



2016 Community Health Needs Assessment Addendum



**NATIONWIDE
CHILDREN'S**

When your child needs a hospital, everything matters.SM

In 2013, Nationwide Children's Hospital set out to accomplish specific goals to improve the health of Franklin County's children and young adults. Since the majority of our patients live in Franklin County, we focused on indicators specific to these residents' needs.

Goals for improvement were determined after review of morbidity and mortality data and a series of community meetings, which were designed to solicit feedback from residents on how Nationwide Children's could better serve them. The 2013 HealthMap was posted to the Nationwide Children's website following its approval in January 2013. Community members could provide feedback on the document via an electronic form, but no comments have been received to date.

Nationwide Children's succeeded in achieving many of our goals for improvement, and going forward will continue to be responsive to the community's health care needs by regularly evaluating each service we provide.

The following report is a review of the 2013 Nationwide Children's Implementation Strategy. The primary targets for Nationwide Children's efforts fall into the following categories, which were identified as areas of need by the Franklin County Health Map 2013:

- **Access to Care:** Nationwide Children's will expand our presence in the communities we serve, 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 our target population by providing care in the most appropriate setting.
- **Cancer:** Nationwide Children's will grow our 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.

Access to Care

Primary Care

2013 Implementation Strategy Initiatives:

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

- Expand one primary care center in 2013
 - Add one primary care center in 2014
 - Continue to support 10 primary care clinics
 - Continue to advance the Patient-Centered Medical Home (PCMH) initiative
 - Hire care coordinators to assist patients with navigating care in the right setting
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Nationwide Children's network of Primary Care Centers is located in the neediest areas of Franklin County, where few to no primary care physicians provide services. In addition to the Primary Care Centers, two mobile health care centers provide service. The focus of the mobile care centers has shifted to urban areas, with an emphasis on continuing to improve and expand upon Nationwide Children's partnership with Columbus City Schools to provide additional health care access to students.

Expand one primary care center in 2013

In response to the need for more appropriate and accessible health care, Nationwide Children's expanded its network of Primary Care Centers and increased services available at some centers in the past three years. In 2013, four Primary Care Centers, Hilltop, Eastland, Linden and one at the main hospital campus, expanded services by adding specialty sessions specifically for asthma, including an allergy clinic at the Westerville *Close To HomeSM* Center. Enhancing access to these services in the Primary Care Centers has helped reduce the number of Emergency Department visits from these patients. (See more information on asthma initiatives on page 9).

Add one primary care center in 2014

Primary care services were expanded with the opening of a new center, Sharon Woods, in April 2014. Services provided include well visits, sick child care, immunizations, social services, developmental screenings, behavioral health, foster care clinic and a tuberculosis clinic.

Continue to support 10 primary care clinics

In addition to expanding and adding Primary Care Centers, Nationwide Children's continues to support its existing Centers. In 2014, 12 of Nationwide Children's Primary Care Centers met the goal of having at least 96 percent of patients fully vaccinated by age 2, which resulted in the Ohio Department of Health presenting Nationwide Children's with the AFIX (Assessment, Feedback, Incentive, and Exchange) Award. Immunization rates at the Primary Care Centers in 2014 also were high, with few, if any, missed immunizations at each of the sites.

Nationwide Children's Primary Care Centers have focused on adolescent well-child checks across the entire Franklin County area, specifically to provide immunizations to adolescents 12- to 18-years-old to increase the odds that if they were to get pregnant, they would have healthier pregnancies and births. Nationwide Children's has also increased its focus on well-child checks for those ages 3 to 6 to prepare children for kindergarten within the economically challenged area in the vicinity of the hospital.

Continue to advance the Patient-Centered Medical Home (PCMH) initiative

All of the Primary Care Centers and the hospital in general are focused on providing a quality patient-centered medical home. In 2014, all of Nationwide Children's 12 Primary Care Centers received the National Committee for Quality Assurance Level 3 Patient Centered Medical Home recognition for using evidence-based, patient-centered processes that focus on highly coordinated care and long-term, participative relationships. The medical

home model supports fundamental changes in primary care service delivery and payment reforms, with the goal of improving health care quality.

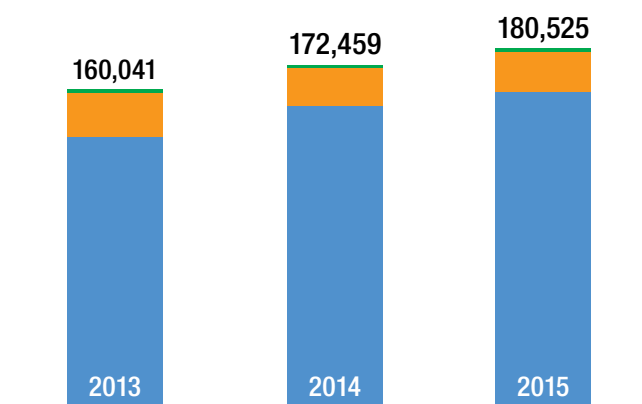
Hire care coordinators to assist patients with navigating care in the right setting

Part of the effort to provide a quality medical home is the assistance of care coordinators who can help patients with complex medical needs. Care coordinators provide outreach services to patients with asthma, ADHD and obesity. In an effort to improve these patients' access to care, Partners for Kids, Nationwide Children's affiliated physician-hospital organization, significantly expanded its team of care coordinators from two in 2013 to its current total of 50. Care coordinators monitor patient

progress toward goals and help families connect to needed services in caring for their child with complex medical needs.

A management infrastructure for the care coordinators was implemented so that representatives from nursing, social work, education and business are included on the team. That team is aimed at developing the staff and program to more efficiently and effectively obtain the best outcomes. Activities of the management team are focused on recruiting and retaining care coordinator staff and developing their competencies. They also work collaboratively to improve system processes, develop tools and establish workflows. All of these steps contribute to a patient receiving the best experience possible.

Primary Care Network Volume 2013 – 2015



	2013	2014	2015
Total	160,041	172,459	180,525
Mobile Units	1,713	1,950	1,680
On Site Visits	22,176	18,725	20,097
Off Site Visits	136,152	151,784	158,748

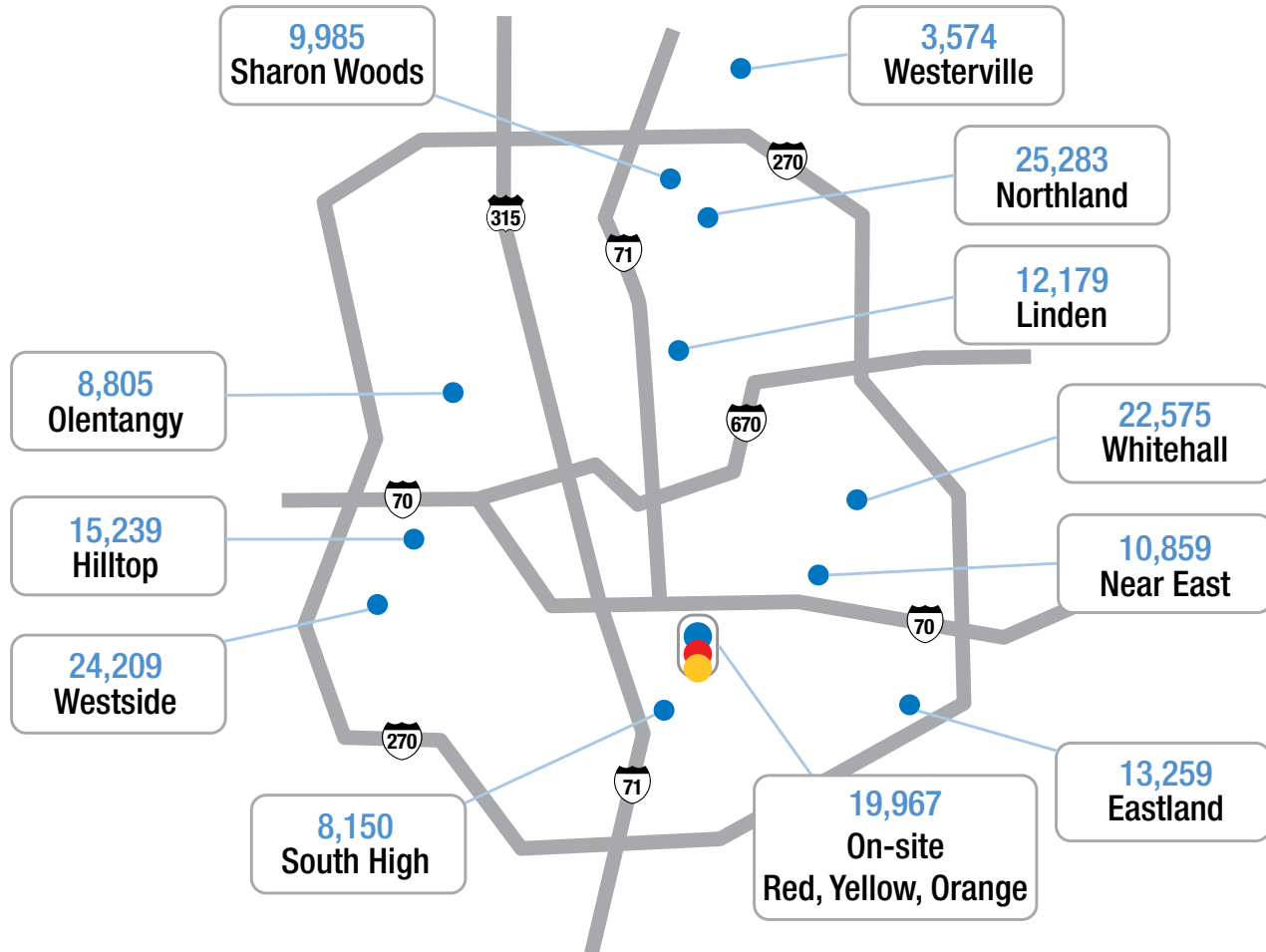
2014 Immunization Rates – Nationwide Children's Primary Care Centers

Site Name ¹	Up-To-Date at 24 Months	Late Up-To-Date ²	Total Up-To-Date	# Missing Immunizations
Eastland	86%	13%	99%	1
Hilltop	79%	17%	96%	4
Linden	86%	14%	100%	0
Near East	78%	18%	96%	4
Northland	83%	15%	98%	2
Olentangy	87%	13%	100%	0
South High Med/Peds	85%	14%	99%	1
Westside	94%	5%	99%	1
Whitehall	93%	7%	100%	0
Primary Care Red	92%	6%	98%	2
Primary Care Yellow	85%	15%	100%	0

¹100 records at each Primary Care location reviewed

²Not up-to-date at 24 months, but up-to-date by time of assessment

2015 Primary Care Network Locations and Number of Visits



Oral Care

2013 Implementation Strategy Initiatives:

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

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

Every year, Nationwide Children's delivers dental care to more than 30,000 children, the vast majority of which are Medicaid recipients in Franklin County. Both preventive care and restorative care are provided, in addition to outpatient dental surgery. Since 2013, Nationwide Children's has improved access to preventative and restorative dental care, which has led to a 22 percent increase in dental surgeries and a nearly 7 percent increase in dental visits.

