



2019-2021 Implementation Strategy



When your child needs a hospital, everything matters.

Community Health Needs Assessment Implementation Strategy 2019-2021

As set forth in Nationwide Children's Hospital's Community Health Needs Assessment, Nationwide Children's Hospital and a number of community partners completed the Franklin County *HealthMap2019*. The Franklin County *HealthMap2019* identifies three health priorities, and Nationwide Children's Hospital adopted two additional priorities based on needs identified within the Franklin County *HealthMap2019* that are particularly relevant to pediatric health care. This Implementation Strategy explains how Nationwide Children's will address and try to impact the priorities identified in Nationwide Children's Hospital's Community Health Needs Assessment.

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1. Access to Care

Description:

The number of Emergency Department visits a hospital receives indicates how much access the community has to health care. Although the number of patients 18 and younger admitted to the hospital decreased from 97.1 per 1,000 in the Franklin County *HealthMap2016* to 62.4 in *HealthMap2019*, the number of children treated and released at all Franklin County hospitals increased from 486 per 1,000 to 546. This suggests a need for improved access to care outside of the hospital to primary care providers, dental providers or community health services.

Access to quality dental care and preventative services for infants and children continues to be a serious issue in Franklin County. Statewide, 4.1% of children ages 3 to 18 were unable to secure dental care in *HealthMap2019*, down from 5.7% in *HealthMap2016*. In Franklin County, however, the numbers remained relatively unchanged, with 5% of children in this age group unable to secure dental care in the latest *HealthMap*.

Nationwide Children's Programs and Partners

In response to the need for more appropriate, accessible care, Nationwide Children's Hospital has committed to providing additional primary and subspecialty health care to Franklin County residents and assisting with coordinating care for vulnerable patients.

Nationwide Children's has implemented care coordination across all departments and with community and school partners through its Care Navigation program. By sharing information and coordinating visits, treatments and other patient activities, the Care Navigation team strives to make the patient as healthy as possible by making it easier to get care.

CARE NAVIGATION

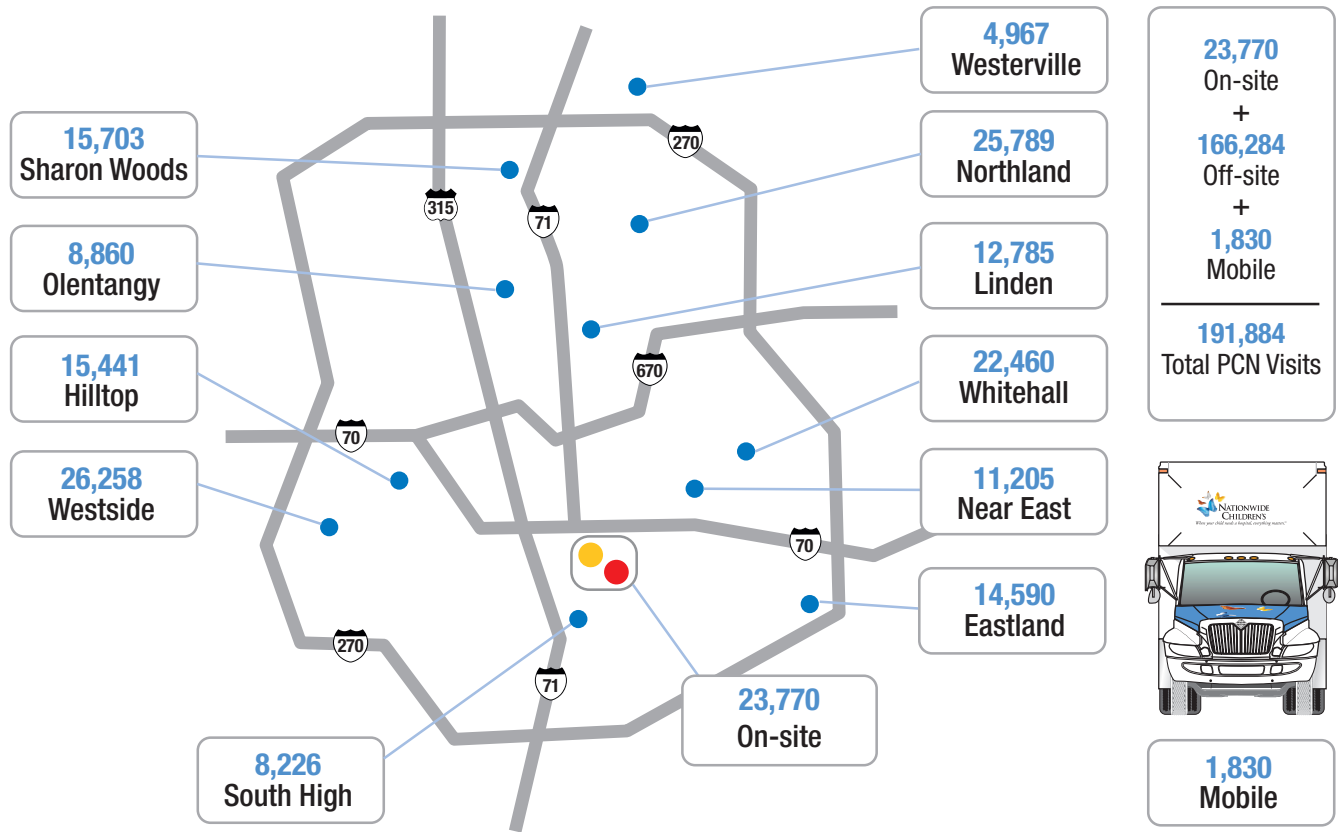
The Care Navigation program at Nationwide Children's provides care coordination for children with complex medical problems, special health care needs and others who have many people involved in their health care in Franklin County and 33 more counties in central and southeast Ohio. Care Navigation team members ensure that all those involved with a child's health care, including the health care team, schools, community

groups and insurance companies, have the information they need. The team helps families obtain the medical supplies the child needs to be healthy and work with families to identify needs, find solutions and prevent new problems from occurring. Studies have shown that care coordination improves patient care and safety while lessening the burdens on families.

PRIMARY CARE

Children and adolescents are increasingly using the preventative care offered through Nationwide Children's 12 Primary Care Centers. The Primary Care Network has introduced more agile scheduling, increased same-day access at three locations and began flexing capacity to accommodate population needs based on identified trends, such as adding new clinics during flu season. Overall, patient volumes increased 5% from 2017 to 2018. In 2018, the network increased well-child visits for adolescent patients by 12% versus 2017.

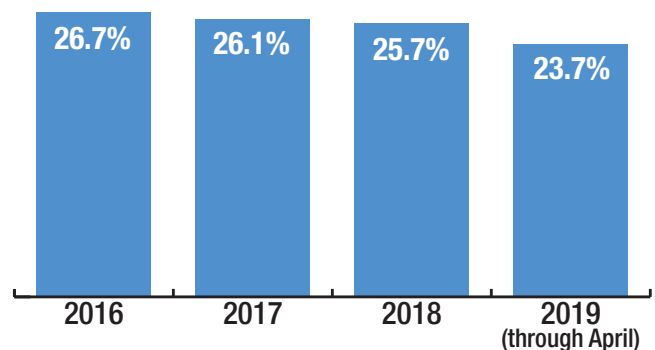
2018 Primary Care Network Visits



Missed Appointment Task Force Team

A missed-appointment task force team was formed in October 2018 to reduce the percentage of missed appointments within the Primary Care Network. Multiple interventions have been implemented. Missed appointment rates improved from a baseline of 26% to under 24% within five months of project initiation. Testing of other interventions is ongoing. Some of the countermeasures that have been implemented include more strategic scheduling for both patients and physicians, along with more flexible scheduling based on patient demand.

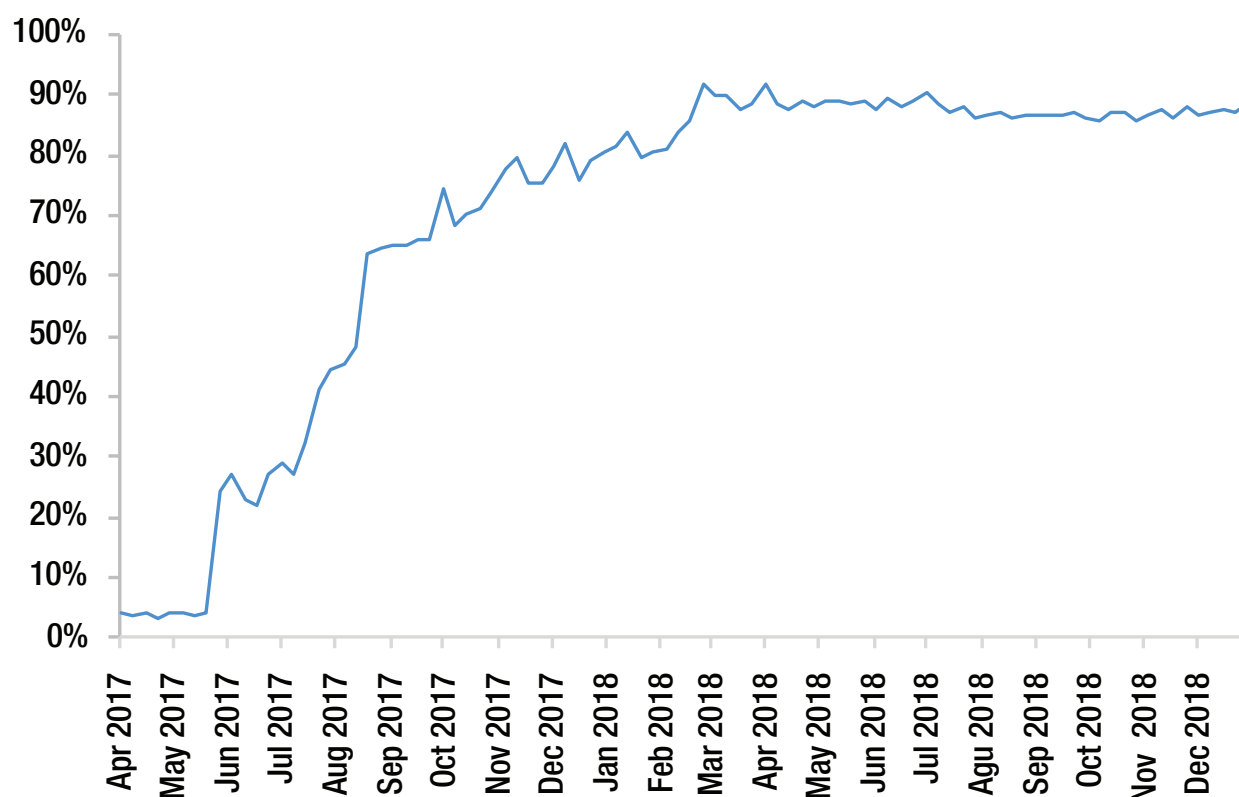
PRIMARY CARE MISSED APPOINTMENT RATE BY YEAR



Continuity of Care

Beginning in 2017, the Primary Care Network implemented a process to improve continuity between patients and providers. Patients are now assigned an individual primary care provider and scheduling at the medical home is now being prioritized. Improvement has been achieved in both areas with approximately 90% of all patients seen in the past year now having an individual primary care provider assigned. Patients are now being scheduled at their medical home for approximately 86% of all visits, compared to 81% at baseline.

