than satisfied and very grateful to be part of a trial that is working to find a cure and eventually treat all muscles.

NOTE: This is from the parent perspective and is not intended to reflect nor should be construed to be an official opinion of Nationwide Children's Hospital or the Principal Investigator on the study or as the effectiveness of the experimental product.

Using Virtual Reality Technology to Ease Patient and Family Anxiety During Intravenous Procedures

Amy Dunn, M.D., Associate Professor of Pediatrics, The Ohio State University College of Medicine, Director, Hematology and the Hemophilia Treatment Center, Division of Hematology/Oncology/BMT, Nationwide Children’s
Jeremy Patterson, Lead – User Experience Technology Research & Development, The Research Institute at Nationwide Children’s

From a young age, patients with a severe bleeding disorder known as hemophilia require multiple intravenous (IV) medication infusions every week. In order to achieve best health outcomes, these IV infusions need to be lifelong. A detractor, the needle used in this procedure, is known to create stress, anxiety and pain for the children and their families. The increased burden of negative stress and anxiety can lead to decreased adherence with treatment, increase in bleeding rates and may lead to the development of needle phobia. Nationwide Children’s Hospital’s Hematology Division and The Research Institute at Nationwide Children’s Hospital’s User Experience Technology Research and Development teams wanted to change the experience for families. The groups wanted to redesign and re-engineer to change from a potentially detrimental experience to one that is positive and perhaps even fun for the patient.

The interdisciplinary team worked together to reinvent the IV experience by creating a fully-immersive virtual reality (VR) environment where every small detail is customized to the health care needs of children with hemophilia. "Voxel Bay" is the first result of this unique collaboration and the first platform to bring VR technology from a research environment to a clinical care setting.

"Voxel Bay" is a hands-free, immersive VR game designed to meet the needs of the health care providers, patients and their families. Every aspect of the VR experience, from the hardware, games and ways in which it fits into the clinical care workflow, were designed around the people who would ultimately interact with this technology. This patient-centered design approach has resulted in a first of its kind VR system which encompasses a child’s entire clinic experience outside of the game and redefines the entire experience for the patient.

The game itself runs from an iPod touch placed inside a custom designed, light-weight disposable headset that is exclusive to Nationwide Children’s. Headphones with a built in microphone are incorporated into the headset so the player can listen to the game, and more importantly, control and play the game with sounds of breathing. Thus, the game is playable by patients who must keep their arms motionless during an IV procedure. The end result is an experience which engages the patient through visual and audio elements, as well as beautiful interactive games.

The VR platform includes a remote control dashboard that provides a real-time second screen view into the patient’s virtual world. The clinician is in full control over the events that occur for the patient. For example, the nurse can orchestrate the experience by summoning a distracting game precisely at the moment of need. The dashboard acts as a virtual mixing board for the patient experience in the VR environment and allows all experiences to be perfectly tailored to each unique patient encounter.



"Voxel Bay" starts by asking children to choose a character (parrot, platypus, penguin or sea lion) who will accompany them on an island journey. Throughout the game, choices are made by looking at an object for a few seconds. This was intentionally designed to allow the child to remain relatively still during the game but also to allow easy access to the child’s hands/arms for medical procedures. The games are also designed with novel elements that reduce the chances of the patient experiencing motion sickness.

The child sets off in a boat which follows a pre-determined course. The child experiences the calming ocean atmosphere surrounding "Voxel Bay’s" three islands. Along the track there is always a point of interest in front of the player to keep their attention and minimize their movement, including head rotation.

At each island, and at several points of interest, the boat stops and gives the child a chance to see details of the unique activities which take place on or between each island. The boat may also stop if the clinician initiates a breathing exercise using the dashboard’s remote controls.



In order to set the boat in motion to continue their journey, the player must blow into the sail of the boat through a microphone. For every island stop, players

choose whether to play a mini-game. In addition to the three mini-games accessible from the island stops there are five more inaccessible mini-games that the clinician-orchestrator can start for the player remotely. Using the clinician remote control station to start games helps keep the experience interesting for players because it allows for direct response to the player’s needs and adds a touch of uncertainty and adaptability to the gameplay.

Thanks to a great One Team effort this customized game is now in clinical trials in the hemophilia clinic with rave reviews from patients and families.

Family History: A Powerful Screening Tool

Katelynn Anderson, MS, LGC, Department of Genetics

Families share their genes, environment and lifestyle habits. When combined, these factors can lead to medical conditions that run in the family. Patterns of disorders among relatives can provide clues about whether an individual or other family member may be at an increased risk of developing a particular condition.

For this reason, family health histories are simple but valuable diagnostic tools within the health care setting. Single gene conditions such as cystic fibrosis and sickle cell disease have well understood inheritance patterns that can be seen easily by drawing a family tree. However, the utility of a family health history extends beyond offering risk assessments for disorders with Mendelian patterns (e.g., autosomal dominant, autosomal recessive or X-linked) to offer information about more complex conditions. These complex conditions include common diseases such as diabetes and heart diseases that can run in families in a less obvious pattern due to a combination of shared genes and environment.

