Childhood Asthma and How Asthma Educators Can Help

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Childhood Asthma is Challenging on Many Levels – Asthma Educators Can Help

Widespread and Serious
- Asthma is the most common chronic condition among children
- 55% had at least one asthma attack in the previous year
- 1 in 7 ever diagnosed

Costly
- $8-10 billion in medical expenditures
- Additional $10 billion in indirect costs
- 40% higher emergency department costs

Preventable and Avoidable
- Asthma educators have been shown to effectively reduce the number of days with symptoms, emergency department visits and hospitalizations
The Merck Childhood Asthma Network, Inc. (MCAN) enhances the quality of life for children with asthma and their families, and reduces the burden of the disease on them and society by:

- Improving **access to and the quality of asthma healthcare services** for children, especially those who are vulnerable and medically underserved.
- Advocating for **policies** that expedite implementation, dissemination and sustainability of science-based asthma care.
- Increasing **awareness and knowledge** of asthma and quality asthma care.

The Merck Childhood Asthma Network, Inc. (MCAN) is a nonprofit 501(c)(3) organization founded in 2005 and funded by The Merck Foundation.
Partnerships, Breakthrough Ideas Communicate Value of Asthma Educators, Create Path for Widespread Adoption

Community Healthcare for Asthma Management and Prevention of Symptoms (CHAMPS)

Head-off Environmental Asthma in Louisiana (HEAL), Phase II

Care Coordination Program Sites (Chicago, Los Angeles, Philadelphia and Puerto Rico)

Childhood Asthma Leadership Coalition (CALC)

“Putting Together the Pieces to Manage Childhood Asthma” Infographic
ASSOCIATION OF
ASTHMA EDUCATORS (AAE)

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Mission & Vision

Mission
AAE is the premier inter-professional organization striving for excellence to raise the competency of diverse individuals who educate patients and families living with asthma.

Vision
The leading resource for asthma educators and the premier provider of evidence-based asthma education:

- Advocates for patients with asthma and their families
- Advocates for underserved and minority populations, and addresses disparities in asthma outcomes
- Improves asthma management and education outcomes
Who We Are

- Asthma educators
- Nurses
- Advanced practice nurses
- Respiratory therapists
- Pharmacists
- Physicians
- Physician Assistants
- Allied health professionals
- Public/community health professionals
- Health educators
- School health professionals
- Social workers
AAE Responds to Disparities Through Community Service Projects

• New Orleans 2009
  – Parish Nurses & Outreach Workers asthma training
  – Parish Nurses & Outreach Workers continue to use presenters as a resource
  – Asthma Health Fair for over 25 patients and families

• Orlando 2010
  – AAE partnered with Not One More Life, Inc. (NOML) to work with the Nemours Children's Clinic – Orlando, Division of Pediatric Pulmonology to present a NOML asthma educational program that consisted of asthma screening, counseling, referral, and outcome monitoring as a means to address the disparities in morbidity and mortality attributable to asthma and other lung diseases among minority and poor populations.
  – The program was provided at a Christian Health Clinic, Grace Medical Home, in Orlando, FL.

• Portland 2012
  – AAE partnered with Josiah Hill Clinic, Healthy Homes Coalition and the American Lung Association of the Mountain Pacific to offer a free asthma educational session to low-income women in the Portland/NW region who are impacted by asthma.
  – The title of the program was “Everyone Needs to Take a Breath!” We focused on asthma self-management, challenges and solutions.
  – The program was provided at Highland Christian Center, in Portland, OR.
Important Barrier in the Field of Asthma Education – Reimbursement

- There are CPT billing codes
- Unlike diabetes, there is not comprehensive national reimbursement of asthma education
- Reimbursement is state-by-state
- Programs need to go to payers within the state and educate them on what program proposes to do
- Successes include MaineHealth & Minnesota Health Care
- More policy work necessary

Reimbursement

CPT Billing Codes
- 94010 Spirometry “pre”
- 94060 Spirometry “post”
- 94620 Spirometry “exercise”
- Procedure Codes:
  - 99211 for face to face education
  - 94664 for instruction on mdi’s, nebulizer, etc.

http://www.mmc.org/workfiles/mh_professional/Asthma/CodingforPatientEncountersrs4-09.pdf
THE ROLE OF ASTHMA EDUCATORS IN ASTHMA EDUCATION AND MANAGEMENT

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What is an Asthma Educator?

Simply stated, the educator/counselor is one who has in-depth evidence-based knowledge of asthma and its management and is able to impart this knowledge to patients in an effective manner that results in the ability of the patient to adequately manage his/her asthma.
Who are Asthma Educators?

