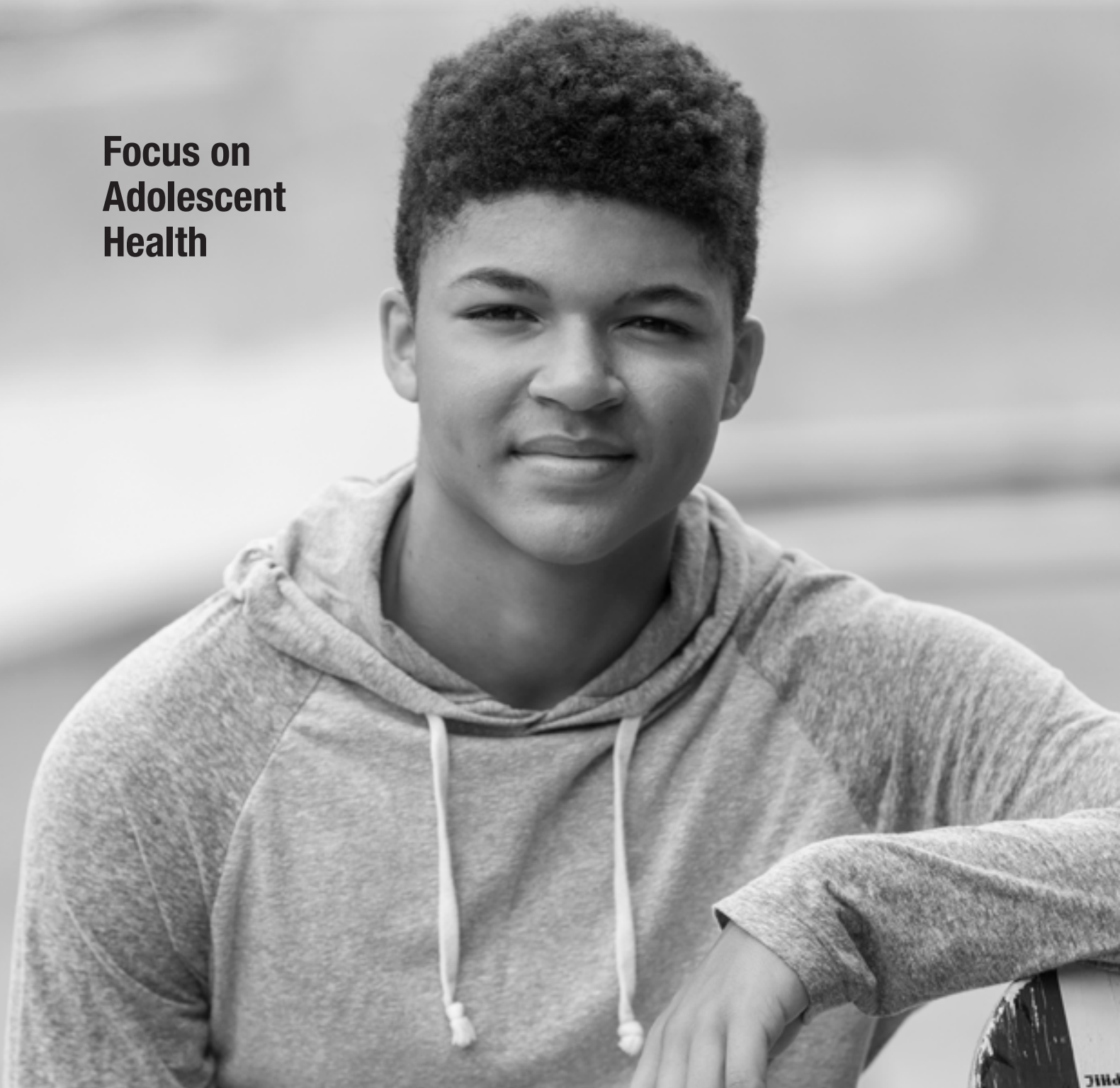


..... Everything Matters In

Patient Care

**Focus on
Adolescent
Health**



Nationwide Children’s Hospital continues its mission to provide Best Outcomes with an increased focus on adolescent health.



Contents

Features



5 The Center for Suicide Prevention and Research (CSPR): A New Resource to Address a Growing Public Health Concern
by John Ackerman, PhD, Suicide Prevention Coordinator, Behavioral Health and Jeff Bridge, PhD, Director, The Center for Suicide Prevention and Research, Principal Investigator in the Center for Innovation in Pediatric Practice, Professor of Pediatrics at The Ohio State University



13 Adolescents and Asthma: Using Technology to Address Treatment Challenges
by David R. Stukus, MD, Assistant Professor of Pediatrics, Section of Allergy and Immunology

Articles

- 4 Focusing on Adolescent Health**
by Linda Stoverock, DNP, RN, NEA-BC, Senior Vice President, Patient Care Services, Chief Nursing Officer
- 9 Nationwide Children’s Specialty Pharmacy**
by Allie Vecchiet, PharmD and Chet Kaczor, PharmD, MBA
- 10 Camera Monitoring of Behavioral Health Patients**
by Theresa Lombardo, RN, MSN Program Manager C5A and Ashley Alexander, RN, MSN, CNL, CPN Clinical Leader C5A
- 12 Inpatient Psychiatric Unit: T5A**
by Dani Milliken, RN, MSN, Clinical Program Manager, T5A Inpatient Psychiatric Unit
- 18 Caring for Gender-Nonconforming Youth**
by Gayathri Chelvakumar, MD, MPH, Assistant Professor of Clinical Pediatrics, Section of Adolescent Medicine, THRIVE Program Physician and Justin A. Indyk, MD, PhD, Assistant Professor of Clinical Pediatrics, Section of Endocrinology, THRIVE Program Physician
- 20 Narcotic Addiction in Adolescents**
by Jason Russell, DO, Medical Toxicologist, Department of Medical Toxicology and Marcel Casavant, MD, Chief of Toxicology, Medical Director, Central Ohio Poison Center
- 22 Strong Women Stay Safe: A Web-based Intervention to Promote Safer Sex in Adolescent Women**
by Vicki von Sadovszky, PhD, RN, FAAN and Nancy Ryan-Wenger, PhD, CPNP, RN, FAAN
- 23 Adolescent Patients and Legal Questions Regarding Consent**
by Sara B. Evans, ESQ, Associate General Counsel
- 24 Early Sports Specialization: What’s the Deal?**
by Thomas L. Pommering, DO, Division Chief for Sports Medicine, Nationwide Children’s Hospital, Associate Professor, Departments of Pediatrics and Family Medicine, The Ohio State University College of Medicine
- 26 Adolescent Mothers: Competent Decision-Makers?**
by Sheria Wilson, MD, Assistant Professor of Pediatrics, Division of Neonatology, Nationwide Children’s Hospital and The Ohio State University College of Medicine

Editorial Staff:

Editor: Charline Catt | **Managing Editor:** Marcie Rehmar | **Editorial Board:** Margaret Carey, Adeline Cursio, Cindy Iske, Tanica Jeffries, Hollie Johnson, Jenna Merandi, Paul Seese, Scott Timmerman, Vicki von Sadovsky, Danielle Worthington | **Editorial Assistant:** Rosetta Gordon | **Editorial Support:** Heather Weekley | **Photography:** Brad Smith and Dan Smith | **Art Director and Designer:** Lindsey Tobin

Pictured left: The Center for Suicide Prevention and Research at Nationwide Children’s is educating Columbus adolescents on the growing public health issue of suicide. Read more about the efforts on page 5.

Focusing on Adolescent Health



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

In order to discuss these risk behaviors, establishing a trusting relationship with the adolescent patient is important.

Adolescence — the time when children reach rapid maturation. Biologic and personality maturation are accompanied by physical and emotional turmoil, and self-concepts are redefined. Health care providers play an important role in helping adolescents value their emotional and physical health through self-care and limiting risky behaviors; yet, access to adolescent patients is limited. The American Academy of Pediatrics recommends an annual health visit for adolescents, **but less than 73 percent receive these recommended visits.** Moreover, these numbers are increasing, especially among adolescents who are non-Hispanic, white, uninsured, have a parent with less than a college education or a parent in poor health. Health care practitioners may have to address multiple health topics within one visit.

