## CONTENTS

<table>
<thead>
<tr>
<th>Contents</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Contents</td>
<td>2</td>
</tr>
<tr>
<td>How to use this Implementation Toolkit</td>
<td>3</td>
</tr>
<tr>
<td>OneCity Health Support Desk</td>
<td>3</td>
</tr>
<tr>
<td>Section One: Overview of the OneCity Health Asthma Project</td>
<td>4</td>
</tr>
<tr>
<td>Project objective</td>
<td>4</td>
</tr>
<tr>
<td>Target patient population for the Asthma Project</td>
<td>6</td>
</tr>
<tr>
<td>Resources</td>
<td>7</td>
</tr>
<tr>
<td>Information Technology support for the Asthma Project</td>
<td>7</td>
</tr>
<tr>
<td>Section Two: Components of CHW Services for the Asthma Project</td>
<td>8</td>
</tr>
<tr>
<td>Components of CHW Services</td>
<td>8</td>
</tr>
<tr>
<td>Outreach</td>
<td>9</td>
</tr>
<tr>
<td>Patient engagement and assessment</td>
<td>10</td>
</tr>
<tr>
<td>Collecting patient data</td>
<td>11</td>
</tr>
<tr>
<td>Home visits</td>
<td>12</td>
</tr>
<tr>
<td>Referral for Home Remediation</td>
<td>13</td>
</tr>
<tr>
<td>Ongoing patient engagement</td>
<td>13</td>
</tr>
<tr>
<td>Communication with clinicians</td>
<td>14</td>
</tr>
<tr>
<td>Documentation</td>
<td>14</td>
</tr>
<tr>
<td>Section Three: Administration and Management of the Asthma Project</td>
<td>15</td>
</tr>
<tr>
<td>Program oversight</td>
<td>15</td>
</tr>
<tr>
<td>Training staff</td>
<td>16</td>
</tr>
<tr>
<td>Materials and supplies</td>
<td>17</td>
</tr>
<tr>
<td>Working with Clinical Partners</td>
<td>18</td>
</tr>
<tr>
<td>Working with Home Remediation Partners</td>
<td>19</td>
</tr>
<tr>
<td>Quality Improvement</td>
<td>20</td>
</tr>
<tr>
<td>Appendix A: GSI Mandatory Fields</td>
<td>21</td>
</tr>
<tr>
<td>Appendix B: Core Competencies of Community Health Workers</td>
<td>23</td>
</tr>
<tr>
<td>Appendix C: Structuring Home Visits</td>
<td>25</td>
</tr>
<tr>
<td>Appendix D: Case Conference and Root Cause Analysis Tool</td>
<td>27</td>
</tr>
</tbody>
</table>
Implementation Toolkit: Asthma Project (Community Health Worker Services)

HOW TO USE THIS IMPLEMENTATION TOOLKIT

This Toolkit was developed by OneCity Health to assist partners in launching the Asthma management program and monitoring program performance. This Toolkit is intended for use by partner organizations that are providing community health worker (CHW) services as part of OneCity Health’s Asthma Project.

ONECITY HEALTH SUPPORT DESK

If you have any questions, please contact the OneCity Health support desk:

Phone Number: 646-694-7090

Email: ochsupportdesk@nychhc.org, with the subject line “Asthma Question”

Hours of Operation: Monday through Friday from 9am to 5pm ET
SECTION ONE: OVERVIEW OF THE ONECITY HEALTH ASTHMA PROJECT

PROJECT OBJECTIVE

The Asthma program is intended to improve asthma control and reduce avoidable asthma-related hospitalizations and Emergency Department (ED) visits, through an integrated asthma management program that includes home-based services. Home-based services will address home environmental trigger management, self-monitoring, medication use, medical follow-up, and coordination with social services.

The Primary Care Clinical team will:

- Review and update clinical treatment recommendations
- Provide asthma education and home environmental screening in the primary care setting
- Identify patients with frequent or severe asthma exacerbation
- Refer patients with frequent or severe asthma exacerbations to CHW services
- Develop and document an Asthma Action Plan

The Community Health Worker will:

- Conduct an in-home environmental assessment
- Support the patient in following the clinical team’s recommendations, including self-monitoring, medication adherence, and follow-up
- Link the patient to home remediation services to address allergens in the home, if needed
- Link the patient to other resources, as identified
Below you will find a list of required and recommended activities, some which are shared between Primary Care teams and Community Health Worker partners

### Recommended:

1. Achieve NCQA PCMH 2014 Level 3 accreditation

2. Establish workgroup in pediatric primary care setting to oversee this project, including clinical quality improvement and Asthma CHW partnership *(for Partners that provide pediatric or family primary care services AND Partners that provide Asthma CHW services)*

3. Establish partnership with Asthma CHW Partner, in collaboration with OneCity Health staff *(for Partners that provide pediatric or family primary care services AND Partners that provide Asthma CHW services)*

4. Train clinical staff members in referral criteria and in expectations for Asthma CHW partnership *(for Partners that provide pediatric or family primary care services)*

5. Train administrative staff in referral process, including GSI training *(for Partners that provide pediatric or family primary care services)*

6. Conduct quality improvement activities for classification of asthma severity, guidelines-based medication treatment, use of Asthma Action Plan, and assessment of asthma control *(for Partners that provide pediatric or family primary care services)*

7. Incorporate spirometry into primary care practice *(for Partners that provide pediatric or family primary care services)*

8. Incorporate structured screening questions about the home environment into primary care practice for patients with asthma *(for Partners that provide pediatric or family primary care services)*

9. Support a clinical staff member to become a Certified Asthma Educator *(for Partners that provide pediatric or family primary care services)*

### Required:

1. Conduct quality improvement activities for documentation of home environmental assessment, case conference, root cause analysis for asthma exacerbations and referral for home remediation services in GSI *(for Partners that provide Asthma CHW services)*

OneCity Health will match participating clinical sites with community-based organizations that provide CHW services. Alternatively, some clinical sites may choose to hire community health workers as employees.

