

Evolving Concept of Asthma Care: The patient centered medical home

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and

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No disclosures



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We have associations or memberships with the following organizations

Stony Brook University Hospital

Association of Asthma Educators

Asthma Coalition of Long Island

American Thoracic Society

American Academy of Pediatrics

American College of Chest Physicians

National Association of Pediatric Nurse Practitioners



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Objectives

After attending this presentation the learner should be able to:

- 1 define **patient centered medical home** as an evolving concept of asthma care
- 2 recognize the role of **community health workers** as the link between families and health care providers
- 3 demonstrate a process whereby a **multifaceted approach** will address confounders and challenges of asthma care



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What is *patient centered medical home (PCMH)*

- a model of care
 - emphasizes care coordination and communication
 - transform primary care into “what patients want it to be”
- empowers the patient to be an active part of his/her health care team
 - physician-led team approach
 - staff works to the highest capability of license/skills

National Committee for Quality Assurance (NCQA)
Healthcare Association of New York State



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Standards

patient centered medical home (PCMH)

1. Patient-Centered Access:

- Accommodate patients' needs during and after hours, provide medical home information, offer team-based care

2. Team-Based Care:

- Engage all practice team members meet cultural and linguistic needs of patients

3. Population Health Management:

- Collect and use data for population management



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Standards

patient centered medical home (PCMH) -continued

4. Care Management and Support:

- Use evidence-based guidelines for preventive, acute and chronic care management

5. Care Coordination and Care Transitions:

- Track and coordinate tests, referrals and care transitions

6. Performance Measurement and Quality Improvement:

- Use performance and experience data for continuous improvement



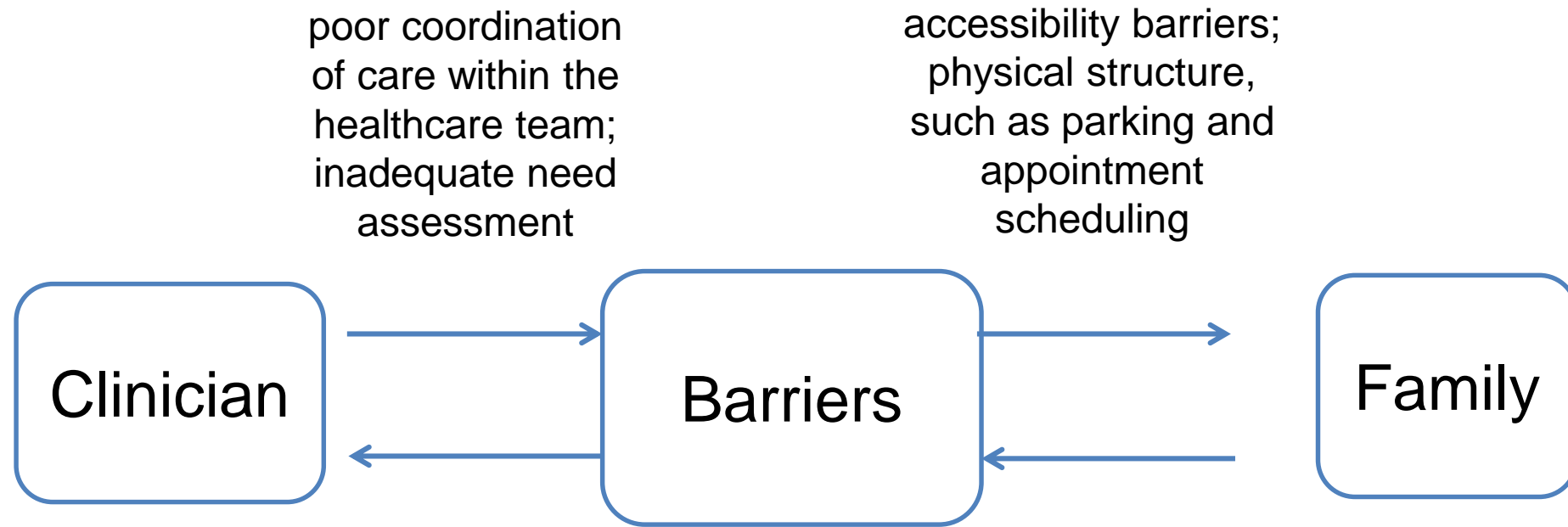
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Why **asthma** as the model chronic disease for *PCMH*

