



Community Health Needs Implementation Strategy



**NATIONWIDE
CHILDREN'S**

When your child needs a hospital, everything matters.SM

Nationwide Children's Hospital is pleased to have participated in the development and adoption of the Franklin County HealthMap 2013 as its Community Health Needs Assessment. Nationwide Children's had several representatives actively participate in the needs assessment with other members of the Central Ohio Hospital Council, as well as community partners.

Our Mission

Nationwide Children's Hospital is committed to providing the highest quality of care to all children and their families regardless of ability to pay.

Our Vision

Best Outcomes Through Best People and Programs

Our Values

As one team we:

Do the right thing

We always act with integrity and honesty
We are inclusive and respectful of everyone

Create a safe day every day

We make safety our personal commitment
We communicate clearly and completely
We routinely seek input from others and always support our colleagues

Promote health and well-being

We balance work and life demands
We generate optimism and energy in one another
We advance our health, and the health of our community

Are agile and innovative

We embrace and manage change
We foster a streamlined and entrepreneurial environment
We generate and share new knowledge and ideas

Get results

We're accountable (we do what we say we'll do)
We're determined (we get the desired result)
We're committed to constant improvement
We leverage our diverse strengths

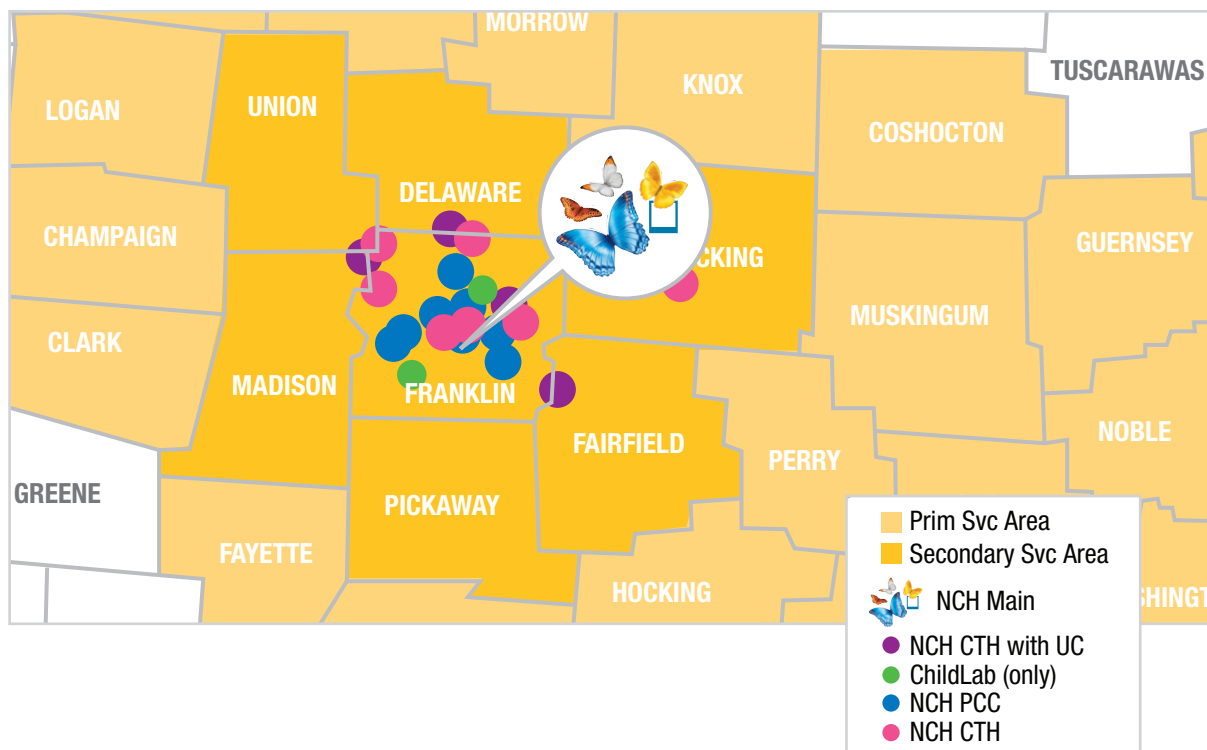
Nationwide Children's Hospital is located at 700 Children's Drive, Columbus, Ohio 43215. The main hospital is based in Franklin County, and in developing its Community Health Needs Assessment, Nationwide Children's has defined the community it serves as the residents of Franklin County. Over 50 percent of the hospital's inpatient discharges and gross charges are from residents of Franklin County. Over 60 percent of the Medicaid Managed Care patients that we serve are from Franklin County. Of the 56 off-site facilities that Nationwide Children's operates, 31 are in Franklin County.

Community input for this report was obtained from a series of meetings with community representatives on the Franklin County Community Health Needs

Assessment Steering Committee, led by the Central Ohio Hospital Council. Individuals representing the broad interests of the community served by our organization participated on the steering committee. Refer to pages 1 and 2 of the Franklin County HealthMap 2013 for names of those who participated.

In response to the health needs assessment, Nationwide Children's has created an Implementation Strategy by which to improve the health of those we serve. In this Implementation Strategy, Nationwide Children's is addressing all of the health needs identified in its Community Health Needs Assessment.

NCH Off-Site Locations



Executive Summary.

To address the needs of its community, Nationwide Children's Hospital has collaborated with dozens of community partners to create a roadmap to better health for all children in Franklin County. Although Nationwide Children's has already made significant progress toward providing high-quality, accessible and appropriate care for the children in its service area, it will continue to address the community needs identified by community representatives and the Franklin County HealthMap 2013 by the methods discussed in this Community Health Needs Implementation Strategy.

Primary targets for Nationwide Children's efforts fall into the categories identified by the Franklin County HealthMap 2013. General strategies for addressing these needs are as follows:

- **Access to Care:** Nationwide Children's will expand its presence in the communities it serves, work to advance patient-centered medical home models, and improve coordination of care to ensure community members have access to high-quality primary, dental, specialized, urgent and emergency care in appropriate settings.
- **Chronic Diseases:** Nationwide Children's will continue striving to reduce asthma, diabetes and obesity incidence and complications. Specialized preventive and urgent care services will be provided, such as Asthma Action Plans, innovative diabetes text messaging efforts and community-based fitness initiatives.
- **Infectious Diseases:** Nationwide Children's will continue to raise standards for hand hygiene, infection prevention, community and staff vaccination efforts, antibiotic stewardship and research to prevent, manage and treat infectious disease.
- **Behavioral Health:** Nationwide Children's will maintain and expand inpatient, outpatient and community-based efforts to innovatively prevent, treat and minimize the impact of behavioral health problems in its target population by providing care in the most appropriate setting.
- **Cancer:** Nationwide Children's will grow its cancer treatment programs to improve diagnosis and patient care options. Research and clinical trial endeavors will be expanded to help ensure that no pediatric cancer patient has to leave central Ohio for top-notch oncology care.
- **Interpersonal Violence:** Nationwide Children's will, with the primary actor of The Center for Family Safety and Healing, provide hospital and community-based programs to address violence prevention and victim care. Coordination of services for victims and their families will be focused on quality and accessibility.
- **High-Risk Pregnancy and Birth Outcomes:** By participating in the endeavors of Ohio Better Birth Outcomes and providing care for infants in need through the Ohio Fetal Medicine Collaborative, Nationwide Children's will strive to reduce prematurity and prevent infant morbidity and mortality.
- **Unintentional Injuries:** Nationwide Children's will continue to lead research and data collection efforts on injury prevention and childhood safety, while also providing a wide range of community injury prevention programs, such as passenger safety campaigns and sports medicine education.

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1. Access to Care

Description

As demonstrated in the **Franklin County HealthMap 2013**, nearly 90 percent of patients who were treated in the Emergency Department (ED) and released were classified as Severity 1, which means they could have been seen in other, more appropriate settings. Obtaining health services in inappropriate facilities suggests a lack of access to primary care providers or accessible community health services.