Family histories can be used to identify inheritance patterns of medical conditions and which individuals may be at risk for those conditions. Individuals at risk for a particular condition may benefit from lifestyle changes, increased monitoring, or in some cases, genetic testing. In addition to this practical use of family histories, this discussion can help foster patient-provider relationships by building trust and understanding of the patient’s background.

A comprehensive medical family history contains information from three generations of biological family members. It is important for providers to regularly update the family history. This can be done by simply asking if anything has changed in the family since the patient’s last visit.

Key Information to Record

- Date the information was collected
- Name of person providing information
- Degree of relation
- First-degree relatives: parents, brothers, sisters, children
- Second-degree relatives: aunts, uncles, nieces, nephews, grandparents, grandchildren
- Third-degree relatives: first cousins
- Sex
- Age or year of birth
- Medical conditions and age at diagnosis
- Birth defects
- Multiple miscarriages
- Developmental delays or intellectual disabilities
- Seizures
- Blindness/deafness
- Cancer
- Genetic or diagnostic testing previously done
- Age at death and cause of death (if known)

It is important to keep in mind that discussing family health can bring up difficult topics, and that divorces, adoptions, recent diagnoses and deaths may be stressful situations. Encourage families to discuss their health. Once health history is recorded it can be shared with medical providers and other family members, and information added any time.

Consider completing this information for your own family.
Knowing your own family medical history allows you to take steps to reduce risk.

The Second Victim Program: Peer Support Matters

Adrien Winning, BS, Research Assistant, Center for Biobehavioral Health
Cynthia Gerhardt, PhD, Director, Center for Biobehavioral Health



Peer support empowers people in the second victim program.



Watching a patient suffer as a result of a preventable error is a distressing experience for most health care providers

Second victims frequently note that peer support is helpful in promoting positive adjustment following an error or adverse event

Many health care providers will experience a medical error or adverse patient event at some point during their career. These events can range from minor medication errors to devastating patient injuries or death. Regardless of the cause and scope of the event, watching a patient suffer as a result of a preventable error is a distressing experience for most health care providers. Notably, these health care providers, or second victims, frequently report experiencing immense guilt and emotional distress following such an event. Additionally, the impact of the event may be far-reaching and extend into other areas of the health care provider's life, potentially diminishing their professional confidence and causing detachment from patients.

Peer support is one resource that second victims frequently note as helpful in promoting positive adjustment following an error or adverse event. In order to help combat negative outcomes among employees, Nationwide Children's Hospital has created the Second Victim Peer Support Program. Housed within the YOU Matter Program, the central goal of the Second Victim Program is to raise awareness about the mental health support available to employees after an adverse event, foster a supportive work environment and reduce

the negative impact of the crises employees experience. This program not only educates all employees about how to identify and provide initial support to second victims, but it also provides further training to a select group of employees to facilitate one-on-one support and group debriefings after an error or adverse event. However, a support program is only as good as the employees willing to help. Therefore, the Second Victim team has been working alongside Cynthia Gerhardt, PhD, Director of the Center for Biobehavioral Health, and her research team to evaluate the effectiveness of this peer support program and improve the services available to hospital employees.

As part of this ongoing quality and safety initiative, the team first disseminated a survey to characterize the emotional and professional well-being of employees from seven different Neonatal Intensive Care Units (NICUs) affiliated with Nationwide Children's Hospital. Of the 466 employees who responded to the survey, 42 percent

42% OF THE 446 EMPLOYEES surveyed had observed or been directly involved in an adverse patient event during the previous 12 months.

had observed or been directly involved in an adverse patient event during the previous 12 months. While this number may seem high, it is consistent with other research that cites medical error prevalence rates ranging from 10.4 percent to 45 percent. Overall, employees reported relatively low levels of distress, such as anxiety, depression, burnout and secondary traumatic stress. They also had average levels of compassion satisfaction (i.e., the pleasure derived from being an effective caregiver) compared to established norms. However, employees who had experienced an error or adverse event reported significantly higher levels of emotional distress compared to those who had not experienced an event. A significant subset of employees had clinically significant levels of anxiety (26 percent) and depression (6 percent). This is concerning as emotional distress can lead to a higher risk of making future errors, and it can have other negative downstream effects on patient care.

26% OF EMPLOYEES had clinically significant levels of anxiety and 6% depression

As a whole, employees felt their peers were supportive (71 percent). High levels of peer support were protective against symptoms of anxiety and depression. In other words, employees who felt better supported by their peers experienced lower levels of anxiety and depression following an error or adverse event. These initial results reinforce the important role of peer support in promoting positive adjustment after an event and confirm the need for institutions to develop and implement programs to better care for employees.

71% OF EMPLOYEES felt their peers were supportive

After elucidating the negative impact of errors or adverse events on NICU employees, the team began implementing the Second Victim Program at the NICU sites. Using a blocked or stratified randomized-controlled design, four of the seven NICUs affiliated with Nationwide Children's Hospital received the program, while the three remaining NICU sites served as a six-month wait list control group. This effort was spearheaded by the Second Victim team, consisting of Jenna Merandi, PharmD, MS, Dorcas Lewke, RN, MS, and Lois Stepney, MSW, LISW-S. Six months after the initial program implementation, NICU employees once again completed a survey assessing their experiences with errors or adverse events, as well as the impact of the peer support program on their emotional and professional well-being.