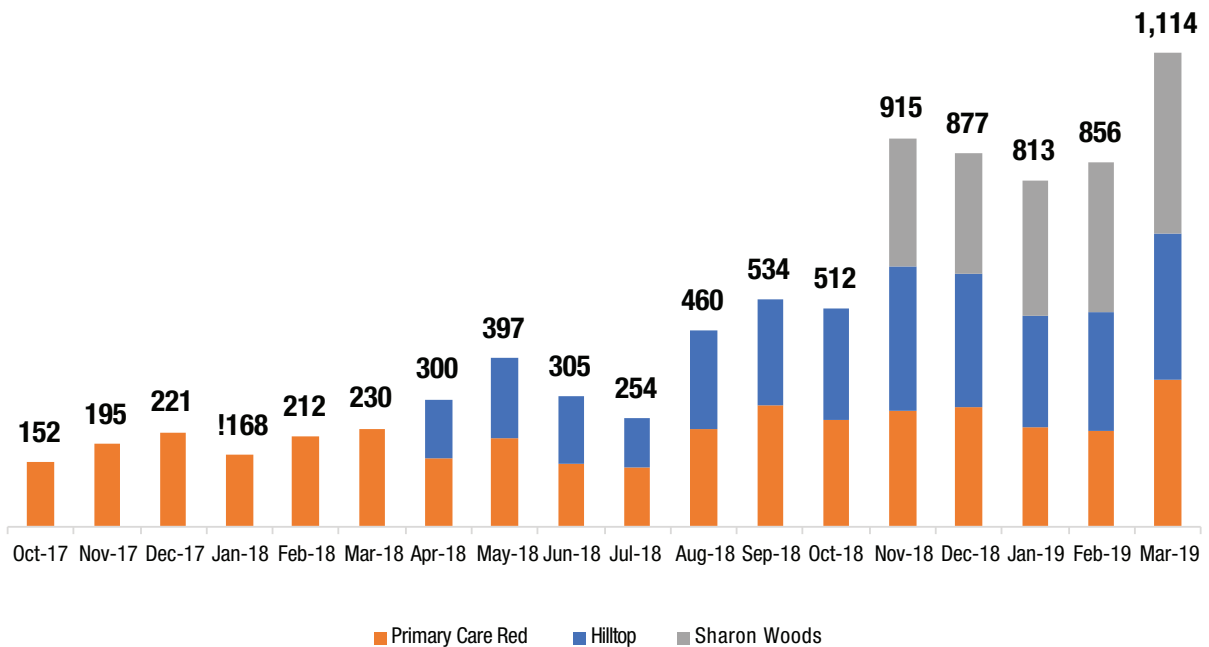
PERCENTAGE OF PRIMARY CARE NETWORK PATIENTS WITH ASSIGNED PRIMARY CARE PHYSICIAN



Emergency Department Reduction

Overall, Emergency Department (ED) utilization for the Primary Care Network population has declined more than 10% in the past 18 months. During this time, there have been over 5,000 fewer ED visits and over 8,000 fewer Urgent Care visits versus the baseline rate. Decreases have been attributed to efforts around continuity and medical home scheduling, improved overall access and the introduction of walk-in clinics into some of the network's offices. Due to continuing longitudinal quality improvement efforts, a more than 30% decrease in the ED visit rate for asthma care in the Primary Care population has occurred over several years. This effort was awarded the 2017 Children's Hospital Association Pediatric Quality Award for Clinical Care. Interventions in place included standardizing documentation of asthma symptoms, assessment and plan; following pharmacotherapy guidelines for patients with poorly-controlled asthma; and screening for asthma control using the Asthma Control Test at all clinic visits for patients with asthma, regardless of the reason for their visit.

PRIMARY CARE WALK-IN, SICK CLINIC VISITS



Social Determinants of Health Screening

The Primary Care Network is an early adopter of universal screening of patients for social determinants of health. The network takes advantage of systems in place to implement interventions based on a patient's and/or family's level of need, ranging from providing a resource list to immediate crisis intervention from behavioral health services.

HPV Vaccination

Current network rates for successful human papillomavirus, or HPV, vaccination are well above state and national averages. The most recent data, from 2017, shows that Primary Care Network patients age 13-17 completed the HPV series 65.6% of the time, versus 47% for the state of Ohio. When comparing Nationwide Children's to national measures, which are limited to 13-year-old patients, 56.4% of Nationwide Children's 13-year-old patients completed the HPV series, compared to 39.1% nationally.

Adolescent Depression Screening

Primary Care Network providers now use paper questionnaires to screen adolescents for depression. A project is underway to implement tablet-based screening that integrates with the electronic medical record to create more seamless communication between medical providers and clinical staff.

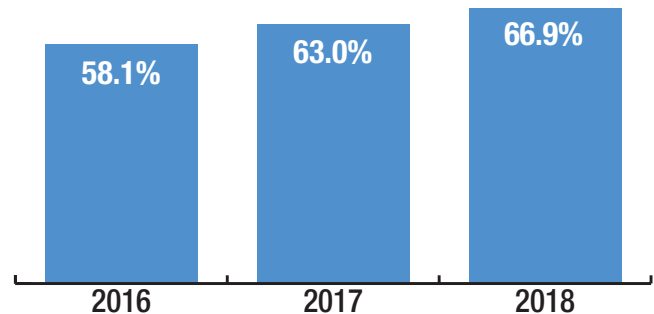
Obesity

Through longitudinal quality improvement work, the network's MyHealth team has shown improvement or maintenance of body mass index (BMI) in 60% of patients who attended three or more MyHealth clinic sessions in six months. The MyHealth initiative is a program for children and families concerned about a child's weight, that helps families learn about healthy eating and activities, set goals and make lifestyle changes. A recent trial at the Eastland Primary Care office increased the percentage of patients who had three or more of these visits.

ADHD Quality Improvement Measures

The ADHD quality improvement team worked to successfully improve the percentage of patients with a recent parent and teacher Vanderbilt form completed, which helps health care providers monitor and adjust treatment. The Vanderbilt ADHD Assessment Scales score on the form requires documentation of symptoms from both home and school. The Primary Care Network also focused on prescribing a higher percentage of preferred medications, which can lead to decreased cost of care and an improvement in overall care value.

PERCENTAGE OF NATIONWIDE CHILDREN'S PARTNERS FOR KIDS PRIMARY CARE PATIENTS PRESCRIBED A PREFERRED ADHD MEDICATION



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

- Reduce Emergency Department utilization for the Primary Care Network population by increasing the percentage of patients scheduled in their medical home, expanding the number of locations offering walk-in sick clinics and more.
- Increase patient access by expanding the size, staff, hours of operation or number of services offered at the Eastland, Sharon Woods, Westerville, Linden and Hilltop sites by 2021.
- Develop a hub model that consists of a large primary care center providing more services in the patient's community and medical home, as opposed to offering the services only at the main hospital campus.

- Optimize behavioral health care delivery by expanding integrated psychology and psychiatry services in primary care centers.
- Increase adolescent depression screening at well-child visits for patients 12 and older.
- Begin a trial at two offices to increase suicide screening in adolescent patients, with plans to expand if the trial proves beneficial to patients.

Community Partners

Access Columbus
Columbus City Schools
Columbus Health Department
Cristo Rey Columbus High School
KIPP Academy
The Ohio State University's Early Childhood Head Start
South-Western City Schools
United Way of Central Ohio
Village Network
Women, Infants, and Children (WIC)
YWCA Family Shelters

DENTAL CARE

Nationwide Children's is committed to meeting the community need for oral health care by offering a safety net dental clinic. The safety net clinic provides dental services to members of the community who, due to low income, special needs or other barriers, lack access to dental care. More than 80% of the patients seen annually at the Dental Clinic are covered by Medicaid, with the majority from Franklin County. Most of the clinical care is provided by pediatric dental residents selected through a highly competitive match program. A team of more than 40 community pediatric dentists and other specialty dentists serve as attending dentists, faculty and care providers. An evening Dental Clinic operates Monday through Thursday and has Saturday hours to help working families. Nationwide Children's is

increasing access through a teledentistry pilot program, in collaboration with community partners and utilizing staff to their fullest capacity according to their licenses and credentials.

Teledentistry

In an effort to expand its reach into the community, the Department of Dentistry piloted a teledentistry program that was ongoing in the first quarter of 2019. In the program, physicians at the Lewis Center Emergency Department or one of four Franklin County Urgent Care offices would contact a dentistry resident who was on-call. The physician used specialized equipment allowing the resident to speak directly to the medical provider and the family. An intraoral camera was used when needed for the dentist to examine the patient. Concerns were resolved through this consultation or the patient was referred to the dental clinic or the emergency room if further care was needed. The department is compiling feedback into a study of the program before deciding on the future direction. The goal is to expand patient access by including additional primary care facilities, school-based health care clinics, and strategic referral partners in the program.

Community Outreach

In partnership with The Ohio State University and Head Start, department faculty and staff are providing care in the community through Early Head Start by visiting 19 neighborhood sites, all in Franklin County. Since spring 2017, the department sees approximately 160 children each year. This initiative maximizes a team approach to dental care and utilizes a hygienist under the Oral Health Access Supervision Program. The hygienist performs screenings, cleanings, and fluoride applications while a dentist provides an exam on each child at the sites at least once per year. Children in need of treatment are scheduled at the Nationwide Children's Hospital Dental Clinic.

Dental Hygiene Ambassador Program

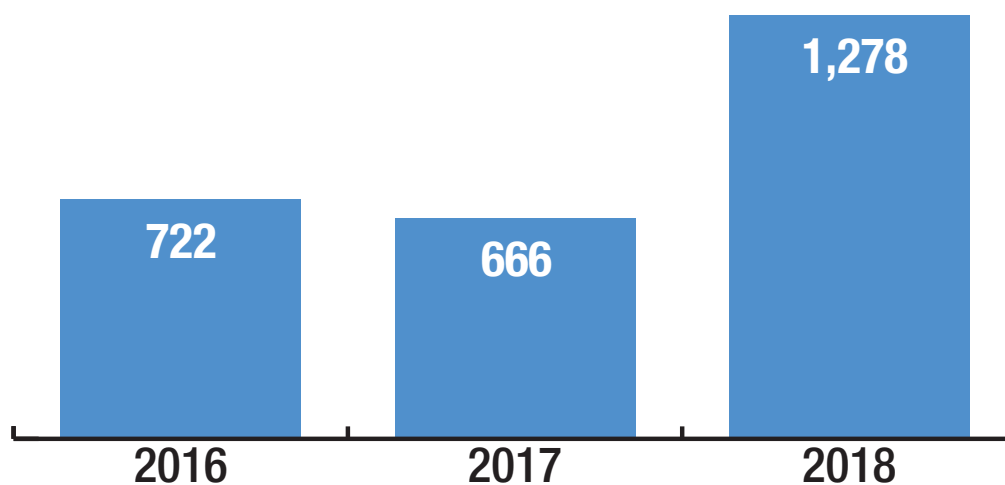
Dental residents traditionally attended hospital teams such as a Hemophilia and Bone Marrow Transplant Long Term Follow-up but attendance could vary due to unexpected clinic obligations, which did not permit continuity

of care. Participation on these teams was often time consuming with little patient contact and reduced the time residents were available to treat children in the dental clinic or operating room. To address these issues, the department has developed a Dental Hygiene Ambassador program to provide continuity of care and ensure the presence of dentistry in these teams. An experienced hygienist now works in the Hemophilia Clinic and the Bone Marrow Transplant Long-Term Follow-up Clinic. The hygienist provides oral hygiene instructions, dietary counseling and assessment compatible with his or her permissible scope of practice. The hygienist consults pediatric dentists as needed for assessment during the team visit and coordinates appointments with the department. This program optimizes resident learning because they are able to shadow other providers while assigned to the team and are not limited to dentistry. This has reduced the time residents spend on these teams, which provides additional time for them to work with patients in other dental settings, increasing access to care.