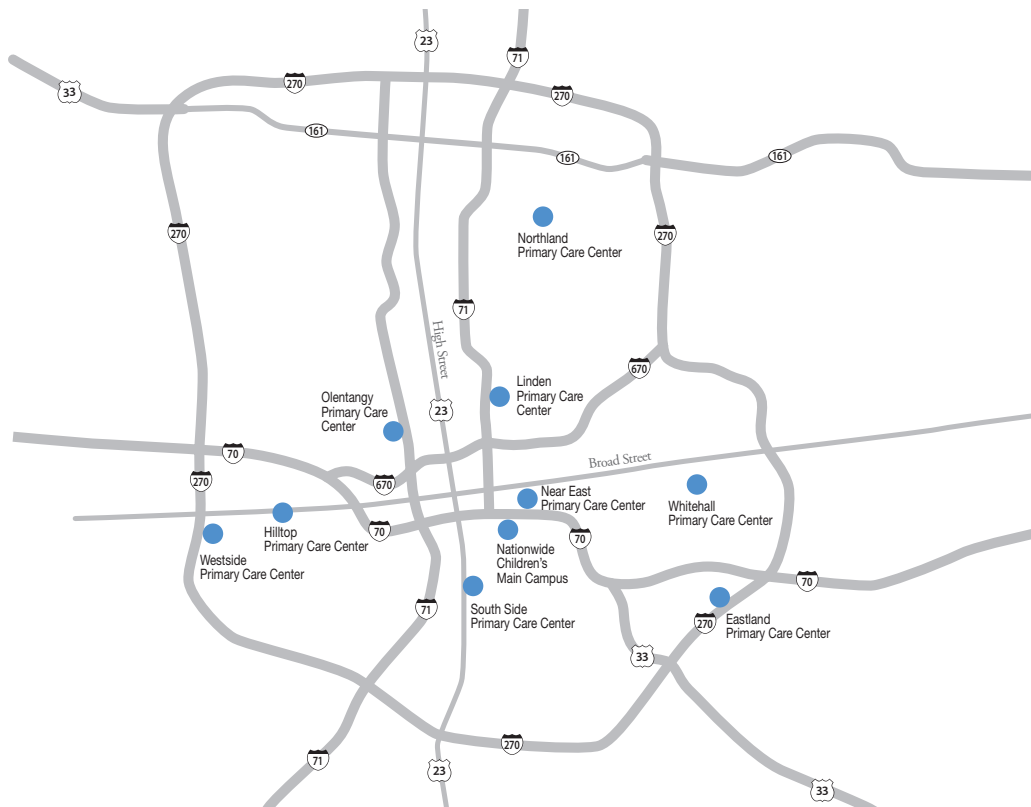
Nationwide Children's Programs and Partners

In response to the need for more appropriate, accessible care, Nationwide Children's Hospital has committed to providing primary and subspecialty health care to Franklin County residents. Some of the ways Nationwide Children's enhances access to care include:

Primary Care

Nationwide Children's has developed a network of Primary Care Centers in the neediest areas of Franklin County, where few to no primary care practitioners provide services. In 2012, Nationwide Children's achieved Patient-Centered Medical Home (PCMH) recognition for each of its primary care sites. Each center has open-access appointments in which children and adolescents can receive same-day care. There is a 24-hour/7-day "Call a Nurse" line for immediate medical advice and direction. In addition to traditional well-child and sick visits, the primary care centers provide dietitians, social workers, health coaches and pharmacists to those in need. The Primary Care Centers also offer the Reach Out and Read program to promote health literacy.

Asthma has become the most common chronic disease of childhood. Symptoms of wheezing, coughing and/or shortness of breath are increasingly common among infants and children and affect



approximately 10 percent of the pediatric population. Asthma was also a top diagnosis within Nationwide Children's ED and represents an opportunity to reduce inappropriate use of ED services.

Nationwide Children's Primary Care is focused on improving asthma care with the use of asthma action plans to help patients and parents know how to respond to asthma symptoms. To reduce the likelihood of children having severe symptoms that require an ED visit, the centers now offer same-day appointments and special asthma services. These are expected to result in a 5 percent reduction in asthma patient visits to the ED from 2011 to 2014.

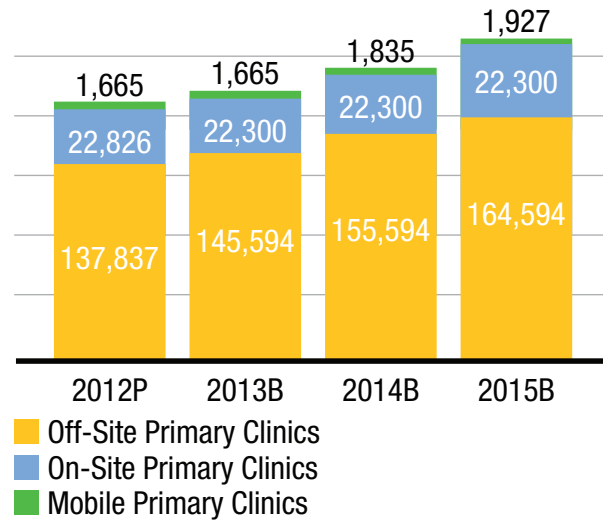
Primary Care focuses on keeping children healthy. One of the most effective ways to promote child health is to provide immunizations. The Primary Care immunization initiative has set a goal of increasing the rate of 2-year-old patients being fully immunized by 4 percent from 2011 to 2014 to reach an 88 percent immunization rate. This exceeds the national average of National Committee for Quality Assurance (NCQA) certified Medicaid plans (74.9 percent) and the Nationwide Children's 2011 baseline of 84 percent.

Nationwide Children's also provides primary medical services through a mobile clinic that travels to Columbus City Schools and several other local school districts. Both well-child and sick visits are conducted in the mobile unit. The mobile unit was provided by a generous grant from the Ronald McDonald House.

To improve access to pediatric primary care services, Nationwide Children's will:

- Continue to support its 10 primary care clinics
- Expand one primary care center in 2013
- Add one primary care center in 2014
- Continue to advance the PCMH initiative
- Hire care coordinators to assist patients with navigating care in the right setting

2012-2015B Primary Care Visits



Community Partners

Access Health Columbus
 Columbus City Schools
 Columbus Kids
 Franklin County Health Department
 United Way of Central Ohio

Oral Care

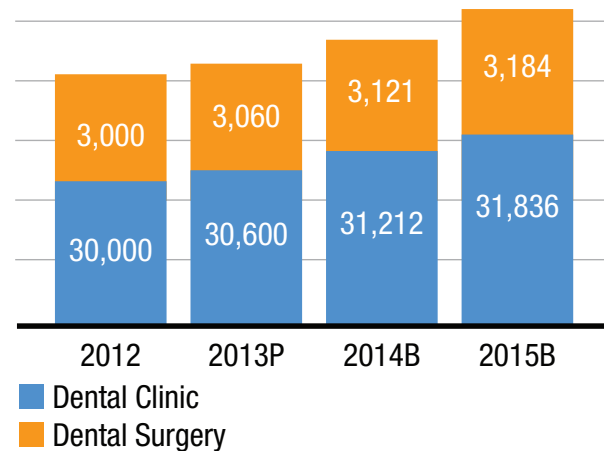
Medical primary care is important, but the evidence supporting dental care's crucial role in children's overall health is becoming stronger. Almost half of Ohio children experience tooth decay by first grade. As stated in the **Franklin County HealthMap 2013**, Franklin County residents have difficulty accessing dental care.

To address this, Nationwide Children's provides dental care to over 30,000 children every year. Nationwide Children's is a safety net for community dental care, with nearly 95 percent of its patients covered by Medicaid. The majority of these patients are from Franklin County. Both preventive and restorative care are provided, in addition to outpatient dental surgery.

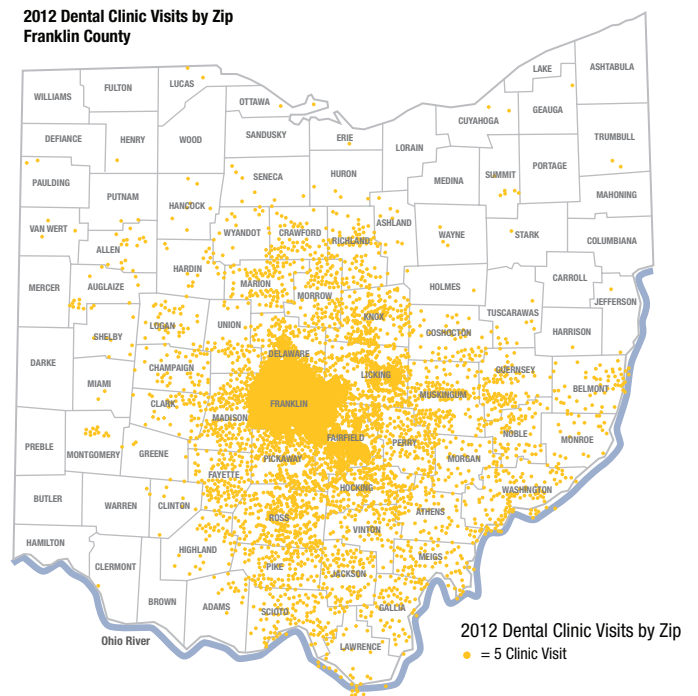
To improve access to preventative and restorative dental care, Nationwide Children's will:

- Expand the hours of the dental evening clinic
- Pilot an infant oral health outreach program
- Continue to provide non-surgical intervention for early dental care
- Implement fluoride varnish programs at Nationwide Children's *Close To Home*SM Centers
- Invest \$3 million in new or expanded dental clinic facilities over the next five years

2012-2015B NCH Dental Visits



2012 Dental Clinic Visits by Zip
Franklin County



Community Partners

Columbus City Schools

Head Start

The Ohio State University College of Dentistry

Partners for Kids (PFK)

PFK is a physician hospital organization (PHO) currently composed of over 643 physicians caring for children and adolescents, including primary care physicians, pediatricians, specialty care providers and physicians at its sponsoring hospital, Nationwide Children's. Since 1994, the PFK network has offered a comprehensive range of health care services to health plans under managed care agreements, taking responsibility for over 400,000 Medicaid lives. The majority of these participants live in Franklin County. The primary goal is to improve quality and access for patients who are jointly served by PFK and Nationwide Children's in the central and southeastern Ohio regions, covering 34 counties.



To improve access to pediatric care for Medicaid patients, Nationwide Children's will:

- Implement a Physician Incentive Plan (PIP) to incentivize community and Nationwide Children's physicians to care for the underserved
- Implement care coordination to ensure patients receive care in the right place at the right time and get proper follow-up to keep them well

Partners for Kids (PFK) Community Partners

Bureau for Children with Medical Handicaps
Columbus Department of Health
Community Physicians
County Child Protective Services
Easter Seals
Ohio Department of Health
Ohio Department of Jobs and Family Service
Ohio Department of Mental Health
Voices for Children

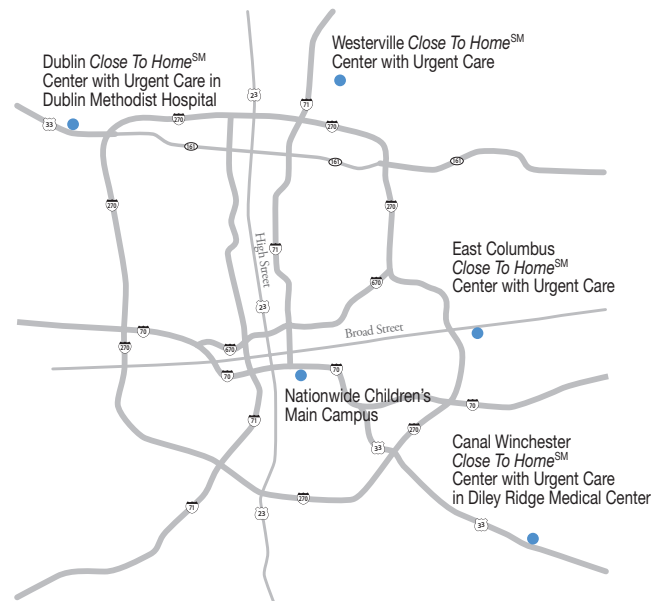
Emergency and Urgent Care Services

Nationwide Children's features a Level I Pediatric Trauma Center and Pediatric Emergency Department (ED), which is staffed by board-certified/board-eligible pediatric emergency subspecialists 24 hours per day. The ED provides expertise in pediatric advanced life support and resuscitation, as well as evaluation and treatment in every area for acute medical and surgical conditions. Additionally, Nationwide Children's offers an Urgent Care network in and near Franklin County to give patients convenient access for urgent medical needs. Less severe cases can be treated in this environment rather than using the main ED, which causes unnecessary utilization, an issue described in the *Franklin County HealthMap 2013*.

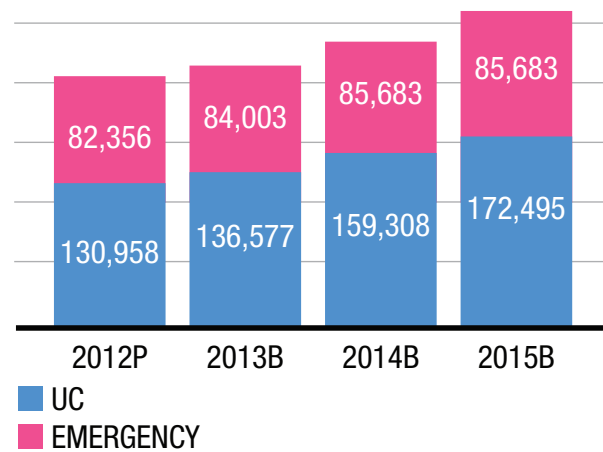
In an effort to increase access for appropriately acute patients, Nationwide Children's recently grew the emergency department from 42 to 61 beds. In order to increase access for non-acute patients, the hospital is currently expanding its urgent care programs. Specifically, a new on-site urgent care will add 25 percent more capacity and will open in October 2013. This will allow the ED to triage patients to the most appropriate care setting.

The hospital partners with all local emergency departments, their physicians, community-based urgent care centers and community pediatricians to educate providers on appropriate ED usage. Nationwide Children's collaborates with the Central Ohio Trauma Association, State of Ohio Trauma Committee, Ohio Committee on Trauma, Ohio Trauma Society of Trauma Nurse Leaders, and other national trauma organizations, such as the Pediatric Trauma Society, to reduce the impact of trauma on a child's life.

Nationwide Children's ED also runs an Outreach Nurse Program. This program provides a follow-up care process for select high-risk groups of patients that ensures patients and families have the necessary resources to appropriately navigate their post-ED care and facilitate a timely recovery. A subset of this



2012-2015 NCH Emergency/UC Visits



high-risk group is asthmatic patients. The Outreach Nurse contacts asthmatic patients previously seen in the ED in order to connect them with Primary Care for outpatient management and follow-up. The Outreach Nurse phone number is included on the after-visit summary, and patient families are encouraged to call with any questions or concerns following discharge.

As an additional service, Nationwide Children's employs two liaisons to partner with local and regional Emergency Medical System (EMS) teams and hospitals to identify and design pediatric educational opportunities and ensure quality and safety in every transport through case discussions and situational analysis. Nationwide Children's then works with the parents of patients who have complex in-home care plans, special equipment and unique patient needs. Care plans are shared with the local pre-hospital providers in the community to ensure a safe transition back home and/or a safe emergent return transport to the hospital during a crisis. This pre-planning program gives EMS the knowledge and skills to care for this fragile population during a crisis. It also provides the families with the confidence that EMS can efficiently meet the special needs of their child and can identify the appropriate level of care, potentially avoiding unnecessary ED visits.

Nationwide Children's ED and Urgent Care Network also send a visit summary to each patient's primary care provider in the community within 24 hours of discharge. This service assists the primary care provider and helps ensure a smooth transfer of care.

To improve access to emergency and/or urgent pediatric care, Nationwide Children's will:

- Add three new sites for provision of urgent care services within the next three years
- Develop and implement a Pediatric Emergency Medicine quality improvement collaborative to reduce practice variation between other centers' emergency departments and the pediatric emergency physicians at Nationwide Children's
- Continue its asthma education programs to reduce unnecessary ED utilization by asthmatic patients

Community Partners

Air Evac
 ADAMH Board of Franklin County
 Center for Family Safety and Healing
 Central Ohio Poison Center
 Central Ohio Trauma System
 Columbus Fire Department and EMS
 Columbus and Metropolitan Medical Response System
 Columbus Public Health
 Department of Homeland Security
 Emergency Medical Services for Children
 Fairfield Medical Center
 Local Fire and EMS Agencies
 Local Law Enforcement
 Local School Systems
 Medical Reserve Corps
 MedFlight
 Mount Carmel Health System
 Ohio Chapter of the American College of Emergency Physicians
 Ohio Chapter of the Emergency Nurses Association
 Ohio Committee on Trauma
 Ohio Department of Health
 Ohio Department of Public Safety, Division of EMS
 Ohio Environmental Protection Agency
 Ohio Fire Chiefs' Association
 Ohio Society of Trauma Nurse Leaders
 OhioHealth Central Ohio Hospitals
 Pediatric Trauma Society
 Regional Hospitals
 Regional Hospital Emergency Preparedness Committee
 State of Ohio Trauma Committee
 The Ohio State University Wexner Medical Center, including but not limited to, OSUWMC
 Emergency Department and Harding Inpatient Psychiatric Unit

2. Chronic Diseases

Description

Chronic diseases are the leading causes of death and disability in the United States.

