Designing a community-wide childhood asthma intervention for high risk neighborhoods in Chicago

Summary report
November 2016
In a place like Chicago, neighborhoods are a big deal. Englewood is not Austin. It’s not Pilsen. It’s not Garfield Park. These are distinct communities.

Humboldt Park is not Pilsen. They may speak Spanish in both communities but they are not the same community.

— ED DOCTOR, CHICAGO AREA HOSPITAL
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Chicago asthma by the numbers

24%
Percentage of African American children in Chicago who have asthma, roughly 1 in 4.¹⁻²

2x
The prevalence of asthma in Chicago’s African American children as compared to the rest of the US. This is double the national average.¹⁻²

9x
The number of visits to the ED by African American children as compared to white children in Chicago.³

9
The average number of days children miss school because of asthma in Chicago Public Schools.⁵

48%
Percentage of African American children living west of Chicago who live with a smoker.¹⁻²

6x
The number of hospitalizations of African American children compared to their white counterparts.³

3 in 4
The number of students with asthma who do not have documentation on file with their schools, and that means they cannot receive formal support to manage asthma attacks at school.⁴

80%
Percentage of African American children on the West side who had no controller medication in the home.¹⁻²

8x
The rate at which African American children in Chicago with asthma die as compared to their white counterparts.³

60%
Percentage of African American children on the West side who had been to the ED due to asthma in the past year.¹⁻²
How do we address persistent asthma disparities in high-risk minority children in Chicago?

Chicago’s south and west sides remain asthma hotspots for children

Chicago is an epicenter for asthma health disparities, with African-American children bearing a disproportionate share of the burden.

Proven asthma interventions exist, but need to be integrated and sustained

Many evidence-based care strategies have demonstrated the ability to improve asthma, but we remain uncertain about how best to implement and sustain these strategies in settings where children live, learn, play, and receive medical care.

CHICAGO II wants to design a community-level asthma intervention that fits Chicago public schools, local clinics, emergency departments and families

CHICAGO (Coordinated Healthcare Interventions for Childhood Asthma Gaps in Outcomes) II was a federally funded effort to plan an Asthma Care Implementation Program (ACIP) for children in the West and South regions of Chicago. This plan targeted coordinated asthma care across all four sectors of a community: the families, home environment, schools and medical providers that serve these communities.

CHICAGO II had four objectives:

1.) Engage a diverse group of stakeholders to align activities with the needs of communities disproportionately affected by asthma.

2.) Conduct a community-based needs assessment to identify resources, gaps in resources, and specific barriers to implementing evidence-based care.

3.) Update and finalize an Asthma Care Implementation Program (ACIP) for children across the following sectors: medical care, family, home and community.

4.) Update and finalize the design of a clinical trial to evaluate the four-sector CHICAGO II ACIP.

This document highlights the people, processes, discoveries and final proposal from the CHICAGO II collaboration.

Research shows barriers to managing asthma exist at the child/family, home, medical, and community levels.

CHICAGO II developed a cross sector, sustainable model of care designed to reduce asthma disparities in high-risk minority children in Chicago.
### Hospital systems

- Rush University Medical Center
- UI Hospital and Health Sciences System
- Lurie Children’s Hospital
- John H. Stroger Jr. Hospital
- University of Chicago Medicine
- Sinai Health System
- UI Hospital and Health Sciences System
- John H. Stroger Jr. Hospital

### Community partners

- CHICAGO ASTHMA
- MTO
- HEALTHY CHICAGO
- CHICAGO HOUSING AUTHORITY
- SUHI
- THE CHICAGO COMMUNITY TRUST

### Industry partners

- Aetna
- CHICAGO ASTHMA
- MTO
- HEALTHY CHICAGO
- CHICAGO HOUSING AUTHORITY
- SUHI
- THE CHICAGO COMMUNITY TRUST

### Other research partners

- University of Colorado Denver
- University of Arizona
- ILLINOIS Medical District
- Institute of Design
The partnership

CHICAGO II is a multi-stakeholder, multi-institutional collaboration

Collective expertise to improve asthma outcomes

CHICAGO II extends a unique, broad-based consortium formed over twenty years in Chicago between caregivers, asthma advocacy groups, health systems, clinicians, researchers, community leaders, schools, local and state public health officials, and healthcare technology innovators. This consortium came together most recently in the CHICAGO Plan, a multi-center clinical effectiveness and implementation trial funded by PCORI (Patient Centered Outcomes Research Institute), to design and test three interventions for children presenting with uncontrolled asthma to emergency departments in six hospital systems across Chicago’s south and west sides. This level of cooperation across hospital systems is rare and a testament to the commitment of the CHICAGO consortium members to improving the care of children and families who struggle with asthma every day.

