Everything Matters in Nursing Practice

2018 Annual Report

When your child needs a hospital, everything matters.
Table of Contents:

4 Letter from our Chief Nursing Officer
4 Nursing Professional Practice Model
6 Points of Pride
8 Strategic Plan

Feature Articles
10 Partners for Kids: An Overview
11 The Long Journey Home
12 Expanding Emergency Care to Delaware County Individuals
13 Improving Homegoing Instructions: One Unit’s Focus on After Visit Summaries
14 Pediatric to Adult Sickle Cell Care: Strategies for Successful Transition During a Difficult Time
17 Keeping Families Connected: An Innovative Approach to Intra-Operative Communication
18 Psychiatric Nurse Practitioner Post-Graduate Fellowship to Expand Access to Childhood Mental Health Services
20 Hitting Harms, Hugging Helps
21 The Search for a Good Death Experience or Infants and Their Families
22 Helping Patients and Families Cope With the Click of a Button
23 Volunteer Neonatal Abstinence Specialist Program: Helping Our Smallest Patients through a Tough Time
24 We Hear You: The Safety Attitudes Questionnaire (SAQ) Spurs Change
25 Evidenced-based Monitoring of Symptoms in a High-Risk Multispecialty Infusion Clinic
27 The CCPR Bowel Management Program: Improving the Quality of Children’s Lives Around the Globe
28 Non-Operative Management of Simple Appendicitis in Pediatric Patients
32 Zero Suicide Initiative
34 Using Health Care Simulation to Create a Safe Day, Every Day
35 NDNQI: More Than a Benchmark
36 Enhancing Health and Wellness Through a Care Connection Partnership
37 Development of a Communication Program to Foster Inclusiveness for LGBTQ+ Families
39 CAR T-Cell Therapy in the Treatment of Cancer

2018 in Recognition
40 Presentations
45 Publications
For more than 15 years, professional practice models have shaped care delivery at Nationwide Children’s. The models reflect our values and culture, and provide guidance in clinical problem solving. It is a tool to guide practice decisions for individual patients, patient populations and project work.

Dear Colleagues and Friends,

At the time we are putting this annual report together, we have completed a monumental project: submission of our fourth Magnet document, which received a high enough score to be granted a site visit! How exciting! Yet, it feels a little bit like the World Series, when you want to print the headlines of the newspaper or winning team shirts, but you do not have the final answer. What I do know for sure is Nursing at Nationwide Children’s Hospital has a lot to brag about and share through professional meetings and publications. Reviewing submissions for the fourth Magnet document demonstrates all the elements of best nursing practice alongside our other professionals.

One of our biggest accomplishments as an organization is our commitment to address the social determinants of health in our community. As a tangible demonstration of that commitment, we are offering a new minimum wage that better equips many of nursing’s support team members to be able to improve their social determinants of health. These invaluable support roles include nutrition services staff, environmental services, patient care assistants, unit coordinators and constant attendants as well as many other roles. These team members are crucial to our work of delivering great patient outcomes and this raise in minimum wage makes their life a little bit easier; supporting child care expenses, food and housing, allowing them to focus on the teamwork here at Nationwide Children’s.

As an equally important move, we are launching a national effort to address the stigma associated with mental illness in children. This movement is growing with our staff leading the way. Both issues of mental health and social determinants are bold moves that ensures Columbus as a leader in community health, not just care of sick and injured children. This is truly an example above the rest for transformational leadership in our organization’s journey to best outcomes.

As always, in an annual report, there are wonderful examples in every department of your contribution to new knowledge, transformational leadership, exemplary practice and structural empowerment, but we will not be able to include them all. Enjoy learning about some of the bigger projects that make this a great place to practice nursing. I look forward to celebrating the fourth Magnet designation with you, but most of all just working with you for our patients and families for best outcomes.

Linda Stoverock, DNP, RN, NEA-BC
CNO/SR VP Patient Care Services
Nationwide Children’s and The Ohio State University Wexner Medical Center program is one of the first to earn ACHA Adult Congenital Heart Disease Accredited Comprehensive Care Center designation.

Nationwide Children’s Hospital has once again made U.S. News & World Report’s 2019-Best Children’s Hospital Honor Roll, a distinction awarded to only 10 children’s centers nationwide. In addition to the Honor Roll distinction, Nationwide Children’s is ranked in all 10 specialties.

The Research Institute at Nationwide Children’s Hospital IS ONE OF THE TOP 10 NIH-funded freestanding pediatric research facilities in the U.S.

Provide more than $191 MILLION IN CHARITY CARE and community benefit services annually

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Inpatient Rehabilitation Maintains CARF Accreditation

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* Most recent data from CHA-member pediatric hospitals

MORE THAN 1.5 MILLION PATIENT VISITS FROM ALL 50 STATES & 45 COUNTRIES

America’s Second Largest CHILDREN’S HOSPITAL

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AMERICA’S LARGEST neonatal network and provider of inpatient pediatric surgeries*

Committed to achieving zero preventable harm

FOUR-TIME MAGNET designation for nursing excellence

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Our vision remains unchanged. We aspire to create the best outcomes for children everywhere. As nurses, this means we create a safe environment for patients, coordinate their care and transform both outcomes and experience. It means retaining the best professionals, sharing expertise and training the next generation. It means advocating for access to care, supporting facility development and embracing technology while improving value to patients and families. It means forging partnerships and affiliations that allow us to improve school environments and communities.
Partners For Kids: An Overview

Individuals Involved
Pamela Edson, MHA

Partners For Kids acts as a bridge between the state's five Medicaid managed care plans and the actual care that approximately 330,000 children in central and southeastern Ohio receive under those plans. Not only is it one of the nation's oldest pediatric accountable care organizations, it is also one of the nation's largest. Partners For Kids has proven it can provide high quality care at a lower cost. It actually rewards physicians for preventing illness and for good health outcomes, not for large numbers of visits or procedures. With the lower cost for care that this model achieves, Partners For Kids and Nationwide Children's are able to reinvest in programs that lead to long-term health for children.

Nationwide Children's and a Partners For Kids board member and published in Pediatrics, found that Partners For Kids' member-per-month costs are less that traditional Ohio Medicaid fee-for-service and Medicaid managed care plans and Partners for Kids' cost have grown at a slower rate.

Partners For Kids target measure of quality care and patient outcomes were holding steady or improving.

One of the most important examples of improvement has been among children who have certain neurologic diagnosis, such as cerebral palsy, and who also need a feeding tube. The number of days that those patients spent in the hospital per month dropped significantly.

The Long Journey Home

Individuals Involved
Mary Gossard, RN, MSN, CNS

Discharging a Neonatal Intensive Care Unit (NICU) baby can be emotionally complex for families. The challenge is to provide comprehensive family preparation in a timely manner and to ensure ongoing support for these fragile babies.

• This past year has seen a lot of attention on discharging the NICU infant; from decreasing length of stay to successful transition of complex patients to home services. One group has focused its work on getting physician agreement on the criteria for discharge such as the number of days to monitor an infant who is prone to apnea and bradycardia events and the identification of the appropriate feed volumes and weight gain.