Risk behaviors that can be discussed openly and without judgment are one such health topic. As adolescents strive to fit in with peers and establish their own self-identity, they may experiment more with high-risk behaviors such as not using seat belts or helmets, tobacco use, alcohol consumption, sexual activity or drug use. In order to discuss these risk behaviors, establishing a trusting relationship with the adolescent patient is important. One way to establish a trusting relationship is by allowing privacy during histories and physicals. At the same time, it is important for the adolescent to understand both the content and limits of what will be communicated with parents, so they do not feel their trust has been violated. Another way to establish trust is to facilitate the adolescent’s understanding of his/her developing body and normal maturation.

Self-management of their health is another topic that needs to be addressed. Adolescents with chronic health conditions need specialized attention to assist them with the transition of their health care from parent to self-management. Nurses play an important role in helping both the adolescent and the parents identify components of their care such as medication management, dietary needs and scheduling of checkups.

Nationwide Children’s strategic plan and quality improvement offers several programs aimed at addressing the health needs of the adolescent population. Primary Care has quality improvement projects to increase the number of visits and immunizations for adolescents. Behavioral Health has implemented screening projects for the identification and early intervention of depression. Ambulatory nursing has focused on providing practitioners with increased knowledge and skills in order to better care for adolescent patients. Several subspecialty clinics have created transition programs for their adolescents with chronic health needs, such as Cystic Fibrosis and Sickle Cell Disease. Finally, Nationwide Children’s has created new partnerships with Columbus Public Schools to provide school-based health programs.

We are doing great things at Nationwide Children’s, both in providing individual care and on an institutional level to improve adolescent health. In this issue of *Everything Matters in Patient Care*, you will see a more focused look at some of the health issues facing our adolescent patients and how our teams are striving to insure the highest level of care and best outcomes for adolescent patients.

The Center for Suicide Prevention and Research (CSPR): A New Resource to Address a Growing Public Health Concern

John Ackerman, PhD, Suicide Prevention Coordinator, Behavioral Health
Jeff Bridge, PhD, Director, The Center for Suicide Prevention and Research, Principal Investigator in the Center for Innovation in Pediatric Practice, Professor of Pediatrics at The Ohio State University





The Center for Suicide Prevention and Research team at Nationwide Children’s; Elizabeth Cannon, Dr. John Ackerman, Melanie Fluellen and Laurel Biever

Nationally, suicide is the **SECOND LEADING CAUSE OF DEATH** for 10- to 19-year-olds

STIGMA & MISCONCEPTIONS can be major barriers to healing

Suicide is a critical yet under-recognized public health issue, particularly in children and adolescents. Nationally, suicide is the second leading cause of death for 10- to 19-year-olds. In the last several years, Franklin County has experienced a concerning increase in youth suicides, bringing the issue even closer to home.

The impact suicide has on families and the community is profound. Furthermore, stigma and misconceptions can be major barriers to healing and learning about effective strategies to prevent suicide. To combat these problems and develop improved ways to reach vulnerable youth, Nationwide Children’s Hospital has created the Center for Suicide Prevention and Research (CSPR), an exciting new partnership between Behavioral Health and the Center for Innovation in Pediatric Practice at The Research Institute. The CSPR operates with the understanding that suicide is preventable and the result of a combination of risk factors understood more fully with well-designed research.

Jeff Bridge, PhD, has been appointed director of the CSPR and John Ackerman, PhD, will coordinate suicide prevention initiatives. Dr. Bridge is a faculty scientist in the Center for Innovation in Pediatric Practice at The Research Institute and Professor of Pediatrics at The Ohio State University College of Medicine. His research focuses on the epidemiology of suicide in young people, with particular attention to factors that put youth at increased risk for suicidal behavior including differences in brain function, their environment and treatment received. Dr. Bridge currently receives funding from the National Institute of Mental Health, the Centers for Disease Control and Prevention and the American Foundation for Suicide Prevention for his research. Dr. Ackerman is trained as a child and adolescent clinical psychologist and has been part of the Behavioral Health’s Mood and Anxiety Program for more than seven years. He has supported the expansion of assessment and therapy services for families of adolescents with mood disorders and the training of providers to deliver effective

treatments such as cognitive-behavioral therapy. Dr. Ackerman has contributed to research of behavioral and neurocognitive risk factors for adolescent suicide with the goal of improving our ability to detect and prevent youth suicide.

The CSPR research program comprises both youth suicide and attempted suicide and includes epidemiological studies, systematic reviews and meta-analyses, treatment and intervention studies, and health services research studies. Investigators in the CSPR are particularly focused on research aimed at identifying behavioral and neurocognitive markers of risk for suicidal behavior in adolescents to frame targets for intervention. The CSPR also focuses research efforts on identifying the best approaches to screening for suicide risk in young people and linking those at risk with mental health services to prevent suicidal behavior. A list of specific research topics currently being studied by CSPR investigators is presented in Table 1.

The CSPR also focuses research efforts on identifying the best approaches to screening for suicide risk in young people and linking those at risk with mental health services to prevent suicidal behavior.

The CSPR is well positioned to translate findings from suicide research directly into awareness and prevention strategies in the local community. The prevention arm of the CSPR will serve as a resource to the schools, community agencies, families and students in central and southeast Ohio. It will promote the use of evidence-based suicide prevention strategies and advocate for a supportive and non-stigmatizing dialogue about suicide. The aim is for all schools to have suicide prevention programs and policies in place that can respond to students who are at risk.

The aim is for all schools to have suicide prevention programs and policies in place that can respond to students who are at risk.

Table 1: Current Areas of Research in the Center for Suicide Prevention and Research (CSPR)

- Neurocognitive vulnerability factors of future suicide attempt in adolescents with depression
- Screening for youth suicide risk in medical settings
- Development and testing of interventions to increase mental health service use in youth at risk of suicide
- Surveillance studies to assess suicide burden in U.S. youth
- Systematic reviews and meta-analyses of benefits and risks of psychotropic medications
- Systematic reviews and meta-analyses of the worldwide literature on psychological autopsy studies of suicide
- Familial risk factors for youth suicide and suicidal behavior
- Quality of care for youth following deliberate self-harm

Currently, one of the major undertakings of the CSPR is the dissemination of a nationally recognized program called Signs of Suicide (SOS) to area high schools and middle schools. The basic goal of the SOS program is to teach school staff, parents and students to respond to the warning signs of suicide just as they would to the signs of any other life-threatening medical conditions, such as a heart attack. Students are taught to recognize the signs and symptoms of suicide and depression in themselves and their friends, and to follow the specific action steps needed to respond to those signs. The program is based on the ACT acronym: Acknowledge the friend’s distress; show you Care; and Tell a trusted adult.

SOS PROGRAM: ACT

Acknowledge the friend’s distress,
show you Care,
Tell a trusted adult.

The SOS program is supported by research that shows a 40 percent reduction in suicide attempts in the schools delivering this program. It also establishes a positive dialogue around mental health issues, including depression and suicide, among schools, families and the students. Even after the delivery of the SOS program, the CSPR serves a consultation role to maintain a dialogue about student safety and suicide prevention.

40% REDUCTION
in suicide attempts in the schools
delivering this program

Hope is critical for someone contemplating suicide. Increasing knowledge about suicide and teaching life-saving action steps to youth and their support network will make a major difference in reversing the troubling trends locally and nationally. When people hear what they are going through has a name, it’s common, it’s not their fault and it’s treatable, a huge weight is often removed from their shoulders. For those youth not

at risk, learning how to respond compassionately to those who do suffer from depression or have thought about suicide is critical. Even though it may be hard to comprehend why a child would attempt to end his or her life, we would like to make it easy to be part of a community response that allows all of our children to have a future.

There have already been numerous situations where SOS has been immediately helpful in getting kids needed care.

At a local high school where the CSPR supported the implementation of the SOS curriculum this past fall, Jessica (not her real name) reported that a friend of hers was contemplating suicide. The school’s guidance counselor reached out to this friend and referred her to the Psychiatric Emergency Evaluation Center at NCH who worked with her and her family to create a realistic safety plan and linked her with a therapist skilled in treating mood disorders.

On another occasion, Aaron (not his real name) had previously been treated for depression but had been out of counseling for more than two years. After taking part in the SOS program, Aaron recognized that having daily thoughts of suicide was a clear sign that his depression had returned, but that his condition was treatable. He discussed his concerns with his parents, who then contacted the Behavioral Health Intake department. The department facilitated a crisis assessment and linkage with an outpatient therapist. Aaron showed considerable improvement in his mood after several therapy sessions.

Such stories show that students can learn to help themselves and their peers in potentially lifesaving ways by increasing their awareness of suicide warning signs and learning important action steps.

For more information about the CSPR, please visit NationwideChildrens.org/Suicide-Prevention. For more information about treatment programs, please visit NationwideChildrens.org/Behavioral-Health.