The Asthma Project may be implemented in settings other than primary care. Patients may be referred to CHW services from any clinical setting, including primary care, inpatient, and ED. Inpatients and ED patients may be referred even if they receive primary care outside of the
OneCity Health provider network. Partners interested in expanding referrals to CHWs for home assessments are instructed to contact OneCity Health.

- **Home-remediation services** remove sources of allergen from the home, such as mold or vermin. The home remediation agency may do this directly or via advocacy with the landlord or housing authority.
- If a patient has an unhealthy home environment that is causing frequent or severe asthma exacerbations, the CHW or the clinical team can refer the patient for home remediation services, which will be funded by OneCity Health.

**TARGET PATIENT POPULATION FOR THE ASTHMA PROJECT**

The Asthma Project targets patients with asthma who have frequent or severe exacerbations. These patients are eligible for CHW referral as part of this project. At this time, recruitment for this project will focus on **pediatric and adolescent populations**.

Patients who are in any of the below categories are considered to have frequent or severe exacerbations:

- **Hospitalized for asthma exacerbation within the last 12 months**
- **Visited Emergency Department with asthma exacerbation two or more times in the last six months**
- **Prescribed systemic corticosteroids two or more times within the last six months**
- **Prescription patterns indicating overuse of ‘rescue medication,’ such as albuterol**
Resources supported by OneCity, include:

- Funding for CHW services for patients referred through OneCity Health clinical sites
- Funding for home remediation services
- Technical assistance in project implementation
- Assistance in identifying or developing patient education materials
- GSI software for care management and registry support

Information Technology Support for the Asthma Project

As part of the Asthma Project, OneCity Health will provide community health workers and clinical sites with software (GSI Health) that supports care coordination and asthma registry management. This software will be used to support care management activities in a variety of settings in the OneCity Health Performing Provider System (PPS). OneCity Health has developed a module specifically designed for asthma management.

GSI software has the following capabilities:

- Tracking outreach activities and patient engagement
- Creating care plans and documenting appropriate patient centered assessments
- Creating care teams and mechanisms for communication within the team
- Tracking outcomes for continual improvement
- Receiving real time event notification alerts for hospital and emergency room visits

All staff who will obtain access to GSI, whether for view-only or documentation purposes, will be provided with a mandatory GSI user training by OneCity Health. Users of GSI for this project include community health workers; managers and administrators in organizations providing CHW services; and clinical personnel. Clinical personnel will use GSI to send initial referral information (including an Asthma Action Plan) to CHWs, and to be able to review information about mutual patients that CHWs have entered. Some clinical sites may also opt to use GSI to manage asthma patients who decline CHW services.
The work of community health workers is central to achieving this project’s objective: to improve asthma control and reduce avoidable asthma-related hospitalizations and Emergency Department (ED) visits.

For the OneCity Health Asthma Program, community health workers will provide:

- **Home visits**, anticipated to be at least three home visits for most patients. Some variety is expected based on patient need.
- **Assistance in mitigating home environmental triggers**, including in-home asthma trigger assessment and referral for home remediation when indicated
- **Education**, including:
  - Baseline asthma knowledge
  - Reinforcement of self-management recommendations provided by clinical team
  - Provision of educational materials on asthma
  - Assistance in keeping a symptom diary and in setting goals
  - Assistance in keeping follow-up appointments
- **Case management for 12 months for each patient**. For most patients, the intensity of services will lessen during the second half of this time period. The CHW will contact the patient or family every three months during the one-year period, by phone or as a home visit.

CHWs in the OneCity Health Asthma Program are required to have undergone trainings that will support the competencies and activities discussed here. Training requirements are discussed in a separate section of this toolkit.

**COMPONENTS OF CHW SERVICES**

Components of the CHW’s responsibilities, which will be discussed in this section, include:

- Outreach
- Patient engagement and assessment
- Collecting patient data
- Home visits
- Referral for home remediation
- Ongoing patient engagement
- Communication with clinicians
- Documentation
OUTREACH

Patients will be referred to the OneCity Health asthma CHW program by clinical providers, if the patient meets criteria. Specifically, a patient may be referred if he or she was hospitalized for asthma in the past year; had two or more exacerbations in the past six months that required an ED visit or treatment with oral steroid medication; or is frequently needing to use rescue inhalers. For this program, the clinicians are required to provide the patient’s Asthma Action Plan at the time of referral. Primary care sites will make referrals via GSI software, and the Asthma Action Plans will be scanned into the GSI record.

Once a patient is referred to an organization for CHW services, the case must be assigned to a community health worker. The CHW must then attempt to contact the patient’s family (“outreach”) to initiate care.

Important points to keep in mind include:

- The initial outreach attempt must be no later than 7 calendar days from the date of referral.

- If the patient is not reached at the first attempt, the CHW must continue trying to contact the patient. At a minimum, at least three attempts must be made to contact the patient within the first 30 calendar days from referral, if the patient cannot be reached earlier.

- If the first outreach attempt did not work, then more intense ways of reaching out must be tried: for example, if a telephone call does not work, then a home visit can be tried, or the patient can be met during a scheduled doctor’s appointment.

