

Illinois Department of Public Health, Asthma Program

Individual Evaluation Plan

Coordinated Approach to Reducing Childhood Asthma Disparities

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# 1. INTRODUCTION

Asthma is a chronic condition that causes a significant health and economic burden throughout the United States. Although it does not discriminate on race, sex, or age, significant disparities in care, health outcomes, and quality of life among those with asthma persist. Improvements in asthma control, quality of life, and reductions in health inequities require supportive and connected services. The Illinois Asthma Program (IAP) has devoted its efforts to strategies and activities that pursue core goals of asthma management and strive for health equity by aligning with the Centers for Disease Control and Prevention's (CDC) Controlling Childhood Asthma Reducing Emergencies (CCARE) goal, the EXHALE Technical Package, and the 6|18 initiative related to asthma control.

One specific strategy is focused on coordinated care (CC), a multifaceted approach that includes evidence-based home visits (HV) used to improve health outcomes and participant quality of life while reducing health care utilization and disparities. Components are based off of the EXHALE Technical Package, and include particulars such as linkages to care, medication management, asthma education, and home environmental trigger assessment and remediation. HVs are provided by Sinai Urban Health Institute's trained Community Health Workers (CHWs). For more information about the CC project partners, see [Appendix A](#).

## **Evaluation Purpose**

This evaluation has a dual purpose. The first is to evaluate the effectiveness of the coordinated care (CC) approach led by the Respiratory Health Association (RHA). The second is to measure the impact of the approach compared to the standardized Community Health Worker (CHW) Home Visiting-only (HV-only) program, which is also funded by the Illinois Department of Public Health (IDPH). The Evaluation Team intends to accomplish this by learning what efforts are working well and to identify areas for improvement, such as linkages, capacity to deliver asthma self-management education (AS-ME), and improved participant health and quality of life (QoL) related to asthma.

The IAP aims to influence the reach, quality, sustainability and processes of partnerships, and collaborative efforts between various professionals that lead to better care, lower costs, improved health, and progress toward preventing half a million emergency department (ED) visits and hospitalizations among children (CCARE). The evaluation findings will be used by CC leadership, members of the Home Visiting Collaborative (HVC), and IAP to make necessary changes to make a true impact on reducing asthma morbidity, mortality and disparities. Additionally, this evaluation is a means of promoting the multifaceted CC approach, especially focused on implementing evidence-based strategies in schools and across multiple sectors. It is an opportunity for raising awareness about program services that include delivering evidence-based asthma management education to various audiences and linkages to care.

## **Stakeholders**

The evaluation process requires input from various stakeholders who work together at every stage of the process to create an environment that supports equitable community health. This individual evaluation plan (IEP) is constructed by a diverse team with backgrounds and experiences that support the evaluation process and are committed to community capacity-building and empowerment.

The external evaluators (i.e., Evaluation Team) take primary responsibility for planning and conducting the evaluation and disseminating the results. They are also responsible for

continuously soliciting feedback from Evaluation Planning Team (EPT) members using a combination of telephone calls, emails, and virtual meetings. All stakeholders are responsible for mobilizing resources, leveraging partnerships, and informing choices to make sense of the information and taking appropriate action to support IAP goals. Other interested groups may be hospital administrators, pediatric and advocacy groups, policymakers, other state asthma programs, and the CDC.

**Table F.1. Stakeholder Assessment and Engagement Plan**

| Stakeholder Name  | Stakeholder Category | Role in the Evaluation   | How and When to Engage   |
|-------------------|----------------------|--|--|
| Sarah Geiger      | Primary              | Lead Evaluator, UIUC   | All Stages (Formation of IEP through Dissemination of Results) |
| Arlene Keddie     | Primary              | Evaluator, NIU   | All Stages   |
| Cassandra Johnson | Primary              | Evaluator, UIUC  | All Stages   |
| Madison Lamphear  | Primary              | Undergraduate Student, UIUC  | All Stages   |
| Erin Virgo        | Primary              | Program Manager, Programs and Policy, RHA                            | IEP Formation Input, Dissemination of Results                  |
| Lesli Vipond      | Primary              | Assistant Director, Programs and Policy, RHA                         | IEP Formation Input, Dissemination of Results                  |
| Stacy Ignoffo     | Primary              | Director of Community Health Innovations, SUHI                       | IEP Formation Input, Dissemination of Results                  |
| Nikki Woolverton  | Primary              | Program Manager, IDPH  | All Stages   |
| Nancy Amerson     | Primary              | Evaluation, Epidemiology, IDPH                                       | All Stages   |
| Enoch Ewoo        | Primary              | Asthma/Tobacco Program Coordinator, IDPH                             | All Stages   |
| Anna Volerman     | Primary              | Pediatrician and Associate Professor of Medicine and Pediatrics, UCM | IEP Formation Input, Dissemination of Results                  |
| Nicole Kappel     | Primary              | Clinical Research Coordinator, UCM                                   | IEP Formation Input, Dissemination of Results                  |
| Theresa Zumba     | Tertiary             | Consultant, Wellness Department, ISBE                                | IEP Formation Input, Dissemination of Results                  |

## **2. DESCRIPTION OF WHAT IS BEING EVALUATED**

### **Need**

There is a strong need for a community-based, multi-facted approach to improving asthma control, quality of life, and health equity-now exaerbated by the COVID-19 pandemic. Linkages to asthma care and appropriate services require shared decision-making and resources ingrained in coordinated efforts, not duplicated efforts, which may prove to be more effective than any one of those activities alone. By improving these components and expanding services, those with asthma and their caregivers will have greater access to comprehensive quality care. Thus, resulting in positive health outcomes and proving that this approach has the greatest collective impact for controlling asthma. Therefore, coordinated asthma care should be implemented as a best-practice. Furthermore, coordinated asthma care in Illinois holds potential for policy and systems change.

