

# Not One More Life

## *A Community Based Approach to Asthma Disparities*

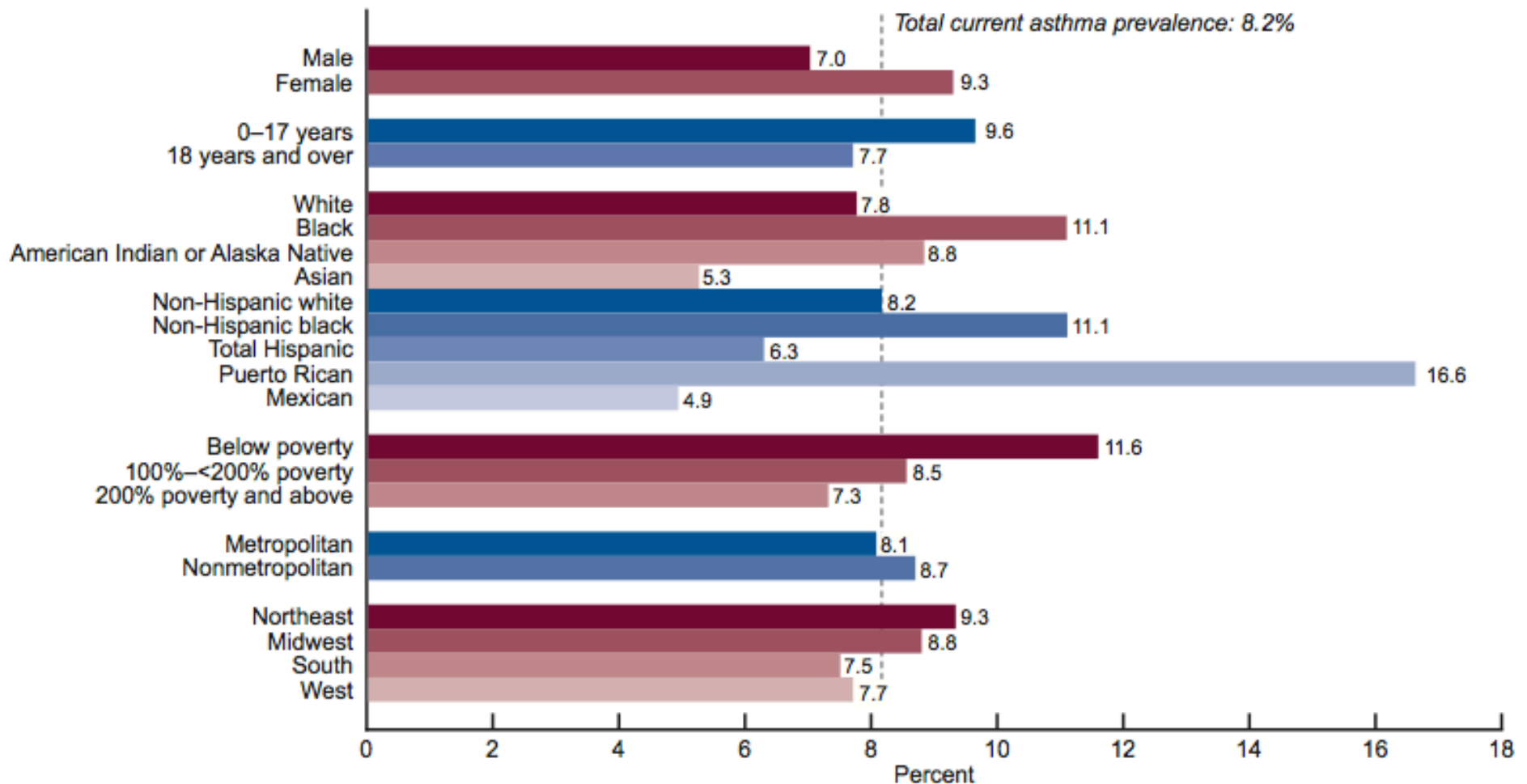


**LeRoy M. Graham MD, FCCP  
Founder and Medical Director  
Not One More Life, Inc.**

**Georgia Pediatric Pulmonology Associates, PC  
Morehouse School of Medicine  
Atlanta, GA**



# Asthma Prevalence

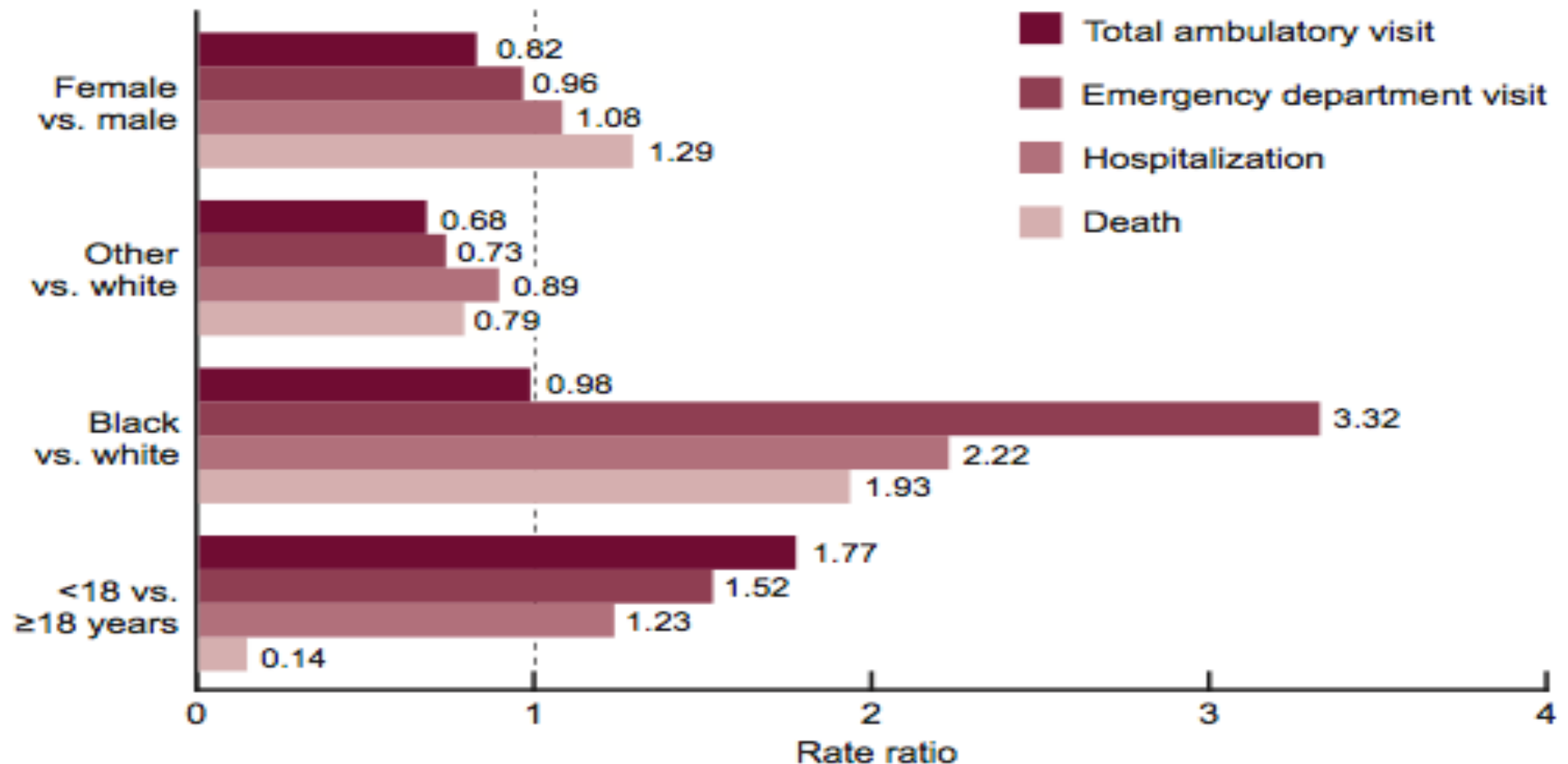


Akinbami LJ, et al. Asthma prevalence, health care use and mortality, US, 2005-2009. NHS Reports 2011;32:1.  
[www.cdc.gov/nchs/data/nhsr032.pdf](http://www.cdc.gov/nchs/data/nhsr032.pdf) accessed April 25, 2011

# In the last 10 years.....

- Overall prevalence has increased by 12.3% to 8.2%, most notably in
  - Children – 9.6%
    - Poor children – 13.5%
    - African American male children – 17.0%
  - Adults
    - Women – 9.3%
    - Poor adults – 13.5%