Medically Complex Patients

A new process helps improve access for children with special health care needs through the Medically Complex Patient (MCP) program. Previously, all children with special health care needs were treated by dental residents, limiting the number of providers and thus access. Now all new patients are treated by a dental resident during their first visit. Based on the resident's assessment, almost all children are able to return to visit a hygienist with special training and experience in treating children with their specific needs. The process has increased the number of potential providers to care for these children and improved access. Each year, the clinic sees around 1,000 new medically complex patients. Due to the patient education and management skills provided by hygienists and residents, nearly 85% of these patients are seen by hygienists with a dental assistant. The rest continue to be seen in MCP hygiene appointments with a dentist.

DENTAL CLINIC MEDICALLY COMPLEX PROGRAM VISITS



Surgeon General's Report

A member of the Section of Pediatric Dentistry and chief of Pediatric Dentistry are contributing to the Surgeon General's Report on Oral Health. Their sections will look at oral health in children and adolescents and oral health implications of unintentional and intentional trauma.

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

- Increase patient visits at Nationwide Children's Hospital by adding a faculty dentist and a clinical dentist to the department and improve the efficiency of scheduling.
- Improve oral health through continuing and expanding community partnerships with the Head Start and Early Head Start programs and collaborate with school-based programs to use teledentistry, serving children who might not otherwise be able to see a dentist.
- Assume responsibility for The Ohio State University College of Dentistry Fellow program. Through enhanced recruitment, training and supervision of these dentists, dental care can be provided to children in the community in a variety of venues.
- Build collaborations within the hospital to improve patient care and research.

Community Partners

Ohio Department of Health

The Ohio State University College of Dentistry

The Ohio State University Dental Health Outreach

Mobile Experience (H.O.M.E. Coach)

The Ohio State University Nisonger Center

2. Chronic Conditions

Description:

Chronic conditions are the leading cause of death and disability in the United States. Just under 16% of children in Franklin County have asthma and nearly one in three children in the county is overweight or obese according to the Franklin County *HealthMap* 2019. An estimated .277% have diabetes, according to Franklin County and Ohio hospital records. The American Diabetes Association estimates the national rate for Americans 20 and younger is .24%. Asthma and diabetes are common reasons youth and adults visit an emergency department. All three conditions require ongoing education, monitoring and interventions.

Nationwide Children's Programs and Partners

Nationwide Children's has multiple programs in place to address asthma, diabetes and obesity, many of which are designed to empower patients and their families to manage their conditions. For children with asthma and diabetes, this has led to fewer emergency department visits and inpatient hospital treatment.

ASTHMA

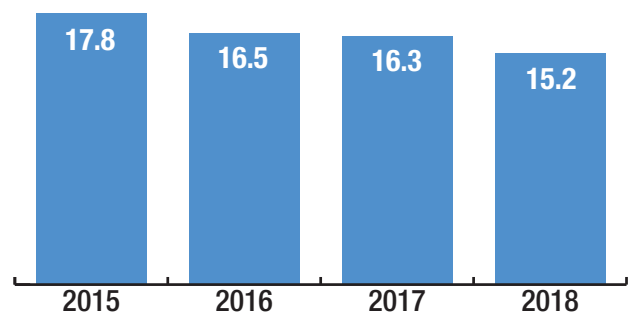
Asthma is the leading chronic disorder in children, affecting nearly 6 million in the United States. The cost of asthma to society in the United States results in more than \$50 billion per year in health care expenses, missed school and work days, and early death. The current Franklin County rate of 15.8% is higher than the state rate of 14.2% but lower than the national rate of 22.8%. Nationwide Children's efforts were recognized with the 2017 Pediatric Clinical Care Quality Award "Quality Improvement in Primary Care: Reducing Emergency Department Visits in Children with Asthma" from the Children's Hospital Association.

Optimizing Treatment

Quality improvement (QI) efforts within Nationwide Children's Primary Care Centers (PCC) focused on using any visit as an opportunity to assess asthma status.

Asthma Control Tests were given to asthma patients at more than 80% of their PCC visits and providers documented additional asthma evaluations at over 65% of visits. Between 2016 and 2018, changing medication management (step-up guideline therapy) for children in poor control of their asthma was a major focus of QI work. Step-up therapy interventions rose from historic rates of approximately 30% to goal levels of 50%. The clinics continued holding at least weekly "Asthma Specialty Clinic" sessions, which afforded more intensive asthma assessment and discussions, including lung function measurement and education supported by respiratory therapists and/or health coaches. In response to these and other efforts, Emergency Department utilization by Primary Care Center asthma patients decreased 8% from 2016 to 2018.

ASTHMA ED VISITS PER 1,000 NCH PCN PATIENTS



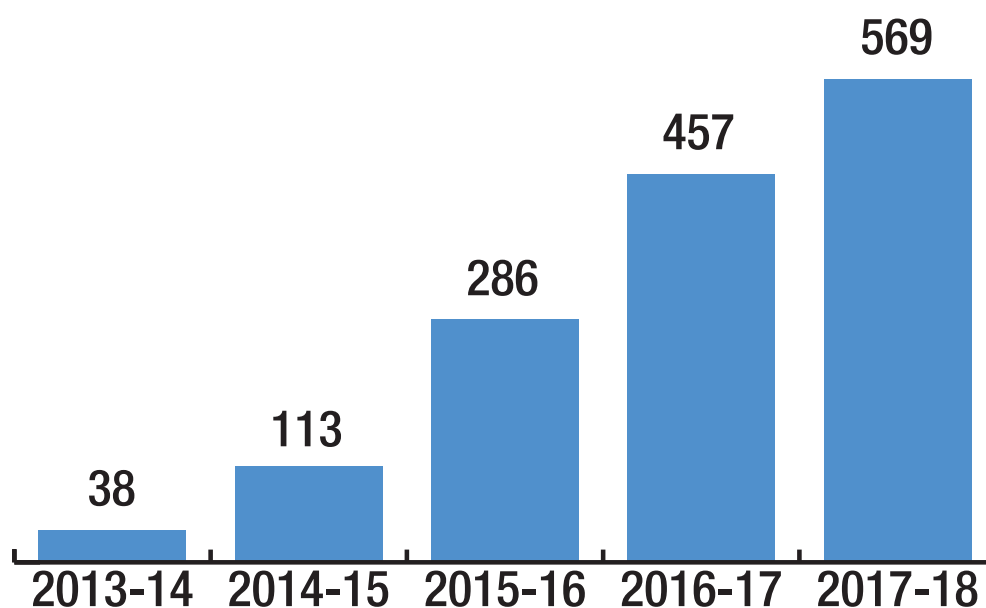
Home Visits

In the Nationwide Children's Asthma Express program, a nurse asthma-education specialist makes two to three home visits to provide individualized education and practical advice to caregivers of children with potentially severe asthma (those who are hospitalized or visit the emergency room frequently for acute flares). Changes, including incorporating techniques that help families find the motivation to follow through with recommendations such as routine controller medication use, were made to the program. Patients who "graduated" from the program cut their Emergency Department visits by more than 50% compared to previous years. From 2016 to 2018, this program reached over 500 children.

School-Based Asthma Therapy

School-Based Asthma Therapy (SBAT) helps children with poorly controlled asthma, marked by frequent or severe symptoms at school or frequent exacerbations requiring urgent therapy. The program promotes communication among the school, caregiver and health care provider. It focuses on ensuring children are taking their routine controller therapy (medications that help prevent asthma symptoms). Participating schools assist by administering a portion of the students' controller doses at school. In the spring of 2016, SBAT enrolled 286 students in kindergarten through 12th grade. By December 2018, enrollment was just under 600 students from more than 200 schools in nearly 30 school districts.

STUDENTS ENROLLED IN SBAT



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

- Sustain routine asthma control assessment and appropriate adjustment of asthma control therapies for patients with asthma within the Primary Care Network.
- Continue School-Based Asthma Therapy (SBAT) program activities via recently expanded staffing as well as support for the Asthma Express program.
- Continue Partners For Kids Asthma Quality Improvement program support for currently participating community physicians to consistently use optimal asthma practices.
- Continue reductions (3% per year relative to average 3-year prior baseline) in Franklin County Partners For Kids asthma-related emergency department visits.
- Establish reductions (3% per year relative to average 3-year prior baseline) in Franklin County Partners For Kids asthma-related inpatient stays.

Community Partners

Columbus City Schools, South-Western City Schools and another 29 other local school districts in Franklin and surrounding counties

Community pediatricians

Ohio Association of School Nurses

Ohio Department of Health

DIABETES

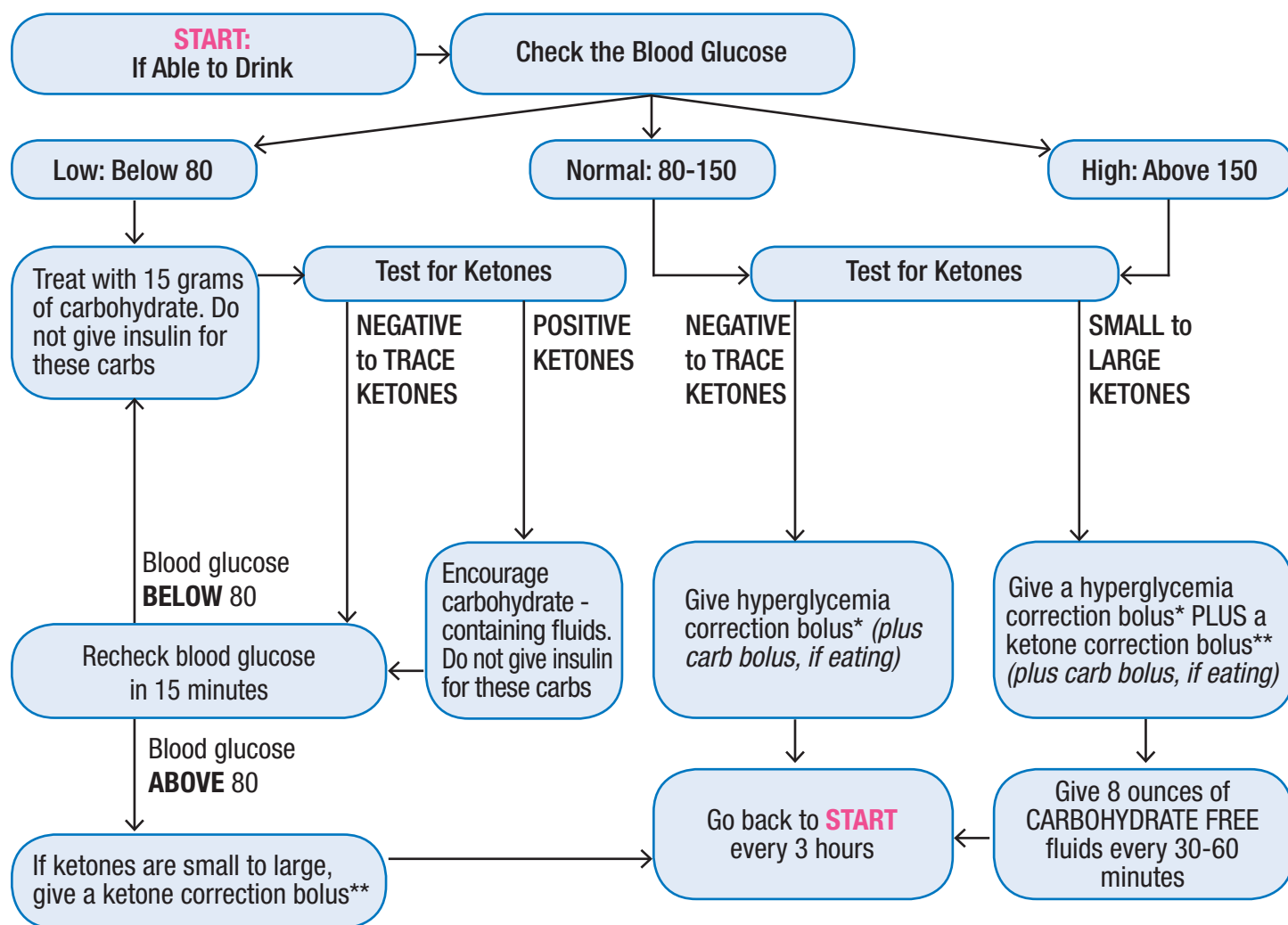
Nationwide Children's diabetes program continually strives to improve and expand the comprehensive outpatient care it offers to children with the disease. The program's overall goal is to provide patients and their families with needed care and the tools to self-manage diabetes, resulting in independent, healthy and active lives.

