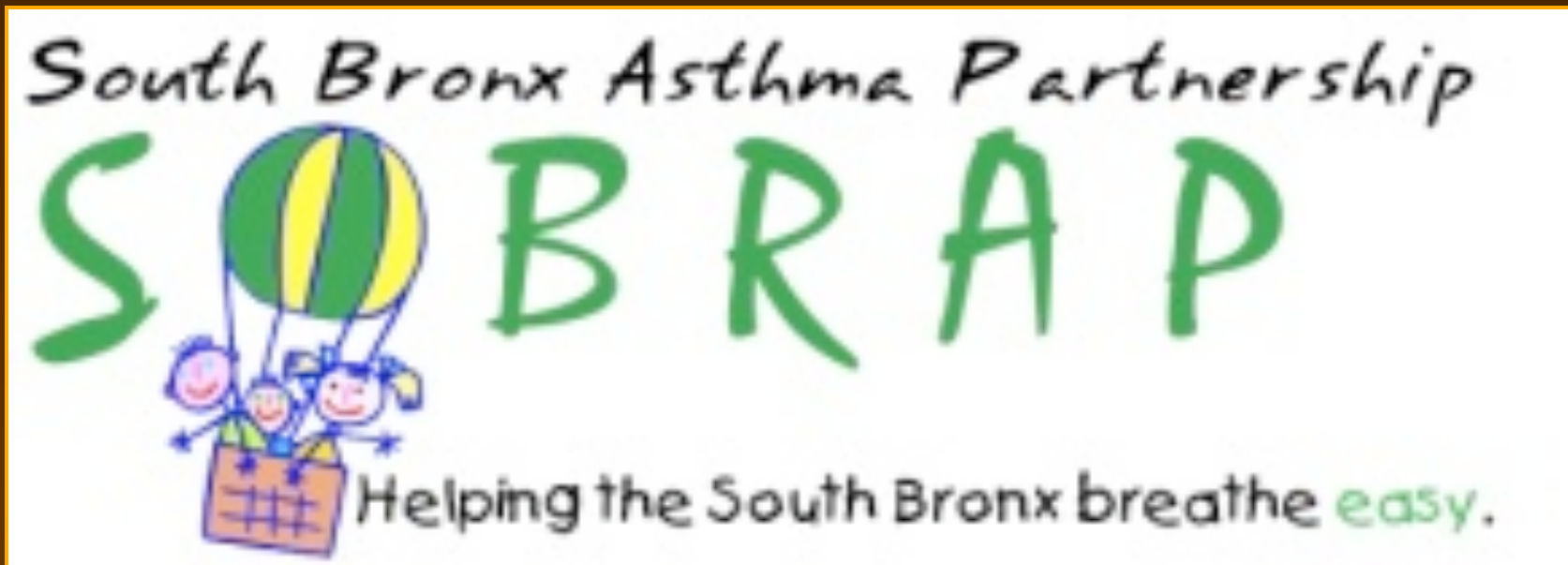


## Mamta Reddy, MD

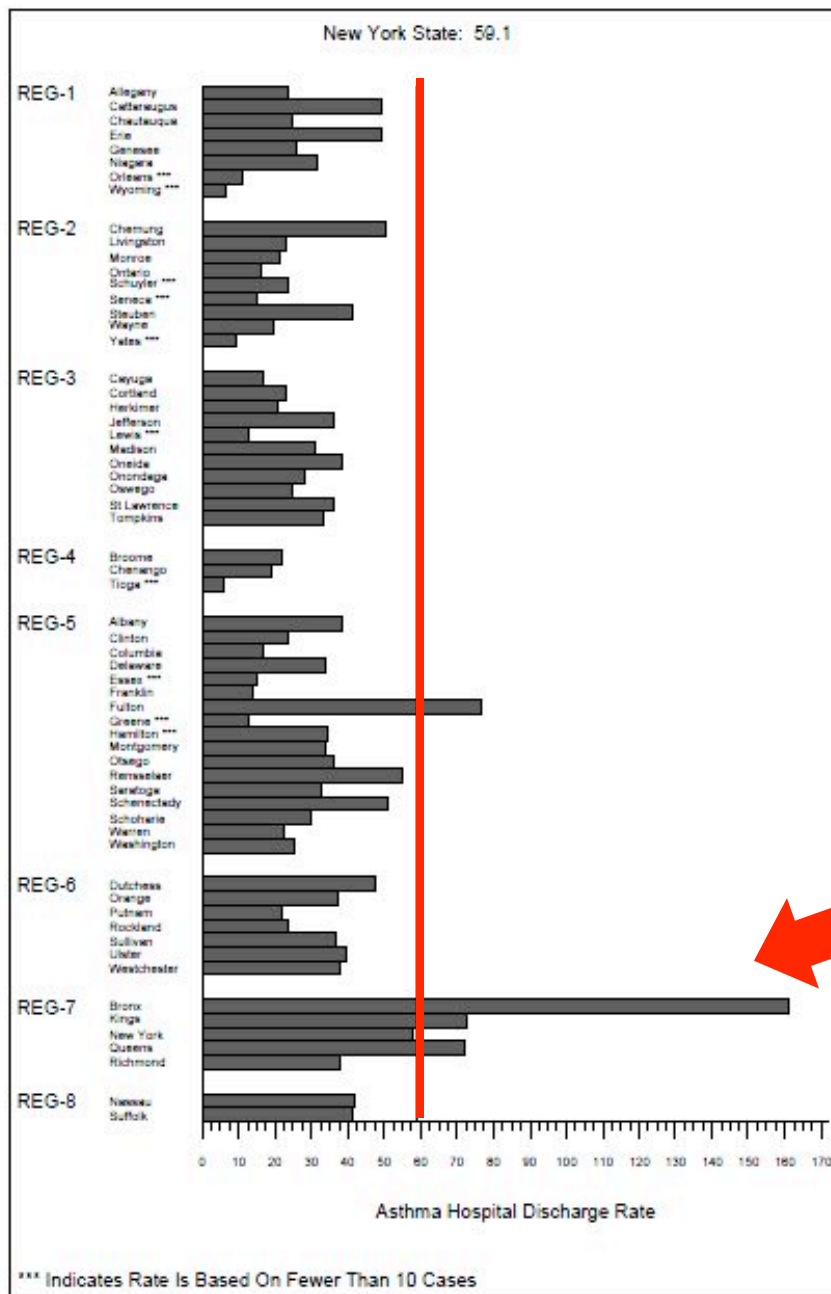
Director, South Bronx Asthma Partnership  
Chief, Allergy Immunology  
Bronx-Lebanon Hospital Center  
Department of Pediatrics





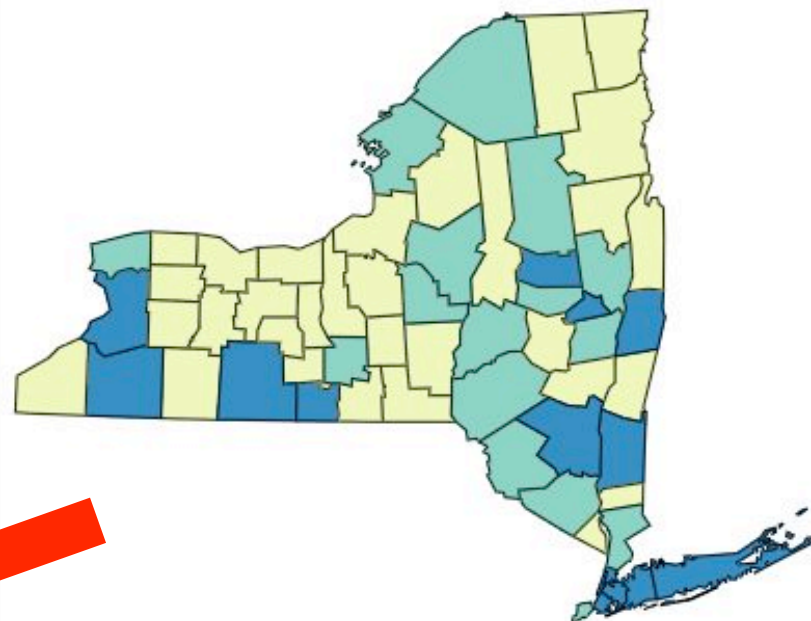
## Engaging the Community in an Asthma Coalition: The South Bronx Experience