Nationwide Children’s Specialty Pharmacy

Allie Vecchiet, PharmD and Chet Kaczor, PharmD, MBA

Cystic Fibrosis (CF) is an inherited, life-threatening disorder that impacts many organ systems in the body, particularly the lungs. The Nationwide Children’s Hospital CF Center provides care for more than 500 pediatric and adult patients with CF who come from Ohio and surrounding states, such as West Virginia and Kentucky. The CF Center is devoted to achieving Best Outcomes for patients with CF.

The Nationwide Children’s Hospital
CF Center provides care for more than

500 PEDIATRIC &
ADULT PATIENTS

Patients with CF are commonly managed with multiple high-cost specialty pharmacy medications. Specialty pharmacy medications refer to high-cost oral or injectable medications used to treat complex chronic conditions. Insurance companies may restrict which pharmacies are able to dispense these medications and typically require extensive clinical information about the patient before agreeing to pay for the medications. Unfortunately, patients may experience lengthy delays awaiting their medication. This leads to frustration for patients and families as well as increases the risk for non-adherence to already complex medication regimens. Additionally, managing the prior authorization process places a heavy burden on clinic nursing and physician staff. In some cases, insurance barriers can lead to increases in health care utilization and expense. For patients experiencing acute CF exacerbations, patients will be admitted to the hospital for intravenous antibiotics if there are delays in receiving inhaled antibiotics through the insurance company’s specialty pharmacy network.

In an effort to better serve Nationwide Children’s CF patient population, the Pharmacy Department entered into an exciting partnership with the Nationwide Children’s CF Center to begin providing comprehensive specialty pharmacy services for the patients of the CF

Center. The Nationwide Children’s Specialty Pharmacy opened in the Fall of 2015 and has already enrolled more than 100 patients. It is a comprehensive service available to any patient seen at the Nationwide Children’s CF Center. A residency trained, clinical pharmacist with CF drug expertise sees patients in clinic as a part of the multidisciplinary team. The pharmacist assists providers in selecting the most cost-effective therapies, counsels patients and their families on their drug regimens, and makes regular phone calls to patients to assess adherence, efficacy and safety concerns. The specialty pharmacy is also staffed by certified pharmacy technicians and staff pharmacists who help patients and their families navigate their pharmacy benefit insurance plans and coordinate monthly refills and mail order services. The specialty pharmacy is conveniently located on the ground floor of the Outpatient Care Center building at Nationwide Children’s so patients can pick up their medications before leaving their CF clinic visit. If patients have questions, they have 24-hour access to a Nationwide Children’s pharmacist from the comfort of their home.

Medication adherence, number of hospitalizations, and patient, family and staff satisfaction scores will be measured to assess the program’s success. Nationwide Children’s Specialty Pharmacy, in collaboration with the CF center, is aiming to create Best Outcomes for CF patients by providing optimal drug therapy, removing access barriers and keeping patients well.



Camera Monitoring of Behavioral Health Patients

Theresa Lombardo, RN, MSN, Program Manager C5A
Ashley Alexander, RN, MSN, CNL, CPN Clinical Leader C5A

Like many hospitals, Nationwide Children’s Hospital has policies regarding safety and security for admitted behavioral health patients. Prior to October 2015, all patients admitted with a diagnosis of being suicidal or exhibiting violent behavior required a constant attendant to sit in the room with the patient to ensure the patient’s safety at all times. In October 2015,

Nationwide Children’s started monitoring behavioral health patients by camera and conducting safety checks every 15 minutes to ensure the patient remains safe. Like many hospitals, staffing resources are limited and place a financial burden having a constant attendant in every patient room. Nationwide Children’s chose to use camera monitoring to reduce the number of constant attendants



but still maintain a high level of patient safety. The camera monitoring is being utilized on the behavioral health unit currently on C5A.

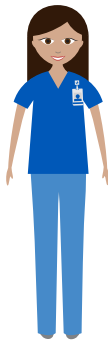
C5A is a 21-bed unit comprised of mostly young children and adolescents suffering from behavioral health diagnoses, many of whom are admitted for suicidal ideation or attempt. The patient population requires extra consideration for the environment of care. To safely organize, develop and initiate the camera monitoring program, a multi-disciplinary team convened to determine camera monitoring guidelines. The guidelines were based on a literature review to ensure that patient safety was maintained and the guidelines were established based on evidenced based practice. A literature review demonstrated that there was no evidence that a 1:1 constant attendant prevented self-harm or even suicide attempts. Evidence did support frequent monitoring, such as room checks every 15 minutes in addition to camera monitoring. This information was utilized to create the basis of camera monitoring on C5A.

Due to the increasing behavioral health population, all of the rooms on C5A were converted to “safe rooms” to reduce the risks of self-harming behaviors by our patients. Some of the safety features include locked nurse servers, specialized door handles, breakaway shower curtains, no glass mirrors and cabinets in each patient room that lock for restricted personal belongings. In addition, the patient bathrooms now lock from the outside so that use is controlled by the staff. Cameras were installed in each room to ensure maximum viewing capabilities. They do not record audio or images, but instead have live streaming to a camera monitoring room on the unit monitored by constant attendants. Since medical patients can also be admitted to this unit, an electronic security mask can be placed on selected rooms to turn their camera views to a blank blue screen and ensure privacy. The cameras are monitored 24 hours a day.

The constant attendant role has expanded to accommodate camera monitoring skills. Previously, all constant attendants sat in the patient room with one patient, ensuring the safety of the patient. The constant attendant role now includes working as the camera monitor or roamer as well as the 1:1 constant attendant. As a camera monitor, the constant attendant can observe up to seven patients at a time, documenting each patient’s activity every 15 minutes. If the patient

escalates and begins to lose control, the camera monitor can call for help and assist the 1:1 constant attendant. The camera monitors add an extra layer of safety for the 1:1 constant attendant, RN, PCA or other clinicians providing care. The roamer is responsible for completing patient safety checks every 15 minutes and can also interact with patients and monitor bathroom use. Patients now need to use their call lights to summon the roamer when they want to use the bathroom, take a walk or order food, as they do not have phones in their rooms.

Since the initiation of camera monitoring, many benefits has been noted. Constant attendants have noted the good catches noticed by monitoring the patient by camera. The major benefit to camera monitoring is the decrease in the number of constant attendant staff needed to safely monitor behavioral health patients. This has decreased constant attendant need by an average of 25 percent, which saved the hospital substantially since its inception in October. Camera monitoring has also decreased the amount of overtime and incentive pay, thus decreasing staff fatigue and burn out.



**CAMERA
MONITORING**
decreased constant attendant
need by an average of
25%

The camera monitoring initiative has been successful in maintaining patient safety. In addition, staff safety has been augmented. There have been zero serious safety events related to patient harm since the cameras were installed at the end of October, and the constant attendants have verbalized that they enjoy the variety of fulfilling different roles within their position.

Inpatient Psychiatric Unit: T5A

Dani Milliken RN, MSN, Clinical Program Manager, T5A Inpatient Psychiatric Unit



Opening a new inpatient psychiatric unit brings various challenges, including patient and employee safety. In an effort to increase patient and employee safety on the unit, two major initiatives were introduced by unit leadership. The first initiative focused on providing the staff proper tools and resources to increase their physical safety while interacting with aggressive patients. One of these tools is Kevlar® sleeves. Kevlar® sleeves are a form of personal

protective equipment made of Kevlar®, a strong cut-resistant synthetic fiber. Kevlar® sleeves help prevent the employee’s skin from being broken due to a scratch, pinch or bite. All T5A staff wear Kevlar® sleeves on their arms for the entire shift, as the wearing of these sleeves decreases the severity of injury and also decreases the risk of infectious disease transmission. Other forms of personal protective equipment we have available on T5A include padded arm and shin guards, padded chest protectors, swim caps, helmets and Kevlar® gloves.



An initiative to increase patient safety on T5A includes the introduction and use of safety smocks as an option for self-injurious patients. On T5A, we have created a milieu environment, defined as a therapeutic structured group setting in which the group provides a venue for each members to work through

their psychological issues. In order to support this type of environment, patients wear their own personal clothing as opposed to hospital gowns and spend most of their time out of their room and in a group setting. At times, we have patients who manifest symptoms of self-injurious behaviors in which they utilize their clothing to inflict harm to themselves. In this situation, we have a safety smock that the patient can wear. The safety smock is made of a material that is resistant to ripping, tearing or tampering of any kind. The patient can wear the safety smock to decrease the risk of self-injurious behaviors while continuing to interact in the milieu with peers safely.