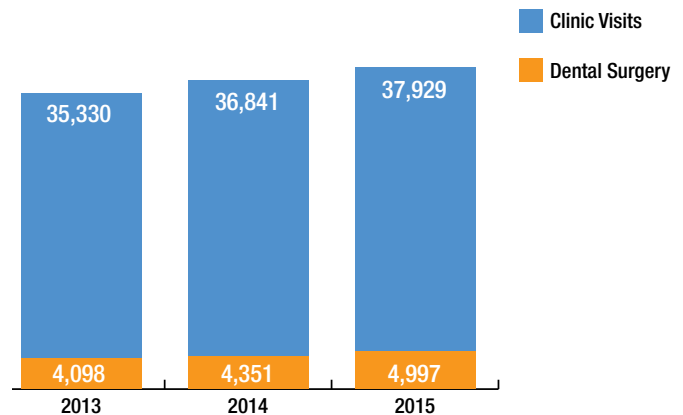
Pilot an infant oral health outreach program/ Continue to provide non-surgical intervention for early dental care

While Nationwide Children's was unable to pilot an infant oral health outreach program due to resource constraints, access to dental care significantly increased for children 4 and under. In 2014, another room at the main campus clinic was added to accommodate young children for regular appointments. These appointments are aimed at providing non-surgical intervention for early dental care. The additional treatment room has increased the number of patients by about 5 percent a day. Furthermore, as a result of a grant, the Dental Clinic has been able to see high-risk babies every three months, as opposed to the typical six months between visits. Appointments for high-risk babies include an exam and fluoride varnish, plus a discussion with parents to encourage preventative measures.

Expand the hours of the dental evening clinic

Two hygiene chairs were added in 2013 to the evening clinic thus improving scheduling and provider availability. The result was a 10 percent annual increase in patient visits.

2013 – 2015 Nationwide Children's Dental Visits



Volume continued to increase across the board because of increased access to care. The number of dental surgeries performed in 2015 at the Westerville Surgery Center increased by 55 percent and by 39 percent at the hospital's operating room.

Implement fluoride varnish programs at Nationwide Children's Primary Care Centers

With the increase in patient volume and the importance of dental care in a child's overall health, Nationwide Children's successfully implemented dental support at its Primary Care Centers. Nationwide Children's dentists teamed up with doctors at Primary Care Centers to train physicians at Nationwide Children's Primary Care Centers to provide fluoride varnish to patients. In 2013, 6,987 fluoride varnishes were completed, in 2014 the total more than doubled to 15,566, and in 2015, the total was 12,465.

Invest \$3 million in new or expanded dental clinic facilities over the next five years

Looking to the future, construction is in progress for a new 30-chair dental clinic, which will include teledentistry services at the Livingston Ambulatory

Center, scheduled to open in 2017. The project, estimated at \$4 million for the dental clinic, began construction in 2015. The new dental clinic is expected to generate a 50 percent increase in annual volume by 2018.

Partners for Kids

2013 Implementation Strategy Initiatives:

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
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Since 1994, Partners for Kids (PFK), a physician-hospital organization and one of the nation's largest and oldest pediatric Accountable Care Organizations, has worked with Medicaid Managed Care Plans to improve overall population health and decrease pediatric healthcare costs. Franklin County is home to the majority of PFK patients — approximately 330,000 covered individuals in central and southeast Ohio. PFK is currently contracted with more than 900 physicians caring for children and adolescents.

Implement a Physician Incentive Plan (PIP) to incentivize community and Nationwide Children's physicians to care for the underserved

To increase the quality of health care among PFK children, a Physician Incentive Plan (PIP) was implemented. The PIP has been in place since 2011 to motivate physicians in central and southeastern Ohio to place more focus on the care of patients who are covered by Medicaid. The program continues to evolve its metrics for success and its care coordination efforts to better serve patients.

The focuses of the PIP program in 2015 included:

1. Rewarding physicians on a per-member basis for enhancing their ability to deliver high-quality care by being recognized as a Patient Centered Medical Home through the National Committee for Quality Assurance

2. Paying physicians a bonus for each patient who achieves Nationwide Children's pre-established quality outcomes
3. Allowing physicians to share in cost savings from a focus on prescribing patterns for select drug categories

Between 2013 and 2015, Nationwide Children's paid an average of \$1.6 million per year to PFK primary care providers through the incentive program. Among PFK's successes in 2013 and 2014 include providing care in asthma management and upper respiratory infections that met or exceeded that of any of the five other Medicaid managed plans. In both years, 87.8 percent of PFK's members ages 5 to 18 years who were identified as having persistent asthma were appropriately prescribed medication. In 2013 and 2014, PFK exceeded all other Ohio Medicaid Managed Care providers in providing quality care to patients with asthma, upper respiratory infections. In 2013, 82.7 percent of PFK members ages 3 months to 18 years who were diagnosed with an upper respiratory infection were treated appropriately without the use of antibiotics. The following year, the percentage rose to 87.1 percent.

In 2015, the PIP program resulted in an additional provider group, Pediatric Associates of Lancaster, gaining recognition as a patient-centered medical home.

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

Another main area of focus for PFK is care coordination. While PFK has engaged in some level of care management and coordination for many years, in 2013, PFK began performing delegated care management activities on behalf of some health plan partners. The table below outlines the impact on four key metrics

achieved in 2014. For example, data from 2014 show that patients enrolled in care coordination for at least 120 days saw hospital inpatient admissions and emergency department visits decrease. PFK care management has decreased utilization, improved lengths of stay, and helped families seek care less often at Emergency Departments, thereby improving quality of life for the patients with the most complex needs.

PFK Care Coordination: Pre- and Post-enrollment Utilization Characteristics of Selected Patients Enrolled in Care Coordination, 2014 ¹

Metric	Time Period	N	Total #	Mean	Median	Range	p-value
Inpatient admissions	pre-enrollment	155	62	0.4	0.0	0-6	0.01
	post-enrollment	155	33	0.2	0.0	0-4	
Bed days ²	pre-enrollment	154	296	1.9	0.0	0-32	0.02
	post-enrollment	154	159	1.0	0.0	0-38	
Readmissions (30-day)	pre-enrollment	155	14	0.1	0.0	0-3	0.2
	post-enrollment	155	7	0.04	0.0	0-2	
ED visits	pre-enrollment	155	125	0.8	0.0	0-9	0.2
	post-enrollment	155	97	0.6	0.0	0-6	
¹ Patients included in this table met the following criteria: 1) at least 120 days of care coordination and 2) continuous eligibility in PFK for 6 consecutive months before and after care coordination enrollment							
² One patient was excluded from the pre/post enrollment totals and the pre/post analysis because of an extreme pre-enrollment bed day total (155 bed days)							

Emergency and Urgent Care Services

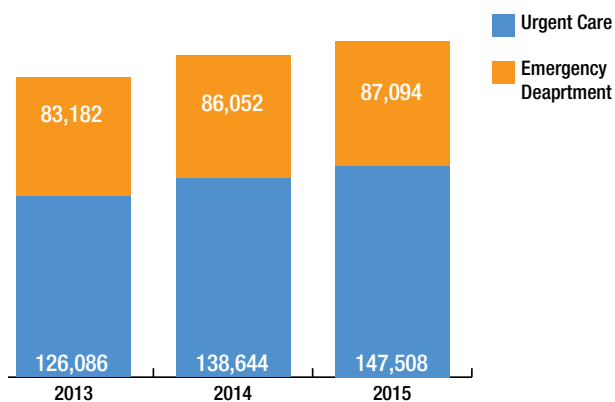
2013 Implementation Strategy Initiatives:

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
- Continue asthma education programs to reduce unnecessary ED utilization by asthmatic patients
- 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

Nationwide Children's has succeeded in serving more patients at its Urgent Care Centers, thus freeing up beds in the hospital's emergency room. Patient visits to all Nationwide Children's Urgent Care facilities have increased by 15 percent since 2013.

2013 – 2015 Nationwide Children's Emergency Department and Urgent Care Visits



Add three new sites for provision of urgent care services within the next three years

To assist with the increase in patient volume, two new Urgent Care Centers, Marysville and Hilliard, were added in 2014. Nationwide Children's is currently constructing a new Emergency Department in Lewis Center to serve northern Franklin County residents in lieu of an Urgent Care.

Continue asthma education programs to reduce unnecessary ED utilization by asthmatic patients

Among the ways that Nationwide Children's has succeeded in reducing volume in the hospital's

Emergency Department is by expanding services for asthma patients, including providing more asthma education regarding the correct use of preventive therapy, trigger avoidance and steps to reduce or prohibit acute flares during inpatient stays, outpatient visits and in the home. Supporting quality outpatient management, as well as school based intervention, has also contributed to reduced ED utilization for asthma. (See Asthma on pages 9-11 for more information on this initiative). Asthma was a top diagnosis within Nationwide Children's Emergency Department. Year-to-date, asthma-related emergency room visits among the highest risk populations have declined by 14 percent relative to the preceding three-year average — nearly five times the original goal.

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

In a continuing effort to reduce practice variation between Nationwide Children's Emergency Department and other pediatric Emergency Departments, staff members participate in the Central Ohio Trauma System (COTS), which provides a forum for independent health care systems and community partners to come together to improve trauma and other time critical diagnoses care within the central Ohio region. A Nationwide Children's staff member co-chairs the Emergency Department directors' committee for COTS. As part of the collaborative, staff members have visited and met with staff from pediatric hospitals in Akron and Dayton in an effort to identify procedural variation.