Overall, 73 percent of employees felt the NICU had benefited from the Second Victim Program. Of the four NICU sites that initially received the program, 13 employees had spoken with a peer supporter following an error or adverse event. All but one of these employees said they benefited at least a little from speaking with a peer supporter, and they felt they did not require additional help (i.e., referral to pastoral care, employee assistance program, social work, and behavioral health staff). Those who experienced an event and spoke with a peer supporter reported lower levels of anxiety, higher levels of compassion satisfaction and perceived their peers as more supportive.

73% OF EMPLOYEES felt the NICU had benefited from the Second Victim Program

Those who experienced an event and spoke with a peer supporter reported lower levels of anxiety, higher levels of compassion satisfaction and perceived their peers as more supportive.

When asked about how the Second Victim Program supported employees in returning to work after a traumatic event or experience, many believed the program was helpful.

“Allowed me to work through my issue gradually and without judgment.”

“It puts my mind at ease to know this program is in place for myself and my staff. I am hoping everyone feels supported and free to open up now that we have peer supporters.”

Several employees mentioned that while they had not yet needed to utilize the program, it gave them comfort knowing the support was available.

“Good, helpful program. Glad to know it’s there if I would need to use it.”

“I am just happy to know that this program exists for staff if and when we need it.”

These preliminary results are encouraging and suggest although this program is still in the early stages of development, employees at Nationwide Children’s Hospital find it an important and valuable resource. It has not only improved the satisfaction employees derive from helping patients, but also aided in alleviating some of the stressors all health care providers experience. There is still work to do, as numerous employees from the initial program implementation reported they were unaware of how to best access and receive support from this program.

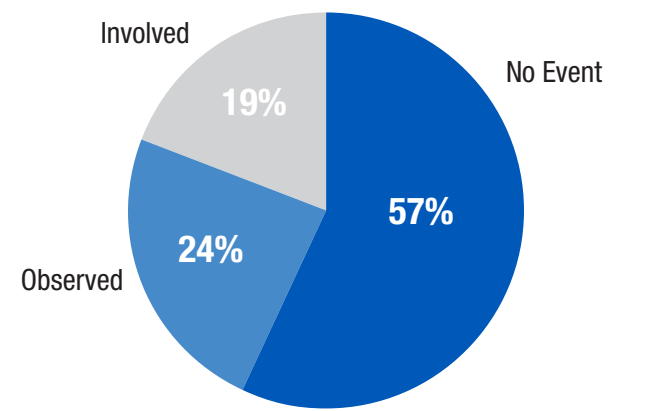
So what’s next? Efforts to not only improve awareness, but also implement this program at the remaining three NICU sites are currently underway. Future endeavors include increasing the number of peer supporters



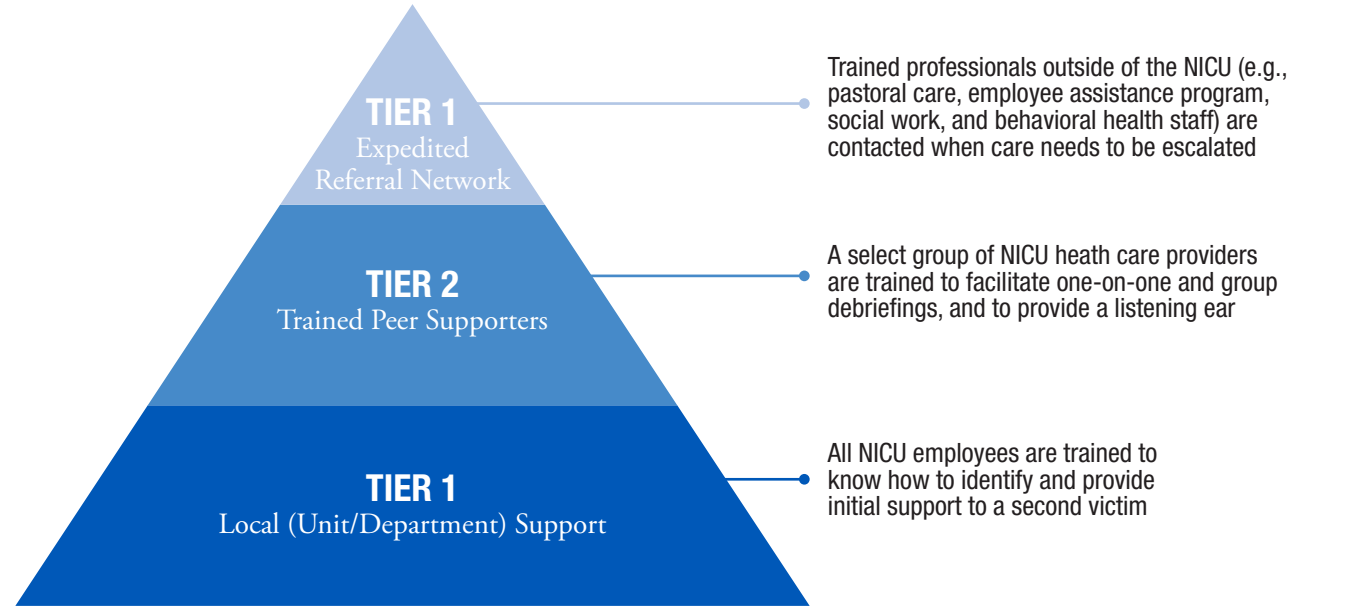
available in each unit and continuing to validate the effectiveness of this important program at one year.