# Asthma Burden

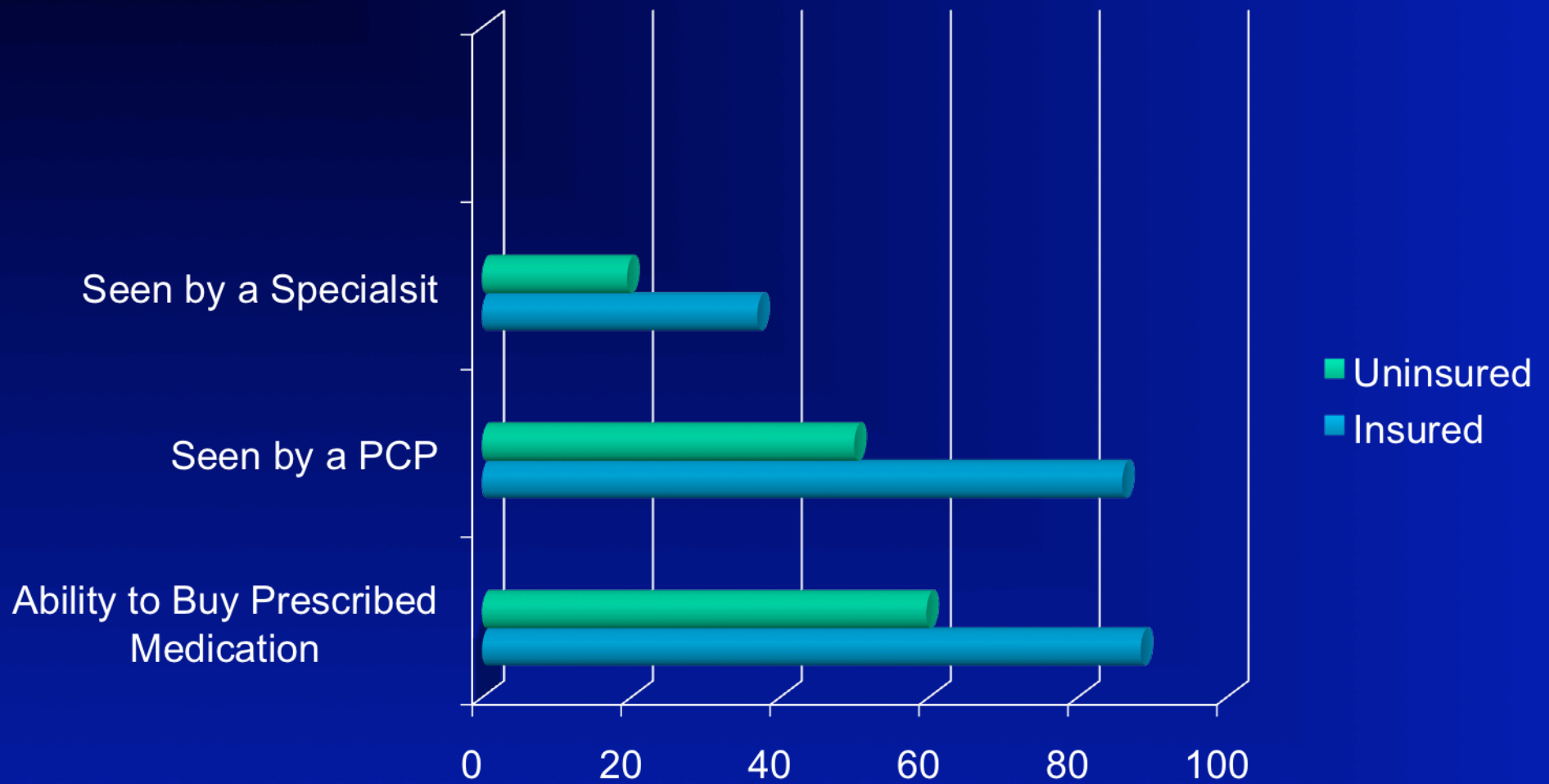


NOTE: A rate ratio of 1.0 (dashed line) indicates equal rates between the groups being compared.

SOURCES: CDC/NCHS, National Ambulatory Medical Care Survey, National Hospital Ambulatory Medical Care Survey, National Hospital Discharge Survey, Mortality component of the National Vital Statistics System, and National Health Interview Survey (population with current asthma).