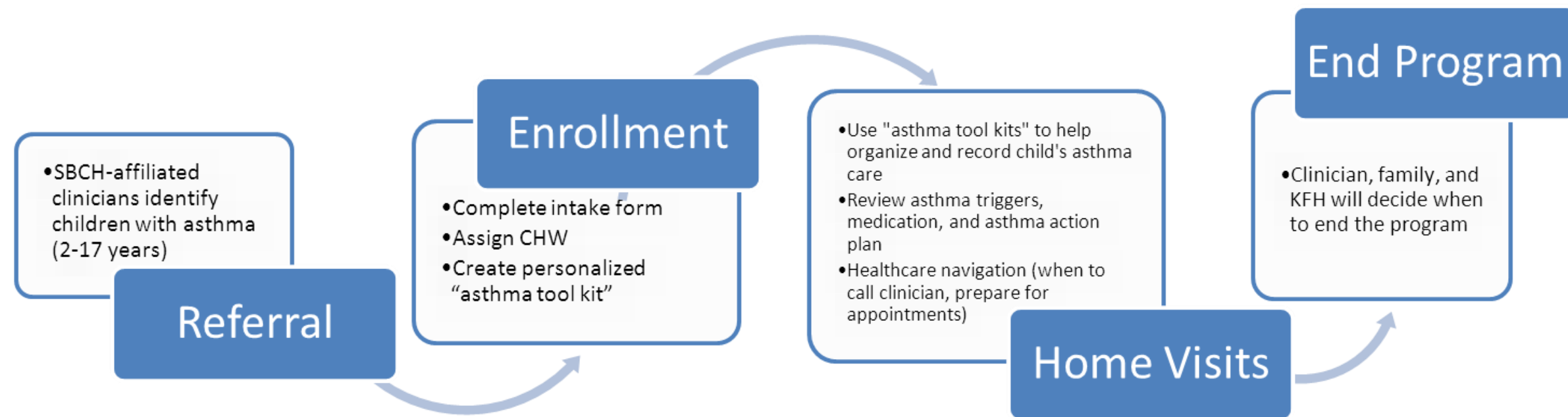
- Asthma is intertwined with **issues on health literacy, cultural barriers and poverty**
- **Partnership with patient and families** is a significant emphasis in asthma care
- The changing face of healthcare is geared towards **preventative care and the community**



Barriers to optimal services experienced by patients with asthma



Stony Brook model for *PCMH* – Keeping Families Healthy



Keeping Families Healthy (KFH)

- Launched July 2011
- Pediatricians refer “at risk” patients
- Community Health Workers (CHWs):
 - Assist with healthcare navigation
 - Provide basic health education
 - Connect families to community resources
- Program is tailored to the needs of each family
- Over 2600 home visits for more than 730 children



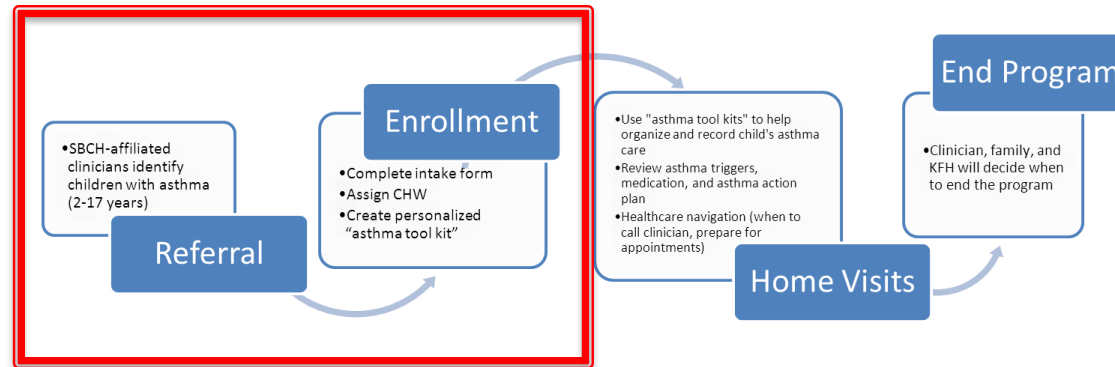
Starting July 2012, Stony Brook Children's Pulmonary Division began collaborating with KFH to:

1. Train CHWs in asthma education and self-management techniques (By AE-C)
2. Enroll high risk patients
3. Review families' progress in self-management
4. Increase patient-provider communication via CHWs



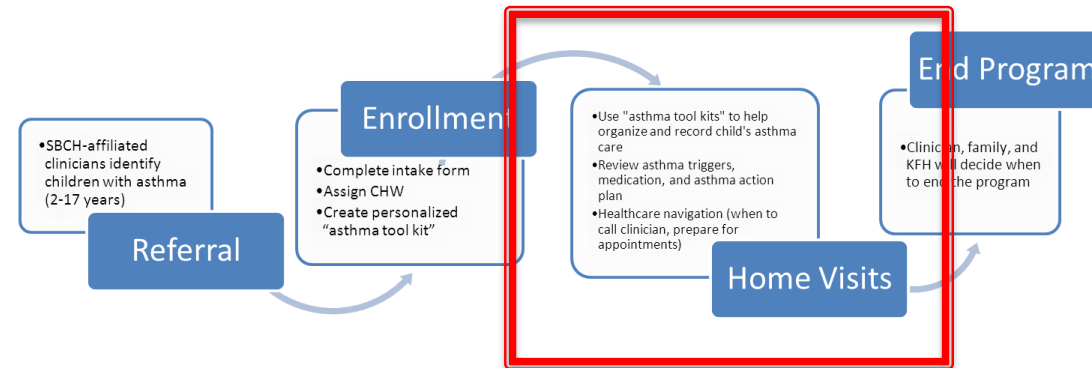
Prior to Initial Visit

- Clinician identifies and refers high risk patients
- KFH contacts family to enroll
- Clinician reviews the patient's asthma management plan with KFH staff
- KFH creates a personalized asthma tool kit



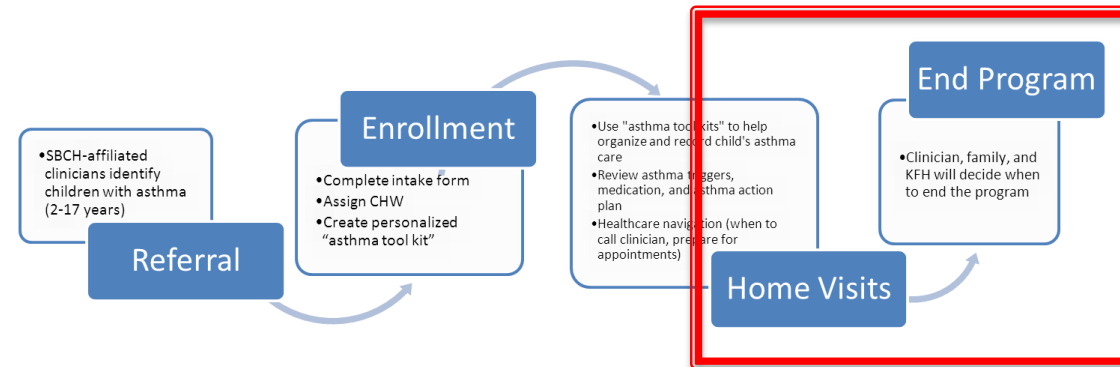
During the Visit

- CHW conducts home visits to:
 - Assist families in understanding the content of their Asthma Action Plan (AAP)
 - Address barriers to adhering to the AAP
 - Follow up with care coordination
 - Discuss techniques for triggers avoidance
 - Give referrals to community resources



Between Home Visits

- CHW write summary of visit
- Summary sent to clinician through EMR
- Clinician reviews and gives feedback
- CHW checks in with family



Research

- CHWs complete CITI and HIPAA trainings
- IRB approval for research activities
- Families are asked to participate in a research study (sign consent)
- CHWs use health technology (iPad) to collect data
- REDCap, secure online database, collects data in real time



Asthma Specific Questions:

