#### The CHAMPS Program: Insights and Building Blocks from a Successful Federally Qualified Health Center-Based Asthma Management Program



#### THE WEBINAR WILL BEGIN MOMENTARILY





## **Webinar Instructions**

#### Audio

- This is an audio/web broadcast where the audio will be transmitted through your computer speakers. Please make sure your speakers are turned on and not muted.
- Upon entering the event, there will be an audio broadcast window where you can adjust volume.
- If you are unable to connect to the webinar using your computer speakers or having audio difficulties, please use the dial-in information provided.
- Your line will be muted.

#### Questions

- If you have a question during the webinar, please click on the "Q&A" tab at the right of your screen and send it to "All Panelists." If you are directing your question to a specific presenter, please write their name before the question (e.g. Ramirez, Arthur, Snyder, Hightower).
- Due to the large number of participants, we will answer as many questions as possible within the time frame allotted for this webinar. If your question was not answered, we encourage you to reach out to the individual presenter via e-mail following the webinar (email addresses will be provided at the end of the presentation).

#### Understanding the Challenges of Childhood Asthma



Floyd J. Malveaux, M.D., Ph.D. Executive Director Merck Childhood Asthma Network, Inc. (202) 326-5200 <u>floyd\_malveaux@merck.com</u>



## **Today's Agenda and Speakers** Live Webinar, February 20, 2014



CHAMPS Overview/Managing Childhood Asthma in Real-World Settings Anne Markus, J.D., Ph.D., M.H.S., The George Washington University



Managing Asthma in Costa Salud Francisco Ramirez, Costa Salud Community Health Center

Engaging Providers: Successful Implementation in El Rio Andrew Arthur, M.D., Ph.D., F.A.A.P., El Rio Community Health Center





How the Payment Environment Impacts Sustainability Celia Hightower, CFO, El Rio Community Health Center

Q&A Session





The Merck Childhood Asthma Network, Inc. (MCAN) is a nonprofit 501(c)(3) organization founded in 2005 and funded by The Merck Foundation

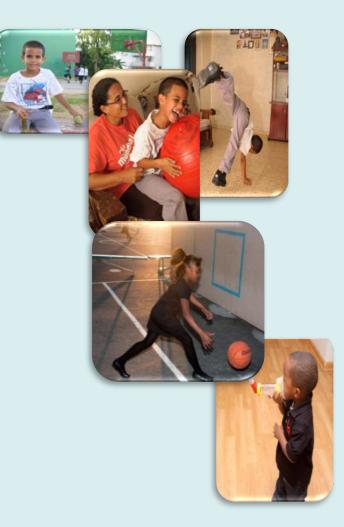
#### MCAN's Mission

Enhance the quality of life for children with asthma and their families, and reduce the burden of the disease on them and society.

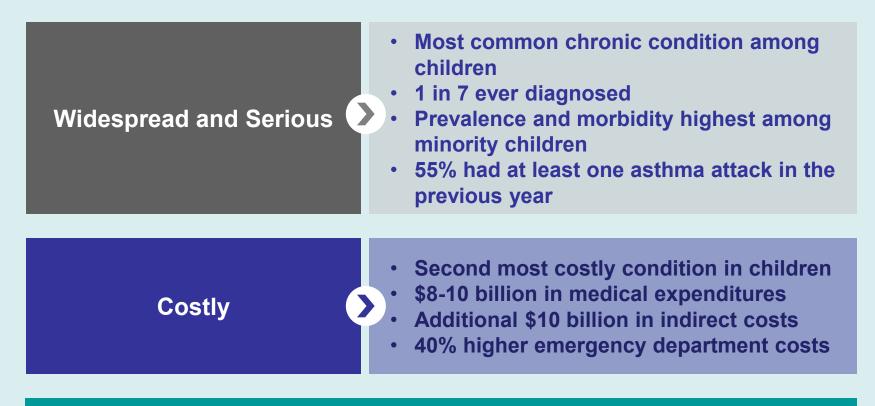
#### <u>Goals</u>

Through research, community programs and partnerships, MCAN is working to:

- Improve access to and the quality of asthma healthcare services for children, especially those who are vulnerable and medically underserved
- Advocate for policies that expedite implementation, dissemination and sustainability of science-based asthma care
- Increase awareness and knowledge of asthma and quality asthma care