Nationwide Children’s has quickly become a national leader in quality and safety, and the Second Victim Program has become a model for other institutions across the country. The Second Victim team has already provided training or consultation to over 14 hospitals who are interested in implementing the program. The Second Victim team hopes these efforts will lead to a collective shift in culture and ultimately improve outcomes for both patients and employees.

A Breakdown of Employee Experiences with Errors or Adverse Events During the Past Six Months



Scott Three-Tiered Interventional Model of Second Victim Support as applied to Nationwide Children’s



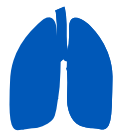
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Journey to Best Outcomes: Using Evidence to Change Practice in Respiratory Care

Laura Evans, MBA, RRT-NPS, RCP, Respiratory Care Manager

The Nationwide Children’s Hospital Patient Family Policy Committee is continually challenging themselves to use evidence to support practice and policies. To enhance patient outcomes, Respiratory Care applied the principles of Evidence Based Practice (EBP) to our practice and policy for airway clearance (AC), including chest physiotherapy (CPT). The clinical problem under investigation was unnecessary use of CPT and AC. Hospital wide, Respiratory Therapists (RTs) and Registered Nurses (RNs) performed more than 100,000 airway clearance therapies in 2015, with the RNs doing nearly 60 percent of these therapies. CPT was being performed on patients with diagnoses and/or symptomatology not indicated by the evidence and, by doing this, were potentially causing adverse side effects, such as agitation and compromised vital signs.



In 2015, Respiratory Therapists (RTs) and Registered Nurses (RNs) performed more than **100,000 AIRWAY CLEARANCE THERAPIES**

The question that guided the inquiry was whether AC was effective in hospitalized pediatric patients. The next step was a literature review followed by an analysis of clinical indications for AC/CPT therapy and overall impact on patient outcomes. In conjunction with the Nationwide Children’s library team, primarily Susi Miller, we identified 50 articles for review. The RT leadership group held working book club-type meetings, where each person reviewed a number of articles using Melnyk and Fineout-Overholt’s EBP appraisal process. The team compiled a body of evidence and found the literature related to CPT and airway clearance is somewhat limited and varied in its findings related to effectiveness and overall long-term benefit to the patient.

Based on these findings we began to examine our own practices more closely. Karen McCoy, MD, Chief of the Section of Pulmonary Medicine serves as a key proponent and a co-leader of the project. Together, we assembled a multidisciplinary team called the CPT working group consisting of units and services that used CPT and AC frequently to take a deep dive into current practices. The team examined data related to the number of therapies performed, the frequency in which they were performed, the duration of the therapy, and the diagnoses of the patients who were receiving the therapy. In reviewing patient cases, the team primarily found AC was prescribed for clinical indications that are not in accordance with the evidence. We also found a lack of consistent documentation of the indications for prescribing CPT and were not reassessing our patients at regular intervals to determine if it was still indicated. Additionally, we surveyed RNs, practitioners and RTs and found a strong bias toward assuming CPT is more effective than indicated in the literature. This lead us to determine we have the opportunity to reduce variation in practice of administering AC by transitioning the work from the RNs to the RTs, a smaller group of people which will likely promote more consistency in the therapy performed.

Based upon the evidence from the literature and our internal practices, the CPT working group put together a guideline and indications tool to guide practitioners to the real need for CPT and the frequency. We are conducting Plan, Do, Study, Act (PDSA) cycles to roll out the guideline effectively. The tool is currently in its third rendition, and we are in the process of establishing its validity and reliability.

The evidence is clear that RT driven protocols are effective in healthcare. They reduce unnecessary treatments and decrease resource utilization, which leads to cost savings with no adverse outcomes for patients. The CPT working group’s goal is to create a protocol process that enables RTs to determine if the patient fits the criteria for CPT and make a subsequent



recommendation for therapy. To ensure the success of the protocol, the group educated more than 150 RTs on the EBP process and performed competency assessments related to CPT, with more rolling education on the horizon for other staff as we deploy the guideline. Having an RT driven protocol using an evidence-based guideline/tool for making a recommendation on whether or not to use airway clearance is our aim. We want to ensure the therapy is performed consistently with our