# Insured vs. Uninsured

## % of Patients with Asthma



CDC, NHIS 2011

# **Racial and Ethnic Disparities in Asthma Medication Usage and Health-Care Usage**

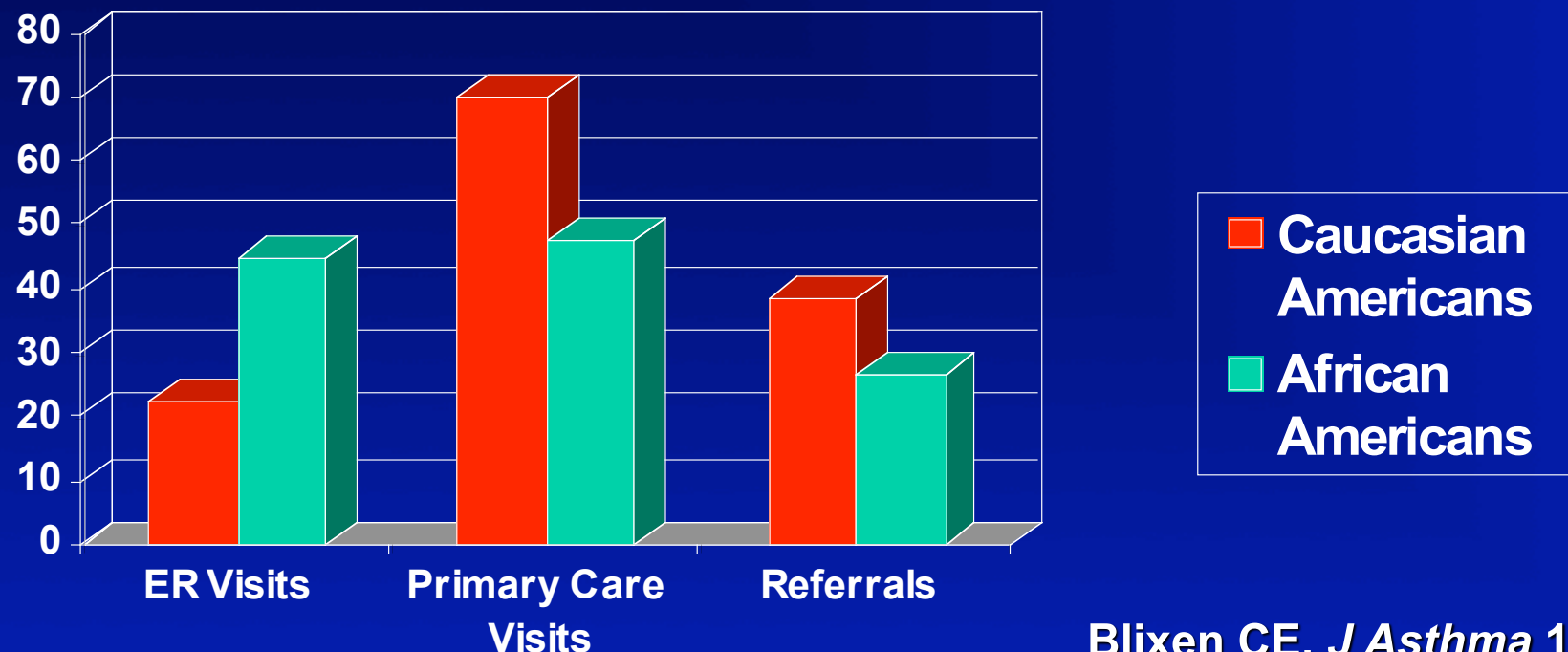
*Crocker, D et al. CHEST(2009) 136(4):1063-1071*

- **National Asthma Survey Database**
- **1485 children surveyed (55% white, 25% Hispanic, 20% black)**
- **Black children had twice as many ED visits (39% vs. 19%) and hospitalizations (12% vs. 5%) than white children**
- **Black and Hispanic were less likely to have used ICS (21% and 22%) than white children (33%) in the preceding 3 months**
- **Black and Hispanic children were more likely receive daily SABA (26% and 19%) than white children (12%)**
- **ED visits positively correlated with SABA use and negatively correlated with ICS use when stratified for race and ethnicity**

# HMO STUDY

## Cleveland Clinic

- African American and Caucasian Patients
- 18-50 Years of Age
- 124 African Americans and 67 Caucasians