Reducing Emergency Department Visits

The Endocrinology Department at Nationwide Children's offers round-the-clock access to care via its urgent phone line. During education sessions and clinic visits, staff discuss the urgent line to ensure patients and their families are aware of the resource and that they should try to call prior to taking their child to the Emergency Department (ED). New-onset and regular clinic education provided to caretakers also gives families information to help them determine when it is appropriate to take their child to the ED. Further, patients receive a diabetes sick day self-management packet to guide them and their families when the patient is feeling ill. The packet includes instructions for insulin injection and insulin pump therapy when suffering different symptoms.

Diabetes SOS: Sick Day Self-Management

Flowsheet - Insulin Injection Therapy When Able to Drink



*Only if blood glucose is above target and it has been 3 hours since last carb and/or rapid-acting insulin dose

**See "SOS" Worksheet to calculate amount of extra insulin for ketone correction

CALL the Diabetes Center (614) 722-4425 (option 3) if any of the following occur:

- You are not sure what to do
- You have treated a LOW blood glucose (hypoglycemia) TWICE in a row with NO improvement.

- You have treated MODERATE to LARGE ketones TWICE in a row with NO improvement.

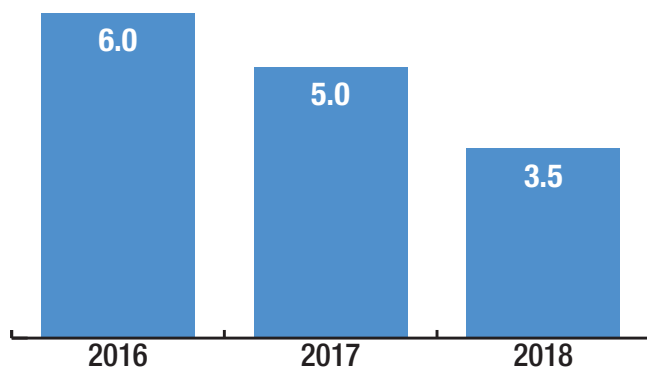
In an Emergency, call 911

When patients with diabetes come to the ED, social workers routinely make follow-up phone calls to learn the reasons why and attempt to connect the patient with a diabetes educator, a dietician, or other resources that may provide information or care that makes future ED visits unnecessary.

To more closely monitor patients and try to prevent issues that would send them to the ED, the department established an email address that newly diagnosed diabetics use to send in blood sugar logs to providers. Providers analyze the logs and respond within 24 hours with their assessment, including adjustments or education on insulin management.

As these efforts have become standard practice, emergency room visits for diabetes-related issues decreased from an average of a little more than six visits per 1,000 patients in 2016 to under four per 1,000 patients in 2018.

**ED VISITS FOR DIABETES-RELATED ISSUES
PER 1,000 PATIENTS**



Among patients admitted for diabetes-related issues, the average number of inpatient events was relatively steady from 2016 to 2019, at between eight and nine per 1,000 patients.

Regular Follow-up Visits

Diabetes is a complicated, chronic disease that requires significant, ongoing education and intervention based on patient response to treatment. According to American

Diabetes Association guidelines, diabetics should be seen four times a year. When patients register in clinic, more than 95% of patients are scheduled for follow-up visits within 105 days. Of those, an average of nearly 70% per month were seen within the time frame. The clinic developed a process improving its ability to identify patients most likely to miss appointments and proactively intervene to prevent missed appointments. The goal is to establish a weekly call list to allow staff to proactively reach out and intervene. Currently, the social work team follows up with high-risk patients who fail to come to appointments, in an effort to discern whether roadblocks are preventing patients from showing up at the clinic, and addressing these issues. Several quality improvement projects are underway to identify and use opportunities to see patients with diabetes every 90 days.

The diabetes clinic continues to focus on using any kind of contact with a patient as an opportunity to follow-up. In 2018, staff identified 2,765 missed opportunities to follow-up with patients within 105 days, a 22% improvement over 2017. The opportunities included scheduled visits with staff, screenings for lipids, blood pressure or depression, risk assessments and more – all part of the performance index called the T1D Care Index (T1D) the department uses to track and measure care.

Screening for High Risk Factors

The Endocrinology Department set a goal to perform risk assessments on all newly diagnosed patients with type 1 diabetes. Patients are assessed for other chronic conditions, mental health, alcohol or drug use by the patient or family, social supports and more. The assessments are part of the T1D and a focus of multiple QI projects. Through 2018, the department assessed more than 85% of new diabetes patients and tracked nearly 90% who scored as high-risk patients. The department staff tags their records to ensure the social work team is engaging regularly with these patients. Staff also schedule high-risk patients for one visit every month until the care team is comfortable with their ability to manage their diabetes.

Transition to Adult Endocrinology

Research has shown that as adolescents with diabetes become young adults, they are at increased risk for poor outcomes. This is due to changes within the body as it reaches adulthood and because self-management of the disease and clinic attendance tends to decrease during this time. Beginning when a patient turns 18, staff discuss or provide information about the transition to adult care at each visit. To patients 20 and older, Nationwide Children's offers weekly sessions staffed by an adult endocrinologist who meets with them and makes referrals as necessary, to help them more comfortably transition into adult care. The department referred about 100 patients 20 and older to adult endocrinology annually from 2016 to 2018.

Optimize Inpatient Insulin Therapy

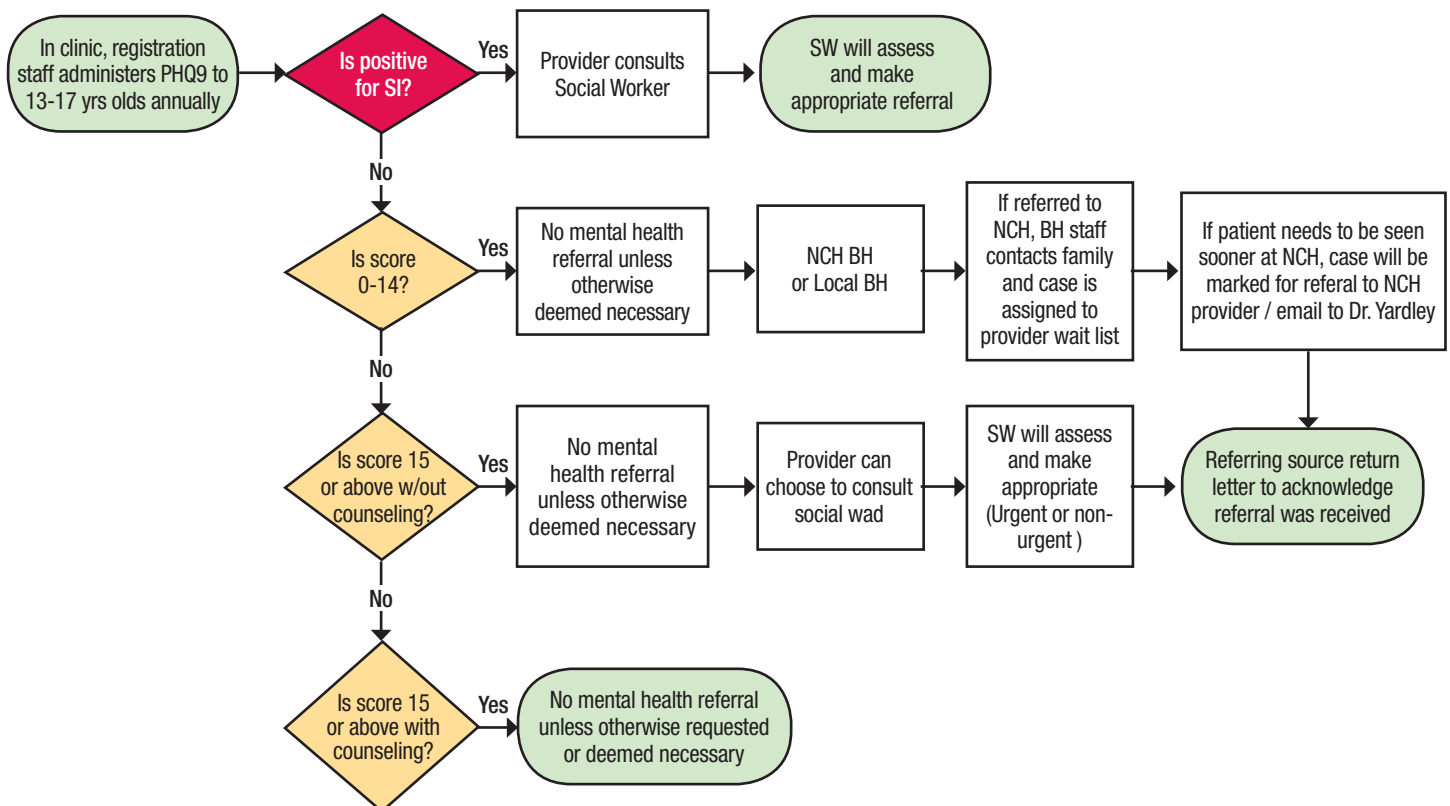
After receiving input from endocrinologists, diabetes educators and other endocrinology staff members with extensive training in insulin therapy, the Endocrinology Department revised hospital-wide policies in order to help staff in other departments safely and accurately administer insulin via an insulin pen or continuous insulin pump.

Recognizing and Treating Depression

In 2017 and 2018, more than 95% of type I diabetes patients 12 or older had been screened for depression within the last year. Depression can hinder a patient's ability to take care of herself or himself and those identified as high-risk are immediately connected with a social worker who intervenes before the patient leaves the clinic. Nationwide Children's provides social work support around the clock. The clinic tracks the percentage of patients screened and has QI initiatives aimed at ensuring all eligible patients are screened.

ROUTINE DEPRESSION SCREENING AMONG ADOLESCENTS WITH DIABETES

Flow Chart Revised 6/30/18



Family Focus Groups

The department has established regular family focus groups, bringing together diverse patients with various levels of “control” of their diabetes to share their concerns with each other and the staff. Social workers lead these groups to try to prevent families from feeling uncomfortable if they need to provide negative feedback. This feedback is analyzed and used to adjust patient care.