• A multidisciplinary discharge checklist is now accessible, by discipline specific sections, and posted in their specific work areas instead of a centralized location. The team has adapted tools from the other hospitals to create Red Flag Action Plans for babies with a tracheostomy or G-tube. These tools give families guidance on how to respond to changes in their baby's condition and when to notify their health care providers or call 911.

• If the baby has a tracheostomy, the family is required to room in and provide all care for 24 hours. This provides the opportunity for families to demonstrate skill acquisition and feel comfort with the home equipment. These scenarios are real life challenges a family may encounter, which may not actually occur during their 24-hour training, such as equipment failure.

• Providing a system of ongoing support after discharge for the families is critical. Another OPQC initiative has been to collaborate with the Ohio Medicaid plans and Partners For Kids (PFK) to get babies enrolled in the Care Coordination program prior to discharge.

This is a fragile population; families have variable personal and community resources. It’s our challenge to empower these parents and ensure supports are in place after discharge.
Expanding Emergency Care to Delaware County

Individuals Involved
Theresa Warnimont, RN, BSN, CPEN

In early 2015, Nationwide Children's Hospital identified a service disparity on the northern edge of Franklin County extending into the surrounding counties. Many families were choosing to use adult facilities for emergency care because of proximity. In order to bring specialized pediatric emergency care to these families, Nationwide Children's decided to explore the feasibility of its first free-standing emergency department. Many meetings followed to determine the specifics of the planned space, as Nationwide Children's Senior Leadership worked to create multi-disciplinary teams to address different facets of the construction and building process. Clinical staff, purchasing specialists and supply chain experts collaborated to determine the equipment and supply levels. Our free-standing emergency department (FSED) has all the equipment and supplies to treat critically ill and injured children. However, access to sub-specialists from areas such as Surgery, Orthopedics and others is limited to telephone consultation, so any patient requiring face-to-face consultation must go to main campus. Clinical staff, as well as Epic specialists, completed a comprehensive review of existing policies and procedures. Finally, staff needed extensive education to exist within a FSED. Nursing staff spent time reviewing respiratory illnesses and care as well as learning the basics of invasive and non-invasive mechanical ventilation. The respiratory therapy and pharmacy departments were instrumental in providing staff with invaluable education and practice. Finally, simulation provided staff a chance to pull all the education together and validate competencies in providing specialized pediatric care. The journey to Nationwide Children's first free-standing emergency department has been long and arduous. However, our commitment to meeting the needs of the community have been realized. Families in Northern Franklin County and the surrounding counties now have quick, immediate access to specialized pediatric emergency care.

Improving Homegoing Instructions: One Unit’s Focus on After Visit Summaries

Individuals Involved
Jennifer Pauken, BSEd, BSN, RN, CPN
Guliz Erdem, MD
Nursing Staff on Infectious Disease Unit C5B

Nationwide Children’s Hospital, through efforts such as teach back techniques and expanded patient education offerings, has recognized the importance of effective discharge instructions. It is shown in the literature that the transition from hospital to home has been associated with high rates of adverse events, many of which are preventable. Nurses, who provide a majority of discharge teaching, identified incorrect or incomplete After Visit Summaries (AVS) as a key area for quality improvement. An ongoing quality improvement project on the Infectious Disease Unit (C5B) grew out of the recognition that nurses were spending considerable time identifying and rectifying AVS errors. The project began in May 2016, with baseline data collection and analysis. The next step was to classify various types of errors according to severity, including identifying which errors can be independently corrected by nurses and which edits must be made by practitioners. The severity matrix included some of the errors which can be corrected by nurses:

- Minor spelling, punctuation errors/typos, wrong gender or age: zero potential for harm
- Incorrect or incomplete follow up appointment details: low potential for harm
- Dot phrase incomplete, inappropriate abbreviations: moderate potential for harm

Based on the initial data, more than 25% of the errors could be corrected by nurses. The project team began by providing comprehensive education to nurses on identifying and correcting errors, with ongoing, consistent reinforcement to maintain focus and build competency. Ongoing audits revealed progress toward goal and by July 2017, the error rate reached a low 27%.
Pediatric to Adult Sickle Cell Care:
Strategies for Successful Transition During a Difficult Time

Individuals Involved
Anthony Villella, MD
Payal Desai, MD
Amy Garee, RN, MS, PNP

Comprehensive Sickle Cell Disease and Thalassemia Multidisciplinary Teams
at Nationwide Children’s Hospital and the Ohio State University Medical Center/James Cancer Hospital and Solove Research Institute

Transitioning from a pediatric provider to an adult physician can be overwhelming. This experience is intensified for patients with chronic diseases. Approximately 400 patients with sickle cell disease are followed at Nationwide Children’s Hospital. Our patients transition to an adult hematologist at age 21. To prepare our patients for transition, we begin to shift the focus of our routine outpatient visits to an adolescent clinic for patients age 14-21 years old. This enables us to move from talking with parents to talking with patients about their own healthcare. As patients become more independent and mature, we suggest that parents remain in the waiting area for most of the appointment and reconnect with their child and provider at the end of the visit. Our team also works to teach our teens and young adults how to assume accountability of their own medical care. Providers give them the responsibility of keeping track of their own appointments, knowing when and how to reach us, and how to effectively communicate so their medical needs are being met. In Columbus, we have a wonderful comprehensive adult sickle cell program lead by Dr. Payal Desai at The Ohio State University (OSU). We partner with OSU in an effort to make the transition from our pediatric program to their adult program as seamless as possible. We have monthly meetings to discuss new research findings, along with quarterly meetings to communicate about the transition program and to discuss patients requiring more specialized care. We participate in the Nationwide Children’s - OSU Sickle Cell Transition Day twice per year. This is a day where we invite our 21-year-old patients and families to OSU to meet their sickle cell team. The day consists of:

- Meeting adult treatment providers
- A presentation about OSU’s program
- Offering an opportunity for questions
- Touring OSU’s medical campus and clinics

Most recently, we have developed a transition clinic where Dr. Desai joins us for our adolescent comprehensive sickle cell clinic. This enables patients to meet her at Nationwide Children’s before they officially transition to her care.
Keeping Families Connected: An Innovative Approach to Intra-Operative Communication

Individuals Involved
Roslyn Colvin, BSN, RN, RNFA, CNOR
Roberta Rodeman, BSN, RNFA, CNOR

As the use of technology has expanded, many hospitals are looking at ways to employ electronic communication for families to receive information about their loved ones, ranging from electronic boards in surgical waiting areas, to postings on social media sites. Our team elected to trial a newly developed Electronic Communication Program (ECP) called Electronic Access to Surgical Events (EASE). Downloading the EASE application allows the OR staff to send one-way personalized messages and photos. Up to three additional mobile device phone numbers of family or friends can be added by the primary contact person.