Asthma

As stated in the Franklin County HealthMap 2013, Franklin County adults and youth are more often diagnosed with asthma, with percentages for both populations being significantly higher than state and national data. Asthma is the leading chronic disorder in children nationally, and within Franklin County, over 16 percent of children have asthma. According to the Asthma and Allergy Foundation of America, Columbus ranks 34th among the top 100 “asthma capitals,” the most challenging places to live with asthma in the United States. Nationally, asthma affects more than one child in 20.

Diabetes

While Franklin County has lower hospitalization rates for diabetes when compared to the state of Ohio, it is still the county's second largest driver of hospitalization illness and injury rates; in 2009 (per Franklin County HealthMap 2013), there were 25 hospitalizations attributed to diabetes per one thousand hospital discharges. An estimated 30 percent of overweight adolescents ages 12 to 19 have metabolic syndrome,¹ which increases the risk of developing type 2 diabetes and other chronic health problems. The percentage of children with newly diagnosed diabetes classified as type 2 (instead of type 1) has increased from less than 5 percent before 1994 to 30 to 50 percent in recent years.²

1 Messiah, et al. (2008). Relationship between body mass index and metabolic syndrome risk factors among US 8 to 14 year olds, 1999-2002. Journal of Pediatrics, 153(2): 215-21.

2 Dabelea, et al. (2007). Incidence of Diabetes in Youth in the United States. JAMA. 297(24):2716-24.

Obesity

Nearly one-third of Franklin County third graders are overweight or obese, according to the Franklin County HealthMap 2013. Overweight or obese children and adolescents are at increased risk for many health problems, including hypertension, diabetes, asthma and other chronic conditions.

Nationwide Children's Programs and Partners

As stated in the Franklin County HealthMap 2013, chronic diseases account for the majority of health care spending. Nationwide Children's has several programs in place to address asthma, diabetes and obesity.

Asthma

Nationwide Children's has undertaken many asthma initiatives, including the following:

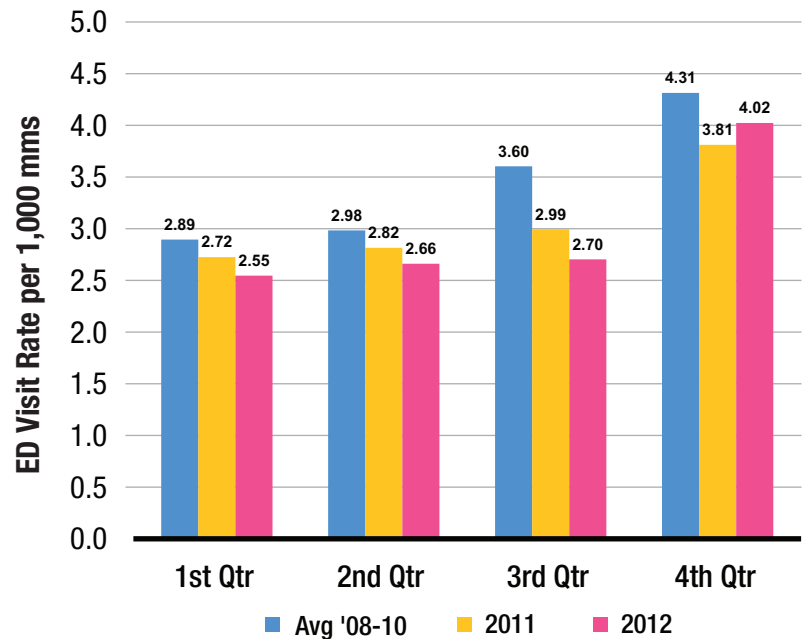
- Participation and leadership in Ohio American Academy of Pediatrics (AAP) Asthma Learning Collaborative
- Improved resident education
- Active facilitation of follow-up with primary care providers
- Increased usage of Asthma Action Plans
- Emergency Department reduction efforts
- Development of Asthma Specialty Clinic
- Faster steroid administration in Emergency Department
- Roll out of Easy Breathing program
- Asthma medication initiatives including “Don't Leave Home Without Them”
- Touchscreen asthma education initiative
- Partnership with Columbus City Schools to engage in Directly Observed Therapy – Inhaled Corticosteroids (DOT ICS)
- Improvement of influenza immunization rates

As a result of these initiatives, asthma-related ED visits have already declined over time in the highest risk population. However, asthma care improvement is an ongoing need that Nationwide Children's will continue to address.

To keep children out of the hospital and minimize the impact of asthma on children's well-being, Nationwide Children's will:

- Improve the utilization of inpatient and emergency department care protocol and invest in additional follow-up phone calls and care coordination
- Create an Asthma Action Plan for each child with asthma seen in a primary care medical home or Asthma Center
- Expand use and protocol of Asthma Action Plans (Easy Breathing®) with community primary care providers
- Provide more asthma education through classes, patient education TV system, and school-based programs on the correct use of preventive therapy, trigger avoidance and steps to reduce or prohibit acute flares
- Create a smart phone application to help chronic asthma patients better manage their disease
- Expand the school-based asthma training program within Columbus City Schools

**PFK - Franklin County (NCH Only)
Asthma ED Visits**



Community Partners

Cardinal Health

Community physicians (Easy Breathing®)

Ohio School of Nursing

School nurses from Columbus City Schools and South-Western City Schools

Diabetes

At Nationwide Children's, our goal is to make life as normal as possible for children with diabetes. This is done by reducing ED and inpatient visits and keeping children healthy through outpatient care.

There are a variety of diabetes initiatives currently underway, including the following:

- A program to provide cell phone text messages to teens with diabetes to encourage self-care
- Improved case management, including telemedicine efforts
- Efforts to increase collaborative community and health plan education
- Collaboration with local schools, including school-based and sick day protocols
- Leveraging technology to remotely monitor glucose for at-risk diabetic patients

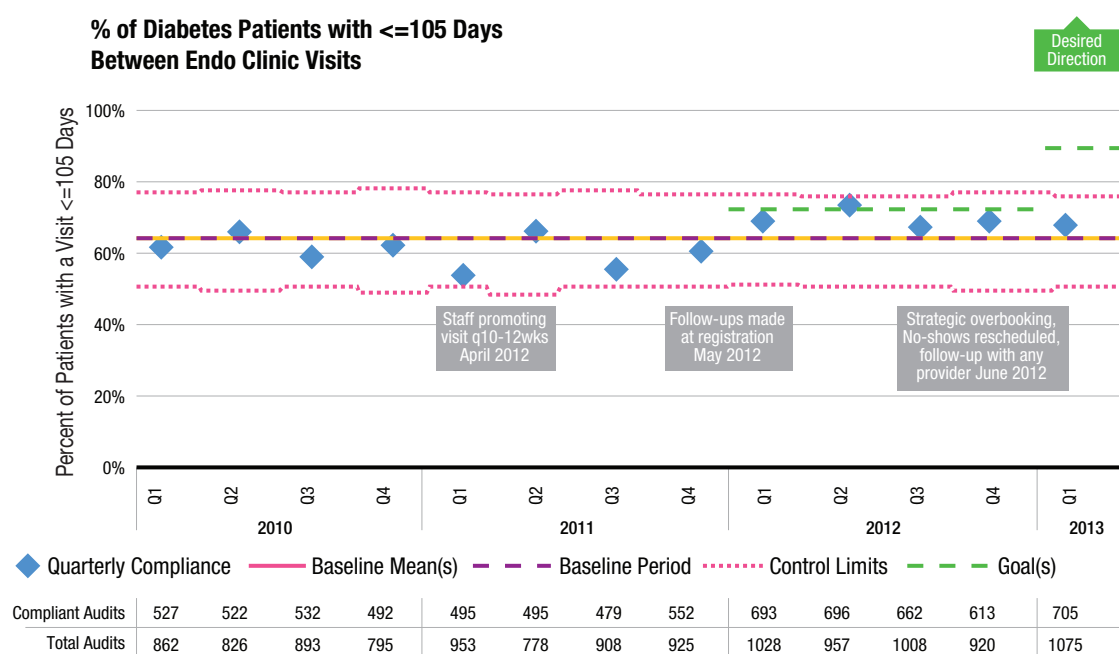
To increase access and encourage patients to proactively seek care, quarterly outpatient clinic appointments are scheduled. This has resulted in healthier blood glucose levels for patients.