- # ED visits and Hospitalizations
- Controller and Rescue Medications Reviewed
- Devices Used (Inhaler with Spacer, Nebulizer)
- Asthma Action Plan Reviewed
- Medication at school/daycare
- Triggers and how to reduce/avoid
- Known Allergies
- If Flu Vaccine Given

| | |
|--|---|
| Do you have an Asthma Action Plan (asthma home care plan)? | <input checked="" type="radio"/> Yes <input type="radio"/> No <input type="radio"/> Don't know <input type="radio"/> Refused to answer |
| It is a plan given to you by a doctor to help you decide what medications to take and when to seek a doctor. | reset |
| Let's review the asthma action plan together. | <input checked="" type="radio"/> CHW discussed with family <input type="radio"/> CHW did not discuss with family <input type="radio"/> Caregiver refused |
| Review the plan and see if the family knows how to use it. | reset |
| Does your child have a controller medication? | <input checked="" type="radio"/> Yes <input type="radio"/> No <input type="radio"/> Don't Know <input type="radio"/> Refused to answer |
| Medication taken regularly to control chronic symptoms and prevent asthma attacks. E.g. Flovent, Pulmicort, Singulair | reset |
| Review controller medication with family. | |
| Family to record information in notebook. CHW in text box. 1) Name 2) Dose 3) Frequency 4) Number of puffs/pills remaining 5) When to refill prescription | Expand |
| Does your child take the controller medication by inhaler, nebulizer or both? | <input checked="" type="radio"/> Inhaler <input type="radio"/> Nebulizer <input type="radio"/> Both <input type="radio"/> N/A (pill) <input type="radio"/> Don't know <input type="radio"/> Refused to answer |
| Clarify inhaler vs. nebulizer with pictures. | reset |
| Remind family it is recommended for the child to rinse their mouth after inhaling/taking the medicine to reduce side effects (i.e. sore throat, thrush) | |
| Does he/she use the inhaler with a spacer and a mouthpiece/mask? | <input type="radio"/> Use with spacer and mouthpiece/mask <input type="radio"/> Use spacer without mouthpiece/mask <input checked="" type="radio"/> No to both <input type="radio"/> Don't Know <input type="radio"/> Refused to answer |
| A spacer is a plastic tube that connects to the inhaler and makes the medication reach the lungs better. | reset |
| He/she may benefit from using the inhaler with a spacer and a mask/mouthpiece. | <input checked="" type="checkbox"/> CHW gave family a spacer and mask/mouthpiece <input type="checkbox"/> CHW told family to ask doctor about proper use <input type="checkbox"/> CHW did not discuss <input checked="" type="checkbox"/> Caregiver ask doctor at next visit <input type="checkbox"/> Caregiver refused/not concerned |
| Give caregiver a spacer and/or a mask. Caregiver should ask pediatrician how to use at next appointment. | |
| Check all that apply. | |
| Does the controller medication match the child's Asthma Action Plan/doctor's order? | <input checked="" type="radio"/> Yes <input type="radio"/> No <input type="radio"/> Don't Know <input type="radio"/> Refused to answer |
| Reinforce the importance of taking controller medications as directed by the doctor (likely everyday), even when feeling well and/or no symptoms. | reset |
| Does your child have a rescue medication? | <input checked="" type="radio"/> Yes <input type="radio"/> No |

Data Collected During Initial KFH Visit



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| Initial Barriers | Improvements |
|--|---|
| CHWs are not AE-C | <ul style="list-style-type: none"> -REDCap restructured to guide the CHW in data collection and to identify “teaching moments” in real time -Ongoing asthma education provided to the CHWs by AE-C -KFH given access to EMR clinician notes and medical treatment plan |
| Families are hesitant to agree to home visits | <ul style="list-style-type: none"> -“Warm Hand-off” from clinician to KFH introduced family to the benefits of the program -Asthma tool kits provided incentives for participation |
| KFH visit summaries were not easily accessible to clinicians | <ul style="list-style-type: none"> -Integration of EMR allowed instant messaging of visit summary to clinician for review and feedback |
| Families were not interested in logging medication and symptoms | <ul style="list-style-type: none"> -Personalized sticker logs created for young children -Parents and older children encouraged to download asthma phone apps -Clinician reviewed logs in office and reiterated importance of logging |