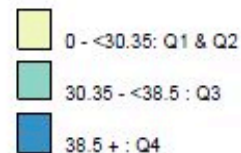


## Asthma Hospital Discharges

Hospital Discharge Rate per 10,000 Population, Age 0-4  
2006-2008



Hospital Discharge Rate  
Counties Are Shaded Based On Quartile Distribution

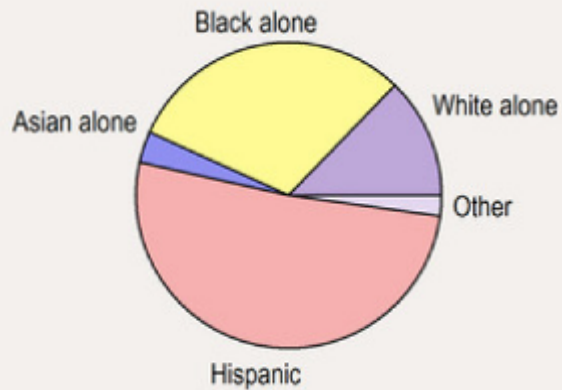


Source: SPARCS



# The South Bronx Community

**57% Hispanic, 37% Black**



- Homelessness
- Poor housing
- Poor access to health care
- Low educational levels
- Discrimination
- Immigration-related issues
- Poor nutrition
- Low literacy
- Poor health outcomes

- 32% born outside of the U.S.
- 56% non-English at home
- 68% high school diploma



# SOBRAP Mission

- 1) Reduce the number of asthma-related ED visits, hospitalizations and unscheduled clinic visits
- 2) Provide culturally-appropriate, literacy-sensitive educational outreach and medical services for an ethnically and culturally diverse community
- 3) Engage community stakeholders who can leverage asthma-related policies and resources



# Partners

## Schools and Day Care Centers

80 Head Start  
and Daycare  
Centers in MAD

Bronx DOE  
NYC Elementary,  
Middle and High  
Schools

## Governmental Agencies

NYCDOHMH  
Bronx DPHO  
Bronx Boro President

## Hospitals, Clinics and Providers

Bronx-Lebanon Hospital Center  
Martin Luther King Jr.  
Montefiore Medical Center  
Albert Einstein Medical Center  
Urban Health Plan  
Narco Freedom  
Morris Heights Health Center  
Bronx Smoke-Free Partnership  
Bronx BREATHEs  
Visiting Nurse Service of NY

## Environmental Groups

AFSZ  
For A Better Bronx  
Healthy Nest  
Clean Air NY  
Commuter Link

## Community Groups

Catholic Guardian Society  
Episcopal Social Services  
New York Public Library  
Crotona Inn Family Shelter  
Good Shepherd Services  
Boys and Girls Clubs  
Sustainable South Bronx





**Mamta Reddy, MD**  
Director



**Diane Strom, LCSW**  
Program Administrator



**Evelyn Arguinizoni, AE-C**  
Community Asthma Educator



**Ram, Kairam, MD**  
Chair, Pediatrics



**Yudy Persaud, MD, MPH**  
Attending, Allergy/  
Immunology



**Lauren Brown, AE-C**  
Program Manager, ALP



**Tomas Jimenez**  
Program Manager, MAD



**Sivani Nattama**  
AmeriCorps\*VISTA



# Asthma Jeopardy at a Community Health Fair





# TRIGGER TOSS



ROACHES



POLLUTION



POLLEN



COLD AIR



EXERCISE



PETS



CIGARETTE  
SMOKE



DUST



# The SOBRAP Asthma Wheel at a Community Health Fair





# Smoking Cessation Wheel at the Great American Smokeout





# The Great American Smokeout





# Integrated Pest Management Workshop at SOBRAP's "Intensive Asthma Training Day"





# BEAM

## Bronx Emergency Asthma Management



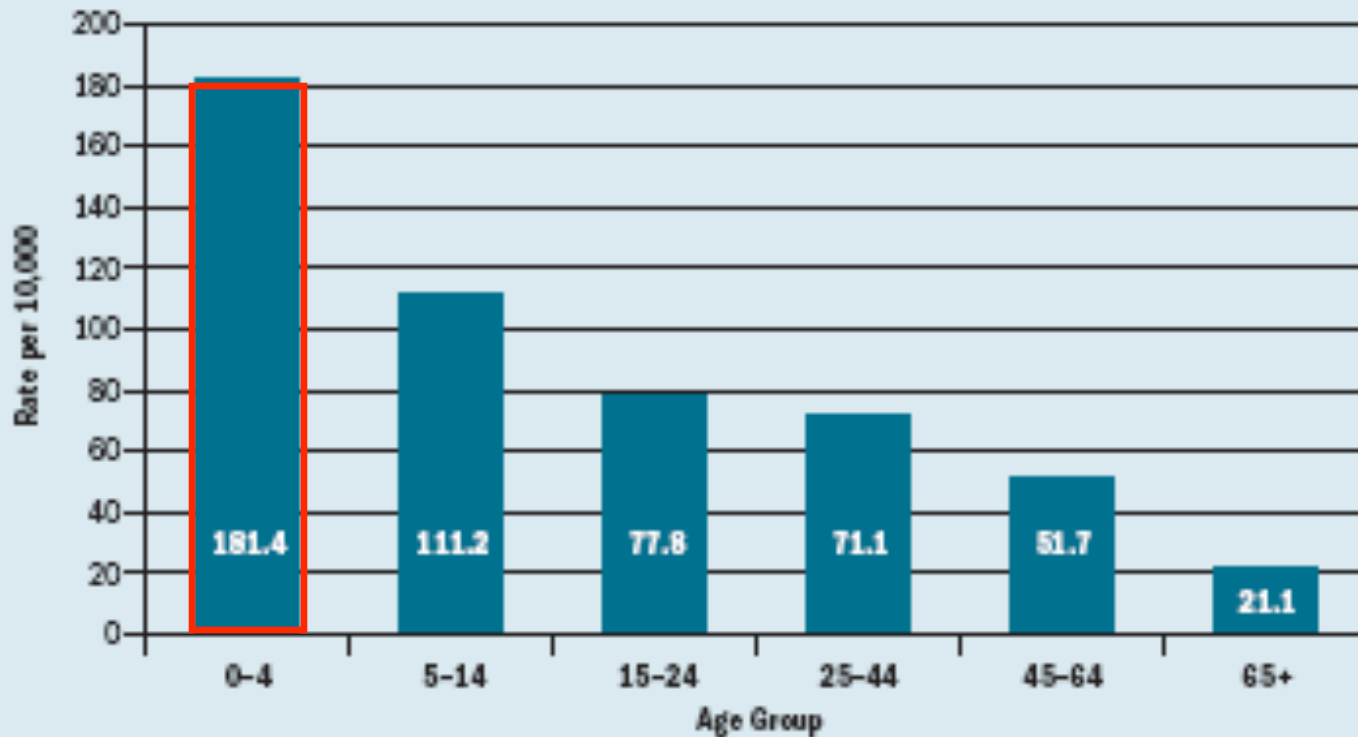
- Educating a captive audience
- Focus on the basics
  - Controllers vs Quick relievers
  - Spacers vs Nebulizers
  - Symptom Diaries
  - Asthma Triggers