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

- Improve the clinic's T1D Care Index, encompassing a number of different factors indicating how well a patient's diabetes is being maintained.
- Continue to utilize and fine-tune T1D Care Index composite scoring to allow providers to rank diabetes patients on a numerical spectrum and track improvement.
- Increase the number of patients seen by an interdisciplinary team annually, as recommended by the American Diabetes Association.
- Pilot a day hospital model for newly-diagnosed diabetics to normalize the diagnosis by sending patients home overnight and eliminate the practice of admitting patients for up to three days after receiving a diagnosis.
- Begin using Glooko, software designed to bring a patient's glucose, activity, food and medication data together and help a patient/family and health care provider manage the disease better.

Community Partners

American Diabetes Association

Juvenile Diabetes Foundation

Central Ohio Diabetes Association

OBESITY

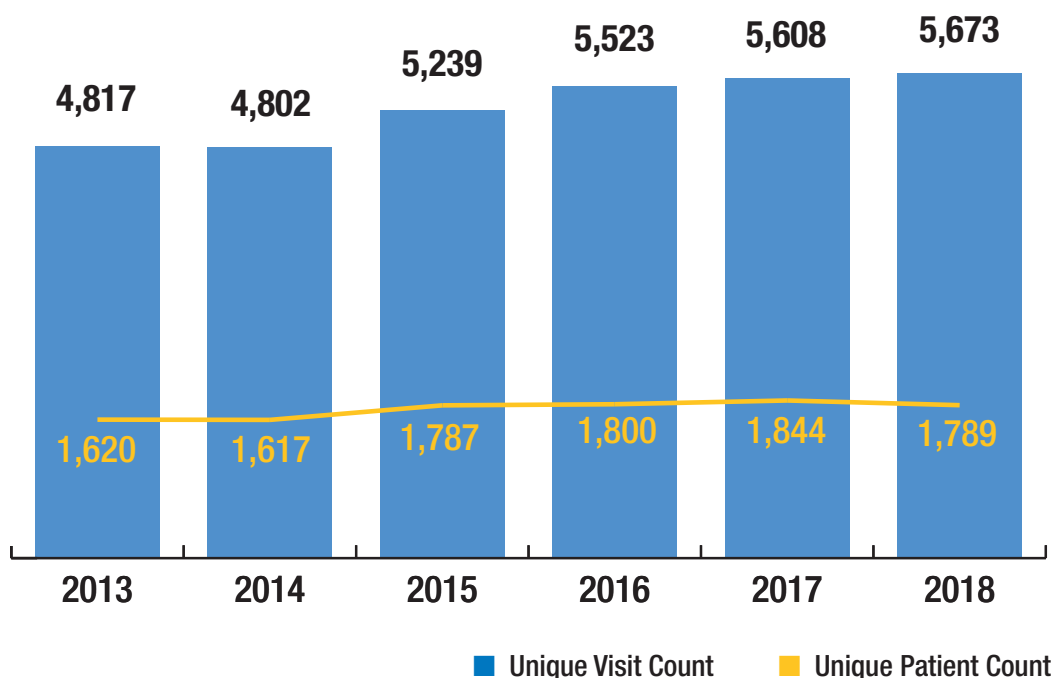
Children with obesity often have risk factors for other health complications, such as heart disease and diabetes. These can persist or worsen if they remain overweight or obese in adulthood. Childhood obesity has also been linked to certain cancers in adults as young as 20. According to the *HealthMap2019*, nearly one in three children in Franklin County is overweight or obese, about the same as *HealthMap2016*. The county average is slightly lower than the state's but equal to the national average.

Nationwide Children's Center for Healthy Weight and Nutrition (CHWN), a tertiary care obesity center, offers a comprehensive approach to weight management in children, including programs for prevention, treatment, education and more. CHWN's medical weight management programs help children 2 years and older who struggle with their weight make lifestyle changes.

Patient Visits

CHWN saw an average of 1,811 unique patients annually from 2016 through 2018, up from the average of 1,675 the prior three years. Healthy weight visits increased to an average of 5,601 annually in 2016 through 2018, compared to an average of 4,592 the prior three years. Healthy weight and nutrition patients came from more than 50 of Ohio's 88 counties and four neighboring states. The increase in visits is due in part to CHWN's effort to enhance patient engagement by increasing patient contacts to four or more visits within a six-month time period. The CHWN improved engagement by coordinating care, establishing continuity of care, improving scheduling and template management, and creating treatment pathways for patients. The number of patients who achieved this goal grew 12% in January 2019 compared to January 2018.

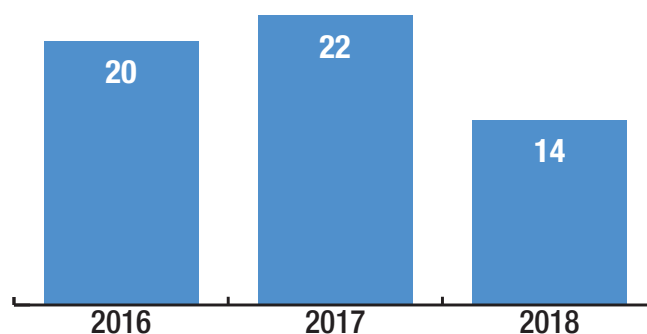
HEALTHY WEIGHT VISITS AND UNIQUE PATIENTS



Weight-Loss Surgery

For adolescent patients who have not achieved their desired weight loss through lifestyle changes, weight loss surgery is an option. CHWN offers three types of bariatric surgeries: gastric sleeve, gastric bypass and laparoscopic adjustable band surgeries. From April 2015 through March of 2018, the center's surgeon performed 59 bariatric surgeries. CHWN received accreditation through the Metabolic and Bariatric Surgery Accreditation and Quality Improvement Program and has implemented quality improvement projects aimed at improving patient retention and patient outcomes, and reducing unplanned pregnancies.

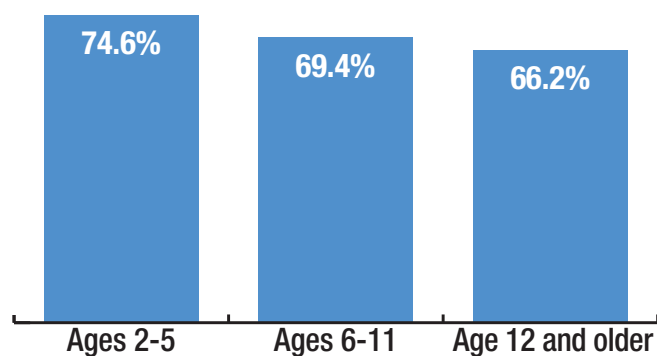
BARIATRIC SURGICAL CASES



Primary Care Obesity Network

To reach and engage more children and youth with obesity, CHWN expanded the Primary Care Obesity Network (PCON). PCON is a network of primary care practices linked to CHWN, implementing high-quality, evidence-based obesity care. Between 2016 to 2018, the CHWN team trained providers at 13 school-based clinics and five practices. A total of 39 practices are in the network. Importantly, CHWN, through its work on PCON, has served as an integrator among community and the clinical practices to promote prevention. Between 2016 to 2018, the network established or sustained relationships with over 20 community organizations, businesses and public health departments. Children involved in PCON clinics demonstrate improvement in diet and physical activity. Approximately 70% of children seen in PCON practices for obesity or being overweight, decreased or maintained their body mass index, with greater declines in younger children.

PERCENT OF PCON PATIENTS WHO HAVE LOST OR MAINTAINED BMI, BY AGE



Community Outreach

Community outreach efforts help increase awareness, education and resources on healthy lifestyles. CHWN participated in 46 community events such as county fairs, school functions, Columbus Marathon, farmers markets and health fairs, reaching more than 524,130 children and caregivers from 2016 to 2018. CHWN focused specifically on reaching out to minority

populations through participation in the Butanese Festival, the Asian Festival, the Latino Festival and the African American Male Walk.

To highlight the “Food is Health” initiative of the Mid-Ohio Foodbank, Nationwide Children’s was one of four health systems in central Ohio that supported the Mid-Ohio Foodbank campaign through a congressional visit in Washington, D.C. and a media campaign. This initiative seeks to improve food availability, access, quality and usage to food-insecure families across central Ohio.

Research

To develop evidence-based prevention and treatments, Nationwide Children’s researchers are collaborating with investigators here and at institutes across the country. Research funding has increased from less than \$1 million from 2013 through 2015, to more than \$3 million from 2016 through 2018. Nationwide Children’s is one of five institutions nationally participating in the Teen-Longitudinal Assessment of Bariatric Surgery research study, which is designed to clarify the benefits and risks of bariatric surgery in adolescents. The hospital is one of four institutions participating in the PLAN with Families study. The goal of the study is to determine the effectiveness of family-based behavioral treatment, such as making incremental changes in eating and exercise habits, when delivered to a parent and child within a primary care setting. Both studies are funded by the National Institutes of Health (NIH).

In addition, CHWN received \$55,000 of funding through MedMutual to support weight management efforts within targeted primary care centers in Franklin County. Through this funding, CHWN implemented a culturally sensitive lifestyle intervention targeting the Latino population.

To reduce or prevent pediatric obesity and to help children already facing this chronic condition, Nationwide Children's will:

- Maintain Metabolic and Bariatric Surgery Accreditation and Quality Improvement Program (MBSAQIP) adolescent bariatric surgery accreditation which will be demonstrated by 75 bariatric surgery cases in the next three years.
- Improve patient engagement in the center by increasing the percent of children with an average number of treatment contacts to four or more visits in six months and increasing the percentage with decreased body mass index.
- Expand community based programming in three sectors: a) outreach to primary care practices, b) school-based programs and initiatives and c) participation in community events and programming.
- Establish and sustain research infrastructure.

Community Partners

Boys & Girls Clubs
Children's Hunger Alliance
Children's Defense Fund Freedom Schools
City Year
Columbus City Schools
Columbus Metro Parks
Columbus Public Health
Columbus Recreation and Parks
Community Development for All People
Franklin Park Conservatory
Junior League of Columbus Inc.
Kroger
Local Matters
Mid-Ohio Foodbank
Philip Heit Center for Healthy New Albany
Primary Care Practices
The Salvation Army
YMCA of Central Ohio

3. Income and Poverty

Description

More than 200,000 people in Franklin County, or about 17% of the population, live below the federal poverty level. A breakdown shows 12.5% of families and 24.5% of children live below the level – a greater percentage than in the state and the nation. *HealthMap2019* shows that 15% of families and 21.3% of children live at 100 to 199% of the poverty level. Where the HealthMap breaks down figures by race, the category Black or African-American includes members of Franklin County's substantial African immigrant community.

Franklin County's per capita income, median household income and mean household income have all increased from *HealthMap2016*. The county's per capita income of \$30,098 is higher than the state's and slightly higher than the nation's. The median household income of \$54,037 and the mean household income of \$73,666 in Franklin County are higher than the state median and mean but lower than national figures.

Despite the increase in income, 17.4% of households lack access to enough food for an active, healthy life, facing limited availability to nutritionally adequate foods in Franklin County. That's about the same percentage as detailed in the *HealthMap2016*. According to *HealthMap2019*, 53.7% of households with children under 18 received Food Stamps, an increase of 2 percentage points from the last HealthMap. The 2019 number is higher than the state as a whole but lower than the nation's.

A one-day count found that 32.4% of the 1,229 persons using emergency shelters for housing were persons in families, compared to 36.3% from *HealthMap2016*. By race, 76% were Black or African American, 22% White, 3% Hispanic and 2% other or unknown.

