Controlling Asthma in West Michigan

2012 EPA Region 5 Asthma Forum

June 6-7, 2012
Chicago, IL

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Asthma Remains a Serious Health Risk in the U.S.

Every day in America, approximately…

***63,000** people miss school or work due to asthma*

***44,000** people have an asthma attack*

***4,700** people visit the emergency room due to asthma*

***1,200** people are admitted to the hospital due to asthma*

9** people **die** from **asthma

Asthma and Allergy Foundation of America (AAFA) www.aafa.org Accessed June 1, 2012.

Asthma: A Preventable Disease… *Out of Control*

- High costs associated with asthma
  - Direct & indirect costs, lost productivity
- Challenges
  - Significant asthma disparities
  - Budget crisis
  - Low Medicaid reimbursement
  - Access to care or receiving inadequate medical care
  - Poverty/psychosocial barriers
  - Environmental triggers

Asthma: A Preventable Disease… *Implementing Best Practices*

- "Abundant" scientific evidence that asthma self-management programs reduce urgent care visits and hospitalizations and improve overall health status (EPR-3).
- Five key elements of a successful asthma program
  - Committed Leaders and Champions
  - Strong Community Ties
  - High-Performing Collaborations & Partnerships
  - Integrated Health Care Services
  - Tailored Environmental Interventions

First Things First: Building the System

- Established in 1994 as the grass-roots asthma coalition serving West Michigan
- Start Small to Get Big
  - The first asthma coalition in Michigan; one of the first in the nation
  - Began providing home-based asthma case management services in 1996
  - Targeted at-risk children with asthma: started with 50 children, school-aged, Kent County
  - Obtained 501(c)(3) status in 1997
  - Contracted with area's largest payer in 1999

First Things First: Building the System

- Let the data guide the program
  - Population Served – 3 West Michigan counties (Kent, Ottawa, Muskegon)
    - Total Population Served: 1,032,426
    - Total with asthma: 82,933
    - Total adults: 57,568
    - Total children: 25,365

- Build evaluation in from the start
  - Began to measure outcomes on day one, national abstract presented one year later
  - Demonstrated quality outcomes, resulting in cost savings, which we took to the area's largest payer

Committed Leaders and Champions

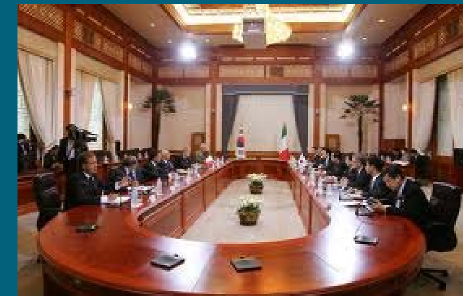
- Institutionalize the focus on outcomes
  - Community collaborative guided by a physician champion and partners in key positions of leadership, able to parlay that partnership into action
  - "Leave your badges at the door" –
    - partnered to achieve a shared goal nd not for any organizational advantage
    - Ensure mission-program alignment, don't just "follow the money"
  - Designed a comprehensive program, which would provide direct service and would target the most at-risk children with asthma in our community

Strong Community Ties

- Included our community in program planning
- Engaged our community "Where it Lives"
  - Situated our offices in target community
  - Demonstrated broad commitment to our target community by getting involved in community affairs
- Recruited asthma champions
- Reached out to local foundations and corporations
- Collaborated with competing hospital systems
- Supported school districts
- Focused on health care providers/clinics
- Partnered with local universities
- Engaged health plans

High Performing Collaborations and Partnerships: Build on What Works

- Collaborate to build credibility – become *indispensible* to your community
  - Patient-centered medical home model in Kent County
  - We Are For Children – largest pediatric practices in West Michigan – training/mentoring providers and staff to improve asthma care protocols across the board
  - Merck Childhood Asthma Network grant/GWU study
- Engage health plans
  - Identify key decision-makers, offer a "trial" period
  - "Payer Summit"
  - Be responsive and flexible (e.g., service to Muskegon at the request of Priority Health)



High Performing Collaborations and Partnerships: Health Plans

- First asthma coalition in the nation to contract with health plans
- Some health plans authorize 18 visits, others authorize fewer and AE-C must call and justify the need for more visits
- Target members with uncontrolled asthma
- Signed contracts with 5 health plans – negotiating with a 6th
- Reimbursement ($160,000) covers ~1/3 of our operating budget ($500,000)