During the intra-operative period, nursing staff used a tablet loaded with the sender application allowing updates to be sent containing any combination of text messages, photos and videos according to the family’s preference. A timeline of messages usually included a picture with text of the patient safely off to sleep after anesthesia, a narrated video clip of the pre-op echocardiogram performed by the cardiologist, text updates every 30 minutes including the start of the procedure, the implementation of bypass, separation from bypass, a video update from the surgeon prior to closing the chest, and a final update as the patient is leaving the OR for the Cardiothoracic Intensive Care Unit.

Most family participants observed that the timely updates and images decreased their stress and enhanced their experiences. After the implementation of the EASE program, 262 families that utilized the electronic application for intra-operative updates were surveyed from June through October 2016. Results indicated high satisfaction with families, rating their experience at an average of 9.8 out of 10, and 97% indicating they would recommend this hospital to others.
Psychiatric Nurse Practitioner Post-Graduate Fellowship to Expand Access to Childhood Mental Health Services

Individuals Involved
Nancy Noyes, MS, PPCNP-BC, PMHCNS-BC
Trish Miller, APN
Vonda Lowe, APN
Bethany Downey, APN

One in five children will develop a serious and debilitating mental health disorder in their lifetime. In addition, suicide is the third leading cause of death in children between the ages of 10 to 14 years, and is the second leading cause of death in those individuals between 15 to 34 years.

There are currently 8,500 child and adolescent psychiatrists in the U.S., but only 2.4% of the 234,000 U.S. nurse practitioners work in psychiatry. Of those, even fewer care for children and adolescents. In Ohio, there is a severe shortage of child and adolescent psychiatrists (currently only 287) who see children and adolescents with mental health disorders from 1 to 17 years of age. This shortage complicates the ability of psychiatry providers to effectively integrate primary care with behavioral health. Two-thirds of primary care providers report difficulty accessing mental health services. This is double the percentage of providers who report difficulty referring to any other specialty.

To address this access issue and provide highly competent PMHNP’s to care for our children and adolescents with complex psychiatric disorders, Nationwide Children’s Hospital began the first Child and Adolescent Psychiatric Nurse Practitioner program in the United States in August 2018. Two fellows were accepted into the first cohort and will graduate in August 2019. The mission of the program is to transform the delivery of pediatric mental health care in central Ohio through the expansion and development of expert Psychiatric Nurse Practitioners to meet the complex needs and improve the outcomes of the acute and chronically ill child and adolescent mental health population.

The first year of the program has been very successful and our fellows have integrated well into both the inpatient and outpatient mental health setting. The program will apply for pre-accreditation by the National Nurse Practitioner Residency and Training Consortium (NNPRTC) and anticipate a site visit in July 2019. There are also potential future plans to expand the number of Psychiatric NP’s accepted into the fellowship. Ongoing evaluation of the fellowship program and programmatic changes are anticipated in the second year of the fellowship.
Hitting Harms, Hugging Helps

Individuals Involved
Pamela S. Creech, MSN, RN, CPN, NEA-BC
Gail Hornor, CPNP-PC

Nationwide Children’s Hospital has instituted a new initiative titled Hitting Harms, Hugging Helps to make the hospital a safe and healthy environment for every child, parent, visitor and staff member. Spanking is associated with more aggressive behavior, anti-social behavior, slowed cognitive development, poorer mental health outcomes and negative parent-child relationships. Pediatric health care providers must feel comfortable and confident talking with parents about discipline and the potential negative consequences of spanking. Providers should stress to parents the importance of realistic developmental behavioral expectations and discipline strategies. Parents should understand that they teach with their actions as well as their words, and children mimic parental behavior that they see - both good and bad.

The original goal of the No Hit Zone (NHZ) developed in Cleveland, Ohio was to reduce the frequency with which parents administered discipline that was physically or emotionally excessive or disruptive in the hospital setting. Nationwide Children’s brought key stakeholders together to plan for implementation of the NHZ concept within our institution. The decision was made to make the national concept our own and name it “Hitting Harms, Hugging Helps,” with a stronger focus on role-modeling and coaching positive parenting concepts. Our application to these situations are the Zero Hero tools of Stop & Resolve, ARCC (Ask Question, Request Change, Express Concern, Escalate up the Chain of Command) and taking the HEAT (Hear the Family Out, Empathize, Apologize, Take Action). The core concept of Hitting Harms, Hugging Helps is “At Nationwide Children’s, no adult shall hit a child and no adult shall verbally abuse a child.” So when hitting or verbal abuse is observed, as Zero Heroes we interrupt the behavior and offer assistance to diffuse the situation. Our Journey to Best Outcomes could not be complete without empowering our staff to role model and intervene as Zero Heroes in this very important but sometimes difficult subject.

The Search for a Good Death Experience for Infants and Their Families

Individuals Involved
Christine Fortney, PhD, RN
Amy Baughcum, PhD

It could be said that there is no such thing as a “good” death when an infant dies. Death at the beginning of life is unnatural, unexpected and tragic. For Neonatal Intensive Care Unit (NICU) families, the trauma of the experience may have lasting effects, including long-term negative health outcomes for a subset of parents.

Each year in the United States, 23,000 infants die, with more than two thirds of these deaths occurring in the NICU. Important research led by co-investigators at the Ohio State University College of Nursing and the Center for Biobehavioral Health at Nationwide Children’s Research Institute highlights a constellation of factors that contribute to the quality of the end of life (EOL) experience for infants, families, and health care providers. While the loss of an infant may be unavoidable, patient and family centered-care may ease distress and help those who are bereaved to move forward in a healthier, more positive way.

The quality of a neonatal death can be evaluated through the use of an evidence-based framework that has been adapted from the adult literature. Fortney & Steward’s Framework for a Good Neonatal Death (2014) identifies key variables across three domains (infant, parent, nurse) that interact within the changing NICU environment and may contribute to a “good death,” defined by the Institute of Medicine (2003) as “free from avoidable distress and suffering for patients, families and caregivers; in general accord with patients’ and families’ wishes; and reasonably consistent with clinical, cultural and ethical standards.” The interaction of these variables may influence whether the death experience will be more positive or more negative. Recently, the original Framework for a Good Neonatal Death was expanded to incorporate research results that highlighted the importance of collaboration between the interdisciplinary team and parents in recording symptoms, making medical decisions, and EOL care. Other recommendations include providing parents information on community grief resources and developing processes in which designated staff reach out via phone calls or mailings at significant milestones to communicate to families that their infant is not forgotten.