Blixen CE, *J Asthma* 1999

# Ethnic Disparities in Asthma

- Prevalence of asthma among African Americans is 42% higher than in White Americans
- African American females have the highest asthma prevalence and morbidity of any racial/gender group
- African Americans are hospitalized for and die from asthma at twice the rate of White Americans



NCHS/CDC 2011

# **Ethnic Disparities in Asthma:**

## ***Diversity Among Hispanic Americans***

- Puerto Ricans have higher asthma prevalence and mortality than African Americans
- This disparity is most notable among Puerto Ricans living in the Northeastern United states
- Mexican Americans have lower asthma prevalence, morbidity and mortality than White Americans, African Americans and Puerto Ricans
- Considerable diversity with respect to asthma epidemiology exists among “Hispanic Americans” and has been inadequately studied



***NCHS/CDC 2011***

# A New Management Paradigm.....

Engagement

Education

Empowerment



## Hypothesis

*Partnerships with minority communities of faith and their well organized Health Ministries offer the best vehicle for the systematic community-based education and individual empowerment needed to control Asthma in Our Communities*

**An Atlanta Based Model Now Being Expanded Across the US**



# Not One More Life

## *The Team of The Willing*

LeRoy M, Graham MD

Tia Boone RN

Mike Stader RT, AE-C

Sam Lindo RT

Gerry Staton MD

Tracey Patterson PA

W. Gerald Teague MD

Varada Divgi MD

Michael Lenoir MD

Rhonda Hill

Chanda Mobley

Robin Hyman RT

Carla Brigotti RT

Kat Gamble NP

Kelly Morganstein PA

Matt Dieter RT

Jadese Weddington RT

Randy Brown MD

Alonzo White MD

Jon Popler MD

Stephanie Hassel MD

Steen James MD

Ann Marie Brooks MD

Latresa Lang MD

Renee Bomar NP-C

Patrice Gaspard MD

George Strait

Shirley Knight RT

Yvette Samuel

Jim Presswood Esq

Julie Williams

Kecia Walker LSW

Nick Raviele

Tanisha Denny MPH

[www.notonemorelife.org](http://www.notonemorelife.org)

# Why Communities of Faith?

- Enduring bases of leadership
- Roles in fostering community well-being
- Strong visions for spiritual and physical health of their faith communities
- Well-developed Health Ministries staffed by members committed to fostering health in their congregations

# Our Methods Are Novel

NOML programs scheduled at local communities of faith through health ministries:

- short didactic presentation on asthma followed by Q and A
- participants screened by validated (Juniper) questionnaire and spirometry
- Pulmonologist/allergist reviews and discusses results with participants
- Information relayed to PCP and/or specialty follow up arranged
- serial telephone follow up at 1, 3, 6 and 12 months
- Individual case management



# **Straight Talk – No Chaser!!**

- Blunt talk about disparities and high risk status
- Elimination of Victim Mentality
- Ownership and Accountability
- Successful Health Care results from Radical Consumerism
- **INDIVIDUAL EMPOWERMENT = The Ultimate Healthcare Reform**

# ASTHMA CARE

- Care must be long term; there is no cure
- See a doctor at least every 1 - 6 months
- Take daily medicines to prevent attacks as your doctor tells you
- Add short-term treatment when symptoms start
- Stay away from things that make your asthma worse



# ASTHMA

## *“Nuts, Bolts and Nuggets”*

- The problem is not getting air in, it's getting air out !
- Your airways are inflamed aka “hot, sore and irritable”
- Your controller soothes your airways
- Your rescue medication can get you out of trouble but only for a while
- Your medications don't work unless you take them and take them right...learn how to inhale!

# List and Then Share Your Thoughts and Concerns With Your Doctor

- What you would like to get from your visit or why you decided to see the doctor.
- When and where you had your symptoms.
- Your concerns about the symptoms and your medicines.
- The questions you want answered.
- You get out of the visit just what you put in!
- There are no dumb questions.