# Childhood Asthma Is Challenging On Many Levels



#### **Preventable and Avoidable**



### Managing Childhood Asthma in Real-World Settings



#### Anne Markus, J.D., Ph.D., M.H.S. The George Washington University School of Public Health and Health Services (202) 994-4139 armarkus@gwu.edu





## A Quick Overview of the CHAMPS Program

The Community Healthcare for Asthma Management and Prevention of Symptoms (CHAMPS) Program Partnership between MCAN, The George Washington University (GW) School of Public Health and Health Services, the RCHN Community Health Foundation and Rho in three non-profit Federally Qualified Health Centers:

- El Rio Community Health Center (Tucson, AZ)
- Cherry Street Health Services (Grand Rapids, MI)
- Rincon Health Center (Rincon, PR)

Implementing evidence-based asthma management programs in real-world settings where many children and families most receive care



# CHAMPS is Based on the Results of NIH Clinical Trials, 1990-2010

#### Approach to Asthma Management Tailored to the Needs, Allergies, and Home Exposures of the Child with Severe, Persistent Asthma



Asthma counselor to educate, assist in managing the disease, coordinate care



Prevention strategies aimed at protecting from exposure to environmental triggers

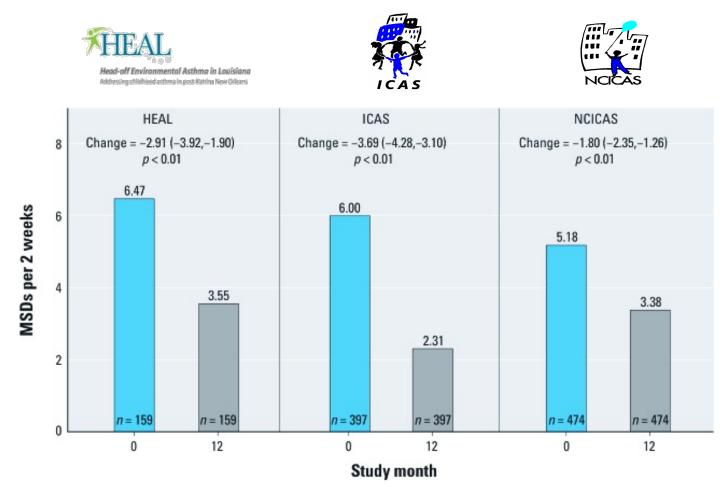


Hybrid intervention: NCICAS + ICAS





# NIH Studies Found Significant Reduction in Asthma Symptom Days

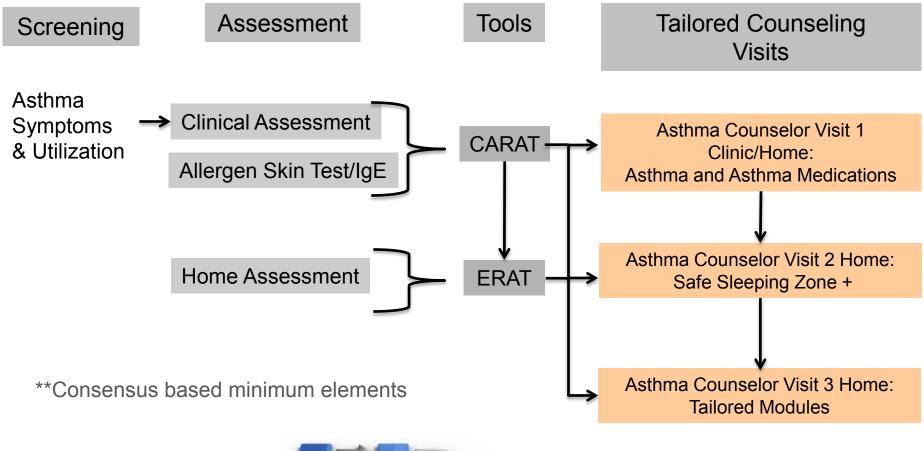


<u>Source</u>: Mitchell *et al.* (2012) Implementation of Evidence-based Asthma Interventions in Post-Katrina New Orleans: The Head-off Environmental Asthma in Louisiana (HEAL) Study *Environmental Health Perspectives.* 120(11): 1607–1612.





