

# **Exploring Policies that Support Community Health Workers in IL**

## **Research and CHWs**

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# Research and Policy

- Good research can drive policy
- Research that is
  - Theory driven
  - Clinical outcomes
  - Rigorous study design (randomized controlled trials)
  - Consistent (similar results in multiple studies)

# Local Research

- Asthma
  - Sinai
  - CURA
- Diabetes
  - MATCH
- Breast and Cervical Cancer
  - DuPage Patient Navigation Collaborative
- Maternal/Child Health
  - Chicago Doula Project



# Sinai Pediatric Asthma Program: Helping Children Breathe and Thrive

## Ten years of Community Health Worker Asthma Interventions in Chicago and Illinois

- Pediatric Asthma Intervention 1 (2000-2004)
- Pediatric Asthma Intervention 2 (2004-2006)
- Controlling Pediatric Asthma through Collaboration & Education (2006-2009)
- Healthy Home, Healthy Child (2008-2011)



# Outcomes and Cost-savings: It works!

## Sinai Pediatric Asthma Program: Intervention Results

	PAI-1	PAI-2	CPATCE (Sinai)	CPACTE (Sinai, CAC & Decatur)
<b>Asthma ED Visits</b>	64% decline*	73.5% decline*	47.6% decline*	62.3% decline*
<b>Asthma Hospitalizations</b>	81.0% decline*	71.4% decline*	50.0% decline*	59.0% decline*
<b>Urgent Health Resource Utilization<sup>^</sup></b>	67.6% decline*	69.3% decline*	50.0% decline*	66.0% decline*
<b>Nighttime Asthma Symptoms</b>	-	51.6% decline*	63.6% decline*	50.4% decline*
<b>Quality of Life</b>	-	Increased by 0.8* ¥	Increased by 0.43*	Increased by 0.68* ¥
<b>Cost-savings/\$ spent on the program<sup>∞</sup></b>	\$13.35	\$5.58	\$4.18**	-

\*Statistically significant  $p < 0.05$

ED = Emergency Department

<sup>^</sup> Sum of ED visits, hospitalizations, and urgent clinic visits

¥An increase of 0.5 is clinically significant

<sup>∞</sup> Cost Savings per \$ spent = Healthcare Cost Savings/Cost of Program

\*\* Preliminary analysis. Subject to change.



# CHW: Successes

- Improve Health
  - Decrease morbidity and mortality
  - Increase access to the healthcare system
- Increase Quality of Life
  - Empower families to take control of their own health
  - Assist families in obtaining assistance in other areas of their lives
- Cost Effective
  - Decrease health care costs
- Peer Education
  - breaks down barriers between healthcare system and patient
- Community Outreach
  - Employing community members
  - Community members working to help other community members



## Project CURA

### La Comunidad Unida Retando el Asma The Community United to Challenge Asthma

- Two R21s funded NIH
- Behavior randomized controlled trial
- Compares a CHW asthma self-management intervention to written education
- Study population: Puerto Rican children ages 5-18 with uncontrolled persistent asthma
- Primary outcomes are home asthma triggers and medication adherence
- Currently: 13 CHWs trained. Cohorts recruited. Complete data in Jan 2012.





## **Mexican American Trial of Community Health Workers**

- Randomized behavioral clinical trial
  - Funded by NIH: 1 R01 DK061289
- 144 Mexican Americans with type 2 diabetes
- Community-based recruitment