Chronic Diseases

Asthma

2013 Implementation Strategy Initiatives:

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

- Expand the school-based asthma therapy program within Columbus City Schools
- 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
- Create an Asthma Action Plan for each child with asthma seen in a primary care medical home or Asthma Center
- Improve identification, management and use of Asthma Action Plans (Easy Breathing®) with community primary care providers
- Improve the utilization of inpatient and Emergency Department care protocol and invest in additional follow-up phone calls and care coordination

Asthma is the leading chronic disorder among children nationally, and within Franklin County, more than 16 percent of children have asthma. To better reach those children and minimize the impact of asthma in their lives, Nationwide Children's has significantly extended its efforts in community care.

Expand the school-based asthma therapy program within Columbus City Schools

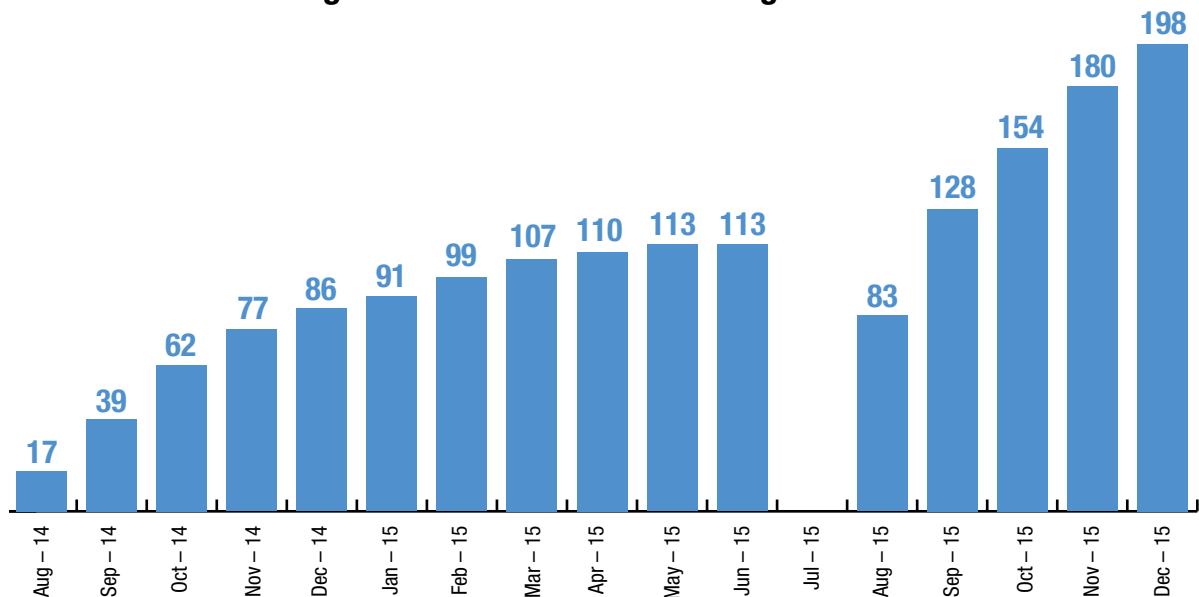
Nationwide Children's School-Based Asthma Therapy (SBAT) Program works as a liaison between schools and the asthma care provider to design a plan for students with high-risk asthma to receive asthma prevention

medications at school. The program has grown from 17 schools in 2013 to 90 throughout central Ohio in 2015 and to more than 280 students. Student enrollment increased from the 2014-2015 school year to the 2015-2016 school year.

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

Asthma education is a crucial step in decreasing emergency room visits. Opportunities for asthma education have expanded from primarily bedside

SBAT Student Enrollment August 2014 – June 2015 and August 2015 – December 2015



teaching to include educational videos and multiple asthma classes offered over the course of the week during inpatient stays.

Create a smartphone application to help chronic asthma patients better manage their disease

Another way to assist with asthma education has been through Nationwide Children's smartphone app, AsthmaCare. The app, released in May 2014 for Apple devices and in May 2015 for Android, has averaged 100 downloads per quarter, or roughly one per day. A randomized, prospective trial is being conducted that will evaluate use of the app versus standard asthma care to see if the app may relate to reduced asthma attacks and Emergency Department visits.

Create an Asthma Action Plan for each child with asthma seen in a primary care medical home or Asthma Center

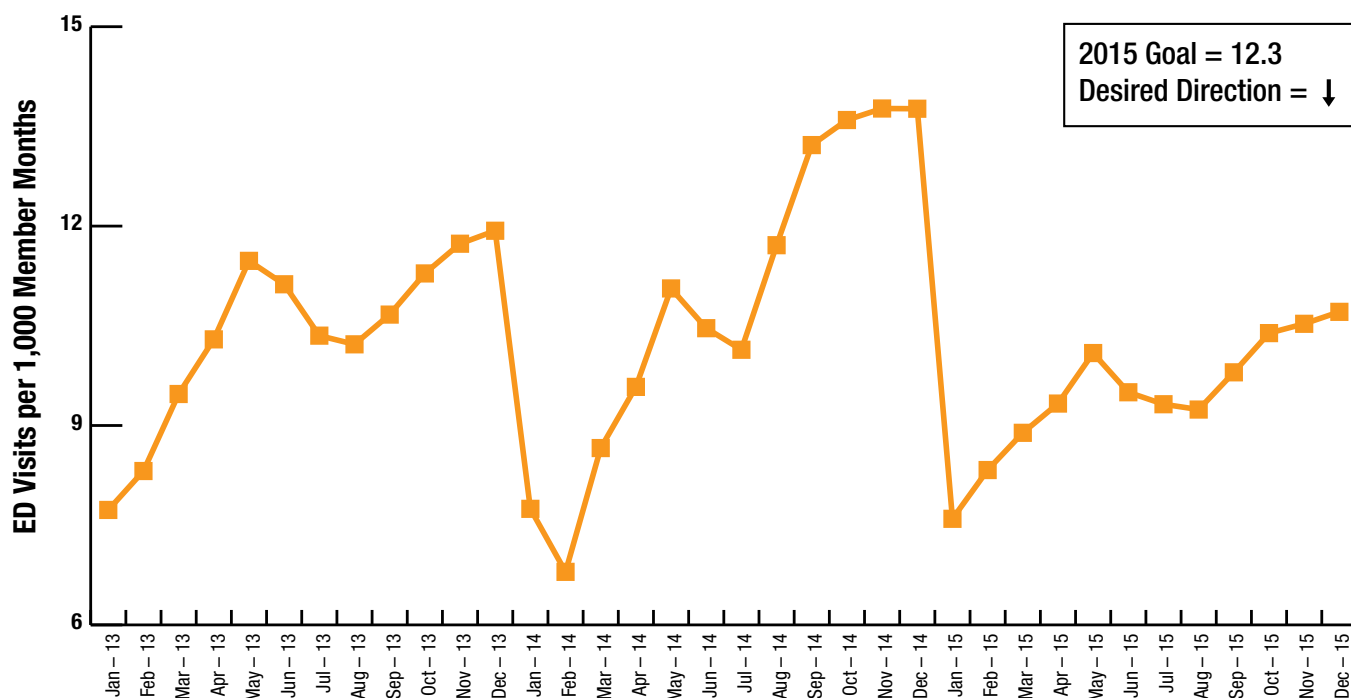
An Asthma Action Plan is a written plan developed with a doctor to help control asthma. Routine assessment of asthma control, as well as provision of Asthma Action Plans,

takes place for patients who have asthma when they attend Nationwide Children's Primary Care Center appointments. Those with more challenging asthma receive these services in a Asthma Specialty Clinic taking place weekly within the child's own Primary Care Center. In 2015, more than 90 percent of asthma patients cared for in the Nationwide Children's Primary Care Centers received an updated Asthma Action Plan within the previous year.

Expand use and protocol of Asthma Action Plans (Easy Breathing®) with community primary care providers

It's important that all children, regardless if they are seen by a Nationwide Children's Primary Care Center provider or a community provider, have an Asthma Action Plan. The Easy Breathing® program is one way this is done. The community-based Easy Breathing® program has been used by roughly 20 primary care practices in the region and is currently active in nine. By the end of 2013, 542 asthma patients had undergone an initial assessment, including provision of an Asthma Action Plan. By the end of 2015, the program grew to 2,800 asthma patients.

PFK Asthma Emergency Departments Visits



Improve the utilization of inpatient and Emergency Department care protocol and invest in additional follow-up phone calls and care coordination

For asthma patients who arrive in the hospital or Emergency Department, hospital protocol was improved so that patients are better served while they are in the hospital and are more able to manage their asthma symptoms outside of the hospital.

In the Emergency Department, the median time in which steroids are given to asthma patients was cut by a third. The median time dropped from nearly 60 minutes in early 2014 to under 40 minutes in 2015. That same year, “albuterol burst” therapy was introduced for children presenting with more severe symptoms. Now, 75 percent of children in this category receive this therapy typically at the start of their Emergency Department stay to help stabilize them quickly. In addition, there is now a decreased need for pediatric ICU therapy since protocol changed, and nurses now can wean Albuterol therapy as the child improves. This has contributed to a decline in median length of stay from 1.91 to 1.77 days from 2014 to 2015.

Once patients are discharged, Nationwide Children's Asthma Express program serves as an effective follow-up tool. Asthma Express is Nationwide Children's home visitation program to help patients successfully manage asthma outside of the hospital. The rate of follow-ups increased from 14.6 percent in 2013 to 33.5 percent in 2015.

Along with Asthma Express, discharged patients receive an Asthma Action Plan to assist with follow up measures. The percent of discharged patients who received an Asthma Action Plan increased from 88 percent in 2013 to 97 percent in 2015. New protocols also eliminate a trip to the pharmacy for those with asthma, saving the family time and making sure they have proper medication. Since June 2014, patients have been handed their in-hospital controller inhalers as they are discharged, instead of having to fill a new prescription. Previously, patients only went home with controller therapy in hand if they made a separate trip to the pharmacy to buy it.

All of the above efforts have led to a 15 percent decrease in asthma related emergency room visits.

Diabetes

2013 Implementation Strategy Initiatives:

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
 - Increase the number of diabetes care coordinators
 - Create a new adolescent-focused diabetes clinic
 - Educate children and their families in new ways with games, technology, classes and individual instruction
 - Improve access and education for same-day/urgent care, thereby improving sick day and overall diabetes management skills
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Since 2013, the Diabetes program at Nationwide Children's has grown in terms of both staff and sessions offered.