High Performing Collaborations and Partnerships: CHAP

- Now partnering with First Steps (community collaborative) and local Medicaid plans to implement patient-centered medical home project in Kent County – Children's Healthcare Access Program (CHAP)
- Incentives for local pediatric practices to accept more Medicaid children
- ANWM is the provider of home-based asthma case management for this pilot
- Expansion of our model to include Community Health Workers who augment our case management team

High Performing Collaborations and Partnerships: CHAP

- CHAP began in 2008
  - 15,000+ children ages 0-17 receiving Priority Health in Kent County
  - Pilot sites: Four private pediatric practices, FQHC, NP clinic, Pediatric Residency Clinic
  - Entering 4th year
    - Expanding to additional practices
    - Expanding to additional Medicaid payers
    - Replicating in other counties

Integrated Health Care Services: Working on Three Levels

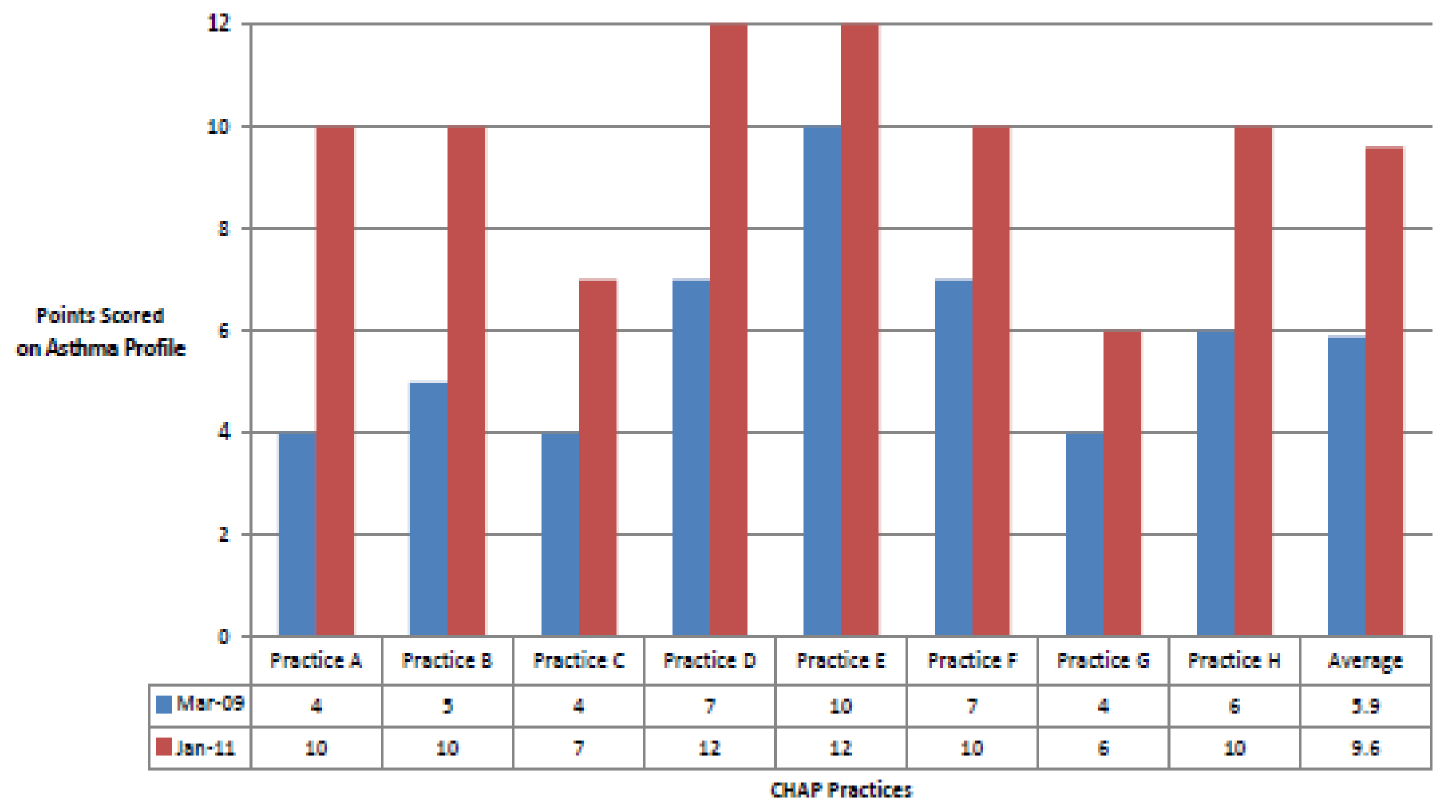
- Family
  - Parent education
  - Intensive asthma education and home-based case management
  - Resource coordination
  - Free same-day transportation