The search for the best possible death experience continues to unfold through research with parents and healthcare providers throughout the infant’s journey and after death. The hope is that this research will help to reduce symptom burden and suffering for infants and families, help families honor their child’s legacy, and lay a positive foundation for life after loss.
Helping Patients and Families Cope With the Click of a Button

Individuals Involved
Sarah See, MS, PC, CCLS
Sarah Klemann, RN

Many invasive tests and procedures take place each day at Nationwide Children’s Hospital, some of which may induce fear and anxiety for our patients and families. In order to provide better care across all Nationwide Children’s service lines, a multidisciplinary team worked together to create personalized coping plans as a collaborative approach to support patients and families during their medical journey. This hospital-wide initiative aims to increase patient and family comfort and compliance during medical procedures, participation in their medical care, satisfaction with treatment and staff understanding of best teaching methods. The coping plan is created during the admission process, where the nurse assesses whether the patient already has a coping plan, needs a coping plan or wishes to decline a coping plan. The coping plan is available in both inpatient and outpatient settings at Nationwide Children’s and “lives” as part of the patient’s profile in EPIC™, therefore, is available throughout any interaction at Nationwide Children’s. This can be particularly helpful for patients and families who have frequent admissions and appointments, because they communicate the information once, and the nurse or unit child life specialist can update the coping plan information only as needed. There are six components families are asked when creating this personalized plan, all designed from evidenced-based practices. The questions pertaining to each component are listed below:

• How have your previous medical experiences been?
• What is your preferred position of choice during medical procedures?
• What helps you cope during your hospital admission and medical procedures?
• Who helps support you during your hospital admission and medical procedures?
• How do you prefer to learn information about your medical experiences?

The coping plan was created to promote an environment where patients and families feel empowered to participate throughout their medical experiences, decrease fears and anxieties about medical procedures, increase knowledge in a developmentally appropriate way and provide tools to promote best outcomes.

Volunteer Neonatal Abstinence Specialist Program: Helping Our Smallest Patients through a Tough Time

Individuals Involved
Kelly Kennedy, RN, MSN
Gail A. Bagwell DNP, APRN

Opiate use disorder is a growing problem in the United States and has reached epidemic proportions. This disorder can affect anyone, including pregnant women. A consequence of this epidemic is that newborns are born with drug dependence and many will experience Neonatal Abstinence Syndrome (NAS). Nationwide Children’s Hospital Newborn Intensive Care Unit (NICU) began noticing an increase in newborns admitted for drug withdrawal in 2009 and developed an interdisciplinary NAS taskforce to address the problem. The NAS taskforce, using quality improvement methods, has implemented many initiatives to help decrease the length of stay for the NAS patients and improve their outcomes. One of those initiatives is the Nationwide Children’s Volunteer Neonatal Abstinence Specialist Program. This program, developed in July 2014, has utilized volunteers to help comfort the babies when the parents were not available to assist the RN with the non-pharmacological care. The goal is to utilize as many non-pharmacological interventions as possible to help control withdraw symptoms. While no final data are available to see if there is a correlation with the use of our volunteer specialists and a decrease in length of stay or medication usage, our volunteers as well as family and staff have verbalized an appreciation for the program. The volunteers have stated that the increase in knowledge and tools helps them to better assist with the comforting of the NAS population. The nursing staff appreciates the extra help to care for this special population as well. “This is one of the most important things I do in my life every week,” reported a volunteer, discussing the value of the program. The opioid crisis in Ohio and the United States show no signs of slowing down. The Neonatal Abstinence Volunteer Specialist Program is an important component of non-pharmacological care that we provide our NAS babies on our Journey to Best Outcomes.
We Hear You:
The Safety Attitudes Questionnaire (SAQ) Spurs Change

Individuals Involved
Michael T. Brady, MD
Sharon T. Dooley, RN, MA, NE-BC

The Safety Attitudes Questionnaire (SAQ), a valid and reliable measure of health care providers’ attitudes about issues related to patient safety, is administered at Nationwide Children’s Hospital every other year since 2009. After each survey, we undertake a debriefing process to share survey results with professional groups from units where survey results suggest there may be risks concerning safety and teamwork. While the debriefing process has evolved over time, the purpose remains the same: To determine actionable items we can use to improve the culture in units that show either poor safety or teamwork, or both, based on survey results. In one instance two professional groups clearly had different views of how their team was functioning. Through the debriefing process with nurses, physicians and others, it became apparent that the significant management issues were at play, and staffing levels and patterns were causing concern. As a result, changes were made on this unit including a new nurse manager and increased staffing. We know these surveys take time, and if you are in a unit that has been identified as having an opportunity to improve on your scores, the debriefing process may be a challenge. Leadership listens to what you say and hopefully the end result will be an improved safety and teamwork culture, which in turn is more fulfilling for everyone working on the unit and a safer environment for all our patients.

Evidenced-based Monitoring of Symptoms in a High-Risk Multispecialty Infusion Clinic

Individuals Involved
Merry Gilbert, RN

Pediatric multispecialty Infusion Centers provide therapy for several thousands of patients with diverse acute and chronic conditions annually. The types of high-risk infusion therapies (HRITs) administered have the potential for severe sensitivities and adverse reactions. The nursing care and standards of practice around monitoring for such sensitivities and reactions was to perform vital signs every 15 minutes during medication administration. The clinical problem is that vital sign changes often occur later in an adverse reaction. An Evidence Based Practice project led by Merry Gilbert, RN, addressed the question whether direct observation or a full set of vital signs every 15 minutes was better at predicting adverse reactions during infusion. The team found vital signs are not a predictor of an impending adverse event during HRITs. Vital signs do not significantly deviate from baseline at all during the reaction. Blood pressure can rise, only in response to the patient experiencing dysphoria. Based on these findings, implementation of a new policy included evidence-based direct observation assessment techniques to monitor for adverse reactions in pediatric patients. These assessments included:

• Vital signs will be taken prior to medication infusion to assure the patient is healthy to receive the infusion, as well, as to serve as a baseline reading.
• Medication side effects, signs and symptoms of an impending infusion reaction will be reviewed with patients and their families.
• Patients will be closely observed throughout the infusion for signs of flushing, coughing, chilling, etc.
• A full set of vital signs will be taken should their condition deviate from baseline.

After implementation, there was earlier treatment of adverse reactions and patient and parent satisfaction improved. Direct observation is a viable assessment option for adverse reactions in Pediatric Multispecialty Infusion Centers.
The CCPR Bowel Management Program: Improving the Quality of Children’s Lives Around the Globe

Onnalisa Nash, MS, CPNP

The Center for Colorectal and Pelvic Reconstruction (CCPR) at Nationwide Children’s Hospital is a specialty center for patients with anorectal malformation, Hirschsprung disease (absence of ganglion cells and presence of hypertrophic nerves), neurogenic bowel and severe functional constipation. CCPR is one of the first centers in the world to formally integrate all specialties involved in providing complete care of the colon, rectum and pelvis in children by joining surgeons and specialists from the fields of Colorectal Surgery, Gastroenterology, Gynecology, Urology and many other collaborating providers.

The bowel management program (BMP), offered at the CCPR, is a week-long outpatient program to treat constipation, hypermotility and fecal incontinence. The goal of the program is finding a regimen that achieves social continence, allows the patient to resume normal daily activities and wear normal underwear. The BMP week begins with a nursing led educational session for parents, while the patients attend a session facilitated by the psychosocial team comprised of licensed Social Workers and Child Life Specialists.

Upon completion of the intense bowel management “boot camp” week, patients are scheduled for follow-up at routine intervals. The information from the assessment allow us the opportunity to look at the objective data related to our patient outcomes. We have found that about 30% of patients do require surgical intervention after bowel management to improve their bowel regimen with either an antegrade option for flushes and/or a colon resection based on colonic manometry studies.