Personalized Tool Kits

- Stony Brook Children’s Bag
- Asthma Care Notebook
- Personalized Health Information Sheets
- Asthma Education Handouts
- Spacers and Masks
- Pillow and Mattress Dust Mite Covers



| Indications | | Quick Relief, As Needed | |
|--|--|---|--|
| Inhaler with Spacer | | albuterol 1 amp, Nebulized, OR albuterol Inhaler with Spacer 2 puffs, Every 4 hours as needed for symptoms. | |
| Singular 5mg 1 tablet, oral, at bedtime | | -If needing more than every 4 hours, call your Pediatrician or seek Emergent Care | |
| Fluticasone nasal (Flonase 0.05 mg/inh nasal spray) 1 spray each nostril, at bedtime | | -If needing Albuterol more than 2 days a week, please call pediatrician to let them know | |

(Child's Name)
Medicine Chart

| Date: | Monday | | Tuesday | | Wednesday | | Thursday | | Friday | | Saturday | | Sunday | |
|--|--------|-------|---------|-------|-----------|-------|----------|-------|--------|-------|----------|-------|--------|-------|
| | Puffs | Pills | Puffs | Pills | Puffs | Pills | Puffs | Pills | Puffs | Pills | Puffs | Pills | Puffs | Pills |
| Symbicort AM (rinse mouth) | | | | | | | | | | | | | | |
| Symbicort PM (rinse mouth) | | | | | | | | | | | | | | |
| Singular | | | | | | | | | | | | | | |
| Flonase | | | | | | | | | | | | | | |
| Albuterol (as needed) | | | | | | | | | | | | | | |
| Albuterol (as needed) | | | | | | | | | | | | | | |
| Symptoms? <small>(none, coughing, wheezing, tight chest, etc)</small> | | | | | | | | | | | | | | |



KFH evolved from few referrals to a more robust asthma medical home (after QI) to now a proposal medical home concept for DSRIP



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Delivery System Reform Incentive Payment (DSRIP) Program

New York State will implement the Medicaid Redesign Team

fundamentally restructure the health care delivery system by reinvesting in the Medicaid program

primary goal of reducing avoidable hospital use by 25% over 5 years



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Expansion of Asthma Home-Based Self-Management Program

Project Objective: Implement an asthma self-management program including home environmental trigger reduction, self-monitoring, medication use, and medical follow-up to reduce avoidable ED and hospital care.



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Benefits of CHWs

- Home monitoring
- Ongoing asthma education
- Coordination of asthma care
- Identification of risk factors and barriers
- Assistance with referrals, transportation, communication and arranging medical appointments, insurance , pharmacy, community referrals such as : DOH, landlord assist with home environmental issues, CPS coordination of care and more
- Assist with provider communications



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Community Health Workers

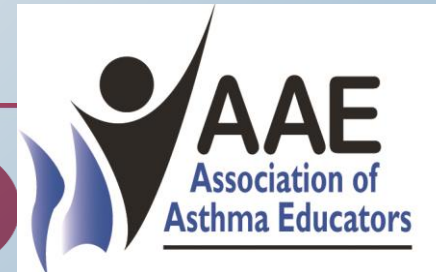


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Launch of the AAE's
*Asthma Education for the Community
Health Worker:*
A National High Quality Curriculum

Traci Hardin, MPH, AE-C

Ellen A. Becker, PhD, RRT-NPS, RPFT, AE-C,
FAARC



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AAE Educational Initiatives

Advanced Level

*AAE's National Asthma Educator Certification/
Preparatory & Recertification Course*

Intermediate Level

*AAE's Becoming an Asthma Educator and Case
Manager (BAECM)*

Introductory Level

?



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AAE CHW Initiative

July 2012:

AAE Board initiated the CHW Task Force
Consistent national curriculum for asthma education
Reviewed existing resources
Utilized medical terminology
Assumed prior asthma education knowledge
Reached out to AAE members for feedback

August 2013:

Recruited additional AAE member (CHW Task Force) involvement

September 2013 – May 2015:

Curriculum development, pilot programs, editing based on pilot feedback

June 2015:

Video Shoot of Didactic Content



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Funding & Collaboration

The CHEST Foundation Community
Service/Humanitarian Grant

Funding for video production

South Carolina Department of Health &
Environmental Control



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Design of Asthma Education for the Community Health Worker Program

Six modules

Didactic content & learning activities

120 minutes each

Comprehensive Evaluation of mastery of information

Video for didactic content

“Taught” by experienced CHW

Ensures continuity of content

Allows for additional review of information



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Design of Asthma Education for the Community Health Worker Program