An indicator of economic health is the percentage of income families spend on housing. Among Franklin County households, 17.2% spend 50% or more of their income on housing costs while 31.9% of households spend 30% or more. The figures are up from the last HealthMap and in both cases, higher than state but lower than national figures.

Nationwide Children's Programs and Partners

Low-income and poverty, lack of access to nutritional food and substandard housing are closely linked and have been associated with health deficits in multiple research studies. Poor children have significantly increased risk for infant mortality, low birth weight, chronic illness, poor nutrition, exposure to environmental hazards, toxic stress, injury and more adverse health outcomes that can impact a lifetime. Nationwide Children's and its partners are engaged in a number of initiatives to address poverty, food access and housing.

Income and Poverty

Nationwide Children's has also announced plans to directly address poverty by increasing the hospital's minimum wage to \$15 per hour over the next two years. The hospital estimates that 1,800 employees will benefit from the wage hike and an additional 2,000 employees who already make \$15 per hour will receive pay raises in proportion to their experience and position. Researchers at the hospital will explore the effects of this wage shift on the health of the population.

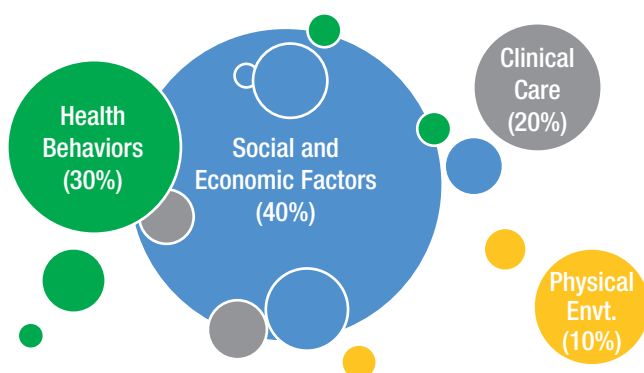
To help the next generation succeed, more than 200 hospital employees serve as mentors in neighborhood schools and youth-serving organizations. Nationwide Children's also offers programs, such as the Upward

Bound Math and Science (UBMS) program, targeting youth at two high schools nearest the hospital. Upward Bound is designed to prepare 60 high school students who are low-income and potentially first-generation college students, for college and careers in math and science fields. Of those students participating in Upward Bound, 98% continued to the next grade level and 70% of UBMS students maintained a cumulative 2.5 grade point average or better by the end of the year.

Social Determinants of Health Screening

Nationwide Children's Primary Care and selected other clinics screen patients and families to identify income-related social factors associated with health, such as housing instability, food insecurity, utility needs, and transportation needs; and refer families to appropriate resources. Since June 2018 over 45,000 of patients at 16 clinics have been screened. Of those screened, 5.5% reported food insecurity, 4.7% reported transportation needs, 3.8% reported utility needs, and 1.7% reported housing needs. Over 90% of those whose needs were urgent received a social work consult. A follow-up survey of parents who completed the screening found that over 90% welcomed the screening process or didn't mind it.

SOCIAL DETERMINANTS OF HEALTH



Housing

Through the Healthy Neighborhoods Healthy Families (HNHF) initiative, Nationwide Children's, Community Development for All People and partners have treated Columbus' Southern Orchards neighborhood as a patient instead of the traditional health care model of treating one child at a time. The neighborhood, composed of 4,300 residents near the hospital, was marked by gun violence, high infant mortality rates and high asthma rates in children when the initiative began in 2008. Half the children lived in poverty, local school populations were highly transient and one in three residents 16 or older were employed full time.

After identifying safety associated with the loss of residents and a surge of vacant and abandoned properties as the neighborhood's chief concern, HNHF invested \$23 million to upgrade more than 300 homes, including 117 renovations and 31 new builds, and provided 166 grants for new roofs, windows and siding.

Early results of the initiative and related programs show the vacancy rate declined from more than 25% to 6%. Youth who have participated in area development programs have shown progress in emotional health and academic performance. The high school graduation rate rose from 64% in 2013 to 79% in 2017. Homicides have declined with none reported in the immediate neighborhood in 2016, one in 2017 and none in 2018.

Studies underway further explore the relationship between HNHF housing interventions and outcomes including health care use, crime and infant mortality.

In 2018, Nationwide Children's, Community Development for All People and the Columbus-based nonprofit Ohio Capital Finance Corporation created a \$20 million fund to ensure that housing remains affordable on the South Side. The South Side Renaissance Fund will pay for the development of up to 150 units of multi-and single-family rental housing. Homes will be made available to families with incomes up to 80% of area median income and will allow the housing arm of HNHF to expand to cover portions of areas in zip codes 43205 and 43207.



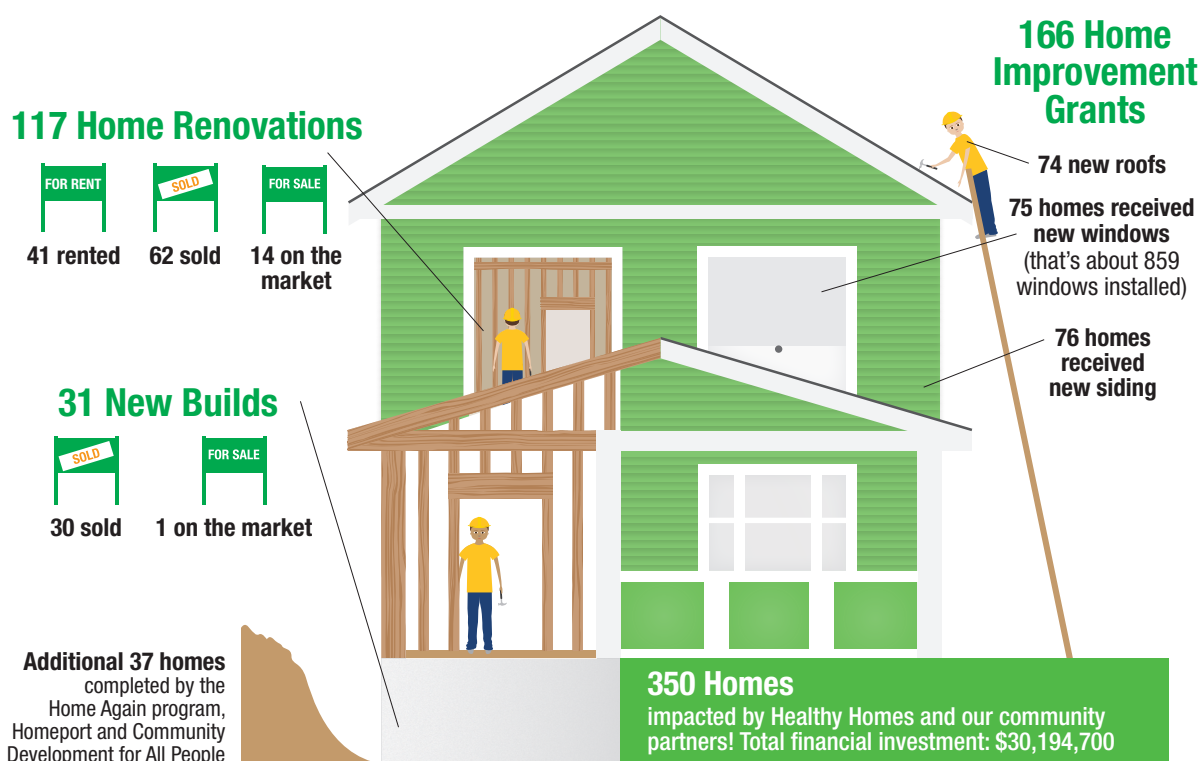
HEALTHY NEIGHBORHOODS HEALTHY FAMILIES
AFFORDABLE HOUSING

Improving the Neighborhood We Call Home

Healthy Homes

An affordable housing initiative aimed at revitalizing housing in the neighborhoods around Nationwide Children's. Focusing on blighted homes, Healthy Homes and its partners builds, rehabilitates and repairs homes.

Check out our progress from kick off in 2008 through today!



Our focus on partnerships and collaboration has fueled our effectiveness in our community. We are extremely grateful for our collaborators.



NATIONWIDE CHILDREN'S
When your child needs a hospital, everything matters.SM



The Residences at Career Gateway offers 58 units of affordable housing combined with on-site workforce development training.

Workforce Development

A crucial part of neighborhood revitalization is the opportunity to obtain stable employment at a livable wage. One of the hospital's goals is to reduce unemployment and poverty in the community by creating pathways to employment at Nationwide Children's and other area employers. The Residences at Career Gateway on the South Side provides 58 units of affordable apartments and townhomes along with on-site career development training. Nationwide Children's and partners offer free workshops at the Residences at Career Gateway for its tenants and all South Side residents living in zip codes 43205, 43206 and 43207.

Nationwide Children's Hospital's proposal for "South Side Career Homes" was named as a contract awardee in Phase 1 of Fannie Mae's Sustainable Communities Innovation Challenge in 2018 to further improve workforce development. The hospital is partnering with Community Development for All People and Goodwill Columbus on the project. The project includes affordable housing within one mile of the hospital and integrated health care workforce training that goes beyond entry-level jobs. Job coaching assistance and recruitment/retention support will be provided to rental candidates with incomes below 80% of the area median.

School-Food Access

Nationwide Children's is participating in and cosponsoring FoodNEST, a research project studying food environments and their association with health in the Columbus' South Side neighborhood and Cleveland's St. Clair-Superior neighborhood. Both neighborhoods fit the United States Department of Agriculture's definition of a food desert. This project is assessing the availability and cost of healthy food items and the presence of tobacco and alcohol advertising. The study tracks residents' dietary intake, shopping habits and more. The ultimate goal is to determine how changes in the food environment are associated with changes in health status and overall well-being.

To help improve residents' incomes, food access and housing, Nationwide Children's will

- Add up to 150 units of affordable rental housing (80% area median income) and 30 units of homeownership (120% area median income) to the Healthy Homes impact area that covers parts of 43205, 43206 and 43207 zip codes.
- Provide 30 home repair grants for area owner-occupants.
- Connect all clients (rental, homeownership and home repair) to the other prongs of HNHF, most importantly workforce development.
- Implement a tenant coaching program to support personal development.
- Increase employee engagement through HNHF volunteer and mentoring opportunities, with a goal of at least 1,000 volunteers/mentors by 2021.
- Expand research on health and well-being outcomes of community interventions.
- Engage with state agencies to inform policies that improve access to health care, address social drivers of health, and close racial and socioeconomic health disparities.

Community Partners

Income and Poverty:

United Way of Central Ohio
 The Columbus Foundation
 Columbus Works
 Goodwill Columbus
 Center for Employment Opportunities
 The Reeb Center
 Mid-Ohio Foodbank
 Community Properties of Ohio
 Community Development for All People
 CelebrateOne
 Primary One
 I Know I Can
 Boys & Girls Clubs of Columbus
 Columbus City Schools
 Harmony Project

Food Access:

Mid-Ohio Foodbank
 Local Matters
 OSU School of Agriculture - Buckeye ISA
 The Reeb Center

Housing:

Community Development for All People
 The City of Columbus – Department of Development
 The City of Columbus – Land Bank
 Central Ohio Community Improvement Corporation
 United Way of Central Ohio
 JP Morgan Chase
 Ohio Capital Corporation for Housing/Ohio Capital Finance Corporation
 Columbus REALTORS
 South Side Renaissance LLC

4. Maternal and Infant Health

Description:

Franklin County's infant mortality rate was 8.7 per 1,000 live births, remaining relatively constant since the *HealthMap2016*, and consistently higher than the state rate of 7.4 and significantly higher than the national rate of 5.9. In 2016, 165 infants died before their first birthday and declined steadily to 136 in 2018. The mortality rate for Black infants increased to 15.2 and remains more than double that for White infants, at 5.8. Preterm births also remained relatively steady, with a rate of 10.7% according to *HealthMap2019*, compared to 10.4% in *HealthMap2016*.