The CCPR has successfully helped change the lives of children across the country and the world with the bowel management program. The program has only been made possible by a dedicated leadership team and committed staff who spend endless hours at clinic visits, on phone calls and emails to families who previously thought there was no hope and no solution to their child’s incontinence. Our success stories include kids who can now play sports and go to sleep overs without the fear of embarrassing social situations. Our families come to us with very few resources or support in their lives, and leave our center with a team of experts ready to support their child and their family for the rest of their lives.
Non-Operative Management of Simple Appendicitis in Pediatric Patients

Individuals Involved
Nicole Jenkins, RN, MSN, NP-C
Katherine Deans, MD
Peter Minneci, MD

Each year the Pediatric General Surgeons at Nationwide Children’s Hospital operatively treat an average of 600 cases of appendicitis. Of these cases, approximately 70% are uncomplicated or simple acute/gangrenous appendicitis; approximately 30% are considered ruptured appendicitis. Since 2012, researchers at Nationwide Children’s and the Center for Surgical Outcomes have been studying non-operative management of simple appendicitis in the pediatric population. The study spearheaded by Katherine Deans, MD and Peter Minneci, MD is the first study of its kind in the United States to address this issue. After the children have met specific inclusion criteria, they were able to participate in the non-operative appendicitis study. In non-operative management, the child is treated with intravenous antibiotic therapy of either Zosyn®, or Ciprofloxacin® and Flagyl® for a minimum of 24 hours. During this time the child is kept NPO and the symptoms are monitored by the child’s nurse, physician and advanced practice nurses. If the child’s symptoms worsen or fail to improve with IV antibiotics alone, a decision is made on whether an appendectomy is warranted. Nursing assessment is crucial in making a decision on how to proceed. If symptoms improve after 12 hours, the diet can be advanced and the child is monitored for 24 hours on IV antibiotics. After 24 hours of continuous IV infusion of antibiotics, the child is then discharged home on oral antibiotics to complete seven days of therapy. Prior to discharge, nursing provides comprehensive patient and family education regarding importance of completing antibiotic treatment and the signs and symptoms to monitor if appendicitis were to return. The study team follows the patient by phone or email day two through five, day 10 through 14, at one month, six months, one year and then annually. The research is ongoing, but the preliminary findings to avoid surgery have been encouraging. The potential benefits in the pediatric population are very positive and include:

• Avoiding surgery complications such as bleeding, infection, postoperative ileus or bowel obstruction, nausea and vomiting postoperatively.
• Complications of anesthesia can be avoided.
• No opioids are prescribed upon discharge and minimal if any are administered during hospital stay.
• Patients can return to normal activities and contact sports after just 48 hours compared to two weeks post operatively.
Nursing Research at Nationwide Children’s Hospital

We have several nurse researchers and nursing research studies going on at Nationwide Children's Hospital. Below is an overview of completed and ongoing research studies that occurred in 2018.

### Completed Studies in 2018

<table>
<thead>
<tr>
<th>Principal Investigator</th>
<th>Purpose</th>
<th>Findings</th>
</tr>
</thead>
</table>
| Glenda Daniels, MS, APN | Effect of Nurse Led Rounds on Unit Culture | • Nurses improved to 100% accuracy in delivering information  
• No change in already high family satisfaction  
• No change in already high unit culture |
| Christine Fortney, PhD, RN | Examine accuracy of health care practitioners’ classifications of palliative vs. end of life care | • There was no clear consensus on definitions for palliative or end of life care  
• Similar to definitions in current guidelines  
• Varying opinions as to what type of care (palliative and end of life care) should be initiated during the course of treatment |
| Micah Skeens, PhD, RN, APN | Examine predictive value of Medication Level Variability Index (MHVI) with graft-versus-host disease (GVHD) in pediatric hematopoietic stem cell transplant patient | • Patients with GVHD had significantly higher MHVI than those who did not  
• Using a criterion of MLVI>3, there was a significant increased likelihood of GVHD. |
| Vicki von Sadovszky, PhD, RN, FAAN | Examine predictive value of Medication Level Variability Index (MHVI) with graft-versus-host disease (GVHD) in pediatric hematopoietic stem cell transplant patient | • Participants preferred avatars that did not have an obvious gender  
• Children were able to identify 90% of the symptom icons with 100% accuracy  
• Favorable perceptions of design and color |

### Ongoing Studies/Programs of Research

<table>
<thead>
<tr>
<th>Principal Investigator</th>
<th>Research Area</th>
</tr>
</thead>
<tbody>
<tr>
<td>Debra Armbruster, PhD, APRN, NNP-BC, CPNP-AC</td>
<td>Relationship between neonatal PICC tip insertion depth and neonate’s anthropometric measures of weight and length</td>
</tr>
<tr>
<td>Grace Deyo, PhD, RN, CPNP</td>
<td>Preventing non-accidental trauma, post-operative care of neurosurgical patients and management of patients with hydrocephalus</td>
</tr>
<tr>
<td>Christine Fortney, PhD, RN</td>
<td>Improving palliative care and end of life experiences for infants in the NICU</td>
</tr>
<tr>
<td>Amy Garee, MS, RN, PNP</td>
<td>Parental coping in pediatric oncology and palliative care patients</td>
</tr>
<tr>
<td>Kristen Greathouse, PhD, CPNP-AC</td>
<td>Evaluating the function of the immune system in children with congenital heart disease, especially around time of surgery</td>
</tr>
<tr>
<td>Tondi Harrison, PhD, RN, FAAN</td>
<td>Effects of maternal caregiving on the development of stress neurobiology in full-term infants hospitalized shortly after birth</td>
</tr>
<tr>
<td>Marliese Nist, MS, RNC-NIC</td>
<td>Mediators of NICU stress exposure and neurodevelopment in very preterm infants</td>
</tr>
<tr>
<td>Rita Picker, PhD, RN, FAAN</td>
<td>Quality of life and improved care for preterm infants in the NICU</td>
</tr>
<tr>
<td>Micah Skeens, PhD, RN, PNP</td>
<td>Adherence in pediatric oncology and hematopoietic stem cell transplant patients</td>
</tr>
<tr>
<td>Heather Tubbs-Cooley, PhD, RN, FAAN</td>
<td>Factors that impede and enhance the quality and safety of care in the NICU</td>
</tr>
<tr>
<td>Vicki von Sadovszky, PhD, RN, FAAN</td>
<td>Health applications and gaming to ease unpleasant symptoms</td>
</tr>
</tbody>
</table>
Zero Suicide Initiative

Individuals Involved
Glenn Thomas, PhD

In 2017, more than 3,000 children and teens died by suicide in the U.S. and suicide is now the second leading cause of death for this age group. Nationwide Children’s Hospital has made a significant commitment to behavioral health and working with high acuity youth, expanding our crisis and treatment services to help meet the need in the community. Zero Suicide is a comprehensive set of best practices designed to improve care for patients at risk for suicide, prevent them from slipping through the cracks, and support the clinicians who identify and work with these patients.