- The CHW should try to reach the patient at different days of the week or times of the day, in case the initial outreach attempt was at a time when the patient is not usually reachable.

If despite repeated and varying attempts at contacting the patient, the patient cannot be reached, then the CHW should notify the referring provider and close the referral.
PATIENT ENGAGEMENT AND ASSESSMENT

Engaging the patient in care is an extremely important step. Patients may decline CHW home visits, for various reasons such as the house not being clean; overcrowding; concerns about immigration status; the house smelling like cigarette smoke; or fear of being reported to Child Protective Services. In order to help the child with asthma, the CHW needs to build trust with the family.

To help build trust with patients, the CHW can:

- Provide a warm welcome to the services offered
- Remind the patient or family that you will meet them at the clinic (if applicable); or that her/his doctor recommended the home visit
- Be flexible when you set up a home visit
- Be non-judgmental, warm, respectful, and sensitive to families’ needs
- Recognize in conversation with the family (and patient) that they are the greatest resource to help keep their child’s asthma under control.
- Encourage them to share good news about their child as well as their concerns about their child’s asthma

Referrals from a clinical site may be more successful if there is a community health worker co-located at the clinical site. This allows for ‘warm hand-offs,’ in which the patient is introduced to the community health worker by the clinical team at the time of the patient’s clinical visit. Community health worker organizations may discuss this option with the clinical sites that they are matched with. Clinical sites will need to consider whether they wish to have community health workers spend time on-site. The willingness of clinical sites to have on-site community health workers spend time on-site may depend on factors such as available space and local policies and procedures. Community health workers may be available in clinic during limited times of the week, since much of their time will be spent in the community.

Note that informed consent must be obtained and documented on the appropriate form. The informed consent has two parts:

1. informed consent form for enrollment in community health services
2. informed consent for data sharing (this form will be provided by OneCity Health)

The informed consent documents must be completed at the first face-to-face encounter at which the patient accepts enrollment. For example, it may be completed in the clinical setting during a warm hand-off. For patients initially contacted by phone, it may be completed at the beginning of the first home visit or other face-to-face encounter.
COLLECTING PATIENT DATA

Before going on the home visit, the CHW should review the information that was provided at the time of referral. This can include the Asthma Action Plan (which includes directions for taking asthma medications), and any other information provided by the referring clinician. The CHW should communicate with the clinician’s office to ask for any further important information, including concerns the clinical team may have about the patient’s care.

Once the patient is enrolled, the CHW must complete the “asthma assessment” form in GSI and create a “care plan” form for issues identified in the assessment.¹

The GSI asthma module is designed to support the CHW in gathering the correct information. As part of this documentation, the CHW should identify members of the patient’s care team (such as physician, nurse, social worker, etc.) and document this in GSI. It is important to know who the care team members are, in order to communicate with them about the patient’s circumstances and needs.

Clinical, social, or any other issues that are outside the scope of CHW services must be referred to the appropriate licensed professional or other appropriate individual for assessment and intervention. In many cases, this will require alerting the clinical team of the need that has been identified.

¹ Please note that these forms do not represent clinical assessments or clinical care plans, which can only be performed by a licensed clinical provider and are beyond the scope of a community health care worker. The “assessment” form in GSI is a data collection form. The “care plan” represents the management plan for non-clinical issues and/or reflects the clinical care plan that was created and documented by the clinical care team (e.g. the Asthma Action Plan).
HOME VISITS

Home visits are opportunities for the CHW to:

- Reinforce education about asthma self-management
- Assess the home environment for allergens and irritants that worsen asthma control
- Provide resources to control asthma triggers, such as bedding covers and cleaning supplies

The primary purpose of the visit is to help the family get their child’s asthma under control. Home visits can make apparent many problems that families face, such as housing problems, poverty, and unemployment. If a family has extensive social barriers to health, the CHW may want to refer the family for care management services, for example through the primary care office. Consider what materials you will need for your visit.

These may include:

- Computer, or a place to write down information that will later be entered into GSI
- Telephone (to contact the patient, the patient’s care team, a supervisor, etc.)
- Home environmental assessment form
- Educational materials for patients/ families
- Daily symptoms diary
- Patient and family goals setting forms
- Community resource guide
- Referral forms for home remediation (integrated pest management)
- Bed covers, pillow cases, roach traps, and other materials to help control allergens

For the home environmental assessment form, examples of validated tools are as follow:

- EPA Home environmental checklist:
- Green and Healthy Home initiatives
- Community environmental health resources center and National Center for Pediatric Housing

Appendix C provides example of how to structure home visits.
Implementation Toolkit: Asthma Project (Community Health Worker Services)

REFERRAL FOR HOME REMEDIATION

Community health workers will conduct home environmental assessments. Some patients will be able to control triggers themselves, through cleaning techniques, removing sources of allergen from the home, and/or use of supplies such as pillow covers.

Patients who require home remediation services, including integrated pest management or home repairs, should be referred for these services. OneCity Health will fund home remediation services for patients enrolled in its Asthma Program. The CHW documents a home remediation referral in the GSI web-based data management platform, and the clinical team should be informed.

ONGOING PATIENT ENGAGEMENT

Community health workers must contact patients (or their families) at least quarterly, either by phone or in person, for 12 months starting from time of enrollment (or until the end of the organization’s contract period).