Expand capacity in the Nationwide Children's Endocrinology Clinic/Increase the number of diabetes care coordinators

One endocrinologist and one diabetes care coordinator have joined the Nationwide Children's Endocrinology team, and four additional diabetes sessions have been added over the last two years. Additionally, in an effort to increase the capacity of the Endocrinology Clinic, the recruitment process is underway for two endocrinologists and one chief, all of whom are expected to begin in 2016.

Create a new adolescent-focused diabetes clinic

Recognizing the importance of helping an adolescent with diabetes transition from pediatric to adult care, an adolescent diabetes transition program was launched at the end of 2014. The transition team includes a social worker, diabetes care coordinator, pediatric diabetes provider, transition diabetes provider, nurse diabetes educator and registered dietitian. A physician from The Ohio State University Wexner Medical Center sees patients from Nationwide Children's who will be moving to adult care and assists with referrals for care as needed.

Educate children and their families in new ways with games, technology, classes and individual instruction

Along with a new adolescent-focused diabetes clinic, general community education programs have expanded to target all ages. Monthly support groups are offered for teens, pre-teens and parents. In 2014, Nationwide Children's began offering a four-hour diabetes educational class to the community once per quarter. Additionally, a

school nurse education course began in 2015 in which Nationwide Children's provides educational sessions twice per quarter for nursing continuing education hours. This program will continue to expand as it reaches full implementation in 2016.

Improve access and education for same-day/urgent care, thereby improving sick day and overall diabetes management skills

In conjunction with the aforementioned educational programs that help with patients' health, Nationwide Children's Fitness and Nutrition (F.A.N.) Club continues to encourage patients to seek proactive diabetes care through scheduling quarterly outpatient clinic appointments. One of Nationwide Children's goals for this patient population is to schedule these clinic visits with 80 percent of all diabetes patients.

As of the third quarter of 2015, Nationwide Children's is making progress toward this goal. More than 70 percent of diabetes patients are seen within 105 days of their previous endocrinology visit.

Access to care has also been improved by implementing a hospital-wide physician consult-transfer center triage system. The system has helped reduce sick days and improve overall diabetes management skills. Diabetes patients, particularly new patients or those needing care after hours, are encouraged to use this system, which is staffed by an experienced nurse. Through this triage system, patients are guaranteed some type of interaction within 24 hours - either by a doctor or physical therapist - and will be instructed to go to the Urgent Care or Emergency Department.

Obesity

2013 Implementation Strategy Initiatives:

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

- Support the Time for Ten exercise program
 - Expand the Fitness and Nutrition (F.A.N.) Club
 - Continue to provide the Nationwide Children's Community Gardening and Education Site
 - Expand the HEAL Health Coaching Initiative
 - Expand the Primary Care Obesity Network
 - Expand the Feeding Your Kids parent education program
 - Provide School Nurse Training to support school weight management programs
 - Support the ACHIEVE (Action Communities for Health Innovations and Environmental Change) Program
 - Participate in the Ohio Healthy Programs Project
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Obesity affects more than 12 million children in the United States, with higher rates among lower socioeconomic status and ethnic/racial minority groups. In Ohio, one in three third graders is overweight or obese. Ohio became the first state to legislatively respond to the obesity challenge, with Nationwide Children's playing an integral role, by passing the Healthy Choices for Healthy Children Act in June 2010.

In the past three to five years, Nationwide Children's has built, strengthened and broadened the reach of the law's initiatives. The law, which improves the nutritional value of foods in schools, led to a sugar-sweetened beverage ban at Nationwide Children's. The hospital became the first freestanding children's hospital to institute a hospital-wide ban on these beverages. Over the past three years, Nationwide Children's has served as an expert guide to eight children's hospitals across the country to help implement their own sugar-sweetened beverage bans.

Support the Time for Ten exercise program

The Healthy Choices for Healthy Children law also raised the bar for physical education opportunities in schools. To support this aspect of the law, in 2013, Nationwide

Children's worked with the Office of the First Lady of Ohio and several community partners to create Time for 10!, a well-received series of free 10-minute child-friendly activity videos. These videos are now used in schools, doctors' offices, child care centers and homes all over Ohio to help children and families increase their daily physical activity.

Expand the Fitness and Nutrition (F.A.N.) Club

Another way Nationwide Children's promotes physical activity is through the Fitness and Nutrition (F.A.N.) Club. This afterschool program encourages school age children to develop healthy eating and physical activity behaviors in a fun and interactive environment.

During the 2014-15 school year, Nationwide Children's collaborated with four schools to offer F.A.N. Club, which attracted 170 students. For the 2015-16 school year, 11 schools with more than 450 students are participating in F.A.N. Club, using the train-the-trainer model, thus increasing reach into the community.

Through this model, F.A.N. Club fitness professionals use well-established, evidence-based practices to instruct existing afterschool program leaders in exceptional program delivery and goal accomplishment.

Provide school nurse training to support school weight management programs

Another way to expand Nationwide Children's obesity program's reach in schools has been through school nurses. In 2015, training was provided to the nurse practitioners involved in Nationwide Children's School-Based Health Services at Columbus City Schools. Nurses received information on the programs offered by Nationwide Children's Center for Healthy Weight and Nutrition, along with the criteria, referral process, and handouts on nutrition and physical activity for students. The Center for Healthy Weight and Nutrition provides each school with information on obesity prevention activities aligned with what is provided at their primary care physicians' offices on a quarterly basis.

In 2015, the Center for Healthy Weight and Nutrition began offering training for nurse practitioners in school clinics and holding webinars. The Center also participated in a nursing conference in 2014 where information about the Center's medical weight loss program and resources to school nurses were distributed.

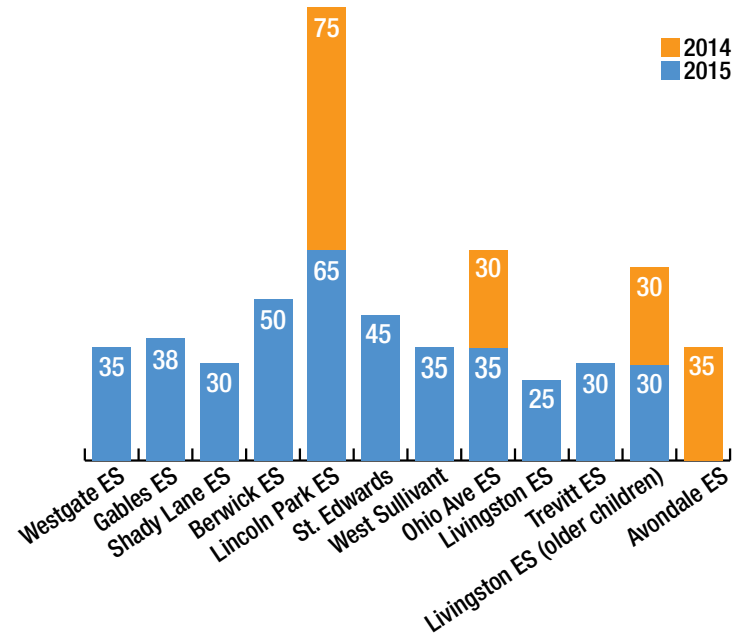
Expand the Feeding Your Kids parent education program

Parent education was also started to help with obesity efforts. The Feeding Your Kids program was a free, 45-day text and email-based program that addressed the real-life challenges of feeding kids and teenagers. In 2014, other initiatives replaced the Feeding Your Kids program, including outreach at about 15 annual community events that focus on healthy eating and recreation for children and adolescents.

Continue to provide the Nationwide Children's Community Gardening and Education Site

Nationwide Children's also recognizes the importance of healthy living in the community in addition to schools. The Center for Healthy Weight and Nutrition continues to maintain two raised beds in the hospital's community garden, which are tended by employees and community members. Produce is harvested and shared with clinic patients and their families, and large harvests are delivered to a local food pantry. The garden is also used as an educational site for medical weight loss classes and community events. Participants have a chance to learn about food ecology, help with garden chores, participate in activities and games, and plant their own vegetables to take home.

F.A.N. Club Level of Impact - Approximate Number of Participants



Healthy Eating and Living (HEAL) program

Another community initiative led by the faith-based organization community department for all people is the Healthy Eating and Living (HEAL) program. This program was launched to provide healthy living activities to low and moderate income Columbus South Side residents. These programs include community gardens, exercise programs, health education seminars, cooking and nutrition classes, preventive health care, farmers' markets and other programs that provide healthy food.

The HEAL health coaching program, which involves educating low income residents on healthy living, has grown significantly from its beginnings in 2013 to 2015. The organization, which Nationwide Children's supports, moved from a 1:1 coaching model to also include small group coaching. The total number of households served by HEAL grew by nearly 47 percent between 2014 and 2015.

Support the ACHIEVE (Action Communities for Health Innovations and Environmental Change) Program and Participate in the Ohio Healthy Programs Project

Nationwide Children's provided representation on the advisory committee of the Ohio Healthy Programs Project between 2013 and 2015.

Expand the Primary Care Obesity Network

Another way to reduce the obesity rate is by involving primary care offices – not just the hospital. In 2012, Nationwide Children's established the Primary Care Obesity Network (PCON), a network of 11 primary care offices in central Ohio linked to the Center for Healthy Weight and Nutrition. The goal of PCON is to implement evidence-based and effective obesity care by establishing a sustainable multi-sector collaboration between primary care practices, a tertiary care obesity center and community organizations to address childhood obesity in central Ohio. The network is the first of its kind in Ohio.