# What to Expect from Asthma Care

- Attend school or work with no time off due to your asthma
- No need for ER or hospital visits
- No symptoms during the day or night
- Few or no side effects from medications

*Ask your doctor to change your treatment plan if these goals are not met!.....*

***or, find another doctor!!!!!!***

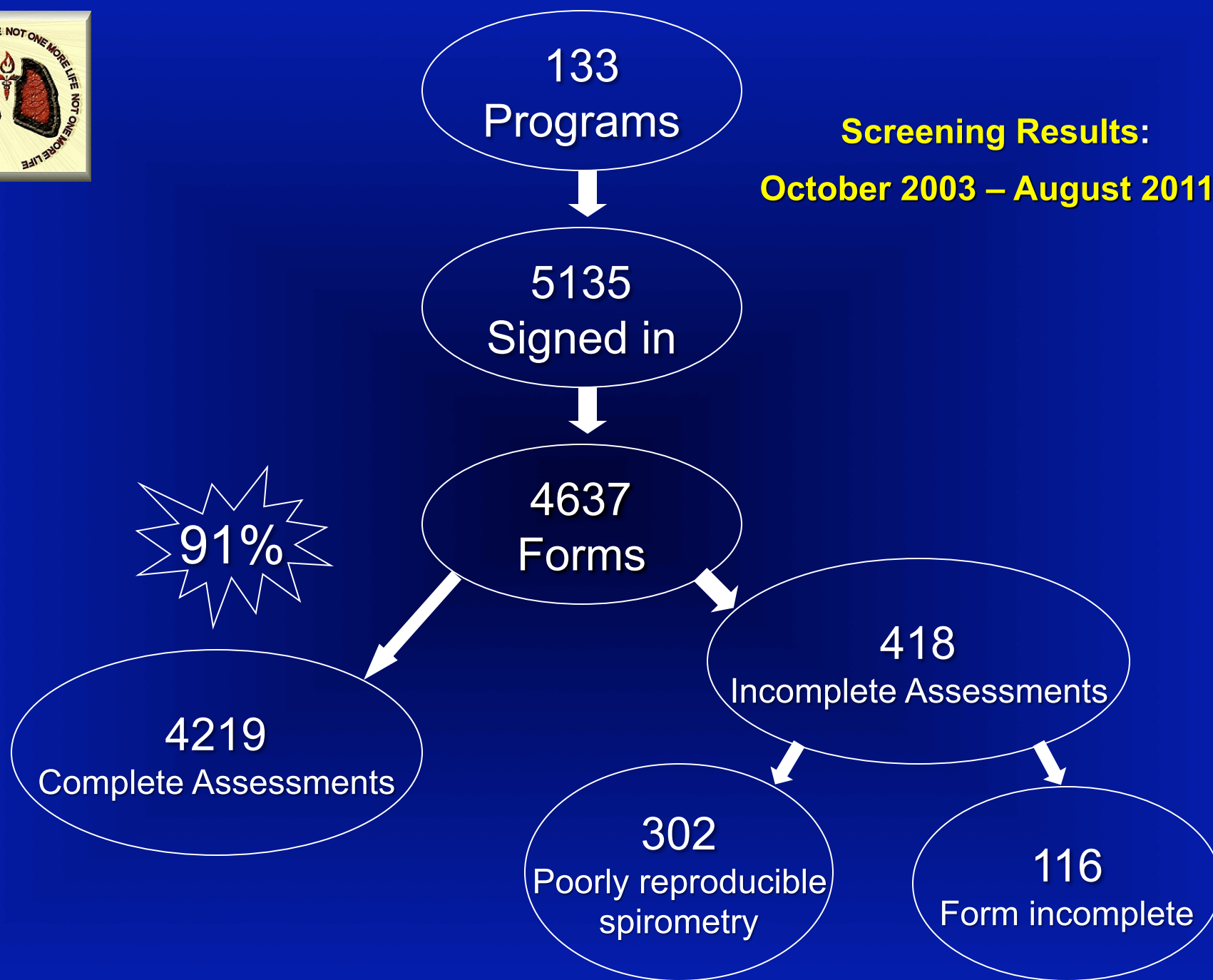


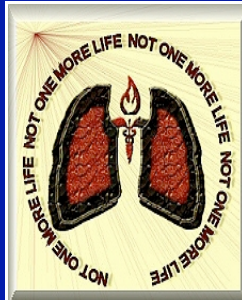
# Case Management

- Telephone follow – up at 1, 3, 6, and 12 months
- Referral to existing clinics/community hospitals
- Follow-up in our free pulmonary clinic in Atlanta
- Medication assistance
- Access to pulmonologists and allergists
- Determining eligibility for CMS
- Utilizing patient assistance programs