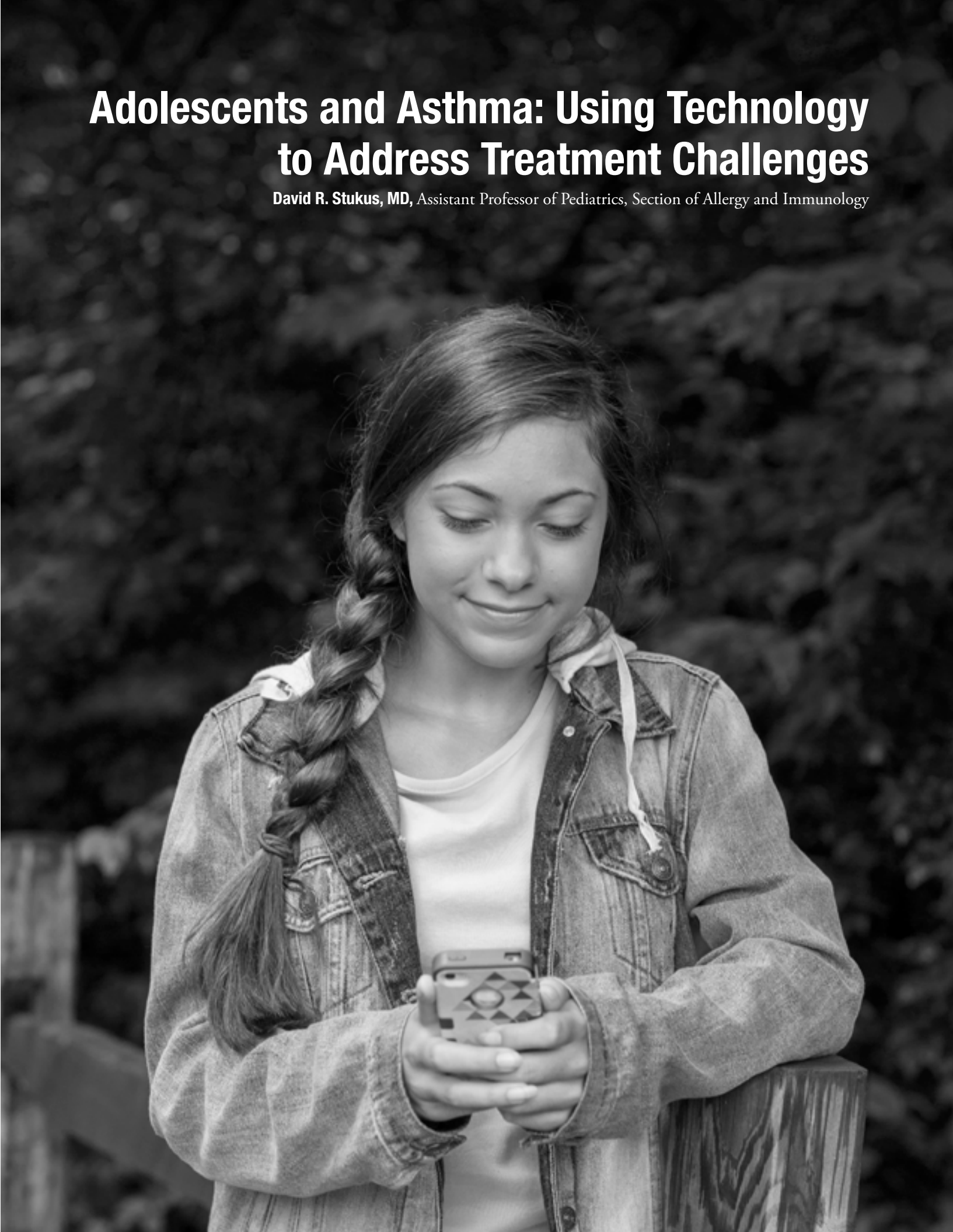
These are just two of the many safety focused initiatives that the unit has implemented since opening in 2014. Patient and employee safety continues to be a focus for T5A on our Journey to Best Outcomes.



Kevlar® gloves and sleeve

Adolescents and Asthma: Using Technology to Address Treatment Challenges

David R. Stukus, MD, Assistant Professor of Pediatrics, Section of Allergy and Immunology



Asthma affects 9% of all children in the U.S.

Asthma is not only a leading cause of health care expenditures but is also a leading cause of missed school for children and missed work for parents.

Asthma is the most common chronic pediatric health condition, affecting about 9 percent of all children and adolescents in the United States. Asthma results in recurrent episodes of breathing difficulty, which manifests as a cough, wheeze, shortness of breath, chest tightness or respiratory distress. Symptoms can be chronic, causing daily cough, nighttime awakenings and difficulty with exercise. Symptoms can also occur very suddenly, leading to severe exacerbations requiring emergency department care or hospitalization. Asthma is not only a leading cause of health care expenditures, but is also a leading cause of missed school for children and missed work for parents.

While there is no cure for asthma, there are many effective treatments available. Children and adolescents who experience chronic or severe symptoms are prescribed daily controller medications. These medications help decrease inflammation inside the lungs but must be used every day, often twice daily, to be effective. In addition, everyone with asthma needs to have access to short-acting bronchodilator inhalers (Albuterol®) to use whenever symptoms occur.

Non-Adherence in Asthma



Only 20% are willing to remove pets from inside their home



< than 50% institute recommended environmental control measures at home



50% continue to have frequent exposure to tobacco smoke, despite counseling



Studies in adult & pediatric asthma estimate adherence to controller medications at **30-70%**

Although there are many effective medications available, non-adherence to therapy is exceptionally common in all patients with asthma and the leading factor involved in poor control. Non-adherence is more than just missed doses of daily medications (Table 1). For most patients, missing medication doses is unintentional and complicated by forgetfulness, busy lifestyles, lack of supervision or inability to afford or obtain medication.

Table 1: Non-Medication Factors Involved in Non-Adherence

- Fears about side effects
- Inappropriate expectations
- Poor supervision, training or follow-up
- Anger about condition
- Underestimation of severity
- Cultural issues
- Forgetfulness or complacency
- Attitudes towards ill health
- Religious issues
- Misunderstanding or lack of instruction

In addition to taking controller medications consistently, effective asthma control relies on self-management and recognition of symptoms when they occur. The earlier asthma symptoms are treated with bronchodilator inhalers, the less likely that severe exacerbations requiring medical care will occur. Self-management also entails being aware of and avoiding asthma triggers, which can cause both acute or chronic symptoms. Common triggers in the adolescent and pediatric population include upper respiratory infections, tobacco smoke,

weather changes, indoor and outdoor allergens, exercise, and inhalational irritants such as perfumes, cleaning products and aerosol sprays.

Due to the many factors involved, achieving good asthma control can be difficult for some people. Adolescents are a particularly challenging age group due to their natural development and cognition, which may interfere with their understanding of future consequences. Adolescents are often preoccupied with school, social relationships, extracurricular activities or work. Their busy schedules may make it difficult to maintain a regular medication regimen. Relationships with parents may strain as adolescents strive for more independence. Peer pressure may increase reluctance to carry inhalers or avoid known trigger situations such as being around people who are smoking. All of these factors can interfere with consistent medication use and self-management, thus increasing the risk for poor asthma control and exacerbations.

The one thing most adolescents are consistent with is the use of their

smartphones. Recent market data indicate that 75 percent of adolescents, regardless of socioeconomic background, have daily access to a mobile device such as a smartphone or tablet. Given their predilection for these devices, it seems like a natural fit to try to adapt mobile health applications specifically for adolescents. Over the past few years, the development of mobile health applications has exploded, with more than 40,000 apps available. Unfortunately, the majority of these apps are not developed by clinicians, based on evidence or prove very useful. Without current FDA regulations or oversight regarding mobile health applications, an online search may lead to ineffective or possibly dangerous advice.

