Colorado Summit on Pediatric Home Interventions

Children's Hospital Colorado

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First Things First: Building the System

- Established in 1994 as the grass-roots asthma coalition serving West Michigan – 20th Anniversary this month!
- 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
  - Obtained 501(c)(3) status in 1997
  - Contracted with area's largest payer in 1999
- **<u>Target Population</u>: children with uncontrolled asthma from low-income families in West Michigan**

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 Medicaid Population: 134,194
    - 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 and 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

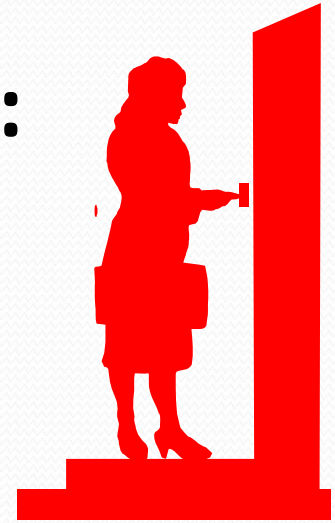
High Performing Collaborations and Partnerships: Build on What Works

- Collaborate to build credibility – become *indispensable* to your community
  - Maintain our neutrality despite close community connections to competing systems
  - Support the patient-centered medical home model in Kent County
  - Provide training/mentoring to health professionals physician practices/community clinics throughout West Michigan to improve asthma care protocols across the board
  - Participate in research, including MCAN and U of M
- Engage health plans
  - Identify key decision-makers, offer a "trial" period
  - "Payer Summit"
  - Be responsive and flexible (e.g., service to Muskegon and launched a home-based COPD program at the request of Priority Health)

High Performing Collaborations and Partnerships: Health Plans

- First asthma coalition in the nation to contract with a health plan (Priority Health) in 1999
- 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 3 health plans – negotiating with #4 & 5
- Reimbursement ($130,000) covers ~ 1/3 of our operating budget ($390,000)
- Working towards reimbursement covering ½ of our budget by increasing our productivity/efficiency

Tailored Environmental Interventions: Program Activities



- Home-Based Case Management:
  - Home visits: AE-Cs, LMSW, CHWs
  - School/daycare visits
  - Physician care conferences
  - Social work support to assist with psychosocial barriers
  - All are reimbursable visits
- Community outreach:
  - Speakers' Bureau

Case Management Team

- Clinical Manager
- 2.0 FTE Asthma Educator/Case Manager – must be a Certified Asthma Educator (AE-C) – RN, RRT or LMSW – or become certified within one year
- 1.0 FTE LMSW (Masters-prepared) recently certified as an AE-C
- 1.0 FTE Business Office Coordinator/Biller
- 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 (min)

= 12 visits

- Target: 6 to 12 visits over 6 to 12 months
- Monthly CHW visits
- Trying to determine effective “dose” for home visit interventions

