COMMUNITY OVERVIEW

Cincinnati Children’s Hospital Medical Center (CCHMC) is a not-for-profit organization working to improve child health and transform delivery of care through research, education, and innovation. As part of its strategic plan for 2020, CCHMC strives to “help Cincinnati’s kids to be the healthiest in the nation through strong community partnerships.” This pillar, co-led by Robert Kahn (Community Health Peer Learning (CHP) Program advisor), is central to CCHMC’s objectives. CCHMC- and community-based staff will work to identify hot spots of poor child health and to understand underlying social determinants of health. With integration of electronic health records (EHR) and geographic information systems, participants aim to gain understanding and then take action to reduce inpatient hospitalizations for pediatric patients. The use of data across sectors will improve CCHMC’s and partners’ ability to identify and address root causes of poor health outcomes within Avondale and beyond.

PROJECT APPROACH

CCHMC will approach data sharing in three phases. CCHMC will:

- Define measures of interest that are available within either the EHR or community-based data sets;
- Convene a work group to choose prototype measures and to design the optimal processes by which data can be shared, integrated, and presented;
- Determine how to package existing population-level data to inform and drive community improvement; and
- Use the developed infrastructure to inform and evaluate small-scale tests of change.

ANTICIPATED IMPACT

CCHMC will develop a data-driven Community Action Plan (CAP) for Avondale, a neighborhood of ~3,200 children with high rates of poverty and one of the highest county inpatient bed-days rates. The collaborative approach employed will help achieve a bold, shared population health improvement objective to reduce the inpatient bed-day rate for pediatric patients living in Avondale by 10 percent in the first year.

PROJECT SNAPSHOT

<table>
<thead>
<tr>
<th>Site Type</th>
<th>Hospital</th>
</tr>
</thead>
<tbody>
<tr>
<td>Health Category</td>
<td>Maternal/child health</td>
</tr>
<tr>
<td>Health Objective</td>
<td>Reduce the inpatient bed-day rate for pediatric patients in the community by 10% in the first year</td>
</tr>
<tr>
<td>Anticipated Products</td>
<td>Cross-sector data exchange platform</td>
</tr>
<tr>
<td>Geographic Scale</td>
<td>Neighborhood</td>
</tr>
<tr>
<td>Sectors</td>
<td>Lead: Health Care</td>
</tr>
<tr>
<td></td>
<td>Partners: Education, Social Services</td>
</tr>
<tr>
<td></td>
<td>Data contribution: Health Care, Community-based Organizations, Education, Social Services, Local Government</td>
</tr>
<tr>
<td>Data Types</td>
<td>EHR, geographic data, public records</td>
</tr>
<tr>
<td>Data Integration</td>
<td>Develop data sharing methods to integrate health care and community-level data</td>
</tr>
</tbody>
</table>
PROJECT TIMELINE

MONTHS 1-6
- Identify key drivers of disparities in inpatient bed-days to inform potential levers for change
- Identify and optimize EHR-based data elements for community health initiatives
- Form and convene work group to help identify community-based data elements and to begin developing the CAP
- Develop and pilot small-scale tests of change

MONTHS 7-12
- Draft CAP and adapt drivers for relevance to community (Avondale) leaders and residents
- Develop prototype data commons
- Test and refine CAP and data sharing processes with key hospital- and community-based stakeholders
- Continue data-informed tests of change

MONTHS 13-17
- Assess both process and outcome measures pertinent to the CAP and to the population health objective
- Participate in key forums with the community and partners to disseminate results
- Determine how learnings from Avondale can be translated to other Greater Cincinnati communities

LEAD AGENCY

- Cincinnati Children’s Hospital Medical Center (CCHMC) (http://www.cincinnatichildren.org/default/) is the sole provider of hospital care for local children (capturing ~95 percent of city admissions) and is a primary care, safety-net provider for 32,500 children with high morbidity and high rates of poverty. CCHMC primary care centers have considerable experience in bridging data divides using health information exchange processes.

PARTNERS/COLLABORATORS

- Avondale Comprehensive Development Corporation (ACDC): ACDC actively promotes housing, economic, and workforce development via partnerships with Avondale residents, agencies, and churches around its stated purpose: “to serve the Avondale community … [and] to improve the quality of life of the neighborhood by implementing, coordinating and partnering” on priority areas including health and wellness. ACDC has a powerful convening capacity that will be crucial to the development and implementation of an effective CAP and is well-poised to facilitate family engagement in the development of our CAP.
- Cincinnati Public Schools, School Based Health Centers, and the Cincinnati Health Department (CPS/SBHC/CHD): CPS runs two elementary schools that serve Avondale. Both schools have SBHCs that are managed in conjunction with CCHMC and in association with the CHD. The SBHCs serve neighborhood children of all ages regardless of whether they attend that particular school, and starting in August 2015, they record health data in an EHR shared with CCHMC.
- Cincinnati Area Geographic Information System (CAGIS): CAGIS serves as a large data repository for public information such as housing code violations and property values – data elements, among others available publically from the City, that could help to contextualize a patient’s social, economic, and environmental risks. CAGIS administrators and CCHMC researchers have partnered in the past to illustrate the association between area-level housing code violation density and asthma.

MEET THE PROJECT TEAM!

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