- Provider
  - Provider education, regular physician meetings, practice profiles
- System
  - Increased access to PCP – additional Medicaid slots
  - Practice and process improvements, e.g., expansion of hours

CHAP Practice Profiles

Points Scored

1. Asthma in-service for staff
2. Asthma education for patients
3. In-office asthma educator
4. Referral to CHAP/ANWM
5. Flu shot
6. Teach peak flow monitoring
7. ETS assessment
8. In-office spirometry
9. AAP
10. ACT
11. Asthma registry
12. Routine 6-month asthma visits

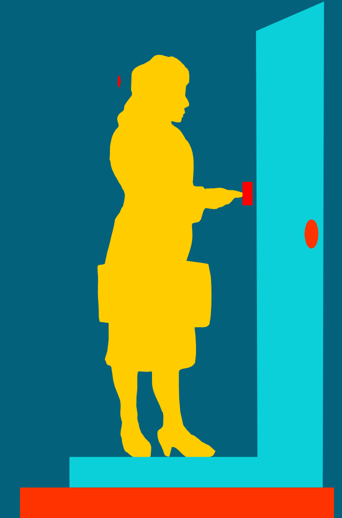


	Practice A	Practice B	Practice C	Practice D	Practice E	Practice F	Practice G	Practice H	Average
Mar-09	4	5	4	7	10	7	4	6	5.9
Jan-11	10	10	7	12	12	10	6	10	9.6

Integrated Health Care Services Goals

- Identify and **address systems barriers** that prevent patients from optimally managing asthma
- **Increase access** to, availability, and coordination of asthma services for children on Medicaid
- **Standardize asthma management** in Kent County
- **Reduce emergency department use and hospitalizations** related to asthma among target population

Tailored Environmental Interventions: Case Management



- Home-Based Case Management:
  - Home visits
    - AE-Cs, LMSWs and CHWs
  - School/daycare visits
  - Physician care conferences to elicit a written asthma action plan
  - Licensed masters social worker (LMSW) to assist with psychosocial barriers
- Community outreach:
  - Speakers' Bureau

Case Management Team

- CHAP Clinical Manager / ANWM Manager
- 2.3 FTE Asthma Educators/Case Managers – must be Certified Asthma Educator (AE-C) – RN or RRT – or become certified within one year (bilingual preferred)
- 1.5 FTE LMSW (Masters-prepared social worker)
- 1.0 FTE Billing office coordinator
- 2 Community Health Workers (CHW)
  - .75 FTE combined

Case Management Model

- 5 AE-C Home Visits in 3 months
- 3 monthly visits thereafter
- 1 visit to medical home
- 1 visit to school or daycare
- 2 LMSW visits

- Target: 6 (min) to 12 (max) visits over 6 (min) to 9 (max) months
- Monthly CHW visits

Case Management Referral Sources

- Inpatient population
- PCP/clinic
- School nurse
- Public Health Nurse
- Self-referral
- Managed Care Organizations

Case Management Goals

- Target behavior modification to promote prevention rather than crisis care
- Appropriate utilization of the health-care system
- Access to medications and primary care physician (obtain "medical home" if necessary)
- Address barriers - encourage problem-solving strategies
- Improved asthma knowledge/Improved quality of life
- Resolving psychosocial issues allows AE to focus on asthma management issues
- Enhanced communication with school and medical personnel
- Ensure asthma management in accordance with NAEPP guidelines

Case Management Objectives

- Case management goal of 75 families/1.0 FTE asthma educator/case manager ~ 210 families
- 185 reimbursable slots
- 25 non-reimbursable slots (waiting list) – supported by grant $
- Serve over 400 families per year
- Accomplish ~ 2,000 home visits per year