- Nurses
- Respiratory therapists
- Nurse practitioners
- Physician assistants
- Physicians
- Pharmacists
- Case managers
- Social workers
- Health educators
- Community health workers
- School and allied health professionals
Settings Where Asthma Education Can Take Place

- Asthma educators
- Nurses
- Advanced practice nurses
- Respiratory therapists
- Pharmacists
- Physicians
- Physician Assistants
- Allied health professionals
- Public/community health professionals
- Health educators
- School health professionals
- Social workers

EPR-3: Asthma self-management education is essential to provide patients with the skills necessary to control asthma and improve outcomes (Evidence A).
How is Asthma Education Beneficial?

Meta-Analysis of 37 studies

27 compared asthma education interventions with ‘usual care’

Findings: Asthma education was associated with statistically significant decreases in mean hospitalizations and emergency department (ED) visits.
- Trend toward lower odds of ED visits
- Asthma education did not affect odds of admissions or mean number of urgent doctor visits

10 compared different types of asthma education interventions

Findings: Results suggest that providing more sessions and more opportunities for interactive learning may produce better outcomes.

Effects of Asthma Education on Children’s Use of Acute Care Servies: A Meta-analysis.
Researchers used a chronic care model and invited 23 patients with asthma 13 – 80 years old to describe their asthma-related medical experiences and their opinion on five leaflets about asthma medications.

They found that slightly over half the patients felt that the information given to them by their healthcare provider was unclear or confusing or not what they wanted.

The investigators concluded that patients prefer ‘personal contacts’ rather than ‘written sources’.

Patients with chronic asthma found medicine information to be unclear or confusing, did not receive complete information on medicine use and side effects, and found leaflets to be unhelpful. Evidence Based Nursing:2005;8;28
Components of Asthma Education That Promote Self-Management

- Pathophysiology
- Medications
- Device use & technique
- Asthma attacks
- Co-morbidities
- Asthma Action Plan
- Triggers
- Medication use outside the home
- Address adherence
- Teach children as they get older

AND THE LIST GOES ON!
Certified Asthma Educator (AE-C)

National Asthma Educator Certification Board (NAECB)

- Separate from the Association of Asthma Educators (www.NAECB.com)

- Certification period is for 7 years

- May use the designation ‘AE-C’

- Eligibility: Licensed/credentialed health care professionals OR individuals providing direct patient asthma education with a minimum of 1,000 hours experience in these activities.
Advantages of Becoming a Certified Asthma Educator

- ‘Demonstrates that rigorous education and experience requirements have been met’ (NAECB)
- Reimbursement may be contingent on becoming a certified asthma educator
- May lead to increased pay and recognition in the workplace
Certification Exam

Considered by many to be a difficult exam.

Ways to improve success

▪ Self-assessment examination – NAECB

▪ National Asthma Educator Certification and Recertification Review Course (live or on DVD) – AAE (www.asthmaeducators.org)

▪ Coming soon! Review course designed especially for community health workers – AAE
Professional Challenges Experienced

• Subspecialty in an academic clinic

• Primary focus: management of children with moderate-to-severe persistent asthma

• Incorporating NHLBI guidelines into practice affects patient flow

• Developing an asthma program is time-consuming
Insights from the Head-off Environmental Asthma in Louisiana (HEAL), Phase II Project

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Asthma Prevalence in Post-Katrina Greater New Orleans Area

By Parish

Orleans 12.8%
- 6,041 children have asthma
- 19,754 adults have asthma

St. Bernard 12.7%

St. Tammany 10.7%

Plaquemines 10.4%

Jefferson 9.9%

HEAL, Phase II Overview

**Goals & Components**

- Builds upon the lessons learned from HEAL I.
- Implement a multi-component pediatric asthma care project in the greater New Orleans area.
- Identify and sustain aspects of HEAL, Phase II, associated with positive asthma outcomes.
Collaboration Key to HEAL, Phase II Success

- Xavier University
  - College of Pharmacy
  - Center for Minority Health and Health Disparities Research and Education
- Daughters of Charity Health Centers (DCHC)
- Merck Childhood Asthma Network, Inc. (MCAN)
- Children’s Health Fund Pediatric Mobile Unit (CHF)
Moving Towards Implementation

Planning Period
- Building trust between collaborators
- Collecting information
- Assessing workflows
- Analyzing benefits and identifying enhancements

Pilot Testing
- Training of Staff
- Implementation
- Ongoing meetings
- Proposed refinements