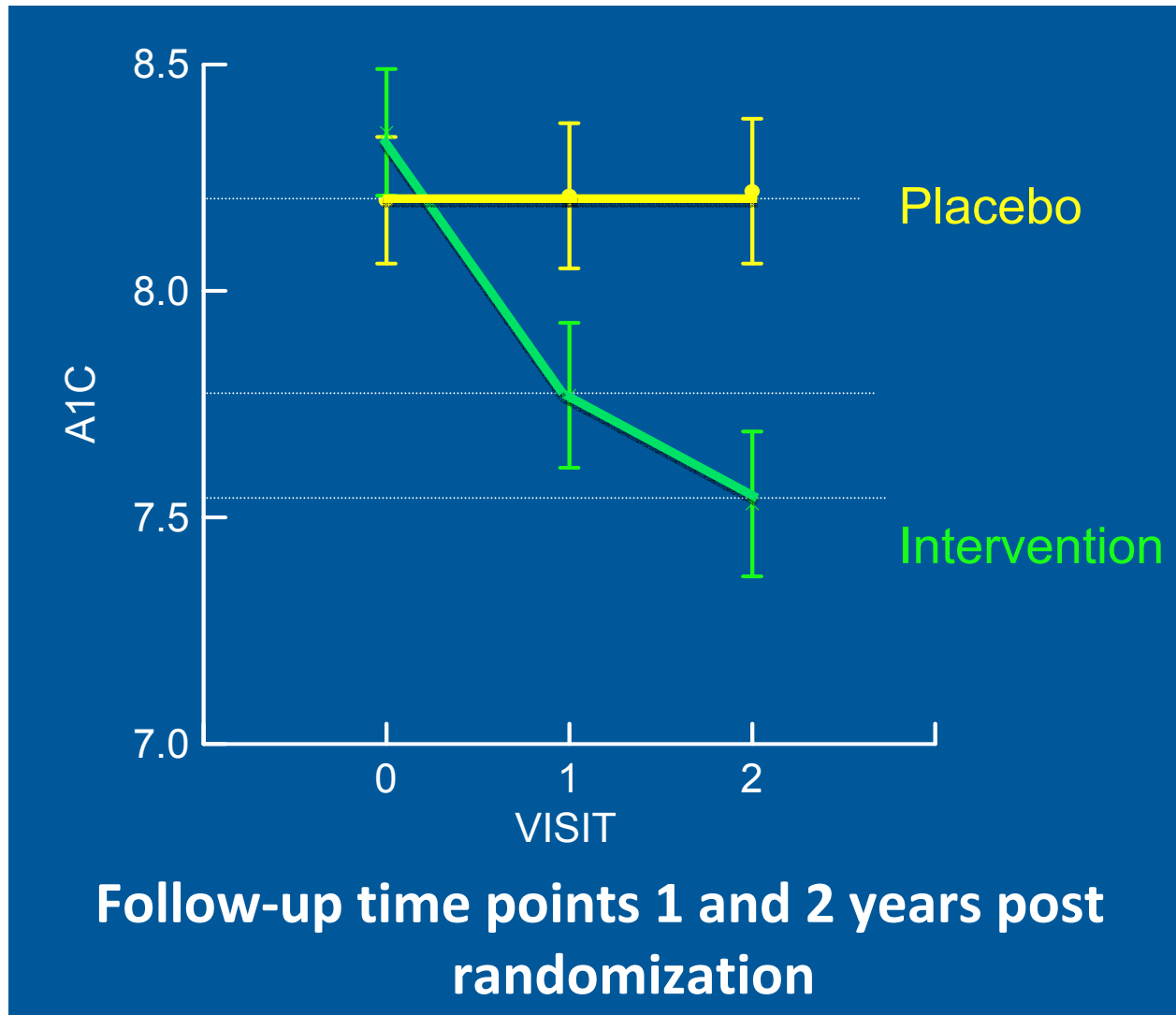
# Mexican American Trial of Community Health Workers

## CHW Intervention

- 36 home visits over 24 months
  - Biweekly in 1<sup>st</sup> year; Monthly in 2<sup>nd</sup> year
- Content areas matching curriculum of American Assn of Diabetes Educators (“AADE 7”)
- ***Emphasis on self-management through environmental modification, stress management, peer support, problem solving***



# Mexican American Trial of Community Health Workers- Preliminary Data





# Mexican American Trial of Community Health Workers- Preliminary Data

## Lessons Learned

- CHWs can deliver a structured diabetes self-management curriculum
- Emphasis on behavioral modification, not content or primary diabetes education
- ***Significant improvement in glycemic control relative to attention control group, sustained over two years***

