Health relationship, school, institutions: Effective connections

All Children Thrive Learning Network - Cincinnati

September 2019
3 presentations on health for all children

1. Social and economic factors that influence the health of children and their families
2. Thinking about how pediatric care can help the population's health outcomes
3. Effective relations between health, schools and other institutions

1. Scope of the problem and pediatric response
2. Structure and impact of hospital and health system response
3. Building a multi-sector response to help all children thrive
What do children need to lead a full healthy life?

- Obstetrics
- Home visiting
- Pediatrics
- Preschool
- Public schools
- Benefits, child welfare
- Public health
- Jobs, financial literacy
- Housing, domestic violence
- Government

[Image of children for illustration]
Partnership #1: Legal advocates to address social, economic and legal problems for families
Cincinnati Asthma Admissions and Neighborhood Asthma Hotspots

Asthma admissions 9/1/10-8/31/11

- **Asthma admissions**
- **City of Cincinnati**
- **Admission rate per 1000**
  - 0.00 - 0.78
  - 0.79 - 3.40
  - 3.41 - 5.76
  - 5.77 - 10.99
  - 11.00 - 27.24
- **Census tract**
Legal Aid Housing Cases Mapped Against Neighborhood Asthma Hotspots
Cincinnati Child Health-Law Partnership (Child HeLP)

- Address families’ unmet civil legal needs
- Educate health professionals about social determinants of health
- Advocate for system-level change
- Referrals made in 3 primary care and 3 school-based clinics
- Onsite Child HeLP office at main hospital staffed 4 days a week
- Top 3 case types: housing, public benefits, education
Child HeLP Process Map

- Patient screens positive for social need
- Partners advocate for system changes
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Provider education

Referral processes in EHR

Shared data

Shared goals, communication, joint leadership

Improved patient and population health outcomes
How do we know if partnership is working? - one process measure
Child HeLP Snapshot

2009 – 2018:

• 7,070 referrals
• 5,230 legal cases opened
• 6,700 positive legal outcomes achieved
• 13,240 children and 6,690 adults helped
• >$900,000 in back and adjusted future public benefits recovered for families
• 600 pediatric interns and residents trained
Partnership #2: Cincinnati Public Schools
Reading proficiently by 3rd grade

• Why we committed:
  • Education and literacy have profound effects on health
  • Indicator of ‘brain health’ – cognitive, emotional, executive function
  • Until 3rd grade child is learning to read; after 3rd grade, child is reading to learn
  • Cincinnati Children’s known for it’s quality improvement: ‘be the best at getting better’
  • Superintendent of the Public School District asked for help improving student outcomes
K-3 Literacy AIMS

Increase the percent of children reading proficiently by 3rd grade in CPS schools from 46.5% in June 2016 to 71% by June 30, 2020.
What are we trying to accomplish? **AIM**

How will we know that a change is an improvement? **MEASURES**

What change can we make that will result in improvement? **THEORY AND IDEAS**

**Model for Improvement**

**Act**
(Adopt, Adapt or Abandon)

**Plan**

**Study**

**Do**

Then test ideas that are linked to theory and see if results change

SMART
Specific
Measurable
Action Oriented
Realistic
Timely

Langley et al. 1996
## Quality Improvement Capability Building

<table>
<thead>
<tr>
<th>Improvement years</th>
<th>Number of Children Grades K-3</th>
<th>Number of Children 3&lt;sup&gt;rd&lt;/sup&gt; grade</th>
<th>Number of Classroom Teachers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Year 1 (2016-2017)</td>
<td>331</td>
<td>210</td>
<td>10</td>
</tr>
<tr>
<td>Year 2 (2017-2018)</td>
<td>557</td>
<td>247</td>
<td>19</td>
</tr>
<tr>
<td>Year 3 (2018-2019)</td>
<td>1104</td>
<td></td>
<td>40</td>
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</tbody>
</table>
Results for SY 18/19 show a spring proficiency score of about 66.4%.
What do children need to lead a full healthy life?
Community Quality Improvement Course

Build improvement leaders: schools, public health, child welfare
6 month course
Methodology is the Model for Improvement

- Measurement and analysis
- PDSA and PDSA ramp strategies
- Introduction to reliability
- Psychology of change management
- Systems thinking
- Sustainability & Spread
Partnership Elements

Clear shared vision and goals
Inherently motivated leaders
Measurement system that connects all the dots
Children and family centered
Quality improvement approach
  • Frequent testing, transparent results, data for improvement not evaluation
Be gracious enough to share, humble enough to learn together
QUESTIONS?