**Screening Results:**  
**October 2003 – August 2011**





	Asymptomatic/ Normal Lung Function n (%)	Symptomatic/ Normal Lung Function n (%)	Asymptomatic/ Abnormal Lung Function n (%)	Symptomatic/ Abnormal Lung Function n (%)	Missing n (%)
Sample	1654 (45.4)	691 (19.0)	445 (12.2)	526 (14.5)	324 (8.9)
Men	534 (48.2)	155 (14.0)	160 (14.4)	161 (14.5)	98 (8.8)
Women	1119 (44.4)	534 (21.2)	285 (11.3)	361 (14.3)	221 (8.8)
0-17 yr	301 (35.9)	195 (23.3)	83 (9.9)	135 (16.1)	124 (14.8)
18 > yr	1341 (48.5)	491 (17.8)	357 (12.9)	386 (14.0)	190 (6.9)
NL BMI	923 (46.8)	361 (18.3)	250 (12.7)	277 (14.0)	162 (8.2)
Obese	427 (42.7)	230 (23.0)	114 (11.4)	169 (16.9)	60 (6.0)
Asthma	149 (17.7)	266 (31.6)	80 (9.5)	277 (32.9)	70 (8.3)
Smoker	104 (32.4)	84 (26.2)	45 (14.0)	71 (22.1)	17 (5.3)

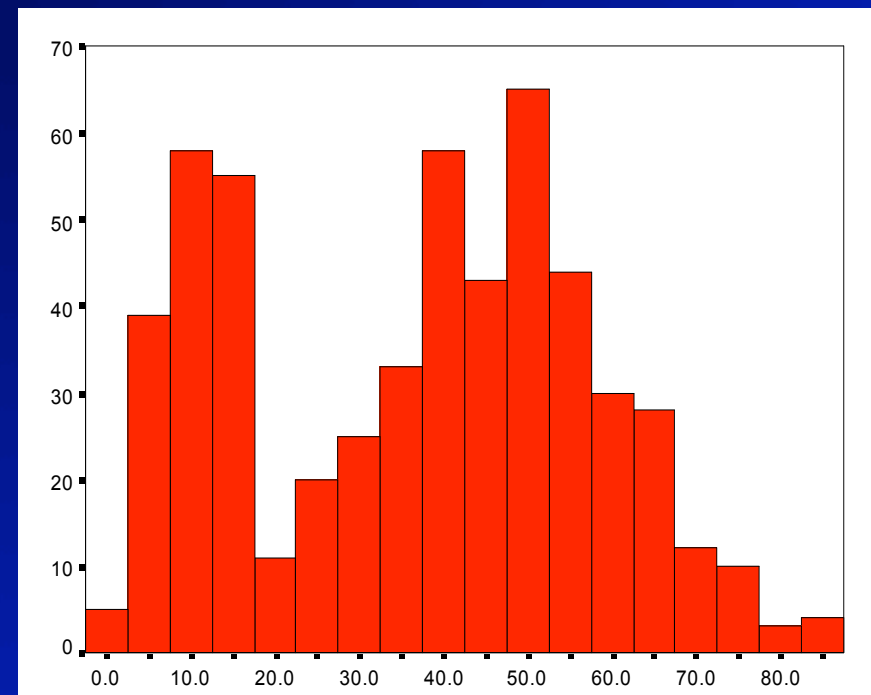
# Screen Results and Demographics of 4637 Participants a NOML Events 2003-2011

## Screen Results

Few Symptoms and Normal Lung Function	50.4%
Increased Symptoms and Normal Lung Function	18.9%
Few Symptoms and Decreased Lung Function	12.9%
Increased Symptoms and Decreased Lung Function	15.2%

Only 23.7% self-reported asthma yet nearly 50% have increased symptoms Or abnormal lung function

66.7 % Female  
73.6 % African American  
33.6 % BMI > 30 kg/m<sup>2</sup> (obese)  
23.7 % Ever smoked  
7.1 % Current Smokers



Age Distribution (yrs)

# Screening Results for Asthmatics: Only 17% asymptomatic with normal lung function!

Low Symptom Score and Normal Lung Function <b>17%</b>	High Symptom Score and Normal Lung Function <b>35.6%</b>
Low Symptom Score and Abnormal Lung Function <b>8.9%</b>	High Symptom Score and Abnormal Lung Function <b>38.5%</b>