Key tasks that should be addressed during quarterly follow-up include:

- Ask the family about any asthma flares that have occurred, including asthma-related hospitalizations, Emergency Department visits, or need for oral steroid medications
- Complete the Asthma Control Test with the patient/ family
- Discuss any problems using medications or obtaining needed supplies
- Follow up with home remediation needs to ensure they were addressed
- Reinforce asthma education and provide additional educational materials as needed
- Communicate with the clinical care team, including any concerns about inadequate asthma control

In certain circumstances patients will have an ‘early discharge’ before the 12-month follow-up period (or contact period) is over. Acceptable reasons for early discharge include:

- Patient refuses further services
- Patient does not respond to 3 attempts at contact within a 30-day period

All contacts and attempted contacts must be documented in the appropriate fields in GSI.
COMMUNICATION WITH CLINICIANS

Community health workers must communicate with the patient’s clinical team. This may be the primary care provider, pulmonologist, and/or allergist, depending on which clinician is primarily managing the patient’s asthma.

**Communication must be bi-directional**, meaning that it should involve an exchange of communication between the clinical care team and the community health worker. Simply sending updates without obtaining any response or feedback is not adequate for true coordination of care. The clinical care team may be the physician, a nurse, or another care team member. **Communication with the clinical team should occur at least quarterly, and more frequently as needed.**

Communication may include issues such as:

- Clarification if needed of the contents of the Asthma Action Plan, including medication instructions
- Observations by either clinical team or CHW of the patient’s asthma control and ability to self-manage
- Needs identified by the CHW that require attention from the clinical care team, including services that are not within the scope of the CHW’s abilities
- Updates to the clinical care team on activities accomplished in the home, such as home remediation services

All communication must be documented by the CHW in GSI.

DOCUMENTATION

GSI software contains an asthma module. All patient information, outreach attempts, home visits, phone calls, communication with clinicians, and other activities related to this project **must be documented** by the CHW in GSI. GSI’s asthma module includes **structured fields** that guide the CHW in obtaining and documenting the necessary information.

The capabilities of the GSI Asthma Module include:

- Track outreach and patient engagement
- Document care teams and communicate securely through GSI with other team members who use the platform
- Create assessments and care plans
- Monitor processes and outcomes for a panel of patients
- Provide real time event notification alerts of hospital admissions and discharges

A list of mandatory fields in GSI is in included in **Appendix A**.
Partner organizations that contract with OneCity Health for the Asthma Project are responsible for establishing, managing, and overseeing community health worker services as specified in this toolkit.

Specific responsibilities of the partner organization include:

- Participating in meetings telephonically or in person with OneCity Health as deemed necessary by OneCity Health
- Adhering to information sharing and patient consent procedures mandated by NYC Health + Hospitals and complying with all applicable federal, state or local statutes or regulations governing privacy and confidentiality of health information
- Conducting background checks on all employees involved in this project
- Adhering to user activation and deactivation processes mandated by OneCity Health for IT platforms used in this project (GSI)
- Supporting information technology infrastructure with minimum requirements for GSI platform

The success of the CHW program will depend in large part on the quality of program management. This section provides guidance in:

- Training CHW staff
- Materials and supplies
- Working with clinical partners
- Working with home remediation partners
- Quality improvement and program evaluation
TRAINING STAFF

The core competencies of community health workers are described in Appendix B.

Training that meets the minimum requirements described below should be completed before the CHW is assigned patients. The organizations that employ the community health workers are responsible for arranging the training. The organizations providing CHW services must maintain proof that CHWs have met the training requirements and must submit this proof to OneCity Health if requested for auditing purposes.

OneCity Health requires that community health workers be trained in all of the following four areas:

1. **Community health worker training**
   - OneCity Health requires that training cover curricular areas and be of the same or similar time commitment and intensity as the trainings provided by the Community Health Care Worker Network of NYC. These trainings are 35 hours long for trainees with greater prior experience, and 70 hours long for trainees without significant prior experience.

2. **Asthma management training.**
   - Examples of training programs include:
     - https://lung.training/courses/asthma_basics.html
     - http://www.aafa.org/page/asthma-allergy-education-programs-teach-patients.aspx#WeeBreathers

3. **Home environmental assessment**
   - Training should include content education, role playing, an explanation and practice of standardized methods of documentation, and cultural competence. The training should also teach health workers to understand the limits of their expertise, such as when to refer a suspected problem to home remediation services for home repairs or integrated pest management. Resources for training include:
     http://healthyhousingsolutions.com/hhtc/

4. **GSI Asthma training**
   - GSI training will be provided by OneCity Health.

Organizations providing CHW services may request that OneCity Health accept documentation of prior equivalent training of their staff. OneCity Health reserves the right to require additional training or re-training before CHW staff is assigned patients participating in the OneCity Health Asthma Project.
MATERIALS AND SUPPLIES

Community health workers will benefit from having appropriate materials and supplies available to them from their organization. The organization providing CHW services is responsible for providing these.

Materials and supplies include:

- **Trigger remediation supplies**
  - Mattress covers, pillow cases, and cleaning supplies for patients with allergies to dust mites and other indoor asthma triggers

- **Patient education materials**
  - Sources for asthma-related patient education include:
    - [http://www.health.ny.gov/forms/order_forms/asthma.pdf](http://www.health.ny.gov/forms/order_forms/asthma.pdf)
    - [http://www.nhlbi.nih.gov/health/resources/lung#asthma](http://www.nhlbi.nih.gov/health/resources/lung#asthma)
    - [http://www.epa.gov/asthma/publications-about-asthma#tab-1](http://www.epa.gov/asthma/publications-about-asthma#tab-1)
  - “Green cleaning” instructions
  - Smoking cessation education materials can help support adults in the home to quit
    - [https://www1.nyc.gov/site/doh/health/health-topics/smoking-nyc-quits.page](https://www1.nyc.gov/site/doh/health/health-topics/smoking-nyc-quits.page)

- **Templates and tools to support CHWs’ documentation and communication practices**
  - Examples of resources include:
    - Home environmental checklist:
      - [https://www.epa.gov/asthma/asthma-home-environment-checklist](https://www.epa.gov/asthma/asthma-home-environment-checklist)
    - Visual survey and trigger remediation action plan:
    - Patient symptom diary:
  - Other useful templates may include: list of patient and family goals; letter to health care providers; letter for landlord or for home remediation services.