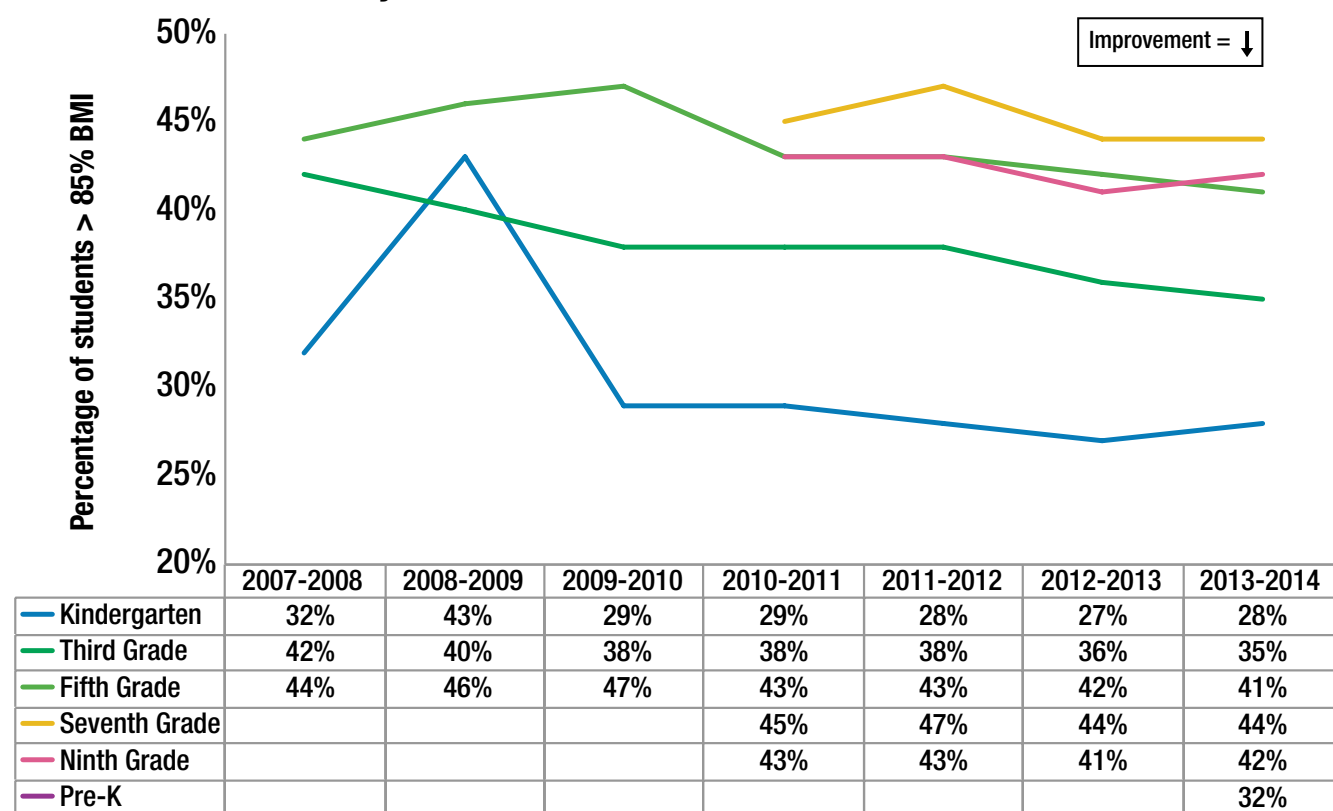
Primary care offices affiliated with Nationwide Children's are either a Level 1 PCON clinic where the physician alone provides the intervention or a Level 2 PCON clinic, where both a registered dietitian and physician deliver the intervention. The Center for Healthy Weight and Nutrition provides education and training based on expert committee guidelines, as well as administrative support to all participating clinics.

By the end of 2015, PCON grew to become a network of 20 primary care offices in the central Ohio area. Between 2014 and 2015, the program began to expand its reach and established affiliations with three additional offices outside the central Ohio area. Ninety-two providers, including doctors, nurses, dietitians and health coaches, were trained in 2015, and 1,601 children/families were cared for between 2013 and 2014.

Prevention is a key goal for PCON. Nationwide Children's has established a coordinated plan to partner and collaborate with the Columbus Public Health Department, food banks, grocery stores, educational programs and several community organizations to offer services that help keep children and families healthy and decrease prevalence and the risk for future onset of childhood obesity.

Nationwide Children's continues to be involved in infectious disease prevention and management efforts in central Ohio and supports ongoing research efforts.

2007–2014 Columbus City Schools >85% BMI Data



Infectious Diseases

2013 Implementation Strategy Initiatives:

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

- Continue to support a rigorous research institute that hosts many scientists searching for treatments, cures or vaccines related to infectious diseases
- Obtain 100 percent compliance with staff immunization recommendations
- Continue to achieve >98 percent hand hygiene compliance by Nationwide Children's staff
- Improve influenza vaccination rates in the Nationwide Children's patient population
- Reduce surgical site infections in partnership with all Ohio pediatric hospitals
- 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

Two of Nationwide Children's infectious diseases research centers have expanded to include more faculty since 2013, furthering the effort to identify the causes of various diseases. The Center for Microbial Pathogenesis, one of the hospital's infectious diseases research centers, recruited three new faculty. The research for the center is currently focused on characterizing the causative agents of influenza, sexually transmitted diseases, meningitis, pneumonia and urinary tract infections. The goal is to develop a greater understanding of the molecular mechanisms by which microorganisms cause infectious diseases, and how the host responds to these disease states.

Nationwide Children's Center for Vaccines and Immunity has recruited three new faculty members since 2013. The Center seeks to improve the health of children through fundamental and applied research leading to a new generation of safe, protective vaccines against infection, cancer and allergies. Center researchers look to develop vaccines for serious persistent viral diseases passed from infected mothers to children during pregnancy and birth included. More specifically, the center focuses its research on Hepatitis C, cytomegalovirus (CMV) and respiratory syncytial virus (RSV), the most frequent cause of respiratory infection in infants and young children worldwide.

Since childhood urinary tract infections account for more than 1 million pediatrician visits each year in the U.S. Nationwide Children's continues to support research on urinary tract infections through its Center for Clinical and Translational Research.

Obtain 100 percent compliance with staff immunization recommendations

Flu shot immunization rates among Nationwide Children's employees was 97 percent in 2013 and 2014, just slightly under the hospital's 100 percent compliance goal.

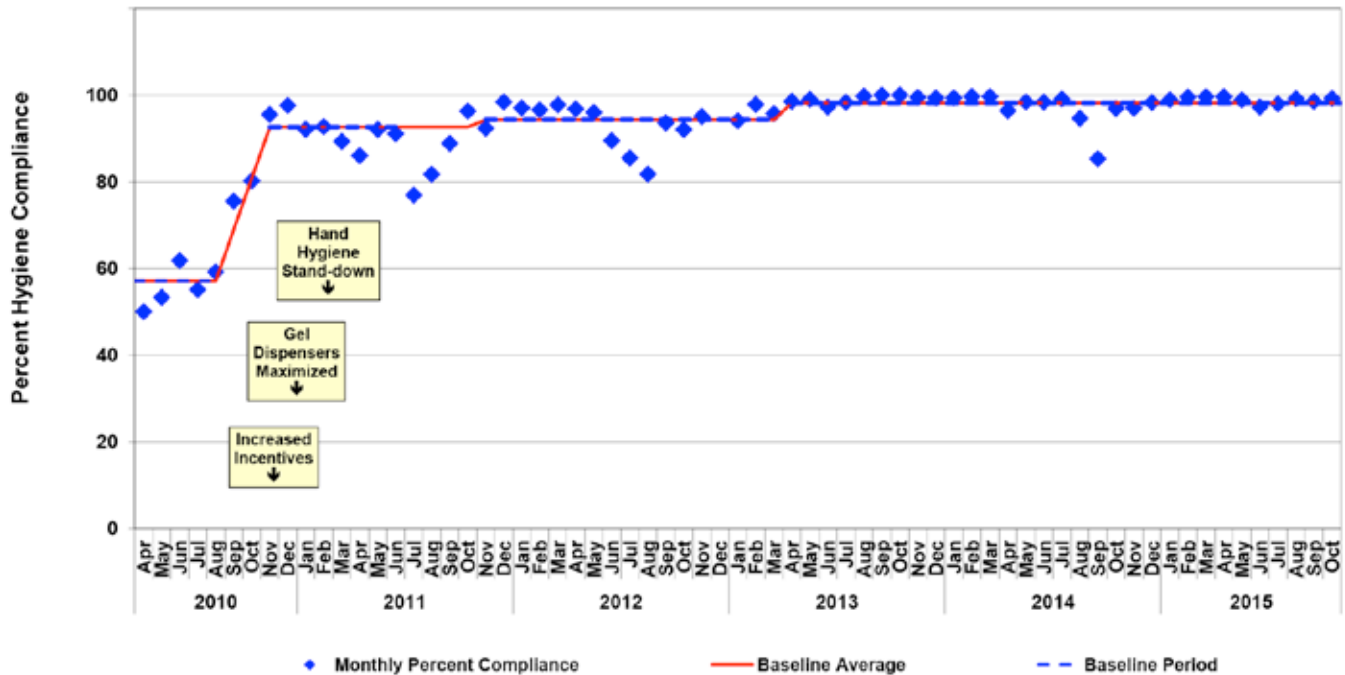
Continue to achieve >98 percent hand hygiene compliance by Nationwide Children's staff

Nationwide Children's overall hand hygiene compliance remains above 98 percent as noted in the following graph. Hand hygiene is essential to prevent the spread of infection and continues to be monitored and reviewed monthly.

Improve influenza vaccination rates in the Nationwide Children's patient population

Nationwide Children's Hospital collaborated across inpatient and outpatient services to bring about an increase in the vaccination rates among patients between 2013 and 2015 from 70 percent to nearly 77 percent.

A total of 27,342 patients were given vaccines in 2015.