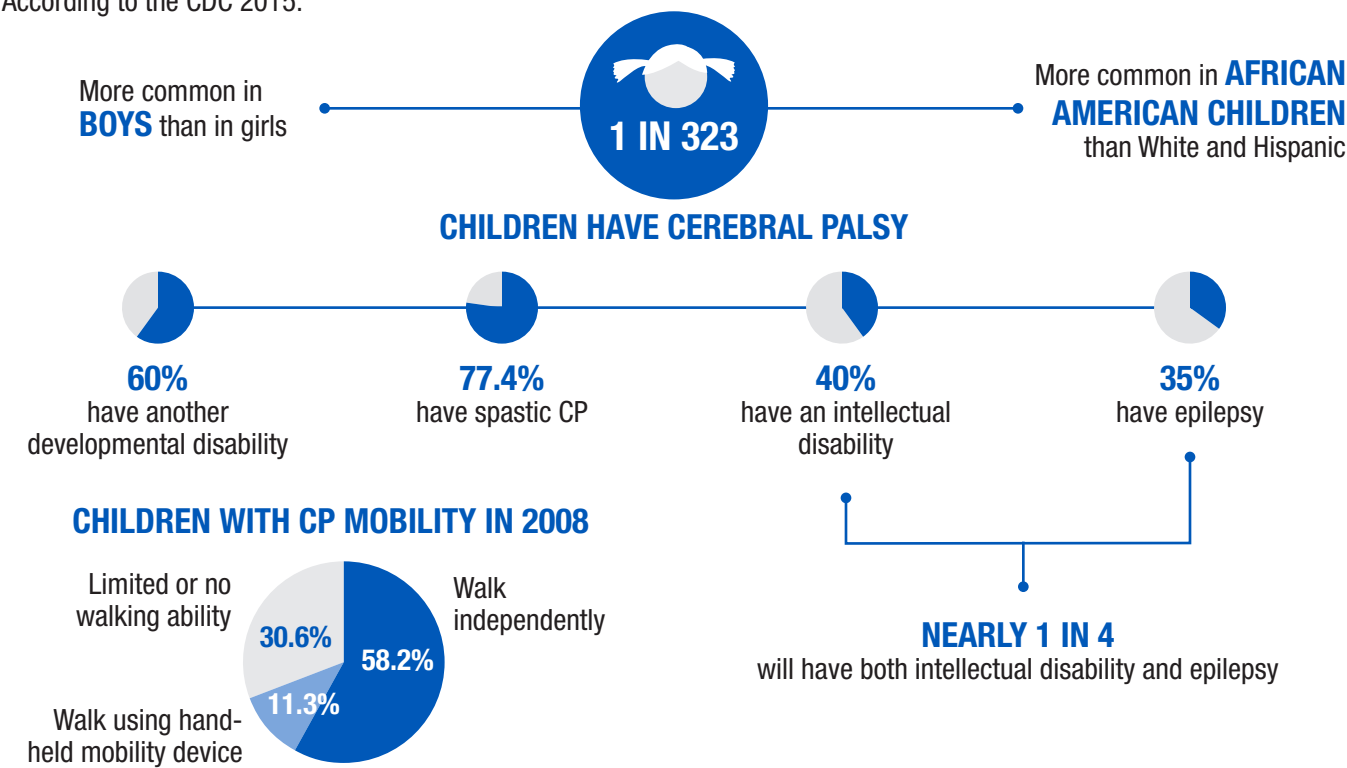
patients and regularly reassessed to determine if it is still indicated. This ensures our patients receive therapy that is warranted and effective. We will continue to monitor and evaluate the effectiveness of our guideline. In doing this EBP project, we have overcome our fears of implementing EBP, integrated the literature into practice, and established a stepping stone on our Journey to Best Outcomes in Respiratory Care.

Improving Socialization Opportunities for Children with Cerebral Palsy

Lamara Love, BSN, RN, CPN, HNB-BE, Comprehensive CP Program Coordinator
Sha Clark, LISW-S, Comprehensive CP Clinical Program Coordinator

Cerebral Palsy (CP) is the most common motor disability in childhood.

According to the CDC 2015:



Regardless of the outcome measure used, young people with cerebral palsy appear to be less habitually physically active than their typically developing peers, as well as less active than recommended by physical activity guidelines. A key role for many clinicians working with young people with cerebral palsy is to encourage and facilitate opportunities to increase habitual physical activity and reduce the amount of time spent sedentary, in order to optimize long-term health outcomes. (S.L. Carlon et al.)

Due to some of the potential side effects of CP (reduced mobility, increased pain, impaired communication), children with CP can be at greater risk for negative

psychosocial outcomes. Parents in our community have asked for a program that involves the “comprehensive treatment of the whole child.”

The overriding theme expressed by families and caregivers was their children “deserve the opportunity to become active, independent adults with fulfilling lives.” In essence, families were describing a “holistic” treatment approach. The definition of holism as it pertains to medicine according to Oxford Dictionaries is “the treating of the whole person, taking into account mental and social factors, rather than just the physical symptoms of a disease.”

As a result of parental feedback and ongoing partnership with family advisers, Nationwide Children’s Hospital developed The Comprehensive CP Program, which is designed as an interdisciplinary translational research model to provide standardized, evidence-informed care. Data collected in the course of the clinical visit is captured in a standardized fashion in the electronic medical record in a process we call Learn from Every Patient (LFEP). To promote coordination of care, an electronic individualized holistic CP Care Plan is developed in collaboration with the family and team providers. The CP Care Plan is the “glue” that pulls the visit together and paints a picture of the whole child.