Trainer(s)

AE-C

Approved AAE Faculty

Materials:

Participants: 5 workbooks, 1 DVD

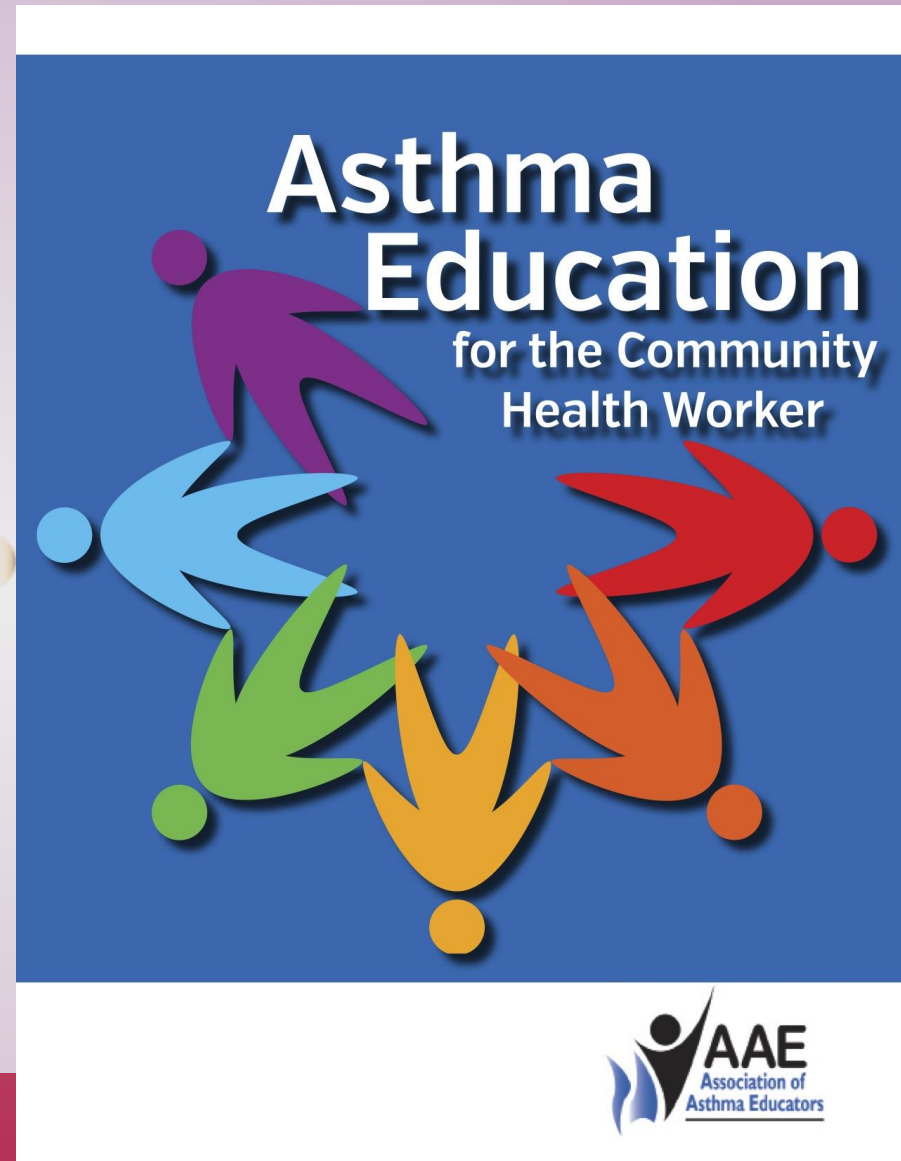
Trainers: Manual, 1 DVD

AAE Certificate of Completion



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Module 1: *The Scope*
Module 2: *Triggers & Environmental Control*
Module 3: *Medications*
Module 4: *Medication Delivery Devices*
Module 5: *Assessment & Monitoring*
Module 6: *Comprehensive Evaluation*



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Module Basic format

- Review Activity- previous Module Material
- Video of Didactic Content (10-20 minutes)
- 2 Learning Activities



Suggested Delivery Format

- (6) 2-hour sessions
- (3) 4-hour sessions
- Encourage continued review of material between sessions