CHICAGO II takes this collaboration to the next level—designing an intervention to coordinate care across emergency departments, clinics, schools, homes and families. This consortium is singular in its diversity, scope and willingness to address the complex and sometimes conflicting demands of healthcare systems, patients, caregivers and the community context in which they must all function together. The collective expertise, experience, and community partnerships of the CHICAGO consortium provide a unique context to develop, test, and implement a sustainable model of care that successfully reduces asthma disparities in high-risk minority children in Chicago.

CHICAGO II efforts were led by Respiratory Health Association, Sinai Urban Health Institute, Chicago Asthma Consortium and University of Illinois Hospital and Health Sciences System.
CHICAGO II engaged 47 different stakeholders to create a 360 degree perspective on asthma in Chicago

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**Home environment**
- Home environment triggers; awareness and coping strategies of caregivers regarding triggers

**Family**
- Asthma care practices and asthma management experiences in the home; fit/feasibility of in-home interventions

**Schools/community**
- Experiences of caregivers with schools related to child’s asthma care; fit/feasibility of school-based interventions

**Medical**
- Experiences and practices around medical care of child’s asthma; fit/feasibility of ED-based interventions

**3 Community Health Workers**
- Common triggers in the home environment and causes of maladaptive home behaviors

**Family**
- How families engage CHW coaching, how to build relationships with families; fit/feasibility of interventions

**Schools/community**
- Community-level supports and workarounds as relates to getting, coordinating asthma care

**Medical**
- How CHW families conceptualize the role of the ED in asthma management

**3 Chicago Public School Admin**
- Procedures, barriers and workarounds when engaging families of children with asthma; desirability of in-home interventions

**Family**
- Policies and priorities of staff regarding asthma in schools; fit/feasibility of school-based interventions

**Medical**
- How schools acquire and manage asthma paperwork and child medications

**10 School staff**
- Procedures, barriers and workarounds when engaging families of children with asthma; desirability of in-home interventions

**Family**
- Roles, routines and expectations of staff regarding asthma in schools; fit/feasibility of school-based interventions; observe real world context for asthma interactions

**Medical**
- How schools collect and manage asthma paperwork and medications

**8 ED nurses + doctors**
- Fit of interventions with families seen in the ED, including types of patients who would benefit most from them

**Family**
- Acceptability of interventions to ED staff and fit with current workflows

**Medical**
- Acceptability of interventions to clinic staff and fit with current workflows
Who did we engage? What did they teach us?

A call for coordinated action

Decades of research and testing have produced asthma care treatments and management strategies that improve asthma outcomes. These include asthma self-management education in schools; Community Health Worker coaching in the home setting; asthma action plans in ED and clinical settings; supervised daily controller therapy in schools. We know these work. So why is adoption of these strategies so low?

Our experience points to multiple critical barriers that must be addressed simultaneously to overcome asthma disparities in Chicago. For the CHICAGO Collaboration II, we worked with stakeholders who live, work and play in each of the four community sectors that comprise a child’s life:

1. Medical sector

We worked with Emergency Room doctors and nurses, clinical and administrative staff of Federally Qualified Healthcare Centers.

2. Home sector

We talked with asthma educators who live in the communities they serve and work in the homes of caregivers of children with asthma.

3. Family sector

We spent hours in the homes of families whose children have asthma talking about their experiences learning to manage asthma, as well as their experiences with schools, EDs and clinics.

4. Community/Schools sector

We worked with both Chicago Public School administrators and school-level employees, including Principals, nurses, case workers and office staff.