Pregnancies among women 17 and younger declined from 7.5 per 1,000 in *HealthMap2013* to 4 in *HealthMap2016* to 3.1 in *HealthMap2019*, and among women 18 to 19 years old from 57 to 31.6 to 29.1. During that time, a national study by the Centers for Disease Control and Prevention found declining numbers of teens were having sex.

The percentage of births with no prenatal care decreased from 4% in 2014 to less than 2% in 2017 and 2018. The percentage of mothers who smoke during the third trimester and rates of babies hospitalized due to neonatal abstinence syndrome remain lower than Ohio overall.

Nationwide Children's Programs and Partners

Nationwide Children's aims to decrease infant mortality and preterm births and improve prenatal care in Franklin County through a number of programs and services. The hospital collaborates with the delivery hospital systems in central Ohio and local and state organizations to address these related issues.

BC4Teens (Birth Control for Teens)

By providing education and access to birth control, Nationwide Children's BC4Teens program helps ensure teens do not become pregnant. BC4Teens is a place where young women up to age 22 can learn about birth control and get the best method for them, including IUDs and implants, both of which are more than 99% effective at preventing pregnancy for at least three years. A total of 1,172 patients received long-acting reversible contraceptives (LARC) from BC4Teens from 2016 through 2018 and 89 through the first quarter of 2019. The program saw more than 880 teens from 2016 to 2018.

Teen and Pregnant Program

When teens are pregnant, Nationwide Children's Teen and Pregnant, or TaP, program offers assistance so they can have a healthy pregnancy. TaP provides prenatal and postpartum care to young women up to age 21½. The program was launched in 2012 to address high rates of infant mortality in Franklin County. The program saw more than 475 new patients from 2016 to 2018 for a total of more than 3,900 visits.

Nationwide Children's provided care to pregnant teens in the CenteringPregnancy® prenatal care program at its two TaP clinics. CenteringPregnancy brings together women who are at similar stages of pregnancy to meet, learn care skills and participate in group discussions. This program has decreased preterm births and increased healthy habits. In 2018, 54 patients participated in CenteringPregnancy. From 2016 to 2018, the hospital helped increase program sites in the community to four through Ohio Better Birth Outcomes prenatal clinic partnerships. The new sites are at Whitehall Family Health (Heart of Ohio), OhioHealth Grant Medical Center, and two additional locations at PrimaryOne Health.

A resource of CelebrateOne, StepOne for a Healthy Pregnancy, helps connect women with affordable, timely and convenient prenatal care, and resources, such as food and housing, for a healthy pregnancy, all with a call to their hotline. StepOne connected 258 pregnant adolescents 19 and younger to prenatal care in 2016, 296 in 2017 and 270 aged 15 to 19 in 2018.

Ohio Better Birth Outcomes

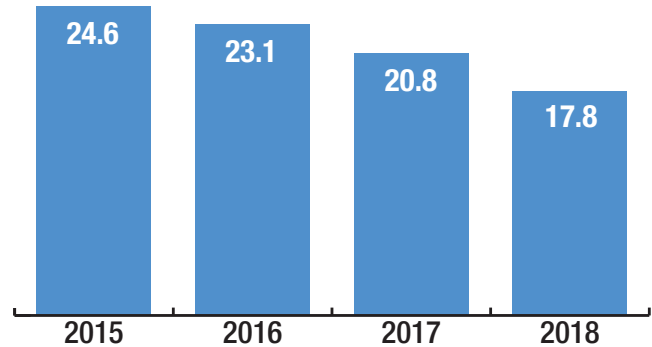
In 2014, a task force of city and county leaders, the business community, residents, elected officials, nonprofits, hospitals and public health systems came together to develop a comprehensive plan to address the unacceptable infant mortality rate in Columbus and Franklin County. This plan seeks to reduce the local infant mortality rate by 40% and cut the racial disparity gap in half.

The Ohio Better Birth Outcomes (OBBO) was named as one of the leading organizations to implement the plan's recommendations. OBBO is a clinical and quality-based prevention collaborative designed to reduce preterm birth and infant mortality in Franklin County and in Ohio. OBBO unites Franklin County's four hospital systems along with the Central Ohio Hospital Council, Columbus Public Health, and PrimaryOne Health. Nationwide Children's staff provides strategic and operational leadership to this collaboration.

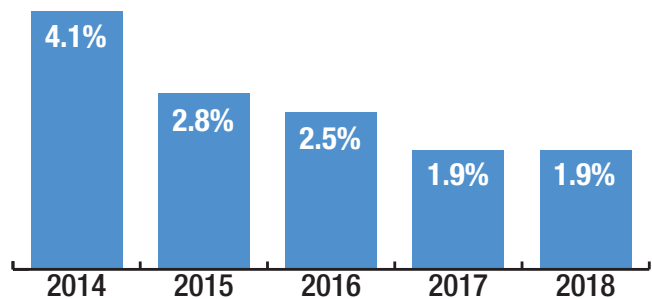
OBBO's implementation activities are focused on improving prenatal care and connecting with upstream providers, expanding evidence-based home visiting and reproductive health planning (specifically accelerating access to LARC), and starting a clinical quality improvement initiative to increase the use of progesterone in certain high-risk pregnancies. OBBO focuses on specific interventions for high-risk pregnant women and new mothers to help reduce prematurity-related morbidity and mortality. OBBO works to ensure that all women in the community have access to safe and effective ways of preventing pregnancy, including abstinence, natural family planning and contraceptive use. Its goal is to promote reproductive health planning to ensure safe spacing between pregnancies.

Postpartum LARC insertions performed by TaP and Franklin County partners in Ohio Better Birth Outcomes (OBBO) totaled 1,265 in 2017 and 1,363 in 2018.

**BIRTH RATE PER 1,000 WOMEN AGE 15-19
IN FRANKLIN COUNTY**



**PERCENTAGE OF FRANKLIN COUNTY BIRTHS
WITH NO PRENATAL CARE**



Adolescent Well-Care

To increase adolescent well-care visits, Partners For Kids targets patients who were overdue or would be due for well-child checks within the next two months with phone calls, letters and postcards. Partners For Kids personnel also supplemented office staff at clinics and practices to schedule patients and tracked the well visits, missed appointments and other data. The organization created an incentive payment for each well visit completed by practices under contract with Partners For Kids. Other steps included hosting training retreats on improving well-care rates, providing pamphlets and

guides and other materials on periodicity, the importance of well-care visits and more for practices to use and share with patients. Adolescent well-care visits steadily increased from 9,145 in 2016 to 11,793 in 2018. Partners For Kids is also generating reports that assist practices in identifying those children who have not yet completed their annual well visits, so that the practices know to reach out to those families to schedule.

Safe Sleep

On average, more than three Ohio infants die each week due to sleep-related causes. To help combat this statistic, Nationwide Children's has a Safe Sleep core composed of internal hospital departments to implement best practices. Nationwide Children's implemented standardized safe sleep screening at targeted visits within the neonatal intensive care unit (NICU), Primary Care, the Emergency Department (ED) and Urgent Care Centers. Parents screened for safe sleep risk increased from just over 30% in 2015 to more than 90% in 2018. Safe sleep education provided to parents in these locations increased from 10% in late 2016 to more than 80% in 2018. Nationwide Children's also audits hospitalized infants 12 months old and younger to see if staff are complying with all the elements of the safe-sleep protocol, for the safety of the infants while in the hospital and also to show parents the practices they should use when they take their baby home.

To further education efforts more broadly, the hospital launched a social media campaign about the ABCs of safe sleep: babies should sleep alone, on their backs, in a crib. On Facebook, Twitter and Instagram, the infographics drew 317,285 engagements (likes, comments, reactions, shares and clicks) and were linked to 89,607 views of safe sleep videos featuring NICU and Primary Care providers explaining in more detail, in 2018. The campaign primarily targeted zip codes with higher concentrations of at-risk populations.



To reduce the rates of premature birth and infant mortality and increase prenatal care, Nationwide Children's will:

- Increase enrollment in evidence-based home visiting services from prenatal clinics at the adult hospital health systems and Federally Qualified Health Centers.
- Increase LARC access for postpartum women immediately at delivery and at postpartum appointments.
- Expand LARC access to at-risk populations (teens and women in substance abuse treatment).
- Expand safe sleep education practices developed within Nationwide Children's Primary Care Network to community-based pediatric, internal medicine and family practices.

Community Partners

CelebrateOne

Central Ohio Hospital Council

Columbus Public Health

Mount Carmel Health System (**NOT involved in any LARC-related activities)

OhioHealth

The Ohio State University Wexner Medical Center

PrimaryOne Health

Heart of Ohio

Lower Lights

Partners For Kids

5. Mental Health and Addiction

Description

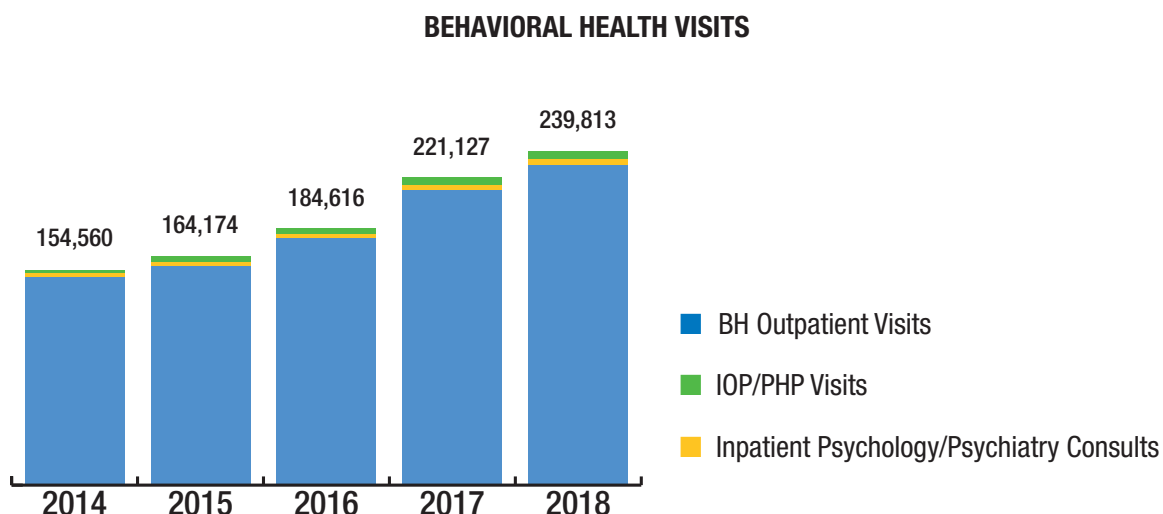
National studies estimate 17% of children ages 2 to 8 have a diagnosed mental, behavioral or developmental disorder and that 13% of children ages 8 to 15 experience a mental health condition. In Franklin County, the suicide rate among youth ages 15 to 25 has remained relatively unchanged since 2016, at 12.8 per 100,000, according to *HealthMap2019*.