Back in 2012, in order to understand the specific needs of the families served in the CP Program, caregivers present at the CP Interdisciplinary Team visit completed two subtests of the Assessment of Caregiver Experience in Neuromuscular Disorders (ACEND). One of the top psychosocial stressors identified by caregivers was the inability to engage in family activities in the community.

Moving forward and looking at the “whole” child within the context of family and community led us to discover a very specific clinical problem. Many children with CP have minimal opportunities for socialization and fun physical activities. There is also a decreased awareness by caregivers of the adapted recreation options available in the community. Therefore, children with CP are often less physically active and have fewer opportunities for socialization with their typically developing peers.

Addressing this identified concern was approached through a multi-step effort. The first step was to develop a CP mascot and research study called A Descriptive Study of CP Patient’s Preferences for Adventures. It looks at children with CP and their inclination toward certain adventures. The child with CP is encouraged to explore his/her environment with the CP Mascot, with the goal of increasing knowledge of and interest in available activities and adaptations.



The next step was to address feelings of isolation by families by developing opportunities for families to meet and socialize with others who have a child with CP. One such activity developed was a “CP Family Day” at a local fully adapted recreation camp. This enabled families to spend a day engaging in fun activities while having the opportunity to develop relationships with other families.

Another activity developed is a Kid Fest as part of the Pedal-with-Pete, a Columbus event which raises money for CP research. The Kid Fest is an opportunity for children with CP to participate in an all-wheels parade, race and celebration with other children who are living with CP. Several children have also received adapted bikes donated by various community organizations.

In collaboration with Nationwide Children’s Nurse Scientist, results of the Mascot Study were presented at an international nursing conference. We identified camping was the number one choice of adventures when given the options of hockey, having super powers, rock climbing and camping. Our hypothesis is a child’s overall health will show improvement due to increased opportunities for socialization. Nurses, social workers and other health professionals will be able to use our findings to understand what types of activities appeal to children with CP and target health messages around these activities. In providing many socialization opportunities, our goal is to show an improvement in physical mobility, social functioning, self-esteem and self-care.

The next step is to expand our sample nationally through networks to get broad representation and add new adventures to the existing list. We would like to take a deeper look at the CP Mascot Project and collaborate on a national level, to develop activities based on preferences of children with CP.

Resources Needed for Nurses to Float

Ann Hoffman MS, RN, CPN, Patient Care Services

Floating is an adjective meaning buoyant or suspended in water or air. It also means unsettled, transient, variable or temporary. For most members of the health care team, floating means moving from an area of comfort — one’s home unit — to an area that is less familiar. This can create feelings of anxiety and dread.

Floating is a common occurrence in hospitals across the country. It is no different at Nationwide Children’s Hospital. Ensuring all staff have the most current information and resources available when they float has always been a concern. There have been many publications that address best practices related to floating, the experience of floating or the characteristics of float pool nurses, but very few articles address the types of resources nurses feel they need during the float process.



In 2011 the Nursing Congress at Nationwide Children’s made a concerted effort to improve the floating experience. The Congress set a goal of implementing a float nurse resource in both inpatient and outpatient areas. The resource manual was preempted by a survey to all units asking to identify the important information for a nurse to know when floating. A majority of the information gathered was universal but also included unit specific content. Each unit was tasked with creating a resource manual for staff to use when floating to their specific area.

These manuals were modified over time and still exist on many units, but eventually it was determined while these were a great resource for float staff, they were cumbersome and not necessarily a quick and easy reference. As a result, the float flyer or welcome document was created.

This one-page document is given to the float nurse when they arrive on the unit and extra copies are kept in the conference room with the assignment board. These flyers are small enough to fit in a pocket, yet contain all pertinent unit information including resource names, general unit information and diagnosis specific information. Many units have gone on to develop a float flyer for Patient Care Assistants (PCAs) as well.

In 2014, with the growth of the inpatient float pool, the subject of floating was revisited. As more people were hired into the float pool, another survey was sent out to inpatient staff to determine what resources were needed to float. Participation in this survey was confidential and voluntary but highly encouraged.

Questions Included

- How many years have you been a nurse at Nationwide Children’s?
- In the past 12 months, how many times have you floated?
- Do you feel you have the necessary resources available to you in order to float to other units?
- What would be the best way to ensure the most current unit based information is available to you?
- What resources/information (if any) do you feel is lacking that would help you feel more competent floating to another unit, and what suggestions do you have for improving resource availability for floating staff?



The results included responses from 220 inpatient nurses or about 20 percent of inpatient nursing staff. The results of the survey told us the length of time as a nurse at Nationwide Children’s or number of times floating had no bearing on the perceived resources needed to float. The top suggestions for improving the floating experience were a friendly face, an identified resource person who is introduced to the float and checks on them frequently, a quick unit orientation and tour, and a written or electronic resource document readily available. In response to this survey, the float flyers and welcome documents for all inpatient units were added to ANCHOR so staff would have the ability to get an electronic copy.