For data collection, we utilized a mixed-methods approach of in-person interviews, focus groups, and user-centered observations of people working in their real-world environments. We actively analyzed additional asthma data with stakeholders in a group setting from a variety of data sources including Healthy Chicago 2.0, Chicago’s four-year plan to improve health and well-being throughout Chicago communities, Chicago hospitalization data, Chicago-based federal qualified health center data, etc. Both qualitative and quantitative data were review and assessed and the CHICAGO II team developed an Asthma Care Implementation Program (ACIP) that was responsive to community need.
Some people say it’s not our responsibility to be raising people’s kids. I think it is our responsibility because they’re here longer than they are at home. I feel if we can provide them a service, we should be providing that service because they don’t have the financial means to address their kids’ illnesses.

We are all affected by children’s illnesses, so we should all help one another take care of these kids.”

— PRINCIPAL, CHICAGO PUBLIC SCHOOL
What we learned

Schools see a lot but have few resources—or even permission—to act

We interviewed three CPS administrators and 10 school-based staff from schools on the west and south side of Chicago. Here’s some of what we learned.

1. Schools see managing asthma—and student health in general—as a priority.
   In all 3 schools, asthma was considered a significant problem and a priority. This often came from a place of genuine concern for students’ well-being because asthma is frightening.
   “I would say at least 30 [percent of students in this school have asthma] if not more.” (Principal)
   “I’m kind of really aggressive when it comes to children not being able to breathe.” (Principal)

2. But student health is just one of many priorities competing for resources. Staff and support to manage children’s asthma is scarce. As a result, many schools are left to manage asthma in a reactive, not proactive, mode.
   “This is not a clinic. We have no diagnostics here. There’s not even a nurse in the building every day.” (School nurse)
   “I may not know… If they’re self-monitoring and independent then they may not come under the needs of the nurse or anyone.” (School nurse)
   “If anybody has something [an inhaler] on them, we don’t know anything about it.” (Office Staff)

3. In 2001, Illinois adopted asthma legislation that gave students the right to carry and self-administer their own asthma inhalers while at school, saving lives and freeing up scarce school resources. In 2010, this law was amended further to allow students with parental permission on file to carry and self-administer their asthma medication; students no longer have to ask teachers to leave the classroom and lose time going to the school nurse when having an asthma attack. In previous years, centralized inhaler storage had lead to fatal asthma episodes in schools.
   But for some families, active school oversight of their children’s medication usage was a useful backup. Staff could catch when medication was low or a child increased their inhaler usage. Recent Illinois asthma legislation increased student access to asthma rescue medications but it does not resolve all of the challenges to caring for students with asthma.
   “I may not know... If they’re self-monitoring and independent then they may not come under the needs of the nurse or anyone.” (School nurse)
   “You know, there are children in this building that have asthma, and the parent is just not compliant in providing information. So I can’t do anything about it.” (School Nurse)

4. Asthma continues to be under-reported in schools. Having up-to-date student health paperwork on file is critical in allowing the schools to both know their students and act on their behalf.
   “The biggest barrier is parent participation. Sometimes I send papers home, I’ll wait a couple months, no return. Sometimes I’ll send it again, no return. Of course they have to go to the doctor, so I’m not sure everybody’s going to the doctor like they should.” (School nurse)

5. Parents are the middleman between schools and doctors, and are singled out as the bottleneck to having essential paperwork on file in schools. They could use an intermediary to help them manage this process.
   “I think [asthma education] would be good for everybody, because a lot of our children have family members with asthma so why not train all the children and make them aware of asthma? Because kids help each other here. They’re like, ‘Oh, she can’t breathe,’ and they get really upset.” (Principal)
We are the primary care physicians for the majority of these children. They [caregivers] say that they have them, but we see these kids sometimes on a weekly basis—the same kids, and not just asthmatics, but kids in general. They utilize us as a clinic.

— ED NURSE

...in the ED
What we learned

**Emergency Rooms save children in crisis, but lack the time and resources to help caregivers**

We interviewed eight ED doctors and nurses in three different hospital systems that serve the south and west sides of Chicago. Here’s some of what we learned.