# Asthma Emergency Department Visit Rate

per 10,000 Residents by Age Group  
New York State, 2005



New York State Asthma Surveillance Summary Report, p 65; October 2007

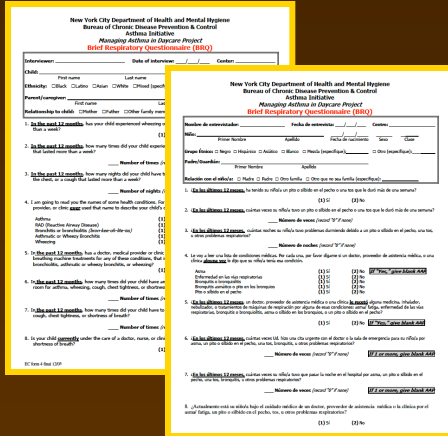


# Managing Asthma in Daycares

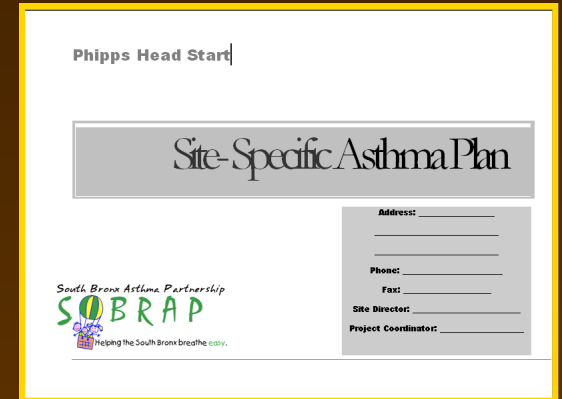


# Quarterly Meetings

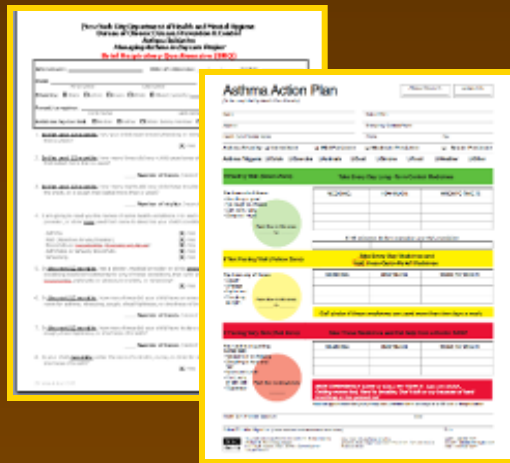
BRQ



Site Specific  
Asthma Plan

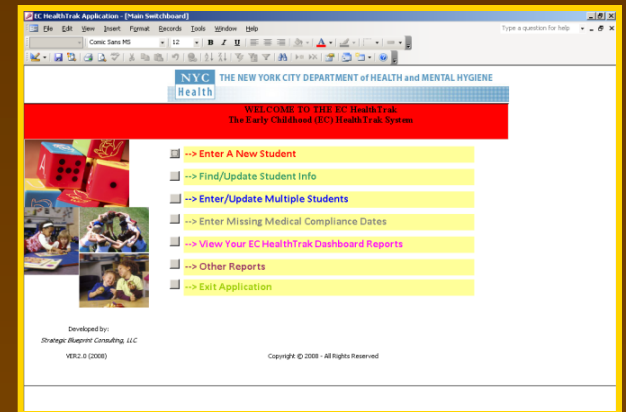


Refer for Medical  
Follow-up



MAD

Computerized Health  
Tracking System

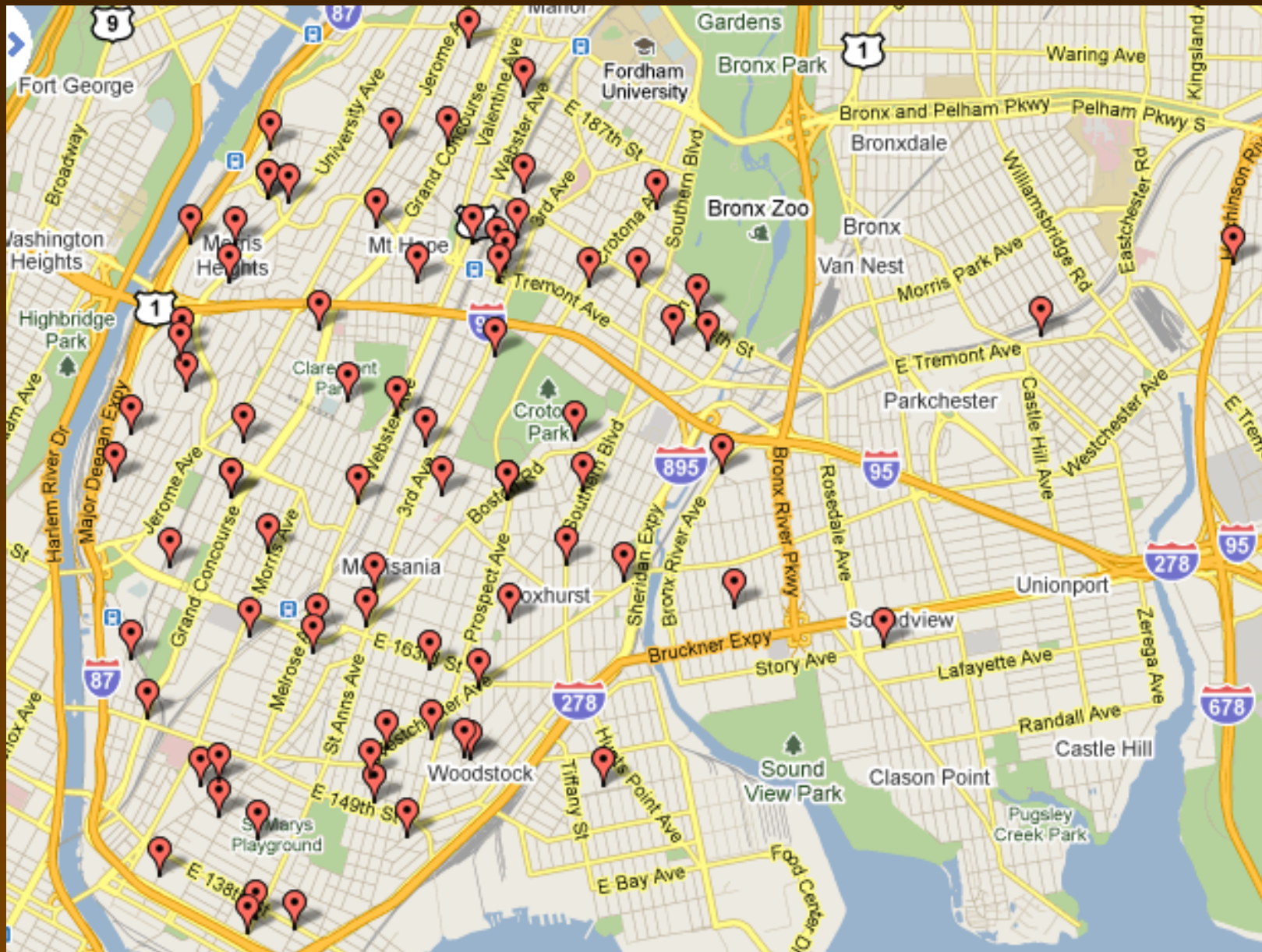


Education





## 80 Sites Across the Bronx





New York City Department of Health and Mental Hygiene  
Bureau of Chronic Disease Prevention & Control  
Asthma Initiative  
Managing Asthma in Daycare Project  
**Brief Respiratory Questionnaire (BRQ)**

Interviewer: \_\_\_\_\_ Date of interview: \_\_\_\_/\_\_\_\_/\_\_\_\_ Center: \_\_\_\_\_

Child: \_\_\_\_\_  
First name Last name D.O.B. Gender Class

Ethnicity: ☐ Black ☐ Latino ☐ Asian ☐ White ☐ Mixed (specify): \_\_\_\_\_ ☐ Other (specify): \_\_\_\_\_

Parent/caregiver: \_\_\_\_\_  
First name Last name

Relationship to child: ☐ Mother ☐ Father ☐ Other family member ☐ Non-family member (specify): \_\_\_\_\_

- In the past 12 months**, has your child experienced wheezing or whistling in the chest, or a cough that lasted more than a week?  
(1) Yes (2) No
- In the past 12 months**, how many times did your child experience wheezing or whistling in the chest, or a cough that lasted more than a week?  
\_\_\_\_\_ Number of times (record "0" if none)
- In the past 12 months**, how many nights did your child have trouble sleeping because of wheezing or whistling in the chest, or a cough that lasted more than a week?  
\_\_\_\_\_ Number of nights (record "0" if none)
- I am going to read you the names of some health conditions. For each one, please tell me if a doctor, medical care provider, or clinic **ever** used that name to describe your child's condition.  