Institutionalization of Enhancements
- Finalized enhancements
- Ongoing testing
- Monitoring patient care outcomes
Medical Assistant
- Asthma Control Test (ACT)/Childhood Asthma Control Test (C-ACT)
- Peak flow reading and predicted peak flow

Physician
- Reviews and totals ACT/C-ACT score
- Determines level of severity or control
- Completes Asthma Action Plan and ASI

Asthma Educator (AE-C)
- Asthma Education Inventory
- Child Asthma Risk Assessment Tool (CARAT),
- Asthma Belief Scale
- Caregiver/Patient Satisfaction Surveys
- 2 weeks follow-up calls following clinic
- 6 and 12 month follow-up
HEAL, Phase II Closing the Gap in Asthma Care

- Diagnoses level of severity and plans care
- Comprehensive asthma care
- Trained on EPR-3 asthma guidelines

- Comprehensive and tailored asthma education
- Follow-up on reducing asthma symptoms
- Follow-up at 6 and 12 months

- Reduced asthma level of control
- Reduced school absenteeism
- Reduced emergency room visits and hospitalizations
Baseline & Follow-up Data (n=89)

- Uncontrolled asthma*: Baseline 63%, Follow-up 36%
- Symptom days in the past 4 weeks: Baseline 80%, Follow-up 70%
- School absenteeism: Baseline 20%, Follow-up 20%
- OCS burst*: Baseline 30%, Follow-up 22%
- SABA use: Baseline 53%, Follow-up 39%
- ER visit*: Baseline 43%, Follow-up 42%
- Hospitalization: Baseline 11%, Follow-up 8%

*2-sample test of equal proportions (p-value < 0.05)
Addressing Implementation Challenges

Health System Integration
- Endorsement by medical director
- Prompting healthcare provider on documentation
- Implementation of incentives for clinical personnel

Follow-up
- Implementation of incentives for 6- and 12-month follow-up
- Distribution of follow-up calling list to partners
- Mailing letter to hard-to-reach patients
Asthma Educators: Bridging the Gap in Community Health Care

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Adherence to Guidelines

- The National Heart, Lung, and Blood Institute (NHLBI) recommends that all patients with asthma receive education.
- Without appropriate self-management and asthma education, physician recommendations are less likely to be effective.
- For years, studies have shown that primary care providers’ adherence to NHLBI asthma management guidelines is poor.
Adherence to Guidelines

- Significant gaps exist between evidence-based guidelines and everyday primary care practice.

- Possible explanations:
  - Limited time during a typical office visit
  - Increase in scope of services expected from the provider
Asthma Educators Promote Best Care Practices

- Asthma educators (AE) help to fill in the gap between evidence-based guidelines and “real-life” practice.
- AE provide the opportunity for routine dissemination of education to all asthma patients.
Asthma Educators Promote Best Care Practices

- Asthma educators can uncover important historical information that otherwise gets missed in a limited office visit.
  - Medication adherence issues
  - Environmental triggers
  - Asthma action plan counseling
Life “Before” the Asthma Educator

- Patient scheduled for a 15-minute office visit
- Medical history and physical exam
- Consideration of maintenance medications dependent on history and symptoms
- Asthma action plan written or previous one reviewed
- Visit ends with educational instructions provided by a medical assistant
Life “After” the Asthma Educator

**BEFORE**
- Patient scheduled for a 15-minute office visit
- Medical history and physical exam

**AFTER**
- Asthma control test given prior to provider walking in room
- Asthma educator may visit with established patient prior to provider encounter
Life “After” the Asthma Educator

BEFORE

- Consideration of maintenance medications dependent on history and symptoms.
- Asthma action plan (AAP) written or previous one reviewed

AFTER

- Maintenance medications prescribed according to evidence-based guidelines (stepwise approach chart, ACT score, etc.)
- Asthma action plan written or reprinted for patient, then reviewed by asthma educator.
Life “After” the Asthma Educator

**BEFORE**
- Visit ends with educational materials provided by a medical assistant

**AFTER**
- Visit ends with educational material provided by an asthma educator.
- Review of any new medications prescribed
- Demonstration of inhaler medication techniques
- Reassurance that add’l asthma education questions are answered by a trained asthma professional.
Asthma Educators: Bridging the Gaps

- Primary care providers face challenges for adherence to evidence-based guidelines for asthma management.
- Asthma educators are instrumental in assisting providers to follow recommended practice guidelines.
- Asthma educators can be effectively integrated into a community health care setting to make a significant difference in the standard of care for all asthma patients.
If your question is not answered during the Q&A session, please direct it to individual presenter:

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