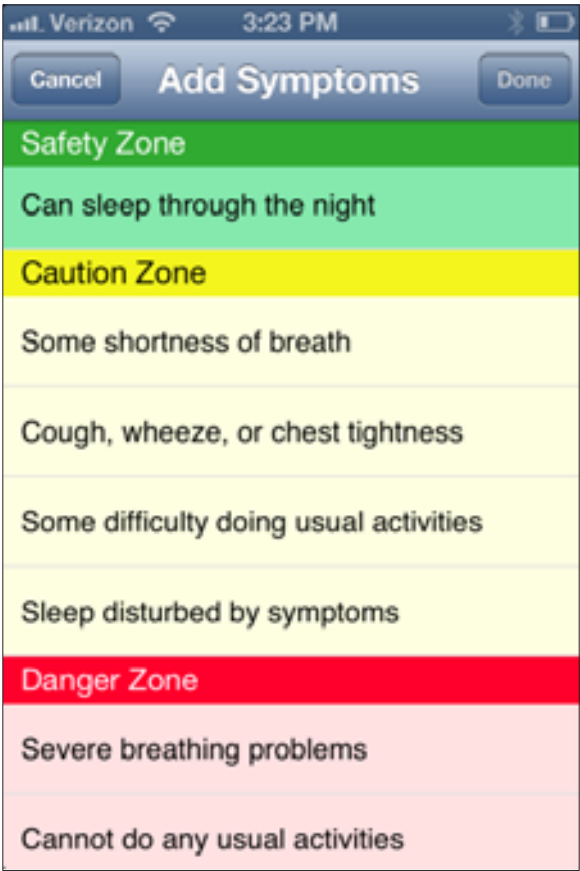
In 2013, our research team was given a grant through the Nationwide Children's Hospital Foundation to develop a mobile health application for asthma aimed at children and adolescents. Along with Nabeel Farooqui, MD and Claudia Barrett, MHA we designed, developed and tested our application, named AsthmaCare. This application is currently available for



75% of adolescents have daily access to a mobile device

both iOS and Android devices and free to download at NationwideChildrens.org/AsthmaCare. Since the initial release in May 2014, more than 400 patients have downloaded AsthmaCare.

AsthmaCare is a user-friendly, personalized, self-management tool for children and adolescents with asthma. Users input their personal medications and AsthmaCare provides scheduled reminders for every dose. When the user enters use of their medication they accumulate points, which can then unlock rewards at various levels. In addition, users are also prompted to choose their triggers from a list of eight common asthma triggers. They then receive one educational message each day regarding steps to avoid that trigger. Each trigger has three separate messages that cycle throughout the month.

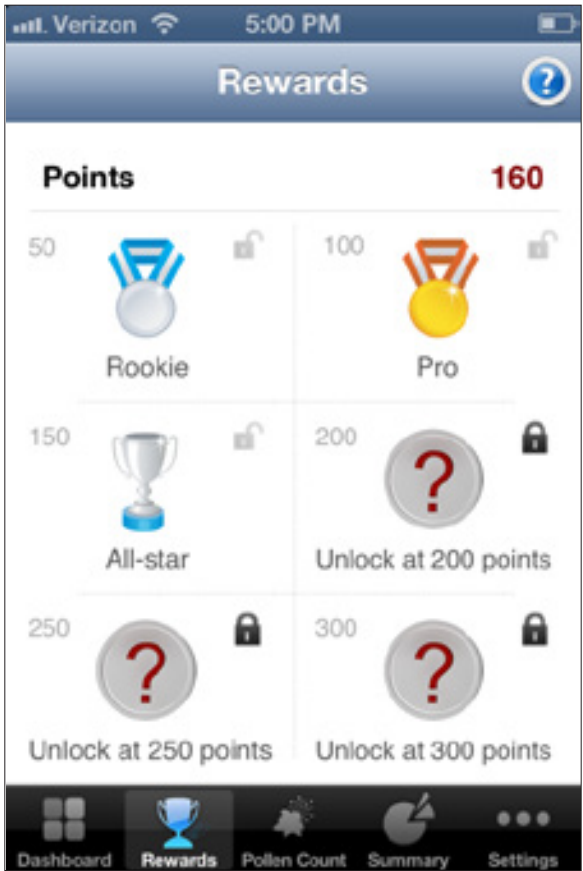


Perhaps the most effective part of AsthmaCare is the inclusion of an asthma action plan. Asthma action plans are useful tools to help patients with self-management. They contain a Green zone, which describes daily medications and avoidance measures when no symptoms are present. The Yellow zone is most important, as it describes what medications and measures to take as soon as any symptoms develop, to try and prevent progression towards an asthma exacerbation. Lastly, the Red zone includes instructions for when symptoms progress past the Yellow zone and indicate an emergency situation. Asthma action plans are recommended by national asthma guidelines for all levels of asthma severity, but remain underused. Traditionally, this is given as a paper printout during the doctor's visit, which often ends up lost or forgotten. The inclusion of an action plan within the AsthmaCare app ensures immediate access for adolescents, as long as their mobile device is available.

AsthmaCare utilizes behavioral modification theories to maintain engagement through positive messaging and rewards points after logging use of medication. Additional features of the app include a user-friendly

interface allowing for an easy transition through different features, links to the nearest pollen counting station for those with seasonal allergies, and the ability to email an asthma diary containing medication use and symptom occurrence.

AsthmaCare was tested in 21 participants ages 9 to 16 (mean = 11.6 years) during a 30-day pilot study. The main study outcomes included feasibility and acceptability of the app. We found that all users



interacted with AsthmaCare at least once daily, with 81 percent using it more than once a day. All participants preferred AsthmaCare compared to their previous written asthma action plan and 100 percent would recommend to a friend or family member with asthma. In addition, knowledge of trigger avoidance measures increased by 22 percent among all users. Despite the rapid increase in development of mobile health applications, very few have been studied or reported in peer-reviewed journals. We are proud to have one of the first published studies regarding the use of mobile health applications for treatment of asthma in the pediatric population.

Currently, AsthmaCare is being studied in a more rigorous randomized controlled prospective trial, which is near completion of enrollment. Participants are being recruited upon presentation to the Emergency Department at Nationwide Children's Hospital for asthma exacerbation. Half of the participants are randomized to receive the AsthmaCare app whereas the other half will receive standard asthma education. Participants are followed for six months and the primary outcome measure is a comparison of asthma exacerbations between the two groups. We are also interested in which self-management behaviors and family dynamics make use of an asthma mobile health application more or less useful. This type of study is crucial for mobile health applications to best determine whether they impact health care outcomes and ultimately health care expenditures.

Are we going to cure asthma through the use of a smartphone app? No. Are we going to engage with the adolescent population in a new and exciting way that may improve their health outcomes? Hopefully. Our goal is to understand how technology can be used to help adolescents manage their chronic health conditions. While asthma is the perfect disease to study this given its prevalence and inherent challenges as described above, there is no reason other health conditions wouldn't be amenable to similar applications. By connecting with adolescents through technology which they are accustomed to, perhaps they will better understand their health and improve outcomes.



This application is currently available for both iOS and Android devices and free to download at NationwideChildrens.org/AsthmaCare.

Caring for Gender-Nonconforming Youth

Gayathri Chelvakumar, MD, MPH, Assistant Professor of Clinical Pediatrics, Section of Adolescent Medicine, THRIVE Program Physician
Justin A. Indyk, MD, PhD, Assistant Professor of Clinical Pediatrics, Section of Endocrinology, THRIVE Program Physician

As members of the THRIVE multidisciplinary clinic team that cares for gender nonconforming (GN) youth, we frequently encounter staff and providers interested in knowing how to best handle gender identity concerns. First, it is of critical importance to familiarize ourselves with the specific health care needs of GN youth since they are at significantly increased risk of self-harm, suicide attempts, mood disorders, eating disorders, substance use and low school performance.

Creating a safe, supportive, affirming environment for patients during their health care visits can have a positive impact on patients and potentially decrease these risks.

Terminology

Review of terminology and clarification of the difference between biologic sex, gender identity, gender expression and sexual orientation is necessary to better understand the care of GN youth [Table 1].

TABLE 1: Common Terminology	
Biologic sex	Sex typically assigned at birth (sex of rearing); determined by chromosomes, hormones and anatomy; most commonly is female or male. For a minority of the population there may be disorders or differences of sex development (DSD) in which the development of chromosomal, gonadal or anatomic sex is atypical. Examples of DSDs are congenital adrenal hyperplasia (CAH) and androgen insensitivity syndrome.
Gender	Includes the behavioral, cultural and psychological characteristics associated with femaleness or maleness.
Gender Identity	A person's innate sense of feeling male, female or somewhere in between. A gender identity that is congruent with assigned sex is often referred to as cisgender, and gender identity incongruent (or not aligning with) with birth sex is referred to as transgender. Identity can also fluctuate between the two (gender fluid).
Gender dysphoria	Psychological distress due to the incongruence between biological sex and internal gender identity; this mismatch leads to clinically significant distress or impairment in daily functioning. Gender Dysphoria is a diagnosis in the Diagnostic and Statistical Manual of Mental Disorders- Fifth edition (DSM-V). It has replaced the earlier diagnosis of Gender Identity Disorder (DSM-IV). The new diagnosis focuses on the distress related to this incongruence, and does not label it as pathologic.
Gender nonconforming	Individuals do not follow other people's ideas or stereotypes about how they should look or act based on the sex assigned at birth.
Gender expression	How a person chooses to present themselves to the world. A person's gender may or may not be consistent with their internal gender identity. For example, an individual may biologically be female (XX chromosomes, have a uterus, ovaries and vagina), self-identify as female, but express herself in a masculine way with hair cut short and wearing more masculine clothing.
Sexual Orientation	Sexual orientation is based on sexual and physical attraction. An individual may be attracted to members of the same sex (homosexual, lesbian, gay), opposite sex (heterosexual), or both sexes (bisexual).