Asthma	(1) Yes	(2) No	<b>If "Yes," give blank AAP</b>
RAD (Reactive Airway Disease)	(1) Yes	(2) No	
Bronchitis or bronchiolitis ( <i>bron-kee-oh-lite-iss</i> )	(1) Yes	(2) No	
Asthmatic or Wheezy Bronchitis	(1) Yes	(2) No	
Wheezing	(1) Yes	(2) No	
- In the past 12 months**, has a doctor, medical provider or clinic **prescribed** any medicine, inhaled inhaler, or breathing machine treatments for any of these conditions, that is for asthma, reactive airway disease, bronchitis or bronchiolitis, asthmatic or wheezy bronchitis, or wheezing?  
(1) Yes (2) No **If "Yes," give blank AAP**
- In the past 12 months**, how many times did your child have an emergency visit to a doctor, clinic, or emergency room for asthma, wheezing, cough, chest tightness, or shortness of breath?  
\_\_\_\_\_ Number of times (record "0" if none) **If 1 or more, give blank AAP**
- In the past 12 months**, how many times did your child have to stay overnight in the hospital for asthma, wheezing, cough, chest tightness, or shortness of breath?  
\_\_\_\_\_ Number of times (record "0" if none) **If 1 or more, give blank AAP**
- Is your child **currently** under the care of a doctor, nurse, or clinic for asthma, wheezing, cough, chest tightness, or shortness of breath?  
(1) Yes (2) No

Demographic information about the child and parent

8 questions about the child's respiratory health



Asthma & Health Literacy

steroids CFC Ventolin daytime symptoms  
peak flow meter diskus Xopenex HFA  
night time symptoms spacers only as needed  
triggers asthma action plan quick-relief  
preventer albuterol metered-dose inhaler  
nebulizers moderate persistent  
asthma diary two puffs twice daily Pro-Air  
controller medicines  
b.i.d. intermittent severe persistent  
Proventil spirometry inhaled corticosteroids  
MDI



# ALP

## The Asthma Literacy Project





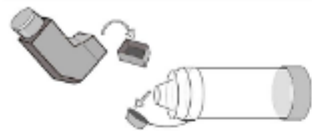
# ALP

## The Asthma Literacy Project

- **How to Use a Spacer**
- **Understanding Asthma Medications**
- **Keeping a Symptom Diary**
- **Understanding Asthma Triggers**



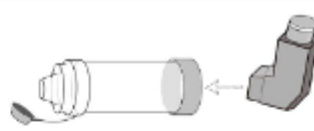
## HOW TO USE A SPACER



**Step 1.** Remove the caps from the inhaler and the spacer.



**Step 2.** Shake the inhaler well for 5 seconds.



**Step 3.** Insert the inhaler into the open end of the spacer.



**Step 4.** Practice breathing slowly and deeply through the mouth.



**Step 5.** Wrap your lips around the mouthpiece of the spacer so that no air leaks out.



**Step 6.** Push the inhaler down once. This will release one puff of medicine into the spacer.



**Step 7.** Breathe in and out slowly and deeply as you slowly count to 10. Now relax and breathe normally.



**Step 8.** How many puffs did your doctor say to take? Wait 1 minute between each puff. Follow steps 5-8 for every puff.

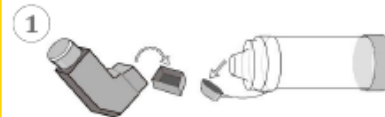


**Step 9.** Rinse your mouth out with water. Clean the spacer once a week with soap and warm water and then let them air dry. Replace caps on inhaler and spacer.

Downloaded by SOBAP's Asthma Library Project with assistance from the Library Assistance Center of NYC.



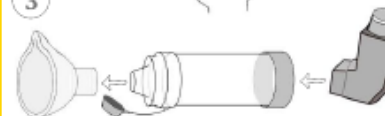
## HOW TO USE A SPACER WITH A FACEMASK



**1** Remove the caps from the inhaler and the spacer.



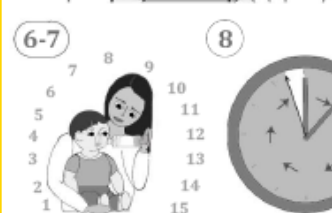
**2** Shake the inhaler well for 5 seconds.



**3** Attach the mask to the mouthpiece of the spacer. Now insert the inhaler into the open end of the spacer.

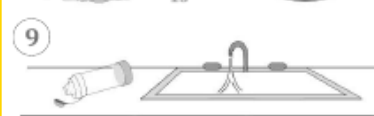


**4** Put the facemask up to your child's face. Make sure that it is tight around the child's nose and mouth so that no air leaks out.



**5** Push the inhaler down once. This will release one puff of medicine into the spacer.

**6** Hold the facemask to your child's face for enough time to allow at least 6 breaths. This may take 10-15 seconds.



**7** Remove the facemask from your child's face.

**8** How many puffs did your doctor say to take? Wait 1 minute between each puff. Follow steps 4-8 for every puff ordered by your doctor.






**9** Rinse your child's mouth with water. Clean the spacer and facemask once a week with soap and warm water and then let air dry. Replace caps on inhaler and spacer.



Downloaded by SOBAP's Asthma Library Project with assistance from the Library Assistance Center of NYC.



## Understanding Asthma Medicine and Treatment

The Three Types of Asthma Medicine	 What does it do?	 When do I take it?	 Be Careful!	Medicines:
1. Daily Preventive	This medicine controls the swelling and mucus build-up in your airways to <b>prevent</b> asthma symptoms.	Take this medicine <b>everyday</b> , even when you feel well and have no asthma symptoms.  Take this medicine everyday until your doctor tells you to stop.	This medicine will <u>not</u> stop asthma symptoms once they have started!  It will <u>not</u> relieve symptoms today or make you feel better today!	My daily preventive medication is:  Flovent      Pulmicort Advair      QVAR Singular  I will take this medication: _____
2. Quick-Relief	This medicine relaxes the muscles around the airways. This helps more air get to the lungs.	Take this medicine at the first sign of asthma symptoms. It will help you feel better <b>now</b> .  This medicine might be prescribed for use before exercising or gym class.	This medicine will <u>not</u> prevent symptoms. It will only relieve current symptoms.  If you use this more than twice a week, you should talk to your doctor.	My quick relief medication is:  (Albuterol) Ventolin      Pro-Air Proventil      Xopenex  I will take this medication: _____
3. Emergency	This medicine brings back control of serious asthma symptoms. It might take several hours to start working.  It is taken as a pill or syrup.	This medicine should <b>only</b> be taken for serious symptoms.  ONLY take this medicine for as long as your doctor tells you to.	This medicine can cause serious side effects in other parts of the body.  If you need this medicine more than twice a year, you should talk to your doctor.	<b>Steroids:</b> Prednisone Oraped Prelone Prednisolone



# My Asthma Diary

Date	Peak Flow	Wheezing	Coughing	Stuffy/runny nose	Medication	What happened
Sunday /						
Monday /						
Tuesday /						
Wednesday /						
Thursday /						
Friday /						
Saturday /						
Sunday /						
Monday /						
Tuesday /						
Wednesday /						
Thursday /						
Friday /						
Saturday /						
Sunday /						
Monday /						
Tuesday /						
Wednesday /						
Thursday /						
Friday /						
Saturday /						
Sunday /						
Monday /						
Tuesday /						
Wednesday /						
Thursday /						
Friday /						
Saturday /						



### My Asthma Diary:

Answer these questions every day:

1. Did my child cough last night?
2. Did my child need the quick-relief inhaler?
3. Did my child have difficulty with exercise or activity?