# **The CHAMPS Intervention**









# CHAMPS Has Four Objectives...

- To implement and evaluate evidence-based asthma interventions in community health centers (FQHCs)
  - To evaluate if the translation of the evidence-based intervention remains effective
  - To evaluate the cost-effectiveness of the implemented intervention at each clinic
- To assess how clinics and the health system around them make interventions sustainable
- To propose strategies that can support the successful implementation of the effective intervention in other clinics
- To recommend policy modifications to support the intervention on a broader scale





# **Anticipated Impact of CHAMPS**

- Clinical Care: It will improve the quality of pediatric asthma care at health centers
- **Research:** It will fill in a gap in prior implementation effectiveness research
- Payment Policy: It will inform improvements in Medicaid/CHIP reimbursement









# **CHAMPS is a Multi-Site Study**

- 3 jurisdictions selected for varied policy and programmatic environments
- 3 intervention and 3 comparison clinics (FQHCs) matched for patient characteristics, organizational features, geographic location
  - 1 matched pair per jurisdiction

Clinic Site	Pre measure	Intervention	Post measure			
Intervention Site	Yes	Yes	Yes	Matched		
Nonintervention Site	Yes	No	Yes	Pair		





# **CHAMPS Target Sample Sizes**

	ARIZONA		MICHIGAN		PUERTO RICO		
Study Components	AZ-I	AZ-C	MI-I	MI-C	PR-I	PR-C	TOTAL
Clinical	100	100	100	100	100	100	600
Effectiveness	Children, 5-12 Years Old, Persistent Uncontrolled Asthma						
Cost- Effectiveness	60-100	60-100	60-100	60-100	60-100	60-100	360-600
	4-6 Healt	Health Plans 4-6		4-6 Health Plans		1 Health Plan	
Implementation Process	25 25 <sup>1</sup> 10-15 <sup>2</sup>	5 <sup>2</sup>	25 25 <sup>1</sup> 10-15 <sup>2</sup>	5 <sup>2</sup>	25 25 <sup>1</sup> 10-15 <sup>2</sup>	5 <sup>2</sup>	195-210
	Clinical and Administrative Staff						
Family Satisfaction	60		60		60		180
Family Attitudes	60 60 <sup>3</sup>		60 60 <sup>3</sup>		60 60 <sup>3</sup>		360

1 Estimated in person interviews during site visits at baseline (n=25) and post-enrollment (n=25) for a total of 50 interviews per site

2 Estimated follow-up on-line questionnaires in between site visits

3 Paper questionnaires provided to families at baseline (n=60) and post-intervention (n=60)





# Visits & Surveys Completed to Date (as of January 22, 2014) Clinical Effectiveness Analysis

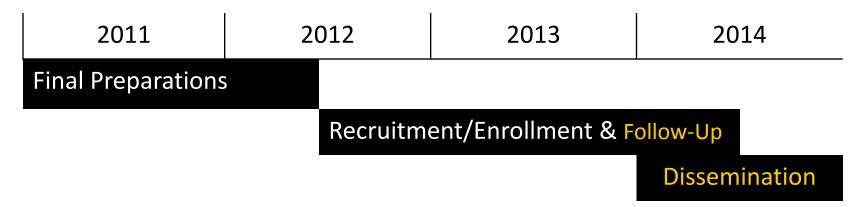
	AZ	AZ-C	МІ	MI-C	PR	PR-C	Total
Enrolled	123	99	90	77	106	101	596
Clinic Counseling Visits (AC1)	123		85		105		313
Home Assessment Visits (AC2)	105		74		105		284
Home Counseling Visits (AC3)	89		64		102		255
Home/Clinic Counseling Visits (AC4)	84		57		102		243
6-Month Outcomes Visits	106	23	67	23	105	66	390
12-Month Outcomes Visits	48	6	27	0	105	0	186







# **Project Timeline**



# Year 3 Implementation Milestones

October 1, 2012 – July 31, 2013 – Recruitment/Enrollment at Intervention Clinics

**Enrollment completed:** 

- •December 31, 2012: Costa Salud (Rincon)
- •June 30, 2013: El Rio
- •July 31, 2013: Cherry Street

October 1, 2012 – December 31, 2013 – Recruitment/Enrollment at Nonintervention

Clinics





## **Managing Asthma in Costa Salud**



Francisco Ramirez Registered Nurse/Asthma Counselor Costa Salud Community Health Center 787-823-5555 Ext. 160 <u>rincongreen@gmail.com</u>