- **Resource lists**
  - A community resource list may include asthma education classes, school-based programs, smoking cessation groups, or exercise programs.

Peak flow meters and spacers are usually covered by health insurance and can be prescribed through the patient’s physician.
WORKING WITH CLINICAL PARTNERS

OneCity Health will match partner organizations that provide CHW services to clinical partners who will refer eligible patients. A strong working relationship between partners will be essential to grow the asthma CHW program and to ensure optimal benefit to patients.

To establish a strong working relationship, the organization that provides CHW services should consider the following steps.

☐ Build a relationship
  • Identify an administrative or clinical leader within the clinical partner organization
  • Ensure that staff members in the CHW and the clinical organization who are key to this collaboration are introduced early on in the planning process
  • Set an expectation for open dialogue. This includes being receptive to feedback and committed to joint problem-solving.
  • Understand the staffing and programmatic resources within the clinical site (e.g. social work resources, nutritional counseling, group visits for asthma management)
  • Understand how the clinical team monitors and manages the patient panel of each clinical provider or care team
  • Schedule a time when staff from the CHW program can meet the clinical team, for example during one of the clinical team’s scheduled staff meetings. Meeting in person will help to establish a working relationship between the two organizations.

☐ Discuss key issues in initial set-up
  • Learn about the characteristics of the clinical site’s patient population (language, demographics, prevalence of asthma, current asthma outcomes)
  • Discuss anticipated volume of referrals that the clinical site will generate for the CHW program. When planning CHW staffing needs, keep in mind that not all families referred for CHW services will accept enrollment.
  • Review CHW roles and workflows with the clinical team including the development of a referral process that will work for the site
  • Agree on a joint timeline for program roll-out
  • Maintain clarity that, for the OneCity Health Asthma Program, CHWs will provide services to patients who qualify for and agree to the home visiting program. Patients who either do not qualify, or who decline, the home visiting program should have their needs managed by the clinical team.
  • Agree whether CHWs will ‘co-locate’ within the clinical setting in order to receive ‘warm hand-offs’ of referred patients. This decision is discussed earlier in this toolkit, in the ‘Outreach’ section.
Create clear communication processes
- Provide the clinical partner’s leadership team with the name and contact information of a person who is accountable for overseeing the community partner’s CHW program
- Create processes by which individual CHWs can be contacted by the clinical partner to discuss patient care
- Identify who within the clinical site can be contacted for:
  - Patient issues that require immediate attention from the clinical team
  - Non-urgent updates on patient care
  - Multidisciplinary review of complex cases

Plan for iterative process design and for joint quality improvement work
- Schedule to meet with clinical and/or administrative leadership at regular intervals
- Design standing agenda items for these meetings, such as: discussion of recent successes; identification of obstacles and challenges to program success; discussion of ways to improve communication and coordination of services; review of complex patient cases (including root cause analysis for patients with ongoing frequent or severe exacerbation); and review of quality improvement data based on GSI reports and/or other sources
- These discussions should emphasize concerns that relate to communication and coordination between partner organizations or that require multidisciplinary review of patient cases

WORKING WITH HOME REMEDIATION PARTNERS
When a patient requires integrated pest management or home repair, the CHW will refer the patient to the organization contracted by OneCity Health to provide home remediation services. The referral and the completion of these services should be documented in GSI and the clinical team should be informed. The CHW organization should establish a working relationship with the home remediation provider, to allow for ongoing quality improvement across this interface.
QUALITY IMPROVEMENT

Organizations participating in the Asthma Project must establish processes to conduct quality improvement (QI) activities. This is important for all organizations, including those with established CHW programs, those with new programs, and those with expanding programs. Programs must have written policies and procedures that support management of CHW staff.

Quality improvement activities must include:

- At least quarterly, scheduled times to review program performance, successes, challenges, and possible solutions
- Observation of the initial engagement effort
- Periodic review of CHWs’ documentation by their supervisor(s) or by a project coordinator
- Monitoring of GSI reports
- Observation of home visits to ensure quality of care and appropriate documentation
- Attendance and participation in OneCity Health events including training, seminar and conferences.

As the CHW program evolves, questions that every OneCity Health CHW partner should consider include:

- Was the program implemented as planned?
- Were program participants representative of the target populations? Who was excluded and why?
- Is CHW staff demonstrating high quality patient care?
- Were all patients logged into the patient registry? When did this not happen and why?
- Were the services provided implemented consistently with program protocols? If not, when did implementation not occur?
- How many patients received each of the project’s services or interventions?
- Are patients/ families satisfied with the care provided by CHWs?
- Has the clinical partner raised any concerns with the partnership?
- Was there a meaningful improvement in the condition of the target housing units? If so, what type of improvement?
- Was there an improvement in the health of the target patients? If so, in what way did their health improve?
APPENDIX A: GSI MANDATORY FIELDS

Community health workers will be responsible for entering information relevant to their activities, including Home/Community Based Information. Below is a list of mandatory fields in the GSI asthma module that community health workers will be using.

Training on GSI, including how the software supports the creation of care plans, will be provided to community health workers via OneCity Health.