To improve the quality of life for patients with this chronic pediatric condition, allowing children to live as normal a life as possible, Nationwide Children's will:

- Expand capacity in the Nationwide Children's Endocrinology Clinic
- Educate children and their families in new ways with games, technology, classes and individual instruction
- Create a new adolescent-focused diabetes clinic
- Improve access and education for same-day/urgent care, thereby improving sick day and overall diabetes management skills
- Increase the number of diabetes care coordinators

Community Partners

American Diabetes Association, Columbus Chapter
 Bob Evans Farms
 Central Ohio Diabetes Association
 Don Johnson Memorial Bowling Team
 Juvenile Diabetes Research Foundation, Columbus Chapter



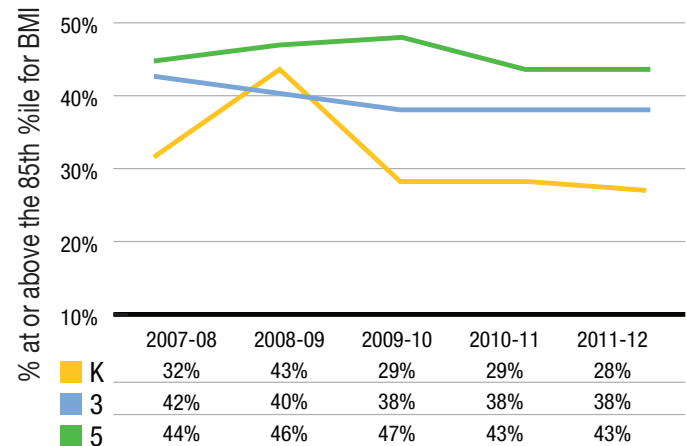
Obesity

In June 2010, Ohio became the first state to legislatively respond to the obesity challenge, with Nationwide Children's playing an integral role. The Healthy Choices for Healthy Children bill will improve the nutritional value of foods offered during the regular and extended school day and raise the bar for physical education. It also provides for Body Mass Index (BMI) screenings upon school entry and in the third, fifth and ninth grades, and a pilot program for daily physical activity during the school day. This is just one example of what Nationwide Children's is doing to combat childhood obesity.

To prevent the chronic condition of obesity and to help children already facing this chronic condition, Nationwide Children's will:

- Support the ACHIEVE (Action Communities for Health Innovations and Environmental Change) program
- Continue to provide the Nationwide Children's Community Gardening and Education Site
- Expand the Fitness and Nutrition (F.A.N.) Club
- Expand the Feeding Your Kids parent education program
- Participate in the Ohio Healthy Programs Project
- Expand the Primary Care Obesity Network
- Provide School Nurse Training to support school weight management programs
- Expand the HEAL Health Coaching Initiative
- Support the Time for Ten exercise program

PREVELANCE OF OVERWEIGHT/OBESITY IN COLUMBUS CITY SCHOOLS



Community Partners

After-School All-Stars
 Alpha Kappa Alpha Sorority, Incorporated
 American Academy of Pediatrics
 Cardinal Health
 Central Ohio Hospital Council
 Children's Hunger Alliance
 Columbus City Schools
 Columbus Public Health
 Community Development for All People
 Franklin Park Conservatory
 Girls on the Run
 Holy Rosary St. John Church
 Hopewell United Methodist Church
 Office of Ohio First Lady Karen Kasich
 Ohio Child Care Resource and Referral Association
 Ohio Department of Education
 Ohio Department of Health
 The Ohio State University College of Nursing
 The Ohio State University College of Pharmacy
 The Ohio State University Medical Dietetics and Health Sciences
 The Ohio State University Prevention Research Center
 United Way of Central Ohio

3. Infectious Diseases

Description

According to the Franklin County HealthMap 2013, infectious diseases are more prevalent in Franklin County than other Ohio counties.

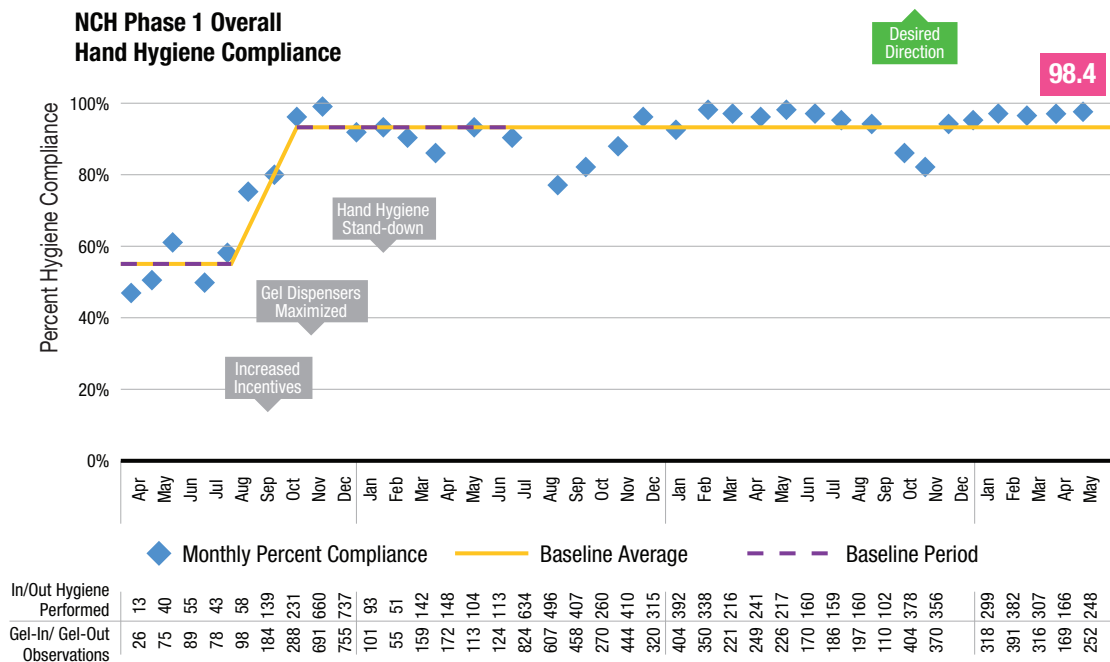
Nationwide Children's Programs and Partners

The Epidemiology Department at Nationwide Children's Hospital is dedicated to detecting and preventing infections. The department consists of six infection control prevention specialists, a data analyst and an infectious disease physician. While the group addresses emerging infections, the primary focus of the group is to prevent infections. Prevention of infections is an essential part of protecting patients and keeping them safe during hospital admissions or visits to clinics. Hospital-acquired infections are known to extend hospital stays, increase the cost of care and cause serious harm.

Infectious Disease Prevention, Management and Research

Hand hygiene (washing hands with soap and water or using an alcohol-based rub) is the simplest and most important method to keep patients and employees infection-free. In conjunction with the Quality Improvement Services Department, the hospital monitors hand hygiene performance using known and secret auditors. Nationwide Children's Hospital's hand hygiene compliance is more than twice the national average.

Influenza vaccination is another essential tool to protect patients and employees. The hospital has a mandatory influenza vaccine requirement for employees, and each year approximately 98 percent of our employees meet this requirement. The hospital has also worked on a program providing vaccination to all inpatients and outpatients seen during the influenza season. The program was very successful and was presented as an oral abstract at the 2012 Academy of Healthcare Improvement.



Antibiotic stewardship is concerned with “the optimal selection, dose, and duration of an antimicrobial that results in the best clinical outcome for the treatment or prevention of infection, with minimal toxicity to the patient and minimal impact on subsequent resistance.”¹ It is well recognized that overuse of antibiotics is a problem associated with the emergence of antimicrobial resistance, increased adverse drug events, and other negative patient outcomes (e.g., increased mortality and morbidity, increased length of hospitalization). Nationwide Children's is implementing a variety of strategies to improve antibiotic utilization. The hospital uses prospective audit with intervention and feedback, targeting a set of broad-spectrum and high-impact antibiotics. This involves review of use of targeted antibiotics at 72 hours to determine if continued drug use is appropriate and optimal for the patient. In addition, the hospital has begun to require a specified indication for each ordered targeted antimicrobial at the time of health care provider order entry within the electronic medical record. Future steps include the expansion of targeted antimicrobials, developing and requiring indications for all antimicrobials ordered within the electronic medical record, providing antibiotic recommendations within EPIC order sets, and developing clinical guidelines for antibiotic de-escalation and optimal duration of therapy.

1Gerding DN. (2001). The Search for Good Antimicrobial Stewardship. Journal on Quality Improvement, 27(8):403-4.