**Remember to bring this  
Asthma Diary to your next  
doctor's appointment!**

Use these symbols to record any other symptoms your child had.

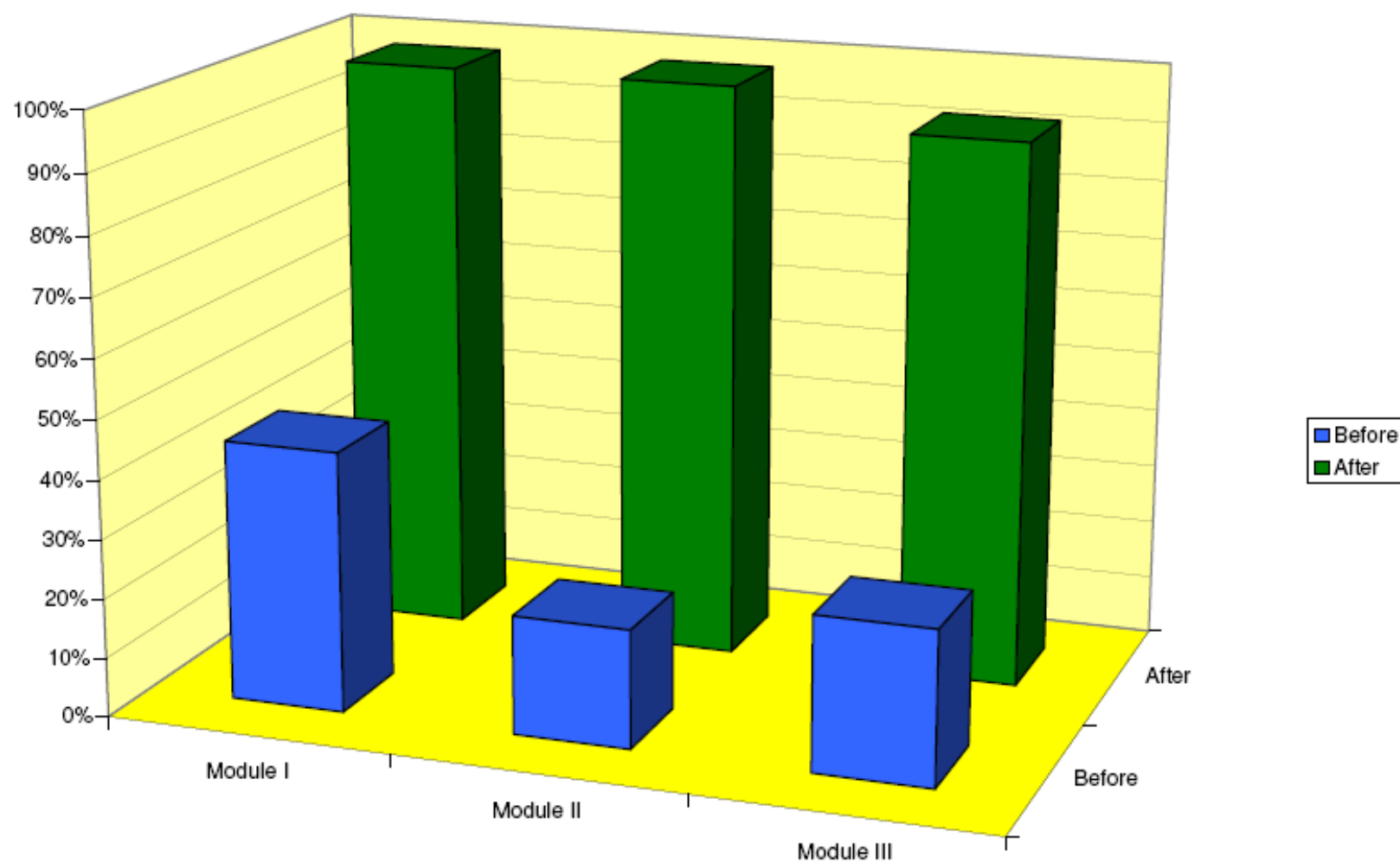
### Symptoms:

**Symptoms:** ☒ Day Wheezing ☐ Night Wheezing ☐ Day Coughing ☐ Stuffy Nose ☐ Runny Nose ☐ Sneezing ☐ Itchy Eyes

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday



Caregivers' ability to demonstrate asthma self-management skills before & after intervention





**Triggers can cause asthma symptoms.**



**Not everyone has the same triggers.**

### What Are Your Triggers?

- ☐ Cigarette Smoke
- ☐ Colds & Viruses
- ☐ Weather Changes
- ☐ Hot Air or Cold Air
- ☐ Cats
- ☐ Dogs
- ☐ Odors & Perfumes
- ☐ Cleaning Products
- ☐ Exercise
- ☐ Mold
- ☐ Pollution
- ☐ Pollen
- ☐ Dust Mites
- ☐ Cockroaches
- ☐ Rats & Mice



### How to Reduce Your Exposure to Triggers

- ☐ Don't bring food into the bedroom
- ☐ Keep pets out of the bedroom
- ☐ Caulk holes and cracks in walls and corners
- ☐ Remove carpets and rugs from the bedroom
- ☐ Wipe off dust regularly with a damp cloth
- ☐ Remove extra dust-collecting items from the bedroom
- ☐ Put away stuffed animals and toys in a bag or box
- ☐ Use zipper-encased, allergy-free bedding and pillowcases
- ☐ Replace curtains with shades or blinds
- ☐ Don't smoke inside the house
- ☐ Keep the windows closed during allergy season
- ☐ Keep indoor humidity under 50%
- ☐ Use only HEPA vacuums and air purifiers
- ☐ Tell your landlord (or call 311) to get rid of mold
- ☐ Use 'green' cleaning supplies or water and vinegar

You can reduce your exposure to triggers.



Make your bedroom trigger-free.

Developed by the Asthma Literacy Project for the South Bronx Asthma Partnership





**I can identify my child's asthma triggers**



## National Asthma Control Initiative

The National Heart, Lung, and Blood Institute Launches New Effort to Put What Works into Action

### The Challenge

Today, 23 million people in the United States have asthma, including seven million children under 18 years of age. More than half of these individuals had at least one asthma attack in the previous year.

Asthma accounts for more than 10 million missed work days and almost 13 million missed school days each year. Moreover, ethnic and racial disparities in asthma morbidity and mortality persist, as does the disproportionate burden of asthma on individuals who live in lower-income, inner-city environments.

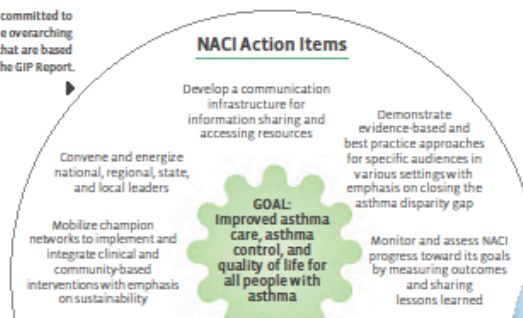
Implementing evidence-based clinical practice guidelines for asthma has demonstrated effectiveness. Yet, getting most clinicians to implement guidelines-based care for their patients with asthma and getting patients to adhere to their treatment plan remain a challenge.



### Moving from Evidence to Action

The National Asthma Control Initiative (NACI) is a new initiative of the National Asthma Education and Prevention Program (NAEPP), coordinated by the National Heart, Lung, and Blood Institute (NHLBI). The NACI aims to use the recommendations of the NAEPP's Expert Panel Report 3 (EPR-3)—Guidelines for the Diagnosis and Management of Asthma and its companion Guidelines Implementation Panel (GIP) Report to mobilize multisector stakeholders and bring about meaningful change in asthma clinical care practices and quality of life for people who have asthma.