**General Information**
- Borough

**Acute Visit**
- Does patient have a scheduled PCP visit?
- Did the patient have an unscheduled visit to their PCP?
- Did the patient have an ER visit for asthma?
- Did the patient have any hospitalization for asthma?

**Clinical – Ambulatory Care**
(This section is mandatory for patients referred from the ambulatory care setting)
- Age group
- Severity classification
- Daily controller medication
- Asthma control test
- Does the patient have an Asthma Action Plan?
- Did the patient have an asthma education session?
- Does the patient have a home assessment trigger tracker?
- Does the patient have an allergy test completed
- CHW / home visit referral given?

**Clinical – Emergency Department and Inpatient**
(This section is mandatory for patients referred from ED or inpatient settings)
- Daily controller medication
- Was the patient given an Acute Asthma Action Plan?
- Follow up appointment with primary care given?
- CHW / home visit referral given?
Home – Community Based Information

- Select all the asthma components you have reviewed with the patient
- Select all of the asthma medication devices you have reviewed with the patient
- Select all elements of the **Kitchen** that you have assessed for the home environmental assessment
- Select all elements of the **Bathroom** that you have assessed for the home environmental assessment
- Select all elements of the **Bedroom** that you have assessed for the home environmental assessment
- Select all elements of the **Living Room** that you have assessed for the home environmental assessment
- Select all elements of the **Hallway** that you have assessed for the home environmental assessment
- Did the patient accept a referral for other services?
APPENDIX B: CORE COMPETENCIES OF COMMUNITY HEALTH WORKERS

The following core competencies for CHWs are adopted from the U.S. Department of Health and Human Services’ “A Breath of Life: Asthma Control for My Child” (https://catalog.nhlbi.nih.gov/sites/default/files/publicationfiles/14-7952.pdf)

1. Communication skills
   - Listens to understand the strengths, needs, experiences, and knowledge of others.
   - Answers questions and clarifies doubts.
   - Makes difficult ideas easy to understand.

2. Interpersonal skills
   - Develops positive relationships.
   - Gets along with supervisors.
   - Works well as a team member.

3. Knowledge of community, health problems, and community services
   - Understands difficulties that people in the community face.
   - Identifies specific health issues.
   - Knows what services are available and where they are.

4. Service coordination skills
   - Connects with and accesses community resources.
   - Helps families connect with needed services.
   - Provides follow-up.

5. Capacity-building skills
   - Recognizes others’ strengths, such as knowledge, understanding, motivation, and determination.
   - Helps parents identify problems and what they can do to resolve them.
   - Helps parents explain or demonstrate a skill, such as how to use an inhaler.

6. Family advocacy skills
   - Speaks on behalf of others to agencies and other service providers.
   - Represents others in public meetings.
7. Teaching skills
   • Educates others about how to prevent or manage health conditions.
   • Teaches others healthy habits.

8. Organizational skills
   • Sets goals and achieves them.
   • Sets priorities in work activities.
   • Keeps track of time and appointments with parents, supervisors, and others.
   • Writes reports.
APPENDIX C: STRUCTURING HOME VISITS

The following is an example of how to structure home visits.²

**Focus for initial home visit**

- Assess family’s baseline asthma knowledge
- Review Asthma Action Plan with the family/patient
- Home assessment – trigger identification
- Review of asthma medications
- Identify patient and family goals

<table>
<thead>
<tr>
<th>Component</th>
<th>Key Points</th>
<th>Intervention</th>
<th>Examples of support materials</th>
</tr>
</thead>
</table>
| Introduction | • Introduction and greeting | • Share your name and the name of your agency  
• Remind the patient/family that their provider recommended this service | • Employee ID tag |
| Initiating conversation | • Build trust with patient and family | • Start with a friendly conversation  
• Ask the patient or family if they have any questions or concerns since last visit  
• Review the trigger tracker  
• Review the daily symptoms diary | • Employee ID tag |
| Assess patient and family knowledge of asthma | • Patient and family’s knowledge evaluation | • Ask the family about their basic understanding of asthma | • Consider using standard pre-test questions |
| Home Assessment | • Identification of home asthma triggers and other home health hazards | • Use a validated home environmental assessment tool to inspect the home  
• Inspect all areas of the house/apartment including the hallway outside (if applicable), the building/house entrance, and the surroundings  
• Complete a trigger remediation action plan and give patient or family a copy  
• Give patient/family a trigger tracker and daily symptoms diary to completed until next visit | • Validated home assessment tool  
• Trigger remediation action plan  
• Trigger tracker tool  
• Daily symptoms diary |

### Social barriers

- Identify any economic and social factors that may affect the asthma control
- List the top three barriers identified by the patient and family and find relevant community resources, such as:
  - No money to buy asthma medicines and devices;
  - Unemployment;
  - No health insurance;
  - No transportation;
  - Lack of family support;
  - Language;
  - Health beliefs
  - Domestic violence or abuse
  - Immigration status

### Reinforce Asthma Medication Education

- Using the Asthma Action Plan, review the list of asthma medications and compare with current medications at home
- Use the Asthma Action Plan provided by the clinical team to reinforce the doctor’s instructions
- Identify if the patient or family has any concerns or questions about the prescribed medications
- Reinforce the importance of daily controller medications to treat the inflammation process
- Reinforce the importance of rescue medications during acute symptoms
- Show the patient and family proper technique for using the inhalers with the spacer/aero-chamber and other devices

### Patient and Family Goals

- Identification of actions that can improve asthma control
- Ask the patient (if old enough) what he or she would like to accomplish for the next visit and write it on the “Goals Form”
- Ask the parent/guardian (if applicable) what he or she would like to accomplish for the next visit and write it on the “Goals Form”