There are several essential components to the first phase of implementation:
• Suicide screening: initially all patients age 10 and up will be screened with the ASQ (Ask Suicide-Screening Questions), an evidence-based suicide-specific screening tool, at first contact and then monthly (if the patient is functioning in or above the range of a typically developing 10-year-old). Patients presenting to the ED with behavioral health concerns will be screened from age eight and up.
• Suicide risk assessment: any patients screening positive on the ASQ will receive a comprehensive suicide risk assessment. This assessment will consist of the Columbia Suicide Severity Rating Scale, also evidence-based, plus additional risk and protective factors.
• A suicide risk categorization.
• An updated safety plan, modified to include the school setting.

To support this initiative and our clinicians, these elements have been built into Epic in a new section of the Behavioral Health navigator - the Suicide Toolkit - making it easy to locate the most recent suicide screening, assessment, risk category and safety plan as patients transition from one service to another across our continuum of care.

For patients admitted to hospital-based services due to suicidal ideation and/or behavior who are being discharged to the community, this initiative will focus on maintaining continuous contact by sending encouraging texts to patients (13 and older) over a period of months and reaching out to their caregivers within 48 hours of discharge. Once these elements have been implemented across Behavioral Health over the summer, we will examine the screening and assessment data to finalize criteria for another important component of the Zero Suicide implementation: the Suicide Care Pathway. Patients on the Suicide Care Pathway will be those at highest risk for suicide and will receive additional elements of care, such as increased frequency of contact and screening, and timely follow-up if an appointment is missed.

This approach will improve the care and safety of our patients and increase the comfort and confidence of our staff, thereby making our organization a safer and more satisfying place to work.
Using Health Care Simulation to Create a Safe Day, Every Day

Individuals Involved
Tom Heater, BBA, RRT, CHSE

Simulation education is one of seven key pillars to support quality, safety and service improvement. This type of education allows learners to move from knowledge and comprehension to application, analysis and synthesis, which are much stronger indicators of competence. In 2018, under the leadership of Tensing Maa, MD, DJ Scherzer, MD and Terri Long, the Simulation Program at Nationwide Children's Hospital held more than 800 simulation sessions and reached over 5,300 healthcare staff of various disciplines. Their program aims to support Nationwide Children's guiding principle to "Create a safe day every day." Simulations incorporate a variety of simulation modalities and methodologies including state-of-the-art simulators (manikins), actual patient care environments, standardized patient actors, task trainers for deliberate practice of skills and virtual/augmented reality. Education provided by nursing and many other healthcare disciplines reach a widespread audience with the principal goal of improving outcomes. Improved outcomes already seen with the program include:

- Nearly 90% of the learners in 2018 said their simulation experience improved their teamwork and communication skills, expanded their clinical knowledge and critical thinking, and better prepared them to manage a similar situation with a real patient.
- About 75% of learners reported applying a lesson they learned in their simulation session to their patient care.
- Increased staff satisfaction and preparation for new positions has been shown to increase nurse retention.

NDNQI: More Than a Benchmark

Individuals Involved
Sherri Watts, MSN, RN

In 2002, Centers for Medicare and Medicaid Services (CMS) and The Joint Commission introduced evidence-based bundles of care called core measure sets for common diagnoses or procedures existing in accredited adult hospitals. This voluntary turned mandatory data submission demonstrating adherence to evidence-based practice standards, initiated collection of performance data with potential for comparison and benchmarking.

In addition to improving patient care quality, hospitals were challenged with nurse shortages. It was at this time that several nurse researchers identified specific qualities evident in hospitals that demonstrated successful attraction and retention of nurses; they were magnetic. The American Nurses Association (ANA) assigned the American Nurses Credentialing Center (ANCC) to develop a program for other healthcare organizations to enculturate this magnetic environment.

In 2001, around the same time ANCC was developing a Magnet program, the ANA founded the National Database of Nursing Quality Indicators™ (NDNQI®) program with the mission to improve patient care by collecting, comparing and reporting nurse-sensitive indicator performance data.

To date, NDNQI is the largest nursing quality measurement program offered to hospitals. NDNQI’s strict adherence to structure, process and outcome not only provides the platform for implementing one of the four Institute of Medicine’s Future of Nursing recommendations, but also is aligned to the ANCC Magnet data submission criteria that requires eight consecutive quarters of nationally benchmarked, unit-level data.

In addition to the multitude of quality improvement initiatives, Nationwide Children’s Hospital utilizes Press Ganey’s patient satisfaction and nurse engagement surveys, as well as submits the following Press Ganey NDNQI indicators in the Magnet document: falls with injury, pressure injury stage 2 and above, CLABSI and CAUTI.

Nurse managers and leaders receive the quarterly NDNQI NSI data and disseminate to staff for review of how their performance impacts patient quality and nursing practice.
Enhancing Health and Wellness Through a Care Connection Partnership

Individuals Involved
Mary Kay Irwin, EdD
Sara Bode, MD

Widely accepted is the notion that children and adolescents who experience good health are more likely to perform well in school and those that experience poor health are more likely to struggle in school. This link carries over into adulthood, as health and education status is a predictor of success with respect to high school graduation rates, post-secondary attainment, career opportunity/advancement and more. With a commitment to population health, Nationwide Children’s Hospital is leading the way as an early adopter of school health integration; leveraging this as one opportunity to pursue health equity for children and adolescents with poor health and education outcomes. While Nationwide Children’s has had longstanding relationships with schools in the central Ohio region, in recent years the hospital has significantly expanded programs and services in schools as a strategy to reach children and adolescents not previously accessing care. Our 13 school-based health centers (SBHCs) are an extension our Nationwide Children’s Primary Care Network. Our SBHCs are staffed with advanced practice nurses (APNs) and medical assistants or licensed practical nurses who work within a school-based multidisciplinary team, typically including school nurses, school counselors, teachers and administrators. Patients of our SBHCs receive the same comprehensive primary care services provided at a Nationwide Children's Hospital. Our SBHCs are staffed with advanced practice nurses (APNs) and medical assistants or licensed practical nurses who work within a school-based multidisciplinary team, typically including school nurses, school counselors, teachers and administrators. Patients of our SBHCs receive the same comprehensive primary care services provided at a Nationwide Children's Primary Care Centre. Services offered include but not limited to sick appointments, well child exams, immunizations, laboratory testing, physicals, chronic disease management, teen health and mental health. All of these services are documented in the electronic medical record and linked to the child's medical home. For children and adolescents without a medical home, the school-based health center provides much needed comprehensive care and becomes their medical home. In collaboration with our community and school partners and our patients and their families, we are achieving the goals of the Care Connection partnership - to enhance the health and wellness of children and adolescents, to improve students' health promotion and access to care, and to improve academic outcomes by eliminating nonacademic barriers to learning.