The rate of unintentional drug/medication deaths has increased to 24.1 per 100,000 Franklin County residents from 16 in the last *HealthMap*. This is lower than the state rate of 36.8 but higher than the national rate of 19.7. Overdose death rates from opiates, heroin, fentanyl and cocaine have increased. In Franklin County, opiates were the leading cause of overdose deaths among youth and young adults ages 15 to 24, at a rate of 12.3. Opioid overdose is the cause for 12.4% of all deaths of those age 15-24 years in the country. In Ohio, overdose is the No. 1 cause of death for this same age population.

In *HealthMap2019*, 13.1% of Franklin County residents report illicit drug use within the last month, compared to 11.9 percent in *HealthMap2016*. According to the Ohio Healthy Youth Environments Survey Data, in Franklin County, 9.2% of all middle and high school students drink alcohol on a regular basis, 10.4% of students vape or use e-cigarettes regularly, 8.3% of students have used drugs without a prescription, and 7.5% are regularly using marijuana. Vaping nicotine and marijuana by adolescents is at an all-time high in Ohio and the nation.

Nationwide Children's Programs and Partners

Nationwide Children's Behavioral Health Services 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. The hospital and its partners are continuing to expand and improve treatment options, including inpatient and outpatient services and outreach and community programs, to serve children in Franklin County and in southeast Ohio.



MENTAL HEALTH

Inpatient and Outpatient Facilities

The hospital is continuing to work toward opening the Big Lots Behavioral Health Pavilion in March 2020. The pavilion will be the country's largest behavioral health treatment and research center dedicated to the treatment of children and adolescents. Outpatient programs will include an outpatient crisis clinic, a mood and anxiety program, family-based intensive treatment and general psychiatry as well as a partial hospitalization program. The pavilion will be home to 10-bed Psychiatric Crisis Center, the first-of-its-kind psychiatric center dedicated to treating behavioral health. Patients experiencing a behavioral health crisis who typically visit an Emergency Department will now be triaged to this center. The Behavioral Health Pavilion will house separate inpatient units: one for children, one for adolescents, and one for children with intellectual and developmental disabilities. A 16-bed Youth Crisis Stabilization Unit and a 10-bed Extended Observation Unit will also be part of the facility.

Suicide Prevention Efforts

Suicide is the second leading cause of death for adolescents nationally. Behavioral Health has expanded and continues to expand suicide prevention services. The Center for Suicide Prevention and Research (CSPR) staff have provided local, statewide, and national trainings on youth suicide prevention topics to the American Psychological Association, American Association of Suicidology, Ohio Supreme Court, Ohio Statewide Suicide Prevention Conference, Ohio Suicide Prevention Foundation, Ohio School Boards Association, OhioMHAS, OhioHealth, Columbus City Schools, and numerous others. The Center also supports many internal and external awareness and behavioral health messaging efforts for the hospital.

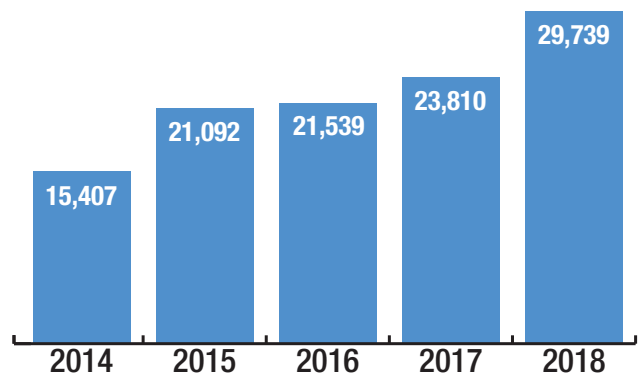
CSPR supports the Franklin County Suicide Prevention Coalition and youth-serving organizations including Boys and Girls Club of America (BGCA), YMCA, City Year, Big Brothers Big Sisters, and other local sites to train staff to understand and look for signs of suicide and preventative steps to take. In the summer of 2019 the

CSPR will train BGCA to deliver a weeklong pilot of a suicide prevention curriculum established in partnership with the American Association of Suicidology. The effort is supported by a Big Safety Ideas grant awarded to the Columbus BGCA site.

THRIVE Clinic

Psychiatry services were added to the THRIVE clinic to collaborate with therapy already being provided. THRIVE is a program that specializes in care for differences/disorders of sex development (DSD), complex urological conditions and gender concerns. The program is dedicated to providing support for family members and optimal care for individuals diagnosed with a DSD, and/or a complex urological condition, including but not limited to bladder exstrophy, cloacal abnormalities, severe hypospadias and gonadal agenesis, as well as gender non-conformity.

OUTPATIENT PSYCHIATRIC VISITS



School Prevention Programs

Nationwide Children's Hospital is aware mental health plays a huge role in a student's success. Students who receive mental health and social-emotional support in the school setting have better academic outcomes. Nationwide Children's offers support from the elementary school level to high school.

More than 2,500 students in 16 different elementary schools have been engaged in the PAX Good Behavior Game® since the program launched during the

2013-2014 school year. PAX processes help children understand their thoughts and feelings, allowing them to better manage their emotions and behaviors. Children begin to recognize the needs of others, improving relationships with classmates, teachers and parents.

In both middle and high schools, Signs of Suicide (SOS), a nationally recognized suicide prevention program, is offered by The Center for Suicide Prevention and Research. The SOS program teaches students, school staff and parents that suicide is preventable by promoting the ACT® message. When anyone notices warning signs of depression or suicide they should acknowledge there is a serious concern, care and show the person you care, and tell a trusted adult.

Individual therapy and family therapy is offered to students who are more at risk. Licensed mental health professionals provide counseling and prevention services to help children in the schools. They assist children to overcome life's problems, feel better, manage their relationships with others and improve how they do in school.

Training

The number of people trained in Nationwide Children's Behavioral Health programs has increased 63% since 2015. Training is available across 17 programs, including psychiatry, psychology, advanced practice nursing, masters-level clinicians, research and developmental behavioral pediatrics. At the end of 2018, 103 people were engaged in the training programs.

Crisis Care

When a young person faces a psychiatric crisis, the Youth Crisis Stabilization Unit provides intensive mental health treatment to the youth and his or her family. Located on Nationwide Children's main campus, the unit expanded to 12 beds from 10 in early 2019. Treatment focuses on the critical needs of the patient and family, and can include individual and family therapy and a psychiatric evaluation with medical management if necessary.

The Psychiatric Emergency Evaluation Center (PEEC) operates 24/7 in Nationwide Children's Emergency Department and provides psychiatric emergency assessments for youth younger than 14. Older teens are provided the services at The Ohio State University Wexner Medical Center. Based on an initial assessment, a behavioral health licensed therapist works with the patient, family and medical team to determine whether to discharge the patient home with a safety plan, discharge the patient home with a safety plan and a referral for ongoing behavioral health services, or admit the patient to a higher level of care. The center had 4,944 visits in 2018. When the Pavilion opens in 2020, the Psychiatric Crisis Center will open, allowing these youth a place to go instead of the Emergency Department.

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

- Open the Big Lots Behavioral Health Pavilion, making up to 74 beds available by the end of 2021.
- Improve care for patients at risk for suicide by implementing the Zero Suicide Initiative across Behavioral Health.
- Open a new partial hospitalization program in 2020 to provide intensive care for patients who are stepping down from inpatient care.
- Expand services for patients with autism and/or intellectual and developmental disabilities.
- Continue to enhance collaboration with primary care providers, including an initiative with Partners For Kids designed to increase the comfort and capacity of primary care providers to care for patients with behavioral health needs, and develop a system of care connecting communities to specialty resources.
- Expand prevention efforts in southeast Ohio.
- Continue to expand research and education efforts.

Community Partners

Columbus Public Schools
 Delaware-Morrow Mental Health & Recovery Services Board
 Franklin County Alcohol Drug and Mental Health Board (ADAMH)
 Franklin County Children Services
 Franklin County Juvenile Court
 Licking-Knox Mental Health & Recovery Services Board
 Mental Health, Drug, and Alcohol Services Board of Logan and Champaign Counties
 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 Jobs 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
 Ohio University
 Muskingum Area Board of Mental Health and Recovery Services
 Family and Children's First Council of Franklin County
 Ohio Children's Trust Fund
 Hopewell Health Centers
 Columbus Foundation

ADDICTION AND DRUG OVERDOSE DEATHS

Addiction is preventable but difficult to cure. Nationwide Children's offers outpatient detoxification for opioids and benzodiazepines and other outpatient treatment programs, patient support and education, training and community outreach to address the growing problems of drug addiction and overdose deaths. For youth in Franklin County with both substance abuse and mental health issues, the hospital also offers in-home treatment.

Community Outreach

In order to expand its reach, Nationwide Children's hired a Peer Recovery coach in 2019, who suffered from substance abuse and human trafficking. She provides outreach services and informs the community of the hospital's existing programs. The coach also provides lived life experiences to patients involved in human trafficking and substance abuse.

The Section of Adolescent Medicine offers a weekly recovery support group to serve patients and other adolescents and young adults who wish to participate. This group has applied for grant funding to provide and evaluate music therapy as an alternative therapy for patients with severe opioid use disorder.

Medication Assisted Treatment for Addiction Program

Adolescent Medicine's Medication Assisted Treatment for Addiction (MATA) is an outpatient program for adolescents and young adults, 14 to 21 years of age, who are addicted to prescription opiates or heroin/fentanyl. Research shows that combining addiction-treatment medication with behavioral therapy is the best way to ensure success for most patients. In response to the growing need, a full-time mental health/substance abuse counselor was hired and added to the MATA staff in 2018. Through training provided by section leaders, 26 more physicians in Franklin County are qualified to prescribe buprenorphine to patients with opioid use disorder. In addition, three adolescent medicine fellows trained at Nationwide Children's are starting their own treatment programs in different parts of the United States.

Division social workers are available to assist MATA patients and families with community referrals for assessment and treatment. The program provides ongoing support and case management throughout a patient's course of treatment. From 2016 through 2018, 90% of patients returned to MATA for a second visit, up from 75% the prior four years. MATA patient retention through the first quarter of 2019 reveals that 100% of patients return for a second visit, 68% reach short-term remission (three months) and 45% reach long-term remission (one year).

To reduce illicit drug use, addiction and overdose deaths, Nationwide Children's will:

- Continue to evaluate and treat adolescent and young adult patients with severe opioid use disorder.
- Expand the substance abuse program in Columbus and southeastern Ohio to:
 - Train physicians in Screening, Brief Intervention and Referral to Treatment (SBIRT), so that during an office visit, they can better identify youth ages 10 to 18 with significant substance abuse problems and refer them to the expanded substance abuse program.
 - Expand clinical services at Nationwide Children's to provide a multidisciplinary evaluation of youth and families experiencing substance abuse problems. The evaluation will include assessments by staff from Behavioral Health and Adolescent Medicine.
 - Utilize telemedicine to assist physicians and patients in remote areas in getting the help they need.
 - Continue to provide overdose kits to all adolescent and young adult patients involved in our program.
 - Improve the MATA six-month, one-year and two-year retention rates from 2018 rates. Retention in the program, a standard measure of success, means the patient is continuing to be involved in the program and is mostly sober from opioids.

Community Partners

Columbus Public Health

Ohio Department of Mental Health and Addiction Services (OMHAS)

Conclusion

In order to address the community needs identified by community representatives and the Franklin County *HealthMap* **2019**, 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 conditions, income and poverty, maternal and infant health and mental health and addiction among the population it serves.



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