Trajectory of Gender Identity

Experimenting with gender expression and gender roles is a normal part of childhood. The majority of young children with nonconforming gender identification will not persist with this identification through adolescence. While it is difficult to predict the trajectory of cross-gender identification in early childhood, those with a persistent, insistent and consistent cross-gender identification in childhood are more likely to experience gender dysphoria and continue with a transgender identity into adulthood. Adolescence is a particularly difficult time for GN youth. The development of secondary sex characteristics that are not of an individual's identified gender, in addition to the psychosocial challenges of adolescent development, can lead to increased suicidal thoughts, anxiety, isolation and self-harm behaviors.

Approach to Gender Nonconforming Patients in Practice

Primary care providers are often the first place families turn when a child experiences gender identity concerns. Providers should first work to educate themselves and their staff about issues affecting GN youth and learn to provide culturally competent care. Asking adolescents their preferred names and preferred pronouns (e.g. "he/him/his," "she/her/hers," "they/them/their," or something else), properly documenting in the medical record and appropriately training clinic staff all create an environment that validates, supports and respects these youth. It is important to avoid assumptions about gender identity based on gender expression.

GN youth are at high risk for mental health complications including suicide, self-harm and mood disorders, so familiarity with providers who have expertise in issues of gender identity is essential. We should be aware that variations in gender identity are normal and "conversion therapies" or other efforts to change gender identity are not effective, can be very harmful and are not appropriate therapeutic practices. Our THRIVE multidisciplinary team can coordinate with local providers to provide care to GN youth, and we are happily accepting new referrals. Together we can do our part to create a safe, supportive and non-judgmental environment for all patients.

Things You Can Do (DOs and DON'Ts):

- DON'T assume gender
- DON'T assume relationships of people accompanying the patient; DO ask them how they are related
- DO use patient's preferred names and pronouns
- DO clarify meaning of terms you are unfamiliar with
- DO acknowledge, apologize and correct yourself if you make a mistake
- DO pay attention to the "nickname" in EPIC
- DO respect confidentiality and be non-judgmental and respectful regarding clothing and appearance

Narcotic Addiction in Adolescents

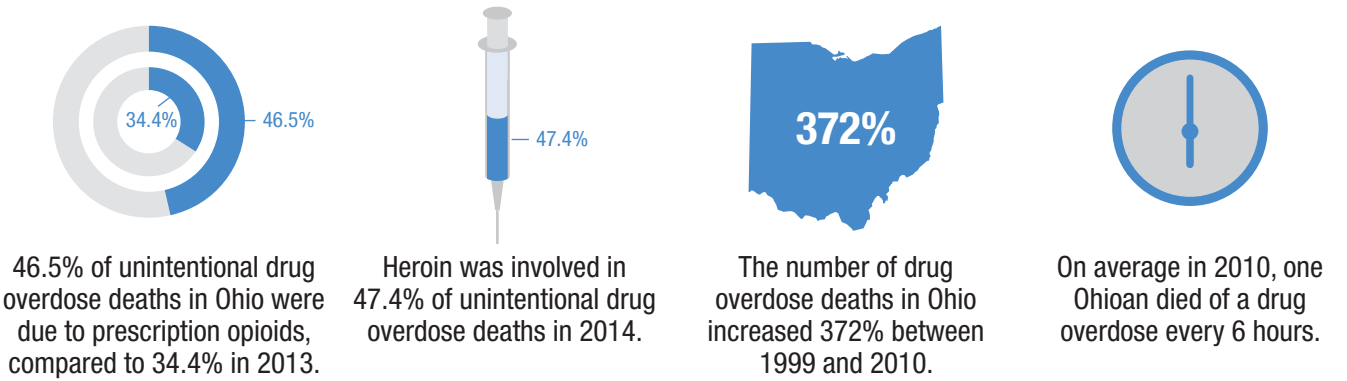
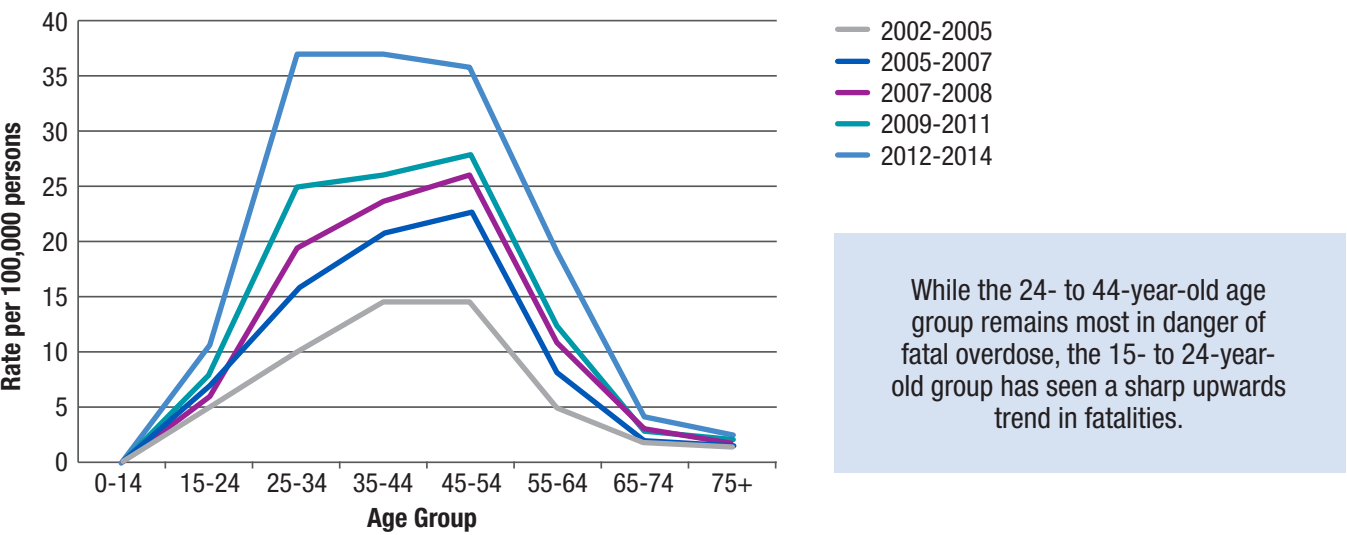
Jason Russell, DO, Medical Toxicologist, Department of Medical Toxicology
Marcel Casavant, MD, Chief of Toxicology, Medical Director, Central Ohio Poison Center

Abuse of pharmaceutical pain medications and heroin has reached epidemic proportions in the United States. Though this trend is seen across all age groups, the rise in drug abuse by adolescents has been staggering. The increasing number of prescription drug and heroin related deaths, both in the United States in general and Ohio in particular, have placed this topic at the top of the priority list amongst Public Health agencies. The key to successfully managing this epidemic lies in understanding and recognizing the drugs themselves and the threat they pose to adolescents.

The number of patients taking one or more prescription pain medications in the United States has never been higher. As a result of this increased availability, the frequency of non-medical prescription opioid use amongst adolescents has skyrocketed. Most of these medications, as well as heroin, stimulate opioid receptors within our bodies. They are in many ways analogous to our own natural endorphins, the chemicals our brains use to communicate pleasure and to dampen pain signals.

Ohio’s Opioid Epidemic: By the Numbers

Average unintentional drug overdose Death Rate by age group over time, Ohio residents 2002-2014*



*Source: Ohio Department of Health, Office of Vital Statistics (OOH Violence and Injury Prevention Program)

Knowing the Enemy

Two of the most commonly abused prescription opioids are Vicodin® (hydrocodone and acetaminophen) and Percocet® (oxycodone and acetaminophen). Both are immediate-release, short acting opioids frequently prescribed for the treatment of acute pain. Though many adolescents will abuse these medications by taking them orally, they are frequently crushed and snorted or injected intravenously.