[illegible]

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

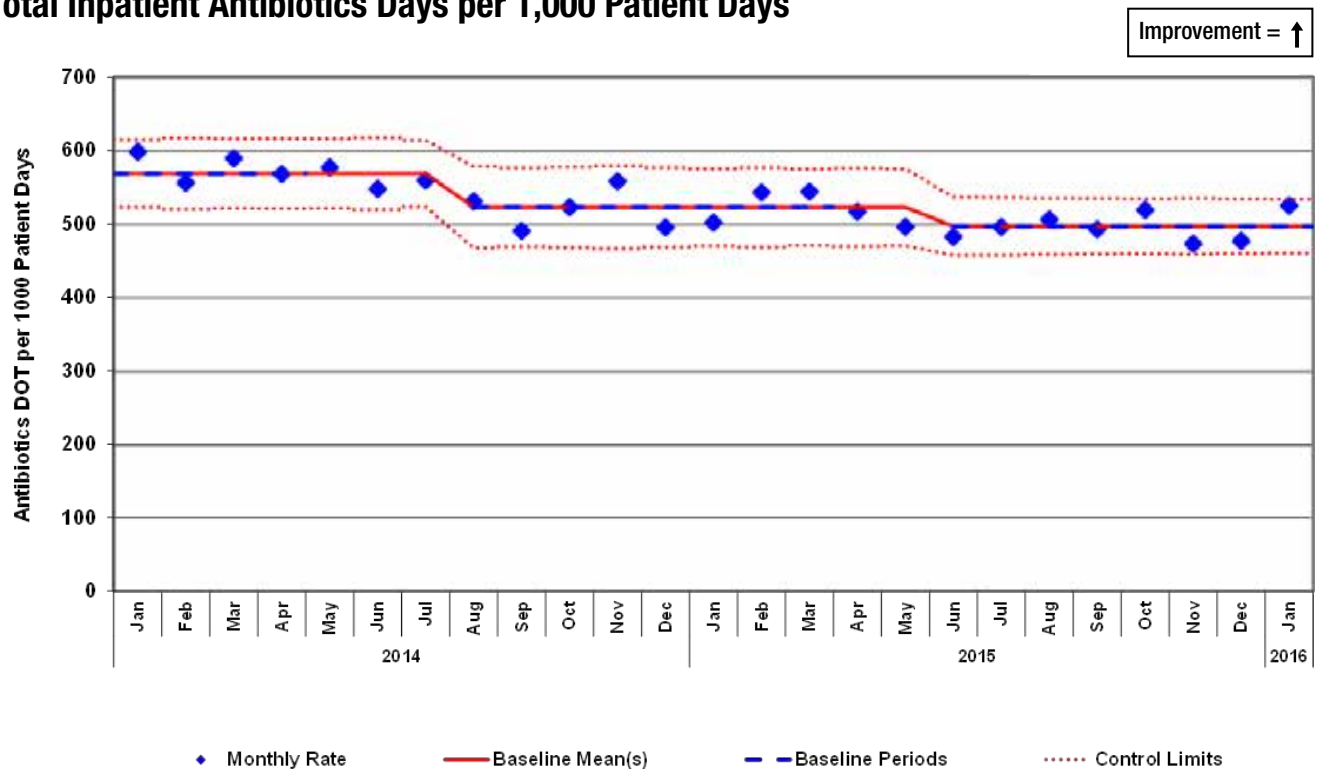
In an effort to curb the overuse of antibiotics in young children, Nationwide Children's implemented a number of measures between 2013 and 2015. The use of all antibiotics across the hospital, particularly those within the "broad antibiotic" category, is declining as a result of the implementation of restrictions/EPIC guidelines by the Infectious Diseases team. Nationwide Children's developed clinical guidelines for antibiotic de-escalation and optimal duration of therapy for inpatients. Restrictions have

Surgical Site Infection Rates

	Rate	2013	2014	2015
Surgery Center Main Campus	# of infections	4	9	6
	# of procedures	4,573	5,011	5,249
	rate	0.09	0.18	0.11
Surgery Center Westerville	# of infections	1	4	2
	# of procedures	3,009	3,510	4,412
	rate	0.03	0.12	0.05

been placed on Meropenem and Linezolid, reducing use from 10 antibiotic days to six per 1,000 patient days. Furthermore, the use of Cefepime is being tracked. These efforts will continue in the coming years.

Total Inpatient Antibiotics Days per 1,000 Patient Days



Admin Abx	6532	5333	6028	5705	5911	5156	6195	6198	6142	6280	6304	6121	6528	6701	7273	6557	6534	5999	6236	6635	6590	7120	6239	6670	7562
Patient Days	10903	9575	10211	10029	10230	9400	11058	11657	12498	11996	11279	12337	12989	12326	13348	12668	13147	12416	12553	13091	13354	13697	13167	13962	14383

**Control Limits are wider (or narrower) than standard because data variation in one or more baselines is too large (or too small) to meet usual u-Chart statistical assumptions.

Behavioral Health

2013 Implementation Strategy Initiatives:

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

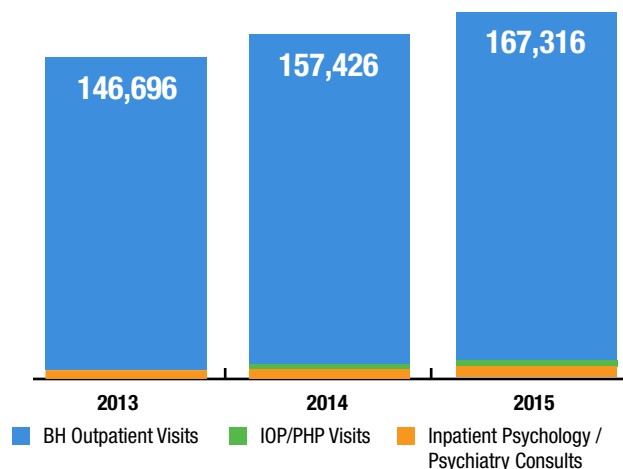
In a continuing effort to serve the increasing behavioral health needs of the area, Nationwide Children's significantly expanded its inpatient and outpatient programs.

Add a 16-bed Inpatient Psychiatric Unit

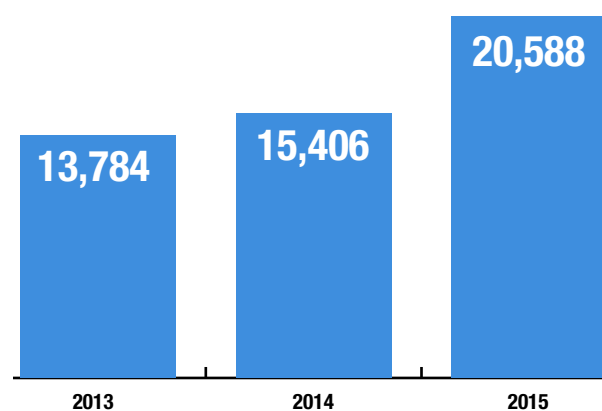
Nationwide Children's first inpatient psychiatric unit opened in 2014, a 16-bed facility that provides acute psychiatric care and intensive inpatient treatment for families and children ages 3 to 17. Nationwide Children's is currently the only inpatient psychiatric provider in central Ohio for children under the age of 12. The inpatient psychiatric unit is staffed by an interdisciplinary team of registered nurses, mental health technicians, behavioral health therapists, a Columbus City Schools' teacher, occupational therapists, physical therapists, recreational therapists, psychiatrists and nurse practitioners.

Since 2013, the Youth Crisis Stabilization Unit has added four beds for a total of ten. Furthermore, in 2015, Behavioral Health at Nationwide Children's partnered with The Ohio State University Wexner Medical Center to provide 24-hour emergency crisis evaluation for Franklin County's children and adolescents. Franklin County families and local community referral sources have access to two hospital systems that provide specialized, quality crisis stabilization services to children and adolescents. Nationwide Children's focuses on children 14 and under, while Ohio State Wexner Medical Center focuses on adolescents 15 to 17 years old. This collaborative care allows Nationwide Children's and Ohio State Wexner Medical Center to assess each child's need and provide the best behavioral and mental health

2013-2015 Behavioral Health – Total Visits



2013-2015 Behavioral Health – Outpatient Psychiatry Visits



care. This arrangement decreases the number of patients, aged 17 and younger, waiting for psychiatric care in medical unit hospital beds and cuts the time necessary to access services.

Expand suicide prevention programs

More children killed themselves in Franklin County in 2014 than any year prior. With a goal of reducing the number of suicide attempts and completions, Nationwide Children's opened a new Center for Suicide Prevention and Research in October 2015. The Center for Suicide Prevention and Research is a central resource where youth, parents, schools, clinicians and community partners can access information related to care for individuals at-risk for suicide. Center staff members have begun to increase suicide awareness and decrease the stigma of mental health in the community. The center's staff works with school districts throughout the central and southeast Ohio region to train school employees, parents and students to recognize symptoms of depression and the warning signs of someone who might be suicidal and to know how to respond.

Expand abuse and violence prevention programs

Starting with the 2013 - 2014 school year, Nationwide Children's Hospital's Behavioral Health staff has offered "Too Good for Violence," a violence prevention group for students in grades K-12. The curricula focus on increasing students' knowledge of positive strategies to avoid and address conflict and violence and also improve the social and emotional competence of the participants by promoting healthy beliefs and social skills.

During the same school year, Nationwide Children's began offering the PAX Good Behavior Game in one school district, Canal Winchester. It has now expanded to also reach the even larger district of Columbus City Schools. The program is an evidence-based classroom strategy that provides opportunities for self-regulation and teaches self-management utilizing peer influence and collaboration to meet classroom expectations. By using PAX, teachers spend less time on classroom management

while increasing overall productivity. Although PAX Good Behavior Game is not identified specifically as a violence prevention program, it promotes self-regulation strategies and positive interactions, thus decreasing incidents of conflict. Furthermore, research shows that children who receive the PAX Good Behavior Game demonstrate reductions in aggression, suicidality and substance abuse in adulthood.

Add new eating disorder partial hospitalization and intensive outpatient programs

Another area of focus in Franklin County is eating disorders. To better meet the growing demand for eating disorder treatment, in early 2014 Nationwide Children's implemented an integrated assessment and intervention program with Adolescent Medicine designed to stabilize eating behavior, assure medical stability and resolve concerns that led to the disordered eating. Through the program, clinicians address additional behavioral health concerns the patient may experience, such as depression or anxiety, related to the eating disorder. The levels of care include outpatient, intensive outpatient and partial hospitalization.

Continue to provide extensive on-site and community-based behavioral health programs

Recognizing the growing need for behavioral health support in the county, services were expanded on-site and in the community. The Community Support Program was expanded to form two teams in 2014. Similarly, School-Based Health Services grew to form two teams in 2015. In April 2015, a new psychiatry clinic opened at 500 E. Main St. The total number of psychiatry outpatient visits in 2015 exceeded the volume of 2013 by 49.4 percent. A new integrated specialty clinical team focusing on adolescents with mood and anxiety disorders began in June 2015, with outpatient therapy and psychiatry services and an intensive outpatient program. Significant overall growth has taken place in Nationwide Children's Behavioral Health outpatient services, with an 11 percent increase in outpatient visits from 2013 to 2015.

Cancer

2013 Implementation Strategy Initiatives:

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

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

With cancer being the second leading cause of death among children age 1 to 14 in Franklin County, research into treatment options is a top priority at Nationwide Children's. In 2015, Nationwide Children's Hematology/Oncology division added two faculty members and new leadership at the center was successfully recruited.

Increase cancer consortium memberships and phase I investigator-initiated clinical trials

A key component to cancer centers is the number of clinical trials offered through the cancer center. Between 2013 and 2015, the number of Phase 2 investigator initiated trials increased from 21 to 29 and Phase 1 trials increased from eight to nine. Additionally, Nationwide Children's memberships to cancer consortiums now totals nine, which is expected to help increase the number of Phase 1 protocols opening at the hospital.