The NHLBI is committed to supporting five overarching action items that are based on the GIP Report.



### Get Involved:

To learn more about the NACI, sign up for NACI updates, or become a NACI champion, go to the NACI Web site at <http://naci.nhlbi.nih.gov>

### GIP Priority Messages

The NACI will build on the GIP's six priority messages, selected for their feasibility and potential to positively impact patient outcomes:

1. Use inhaled corticosteroids
2. Use asthma action plans
3. Assess asthma severity
4. Assess and monitor asthma control
5. Schedule follow-up visits
6. Control environmental exposures





# GIP Priority Messages

1. Use inhaled corticosteroids
2. Use asthma action plans
3. Assess asthma severity
4. Assess and monitor asthma control
5. Schedule follow-up visits
6. Control environmental exposures



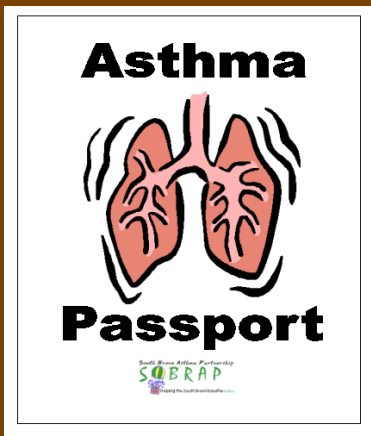


## South Bronx Asthma Partnership Bronx, NY



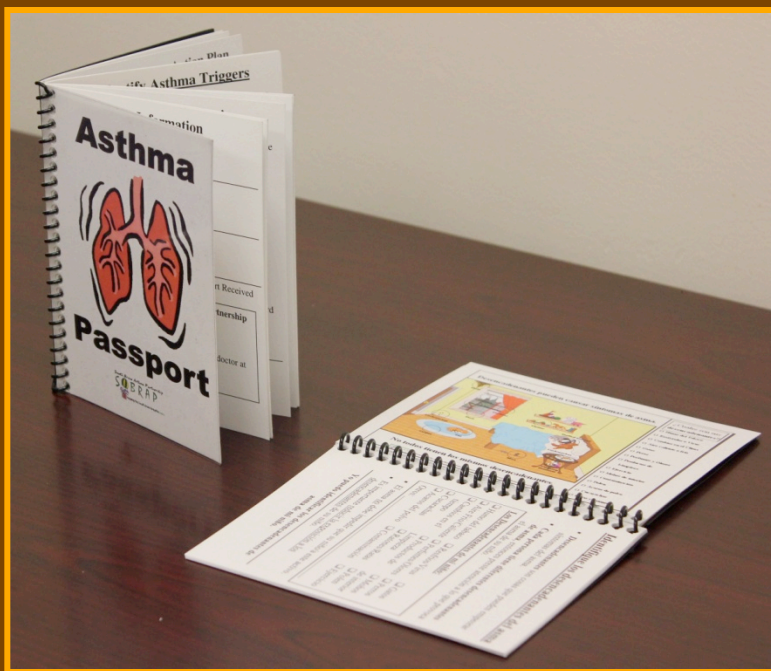
# The Asthma Passport

A palm-sized, wire-bound guide that includes 10 key educational messages:





# The Asthma Passport

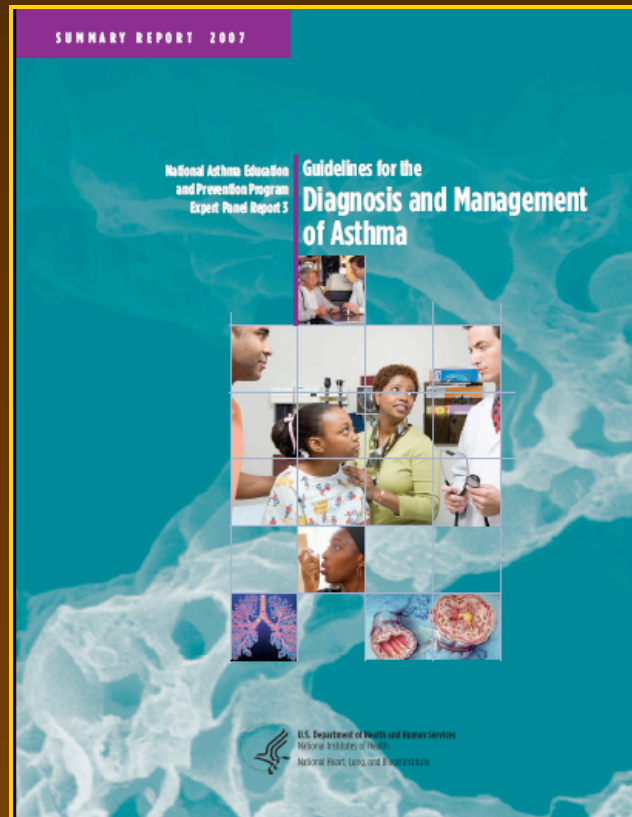


1. Set asthma self-management goals
2. Learn asthma basics
3. Identify my asthma symptoms
4. Understand my asthma medicines
5. Follow my Asthma Action Plan
6. Use my inhaler properly
7. Keep a symptom diary
8. Identify my asthma triggers
9. Schedule a follow-up every 2-6 weeks
10. Ask my doctor specific questions



# PEP

## The Provider Education Project





## Module I

The Stepwise Approach for Long-term Asthma Management

## Module II

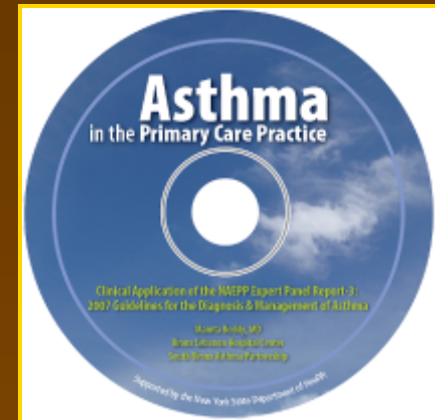
Communication Strategies to Promote Asthma Self-Management