As a result of staff response to these surveys, many enhancements have been implemented to maintain the competency and decrease the angst of staff when floating.

In an effort to measure the success of these actions, another survey will be done in the near future. To help decrease floating, the hospital has increased the number of dedicated float nurses and float PCAs. These dedicated float nurses are divided by area of competency including neonatal, critical care, heart center and medical-surgical units.

In order to adequately staff all units, floating is a necessity. Nationwide Children’s has taken the time to listen to staff concerns, provide available resources and continuously monitor staff satisfaction related to floating.

Find the documents and information for float staff on **ANCHOR/float-resources**

Studies Show Correlation Between High Infant Mortality Rates, Economic Hardship and Legal Problems

Henrietta Nwomeh, Capital University Law Student
Tracy King, MLP Program Coordinator

The social determinants of health are (1) economic stability, (2) neighborhood and physical environment, (3) education, (4) access to food, (5) community and social integration and (6) quality of the available health care system. Many of the social determinants of health have embedded legal problems. As a result, Medical-Legal Partnerships (MLP) possess the capacity to positively impact these social determinants. Beneficial outcomes can occur by integrating legal staff into health care clinics where they remediate legal problems and educate clinical staff on social determinants of health and their legal origins. The MLP is also able to achieve positive outcomes by incorporating legal insights and solutions into health care practices especially if the patient population is poor.

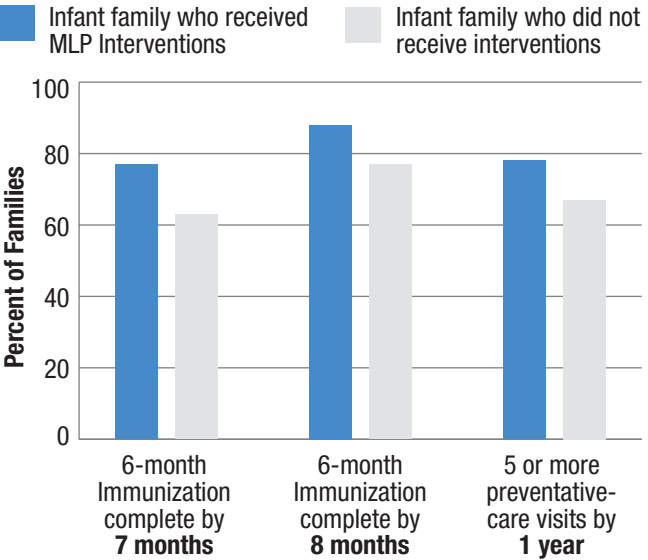
Nationwide Children's Hospital's MLP's main goal is to improve health outcomes through our collaboration with the Legal Aid Society of Columbus. Working under Nationwide Children's Office of Health Equity, the MLP is providing another tool to identify and eliminate health disparities. For example, one of the MLP's service areas is in The Teen and Pregnant Clinic at Nationwide Children's. The Teen and Pregnant Clinic focuses on providing pregnant teens with a multidisciplinary approach to prenatal care with the goal of directly supporting efforts to decrease infant mortality in central Ohio. The Legal Aid lawyers are collaborators with the clinical staff at the clinic, standing side-by-side with the physicians, nurse practitioners, social workers and dietitians. Nationwide Children's MLP contributes meaningfully to better health outcomes by following young mothers through the course of their prenatal and postpartum care (for instance, at the first prenatal visit; 24-28 weeks gestation; and postpartum), and by offering clinical staff and patients a resource to address legal issues that could harm patient health.

The MLP provides frontline staff with education on social determinants of health, as well as information

about the legal remedies the MLP can provide to patients. Legal Aid staff is available for collaboration in person or by phone.

A recent study by Dr. Robert Sege in Pediatrics indicates providing supportive services, including MLP services, can make a significant impact. The study involved 330 infant participant families, 73 percent of whom reported economic hardships. Participant families who received MLP interventions were more likely than those who received no interventions to have completed the infant 6-month immunization schedule by age 7 months (77 percent vs. 63 percent) and 8 months (88 percent vs. 77 percent). Families who received interventions were more likely to have five or more routine preventative-care visits by age 1 year than their counterparts who did not receive such interventions (78 percent vs. 67 percent). This study shows MLP and other supportive services can make a difference in health outcomes. Such results counsel in favor of replicating such interventions in other health care settings, as health care providers engage in the difficult work of trying to decrease the high rates of infant mortality.