### **Context**

Respiratory Health Association (RHA) Department of Programs and Policy leads the coordinated effort with partners from University of Chicago Medicine (UCM), Mobile Care Chicago (MCC), and Sinai Urban Health Institute (SUHI) to deliver programs and services to elementary school-aged children in Cook and Will counties. These partners are supported by a project manager and asthma educator who ensure that components are socially and culturally appropriate and include environmental assessments of schools and individual participants' homes, delivery of asthma self-management education (AS-ME), and linkages to care - particularly to clinical care and HV.

As previously stated, the efforts align with national ones such as the EXHALE Technical Package (EXHALE). The latter is a set of six evidence-based and cost-effective strategies that each contribute to better asthma control:

- **E**ducation on asthma self-management,
- **eX**tinguishing smoking and exposure to second-hand smoke,
- **H**ome visits for trigger reduction and AS-ME (based on National Asthma Education Prevention Program Expert Panel Report guidelines),
- **A**chievement of guidelines-based medical management,
- **L**inkages and coordination of care, and
- **E**nvironmental policies or best practices to reduce indoor and outdoor asthma triggers.

To date, IAP activities have been affected by COVID-19, which was first reported in the United States in January 2020. This has caused home visits to pivot between in-person to virtual to a hybrid model. Schools have also been affected and have pivoted between those delivery modes as well.

An additional hurdle is that the target population is low socioeconomic status (SES), and many have limited internet access. Thus, reinforcing the fact that preexisting inequities are exacerbated by the pandemic strengthens the immediate need for effective, community-based services like the CC approach. Moreover, resources like staffing and time have also been negatively affected by the pandemic, but are accounted for when interpreting and reporting the findings.

## Target Population

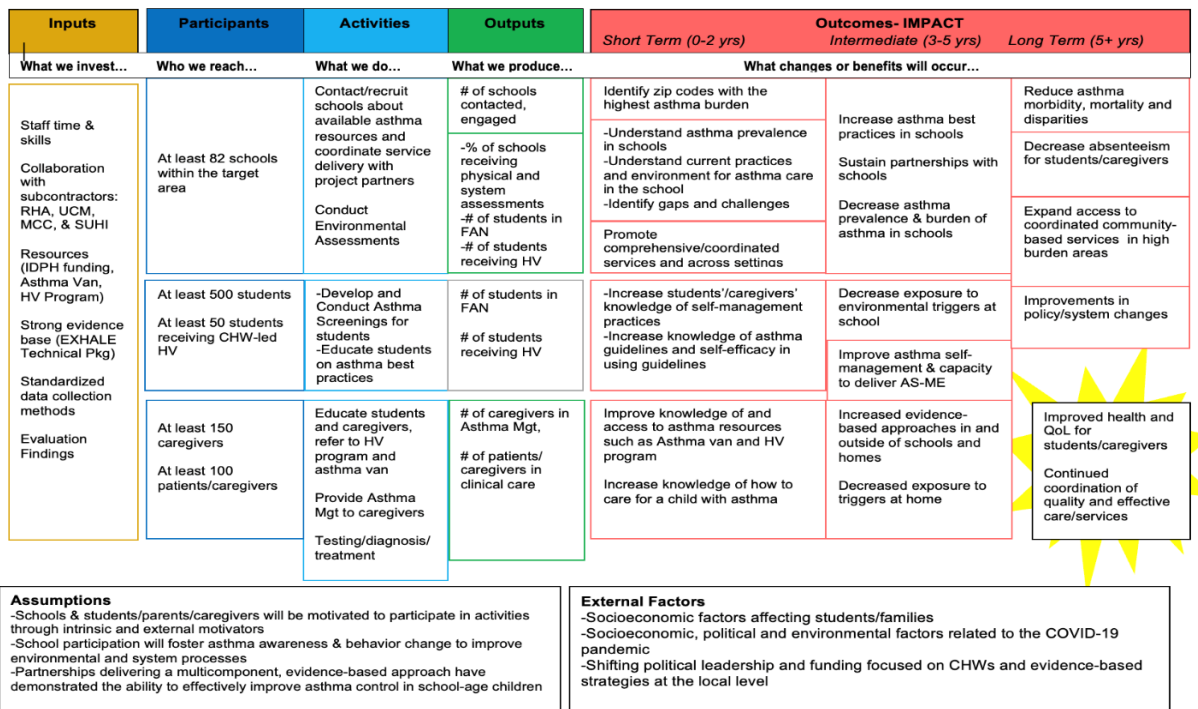
The target population for the CC approach are elementary school students located in at least 10 ZIP codes within Cook and Will counties with high ED visits due to asthma. These schools are selected based on the number of students, location, documented ambulance visits to schools for asthma emergencies, and CPS prioritization for asthma services. Additional criteria include whether or not at least one project partner has an existing relationship and has found leadership to be engaged and responsive. RHA’s application emphasizes that they work with students with the highest numbers of asthma related ED visits. On average, students will be more likely to belong to demographic groups that have a higher asthma burden, such as Black and Latinx racial/ethnic groups, low SES, male prior to adolescence, and female at and beyond adolescence.<sup>1</sup> Due to the sensitive nature of gathering SES data at home visits and the importance of maintaining trust with clients, SES will be approximated using payor information. Individuals with Medicaid coverage will be considered low SES for the purpose of the evaluation.