## A Closer Look At Our Center



- Established in 1975
- Main goal: Serve the undeserved population - 65% Medicaid, 48% under poverty level
- Structure: Family and pediatric practice, pharmacy, laboratory, ER
- No past asthma program established



## Pre-CHAMPS Program: Asthma in Costa Salud in 2012

## **4.8 Patients Seen Per Day in Asthma-Related Visits** Total Patient Population: 12,321 Total Pediatric Population (1 – 20 years): 4,367 Total Pediatric Population (5 – 11 years): 1,425 Total Asthma-Related Visits: 1,753 Total Patients Diagnosed with Asthma: 852









**Pharmacy Records** 

**Emergency Room Referrals** 

**Direct Patient Referrals** 

World Asthma Day Information Campaign

Word of Mouth from Caretaker to Caretaker







### **Trial and Error: Adapting to Patient Needs**



#### **Expanded Recruitment Hours**

After-work/occasional weekend hours Engaged caretakers and allowed counselors to pitch project and fill out paperwork in person

#### Set Schedule

After work/school hours Established a specific day and time for asthma patients to see the pediatrician





#### **Engaging Patients for Success**

Reactive Treatment → Proactive Treatment

**Home Evaluation and Counseling** 

**Patient and Time Specific Treatment** 

**Telephone Follow-Ups** 





## Managing the Challenge





Skin Allergy Testing  $\rightarrow$  IgE Test

**Education Tailored to Patient Needs** 

**Respect Cultural Factors** 

**Provide Remedial Supplies in Increments** 

**Telephone Follow-Up** 







# Engaging Providers: Successful CHAMPS Implementation in the El Rio Community Health Center



#### Andrew Arthur, M.D., Ph.D., F.A.A.P.

Associate Medical Director El Rio Community Health Center (520) 670-3909 andrewwa@elrio.org







# Our CHAMPS Site: El Rio Health Center

- Asthma is the most prevalent serious chronic illness of childhood
- About 10% of children in Tucson suffer from asthma
- Children with moderate persistent asthma and severe persistent asthma represent a majority of the "frequent flyers" at El Rio





# **Before CHAMPS El Rio**

- Prior to inception of the El Rio Asthma Program, 70% of admissions for asthma to Tucson Medical Center came from El Rio
- Many sick "frequent flyers"
- Little time to address family needs







# Engaging Clinical Staff to Participate in CHAMPS

- Reduce burden of asthma in community
- **Support and training** for team and evidence-based asthma intervention to address childhood asthma burden
- Improved support for families to manage asthma
- Improved process for asthma care
- Clinician experience of positive clinical outcomes and family and patient appreciation of results
- Peer recognition from clinicians
- Feedback to clinical staff of clinical and economic outcomes

# Improved Capacity to Support Families



- Hired second Asthma Counselor
- Doubled our capacity
- Resumed home visits
- Distributed home supplies to patients (HEPA vacuums, HEPA filters, allergen pillow and mattress covers)
- Use of incentives (\$20 gift cards) to improve compliance with follow-up







# **CHAMPS Training in El Rio**

- Further training of Asthma Counselors
- Working toward certification of Asthma Counselors
- Retraining of pediatric providers in standards of pediatric asthma care
- Training of providers in office spirometry techniques and interpretation





# **Success of CHAMPS in El Rio**

- Support from families and our peers
  - $\odot$  Happier and healthier patients
  - $\odot$  Far fewer sick "frequent fliers"
  - Parents asking for referrals to the Asthma Program
  - Recognition from colleagues in the community of success with our asthma patients





#### Organizational Benefits and Challenges of Integrating an Asthma Program into a Community Setting



#### Susan Snyder

Site Manager Cherry Street Health Services (616) 965-8200 Ext. 7188 susansnyder@cherryhealth.com





# What Asthma Looks Like In Our Community

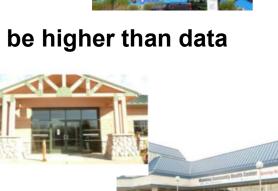
- Based on 436 patients diagnosed with unspecified asthma within the CS system (Data retrieved for asthmatic children 5 12 years of age)
  - Females: 43 % Males: 57%
  - White/Non Hispanic: 30%
  - White/Hispanic: 21%
  - Black/African American/Non Hispanic: 26%
  - Black/ Hispanic: 6%
  - More than one group: 9%
  - Unknown/no data: 8%