Longer acting opioids, such as OxyContin® (controlled-release oxycodone), and MS Contin® (extended-release morphine), are also frequently abused. These medications are used in the management of chronic pain disorders. As such, they are frequently prescribed in large amounts on a monthly basis. Like the immediate-release agents, these drugs can also be abused through snorting or injection.

The development of novel pain medications has been a focus of the pharmaceutical industry for many years. Newer agents such as Sublimaze® (fentanyl), Ultram® (tramadol), and Subutex® (Buprenorphine) all share a similar mechanism of action to other opioids, though each brings its own unique set of complications to the table.

Unlike the synthetic prescription drugs mentioned previously, heroin is actually a naturally-derived opiate extracted from the poppy plant. When taken orally, heroin is largely metabolized by the liver before reaching the brain, so users must smoke the drug or, more commonly, inject it in order to feel its effects. In recent years the practice of mixing heroin with an opioid, such as fentanyl, has become more common. This adulteration of heroin, which may not be apparent to the individual user, has caused a dramatic increase in heroin-related deaths.

Recognizing the signs of abuse

The availability of prescription opioids in the home is a particular threat to curious adolescents. These drugs are much more available to them than other drugs of abuse, such as cocaine and amphetamines. As such it is important to recognize the signs of opioid intoxication. The most common signs of acute intoxication include somnolence, constricted pupils, and decreased or shallow respirations. Many users experience a period of euphoria prior to the onset of sedation and thus may appear disinhibited, similar to alcohol intoxication.

Knowing the signs of opioid intoxication is vital, but recognizing the symptoms of opioid withdrawal is also critical. After all, adolescents who abuse opioids are likely to do this outside of the supervision of adults, so it may be difficult to observe them when they are acutely intoxicated. Withdrawal symptoms, such as irritability, nausea, diarrhea, sweats, aches and piloerection (commonly called goose-flesh or goose-pimples) may be observed during periods of abstinence.

Transition from oral abuse of prescription opioids to the intravenous use of these drugs, as well as heroin, is a common event. When that occurs, venipunctures or “track marks” can be observed. It’s important to remember, though, that veins can be accessed in a variety of locations on the body, so track marks can be seen on the chest and lower extremities.

Treatment Resources

For assessment and treatment of substance abuse disorders, the [Adolescent Medicine service at \(614\) 355-8614](#) has expert physicians and social workers. They can provide medication-assisted treatment, diagnose and treat medical problems related to substance abuse, and supervise recovery.

Additionally, Nationwide Children’s has a 24-hour psychiatric crisis line at [\(614\) 722-1800](#) offering mental health and substance abuse crisis services to those 17 and under in Franklin County.

Meanwhile, every family with an opiate-abusing family member should get naloxone, the emergency antidote to save a life after opiate overdose. Pharmacies dispensing this antidote without a prescription can be located at [Pharmacy.Ohio.gov/Licensing/NaloxonePharmacy.aspx](#).

Finally, addiction is always a family disease; we recommend families seek 12-step help with Families Anonymous: [FamiliesAnonymous.org](#) and/or NarAnon: [Nar-Anon.org](#).

Strong Women Stay Safe: A Web-based Intervention to Promote Safer Sex in Adolescent Women

Vicki von Sadovszky, PhD, RN, FAAN
Nancy Ryan-Wenger, PhD, CPNP, RN, FAAN

There are 20 million new sexually transmitted diseases (STDs) diagnosed each year. Youth (15 to 24 years) make up only about a quarter of sexually active individuals, yet account for half of all new diagnoses. Hence, STDs are a major public health concern in adolescents. STDs are of special concern in adolescent females. The Centers for Disease Control (CDC) estimates that 1 in 4 sexually active adolescent females have an STD. Young women’s anatomy makes them more susceptible to contracting STDs and women are less likely to experience symptoms of these infections than men. Therefore, interventions targeting women are important, especially those focused on prevention, as some STDs are not curable and vaccines have yet to be developed for all of them.

Behavioral interventions for STD prevention are effective in increasing condom use and reducing STD rates. Most interventions have relied on a facilitator in a clinic to provide the information to an individual or group. This is not always feasible to reach a larger number of teens. Given that 92 percent of adolescents are online daily and 75 percent have a mobile phone, more evidence-based interventions are needed online that will target adolescent health.

Our research team has developed and is starting to test the “Strong Women Stay Safe” (SWSS) intervention. The intervention is designed to promote condom use and prevent STDs in young women. This intervention was designed and developed in conjunction with several teams from The Ohio State University and Nationwide Children’s Hospital. Drs. Von Sadovszky and Ryan-Wenger, using Decision Theory and Social Cognitive Theory as a guide, developed the content for the application. The design of the project was developed by Maria Palazzi and students of The Advanced Computing Center for Arts and Design (ACCAD) at Ohio State and the final programming of the intervention occurred here at Nationwide Children’s by RISI Research and Development staff.

The purpose of SWSS is to promote safer sexual behaviors in young women. Upon completing a risk assessment, users of the program set personal goals for romantic relationships, receive tailored content based upon their risk profile, and practice their personal goals in a game to ultimately see the consequences of their decisions in romantic relationships. The hope is that this type of virtual learning will translate into decisions made in real life. SWSS is about to be tested in two places in young women ages 15 to 24 years of age: the Teen Clinic at Nationwide Children’s and at Fort Sam Houston in young Army recruits. The results of these two studies will tell us the effectiveness of the intervention and give us important data on the feasibility and usability of web-based health interventions and games in this population.



Adolescent Patients and Legal Questions Regarding Consent

Sara B. Evans, ESQ, Associate General Counsel



As a general rule, patients may not make decisions regarding their health care until reaching the age of majority, which in Ohio and most other states is 18 years old. Until the patient reaches the age of majority, health care providers must receive consent for health care services from the patient’s legal guardian. Generally, a minor’s biological parents are the minor’s legal guardians, unless the minor has been adopted or a court has placed custody of the minor with someone else, which may be a children services agency. If a court has entered an order related to the minor’s custody, it is important to review that order to determine whether the court has specified who is authorized to consent to the minor’s medical services.

Ohio law permits minors, regardless of age or dependence on their parents or guardians, to consent to certain health care services. These include testing and treatment for venereal disease and HIV, and diagnosis and treatment of alcohol or drug-related conditions. In addition, minors who are 14 years or older may obtain outpatient mental health services without a parent or guardian’s consent. Of note, outpatient behavioral health services to which minors may consent specifically exclude medications and are limited to six treatments or 30 days of services, whichever occurs first. If a health care provider allows a minor to consent to one of these

services without the involvement of a parent or guardian, the health care provider is prohibited from billing the parent or guardian for these services.

In some instances, questions arise as to whether a minor is “emancipated” and therefore able to consent to his or her own medical treatment without the involvement of a parent or legal guardian. Ohio law does not define emancipation for this purpose. However, minors who are married or who are members of the armed forces are generally recognized as emancipated and capable of making their own medical decisions. Some states have adopted a “mature minor” doctrine, which allows minors to consent to medical procedures if they show that they are mature enough to understand the risks and consequences of the procedure and to make a decision independently about whether to undergo the procedure. The mature minor doctrine has not been adopted in Ohio or in a majority of the states. Therefore, unless the minor is clearly emancipated or unless the proposed treatment falls under one of the specific exceptions identified above, a provider cannot deliver treatment without the consent of the minor’s legal guardian. Doing otherwise poses a risk of liability should, after the fact, the minor’s guardian protest the provider’s authority to have performed the treatment.

An interesting legal situation arises when a minor parents a child. In Ohio, a parent has the authority to consent to his or her child’s medical treatment, regardless of the parent’s age. Thus, a minor may provide consent to his or her child’s medical treatment even though that minor is generally not able to consent to his or her own medical treatment (unless the services fall within one of the exceptions discussed earlier in this article).

If you have questions regarding a consent issue, please [contact Legal Services](#) and one of the attorneys will be happy to assist you.

Early Sports Specialization: What’s the Deal?

Thomas L. Pommering, DO, Division Chief for Sports Medicine, Nationwide Children’s Hospital, Associate Professor, Departments of Pediatrics and Family Medicine, The Ohio State University College of Medicine

What is Early Sports Specialization?