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To be determined

- Final competency test
 - Scoring Framework
 - AAE Certificate of Completion
- Completion date (Estimated October 2015)
- Costs



Pilot Sites-Acknowledgements

El Centro, CA * Dr. Saima Khan

Oakland, CA * Mary Frazier

Kansas City, MO * Ben Francisco

● Albany, NY * Kathleen Ristau

Columbia, SC (3 groups)



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CHW Task Force -Acknowledgements

Jennifer Andrus, RRT, AE-C

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CASE #1

The patient centered medical home

Patient: J A-S

Age 7 yo

Diagnosis: moderate persistent asthma,
with a history of

- Severe exacerbation including intubation 1st year of life
- 2x/yr OCS & Ed visits

Other: chronic rhinitis & OSA

Other contributing factors affecting asthma control & home management:

Sibling newly diagnosed Type I DMM

Mother: depression with recent inpatient psych admission

Admittedly having problems with focus & memory

& is concerned about ability to carry out effectively & correctly a home management plan for this child



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Question:

What kind of assistance with the medical home model can be offered?

- 1- Collaboration, communication with this child/families PCP & office staff
- 2- Home assessment by a PHN
- 3- Home visits by a CHW trained in asthma in home assessment & home management plans
- 4- Home social work visit/assessment
- 5- Possible need for CPS preventative services



Nurturing a Partnership

KFH Visit summaries are sent to the clinician and uploaded into electronic medical records (EMR) for review

- Opening the lines of communication
- Identifies issues between doctor's appointments
- More frequent communications between patient/family and caregiver

Confidential

Keeping Families Healthy Phase 2
Child Name KFH Client (Initial Visit)
Page 1 of 2