Robert Kahn
Robert.kahn@cchmc.org
Twitter: @docrob64

https://www.actnowcincy.org/
Changing 3rd Grade Reading Outcomes: Scale Plan

**SY: '16 – '17**
- **8% 3rd Graders**
- **Schools:** 5 Schools, K-3
- **Educators:** 15
- **Teachers:** 12
- **Principals:** 3
- **Student Impact:** 423 K-3
- **Goal:** 60% Nat'l Bench - MAP

**SY: '17 - '18**
- **25% K – 3**
- **Schools:** 15 Schools (5 Pioneer),
- **Educators:** 59 (15 Pioneers)
- **Teachers:** 49 (12 Pioneers)
- **Principals:** 15 (3 Pioneers)
- **Goal:** 66%

**SY: '18 – 20 +**
- **100% K – 3**
- **Schools:** 43 Schools, K -
- **Educators:** TBD
- **Student Impact:** All 11,924 K
- **Goal:** 71% pass proficiency
Our vision is to be earth's most customer-centric company.
Minutes of Lost Instruction Due to Behavioral Infractions, School a

- Median
- Goal
Social and Emotional Learning

Minutes of Lost Instruction 10/1/2018-5/1/19, School Building Grade 4-8

- Social Worker Hired
- Teacher Training
- PAX Kernel 1 & 2
- PAX Kernel 3
- PAX Kernel 4.5, TFT
- PAX Kernel 5
- GUG & Spring Break
- GDG interrupted due to Standardized Testing
- GDG Kernel 9/10

5 Day Period

- Minutes Lost in 5 School Day Period
- Median
- Goal
Avondale: ~205 births per year, 18% PTB rate

SERVICES: Eviction, Partner Violence, Public Benefits, Food Assistance, Mental Health Svcs

UC Med Center
- Prenatal Clinic 2
- Prenatal Clinic 3

University Hospital

Good Samaritan
- Prenatal Clinic 5
- Prenatal Clinic 6

Good Samaritan Hospital

Every Child Succeeds

Community Health Worker Agency 1

Community Health Worker Agency 2

Pediatric Care
Thrive at 5 Health Outcomes

- Immunizations
- Vision
- Dental
- Hearing
- Speech
- Behavioral health
- Emergent literacy

CCHMC Primary Care

Community Partners (e.g., Parents, ECS, Head Start)

Health Dept Primary Care

Engaged Families

Disconnected Families

Cincinnati’s Children and Families
## Prioritizing Partnerships

<table>
<thead>
<tr>
<th>Key Stakeholders</th>
<th>Reach</th>
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<tbody>
<tr>
<td>Cincinnati Public Schools</td>
<td>35,000 children, $600 million budget</td>
</tr>
<tr>
<td>Public Health Department</td>
<td>8,000 children, $55 million budget</td>
</tr>
<tr>
<td>Job &amp; Family Services (welfare/benefits)</td>
<td>60,000 children, $2.4 billion</td>
</tr>
<tr>
<td>Birth Hospitals (UC, Good Sam)</td>
<td>~8,000 births per year</td>
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<tr>
<td>Community Action Agency/Head Start</td>
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<tr>
<td>United Way of Greater Cincinnati</td>
<td>~$30 million annually</td>
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<tr>
<td>Cincinnati Metropolitan Housing Authority</td>
<td>~17,000 housing units</td>
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<td>City Council</td>
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</table>
Stakeholder Domains - *draft*

- Leadership engagement
- System level measures
- Explicit theory and QI methods
- Capability plan and execution
- Family/child centered design
- Early results
Family Centered Design
Family Centered Design

Guiding Principle: **EMPATHIZE**

Many systems and services don’t consider the broad context of the lives of the people they serve. As a result, they don’t meet people where they are. To create a region where all children thrive, we need to build empathy into the fabric of our actions. We must see what families see, and feel what they feel, in order to develop relevant solutions.

**HOW MIGHT WE** build a system that recognizes the complexities of people’s lives and enables them to move forward from their past into the better life they want?

**HOW MIGHT WE** connect with people in ways that are familiar to them?

**HOW MIGHT WE** respect and celebrate the different kinds of families that exist today?
Progress and Integration
Children Thrive Learning Session

Families at the center
Across teams, sectors
Rapid learning
Integration of Health and Well-Being

Poverty defined as:

“Denial of opportunities and choices that are most basic to human development - to lead a long, healthy, creative life and to enjoy a decent standard of living, freedom, dignity, self-esteem, and the respect of others.”

