

## Home Visits for Asthma Patients Improve Symptoms

*Patient-centered outcomes research (PCOR) and comparative effectiveness research (CER) are important sources of data to inform local population health decisions.*



Washington's large, urban local public health department for Seattle and King County used PCOR/CER to conduct a study on the impact of home visits from community health workers to help patients manage asthma symptoms, a health problem which can make it hard for people to breathe.

*"Our work is always toward the underserved communities and making sure that they have the appropriate access. So, the value [of PCOR/CER] is in seeing how this can help the overall system adapt things that have been proven to be better solutions." –Bradley Kramer, PhD, Program Manager*

### Methods

- Through a randomized controlled trial with 551 patients with not very well controlled or very poorly controlled asthma, the research team compared outcomes in patients who received home visits from a community health worker with those who did not.<sup>1</sup>

### Results

- Patients who received home visits experienced more days without asthma symptoms, fewer nights in which their sleep was interrupted because of asthma, and fewer missed work or school days.
- The health department is currently working on the dissemination and implementation of this tested model to communities across Washington state.

### Value of PCOR/CER

#### Addressing local health needs



PCOR and CER yield insights on how to best serve the health needs of a community by helping local health departments implement and pilot evidence-based programming. Engaging in this type of research, organizations can better translate and disseminate results for realistic and relevant public health practice. Through this project, for example, the health department proved the value of home-visits by community health workers for patients with asthma and is playing a key role in implementing the tested model throughout the state. There is additional potential for the results to be used by other stakeholders and communities across the country.

#### Developing partnerships

PCOR and CER also provide a unique opportunity to collaborate with diverse stakeholders in the community.

- A partnership with an **academic institution**, such as a local university, is particularly helpful. Health departments can benefit from universities' expertise in and resources for conducting research; universities can benefit from health departments' staff and relationship with community partners, which can be helpful in executing interventions. Such partnerships between academic institutions and health departments can also yield stronger dissemination possibilities, such as high-quality publication in peer-review journals on the academic side and increased visibility through community and clinical organizations through the health department side.
- Relationships with **local stakeholders** can also be valuable if health departments intend to encourage the provision of direct services by community-based organizations.



## Key Stakeholders

- **Experts.** The largest Federally Qualified Health Center (FQHC) networks in King County, Medicaid managed care organizations, and regional asthma experts were consulted individually in preparation for the application for the PCORI-targeted funding award to determine whether a community health worker model coordinated with asthma care teams and across frontline providers was possible or appropriate.
- **Patients and caregivers.** Adults who had asthma or were caregivers of children with asthma provided feedback on which outcomes of asthma management they valued, what helped control asthma, and which barriers affected their control of asthma.
- **Team of partners.** Throughout the study, a Project Partners team of 15-20 members met monthly.
- **Community health workers,** which included representatives from the research team and visitors across the broader stakeholder set, were also convened weekly to conduct a clinical review of home-based services and continued professional development and training on the study protocols. With the community health workers serving as a collective patient perspective, these meetings allowed for routine review of feedback from patients' homes and clinical connections. Over the entire intervention period, regularly reviewing feedback from over 500 homes on a weekly basis as a whole team brought the vast diversity of patient and community experiences and obstacles to light. They also enabled community health workers to process heartening and difficult experiences in a collaborative environment that was supportive and enriching.
- **Patient-Centered Outcomes Research Institute (PCORI).** The research study and current dissemination efforts was/are funded by PCORI. PCORI's focus on community engagement served as one of the reasons Public Health – Seattle and King County decided to pursue funding through the institute.

## References

[1] Engaging Communities in Asthma Studies: How We Can Make a Difference, 2 May 2017, <https://www.pcori.org/blog/engaging-communities-asthma-studies-how-we-can-make-difference>

At A Glance	
<b>Health Department Name</b>	Public Health – Seattle and King County
<b>Health Department Location</b>	Seattle and King County, Washington
<b>Health Department Size</b>	Large (serves 500,000+ people)
<b>Health Department Setting</b>	Mixed
<b>Project Description</b>	Impact of home visits from community health workers to help patients manage asthma symptoms
<b>Project Funder</b>	Patient-Centered Outcomes Research Institute (PCORI)
<b>Health Department Role</b>	Project lead
<b>Facilitators and Barriers to PCOR and/or CER</b>	<ul style="list-style-type: none"> <li>• <b>Facilitators:</b> meaningful and consistent engagement with stakeholders, administrative infrastructure, and familiarity with managing similar grants</li> <li>• <b>Barriers:</b> no significant barriers</li> </ul>
<b>Value of PCOR and/or CER</b>	<p><b>PCOR and CER provide an opportunity to:</b></p> <ul style="list-style-type: none"> <li>• Learn how to best serve the health needs of a community</li> <li>• Collaborate with diverse stakeholders in the community, including academic institutions that can provide valuable research expertise and support</li> </ul>