1. **Regular primary care is the best way to treat a chronic condition like asthma.**
   “...you need to be taking your meds on a regular basis. You need to know what your symptoms are. You need to know what triggers using your medication and what triggers you coming to the hospital to seek care versus calling your primary care doc.” (ED doctor)

2. **EDs are not designed or in a position to provide this kind of care.**
   “[ED doctors] may just focus on that acute exacerbation, treat it, discharge you, and say that you now need to give this data to your primary care doctor.” (ED doctor)

3. **However, it’s also evident to ED staff that there are real barriers to caregivers using primary care as the first line of defense.**
   One physician highlighted anecdotes from caregivers about how it’s not always the easiest or most realistic task to get an appointment with a Primary Care Provider within the same timeliness that their child could be seen in the ED.
   “…I don’t think primary care providers have enough capacity, given the number of patients who I see coming in saying ‘I can’t get in to see my doctor. I called and they won’t see me for three weeks.’” (ED doctor)

4. **So ED staff try to educate caregivers when they can. But what can be taught in an ED visit needs reinforcement in ‘out there’ in the community.**
   The community, not the ED, is the daily touchpoint of children and caregivers.
   “Maybe if you can sow some good habits with kids they will stick. But the reality is a good habit I teach them in the hospital is nothing compared to what they’re going to see every day in their community, which goes back to the whole community approach.” (ED doctor)
A lot of kids are already on asthma medicines. They already have their plans—or they don’t—and we’re just here to follow up and make sure that they’re doing the best that they can do with their asthma.

— NURSE PRACTITIONER, FQHC
What we learned

**Federally Qualified Health Centers are filling in around routine care providers, but lack the ability to coordinate that care with others**

We interviewed seven staff at Federally Qualified Health Centers (FQHC) that serve patients on the west and south sides of Chicago. Here’s what we learned.

1. **FQHCs refer to themselves as “adjunct” and see themselves playing an active role in coordinating care between other providers. However, for some families and children, FQHCs are primary care:**

   “There are kids who have no primary care providers and we are kind of like their medical home.” (Nurse practitioner)

2. **Being adjunct or back-up means that when caregivers visit FQHCs instead of a routine provider, there is no continuity of care. As a result, there may not be a single, clear plan to follow:**

   “For providers in general, there is a little bit of a disconnect when somebody who is part of a different organization comes up with a different game plan than what you came up with. So then there’s that disconnect, because the patient may not tell them all the medicines that they’re actually on.” (Chief Clinical Officer)

   Chronic conditions need to be monitored more at the beginning until caregivers master it. Persistence on their part is key. But so is consistent medical oversight.

   “I like to coordinate care as much as possible. I don’t like to go against what the doctor does.” (Nurse)

3. **FQHCs see medication—its availability, identification and proper usage—as central challenges for patients with asthma:**

   “Correct understanding of prescribed medicine is important for on-going management of asthma” (Medical assistant)

   Medication identification and a general knowledge gap about how to use them is a barrier to caregiver success and management. A barrier to medicine identification is reading level—caregivers have trouble with complex names and terminology. So caregivers often identify medicine by color, but color usage is not standardized across manufacturers and manufacturers change colors to keep product lines looking fresh. As a result, doctors are not up to date on all the inhaler colors, making communication difficult.

   “One of the issues we have is they’re telling me the color of the inhalers, but people use their medicine all wrong.” (Pediatrician)

   Caregivers also face circumstantial barriers that are related to their ability—not motivation—to have the proper medications on hand. For example, while access to inhalers is critical to achieving asthma maintenance, inhaler are often shared, empty or expired when an emergency comes up.

   4. **Educating caregivers is widely seen as important. Is it consistently delivered?**

   “I think education is really the most important thing. Even if they’ve had asthma their entire lives, there’s something…I think as healthcare workers, especially us here, we’re all about education. We like educating them. So I think we might do more than the norm.” (Medical assistant)
We’ve been here for about eight years, and it’s been a struggle because we flood a lot [living in the basement]. So I know this year we’re going to flood again. And then the mold is bad, and I’m disabled so income is real hard, you know, to move...No agencies will help me get out of here. The mold and stuff makes my child’s asthma worse. So we’ve been dealing with that for about six years.”

— CAREGIVER
What we learned

**Most caregivers struggle, juggle to make things work with the resources they have, which often isn’t much.**

We went into the homes of nine caregivers of children with asthma on Chicago’s south and west sides, spending several hours each time to ask questions and share their stories. We also discussed what family life is like for these people with three community health workers (CHW), who perform home visits with families on the south and west sides on a regular basis. Here’s what we learned.