### Community resources list

- Asthma Action Plan completed by patient’s clinical provider
- Picture of asthma medications (chart or using the tablet)
- Written materials on how to use inhalers and other devices, including peak flow (if applicable) and nebulizer machine
- Patient educational booklets

### Goal tracking form

### All patients must have a follow-up home visit if any of the following occur:

- An acute exacerbation requiring clinic visit, Emergency Department (ED), and/or hospital stay. **OR**
- Asthma Control Test on follow-up phone call is “not well controlled” or “poorly controlled” **OR**
- Ongoing concerns from family about home-based triggers after Integrated Pest Management (IPM)/Home Remediation is completed **OR**
- Request for follow-up visit by treating provider **OR**
- CHW judgment that follow-up home visit is needed
APPENDIX D: CASE CONFERENCE AND ROOT CAUSE ANALYSIS TOOL

Case Conference (SBAR) and Root Cause Analysis tools are found in the resource center in GSI for download and in the OneCity Health Partner Portal. Alternatively, contact the OneCity Health support desk to request a copy.

<table>
<thead>
<tr>
<th>Community Health Worker: Case Conference Report to Clinical Team</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Situation:</strong> Say what has happened. Briefly describe the current situation. Be specific.</td>
</tr>
<tr>
<td>I am (Name) ________________ Community Health Worker – I have conducted a home environmental assessment and spoke with the parent/care taker about the patient below.</td>
</tr>
<tr>
<td>Patient’s name, age and asthma severity: O Severe Persistent O Moderate Persistent O Mild Persistent</td>
</tr>
<tr>
<td>The reason for the Case Conference:</td>
</tr>
<tr>
<td>☐ The patient had an asthma flare-up that required an Emergency Room visit, hospitalization or need for oral corticosteroid medication since their last PCP visit.</td>
</tr>
<tr>
<td>☐ The patient needs clarification about the contents of the Asthma Action Plan including medication instructions.</td>
</tr>
<tr>
<td>☐ The patient’s Severity Classification of Asthma Control Test: O Not Well Controlled O Poorly Controlled</td>
</tr>
<tr>
<td>☐ Needs identified by the CHW that require attention from the clinical care team, including services that are not within the scope of the CHW’s abilities</td>
</tr>
<tr>
<td>☐ Observations made by the CHW identified environmental triggers and referred patient for home remediation services (IPM)</td>
</tr>
<tr>
<td>☐ Other:</td>
</tr>
<tr>
<td><strong>Background:</strong> Explain circumstances leading up to this situation</td>
</tr>
<tr>
<td>During the home environmental visit, the Community Health Worker:</td>
</tr>
<tr>
<td>☐ Provided self-management education</td>
</tr>
<tr>
<td>☐ Reviewed Asthma Action Plan</td>
</tr>
<tr>
<td>☐ Recommended measures to control triggers in the home environment that make asthma worse</td>
</tr>
<tr>
<td>The patient has asthma symptoms # ________ times per day or # ________ times per week!</td>
</tr>
<tr>
<td>The patient wakes up # ________ nights per week or # ________ times per month because of asthma symptoms!</td>
</tr>
<tr>
<td>The patient uses quick-relief medications for asthma symptoms # ________ times per day or # ________ times per week!</td>
</tr>
<tr>
<td>How often do Asthma symptoms interfere with O School? O Exercise/Activities? # ________ times per day or # ________ times per week?</td>
</tr>
<tr>
<td>The patient is taking the medications on the Asthma Action Plan O 100% O 75% O 50% O less than 25% of the time.</td>
</tr>
<tr>
<td><strong>Assessment:</strong> My concern is: Say what you think is the problem from the Home Environment</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td><strong>Report/Results:</strong> Next steps:</td>
</tr>
<tr>
<td>• Who from the Clinical Team did you speak to:</td>
</tr>
<tr>
<td>• What was the outcome from the Clinical Team Case Conference:</td>
</tr>
</tbody>
</table>
Community Health Worker: Case Conference Report to Clinical Team

SBAR Communication Worksheet
Situation/Background/Assessment/Recommendation-Request

| Patient Name: ___________________ | Patient Date of Birth: ___________________ |
| Community Health Worker’s Name/Agency: ___________________ |
| Primary Care Provider/Clinical Team: ___________________ |
| Facility Name: ___________________ |
| Date of Case Conference: ___________________ |

Case Conference Definition:
- A case conference must focus on the needs of a patient, with the goal of improving the patient’s health or well-being.
- A case conference must have bidirectional communication.
- A case conference may be done via any secure communication medium (e.g., in person, phone, secure email).
- A member of a clinical treating team must be included, and other individuals and organizations should be included as appropriate.
- Case conferences should be initiated for events including (but not limited to) ED visit, hospitalization, worsening of medical status.

1. Before the Case Conference:
   Gather the following information:
   - Patient’s name;
   - Age – Date of Birth;
   - Asthma severity classification from Asthma Action Plan;
   - Review Asthma Self-Management Assessment Results.

   Rehearse in your mind what you plan to say to the Clinical Team:
   - Review Case Conference Report with your supervisor.
   - What is the goal of Community Health Worker case conference?

2. During the Case Conference:
   - Remember to start by introducing yourself by name and location.
   - Present completed Community Health Worker: Case Conference Report to the Clinical Team.