Early sports specialization is when a young athlete, usually prior to elementary or middle school, chooses a single sport to practice and play exclusively nearly year round in an attempt to gain early expertise and skill. The myth behind early sports specialization is that early exposure will guarantee expertise and a better chance to earn a coveted spot on a competitive high school team, college scholarship, pro contract or Olympic bid.

Why are parents and athletes talking about early sports specialization?

The origins of early sports specialization probably came from the early talent identification programs practiced in Eastern Europe during the Cold War days. Very young athletes were often identified as having athletic potential in sports such as diving, gymnastics or figure skating and relocated to special sports schools to develop their potential talent. International events such as the Olympics provided powerful political opportunities for these countries. The apparent success of these events brought attention to these practices through the media and subsequently provided validation by the public. When the Cold War era passed, Eastern European coaches familiar with early specialization migrated to the U.S. and brought their philosophies with them.

What are the risks of early sports specialization?

Whenever a young athlete indulges in intense, repeated deliberate practice in a single sport, many undesirable things can occur.

1. **Overuse injuries.** This is the most common risk of repetitive activity. These injuries can include stress fractures, growth plate injuries, orosteochondral bone injuries or effort-related blood clots. Some of these injuries will require surgery and many will be season or career-ending.
2. **Short Stature and Delayed Growth.** This is often seen in sports such as gymnastics and figure skating, where there is a competitive incentive to remain

small and to delay maturation. These behaviors can lead to osteoporosis, stress fractures and disordered eating behaviors such as in the Female Athlete Triad.

3. **Overdependence and Social Isolation.** Kids are naturally social beings and desire friendships and free play. When the majority of a child’s free time is spent on deliberate practice and training, they are denied the ability to develop proper social and problem solving skills with their peers which can result in maladaptive behaviors in adulthood.
4. **Burnout** occurs when athletes no longer have a desire to train and compete even when they are enjoying athletic success. Burnout is a result of stress, overtraining and a loss of control by the athlete. Younger children will often have vague, ill-defined injuries, stomachaches, fatigue, poor concentration, apathy or insomnia. You might notice that this sounds a lot like depression and stress.

Does it work?

There are five sports where early sports specialization seems to be necessary to have an opportunity to compete at the elite level. These sports — figure skating, gymnastics, swimming, diving and dance — are technically difficult individual sports that demand perfection in execution and where success is, in part, judged by the aesthetic appearance of the athlete (except swimming, where the goal is to be fast). However, if the goal is to participate in these activities for fitness, to improve skills and have enjoyment, there is no need for early sports specialization.

Are there other options for my child to excel in sports without specializing early?

The good news is absolutely, yes. Research has taught us two important things:

1. **Early Diversification.** For most sports, research on elite, internationally successful athletes shows that they actually specialized later in life between the ages of 14 and 16. Athletes who tried multiple sports early and held off on early specialization

actually performed better than their counterparts who specialized early. This early sport sampling or diversification may actually allow athletes to read the game better by achieving better pattern recall and skill transfer than kids who specialized early.

2. **Intense training practices.** Intense training is necessary for all athletes to achieve expertise but the timing of that commitment may make all of the difference. Athletes who intensified their training during late adolescence did better than those who began training and competing seriously at a young age. So, it may be more important to time your intense training to a later age when you’ve narrowed down your sport choices. This certainly makes sense in terms maximizing the effects of training your body when it is best suited to adapt, grow and withstand the rigors of training. This also makes sense for avoiding repetitive injury and burnout.

What if my child is already specializing early in their sport?

Not every child who specializes early is doomed to all of the things we discussed earlier. It’s important for all athletes to have at least two months off from their sport each year to recover physically and emotionally. Don’t skip those family vacations. Be sure that your child is being coached in a positive, instructive and

age-appropriate environment. Athletes and their families should be able to maintain some decision-making in terms of a child’s athletic goals and commitments. Be aware of the risks of early sports specialization such as overuse injury and burnout, and if concerned, seek knowledgeable Sports Medicine care. The Sports Medicine Physicians at Nationwide Children’s Hospital will support your child’s athletic goals without compromising their long-term health. Remember that you also need to be willing to advocate for your child if necessary. Avoid becoming a parent-agent. Even though it may not be obvious, competitive athletics performed at a high level is very stressful for a young athlete. Your child needs you more as their parent than anything else.

Athletes for Life

Sport specialization is not the goal for most athletes, and in most cases, it really should not be. It’s most desirable to play different sports throughout the year. Teaching children to run, kick, throw, swim and jump should be our goal up to the age of nine years old. Kids begin learning the fundamentals and rules of their sports, and by late middle school and high school, they should be ready to learn how to train more seriously and play for success.



Adolescent Mothers: Competent Decision-Makers?

Sheria Wilson, MD, Assistant Professor of Pediatrics, Division of Neonatology, Nationwide Children’s Hospital and The Ohio State University College of Medicine

A 525 gram female is born at 24 weeks gestation to a 15-year-old mother. The mother lives with her parents, with whom she has a good relationship. The father of the baby is no longer involved with the mother and does not wish to be involved in the baby’s life. From birth, it is evident that the newborn is critically ill. The neonatologist meets with the mother to discuss the baby’s status, prognosis and treatment options. Based on the newborn’s condition, it is anticipated that many difficult decisions will need to be made during the hospitalization. During the conversation with the neonatologist, the mother is very quiet and asks very few questions. Is this adolescent mother the appropriate surrogate decision-maker for this critically ill newborn? Should she have the same decision-making authority as that of an adult mother in the same predicament?

Although the teen birth rate in the United States has been declining the past few years, it is still substantially higher than that in other industrialized western nations. Compared to adult mothers, adolescent mothers have higher rates of inadequate prenatal care and preterm delivery. As such, adolescent mothers are at greater risk of having critically ill newborns who must be admitted to Nationwide Children’s Hospital Newborn Intensive Care Units. The decision makers for critically ill newborns are asked to make difficult choices, often with limited information and uncertain prognoses, and these decisions may have life-and-death consequences. In most cases, parents make decisions on behalf of the newborn based on the assumption that they are acting in the child’s best interest.



.....
In the United States, children 15 years of age, like the mother in this case, are not permitted to make medical decisions for their own care.
.....

In the United States, children 15 years of age, like the mother in this case, are not permitted to make medical decisions for their own care. In order to be declared emancipated in the state of Ohio, before age 18, the minor must be married or in the military. Thus, in many instances, an adolescent mother would be able to make medical decisions for her critically ill newborn, but not for herself. While age is one consideration, there are other factors that influence the competence of a decision-maker. The capacities generally considered necessary for competency are understanding, communication, reasoning, deliberation, values, morals and conceptions of life goals. These capacities must be considered in determining whether an adolescent mother is competent to serve as the medical decision-maker for her infant.

What might be an appropriate approach to this case? Mark Mercurio, pediatric ethicist at Yale University, proposes that an adult co-decision maker of the mother’s

choosing be involved in all medical decisions. His suggestion is no different than what would happen in the case of an intact adult couple. For some adolescent mothers, the best choice for the role of co-decision maker is the maternal grandmother. In other cases, the mother may choose someone else who meets the standards of competence. This approach is intended to provide the newborn with the same safeguards and representation enjoyed by other patients who cannot speak for themselves.

In situations such as the one described here, requesting a consult from Nationwide Children’s Hospital’s Ethics Committee can help identify and resolve potential sources of ethical tension. Nationwide Children’s Ethics Committee serves as a resource for patients, families and staff experiencing moral distress. With close to 20 members, the Committee represents an assortment of perspectives and disciplines and aims to promote ethical decision making throughout the organization. Individuals and groups who reach out to the Committee will be provided with a framework for decision-making and recommendations.

For more information, visit the Committee’s page on [ANCHOR](#).

Daisy Award

Kimberly Mascaro, RN, BSN

The 12th Nationwide Children's Hospital Daisy Award was presented to Kimberly Mascaro, RN, BSN of H5B. The Daisy Award is given in appreciation of the important difference our nurses make in the lives of the patients and families at Nationwide Children's.

Kimberly was nominated by the mother of one of her H5B patients for providing excellent care to the child. The patient's mother shares that Kimberly went above and beyond one evening when she and her husband stepped out for dinner — and Kimberly wasn't even her daughter's scheduled nurse. "When we came back to our child's room, Kimberly had gotten my child to walk independently for the first time with confidence



after spinal surgery," the patient's mother says. "I can't even explain in words how happy this made me and how rewarding it was as a mother to see this. It brought tears of joy to my eyes."

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 2016, Nationwide Children's Hospital, Inc. All Rights Reserved.