## Stage of Development

The CC team began gathering biweekly in October 2021 to begin project planning, including a review of how each component of the project will work together and communicate throughout the project’s phases to avoid duplicate work. Project leaders anticipate connecting with schools in the summer of 2022 and implementing the full project during the 2022-2023 school year. (See [Appendix B](#) for a flowchart highlighting the project phases. See the Logic Model below to review its inputs, activities, outputs and outcomes.)

## Logic Model

# Coordinated Care Asthma Program



<sup>1</sup> Centers for Disease Control and Prevention. (2021, September 16). *Data, statistics and surveillance*. <https://www.cdc.gov/asthma/asthmadata.htm>

### **3. EVALUATION DESIGN**

#### **Evaluation Questions**

1. Among CC participants, was there an increase in asthma self-management over time compared to those not participating in CC efforts?
  - a. What was the prevalence of asthma in CC participating schools at baseline and after 18 months?
  - b. Among CC student participants, was there a change in asthma control over time compared to those not participating in CC efforts?
  - c. Among CC student participants, was there a change in QoL over time compared to those not participating in CC efforts?
  - d. Among CC student participants, was there an increase in asthma self-management knowledge?
  - e. Were there any differences in effect by age group, gender, race/ethnicity, etc.?
2. Was the number of services received (via coordinated and linkages to care) associated with more improvement in asthma outcomes than linkage to only one service?
3. Did the reach of the CC services increase and by what magnitude?
  - a. Did the number of referrals/clients within CC efforts increase over time?

#### **Stakeholder Information Needs**

The evaluation findings will be used by the members of the CC approach, HVC, IAP, and IDPH asthma program staff to improve program strategies by determining effectiveness of the multifaceted CC approach *especially* compared to the HV-only approach. The findings may also be used to justify continued funding for this approach.

It is important to note that the users must see this information as credible, especially to ensure utility, hence involving key decision-makers as EPT members at all stages of IEP development. The latter lays a foundation of continuing, authentic and timely communication.

#### **Evaluation Design**

The design is quasi-experimental, meaning that there is a treatment and a control group, but no random assignment.

### **4. DATA COLLECTION**

#### **Data Collection Methods**

Primary and secondary data will be used to answer the evaluation questions. The *HVC Data Collection Tool* (tool) will be used to collect demographic data about the CC participants as well as the HV-only participants. The tool also gathers data about Asthma Control Test (ACT) scores, asthma symptoms and quality of life, health care utilization, asthma knowledge, and asthma management. The tool was constructed by the Evaluation Team and several stakeholders in 2019. Since then, the tool has been implemented in the HV-only programs. Therefore, SUHI's staff are experienced users given that they were already part of the HVC prior to the CC project being funded. The control group consists of IDPH's funded HV program participants and their caregivers (including SUHI), who are assigned a family identification number and participant identification numbers for confidentiality. Participants received at least three visits conducted by the CHW over a 12-month period. At baseline and each subsequent visit, data are recollected by the CHWs with the exception of a few different time points in data collection for items like AB

and asthma knowledge quiz scores (See [Appendix C](#) for more information about the HV timeline).

Data related to asthma prevalence in schools will also be collected by other CC partners and shared with the Evaluation Team.

## 5. DATA ANALYSIS AND INTERPRETATION

### Indicators and Standards

Performance indicators chosen by the EPT refer to improvements in ACT and Asthma Knowledge Quiz scores, an increase in symptom free days, a decrease in urgent and emergent health care utilization, and improvements in asthma management. Table F.2. links the evaluation question(s) to its indicators and standards.

**Table F.2. Indicators and Success**

| Evaluation Question  | Criteria or Indicator (Measurable/Observable Elements)   | Standards (What Constitutes "Success"?)   |
|--|--|---|
| 1. Among CC participants, was there an increase in asthma self-management over time compared to those not participating in CC efforts? | Total # of students<br># of students who screen positive for asthma (or have a previous asthma diagnosis)<br># of symptom free days<br>ACT scores<br># ED visits/hospitalizations<br>Pretest, posttest scores (FAN©, Asthma Mgt, SUHI's Asthma Knowledge Quiz) | Increase in the proportion of students who have asthma enroll in the CC program.<br>Statistically significant improvements.<br>Greater number of students with an ACT score above 19.<br>Direction of trend(s) over time. |

|   |  |  |
|---|--|--|
| <p>2. Was the number of services received associated with more improvement in asthma outcomes than linkage to only one service?</p> | <p>Total # of CC participants</p> <p># of CC participants in each part of the program (i.e., UCM, RHA, MCC, SUHI)</p> <p># of referrals from RHA to MCC, MCC to SUHI</p> <p># of students with a new medical home</p> <p># of schools that completed the environmental assessment</p> <p># of symptom free days</p> <p>ACT scores</p> <p># of ED visits/hospitalizations</p> | <p>Increase in the percentage of CC participants who are involved in additional CC services.</p> <p>Increase in the # of referrals.</p> <p>Statistically significant improvements.</p> <p>Greater number of students with an ACT score above 19.</p> <p>Direction of trend(s) overtime</p> |
| <p>3. Did the reach of the CC increase and by what magnitude?</p>   | <p># of participants in each part of the program (i.e., UCM, RHA, MCC, SUHI)</p> <p># of referrals from RHA to MCC, MCC to SUHI</p> <p># of students with a new medical home</p> <p># of schools that completed the environmental assessment</p>   | <p>Increase in counts.</p> <p>Direction of trend(s) over time.</p>   |