One of Nationwide Children's investigator-initiated studies on using Herpes Simplex Virus in cancer treatment is close to meeting its enrollment goals. The study will examine the use of the herpes virus as a form of viral therapy for neuroblastoma and sarcoma.

In 2014, Nationwide Children's enrolled a patient in The Ohio State University Comprehensive Cancer Center study on the side effects and best dose of AR-42 when given together with decitabine in treating patients with acute myeloid leukemia. Drugs used in chemotherapy, such as decitabine, work in different ways to stop the growth of cancer cells, either by killing the cells or by stopping them from dividing. Giving AR-42 together with decitabine may kill more cancer cells. Cincinnati Children's Hospital also is participating in the study.

Increase research funding and partner with the Center for Cancer Research and National Institutes of Health (NIH)

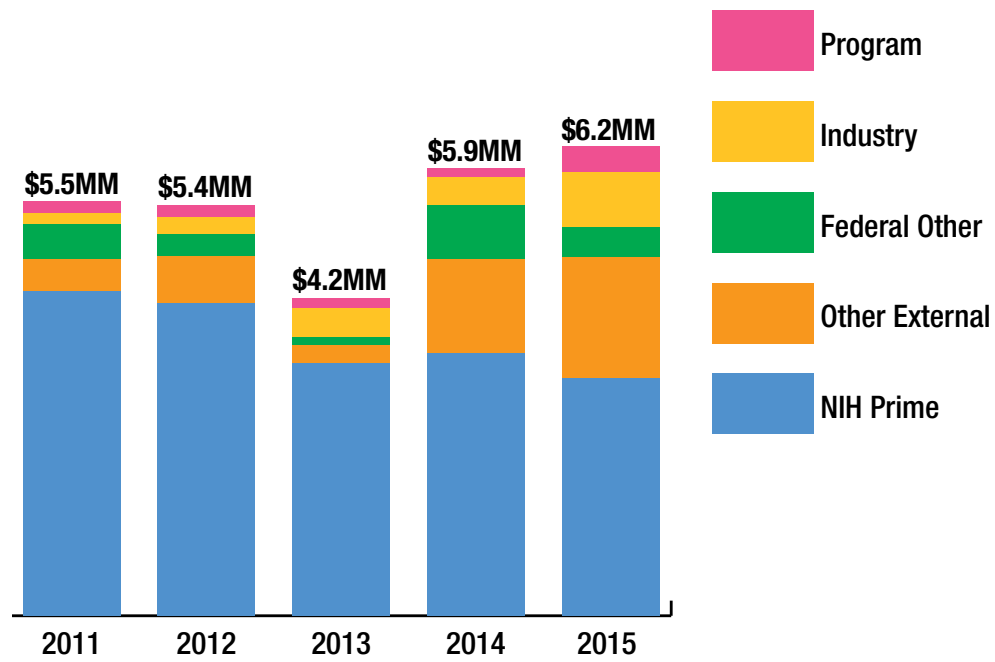
To support its research efforts, Nationwide Children's cancer research continues to receive an increasing amount of grant funding. In 2014, Nationwide Children's received nearly \$7 million in grants, up \$1 million from the 2013 total. This amount was the highest annual amount in a decade. In 2015, Nationwide Children's received \$6 million in grant funds.

Nationwide Children's has partnered with the Center for Cancer Research in various ways, including combining offsite scholar retreats every six months, hosting a shared seminar series on Friday afternoons and regularly having a grants development meeting. In addition to those collaborate efforts, members of the Center for Cancer Research's Board participate in the clinical division Clinical and Scientific Review Committee to review upcoming clinical trials being prepared for IRB submission. Scientists from the Center are invited to clinical tumor boards and clinicians are invited to research conferences.

Expand inpatient services from 36 to 42 beds by 2014

In a continuing effort to serve cancer patients better, Nationwide Children's added six new inpatient beds since 2013, bringing the total to 42. Innovative therapies continue to be provided through key partnerships. Radiation therapy has been provided to patients through a successful partnership with The Ohio State University Wexner Medical Center. Another partnership with The Ohio State Wexner Medical Center allows Nationwide Children's to offer Metaiodobenzylguanidine (MIBG) Therapy to Ohio State Wexner Medical Center's adult cancer patients in addition to Nationwide Children's patients.

Cancer Grant Awards 2011–2015



Interpersonal Violence

2013 Implementation Strategy Initiatives:

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
 - 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
 - Raise community awareness and change attitudes and behaviors with a public education campaign
-

The Center for Family Safety and Healing (TCFSH), a subsidiary of at Nationwide Children's, continues to address all aspects of family violence, including child abuse and neglect, teen dating abuse and domestic violence through its comprehensive programming. Services that have expanded since 2013 include training and advocacy programs and services.

Continue to provide interpersonal violence services to pediatric victims

The Child Assessment Center (CAC) continues to provide responsive and timely medical assessment and treatment for those who have experienced child abuse, neglect or exposure to violence. In 2015, there were 1,460 visits to the CAC. To minimize a child's need to repeatedly tell their story of abuse, the Center uses a multidisciplinary approach consisting of medical, social work, law enforcement and child protective services professionals. The CAC initiated a collaboration with Nationwide Children's Emergency Department to serve children 24/7, and provide the same standard of care delivered in the CAC.

The child and family traumatic stress intervention strategy has also been implemented in the CAC. This intervention strategy addresses some of the stressful symptoms, such as sleep problems, anxiety and recurring and upsetting thoughts about past events, often experienced by individuals following a traumatic event. It has been shown to reduce traumatic stress symptoms through enhancing parent-child communication, skill building and case management services.

TCFSH also partners with organizations in the community to offer free, customized family violence education and training for employers, faith-based organizations, healthcare systems, legal systems, schools, colleges/universities and other social service organizations.

Additionally in 2015, TCFSH and The Ohio State University Department of Social Work collaborated to provide a new course, "Family Violence: Perspective and Interventions." Developed primarily for graduate level students, this course is designed to provide the knowledge and concepts fundamental to working with those who have experienced child abuse, teen dating violence, domestic violence and elder abuse.

The "It's Abuse" program, which stresses the importance of healthy relationships and dating violence prevention, was expanded to cover digital dating abuse and social media's impact on relationships. Developed by TCFSH, the "It's Abuse" campaign addresses the issues of teen dating abuse and digital dating abuse in middle schools, high schools and colleges/universities, through training, educational programming and student-led activities.

Provide trauma-informed therapeutic services to adult victims

The family and domestic violence efforts at TCFSH offer services for adult victims of domestic violence, children who have witnessed family violence, and teens who have been victimized by relationship violence. Adult counseling services offer individualized treatment plans geared toward reaching personal goals of safety planning, symptom management, psychosocial wellbeing and relationship health.

TCFSH benefits from a community advocate who works as both a resource for internal clients and a second responder, working closely with local law enforcement to support clients who are seeking help for domestic violence situations.

Expand free legal services to victims who need assistance with non-emergency services

In addition to trauma-informed therapeutic services, a family advocacy attorney on staff provides no cost legal counsel to clients and patients internal to TCFSH. The attorney helps advise clients on legal cases involving custody, housing, employment and education.

Expand research initiatives to create a systemic, quality-focused outcomes-based system

TCFSH supports scientific inquiry dedicated to improving the health and well-being of its clients and patients. Medical providers employed with the center are actively engaged in research activities. Research published within the past three years focused on health care quality measures for children and youth in foster care, child advocacy center's multidisciplinary team decisions and child protective services outcomes, neurological

manifestations of medical child abuse, prevalence of sexting among adolescents with suspected sexual abuse, corporal punishment evaluations and intervention and childhood trauma exposure and toxic stress. An agenda is being created for future research efforts in the field of family violence, which include a quality-focused outcomes based system.

Raise community awareness and change attitudes and behaviors with a public education campaign

In January 2015, TCFSH launched its "Where's the Line?" campaign that encourages bystanders to seek help. The campaign addresses all types of family violence, such as child abuse, teen dating, emotional and verbal abuse. This resource line was established as part of a large bystander public education campaign to educate and help bystanders better understand family violence and to become aware of how to safely help those in need of family violence services. The information coordinator has helped more than 200 witnesses of abuse receive information on how to safely help family violence victims. In one year, the reach for the campaign has exceeded 381,000 print viewers, 418,000 broadcast viewers and 50,000 digital viewers.



High Risk Pregnancy and Birth Outcomes

2013 Implementation Strategy Initiatives:

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

- Expand OBBO programs, Progesterone Promotion Project and Safe Spacing Efforts
- 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
- 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.

Franklin County fares worse than other areas in Ohio on its rates of infant mortality, preterm birth and infant birth weight. To reduce Franklin County's high infant mortality and preterm birth rates and increase infant birth weights, Nationwide Children's in 2014 joined a newly created coalition of community representatives tasked with generating a comprehensive plan for improvement. The Greater Columbus Infant Mortality Task Force (GCIMTF) consists of city and county leaders, the business community, residents, elected officials, nonprofits, hospitals and public health systems.

Through a six-month process, the task force extensively studied evidence on what works and how other communities have reduced their local infant mortality rate by 40 percent and cut the racial disparity gap in half.

The Ohio Better Birth Outcomes (OBBO) was named as one of the eight lead entities responsible for implementing the GCIMTF recommendations to improve prenatal care and reproductive health planning. OBBO consists of four hospital systems, including Nationwide Children's, Mount Carmel, OhioHealth and The Ohio State University Wexner Medical Center, along with Columbus Public Health and the Columbus Neighborhood Health Centers that collectively work to reduce the incidence of infants dying and babies being born before 37 weeks of pregnancy.

Expansion of OBBO Programs, Progesterone Promotion Project and Safe Spacing Efforts

Two OBBO programs expanded in the past few years. The Progesterone Promotion Project, which provides

progesterone to pregnant women to prevent premature births, grew from 276 patients in 2014 to 341 in 2015.

Efforts to promote Safe Spacing, an education program to encourage women to wait at least 18 months after their last birth before they get pregnant again, expanded to include brochure distribution in area physician's offices, clinics and Columbus Public Health Department.