Care Conference

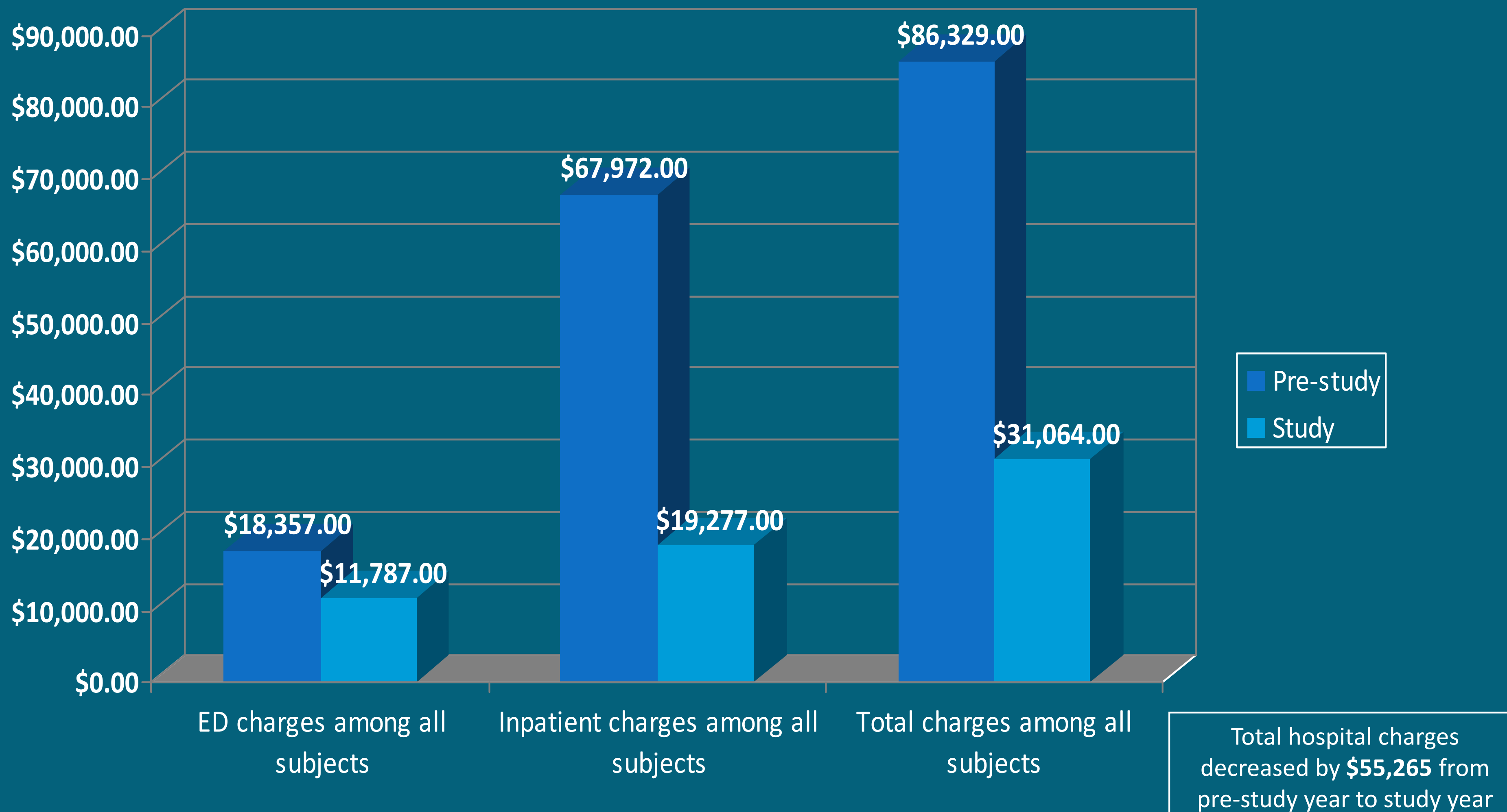
- Conducted with PCP (and possibly specialist as well) with or without family present
- Elicit a written asthma action plan
- Discuss compliance issues - psychosocial barriers to asthma management
- Discuss access to care issues - PCP visits, devices, medications, etc.
- Reimbursable visit

School/Daycare In-service

- Scheduled with key school personnel:
  - principal, school nurse, classroom
  - teacher, phys. ed. teacher, and school secretary
- May provide in-service for entire staff
- Discuss (in private) key issues concerning child's asthma and psychosocial barriers/ learning problems identified by school
- Provide with copy of AAP - ensure school staff understands
- Reimbursable visit

Getting Results: Evaluating the System

Reduced Hospital Charges



Total hospital charges decreased by **$55,265** from pre-study year to study year