**Analysis**

Data will be explored using descriptive statistics. Evaluation questions will be answered using two-group tests, such as t-tests, to assess differences pre and post, as well as CC versus HV-only groups. Regression modeling will also be used to identify predictors of success on various outcomes of interest.

Sub analysis will be performed using secondary data from the Illinois Asthma Call Back Survey and county-level hospital discharge data (i.e., ED visit rates, and pediatric asthma-related ED



visits and hospitalizations). This group is named “non-CC” to distinguish it from the HV-only group when appropriate throughout this document and additional documents related to this IEP.

### **Interpretation**

After the data have been collected and analyzed by the Evaluation Team, the results will be reviewed collectively with the EPT members. By engaging the EPT in interpreting the findings and justifying conclusions, the evaluation is more credible and useful.

## **6. COMMUNICATION AND USE**

The EPT will review the IEP draft and give feedback to the Evaluation Team to make any necessary changes to ensure true reflections of the program’s services and outcomes are within the plan. Then, the plan will be disseminated to appropriate parties via email and/or IDPH’s Asthma Program website. Other methods may include presentations and in-person meetings. Evaluation findings, both interim and final, will be shared with the EPT, and with other internal and external stakeholders since all parties are committed to implementing evaluation findings in an actionable way to improve program efforts and outcomes. There are two main reasons for this step: to gather insights and interpretations, otherwise called “meaning making,” and to improve program processes. Another positive change may be seen in current and future policy work. Lastly, the Evaluation Team will send a “thank you” letter to the CC participants. The letter will include data visualization and how the data is being used in an actionable way by CC partners.

All findings will be shared in a timely manner using engaging formats per the EPT’s request via a post meeting assignment. Items relevant to the HVC and CC team will be shared in both written form and through scheduled quarterly calls to harness forward momentum and adjust as needed within each program for improved processes leading to better health outcomes. Findings and lessons learned will also be shared with other professionals to communicate what works well when addressing asthma management, especially in high burden areas operating in settings most important to affecting children’s health -- at school and at home. One EPT member suggested school nurses and school health personnel, school districts, and the Illinois Association of School Nurses be considered as additional audiences.

## **7. EVALUATION MANAGEMENT**

A well-managed evaluation leads to usable findings. It is the evaluators’ responsibility to align this individual evaluation with IAP goals and objectives. The evaluators must also communicate the findings to the appropriate parties for further action. Program directors and staff are responsible for implementing these findings within their respective programs. Additional stakeholders should use the findings to make informed decisions about current and future programmatic action(s).

### **Data Collection Management and Data Analysis Management**

The Evaluation Team has created a Data Management Plan (DMP) where all Evaluation Team members are involved in various components. The *HVC Data Collection Tool* (tool) and REDCap reports are the primary ways data are collected on a quarterly basis. The Evaluation Team members have access to HV-only and CC data through a shared Box account with IDPH. Privacy, confidentiality, and data security are of utmost importance to the members of the Evaluation Team. These DMP components are emphasized throughout the evaluation process.

These reports will be appropriately named in accordance with protocols specific in the DMP. As part of evaluation management, the Evaluation Team will follow their existing DMP and create a Statistical Analysis Plan (SAP). Regarding the SAP, it is expected that the Evaluation Team

members analyze data early and often regarding descriptive and/or simple bivariate analysis. As part of this systematic process, team members will also reach out to RHA and HVC members to discuss data on a quarterly basis to inform programmatic processes.

### Communicating and Reporting Management

Table F.3 describes the Communication and Reporting Plan by audience. The plan is organized by audience and includes items such as format, date(s) and any notes for the Evaluation Team. Informal communication is expected via email, telephone calls, and/or virtual meetings, but it is not reflected in the table.