3. After the Case Conference:
   - Document Case Conference in GSI as a “Case Conference Note”.

Implementation Toolkit: Asthma Project (Community Health Worker Services)
Community Health Worker: Asthma Related Emergency Visit or Hospitalization Root Cause Analysis Patient/Caretaker Interview Tool

Patient/Caretaker Root Cause Analysis Review Information

<table>
<thead>
<tr>
<th>Community Health Worker Name/Agency:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Patient Name/Date of Birth:</td>
</tr>
<tr>
<td>Emergency Room Visit – Date:</td>
</tr>
<tr>
<td>Hospitalization – Date:</td>
</tr>
<tr>
<td>Patient/Caretaker Interview – Date:</td>
</tr>
<tr>
<td>Clinical Case Conference – Date:</td>
</tr>
<tr>
<td>Facility Name:</td>
</tr>
</tbody>
</table>

**PATIENT/CARETAKER INTERVIEW**

Hi, my name is ______________________ (Community Health Worker) and I am calling about your Emergency Room Visit/Hospitalization for Asthma on Date: ____________ at ________________ (Hospital). I would like to ask you a few questions to see how we can best support you to self-manage your child’s Asthma to stay safely at home after a visit with the Primary Care Team. The interview takes only 10 minutes of your time.

Interviewee:  □ Patient  □ Family/Caretaker  □ Other

1. **Can you tell me what happened that brought you to the hospital this time?**
   a. ____________________________________________________________
      ____________________________________________________________
      ____________________________________________________________

   b. Why do you think this happened?
      ____________________________________________________________
      ____________________________________________________________

   c. Was there anything you think the Primary Care Team could have been done to prevent your hospital visit?
      ____________________________________________________________
      ____________________________________________________________
2. Medications Management

a. Were changes made in your Asthma medications when you were in the hospital?  
☐ Yes  ☐ No  ☐ Not sure  [if no or not sure → please skip to question 2 d.]

Explain:

b. Did you understand the medication changes?  ☐ Yes  ☐ No

Explain:

c. Did you have trouble filling your new medication at the pharmacy?  ☐ Yes  ☐ No  ☐ N/A

If yes, please check all applicable reasons:

☐ Medication unavailable
☐ Cost prohibited/unable to afford
☐ Not on payer formulary
☐ Other

d. Were you able to take your Asthma medications like the doctor prescribed?  ☐ Yes  ☐ No

Explain:

e. Did you receive easy to understand instructions on how to take your Asthma medications and their side effects?  ☐ Yes  ☐ No  ☐ N/A

Explain:

3. Discharge Instructions and Patient Education

At discharge, did the hospital staff give you:

a. Instructions about your Asthma medications (including dosage, side effects, or changes after your ER Visit or Hospitalization)?  ☐ Yes  ☐ No  ☐ Don’t know

b. Instructions about Asthma symptoms and self-management?  ☐ Yes  ☐ No  ☐ Don’t know

c. The name and telephone number of a person to contact for any questions or concerns?  
☐ Yes  ☐ No  ☐ Don’t know

d. Follow-up doctor visit(s) and what to bring?  ☐ Yes  ☐ No  ☐ Don’t know
4. Community Health Worker (Script – Interview Talking Points)

Let’s go back to the day you went home from the hospital on [Date: ______________]. Think about the concerns or challenges you and/or your family faced when you first returned home. We’d like to know if there is anything the Primary Care Team could have done better to support you and/or your family. I am going to read a list of possible things.

Please let me know if this is an area we need to improve.

**Note to the Community Health Worker:** If the patient/caretaker answers yes to any question below, make sure to refer to columns to the right and ask how likely this issue contributed to the Asthma related Emergency Room Visit/Hospitalization.

<table>
<thead>
<tr>
<th><strong>“Referring to your Asthma related hospital visit, could we the clinical team have....?”</strong></th>
<th>STEP 1</th>
<th>STEP 2 If YES, ask, to what degree did it lead you to the hospital?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes, No, Does Not Apply?</td>
<td>Definitely a factor</td>
<td>Somewhat a factor</td>
</tr>
<tr>
<td>1. Explained things more clearly to you from the Asthma Action Plan?</td>
<td>☐ ☐ ☐</td>
<td></td>
</tr>
<tr>
<td>2. Conducted a follow-up call after you left the hospital?</td>
<td>☐ ☐ ☐</td>
<td></td>
</tr>
<tr>
<td>3. Explained how to identify and reduce Asthma triggers in the home</td>
<td>☐ ☐ ☐</td>
<td></td>
</tr>
<tr>
<td>4. Talked to you more about your Asthma medications and the reason/how you take them?</td>
<td>☐ ☐ ☐</td>
<td></td>
</tr>
<tr>
<td>5. Made it easier for you to get in touch with someone from the Primary Care Team if you needed help?</td>
<td>☐ ☐ ☐</td>
<td></td>
</tr>
<tr>
<td>6. Reduced the time it took to get an appointment with the person who manages your Asthma?</td>
<td>☐ ☐ ☐</td>
<td></td>
</tr>
<tr>
<td>7. Provided written materials for you to look over at home?</td>
<td>☐ ☐ ☐</td>
<td></td>
</tr>
<tr>
<td>8. Provided additional support or information to your caregiver or family members?</td>
<td>☐ ☐ ☐</td>
<td></td>
</tr>
<tr>
<td>9. Discussed what you might expect to happen in the future regarding your Asthma and the expected course of your illness and treatment?</td>
<td>☐ ☐ ☐</td>
<td></td>
</tr>
<tr>
<td>10. Anything else? (please specify)</td>
<td>☐ ☐ ☐</td>
<td></td>
</tr>
</tbody>
</table>

5. Is there anything else you’d like to share with us?

Explain:

________________________________________________________________________

________________________________________________________________________

*Thank you very much for your time!*