Respiratory and hepatitis research may offer crucial insight into the prevention of a variety of infectious diseases. For example, researchers from the division of Pediatric Infectious Diseases and Center for Vaccines and Immunity are engaged in translational research addressing the problem of hepatitis C virus (HCV) infection in pregnancy and childhood. Rates of new HCV infections have nearly doubled among women of child-bearing age in the past decade. These

women face not only a potentially lifelong infection that is linked to liver fibrosis and cancer, but also the possibility of passing this virus to their infants. Drs. Christopher Walker and Jonathan Honegger have received National Institutes of Health funding to study the unique effects of pregnancy on immunity to HCV. Normally, cellular immunity to hepatitis C is “exhausted” during chronic infection, and viral levels are high and stable. Following pregnancy however, viral levels sometimes fall sharply. Through collaborations with The Ohio State University and sites in Portsmouth, Ohio, Drs. Walker and Honegger are studying HCV-infected pregnant women to identify mechanisms by which immunity is restored after pregnancy to cause these unusual declines in viral levels. Their hope is that insights gained from these studies may lead to new ways to modulate the immune system and permit better control of HCV and other persistent viral infections.

Additionally, these researchers are addressing the important problem of vertical (mother-to-child) transmission of hepatitis C. HCV vertical transmission occurs in 5 percent of pregnancies to infected women and is the leading route of infection in young children. Currently, no preventative interventions are available. They are testing the hypothesis that the 95 percent of exposed infants who do not acquire the infection have been protected by infant cellular immunity. Insight provided by these studies into the natural mechanisms that protect against vertical transmission may help guide strategies to prevent this infection in children. This research is only a sample of the infectious disease work taking place at Nationwide Children's.

To reduce infectious diseases in central Ohio, Nationwide Children's will:

- Continue to achieve >98 percent hand hygiene compliance by Nationwide Children's staff
- Reduce surgical site infections in partnership with all Ohio pediatric hospitals
- Improve influenza vaccination rates in the Nationwide Children's patient population
- Obtain 100 percent compliance with staff immunization recommendations
- Expand targeted antimicrobials by developing and requiring indications for all antimicrobials ordered within the electronic medical record (EMR), providing antibiotic recommendations within the EMR order sets, and developing clinical guidelines for antibiotic de-escalation and optimal duration of therapy
- Continue to support a rigorous research institute that hosts many scientists searching for treatments, cures or vaccines related to infectious diseases

Community Partners

Columbus Public Health

Ohio Department of Health

Solutions for Patient Safety, a statewide collaborative

Southern Ohio Medical Center

4. Behavioral Health

Description

As stated in the Franklin County HealthMap 2013, a wide spectrum of psychiatric disorders is prevalent in Franklin County. In 2009, nearly half of all students exhibited bullying behavior at least once and over half had experienced it at least once. Behavioral and psychiatric health issues get so severe that they can cause death via homicide or suicide.

Nationwide Children's Programs and Partners

Nationwide Children's offers a variety of behavioral health programs to address the range of community needs. Options include inpatient and outpatient services, as well as outreach and community programs that serve the children in Franklin County and beyond in the most appropriate setting.

Nationwide Children's Behavioral Health Program

The Behavioral Health Program is dedicated to the care of children and adolescents suffering from problems of emotion, behavior, development, thought and adaptation-to-life challenges, including those associated with physical illness and trauma.

Nationwide Children's is committed to partnering with patients, families and referring primary care clinicians and specialists to deliver services of public health relevance and achieve the best possible clinical outcomes. Because no single discipline or professional can adequately address the needs of every child, Nationwide Children's approach is deliberately multidisciplinary and collaborative.

Care is typically delivered by a team composed of some combination of child and adolescent psychiatrists, developmental and behavioral pediatricians, psychologists and neuropsychologists, nurses, social workers and counselors. By working closely together, they deliver team-based care that transcends the work of individual professionals working alone, incorporates evidence-based practices

into high-volume clinical settings, and establishes high standards of quality, safety and customer satisfaction.

Outpatient Behavioral Health

Outpatient assessment and treatment services are offered at five locations throughout Franklin County. Outpatient services are provided to children and their families who have an emotional or behavioral disorder or a life adjustment issue that can be treated successfully in an office-based setting. Services include diagnostic assessment, psychiatric evaluation and medical management, psychological evaluation, and individual, family and group interventions.

Trained to assess and treat the most common behavioral health concerns of childhood and adolescence, our providers also offer specialized interventions such as:

- Cognitive Behavioral Therapy for depression and anxiety teaches children and adolescents management skills through a logical presentation of strategies focused on the cognitions and subsequent behaviors of the identified family member.
- Disordered eating interventions are offered in conjunction with our Adolescent Medicine team to provide an integrated approach for adolescents who have restricted eating practices related to self-image. Individual, group and family therapies are provided.
- Habit Reversal Training for Tic Disorders and Trichotillomania is a brief intervention based in behavioral techniques designed to teach children management skills.
- Incredible Years (IY) provides training to parents of children struggling with disruptive behavior disorders, including ADHD. The focus is on providing consistent reactions to children that are most likely to result in desired behavior. IY is a group-based intervention.
- Parent Child Interaction Therapy (PCIT) relies on live coaching to the parent to embed positive parenting responses in the relationship between

the parent and the child. PCIT is effective with families of children who are disruptive and with violence-exposed children and their battered caregivers.

- Multifamily Psychoeducational Psychotherapy (MF-PEP) utilizes the group format for both children and parents to provide education and therapy around controlling emotions and behaviors. Child and adolescent groups are available.
- Trauma Focused Cognitive Behavioral Therapy is a gradual exposure model that includes individual and family therapy components designed to aid family members in habituating to the traumatic stimuli and response.
- Dialectical Behavioral Therapy is designed to teach skill acquisition to adolescents who are emotionally dysregulated and their adult caregivers. This approach combines individual, group and family therapies and is offered to adolescents who are engaged in self-injurious behavior.

Community-based programs consist of the following:

- The CALL (Consultation, Assessment, Linkage and Liaison) program is a collaborative effort with Franklin County Children Services (FCCS) and the Franklin County ADAMH Board to improve access to quality behavioral and mental health care for children, youth and families involved (or at risk for involvement) with FCCS.
- The Early Childhood Mental Health (ECMH) program is designed to provide early childhood consultation and treatment services to children, birth to age 6, and their families (birth, adoptive or foster) who are involved with FCCS. Prevention and treatment services are also provided to at-risk children and families by way of group and classroom interventions utilizing the evidence-based Incredible Years model.

- The BHJJ (Behavioral Health/Juvenile Justice) program is a collaborative effort with the Franklin County Juvenile Court and the Franklin County ADAMH Board with the goal of safely maintaining court-involved youth in the community whenever possible and linking them to the appropriate treatment at the appropriate level of care.
- The Crisis Program offers consultation and assessment services to programs within Nationwide Children's where youth are presenting in crisis and may be in need of hospitalization due to concerns around danger to self and others and/or psychosis. The Youth Crisis Stabilization Unit (YCSU) was developed to meet the needs of youth in crisis (typically experiencing suicidal ideation) who either did not meet the criteria for psychiatric inpatient hospitalization or met the criteria when no bed was available. The YCSU provides intensive individual and family treatment as well as linkage to ongoing care. Furthermore, as part of the Health Care Initiative Award, the YCSU now offers parent advocates via the Parent Partner Initiative.
- The Community Support Program (CSP) is an intensive home- and community-based treatment service working with youths and family to address emotional and behavioral difficulties in the home, school and community (typically at least two of these areas). These youth and families require more than one session per week, including both individual and family intervention. The Incredible Years model, involving parent education and training, is also offered to these families, with additional follow-up with the caregivers in the home. Some of the caregivers participating in the IY groups are referred by FCCS.
- The Multisystemic Therapy (MST) program is an evidence-based practice for the treatment of delinquency and an intensive strength-based comprehensive treatment program working with

families of youths age 11 to 17 who are at risk for out-of-home placement due to serious conduct problems. In addition, we have an MST for Problem Sexual Behaviors (MST-PSB) program, which is an adaptation of the MST model.

- The School-Based Program is a community-based program collaborating with a number of Columbus City Schools serving primarily youths who are experiencing non-academic barriers to school success. Intervention occurs at school and, where appropriate, in the home with the youth and family.
- Integrated Co-occurring Treatment (ICT) is an intensive community-based intervention for dual diagnosis youth with serious emotional difficulties and significant substance abuse. The extent of these challenges is such that traditional weekly outpatient services are insufficient to bring about meaningful change and a decrease in alcohol or other drug use. Both individual and family therapy approaches are utilized, and caregivers are actively engaged in treatment. Services are provided in the home, school and community.
- The Family Support Program (FSP) is a pediatric trauma treatment team and an affiliate member of the National Child Traumatic Stress Network. FSP was originally developed to treat childhood sexual abuse, and it now also provides mental health services to children and adolescents who have experienced severe physical abuse, exposure to domestic violence, childhood traumatic grief or adolescent relationship violence.
- The Home Base Team offers a blended model of therapy and case management strategies to families at risk for out-of-home placement of their children due to child welfare concerns stemming primarily from parental impairment.