1. For many families in these neighborhoods, asthma is just one item on a list of important issues competing for attention:

   “I would say 70% [of my clients] have issues that are more urgent: housing, finances, food. They are more apt to be conscious of those things, as opposed to asthma, until it flares up.” (CHW)

2. Many caregivers know what they need to do to improve their child’s asthma, but can’t afford to.

   “We’re Section 8. I have to get moving papers, and it takes awhile to get moving papers. Then I get $733 a month. I don’t have money for a security deposit and stuff like that. His doctor, she asked if I’m still in the apartment, and I’ll be like ‘yes’ and then she’ll get upset because that’s not what she wants for him.” (Caregiver)

   “She [a CHW] has supplied some cleaning supplies for me, but I can’t keep up with it because they are organic [expensive]. But it was better for him.” (Caregiver)

   “For people to have to figure out every month how they are going to pay for [asthma medicine], then it becomes a pick and choose. It is a juggling game now.” (CHW)

3. Access to care and cost of medications are a real issue for many families.

   “It is unreal that a working person with insurance is paying $180 a month for asthma meds. That is just for the controller. Quick relief is $60-80 for a 30 day period. They cannot afford it.” (CHW)

4. For many women, who are often young when their child is first diagnosed, asthma can be terrifying:

   “I’d say the scariest moment is when she first got diagnosed. I didn’t know what the heck was going on. You’re sitting here looking at your child gasping for air, you know, and that seems like a moment of ‘Ok, we can’t do nothing here, we need to go to the emergency room where we can really find out what’s wrong.’” (Caregiver)

   “We was in a home, a shelter, because I was getting out of a domestic violence situation. And [child’s name] was eating breakfast, and he passed out. He fell in his oatmeal. And the ambulance had to rush him to Cook County Hospital. He was three.” (Caregiver)

   “She can barely breathe. And sometimes it looks like my baby’s body is going to break because she’s dry heaving and…” (Caregiver)

5. Caregivers are largely alone with the burden of caring for a chronically ill child and learning how to deal with it.

   “I don’t trust a lot of people with him. Like he went with my godson just overnight and then came back eyes swollen shut, couldn’t breathe. And I packed all his medicine.” (Caregiver)

   “I don’t leave my kids with anybody.” (Caregiver)
What we learned

**Caregivers, continued...**

6. The caregivers related many stories of trying to improve their situation for their child.

“I went on Facebook...and messaged Metropolitan Tenant Rights, LAF, the mayor, the alderman, all of them. And nobody responded. Metropolitan Tenant told me they couldn’t do anything because I’m on Section 8.” (Caregiver)

7. The struggle takes a toll.

“Yeah, I feel like I’m a failure because of the situation with the apartment [breaks down crying]. Like those are my new pillows I just got [to prevent her son from sleeping with mold and dust]. Behind them the foundation has mold, and it needs to be fixed and there was a foreclosure and the bank denied to fix it because it cost over $12,000.” (Caregiver)

8. A trusted partnership with people who can help is high on the list of things caregivers wish for. But trust doesn’t come easy, and it requires they believe that the professional cares about them. They are deeply grateful for doctors and nurses who show they do.

“Other than the trust you got with God, this doctor, this physician, is a very important person. It’s just very important for that relationship to be close and tight, because you just don’t feel the need to share your information with somebody that you don’t know and that you think will tell this person and tell that person.” (Caregiver)

“Yeah, I feel like I’m a failure because of the situation with the apartment [breaks down crying]. Like those are my new pillows I just got [to prevent her son from sleeping with mold and dust]. Behind them the foundation has mold, and it needs to be fixed and there was a foreclosure and the bank denied to fix it because it cost over $12,000.” (Caregiver)

9. Even when caregivers find doctors they like and trust, more often than not they can’t get in to see him/her. In these scenarios, primary care providers (PCPs) offer no benefit and urgent care seems smarter.

“Like with me calling in to get an appointment, it shouldn’t be a three week span. I should be able to get an appointment within at least a week, like three to four days. Not a big span like that because anything could be wrong.” (Caregiver)

10. Caregivers question school staff’s ability to care for their child with asthma. One mother describes her child’s move from one school to another.