Accelerators
Wellness & Population Health

Development of a Communication Program to Foster Inclusiveness for LGBTQ+ Families

Individuals Involved
Avery Anderson, BSN, RN

Communication is the foundation of all interactions. While communication is important in every patient encounter, it can be challenging with vulnerable populations. One such vulnerable population is our LGBTQ+ patients. TSA has developed an educational program and resources for staff to foster positive therapeutic experiences and inclusiveness for our LGBTQ+ patients. The goal of this program was to provide staff with the opportunity to empathize with these patients and create a foundation for a therapeutic relationship. The program was implemented for two months and consisted of educational posters, emails and a staff reference manual. The educational poster was used to educate staff on common terms and adjectives used within the LGBTQ+ community. The staff reference manual described in detail health disparities within this community such as risk of violence and psychological distress, terms and definitions used within the community, tips for communication with patients and families, and take-home points. The reference manual included tips for talking with patients with strategies to discover a patient's identity and orientation and establish a therapeutic rapport. In order to understand the patient's perspective.

The educational program was successful with staff. There were significant increases in comfort in caring for patients who are transgender and in talking with parents of patients who are LGBTQ+. Staff evaluated the intervention as very helpful and beneficial. They also had wonderful ideas about additional information topics they would like to learn about in the future.

When communication is the foundation of all interactions, it is paramount that all patients and families feel inclusive. By developing strategies to communicate with patients and families we can truly provide care in an environment where Everyone Matters.
Chimeric antigen receptor (CAR) T-cell therapy is a type of immunotherapy that uses a person’s own immune cells to identify and attack cancer cells. Once CAR T-cells are infused into a patient, they act as a “living drug” against cancer cells. Kymriah™ (tisagenlecleucel) is a CAR T-cell therapy directed against CD19 to treat B cell Acute Lymphoblastic Leukemia (B-ALL). Kymriah™ was FDA approved for relapsed or refractory B-ALL and Nationwide Children’s Hospital is one of the selected treatment centers. The Nationwide Children’s treatment team has completed special training related to management of the side effects of Kymriah™ and developed clinical guidelines to help guide patient care. Patients up to 25 years old are eligible for Kymriah™ if they have B-ALL that is relapsed or refractory to standard therapy. In adults, Kymriah™ can be used to treat other B-cell cancers such as relapsed or refractory large B cell lymphoma. Other indications for Kymriah™ are under investigation in clinical trials, such as B cell lymphoma in children or earlier treatment of B-ALL (e.g., prior to a second relapse). As its name implies, the backbone of CAR T-cell therapy is T cells. T cells are often considered the workhorses of the immune system because of the critical role they play in orchestrating the immune response. Their job is to hunt down and destroy abnormal cells, including cancer cells. For a variety of reasons, however, they don’t always recognize cancer cells or mount an effective attack on them. This potentially allows cancer cells to take root and expand. Turning normal T cells into CAR T-cells seeks to overcome those deficiencies by engineering them to attack any cell with CD19, which is present on nearly all B-ALL cells. Once a patient is identified as being eligible for Kymriah™:

- The patient and their family meet with the bone marrow transplant and apheresis teams for initial consults to learn about the treatment and sign consents
- The patient’s T-cells are then collected from their blood using a process called leukapheresis.
- The collected cells are then sent to the Cell Therapy Lab at The Ohio State University Comprehensive Cancer Center - Arthur G. James Cancer Hospital and Richard J. Solove Research for cryopreservation (a type of freezing that doesn’t damage or kill the cells).
- They are then shipped to a Novartis manufacturing facility.

Next, using a disarmed virus, the T-cells are genetically engineered to produce receptors on their surface (CARs), which allow them to recognize a specific protein, or antigen, on cancer cells and then attack them. This process takes three to four weeks, during which time patients may receive mild chemotherapy to keep the leukemia under control. The cryopreserved Kymriah™ is shipped back to Nationwide Children’s and stored in a freezer until ready for infusion. This chemotherapy is meant to clear space for the incoming CAR T-cells. The cells are thawed at the bedside and infused through the patient’s central line in just a few minutes. After the infusion, patients are monitored inpatient for at least seven days to watch closely for the potentially severe side effects. More than 80% of children diagnosed with B-ALL are cured after a two-year process of standard chemotherapy. But about 15 percent of children diagnosed with B-ALL have a type of disease that is resistant to even the most intense chemotherapy regimens. Before Kymriah™, there were few effective treatment options for patients whose B-ALL returned after chemotherapy or following a stem cell transplant. As a result, relapsed B-ALL is a leading cause of death from childhood cancer. CD19 directed CAR T-cell therapy has dramatically improved outcomes for children with relapsed or refractory B-ALL.
2018 in Recognition

Presentations

Adams, K.
"Occupational Therapy and Speech Therapy Collaboration: Management of Seating and Positioning in Order to Access Communication," American Occupational Therapy Association Annual Conference, April 2018

Becks, C., Selhorst, M.
The Effects of Fear-Avoidance Beliefs on Anterior Knee Pain and Physical Therapy Visit Count for Pediatric Patients. A Retrospective Review, APTA Combined Sections Meeting, New Orleans, LA, February 2018

Boop, C.
“Using American Occupational Therapy Association’s Official Documents for Advancing Knowledge and Professional Advocacy,” American Occupational Therapy Association Annual Conference, April 2018

Boop, C., Tanner, K.
“A Review of AOTA Children and Youth Activities and Resources,” April 2018

Booth, K.
"Sacral Nerve Stimulation in the Pediatric Colorectal Patient," Pull Through Network National Conference, July 2018

Buck, M., Furr R.
“Transitioning Your Teenager to Young Adulthood,” PediaCast CME Episode 402, April 2018

Carey, H., Ferrante, R.
Goal Attainment Scaling to Measure Activity and Participation Level Changes in Young Children with Cerebral Palsy (CP), APTA Combined Sections Meeting, New Orleans, LA, February 2018

Cass, J.
"Quality Improvement: An Introduction," 16th Annual Conference and Workshops of the American Academy of Clinical Neuropsychology (AACN), June 2018

Chaves, E., Eneli, I.
"Severe Obesity in Preschoolers: Medical and Psychological Characteristics and Interventions," Pediatric Academic Societies, May 2018

Choueiki, J., Gerberick, J.
Implementing and Designing a Comprehensive Bowel Management Program, 35th Annual Pediatric Surgical Congress in Foz Do Iguaçu, Brazil, November 2018

Coleman, S., Colman, J., Weaver, L.
An Occupation-Based Approach To Promoting Physical and Mental Health Among Youth With Eating Disorders," April 2018

Colvin, R., Staker, B.