To reduce and manage the prevalence of behavioral health disorders, Nationwide Children's will:

- Add a 16-bed Inpatient Psychiatric Unit
- Expand suicide prevention programs
- Expand abuse and violence prevention programs

- Add new eating disorder partial hospitalization and intensive outpatient programs
- Continue to provide extensive on-site and community-based behavioral health programs

Community Partners

Columbus area school systems

Delaware-Morrow Mental Health & Recovery Services Board

Franklin County Alcohol Drug and Mental Health Board

Franklin County Children Services

Franklin County Family and Children First Council

Franklin County Juvenile Court

Licking-Knox Mental Health & Recovery Services Board

Logan-Champaign Counties MHDAS Board

Mental Health & Recovery Board of Clark, Greene, Madison and Union Counties

Netcare Access

North Central Mental Health Services

Ohio Colleges of Medicine Government Resource Center

Ohio Department of Job and Family Services

Ohio Department of Mental Health

Ohio Department of Youth Services

Ohio Medicaid

Paint Valley ADAMH Board (Fayette, Highland, Pickaway, Pike and Ross counties)

The Buckeye Ranch

The Center for Family Safety and Healing

The Center for Innovative Practices, Case Western Reserve University

The Ohio State University Emergency Department

The Ohio State University/Harding Inpatient Psychiatric Unit

Wright State University

5. Cancer

Description

As stated in the Franklin County HealthMap 2013, cancer is the second leading cause of death among children age 1 to 14 in Franklin County.

Nationwide Children's Programs and Partners

Nationwide Children's has developed a world-class cancer program that attracts patients, physicians and researchers from across the globe. In 2013, Nationwide Children's hematology and oncology clinical faculty grew to 20 physicians, each bringing a specialized skillset to the patients of central Ohio. Through the development of a highly subspecialized team, children who are diagnosed with cancer can seek treatment in Franklin County and avoid traveling to distant cancer centers throughout the U.S. Additionally, many of our experts also participate in research and the development of clinical trials. A key component to cancer centers is the number of clinical trials that are offered through the cancer center. Nationwide Children's has not only increased the number of clinical trials offered that have been developed elsewhere, but is also focused on developing groundbreaking clinical trials and being the first in the world to offer new treatments to the children in Franklin County. To ensure that the Nationwide Children's cancer team is accessible to the broader community, we recently opened a satellite oncology clinic in Mansfield.

To reduce cancer-related morbidity and mortality, Nationwide Children's will:

- Increase research funding and partner with the Center for Cancer Research and National Institutes of Health (NIH)
- Increase cancer consortium memberships and phase I investigator-initiated clinical trials
- Expand inpatient services from 36 to 42 beds by 2014

- Innovate therapies through key partnerships, such as:

- Radiation Therapy through The Ohio State University Wexner Medical Center
- MIBG Therapy through University of Michigan
- Proton Therapy through Children's Hospital of Philadelphia

Community Partners

A Kid Again
 Camp Bold Eagle
 Cancer Support Community of Central Ohio
 Children's Oncology Group (COG)
 Evergreen Bereavement Program for Children and Teens
 Flying Horse Farms
 Kids 'N Kamp
 Make A Wish
 Special Wish
 The Ohio State University Wexner Medical Center

6. Interpersonal Violence

Description

Family violence is the most common form of interpersonal violence, and higher percentages of children in Franklin County families are in need of interpersonal violence services than those in other areas of Ohio, according to the Franklin County HealthMap 2013. Family violence includes child maltreatment, teen and young adult relationship abuse, domestic violence and elder abuse. Currently, family violence victims access services through many separate agencies. This is problematic for victims and service providers. Agencies that serve victims of domestic violence are generally not the same agencies that serve abused and neglected children. This disconnect detracts from the effectiveness of the services being provided.

Nationwide Children's Programs and Partners

This disconnect was one of the reasons for the merger between the former Columbus Coalition Against Family Violence and The Center for Child and Family Advocacy. The merged entity, The Center for Family Safety and Healing (TCFSH) was created in April 2011. The mission of TCFSH is to break the cycle of violence through advocacy, prevention, intervention, treatment and research of family violence by integrating comprehensive services through community interdisciplinary collaboration and evidence-based practices.

Through an impressive combination of public and private resources, The Center for Family Safety and Healing addresses all aspects of family violence including child abuse and neglect, teen dating abuse, domestic violence and elder abuse. We offer a continuum of research-based prevention, intervention and treatment programs for individuals who have experienced family violence. Benefits of this integrated team approach include:

- A one-stop, coordinated response to family violence for individuals and families through partnerships with law enforcement, child protection services, prosecution and a wide range of community resources
- Expanded forum for education, advocacy and ongoing research

Services include:

Child Assessment Center - The Child Assessment Center provides responsive and timely medical assessment and treatment along with interviews of children and family members for those who have experienced child abuse.

Family Support Program - The Family Support Program (FSP) offers counseling for children and adolescents who have been sexually or physically abused or who have been exposed to family violence.

Family and Domestic Violence Services - The Family and Domestic Violence efforts at Nationwide Children's offers services for adult victims of domestic violence, children who have witnessed family violence and teens who have been victimized by relationship violence.

Fostering Connections Program - The Fostering Connections Program is a specialized foster care clinic that offers comprehensive health care services to children and adolescents placed in out-of-home care.

Inpatient Consultation - Physicians and social workers provide inpatient consultations, as well as outpatient and emergency department consultation to the hospital's medical and surgical services in cases of suspected child maltreatment.

Pediatric Sexual Assault Nurse Examiner Program - TCFSH, in collaboration with the Emergency Department (ED) at Nationwide Children's, established a Pediatric Sexual Assault Nurse Examiner (PSANE) program in 2005 to support evidence collection procedures in children and adolescents

who present to the ED for acute sexual assault when the Child Assessment Center is not open to provide this specialized care.

Post-Injury Clinic - The Post-Injury Clinic was established to provide long-term follow-up for victims of Acute Head Trauma as an interdisciplinary collaborative program between The Center for Family Safety and Healing, Developmental Behavioral Pediatrics, and Physical Medicine and Rehabilitation.

To reduce the incidence of interpersonal violence and help victims recover a healthy, high-quality standard of life, Nationwide Children's will:

- Continue to provide the services described above to pediatric victims
- Raise community awareness and change attitudes and behaviors with a public education campaign
- Provide trauma-informed therapeutic services to adult victims
- Expand free legal services to victims who need assistance with non-emergency services
- Expand research initiatives to create a systemic, quality-focused outcomes-based system

Community Partners

Capital University Law School

CHOICES

Columbus Division of Police – The Special Victims Unit

Franklin County Children Services

Franklin County Prosecutor's Office

The Ohio Attorney General's Office

The Ohio Domestic Violence Network

7. High-Risk Pregnancy and Birth Outcomes

Description

Preterm birth is the largest contributor to infant mortality, accounting for almost one-third of infant deaths. The infant mortality rate, preterm birth rate and infant birth weights are all important measures of the health outcomes for women and their newborns. According to the Franklin County HealthMap 2013, Franklin County fares worse than other areas in Ohio for these measures, and Ohio is ranked 34th among the 50 states.

Nationwide Children's Programs and Partners

While Nationwide Children's is not a birthing hospital, part of our mission is to address infant mortality and maternal-child health. Attempts to reduce preterm birth and the associated mortality and morbidities are one key element of maternal-child health.

Nationwide Children's is partnering on efforts to reduce infant mortality and morbidity, helping moms deliver healthy babies.

Ohio Better Birth Outcomes

Ohio Better Birth Outcomes (OBBO) is a clinical and quality-based prevention collaborative designed to reduce preterm birth and infant mortality in Franklin County and the state of Ohio. OBBO unites the four hospital systems, the Central Ohio Hospital Council, Columbus Public Health, and other community organizations to help the most vulnerable in Franklin County. OBBO is focused on specific interventions for high-risk pregnant women and new mothers that have strong empirical data suggesting that they may reduce prematurity-related morbidity and mortality. Below are the projects with OBBO that impact preterm birth and infant mortality.