**Table F.3. Communication and Reporting Plan**

| <i>Communication Plan for IEP for Coordinated Care</i>  |   |                                     |             |  |
|---|---|-------------------------------------|-------------|--|
| <b>Audience</b>   | <b>Email Addresses</b>  | <b>Formats</b>                      | <b>Date</b> | <b>Notes</b>   |
| <b>EPT:</b> Dr. Geiger, Dr. Keddie, Cassandra Johnson, Madison Lamphear, Erin Virgo, Erica Salem, Stacy Ignoffo, Anna Volerman, Nicole Kappel, Theresa Zumba, Nikki Woolverton, Nancy Amerson, Enoch Ewoo | <a href="mailto:smurphy@illinois.edu">smurphy@illinois.edu</a> , <a href="mailto:akeddie@niu.edu">akeddie@niu.edu</a> , <a href="mailto:cmyoung3@illinois.edu">cmyoung3@illinois.edu</a> , <a href="mailto:mel8@illinois.edu">mel8@illinois.edu</a> , <a href="mailto:evirgo@resphealth.org">evirgo@resphealth.org</a> , <a href="mailto:ESalem@resphealth.org">ESalem@resphealth.org</a> , <a href="mailto:stacy.ignoffo@sina.org">stacy.ignoffo@sina.org</a> , <a href="mailto:avbeaser@medicine.bsd.uchicago.edu">avbeaser@medicine.bsd.uchicago.edu</a> , <a href="mailto:TZUMBA@isbe.net">TZUMBA@isbe.net</a> , <a href="mailto:Nikki.Woolverton@illinois.gov">Nikki.Woolverton@illinois.gov</a> , <a href="mailto:Nancy.Amerson@illinois.gov">Nancy.Amerson@illinois.gov</a> , <a href="mailto:Enoch.K.Ewoo@illinois.gov">Enoch.K.Ewoo@illinois.gov</a> | Word doc via email                  |             | *Asked team for feedback on 5/4/22, due 5/13/22.<br>*Feedback included and finalized on ____.  |
| <b>IDPH:</b> (Nikki Woolverton, Nancy Amerson, Enoch Ewoo)  | <a href="mailto:Nikki.Woolverton@illinois.gov">Nikki.Woolverton@illinois.gov</a> , <a href="mailto:Nancy.Amerson@illinois.gov">Nancy.Amerson@illinois.gov</a> , <a href="mailto:Enoch.K.Ewoo@illinois.gov">Enoch.K.Ewoo@illinois.gov</a>  | Word doc and pdf via email, webpage |             | Received Word doc because of EPT membership; pdf sent  |
| <b>HVC:</b> (Felicia Fuller (ALA)), (Tyra Jones/Matt Yarnell (SIUSOM)), (Jerrica Ampadu (SIUE)), (Julie Kuhn)/Stacy Ignoffo (SUHI)  | <a href="mailto:Felicia.fuller@lung.org">Felicia.fuller@lung.org</a> , <a href="mailto:tjones83@siumed.edu">tjones83@siumed.edu</a> , <a href="mailto:myarnell44@siumed.edu">myarnell44@siumed.edu</a> , <a href="mailto:jerphil@siue.edu">jerphil@siue.edu</a> , <a href="mailto:Julie.kuhn@sina.org">Julie.kuhn@sina.org</a> , <a href="mailto:Stacy.Ignoffo@sina.org">Stacy.Ignoffo@sina.org</a>   | Pdf via email                       |             |  |
| <b>Participating School Districts (including school administrators, school nurses &amp; school nurse personnel):</b> (TBD)  | <a href="mailto:*ivolkening@naperville203.org">*ivolkening@naperville203.org</a>  | Pdf via email                       |             | *Jo Volkening participated on a past IEP separate from this project, but is open to any communication benefiting asthma efforts.<br>*This row will be completed by Winter 2023 |
| <b>Illinois Nurses Association: Chicago and Springfield Campuses</b>  | <a href="mailto:update@illinoisnurses.com">update@illinoisnurses.com</a>  | Pdf via email                       |             | *This email address goes to both the Chicago and Springfield Offices.  |

### Timeline

The preliminary timeline for reporting is built around grant deadlines. Data collection and analysis will occur on a quarterly basis during the 2022-2023 school year. Preliminary reporting will follow this timeline to inform CC partners. Formal dissemination of the final evaluation findings will occur no later than three months after the last data collection point, and follow the above Communication and Reporting Plan.

One major concern that could affect this timeline is sample size. The COVID-19 pandemic and its subsequent circumstances have caused many services and schools to constantly pivot to ensure health and safety precautions recommended by the CDC and the Illinois State Board of Education (ISBE), which has resulted in low enrollment, paused services, and/or reprioritization in schools.

## Evaluation Budget

A total of \$130,000 is allotted to evaluations of the new state projects from the Tobacco Settlement Recovery Funds. Some EPT members volunteer their time to help plan the individual evaluation and share the lessons learned.

## POST EVALUATION

### Action Planning

Program improvements and steps towards sustainability require shared decision-making. The evaluators will communicate IEP updates, preliminary findings, and official reports with members of the CC approach, HVC, IAP, and IDPH asthma program staff. This will be done informally via emails, appropriate IAP meetings, HVC meetings, and quarterly evaluation calls.

Official reports may take longer to disseminate, but they are expected to be shared with internal and external stakeholders via informal discussions and formal presentations (in-person and virtually). The evaluators expect that these reports will be accessible on IDPH's webpage as well.

## 8. REFLECTION

Fundamental elements such as group cohesion, motivation, and a shared vision helped EPT members build on the strengths within the group to develop this individual evaluation plan. Although this is a strong plan, the Evaluation Team has acknowledged a need for modifications. Table F.4. describes some lessons learned from the initial planning phase. [Appendix D](#) displays some initial planning activities completed during the first three EPT meetings.