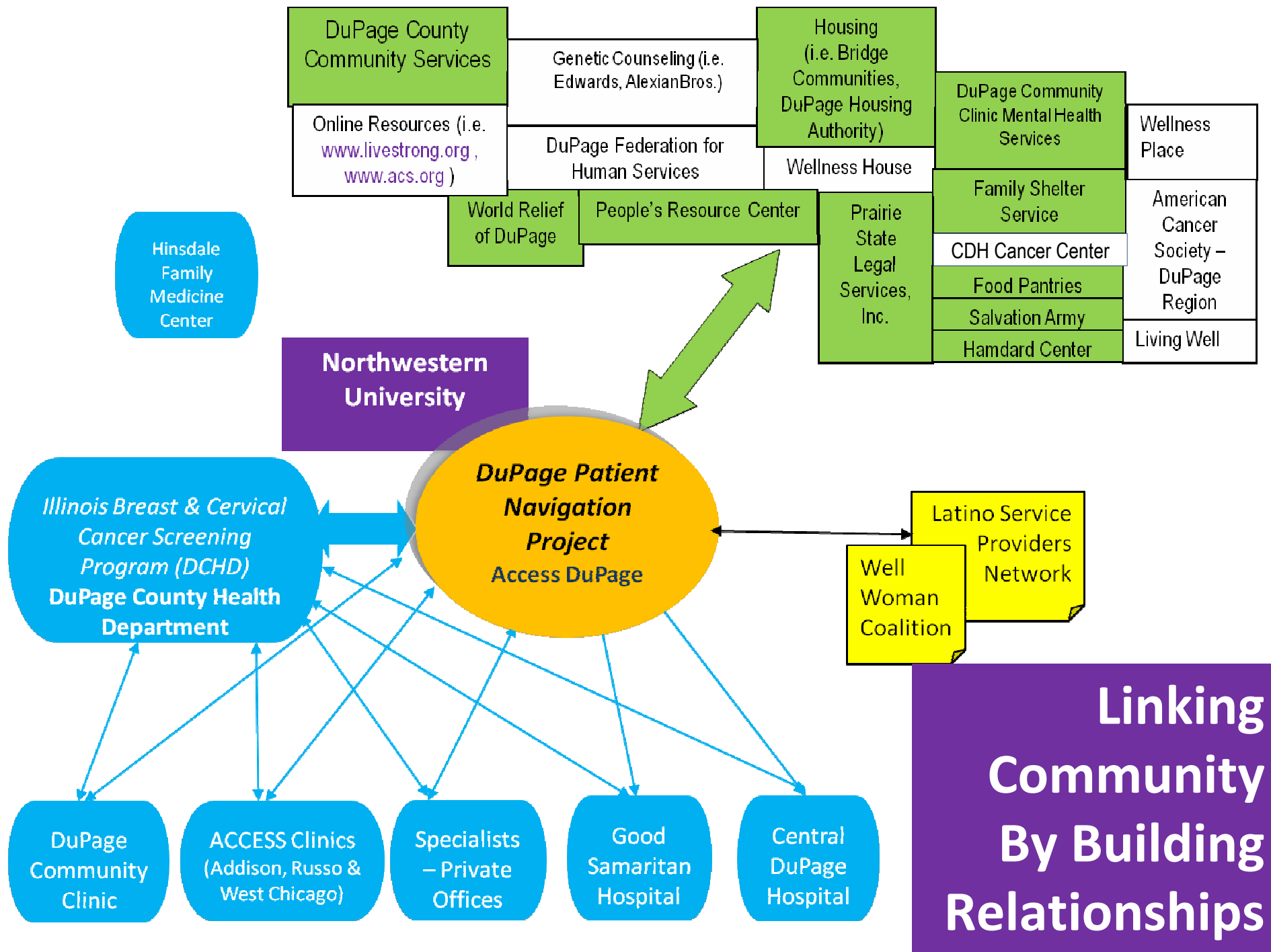
# DuPage Patient Navigation Collaborative