- The Progesterone Promotion Project educates providers about the use of supplemental

progesterone in patients with a history of preterm birth. Eligible women receive weekly injections or daily suppositories beginning early in the second trimester of pregnancy. Progesterone is now indicated for women with a short cervix or history of preterm birth, and implementation of that practice is underway. Over 500 women have been treated using this model, resulting in an average seven-week increase in gestational age in follow-up pregnancies compared with prior pregnancies.

- Central Ohio Scheduled Birth Initiative (COSBI) brings together obstetricians to increase compliance with the American Congress of Obstetricians and Gynecologists (ACOG) recommendation not to perform elective deliveries before 39 weeks of pregnancy. This has resulted in a 6 percent increase in full-term pregnancies in Franklin County over the last two years.
- Safe Spacing is designed to educate and intervene with women who have experienced a prior preterm birth. Mothers have a 10 to 40 percent increased risk of future preterm birth if they conceive again within 18 months of delivery. The recommendation is for mothers to wait 18 to 24 months between pregnancies. The program encourages safe spacing of pregnancies.
- Coordinated Care is a key focus of OBBO initiatives. Efforts to improve coordination include:
 - The Pregnancy Care Connection provides scheduling and referrals for prenatal visits for low-income women and is currently coordinated through one central body.
 - Nurse-Family Partnership is a national, evidenced-based program that may help reduce preterm births and other poor birth outcomes in low-income, first-time mothers who participate in the program. Mothers are partnered before the 28th week of pregnancy with a registered nurse who visits the home through the child's second birthday.

Ohio Fetal Medicine Collaborative

Ohio Fetal Medicine Collaborative is a collaboration of five hospital systems to provide care to high-risk expectant mothers and their babies with suspected fetal diagnoses. While each high-risk pregnancy represents a unique set of circumstances and possibilities, the following is a partial listing of common conditions addressed by the Ohio Fetal Medicine Collaborative. Nationwide Children's provides 100 percent of the care to the babies with conditions on this list:

- Abdominal wall defects, including gastroschisis, omphalocele, and cloacal exstrophy
- Congenital anomalies of the central nervous system, including neural tube defects and hydrocephalus
- Congenital anomalies of the face, including cleft lip and palate
- Congenital cardiac anomalies
- Congenital complex heart defect, including Hypoplastic Left Heart Syndrome
- Congenital diaphragmatic hernia
- Congenital intestinal anomalies
- Congenital lung malformations, including cystic adenomatoid malformations and pulmonary sequestration
- Congenital orthopedic anomalies, including clubfeet and scoliosis
- Congenital urologic anomalies of the bladder and kidneys, including bladder exstrophy
- Duodenal Atresia
- Genetic and metabolic diseases and disorders
- Fetal red blood cell or platelet alloimmunization*
- Twin-to-twin transfusion syndrome*

*Treated during pregnancy

To reduce prematurity and infant morbidity and mortality, negative outcomes of high-risk pregnancy, Nationwide Children's will:

- Continue to provide 100 percent of the infant care within the Ohio Fetal Medicine Collaborative
- Expand teenage long-acting, reversible contraceptive (LARC) services
- Expand teenage pregnancy services in collaboration with The Ohio State University Wexner Medical Center
- Expand OBBO programs
 - Progesterone Promotion Project
 - Safe Spacing
- Initiate Centering Pregnancy® pilot programs in 2014. This program will facilitate a group prenatal care model whereby women of similar gestational age meet for health assessments, education, and self-care information, which helps build a support network.

Community Partners

Central Ohio Hospital Council
 Columbus Neighborhood Health Centers
 Columbus Public Health
 Council on Health Mothers and Babies; Pregnancy Care Connection
 Heart of Ohio
 Miami Valley Health System
 Mt Carmel Health System
 OhioHealth
 The Ohio State University Wexner Medical Center

8. Unintentional Injuries

Description

According to the Franklin County HealthMap 2013, someone in the U.S. dies from an unintentional injury every six minutes. This rate applies to both adults and children. In Franklin County, accidents and unintentional injuries are the leading cause of death for children age 1 to 14.

Nationwide Children's Programs and Partners

To address unintentional injuries, Nationwide Children's has developed a world-class injury prevention program through the Center for Injury Research and Policy at The Research Institute, as well as multiple interdisciplinary community outreach efforts. For example, the Injury Prevention Committee is a multidisciplinary committee that keeps up with the latest education and research and drives the hospital injury prevention initiatives. Injury prevention efforts are broad and include initiatives in the following areas: motor vehicle and car seat use, pedestrian activities, falls, bike safety, lawnmower safety, water safety, button battery safety, eye safety, playground safety, baby care, fire and burns, and sports safety.

Injury Prevention

Nationwide Children's has over 50 active injury prevention initiatives developed to educate the public. When combined with media outreach, the programs reach more than 1 million people each year. Examples include:

Passenger Safety Program - Nationwide Children's staff train families at the hospital, the on-site hospital clinics, the nine Primary Care Centers and the satellite Neonatal Intensive Care Units about age-appropriate child safety seats and boosters as well as correct use. Staff members also help with car fittings.

KISS (Kohl's is Sold on Safety) - Funded through a grant from Kohl's, this comprehensive injury

prevention program allows data-driven, consistent, focused injury prevention projects and public messaging year-round.

One Pair of Eyes - Funded through the State of Ohio and Prevent Blindness Ohio, Nationwide Children's has developed a middle and high school eye health and safety curriculum used throughout the state.

Sports Medicine Injury Prevention Program - Sports Medicine offers injury prevention programs to keep young athletes healthy and playing the sports they love. The programs focus on the keys to injury prevention for all athletes and are tailored to the athlete's age, sport, and developmental level of flexibility, strength, balance, agility and core stability.

Sports Medicine Strength and Conditioning Programs - Sports Medicine offers strength and conditioning programs to keep athletes safe when engaged in sports. These programs are carefully designed to maximize flexibility, strength, power, core stabilization, agility, balance, and conditioning, as well as how to transfer those skills to individual sports.

Sports Medicine Concussion Program - Sports Medicine offers a comprehensive approach to concussion prevention and treatment. These programs offer parents, coaches, educators, school administrators, athletes and others the tools to understand concussions and how to best manage them. This includes neurocognitive baseline testing and interdisciplinary concussion treatment clinics, including pediatric sports medicine specialists, physical medicine and rehabilitation specialists, neurologists, neurosurgeons, radiologists, neuropsychologists, physical therapists and athletic trainers.

The Center for Injury Research and Policy (CIRP) at The Research Institute - This program works globally to reduce injury-related pediatric death and disability. With innovative research at its core,

CIRP works to continually improve scientific understanding of the epidemiology, biomechanics, prevention, acute treatment and rehabilitation of injuries. CIRP serves as a pioneer by translating cutting-edge injury research into education, advocacy and advances in clinical care. CIRP is one of only 11 Injury Control Research Centers funded by the Centers for Disease Control and Prevention and is the only one focused on injuries to children and adolescents.

To reduce morbidity and mortality associated with unintentional injuries, Nationwide Children's will:

- Continue to research and share information regarding injury-related pediatric death and disability
- Continue to sponsor and partner with community organizations to provide public messaging and education campaigns to reduce pediatric injury
- Add one new Orthopedic and Sports Medicine site within the next four years
- Add three new Urgent Care Centers within the next three years
- Expand injury prevention programming to additional Franklin County school districts
- Continue to expand the Passenger Safety, KISS, and One Pair of Eyes programs

Community Partners

Capital University Law School
 Central Ohio Poison Center
 Columbus Blue Jackets (major league hockey team)
 Columbus Public Health
 Girl Scouts of Ohio's Heartland
 Kohl's
 Mid-Ohio Dairy Queen
 Ohio Department of Health
 Pediatric Trauma Society
 Pleasure Guild of Nationwide Children's Hospital
 Prevent Blindness Ohio
 Safe Kids Coalition
 Safety Town
 Schools Districts throughout Ohio (minimum one district per county)

9. Conclusion

In order to address the community needs identified by community representatives and the Franklin County HealthMap 2013, Nationwide Children's Hospital will commit to the Implementation Strategies identified in this document. In addition, the mission of the hospital will continue to guide Nationwide Children's in its daily efforts to create best outcomes and provide the highest quality of care to every child and family with which it comes in contact.

Nationwide Children's will maintain its inclusive endeavors for improving care and serving the community by taking a considered and detailed approach to addressing access to care, chronic diseases, infectious diseases, behavioral health, cancer, interpersonal violence, high-risk pregnancies and birth outcomes, and unintentional injuries among the population it serves.