Utilizing Community Health Workers to Combat Asthma
A guide to using your Indiana workforce to provide effective asthma home visits

By Improving Kids’ Environment, the Indiana Healthy Homes Alliance and the Indiana Joint Asthma Coalition with technical support from the Green and Healthy Homes Initiative

What is a Community Health Worker?

A Community Health Worker (CHW) is a **frontline public health worker** and trusted member of the community who:

- Provides services in the home/community
- Serves as a **liaison** between health/social services and the community
- Facilitates access to services
- Helps to increase **health knowledge & self-sufficiency**
- Provides outreach, community education, informal counseling, social support, and/or advocacy

What training do Community Health Workers need?

### General training

CHWs are often non-medical personnel. However, some CHWs have additional qualifications, such as:

- Nurses
- Respiratory Therapists
- Paramedics
- Home health aides
- Mental health counselors
- Social workers

CHWs may pursue **certification** through a recognized body. **Certified CHW home visits are now reimbursable by IHCP.**

### Specialty training

- Supplements foundational training/certification
- Enables CHWs to provide effective disease specific education
- Disease specific **asthma training** is now available for CHWs.

**CHW specialty asthma training is available from Improving Kids’ Environment:**

- More information can be found by visiting [www.ikecoalition.org](http://www.ikecoalition.org)
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Why use Community Health Workers to improve asthma health outcomes?

1. Home visits by CHWs are proven effective at improving asthma control.

   43% of children and 52% of adults in Indiana with asthma are **poorly controlled**.
   **Average adherence** to asthma medication regimen is <40%.²
   40% of asthma risk may be attributable to residential triggers.³

   **Home visits have proven to:**
   - Improve medication adherence
   - Reduce environmental triggers
   - Reduce acute care visits⁴

2. In-home asthma education can reduce health care costs.

   Annual asthma-related **self-pay** hospital charges (2016, Indiana): **$21,551/patient**²
   Annual asthma-related **Medicaid** hospital charges (2016, Indiana): **$19,046/patient**²
   Estimated average annual home visit program operational cost: **$2,022/patient**

Sample Hospitals

Self-pay and Medicaid hospitalization reimbursement often do not fully cover cost. The table indicates projected savings based on a typical home visit program structure. Estimates were based on publically available data and utilize certain assumptions.

<table>
<thead>
<tr>
<th></th>
<th>Hospital 1</th>
<th>Hospital 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Asthma admissions/year</td>
<td>400</td>
<td>50</td>
</tr>
<tr>
<td>Unique asthma patients</td>
<td>300</td>
<td>36</td>
</tr>
<tr>
<td># Medicaid</td>
<td>392</td>
<td>49</td>
</tr>
<tr>
<td># Self-pay</td>
<td>8</td>
<td>1</td>
</tr>
<tr>
<td>Annual program enrollment (30% eligible)</td>
<td>88</td>
<td>10</td>
</tr>
<tr>
<td>FTE to provide visits (50/CHW/year)</td>
<td>1.75</td>
<td>0.2</td>
</tr>
<tr>
<td>Avoided non-reimbursed charges (5 years)</td>
<td>$5,751,377</td>
<td>$652,114</td>
</tr>
</tbody>
</table>
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What are the best practices in asthma home visiting?

According to the CDC\(^5\), home visits should:
1. Identify and provide education about asthma triggers.
2. Provide asthma self-management education.
Existing tools and checklists for home evaluation are available. Programs that include basic remediation are even more effective. (example )

Train a workforce to provide in-home asthma education, and identification of asthma triggers. A nationally recognized curriculum is available.

Target the highest utilizers, those that frequently visit the ED or hospital for asthma-related issues.

Integrate CHWs with clinical providers to create a continuum of care. Utilize Asthma Action Plans to coordinate patient and caregivers.

Track patient outcomes to understand impact of home visiting program and share with others.

Outcome of home visit program including basic remediation\(^5\):

- ED Visits:
  - Baseline: 60.5%
  - 6 Months: 22.3%
  - 12 Months: 21.9%

- Hospitalizations:
  - Baseline: 51.1%
  - 6 Months: 10.4%
  - 12 Months: 7.7%

66% decrease at 6 Months, 89% decrease at 12 Months.

Resources for Implementing an Asthma Home Visiting Program

Indiana State Department of Health Asthma Resource Guide 2018
Healthy Homes & Asthma: A Healthy Housing Blueprint to Improving Asthma Outcomes
Guidelines for the Diagnosis and Management of Asthma (NIH)
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How can my organization support asthma home visiting?

1. Expand the role of current in-home work force.
   - Expand the knowledge base of current in home providers
   - Improve asthma knowledge, target adherence, identify triggers
   - Resources to aid in remediation

2. Add home visiting capability to your organization.
   - Consider adding in-home providers to your staff.
   - Partner with existing in home organization(s).
   - Existing personnel (nurses, respiratory therapists, paramedics, aides) may be able to expand into home visiting for a portion of their role.

3. Explore reimbursement options.
   Effective July 1, 2018 Indiana Health Coverage Programs (IHCP) provides reimbursement for disease specific education by certified CHWs per the following requirements:
   - CHWs must be employed by a IHCP-enrolled billing provider and deliver services under the supervision of specific provider types.
   - CHWs must be certified by a recognized body; at this time they include the following:
     - HealthVisions Midwest
     - Mental Health America of Northeast Indiana (MANI)
     - Affiliated Service Providers of Indiana (ASPIN)

References
2. Indiana State Department of Health
3. Krieger, J. (2010). Home is where the triggers are: increasing asthma control by improving the home environment.
5. CDC 6|18 Initiative 2018
7. IHCP bulletin May 31, 2018

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