“So both schools knew about his asthma, but only one school was concerned and that’s the school he’s at now. We had a meeting. We had a round table there about his asthma. They had the teachers plan for him, and so they know what was going on, how they would take care of his asthma and treat him while he’s in school.” (Caregiver)

11. Caregivers spoke of a desire for hands-on education about their situation, their child, rather than generic “information” from a doctor.

“I like the idea of [CHWs]. It’s like you feel more comfortable, for one because you’re in your own home environment and then you have someone actually physically here who can pinpoint or help you pinpoint certain issues.” (Caregiver)

“I would like to see more of this going into the home, because you know what, this is where it’s mostly needed, in homes.” (Caregiver)
“Ask the doctor do they have different studies or someone that can educate you a little bit more about asthma instead of you just basically getting information from a doctor. See if there’s someone else that can break it down to you a little more than just a doctor.” (Caregiver)

12. The number one complaint about medication is not having enough. Inhalers don’t last the month. Parents also rely on nebulizers for older children, who really shouldn’t be using them. In short, because kids move through multiple locations in any given day and throughout the month, making sure they have rescue medication with them is an ongoing issue.

“So that’s really the biggest concern, that they only pay for one [nebulizer]. And the kids need two. They really do, because they’re not always in the home. They go to summer camps, they go to after school programs that are in the school, they’re in other places.” (Caregiver)

13. Lastly, caregivers say they want and need more asthma education. What they get currently doesn’t meet their needs.

“The doctors will give you pamphlets, but they don’t give you a lot of education. You really have to take it into your own hands and that’s the really hard part…they don’t really give you much outside assistance.” (Caregiver)

14. But more than anything, they want their children to get asthma education so they know how to help themselves.

“They really should have something for Pre-K on up as well because these kids, they’re not always with mom. They’re not always with dad. Sometimes they’re in different programs. What if they’re in programs at the park district or if they’re on sports teams? And of course you have your coach and you have other responsible adults there, but you want your child to understand what’s going on with them and how to help themselves.” (Caregiver)
The overall goal of CHICAGO II was to develop an Asthma Care Implementation Plan (ACIP) that could be deployed across all sectors that comprise a community—the family, home, schools and medical systems that serve that community. We defined a strong solution as one that is evidence-based but also tailored to and informed by local needs.

Based on research to identify known and tested interventions, the CHICAGO II team asked stakeholders from all sectors to provide feedback about the fit & feasibility of these interventions—would they fit the needs of the people who would be using them? Were they feasible, given the real-world activities and context that exist in EDs, FQHCs, schools and homes?

Based on extensive stakeholder review of these interventions, the CHICAGO II team concluded that interventions 1, 3 and 4 provided the strongest fit, and were most feasible in terms of implementation, with our community. These interventions became the anchors of the new ACIP.

Interventions considered

A review of evidence-based asthma interventions

1: CAPE—an asthma discharge tool
A family-friendly ED discharge and education tool

This new asthma education tool is designed for parents and children with asthma when they are discharged from the Emergency Room for asthma-related care. This tool was designed with input from caregivers, emergency room staff, asthma specialists, and clinic doctors. This tool was tested at six Chicago-area Emergency Rooms.

2: Propeller Health
An app and tool to document inhaler usage

Propeller Health is a sensor that fits onto a patient’s inhaler. It keeps track of every time the inhaler is used. For patients, the sensor works with a mobile app to show how often the inhaler is used and to identify patterns. Doctors can also see patient data through a secure website.

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A family-friendly ED discharge and education tool

This new asthma education tool is designed for parents and children with asthma when they are discharged from the Emergency Room for asthma-related care. This tool was designed with input from caregivers, emergency room staff, asthma specialists, and clinic doctors. This tool was tested at six Chicago-area Emergency Rooms.

2: Propeller Health
An app and tool to document inhaler usage

Propeller Health is a sensor that fits onto a patient’s inhaler. It keeps track of every time the inhaler is used. For patients, the sensor works with a mobile app to show how often the inhaler is used and to identify patterns. Doctors can also see patient data through a secure website.

The CHICAGO II team concluded that interventions 1, 3 and 4 provided the strongest fit, and were most feasible in terms of implementation, with our community. These interventions became the anchors of the new ACIP.