Dawkins, E.
Serving the Deaf Community in the Medical Setting, Capable ERG Resource Fair, Grand Rounds, October 2018

Evelsizer, C.
Communication and Collaboration: An outpatient psychiatry clinic’s approach to improve patient and employee safety, Ohio Chapter of the Society of Pediatric Nurses Annual Conference, October 2018

Feasel, D., Feist, B.
PCS Grand Rounds-Early Intervention & Making Work Fun: Incorporating Intentional Interactions into Your Care Routine, Westerville Surgery Center, Mt. Carmel St. Anns NICU Conference Room, October, 2018

Fisher, M.
“A Nurses Guide to a Standardized Intake Document,” American Academy of Ambulatory Nursing Care 42nd Annual Conference (AANCN), May 2018

Gee, S., Stoner, M., Hot, P.
Safe Interdisciplinary Transport of Pediatric Patients: Medical Control Training, and Interdisciplinary Approach, Air Medical Journal, February 2018

Gerberick, J.
Dietary Awareness in Hirschsprung Disease, 6th Annual REACH Symposium, Shriners Hospital for Children, Sacramento, CA, September 2018

Goettee, C., Bordia, J.
“Treating Breathing Dysfunction,” APTA NEXT Conference, June 2018

Gonzales, A.
“DDAVP vs. Exercise in Mild Hemophilia,” 2018 Ohio Hemophilia Treatment Center (HTC) Staff Meeting for Nurses and Social Workers, April 2018

Hall, C., Madhoun, L., Cummings, C., Eastman, K.
“Building a Multidisciplinary Feeding Team for Your Cleft Lip and Palate Program,” American Cleft Palate Craniofacial Association Annual Meeting, April 2018

Hall, K., Keys, C., Schroedl, R.
"The Resilient Family," Pull-Through Network National Conference, July 2018

Hall, K.

Halpin, B., Batterson, N.
“Treating the Complex Picky Eater: Occupational and Behavioral Strategies for Success,” April 2018

Hundley, H., Macatangay, M.
The Windmill Softball Pitcher: Injury Management Strategies, National Athletic Trainer's Association Clinical Symposium, June 2018

Johnson, M.
The Young Adult Inflammatory Bowel Disease Conference: Transitions of Care Conference, May 2018

Koss Schmidt, L.

Lowes, L.P., Alfano, L.N., Miller, N.F., Iammarino, M.A., Dugan, M.
More Than Just Fun and Games: ACTIVE Workspace Volume Video Game Quantifies Upper Extremity Function in Individuals with Spinal Muscular Atrophy. Lecture Presentation, International Scientific Congress on Spinal Muscular Atrophy, Krakow, Poland, January 2018
Madhoun, L.
“A National Survey of Breastmilk Feeding Practices in Infants with Cleft Lip and/or Palate,” American Cleft Palate Craniofacial Association Annual Meeting, April 2018

Mansfield, C., Galleher, M., Griffith, S.
“A Fish Out of Water,” APTA NEXT Conference, June 2018

Martin, J., DeNiro, R.
“Common Speech and Language Disorders,” Nationwide Children’s Hospital Pediatric Residency Training Program, May 2018

McNally, K., Simpson, T.
“Persistent Symptoms after Pediatric Concussion: Contributing Factors and a Cognitive Behavioral Approach to Intervention,” 16th Annual Conference and Workshops of the American Academy of Clinical Neuropsychology (AACN), June 2018

Miller, T.
“Unconscious Bias In Therapeutic Recreation,” Utah Recreational Therapy and University of Toledo Recreational Therapy Conference, April 2018

Minot, G.
“Transition in the Workplace: Best Practices for Clinicians in Direct Practice,” NASQ National Conference, June 2018

Minot, G., White, K.

Moore, L.
Bowel Management Program, 11th Pediatric Colorectal Congress, Nijmegen Netherlands, December 2018

Moore, L.
“What is Bowel Management?” and “How to Make Long Distance Care Work,” Pull Through Network National Conference, July 2018

Morris, P.
Linking Therapy & Adapted Recreation to Improve Mobility & Independence: Adapted Cycling, ASC Cycling Training, March 2018

Moss-Samuelson, P., Erickson, J., McCullough, L.
Improving Adherence to AAP Treatment Guidelines for ADHD in the Pediatric Primary Care Setting: The Social Worker as Health Coach, Society for Social Work Leadership in Health Care (SSWLHC) Annual Meeting & Conference, Portland, Oregon, October 2018

Mould, L., Keels-Lowe, V.
“The Therapeutic Benefits of Sensory Rooms on Disability Populations,” The University of Toledo Recreational Therapy Club Conference, April 2018

Mould, L., Schlagbaum, P.
“Addressing Adolescent Suicide: Research Implications for TR Intervention,” The University of Toledo Recreational Therapy Club Conference, April 2018

Quitar, K., Wirthman, B.
“Got Teens? Year Round Teen Volunteer Program,” Society for Healthcare Volunteer Leaders (SHVL), National Conference, April 2018

Selhorst, M., Fischer, A., Grafk, K., Ravindran, R., Padgett, N., Rodenberg, R., MacDonald, J.
An Alternative Model of Care for the Treatment of Adolescent Athletes with Low Back Pain: A Feasibility Study, APTA Combined Sections Meeting, New Orleans, LA, February 2018

Selhorst, M., Rice, W., Degenhart, T., Jackowski, M., Coffman, S.
Evaluation of a Sequential Cognitive and Physical Treatment Approach for Patients with Patellofemoral Pain: A Randomized Controlled Trial, APTA Combined Sections Meeting., New Orleans, LA, February 2018

Shann, E.
11th Pediatric Colorectal Congress, Nijmegen Netherlands, 11th Pediatric Colorectal Congress, Nijmegen Netherlands, December 2018

Shann, E.

Snow, T., Maxwell, K.
“Stars Come Out at Night: Implementing a Night Shift-Friendly Committee,” Magnet Conference Nationwide Children’s Hospital, October 2018

Swick, D.
Facilitating a NICU Evacuation from a Neonatal Transport Team Perspective, Air Medical Transport Conference, Georgia World Congress Center, Atlanta, Georgia, October 2018

Swick, D.
Wings to Wheels: Applying Aviation Safety Concepts to Ground Transport Operations, Georgia World Congress Center, Atlanta, Georgia USA, October 2018

Tanner, K., Bassi, M., Martin, K., Koss Schmidt, L.
“Systematic Review on Occupational Therapy for Children and Youth (Age 0-5 Years),” April 2018

Thakur, D.
Williams Syndrome and Music: A Systematic Integrative Review, Frontiers in Psychology, November 2018

Tonnenman, J., Tanner, K.
“The Clinical Experience of Multiple Episodes of Constraint Induced Movement Therapy for Kids,” April 2018

Vicary, M., Selhorst, M.
Memorial Function Not Related to Clinical Outcomes in Females After Acute Spondylolysis: An Observational Analysis, APTA Combined Sections Meeting, New Orleans, LA, February 2018

Vyrostek, S.
Bladder Management, 11th Pediatric Colorectal Congress, Nijmegen Netherlands, December 2018

Wallace, T.
Hot Topics, FANNP Conference, Clear Water Beach, FL, October 2018

Wallace, T.
Renal Review, FANNP Conference, Clear Water Beach, FL, October 2018
Wilhelm, C., Bassi, M.
Collaborating and Co-Treating With Occupational Therapy: Opportunities and Challenges When Treating Children with Language Impairments, OSILHA Annual Convention, Columbus, OH, March 2018

White, K., Lathem, L.
"Life in the ER: Acute Response to Child Physical and Sexual Abuse," Ohio Attorney General’s Two Days In May, May 2018

Whiting, C.
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