**Table F.4. Reflections Summary Matrix**

| Observations/Lessons Learned                               | Plans for modifying the process  |
|--|--|
| Creating a balanced EPT was difficult                      | The evaluation process may have benefited from a more balanced team, such as including CHWs and inviting more school staff/administrators for future evaluations.  |
| Need for a more flexible timeline                          | Like many evaluation plans occurring during the COVID-19 pandemic, flexibility is a requirement. That is, flexibility in response to the ever-present pandemic and the hinderances that may occur as a result, such as avoiding burdening schools and delaying implementation. (The EPT has agreed to look at evaluation on a school/systems level in the future.) |
| Many evaluations can be done with coordinated care efforts | In the future, evaluators can put more focus on preexisting inequities that were exacerbated by the pandemic and possibly look at policies that did not get implemented or didn't fully address preexisting inequities.  |

\_\_\_\_\_ Implemented as Planned

\_\_\_\_\_ Changes Made (see below for itemized list of changes and rationale)

## Appendix A

The Respiratory Health Association (RHA) was established in 1906 and originally named the Chicago Tuberculosis Institute. Since then, they have renamed themselves and expanded to include asthma, chronic obstructive pulmonary disease (COPD), and lung cancer in their work efforts. Through research, education, and policy change, they fight for clean air, prevention of lung disease, and tobacco control. In order to achieve these outcomes, RHA plans a variety of events in Chicago for charities and holds webinars for those interested<sup>2</sup>.

<https://resphealth.org>

Sinai Urban Health Institute (SUHI) has been around for more than 20 years in Chicago and works to promote health equity among communities. Using a community engaged approach, they focus their efforts in areas with disparities. To achieve this, they form connections with members of these communities and help connect them with solutions to their health problems. A unique aspect of their programs is their use of community health workers (CHWs) to go out and facilitate a relationship between community members and health officials<sup>3</sup>.

<https://www.sinaichicago.org/en/>

University of Chicago Medicine (UCM) has been serving the Chicago area and addressing a variety of health issues for around 100 years. In the time since opening their first hospital in the early 1900s, they have evolved to become an academic and community health system as well. Their experts range from clinicians to researchers who all work with the best interest of the community in mind<sup>4</sup>.

<https://www.uchicagomedicine.org>

Mobile Care Chicago (MCC) is a non-profit organization focused in and around Chicago that works with schools to provide full-service medical assistance. Twenty years ago, Mobile Care Chicago partnered with schools to provide care for those who did not have easy access to this kind of care. Now, they have two asthma vans and a portable dental clinic where they provide free medical and preventive care, education, and support to families in disadvantaged areas. Seeing roughly 6,000 patients a year, many more than once, children with chronic conditions get access to care they otherwise would not<sup>5</sup>.

<https://mobilecarechicago.org>

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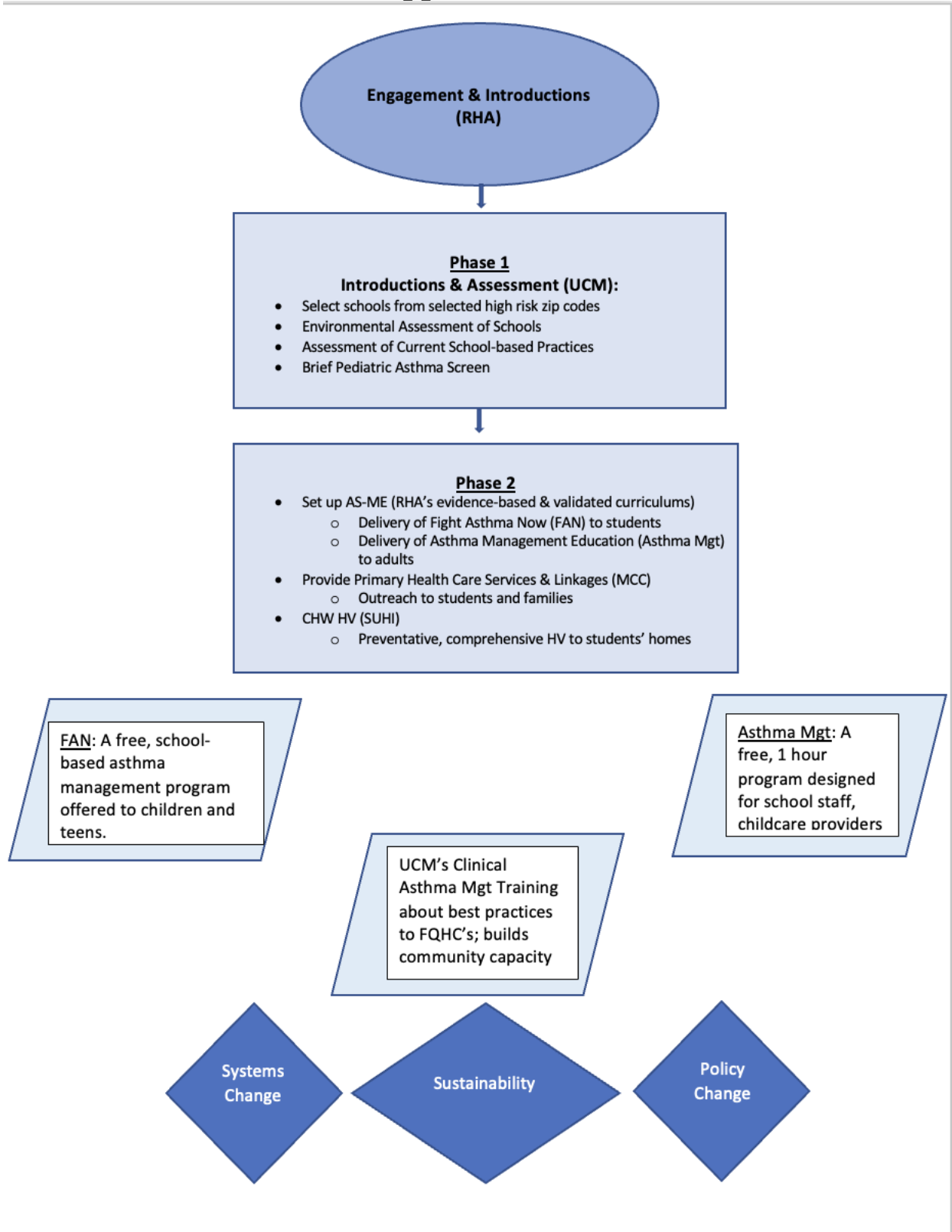
<sup>2</sup> *American Lung Association*. American Lung Association | American Lung Association. (n.d.). <https://www.lung.org/>