Continue to provide 100 percent of the infant care within the Ohio Fetal Medicine Collaborative

As part of Nationwide Children's aim to decrease infant mortality, Nationwide Children's continue to provide 100 percent of the infant care within the Ohio Fetal Medicine Collaborative. Through this collaborative of six area hospitals, expectant mothers are provided high-risk pregnancy health care, diagnostic services and treatment, as well as care for the baby after delivery.

Expand teenage long-acting, reversible contraceptive (LARC) services

One way to decrease the infant mortality rate is by providing education on long-acting, reversible contraceptives (LARCs). LARC insertions include IUD and the Nexplanon implant, both of which are 99 percent effective in preventing pregnancies. The driving force behind LARC education is the Young Women's Contraceptive Services Program, BC4Teens, which opened in June 2014. The BC4Teens program is a place for young women up to age 22 to talk about sex, birth control, STDs and more with medical experts who offer no judgment.

Nationwide Children's has performed an increasing number of long-acting, reversible contraceptive (LARC) insertions each year. The total performed in Franklin County in 2015 was 933, up 44 percent from the annual total of 650 in 2014. The total in 2013, the first year of the program, was 229.

Expand teenage pregnancy services in collaboration with The Ohio State University Wexner Medical Center

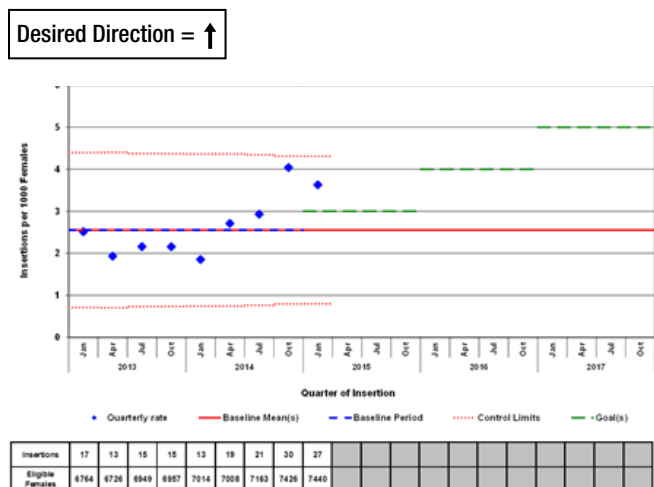
When teens find themselves pregnant, Nationwide Children's also offers assistance so they have a healthy pregnancy. The Teen and Pregnant Clinic (TaP) at Nationwide Children's was launched in 2012 to address the high rates of infant mortality in Franklin County. TaP experienced significant annual increases in the number of patients treated between 2013 and 2015. Patient totals increased from 17 in 2013 to 280 in 2014 and continued to grow in 2015 with a total that year of 386 patients. Care is provided by two nurse practitioners. Nationwide Children's also contracts with

The Ohio State University Wexner Medical Center to provide access to two obstetricians, one of whom was added in 2015 to increase the access women have to medical providers.

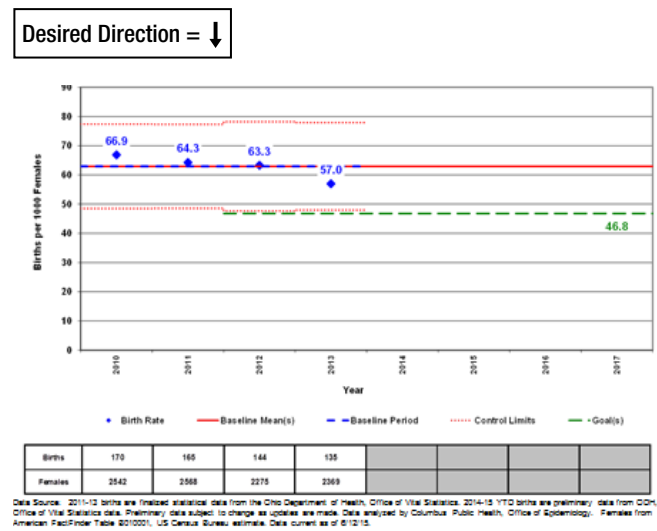
Initiate CenteringPregnancy® pilot programs in 2014

Another way to support a healthy pregnancy is through The CenteringPregnancy® program. The program brings together women who are at similar stages of pregnancy to meet, learn care skills and participate in group discussions. This type of program has been shown to decrease preterm births and increase healthy habits. Nationwide Children's helped launch two pilot CenteringPregnancy® programs, one in 2014 and another in 2015. TaP at Nationwide Children's began a centering group in 2014. In the first year, there were 355 patient visits, and in 2015, patient visits totaled 428. The second centering pilot program is provided by PrimaryOne Health.

Long-Acting Reversible Contraceptive (LARC) Insertion Amongst PFK Females ≤19 Years Living in the HNHF Zone*



Birth Rate per 1000 Females Aged 15-19 Years in HNHF Zone*



* HNHF Zone = Zip codes 43205, 43206 and 43207, around Nationwide Children's

Unintentional Injuries

2013 Implementation Strategy Initiatives:

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

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

In Franklin County, unintentional injuries are the leading cause of death for children ages 1 to 14. Since 2013, Nationwide Children's injury prevention research efforts have advanced, and more people are being served throughout the state with programs designed to inform young people how to best avoid injuries.

Nationwide Children's has, in the past three years, opened new sports medicine care centers, placed an increased emphasis on strength and conditioning services, assisted in the creation of valuable apps and extended community programming on injury prevention.

Add three new Urgent Care Centers within the next three years

Two new Urgent Care Centers, Marysville and Hilliard, were added in 2013. An Emergency Department in lieu of an Urgent Care Center is being constructed in Lewis Center.

Add one new Orthopedic and Sports Medicine site within the next four years

Since 2013, Nationwide Children's Sports Medicine division has grown from five to eight clinical sites, with the addition of facilities in New Albany, Hilliard and Marysville. Sports Medicine has also increased the number of high schools collaborating with Nationwide Children's for athletic training and sports medicine support from 10 to 15 schools, and one university in Franklin County and surrounding areas.

Continue to sponsor and partner with community organizations to provide public messaging and education campaigns to reduce pediatric injury

Through contractual relationships with schools, in

2015 Nationwide Children's began providing strength and conditioning services as well as sports nutrition services to sports teams. More than 50 community partnerships with local youth sports organizations have been established, along with a partnership with the Ohio High School Athletic Association to provide educational resources and pediatric expertise to student athletes.

Expand injury prevention programming to additional Franklin County school districts

Middle and high school-aged football teams in the United States are participating in a research study funded by a grant Nationwide Children's received in December 2013 that studies the effectiveness of a concussion injury app for mobile devices. The Spot Light app was designed to help doctors, coaches, athletic trainers and parents of young football players track the progress of a young athlete from the time of a concussion injury until he/she is cleared to return to play.

The goal is to improve diagnosis of concussions that are occurring among young athletes, and ensure that they are receiving appropriate care and are fully recovered before getting back on the field. The grant for the Spot Light RIOTM Study was awarded to the Research Institute at Nationwide Children's Hospital, and the Colorado School of Public Health, University of Colorado, Denver.

In 2015, Nationwide Children's joined Nationwide, one of the largest diversified insurance and financial services organizations in the U.S., in its effort to prevent childhood injury by developing the Make Safe Happen® app, available free on both Apple and Android devices. The Make Safe Happen® initiative is designed to raise

awareness of childhood injury, bring together experts to address the problem, organize community programs to provide safety education, and provide tools to help parents and caregivers make their homes safer. The app was built by the Center for Injury Research and Policy (CIRP) at The Research Institute at Nationwide Children's.

By using the app, parents can learn as they go with customized room-to-room safety checklists and links to safety products for the home. To date, the app has been downloaded more than 19,000 times. Developers are already working on future versions of the Make Safe Happen® app, which will include even more safety information and additional injury topics.

Continue to research and share information regarding injury-related pediatric death and disability

Research is integral to understanding injury-related pediatric death and disability. Nationwide Children's works globally to reduce injury-related pediatric death and disability.

A 2014 study from CIRP and the Central Ohio Poison Center, both based at Nationwide Children's, highlighted the problem of children's exposure to laundry detergent pods, which has since become an issue of national concern. Members of the U.S. Senate and House of Representatives introduced legislation in February 2015 to address child exposure to laundry detergent pods. This legislation is, in part, a response to the Nationwide Children's 2014 study that found that 17,230 children younger than 6 years of age swallowed, inhaled or were exposed to chemicals in laundry detergent pods. A total of 769 children were hospitalized during that period, and at least one child died. The proposed bill would require the U.S. Consumer Product Safety Commission to set mandatory safety standards for liquid detergent packets.

In an effort to bring worldwide attention to child road safety, CIRP helped bring together more than 150 people from 23 countries for Child Road Safety in the Americas: A UN Global Safety Week Regional Congress in May 2015. The conference included representatives from governments, non-governmental organizations, survivor groups, private sector organizations, medical and public health associates, development agencies and global organizations working to improve road safety.

Continue to expand the Passenger Safety, KISS, and One Pair of Eyes programs

More than 2,000 trauma prevention community educational outreach initiatives and events have been offered by Nationwide Children's in the last three years. Some of the key programs include:

- **The Passenger Safety Program:** This program assists families in preventing and reducing injuries. The Passenger Safety Program consists of one certified child passenger safety technician who is responsible for training and educating staff and families regarding child safety seats. The Passenger Safety Program inspected 109 child safety seats in 2013, and provided 516 child safety seats for at-risk children. Child safety seats given in 2014 totaled 818, and in 2015, the total was 698. Safety seat inspections were no longer tracked after 2013 because they became a small part of the Passenger Safety Program. The program is in the process of refocusing to provide more education about safe travel and ensure that parents bring their child's car seats for safe travels upon discharge.
- **K.I.S.S. (Kohl's Is Sold on Safety) Program:** Nationwide Children's efforts to promote prevention of the most common injuries seen in the Emergency Department led to more events at area schools and elsewhere in the community through forming the K.I.S.S. Program in partnership with Kohl's department stores. Safety presentations were given in 17 elementary schools and from all events, 3,239 helmets were given away in recent years.
- **One Pair of Eyes Program:** Nationwide Children's One Pair of Eyes Programs provides curriculum for eye health and safety for middle and high school students. The program, used in schools throughout the state, served 45,447 young people in the 2014-15 school year. This program has witnessed steady growth in recent years with significantly more Ohio counties reached every year. The program's curriculum was reviewed again to ensure it aligns with the current CORE and STEM standards, and the website, OnePairOfEyes.org, has been updated to include even more offerings.