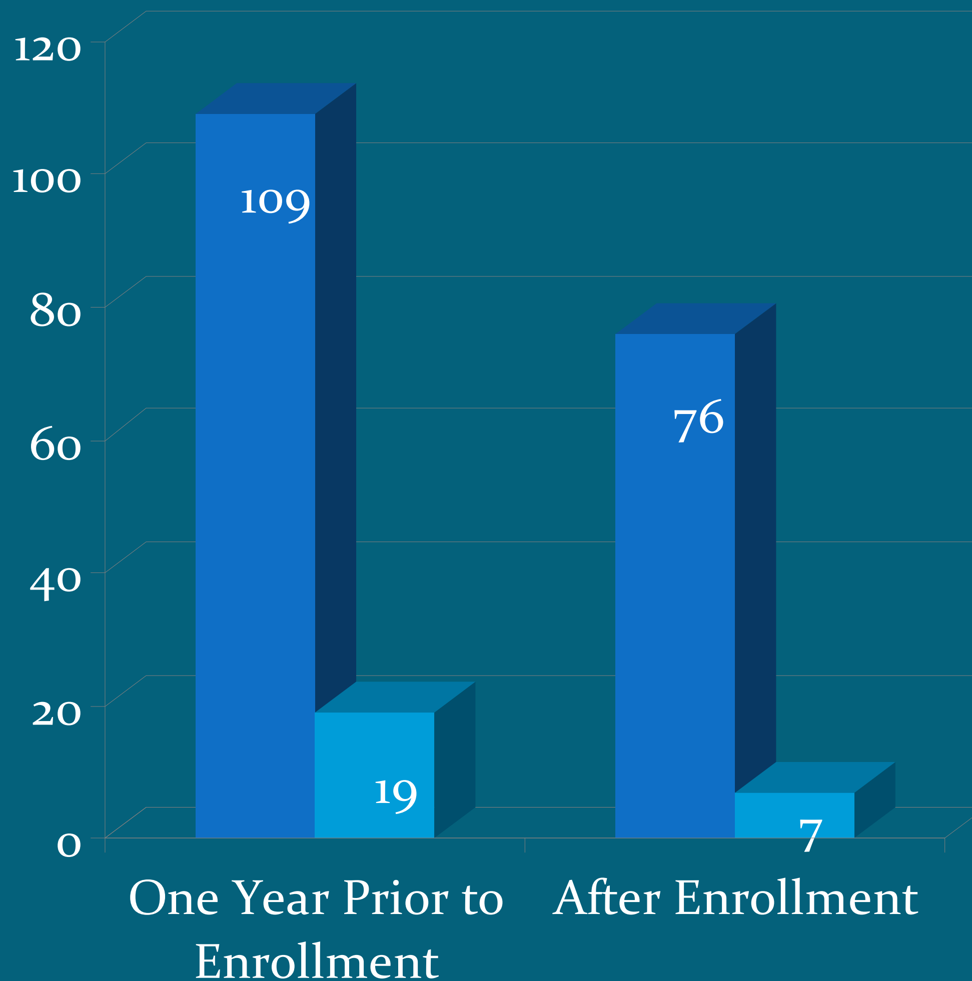
Getting Results: Evaluating the System

- Fewer emergency department visits
- Fewer hospitalizations
- Lower overall costs for asthma

Clinical Outcomes	Cohort Group N=45			Control Group N=39			Cohort vs. Control
	Pre	Study	P-value	Yr 1	Yr2	P-value	P-value
ED Visits	80	61	0.047	28	43	0.0211	0.0040
Hospitalizations	41	13	<0.0001	23	28	0.1457	<0.0001
Days Hospitalized	114	25	<0.0001	55	67	0.0779	<0.0001

Kirk GM, et al. Abstract presented to the American Thoracic Society International Conference in San Francisco - May 2001

Getting Results: Evaluating the System



73 children served between 2007 and 2009 through home-based case management

ED Visits
Hospital Admissions

- 63% reduction in admissions
- 30% reduction in ED visits

Resourcing the System

- Major costs are staff salaries, mileage, and supplies
- Resource planning:
  - Leveraged funds from local foundations for a national grant we did not receive, but the local foundations provided the $ anyway
  - Secured in-kind and other support from a local hospital who houses our program for free
  - Secured long-term sustainable funding from the local United Way and a local hospital's Community Benefits program
  - Plan to assign value to a technical assistance package for replicating our model in other communities

Epiphanies: Making it Last

- Building the System
  - Diversify your funding base – don't rely too much on one funder or revenue source
- Elements of the System – Key Drivers in Action
  - Strong community partnerships and collaborations – including individuals passionate about addressing asthma in vulnerable populations
- Getting Results – Evaluating the System
  - Measure everything you do and share those outcomes with the key financial decision makers (foundations, health plans, hospital systems, etc.)
- Resourcing the System
  - Plan for focused growth, but ensure financial stability at every step

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- Websites:
  - www.asthmanetworkwm.org
  - www.GetAsthmaHelp.org
  - www.naecb.org