<sup>3</sup> Mobile Care Chicago. (2020, July 28). <https://mobilecarechicago.org/>

<sup>4</sup> *RHA— dedicated to Community Lung Health since 1906*. Respiratory Health Association. (2021, December 14). <https://resphealth.org/>

<sup>5</sup> UChicago Medicine. (n.d.). <https://www.uchicagomedicine.org>

# Appendix B



# Appendix C

## HV-only



## Coordinated Care

Engagement & Recruitment (RHA)



Assessments/Screenings (UCM)



FAN & Asthma Mgt (RHA)



Clinical Care (MCC)



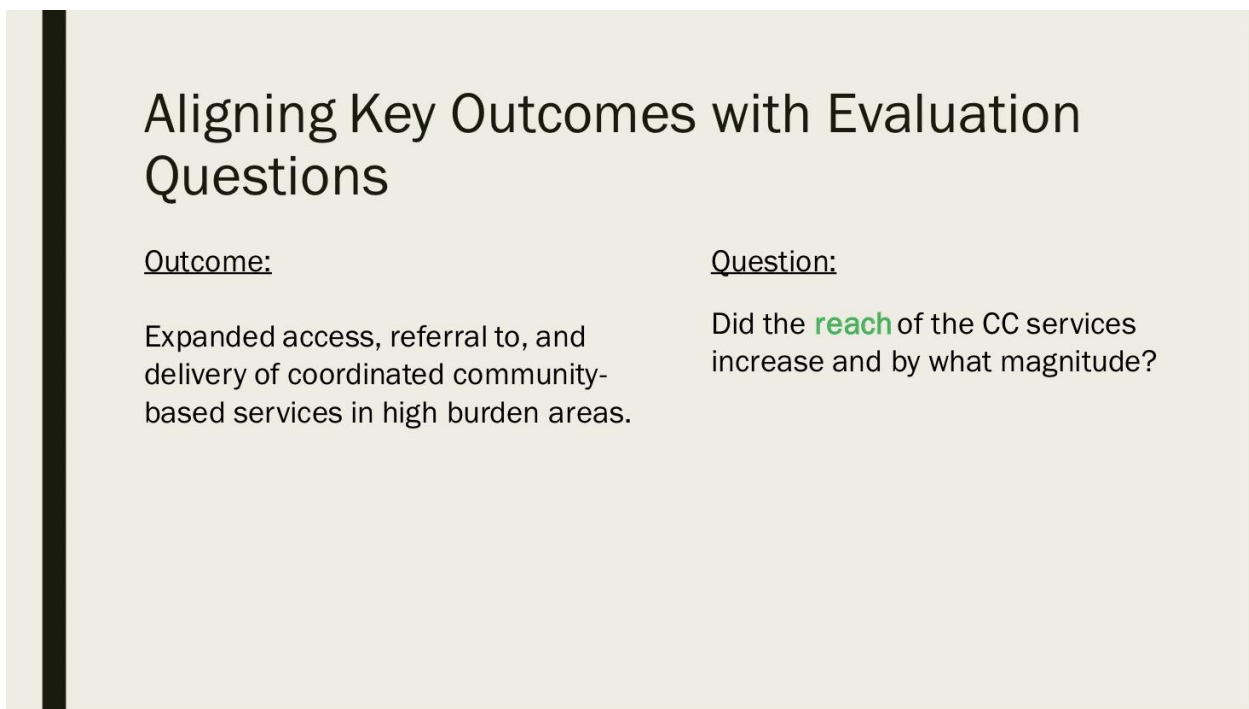
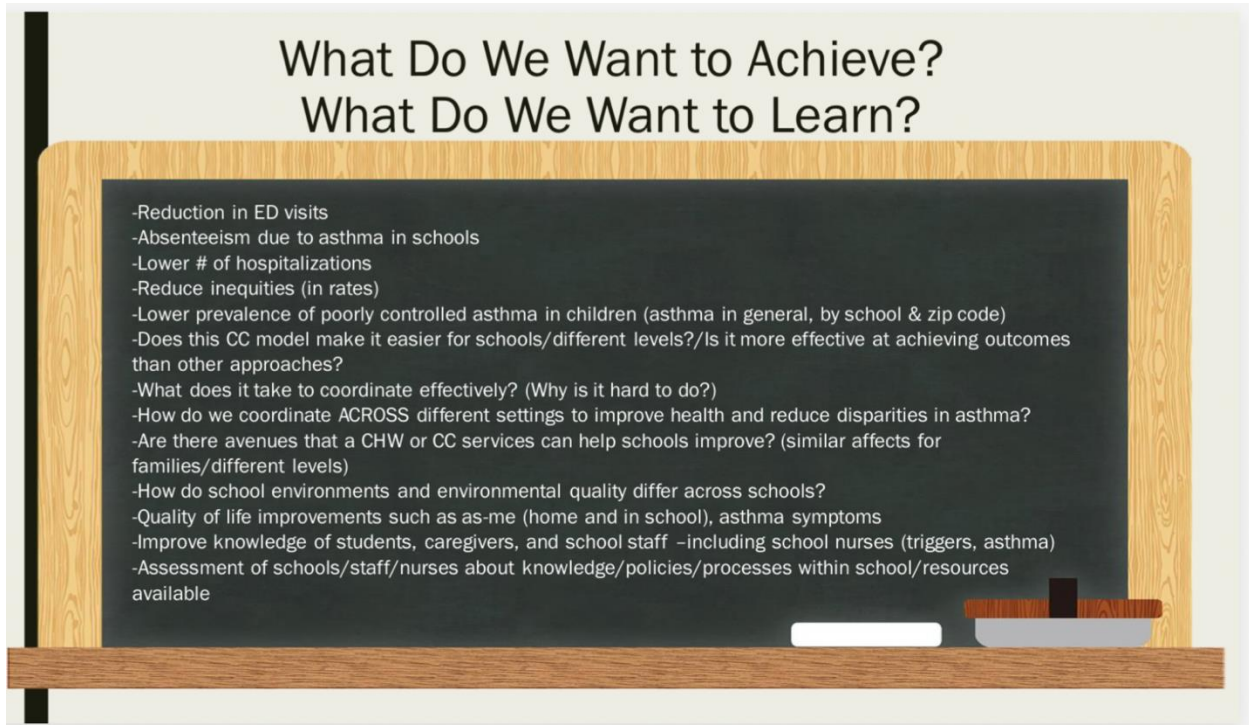
HV (SUHI)