*poor perceivers?*

*Poorly controlled*



# High Prevalence of Under-Treatment and Hospitalization among Asthmatics

**No current asthma treatment: 38 %**

**Bronchodilator only: 27%**

**Inhaled corticosteroids: 19%**

**Ever hospitalized for asthma: 21%**



# Access to a Personal Physician

All participants:

- have physician - 58.5%

Participants with self-reported asthma:

- no physician – 23%\*
- primary care physician – 59%
- specialty physician – 18%

\*  $P < 0.001$  versus participants without self-reported asthma



# How many people walk into programs without a diagnosis of asthma but likely have asthma or some other lung disease?

N = 844 complete screenings without a diagnosis of asthma

**Strong evidence for lung disease** 12%  
(symptoms present and abnormal lung function)

**Good evidence for lung disease** 16%  
(abnormal lung function only)

**Weak evidence for lung disease** 20%  
(symptoms present only)

---

**90% of participants with abnormal lung function  
report seeing a physician after a NOML session**

**48%**

# NOML EXPANSION CITIES

## ■ Current

- Chicago, IL
- Lansing, MI
- Brooklyn, NY
- Flint, MI
- Mt. Vernon, NY
- Chatanooga, TN
- St. Louis, MO
- Hartford, CT
- Grand Rapids, MI
- Norfolk, VA
- Long Island, NY
- Detroit, M

## ■ Planned

- Memphis, TN
- Jackson, MI
- Hattiesburg, MI
- Houston, TX
- Dallas, TX
- Washinton, DC
- New Orleans. LA
- Oakland, CA
- Bronx, NY
- Los Angeles, CA



**ONE** *Breath*™  
Make The Most Of It



[www.notonemorelife.org](http://www.notonemorelife.org)

## The Inner-City Respiratory Alliance

***ENGAGE .....EDUCATE.....EMPOWER***

- **On line Patient Education and Resources**
- **On line Provider CME focused on High Risk populations**
- **Network of 20 NOML Expansion Cities**
  - **Live Patient and Provider Education**
  - **Centralized data collection (ACCESS)**
- **Nascent Research Network**

# Strategies to Change the Paradigm

- Actionable education of PCPs on evidence based guidelines
  - Identify and treat persistent asthma
  - Increased use of spirometry
  - Simplified Asthma Management Plans
    - Emphasize individualized symptom recognition
- Functional cultural competency
- Enhanced provider-patient communication
  - Straight talk
  - Eliminate the victim mentality and the missionary approach

# Strategies to Change the Paradigm

- **Patient Centric Education to Engage, Educate and Empower**
  - **Increased use of Ethnically Oriented Broadcast Media**
    - TV, Radio, Blogosphere
  - **Asthma Champions**
  - **Corporate buy in for the “value-added” concept**
    - Increasing “Presenteeism”

# Strategies to Change the Paradigm

- Increase Adherence
  - Effectively inquire about adherence
  - Discover the barriers
    - Ambivalence
    - Fear and misinformation
    - Cost
    - Hassle factor – KISS
  - Address the barriers
    - Strait talk
    - Education
    - Samples, patient assistance programs, formulary awareness

# Strategies to Change the Paradigm

- Relevant Research where the signal/noise ratio is the greatest
  - Adequate representation of members of high risk populations and minority investigators
  - Cluster studies, multivariate and regression analyses
  - Community based studies utilizing community resources for validation
  - Translational studies
  - Increased focus on validating effective models of community based education and care
  - No more “quick projects” that study only epiphenomena and leave no resources for change

# NOML Clinic

In the fall of 2009, NOML partnered with the City of Refuge Shelter and the Healing Community Center Clinic in Atlanta to start a free clinic to provide access to pulmonary physicians for the individuals who otherwise lack access to care.



# Conclusions

- NOML is a novel asthma screening and education program that is highly effective at reaching and teaching diverse populations at programs conducted at communities of faith
- NOML is now the central component of the *Inner City Asthma Alliance* networking asthma champions across country to address asthma disparities through novel online and live education for both providers and community members
- NOML is currently being expanded into up to 20 cities around the US from its Atlanta base.

IN MEMORY OF  
*Kellen*



**February 9, 1990 -January 11, 2001**

## *“Not One More Child”*

# ***NOT ONE MORE LIFE***

**[www.notonemorelife.org](http://www.notonemorelife.org)**

**A 501c3 not for profit**

**891 Byrnwyck Road  
Atlanta, GA 30319  
404-547-1463**