## Module III

Overcoming System Barriers to Achieving Asthma Control



**Affinity** Health Plan  
*Dedicated to Excellence*





# Survey of 182 providers in the Bronx



Date: \_\_\_\_\_

4-digit ID: \_\_\_\_\_

## Practice Tools/Resources Self-Assessment

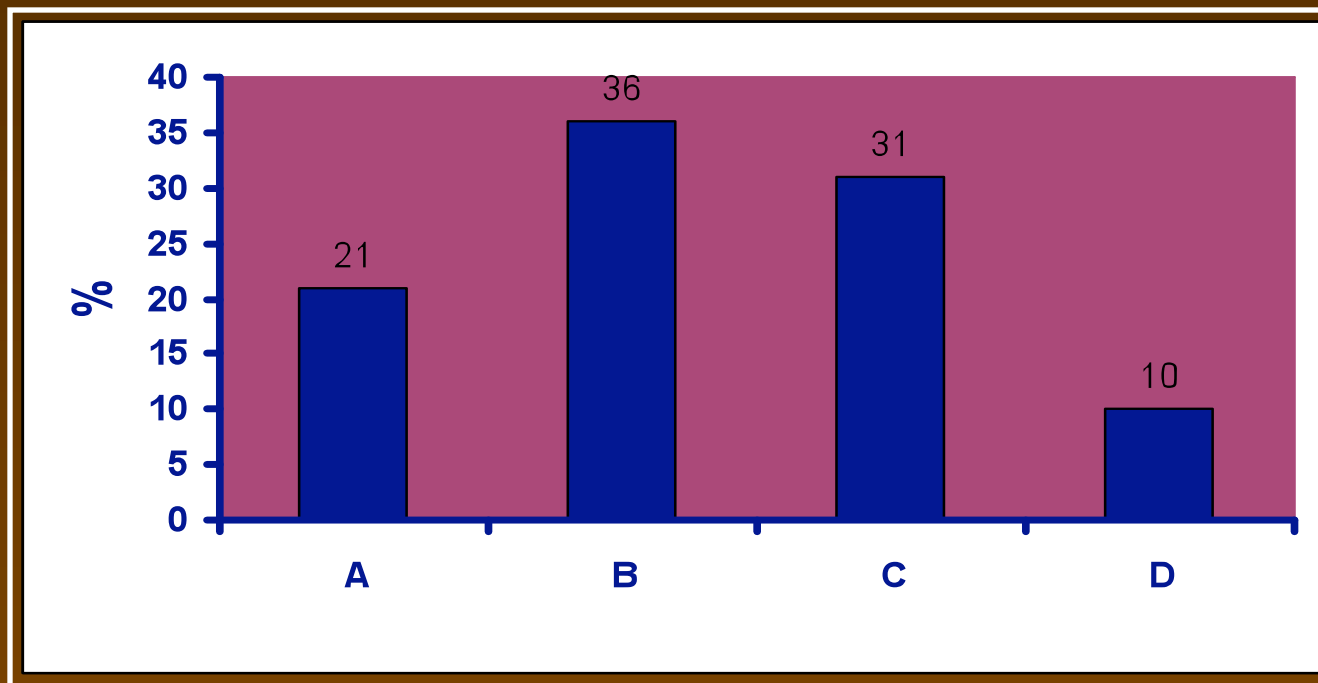
1. The amount of time that would be both ideal and realistic for me to deliver "good" education to a new asthma patient would be:
  - A. 10 minutes
  - B. 20 minutes
  - C. 30 minutes
  - D. I don't think it is a realistic expectation for me to educate a patient with asthma in the time I am allotted to see patients.
2. If I had only 10 minutes to integrate asthma education into an office visit, I would most likely choose to: (select your top THREE messages)
  - A. Affirm the diagnosis of asthma/concept of a chronic disease
  - B. Address inflammation as the underlying cause of symptoms
  - C. Differentiate between "controllers" versus "quick-relievers"
  - D. Demonstrate medication delivery device techniques
  - E. Identify triggers, including second-hand tobacco smoke
  - F. Discuss goals of home monitoring/ benefits of self-management
  - G. Write and review an Asthma Action Plan
  - H. Review how/ when to reach the provider
  - I. Encourage continuous on-going interaction with the clinician
  - J. Administer the annual Influenza vaccine, regardless of severity
3. In my practice setting, I currently have access to the following educational tools:
  - A. Models, photos, or diagrams of inflamed vs normal lungs
  - B. A valved-holding chamber with mask for office demonstration
  - C. A metered-dose inhaler for office demonstration
  - D. A picture chart of various inhalers
  - E. A diskus for office demonstration
  - F. Asthma Action Plans in triplicate form (English & Spanish)
  - G. A peak flow meter in the triage station
  - H. Office spirometry
  - I. A validated questionnaire for patient self-administration
  - J. Referral resources: pest control, home visits, tobacco cessation
  - K. 504b/Medication Administration school forms



**Time**

1. The amount of time that would be both ideal and realistic for me to deliver "good" education to a new asthma patient would be:

- A. 10 minutes
- B. 20 minutes
- C. 30 minutes
- D. I don't think it is a realistic expectation for me to educate a patient with asthma in the time I am allotted to see patients.





2. **Key Educational Messages**  
If I had only 10 minutes to integrate asthma education into an office visit, I would most likely choose to: (select your top THREE messages)

- A. Affirm the diagnosis of asthma/concept of a chronic disease
- B. Express inflammation as the underlying cause of symptoms
- C. Differentiate between "controllers" versus "quick-relievers"
- D. Demonstrate medication delivery device techniques
- E. Identify triggers, including second-hand tobacco smoke
- F. Discuss goals of home monitoring/benefits of self-management
- G. Write and review an Asthma Action Plan
- H. Review how/when to reach the provider
- I. Encourage continuous on-going interaction with the clinician
- J. Administer the annual influenza vaccine, regardless of severity



### 3. In my practice setting, I currently have access to the following educational tools (circle all):

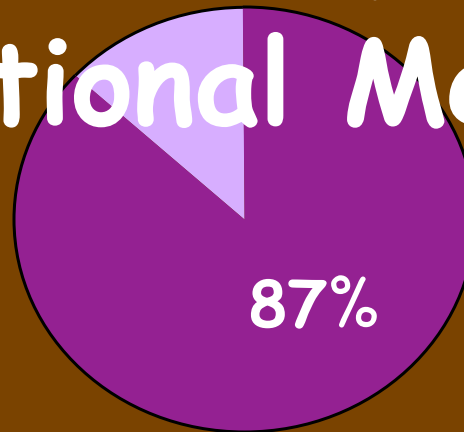
## Self-Management Tools & Resources

- A. models, photos, or diagrams of inflamed vs normal lungs
- B. a holding chamber with mask for office demonstration
- C. a metered-dose inhaler for office demonstration
- D. a picture chart of various inhalers
- E. a diskus for office demonstration
- F. an Asthma Action Plans in triplicate form (English & Spanish)
- G. a peak flow meter in the triage station
- H. office spirometry
- I. a validated questionnaire for patient self-administration
- J. referral resources: pest control, home visits, tobacco cessation
- K. 504b/Medication Administration school forms

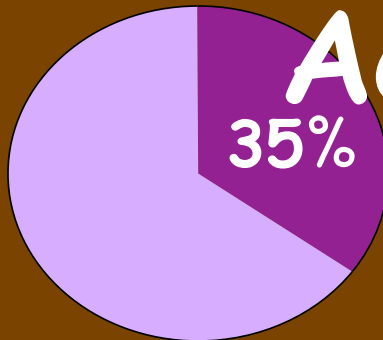


differentiating between  
"controllers" versus "quick-relievers"