# Appendix D

## Planning Notes

Below are screenshots of several activities conducted with the evaluation planning team to aid in the IEP development.





# Appendix D-continued

## How are we going to answer the questions?

Please indicate if data is currently being collected to answer these questions with a yellow sticky. You may indicate what tool is being used and other items such as what the variable is, who collects this and how often. If data is not being collected to answer the question or if you are unsure, please use a blue sticky to indicate this.

Not currently collecting these data

Already collecting these data

**Q1.** Is there a reduction in absenteeism in the student participants with an asthma diagnosis when compared to students diagnosed with asthma that were not participants in the care coordination approach/program?

SUHI's CHWs: "How often does asthma keep participants from attending school?", asked 5x throughout a 1 yr program

SUHI's CHWs: Collecting Demographic info

**Q2.** How is knowledge improvement measured in students, caregivers, and school staff –including school nurses (triggers, asthma) that participate in the care coordination approach/program?

SUHI's CHWs: pre/post test asthma knowledge quiz score, asked 3x (baseline, 90 days and 1 yr) in the 1 yr program

## How are we going to answer the questions?

Please indicate if data is currently being collected to answer these questions with a yellow sticky. You may indicate what tool is being used and other items such as what the variable is, who collects this and how often. If data is not being collected to answer the question or if you are unsure, please use a blue sticky to indicate this.

Already collecting these data

**Q1.** Is there a reduction in absenteeism in the student participants with an asthma diagnosis when compared to students diagnosed with asthma that were not participants in the care coordination approach/program?

SUHI's CHWs: "How often does asthma keep participants from attending school?", asked 5x throughout a 1 yr program

Could individual schools share attendance data with CC for the 500 participants?

For school data, we would need to request consent/permission from parents/caregivers to get the data from the school.

We can obtain self-report data from participating students by asking parents/child. We do not have access to the data from non-participating students.

**Q2.** How is knowledge improvement measured in students, caregivers, and school staff –including school nurses (triggers, asthma) that participate in the care coordination approach/program?

SUHI's CHWs: pre/post test asthma knowledge quiz score, asked 3x (baseline, 90 days and 1 yr) in the 1 yr program

RHA collects pre and post test results for students and their adult caregivers (parents, school staff, etc) regarding asthma knowledge gained.

CHW outreach by UCM will ask open-ended questions and may identify some gaps in knowledge. Not using a knowledge scale.

If this is a research question, I would suggest rephrasing to: Is there knowledge improvement in students, caregivers, and school staff based on participation in the program?

Is this an outcome measure or just a question about how we collect data?



## Appendix D- continued

| <p>HOW WILL WE<br/>KNOW WE'RE<br/>SUCCESSFUL?</p> | <u>Indicators</u>                       | <u>Standards</u>                                      |
|---|---|---|
|   | # of symptom free days                  | Statistically significant improvements                |
|   | Increase in ACT Scores                  | Greater number of students with an ACT score above 19 |
|   | Decrease in EMS calls                   | Direction of trend overtime                           |
|   | Decrease in ED visits, Hospitalizations |   |
|   | Increase in number of referrals         |   |
|   | # of students with a new medical home   |   |

## NOTES

(This section is reserved for a rolling list of edits to this plan, if necessary).