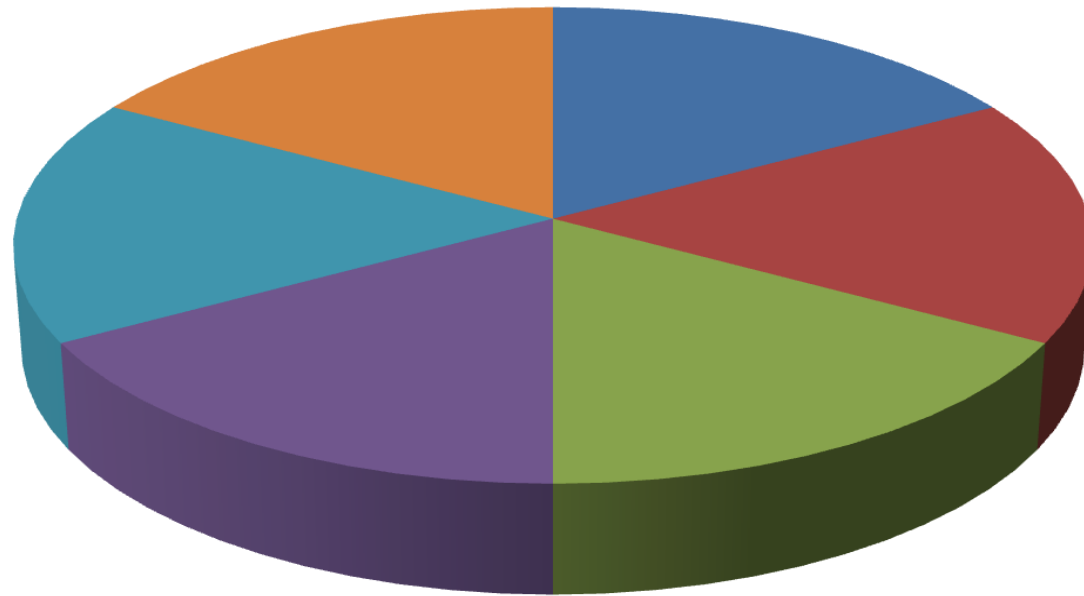
KEEPING FAMILIES HEALTHY Visit Summary

| | |
|--|--|
| Child Name | KFH Client |
| Child's DOB | 2008-11-04 |
| Child's MRN | |
| Visit Date | 2014-06-10 |
| Physicians involved in care | PMD: SB Tech Park Primary SB Pulmonary & Allergy |
| Pediatrician or Nurse to Review? | <input type="checkbox"/> Pediatrician to Review <input checked="" type="checkbox"/> Nurse to Review |
| Active issues: (Medical conditions, reason for referral, etc) | Poorly Controlled Asthma |
| Interval history: (What's happened since the last KFH visit) | Initial Visit |
| Medication list: | - Flovent HFA 44 mcg/inh) 2 puffs, Inhaler with Spacer, Twice daily - Flonase Nasal Spray, 1 spray each nostril, once a day - Albuterol 2 puffs, Inhaler and spacer, every 4 hours as needed |
| Upcoming appointments: | 7/3/14: Pulmonary 9/15/14: Allergy Next well check due November (not scheduled) |
| KFH goals addressed at this visit (check all that apply): | <input checked="" type="checkbox"/> Clarify how to seek appropriate medical treatment <input checked="" type="checkbox"/> Empower families to be prepared for doctors' appointments <input checked="" type="checkbox"/> Facilitate families understanding of the doctor's recommendations <input checked="" type="checkbox"/> Facilitate families creation of a system to keep track of their child's medical information <input checked="" type="checkbox"/> Identify and address barriers to obtaining healthcare <input checked="" type="checkbox"/> Provide appropriate health education <input checked="" type="checkbox"/> Connect families with local community resources |
| Visit summary: | Summary of what was discussed: ~Information collected ~CHW Concerns ~Parent Concerns ~Questions for doctor |
| Health education handouts given and explained during the visit | -SB Asthma Education Handouts -KFH personalized asthma logs -General Health Education Handouts |
| KFH plan: | -What the CHW will follow-up with |



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A Multi-Faceted Approach to Pediatric Preventive Care

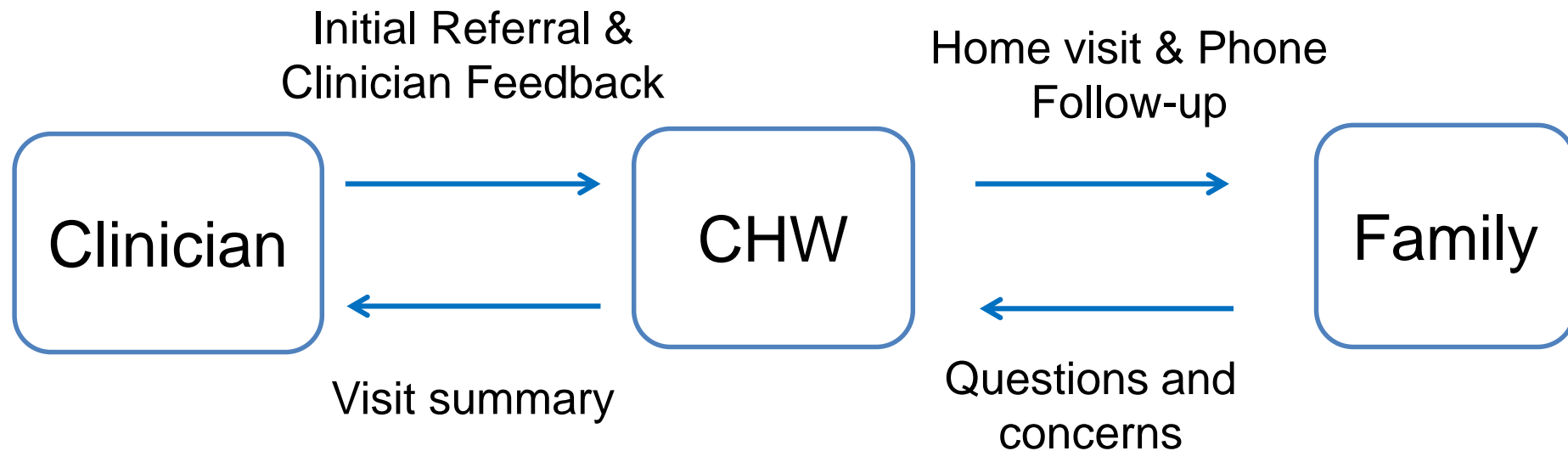


- Health Literacy
- Health Education
- Health Technology
- Growth and Development Screening
- Partnership
- Outcomes Driven Healthcare: Improving Quality



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CHW acts as a BRIDGE between clinicians and families



THANK YOU



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Questions?



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