Amartya Sen
Nobel Prize in Economics, 1998
QI-SEL
Call to Action
CPS District

In 2017-2018, CPS averaged 315 exclusionary disciplinary consequences per school. 28.8% of students per school received a consequence. This equates to 40,731 minutes per day of lost instructional time.

Literature largely supports the assertion that classroom instructional time is a key factor in academic achievement.
Patient screens positive for social need

Partners advocate for system changes
Child HeLP Process Map

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Improved patient and population health outcomes
What should you change? And why?

Key Driver Diagram

- Displays your theory for improvement
- Illustrates what contributes to the achievement of a project aim

SMART Aim

Driver #1

Driver #2

Change idea #1

Change idea #2

Change idea #3
SMART Aim

- **Specific**
- **Measurable**
- **Actionable (and achievable)**
- **Relevant (and realistic)**
- **Time-bound**

Example: Increase referrals to Child HeLP by residents from 20% to 35% by June 30, 2019, within CCHMC’s primary care population
QI for Community Systems of Care

- Shared goals and understanding
- Enhanced referral mechanisms
- Information sharing platforms
- Feedback loops
- Measurement, accountability
- Knowing each other
# Phases of Collaboration

<table>
<thead>
<tr>
<th>Phase 1</th>
<th>Phase 2</th>
<th>Phase 3</th>
<th>Phase 4</th>
<th>Phase 5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Develop Idea</td>
<td>Plan</td>
<td>Align Resources</td>
<td>Reflect and Adapt</td>
<td>Decide Next Steps</td>
</tr>
<tr>
<td>fine core problem</td>
<td>Define shared vision</td>
<td>Execute the plan</td>
<td>Coordinate efforts</td>
<td>Assess progress</td>
</tr>
<tr>
<td>Identify leaders</td>
<td>Develop action plan</td>
<td>Test and refine</td>
<td>Link and track data</td>
<td>Acknowledge successes</td>
</tr>
<tr>
<td>Secure funding</td>
<td>Agree on goals/metrics</td>
<td>Communicate success</td>
<td>Plan for sustainability</td>
<td>Plan for future</td>
</tr>
<tr>
<td></td>
<td>Secure additional funding</td>
<td>Ensure long term funding</td>
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All Children Thrive Learning Network

- **3rd Grade Reading**
  - Cincinnati Public Schools
  - Preschools
  - Pediatric Clinics
  - Libraries
  - Parent/Grandparent networks
  - Community Spaces

- **Thrive at 5**
  - Primary care clinics
  - Public Health Department
  - Behavioral Health Agencies
  - Home Visiting
  - Preschools

- **Bed Day Disparity**
  - Inpatient staff and social work
  - Subspecialists
  - Primary care clinics
  - Public Health Department
  - City departments
  - Community leaders

- **Infant Mortality**
  - Cradle Cincinnati
  - Multiple birth hospitals
  - City health department clinics
  - Home visitors
  - Community Health Workers
  - Parent/Grandparent networks
All Children Thrive Learning Network Core Principles

Equity is foundational to improving children’s health. We believe that financial, social, environmental and racial inequities affect the health and well being of children. Solutions must address basic needs of families first.

Children are at the center of our work. We will work across family, community, organizational and funding boundaries to ensure the system works for children and their health. As we design solutions, we will view the system from the perspective of the family and child. We believe the opportunities and solutions come from within families and communities.

We work together on solutions, building relationships and trust. Family, community and organizational partnerships are a critical aspect of successful improvement. The network is designed to inspire and continuously develop relationships across Cincinnati that work together in a system focused on what works for children.

We all teach and we all learn. Network participants must humbly share and gratefully learn from others. The network is built on the fundamental belief that by transparently sharing successes and failures and by learning from one another, participants can achieve their goals more effectively and quickly than working alone.

We are action-oriented and sustainable-results focused. Participants within the network are employing the methods of improvement science to reach goals. This emphasis on creating and sustaining improvement capability will sustain the network to improve children’s health. We must act with urgency and discipline, focusing on results for children.
ALL CHILDREN THRIVE PRINCIPLES

1. Equity is foundational to improving children’s health
2. Children are the center of our work
3. Relationships, trust, and working together are essential for sustainable solutions
4. We all teach and we all learn
5. Daily work is action oriented and results focused
Family Centered Design and Activation
SY18/19 Deep Learning School Reflection: Building Our SY 19/20 Theory