- Transportation Barrier
  - Large percentage do not own a car
  - Cars are older models and unreliable
  - Bus Lines major source of transportation

#### • Single Parent Homes

- Most families who come in for AE do not have a father in the home
- Residing in sub-standard apartments
- Child, at times, must assume responsibility for asthma management at a very early age







# **Asthma Management In Our Community**

#### **Pre-CHAMPS**

 Access to appropriate assessment and environmental intervention was not available to all children
 Cherry Street had more asthma visits for acute

exacerbations than preventative visits

#### **Post-CHAMPS**

 Systematic access to environmental trigger assessment/intervention

 Increased time with patient
 Fuller understanding of patient/condition (home triggers)
 Clinical team consistently screens/targets patients in need of allergy testing





# Organizational Changes Needed to Implement CHAMPS

- Strengthened collaboration with an existing resource, the Asthma Network of West Michigan
  - $\ensuremath{\circ}$  Recognized shared mission
- Agreement on common protocols for treatment/referrals within and across organizations



 Defined roles of the two organizations and professionals from each





## **Benefits of Partnering** with Asthma Network

## BENEFITS

**O Home visits provide fuller understanding of patients** 

Asthma Network provides feedback on status of patients

- $_{\odot}$  Allows opportunity to provide education/remediation in the home
- Parents have access to non-judgmental, broader support system that recognizes and strengthens efforts to care for their children







## Challenges to Implementing CHAMPS at Cherry Street

#### Challenge One:

# Establishing a reliable system for communication between organizations (e.g. referrals)



#### Challenge Two:

Communicating with patients and parents in an effective way





# **Keys to Success at Cherry Street**

- Building rapport during patient visits to encourage families to invite home environment assessments
- Listening not judging
- Willingness to work unconventional hours in order to reach patients





#### Addressing Reimbursement: How the Payment Environment Impacts Sustainability



Celia Hightower Chief Financial Officer El Rio Community Health Center (520) 670-3705 <u>CeliaSH@elrio.org</u>







## The CEO Perspective: Why We're Involved

**Healthier Patients** 

Reduced Use of Expensive Community Resources

**Satisfied and Empowered Patient and Families** 

Allowed us to refine and "buff up" our program









## Taking a closer look at the current payment environment



# What Reimbursement looks like at El Rio:

- Capitation or Fee-for-Service (FFS) payments from Health Plans
- Asthma Counselor Services are not billable
- Home Supplies/Home Visits generally not covered by health plans
- Medicaid cost reimbursement helps with some costs not covered by payers







## How Do Incentives and Savings Impact Payment Reimbursement?



## Almost 47% of El Rio Patients on Medicaid

- Gift cards/incentives for improved compliance are not covered
- New shared savings contracts with Medicaid and commercial plans have potential
- If savings come to fruition, dollars could cover less traditional expenses
- **ROI Analysis:** Optimistic it will make the case for the program







## **Our Proposed Changes To Improve Payment Policy**

#### Create supportive environment

to encourage sharing of best practices and learning

#### **Provide organizations with incentives** to develop innovative approaches and time to

implement/transform practice

#### **Measure performance**

across health care delivery system (ER, Hospital, pharmacy) and share the data

#### Put real money into quality improvement to support primary care providers





## **Question & Answer Session**



Floyd J. Malveaux, M.D., Ph.D. Executive Director Merck Childhood Asthma Network, Inc. (202) 326-5200 <u>floyd\_malveaux@merck.com</u>

Anne Markus, J.D., Ph.D., M.H.S. The George Washington University School of Public Health and Health Services (202) 994-4139 <u>armarkus@gwu.edu</u>

Francisco Ramirez Nurse/Asthma Counselor Costa Salud Community Health Center 787-823-5555 Ext. 160 <u>rincongreen@gmail.com</u> Andrew Arthur, M.D., Ph.D., F.A.A.P. Associate Medical Director El Rio Community Health Center (520) 670-3909 andrewwa@elrio.org

Susan Snyder Site Manager Cherry Street Health Services (616) 965-8200 Ext. 7188 susansnyder@cherryhealth.com

Celia Hightower Chief Financial Officer El Rio Community Health Center (520) 670-3705 <u>CeliaSH@elrio.org</u>

# For more information, please visit www.mcanonline.org