## *Community based participatory research (CBPR) framework*

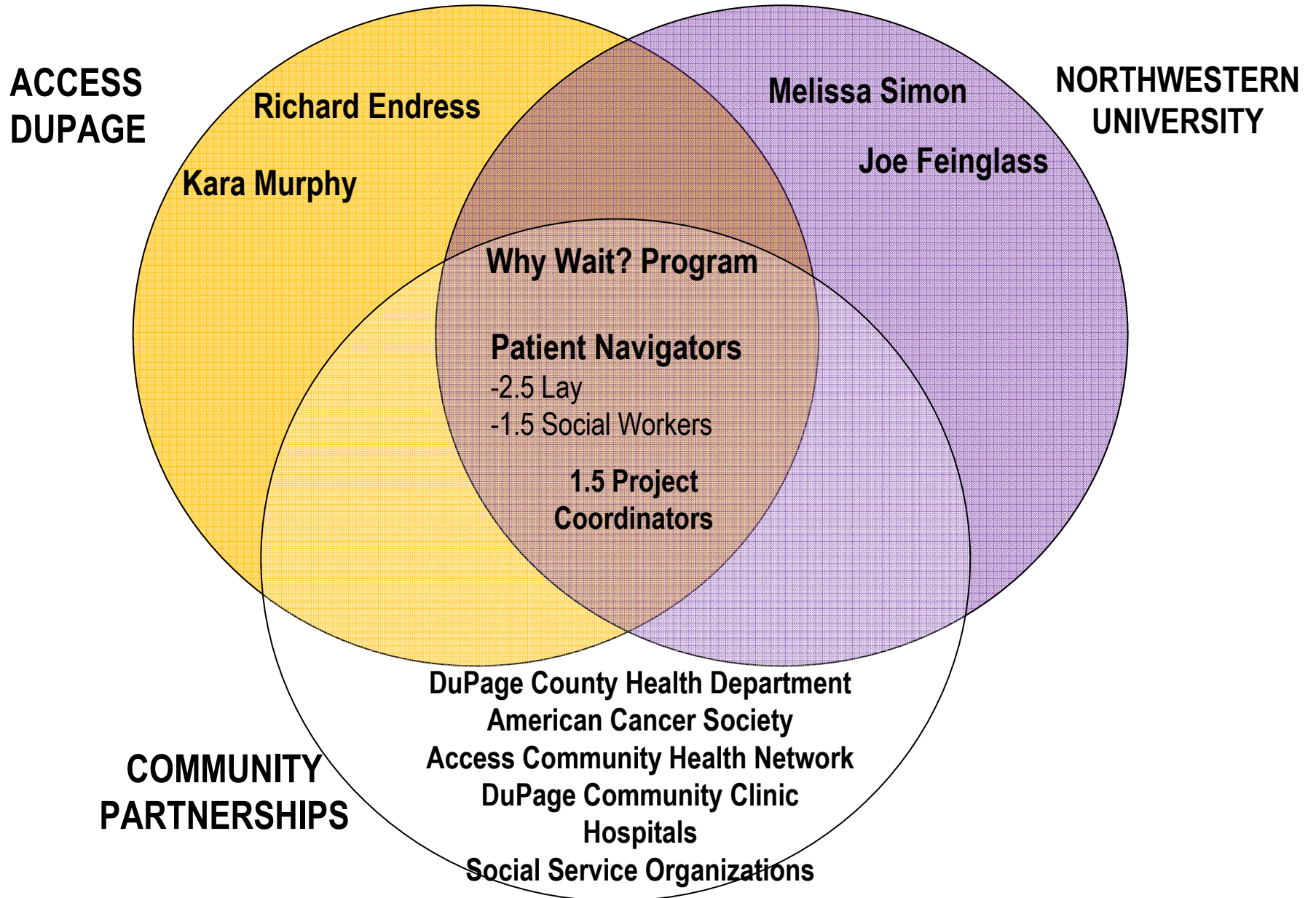
- Northwestern University partnering with award- winning community-based coalition of medical providers and community based and government funded organizations dedicated to providing health care to uninsured residents of DuPage County, a collar county of Cook County.

## *Patient Navigation*

- Service arm of study is housed at Access DuPage and focuses on navigating medically underserved and uninsured suburban women from the point of abnormal breast and/or cervical cancer screening test through diagnostic resolution.
- Leveraging of community and university relationships and resources, the navigation team acts as an important linkage between the patient, the county health department and myriad of community agencies and services.
- *The goal is to facilitate timely access to quality cancer care that meets cultural needs and standards of care for all patients.*



# DuPage Patient Navigation Collaborative



# Doulas

- Chicago Doula Project
  - Lower cesarean and epidural rates resulted in cost savings for teens
  - More breast feeding
- Other programs locally for breastfeeding
- National doula projects similar

# Other Areas of Research

- Diabetes <sup>1,2</sup>
  - Starr County diabetes self-management education study: Improved diabetes knowledge, fasting blood glucose, and HbA1c
  - Amigos in Salud: Improved health status, ED use, diet, activity, med adherence
- Asthma <sup>3</sup>
  - Seattle-King County Healthy Homes project: Reduced symptom days, urgent care, increased QOL
- Breast and cervical cancer nationally

1. Brown et al. Diabetes Care. 2002 Feb;25(2):259-68.

2. Babamoto et al. Health Educ Behav. 2009 Feb;36(1):113-26.

3. Krieger et al. AJPH. 2005;95(4):652-659.

# Other Areas of Research

- Hypertension and Stroke <sup>1</sup>
  - 14 studies, 8 RCTs
  - Significant improvements in blood pressure
- Maternal/child health <sup>2</sup>
  - Improved immunization uptake and breastfeeding
  - Reduced child morbidity
- Infectious Disease <sup>2,3</sup>
  - Improved tuberculosis treatment outcomes
  - Improved outcomes for acute respiratory infections and malaria

1. Brownstein et al. Am J Prev Med. 2007 May;32(5):435-47.

2. Lewin et al. Cochrane Database Syst Rev. 2010 Mar 17;(3):CD004015.

3. Lewin et al. Cochrane Database Syst Rev. 2005 Jan 25;(1):CD004015.

# Next Steps

- Very strong evidence for diabetes
- Good evidence for asthma
- Some evidence for other diseases
- Mostly high risk, minority population

***Do we need more trials?***