MLP Intervention Effectiveness



In Recognition

Presentations

Catie Christensen, Lori Grisez: “Vestibular Considerations for the School Therapist,” 24th Ohio Institute for OT/PT School-Based Practice, August 2016

Samantha Gee, Philip Holt: “Pediatric Extracorporeal Membrane Oxygenation Transport by EC-145 with a Custom Built Sled,” Ait Medical Transport Conference, September 2016

Amy White, Pam Chism: “Lateral Violence in the Perioperative Setting,” AORN National Conference, April 2016

Shana Lucius, Jennifer Wickesberg: “Keep Calm and Music On!” Alexander Graham Bell Association for the Deaf and Hard of Hearing Annual Convention, July 2016

Vicki von Sadovszky, Ann Hoffman: “A Descriptive Study of Resources Needed During Floating Among Nurses in a Tertiary Pediatric Facility,” Sigma Theta Tau International Leadership Conference, September 2016

Dodie Allen: “Acute Child Sexual Abuse/Assault: An Innovative Model of Care,” APSAC's 24th Annual Colloquium, June 2016

Donna Coglianese, Danielle Worthington: “Dashboards for Real Time Chart Audits,” Epic User Group Meeting, September 2016

Ryan Nicoll: “Neonatal Abstinence Syndrome: Support and Education for Caregivers,” OACB (Ohio Assoc. of County Boards) Spring Conference, April 2016

Publications

Cheryl Boyd, Julie Gerberick: **Book Chapter:** “A Real World Example: Using the Evidence-based Practice Competencies with Policy and Procedure Committees,” *Implementing the Evidence-based Practice Competencies in Healthcare: A Practical Guide for Improving Quality, Safety and Outcomes*, June, 2016

Catie Christensen, David Wessells, Michelle Byars, James Marrie, Shaun Coffman, Erin Gates, Mitch Selhorst: “The Impact of a Unique Knowledge Translation Program Implemented in a Large Multisite Pediatric Hospital,” *Journal of Evaluation in Clinical Practice*, September 2016

Hina Walia, Dmitry Tumin, Sharon Wrona, David Martin, Tarun Bhalla, Joseph Tobias: “Safety and efficacy of Nurse-controlled Analgesia in Patients Less Than 1 Year of Age,” *Journal of Pain Research*, June 2016

Philip Holt, Ashley Hodge, Todd Ratliff, W. Joshua Frazier, David Ohnesorge, Samantha Gee: “Pediatric Extracorporeal Membrane Oxygenation Transport by EC-145 with a Custom Built Sled,” *Air Medical Journal*, March 2016

Lauren Madhoun, Sudarshan Jadcherla: “The Complex Relationship Between Dehydration and Dysphagia in Neonates,” *Perspectives on Swallowing and Swallowing Disorders*, June 2016

Kathleen Kennedy Cianca: “Young Children's Participation and Environment Measure Review,” *Rehabilitation Measures Database*, April 2016

Mary Fallat, Barbara Gaines, Kathy Haley, Wayne Meredith, David Mooney, Jeffrey Upperman: “Proceedings of the Second Childress Summit on Pediatric Trauma: Operationalizing the Vision,” *Trauma Acute Care Surg, Volume 81*, October 2016

Debbie Terry, Anup Patel, Daniel Cohen, Daniel Scherzer, and Jennifer Kline: “Barriers to Seizure Management in Schools: Perceptions of School Nurses,” *Journal of Child Neurology*, April 2016

Amy Donegan, Brendan Boyle, Wallace Crandall, Jennifer Dotson, Cinda Lemont, Tania Moon, Sandra Kim: “Connecting Families: A Pediatric IBD Center's Development and Implementation of a Volunteer Parent Mentor Program,” *Future Directions and Methods for IBD Research, Volume 22, Number 5*, May 2016

Gail A. Bagwell: “Neonatal Clinical Nurse Specialist in Improving Neonatal Care through Outreach to Referral Hospitals,” *Newborn & Infant Nursing Reviews 16 (2016)*, October 2016

Erin Keels: “Neonatal Nurse and Neonatal Nurse Practitioner Fatigue,” *Newborn & Infant Nursing Reviews 16 (2016), Elsevier*, October 2016

For a full list of graduations, awards, certifications and more, visit [ANCHOR/In-Recognition](#)

Daisy Award

Denise Yutzy, RN

The 15th Nationwide Children's Hospital Daisy Award was presented to Denise Yutzy, RN, of the Westside Primary Care Center. The Daisy Award is given in appreciation of the important difference our nurses make in the lives of patients and families at Nationwide Children's Hospital.

Denise was nominated by several co-workers for her commitment to nursing excellence. Examples include her thoughtful approach when helping a family who didn't speak English, advocating for a patient with asthma exacerbation and collecting donations for a family around Thanksgiving who was affected by a house fire.



"She is incredibly deserving of the Daisy Award," states one nominator. "She is an excellent role model to all of our staff here at Westside about how to treat people, whether that's patients or co-workers."

EVERYTHING MATTERS IN PATIENT CARE, previously published as *Heartbeat*, is a quarterly publication of the Patient Care Services Division of Nationwide Children's Hospital, Inc., Columbus, OH. Comments regarding the content of this publication are welcomed. References for articles are available by calling (614) 722-5962. Articles may be reprinted with permission. Send all inquiries and material for publication to EVERYTHING MATTERS: IN PATIENT CARE in care of Rosetta Gordon, Administration, Nationwide Children's Hospital, Inc., or call (614) 722-5962. Nationwide Children's Hospital is an affirmative action, equal opportunity employer. Copyright 2017, Nationwide Children's Hospital, Inc. All Rights Reserved.