Case Management Referral Sources

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

Program Metrics

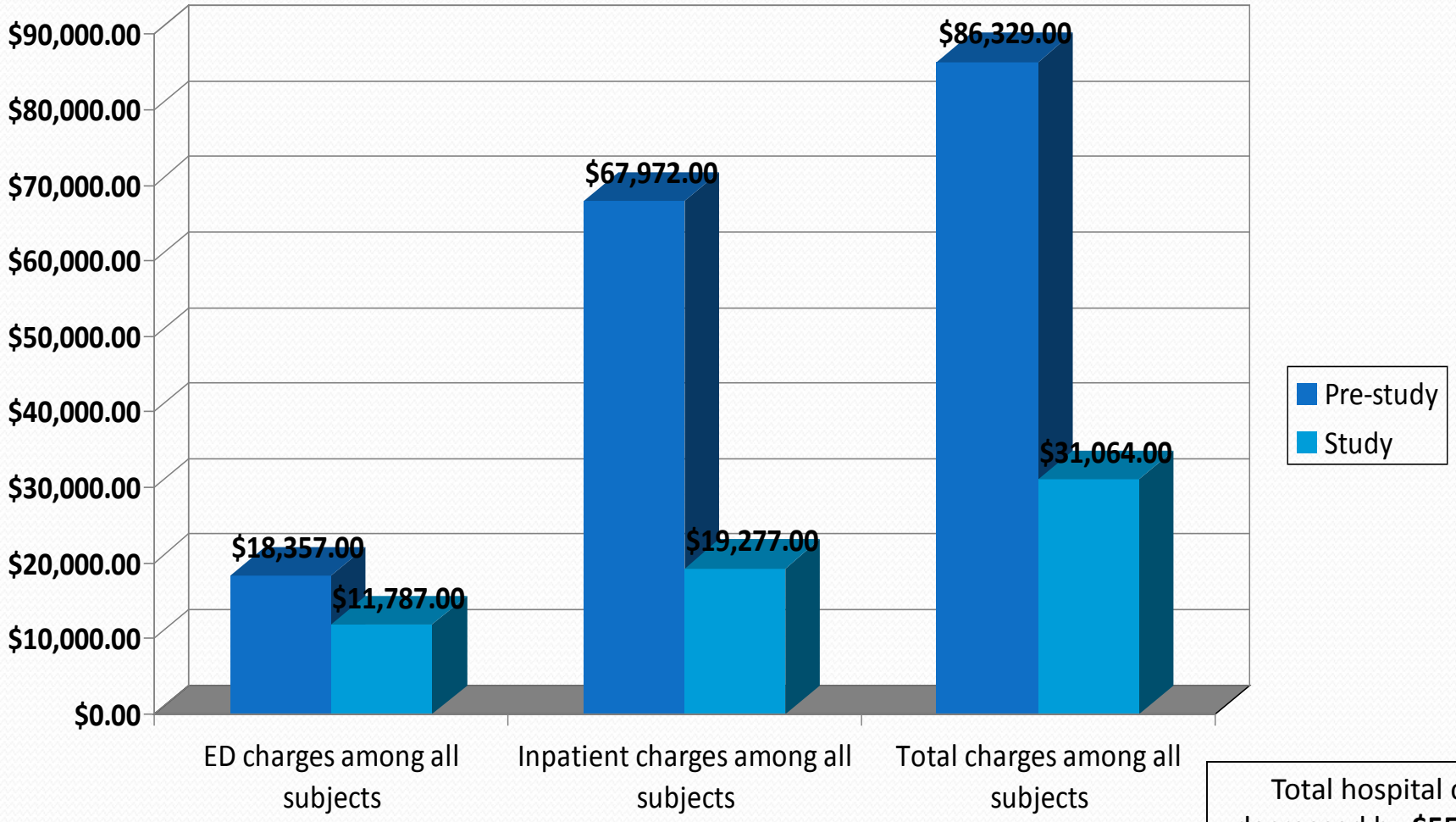
Dashboards

- Patient level:
  - Reductions in ER visits, hospital admissions, school days missed, exposure to ETS
  - Spirometry rates
  - Flu shot rates
  - Juniper QOL
  - ACT scores
  - # Asthma Action Plans

- Staff level
  - # of families served per year
  - # of home visits accomplished monthly (% target)
  - # of community members educated about asthma
  - # of visits/AE-C, no-show rates, time-to-open cases

Health Outcomes:

Reduced Facility Charges



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

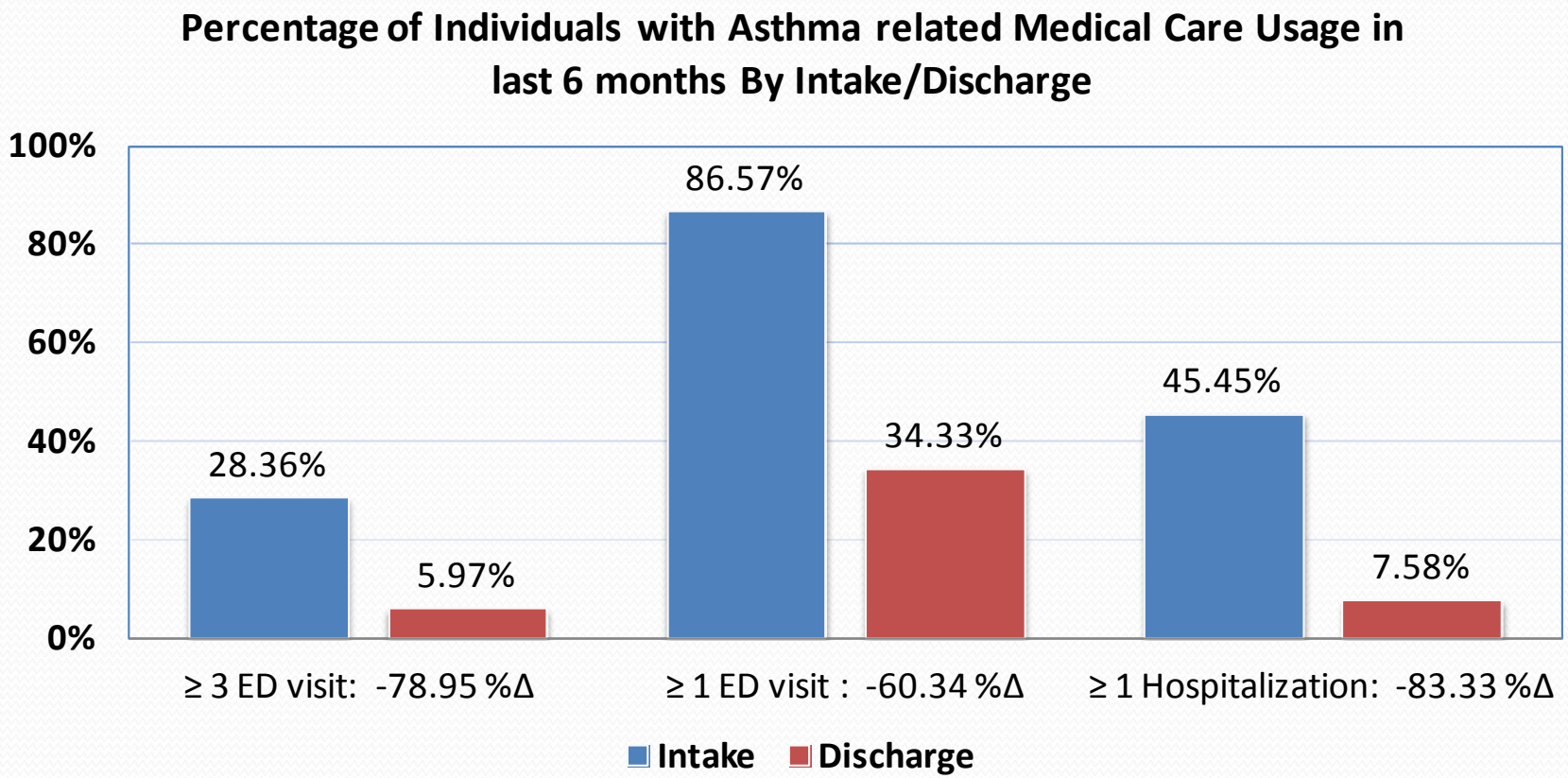
Health Outcomes

- 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

Health Outcomes



Percentage of participants with Asthma Inpatient Visits by intake and discharge for participants who were enrolled for at least 5 months and had at least 6 visits. There was a -78.95% change between Intake and Discharge for participants who had at least 3 ED visits, -60.34% for those who had at least 1 ED visit, and -83.33% change for those who had at least 1 hospitalization.

Management Costs

- 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
  - Created a technical assistance package for replicating our model in other communities

Reflections

- What is your target population/community need?
- How many of your target population will you serve?
- What are your resources/capacity and what services will you offer?
- What are your staffing requirements to in order to implement your program? (FTEs, qualifications, etc.)
- What health outcomes are you committed to achieving (short-term/long-term)?
- What are your anticipated costs?
- What data will you need to refine my value proposition statement and how can you get it?
- Who in my community needs to hear my value proposition statement?

My Value Proposition Statement: Elevator Pitch

For $400,000, the Asthma Network will improve asthma outcomes for 400 at-risk children with poorly controlled asthma by achieving reductions in ER visits and hospital admissions, through our in-home asthma case management program.

We estimate that our work will deliver $640,000* per year in cost savings to the healthcare system through 40% fewer hospital admissions and 25% fewer ER visits.

* $1,600 savings per patient/year x 400 patients/year

For more information...

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