Bree Pediatric Asthma 06.21.22
Home Environment Draft Recommendations

Draft Recommendations

Home-based multi-trigger, multicomponent interventions can reduce exposure to multiple indoor asthma triggers (allergens and irritants). These interventions involve home visits by trained personnel to:

- Assess the home environment
- Change the indoor environment to reduce exposure to asthma triggers such as mold removal, pest management, allergen management, and air filters
- Provide trigger-abatement products, such as bedding encasements, vacuums, and cleaning supplies
- Provide education about the home environment

Programs may also include additional non-environmental activities:

- Training, motivational interviewing, and goal setting to improve asthma self-management
- General asthma education on self-care including medication adherence, inhaler technique, symptom management, and trigger assessment/reduction
- Social services and support, including coordinated care for the asthma client such as referrals to resources and legal/housing assistance
- Encouragement of smoke-free environments (Consider environmental tobacco smoke at the same level of importance as other asthma triggers)
- Combine asthma-related interventions with other health interventions, such as teaching lead-poisoning prevention and offering vaccinations.

Operational/Programmatic Recommendations:

- Design the program to address all four components of the National Heart Lung and Blood Institute's (NHLBI) National Asthma Education Prevention Program's (NAEPP) clinical guidelines.
- Home environment programs should consider behavioral and social drivers of disparities through integrated medical, educational, and environmental components
- Tailor the program for diverse populations and cultures. Design outreach to patients and families.
- Follow-up with multiple visits (at least 3 times) to build relationships with patients and caregivers.
- Include a face-to-face component, including in-person or virtual access
- Pediatric patients admitted to the hospital for asthma should be referred for a home-based assessment and intervention where available
- Hire and train community health workers to implement interventions to improve outreach to primarily low-income and ethnic minority populations.
    - Follow the NCQA/Penn Medicine guidelines to support CHWs, including recruitment via community-based avenues, minimizing traditional hiring barriers,

providing promotions/leadership opportunities, and ensuring sustainable funding.

- Several different professionals may be responsible to conduct home-based assessments and interventions, including community health workers, promotoras, nurses, social workers, or certified asthma educators.
- Expand adoption of comprehensive asthma education programs for high-risk populations. Use existing evidence on improved outcomes and cost-effectiveness to make the case for adoption.
- Address barriers to implementation, including reluctance of families or caregivers, inability to maintain follow-up, difficulty scheduling, and poor compliance.
    - Work with family/caregiver schedules to provide services outside of work or school hours.

Care Coordination/Communication Recommendations

- Consider implementing SDOH screening (Bree recommendations)
- Form strong partnerships and communication policies between health and social service organizations.
- Invest in bidirectional care coordination solutions.

Funding Recommendations (will be included in later conversations as well)

- Consider payment model other than FFS, including alternative payment models such as bundled payments, multipayer primary care, and others.
- Provide sustainable funding for multi-component home environment interventions and care coordination for asthma. Consider combining asthma management with other services from community health workers.