Based on research to identify known and tested interventions, the CHICAGO II team asked stakeholders from all sectors to provide feedback about the fit & feasibility of these interventions—would they fit the needs of the people who would be using them? Were they feasible, given the real-world activities and context that exist in EDs, FQHCs, schools and homes?

Based on extensive stakeholder review of these interventions, the CHICAGO II team concluded that interventions 1, 3 and 4 provided the strongest fit, and were most feasible in terms of implementation, with our community. These interventions became the anchors of the new ACIP.
3: Fight Asthma Now © [FAN]
Asthma curriculum designed for students

FAN was created by Respiratory Health Association. It is based on asthma care guidelines with input from doctors, nurses, community educators, and parents of children with asthma. Engaging lessons give students the information and tools they need to better manage their asthma. FAN has been used in participating Chicago Public Schools since 2007.

4: Community Health Workers
Asthma educators who come to you

CHWs are public health workers who work in underserved communities. They are trained professionals who perform education, counseling, social support and advocacy. For children with asthma, CHWs work one-on-one with their families to identify and avoid asthma triggers; manage asthma episodes and help families use their medications correctly.

5: Daily Medications at School
Schools dispense asthma medication during the week

Research shows that children experience dramatically fewer asthma attacks when they take their controller medication every day. For this intervention, schools would give children their prescribed controller medicine each day school is in session. Schools would also give children their rescue medicine when needed.
Today

A central finding of the Needs Assessment is that all sectors wish for two improvements:

First, they wish for more efficient and faster exchanges of information to better coordinate care and reduce the paperwork and bureaucracy that slows responsive care. It is evident to all that the lines of communication and collaboration across sectors are weak.

Second, participants wish for stronger consistency in the asthma education provided independently by schools, medical services and members of the community, so that the entire community is learning and reinforcing the same good practices.

Furthermore, all sectors recognize that, in the absence of sector coordination, the job of moving information and ensuring that care is integrated across sectors falls to caregivers, who are often overwhelmed and underprepared to navigate the numerous disconnected systems and requirements of each sector.

Today: All sectors are isolated and connect only through overwhelmed caregivers.
CHICAGO II identified two interventions that can help caregivers move easily and more effectively between sectors. The first is CAPE, an asthma communication tool that is easier to understand and use, and so can help caregivers more effectively direct the care of their child more within sectors. The second is a community health worker (CHW), who can accompany caregivers as they move between sectors to reduce burden, speed coordination, help fill out paperwork and provide tailored, at-home asthma instruction to families. Additionally, a coordinated approach to asthma education is needed. A coordinated approach would work across the school and family sectors and draw from a common set of messages, language and practices. This would provide families and children with more touchpoints for learning and create the critical repetition and reinforcement of key aspects of asthma self-management in terms they can understand and apply.

These supports, in conjunction with caregivers, should open up the information, coordination, social support and communication between sectors so that children with asthma get the treatments and supports they need.
A strong partnership in action

Members of the CHICAGO II network contributed their expertise and perspective throughout the development process:

162
Number in total of stakeholders engaged in the CHICAGO II process

2
Number of collaborative research analysis sessions held in the custom-built CHICAGO immersion room at the IIT Institute of Design.

9
Number of total project-wide meetings

31
Number of smaller stakeholder meetings
Moving forward

More collaboration to come

The CHICAGO II succeeded in expanding on existing collaborations to develop a four-sector Asthma Care Implementation Program (ACIP) to improve the care of Chicago children with asthma where they live, learn, play and receive medical care. The CHICAGO II team has taken this work and submitted for additional federal funding to test and implement the new ACIP outlined in this document.

As our efforts move into a broader community-wide intervention, we need to expand the number of people at the table. We are all important to the successful care of Chicago’s children with asthma. Join us in the CHICAGO Plan 3 and help expand our network as we continue our work to test the implementation and effectiveness of this new model of asthma care to improve the care of Chicago children with asthma.

Interested? Contact Us

If you are interested in working with us to address pediatric asthma disparities in Chicago contact Respiratory Health Association at 312-628-0217 or aorourke@lungchicago.org.
Chicago Asthma by the Numbers citations


5. R18EH000355, a CDC-funded initiative “Chicago Westside Partnership for Children’s Asthma Initiative (CWPC-AI)” implemented by Sinai Urban Health Institute in 2011.

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