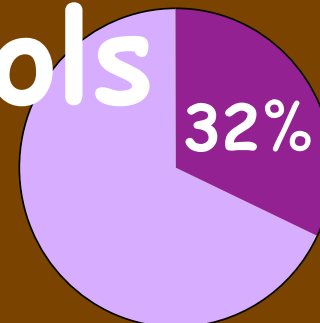
# Key Educational Message # 1



access to models to  
review inflammation



access to visual tools  
for various inhalers

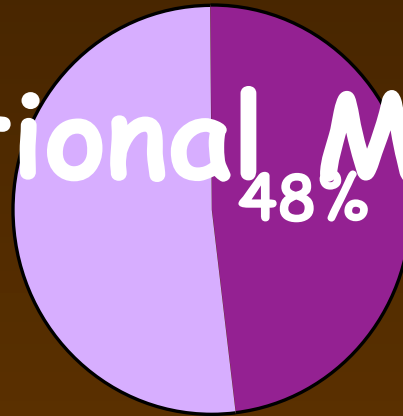


## Access to Tools



identify triggers

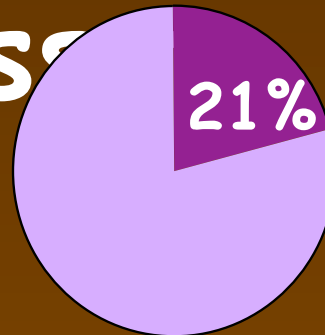
# Key Educational Message # 2



---

referral resources

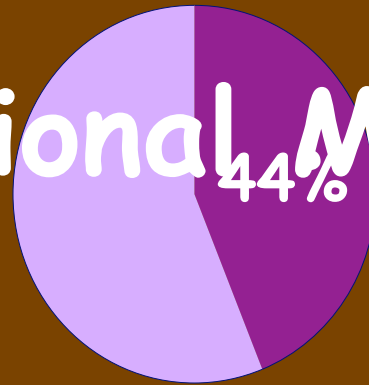
## Access Tools



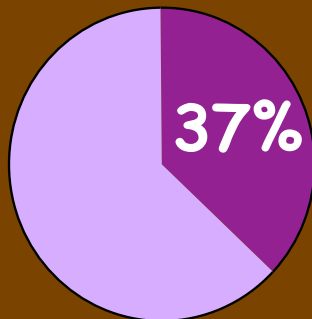


demonstrate medication delivery device technique

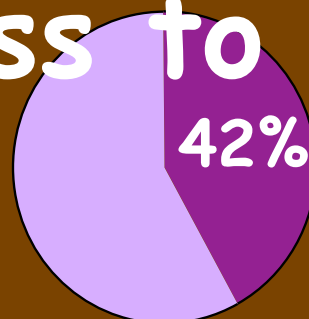
## Key Educational Message # 3



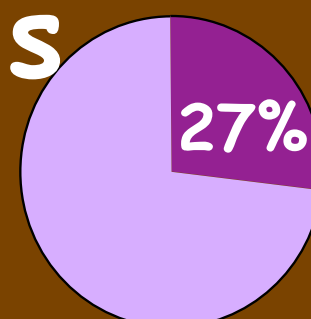
access to a  
sample spacer



access to a  
sample MDI



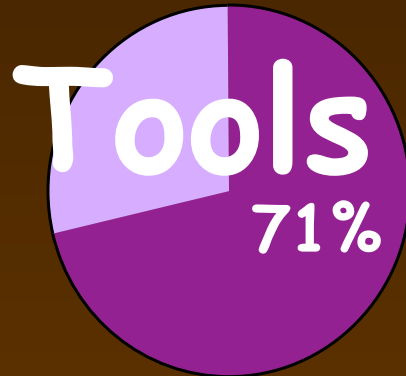
access to a  
sample Diskus



## Access to Tools



access to asthma action plans



write and review an  
asthma action plan

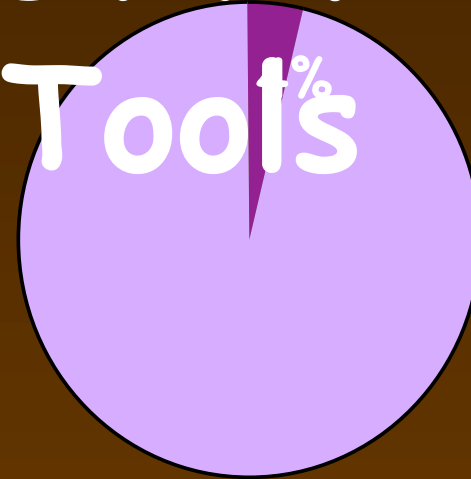




validated questionnaire

Other

Tools



office spirometry

Other

Tools





# Conclusion #1

Providers may not be adequately equipped with the appropriate tools and resources to convey the key educational messages that promote asthma self-management.



# Conclusion #2

Additional work is needed to enable providers to expand their “educational repertoire” of messages and skills to improve overall asthma care.



EPR-3 History & Terminology	Assessing Asthma Severity	Monitoring Asthma Control	Stepwise Treatment & Medications	Education, Environment & Referral
<u>100</u>	<u>100</u>	<u>100</u>	<u>100</u>	<u>100</u>
<u>200</u>	<u>200</u>	<u>200</u>	<u>200</u>	<u>200</u>
<u>300</u>	<u>300</u>	<u>300</u>	<u>300</u>	<u>300</u>
<u>400</u>	<u>400</u>	<u>400</u>	<u>400</u>	<u>400</u>
<u>500</u>	<u>500</u>	<u>500</u>	<u>500</u>	<u>500</u>



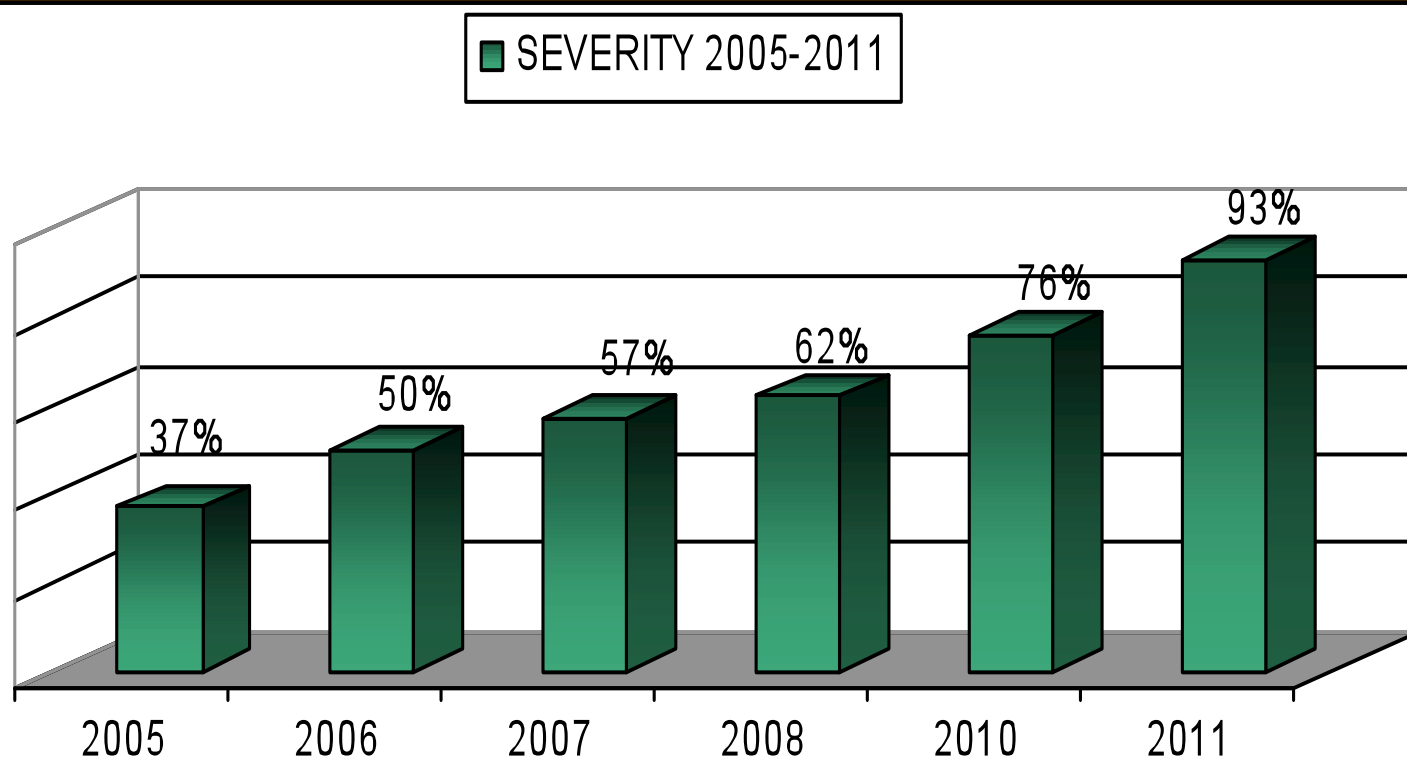
## ASTHMA MANAGEMENT GUIDE (based on the NHLBI/NAEPP EPR-3)

<b>1. PATIENT'S AGE</b>	0-4 years	5-11 years	12 years-Adult
<b>2. SEVERITY and/or CORRESPONDING TREATMENT STEP</b>	no prior asthma diagnosis or past inhaled medications	Intermittent	Persistent
			Mild      Moderate      Severe
	0	1	2      3      4      5      6
<b>3. IMPAIRMENT</b>	cough/wheeze/dyspnea		SABA doses
	# ____ days per week      # ____ nights per month	# ____ days per week      # ____ nights per month	<2/week      daily >2/week      >1/day
		none minor	some extreme
<b>4. RISK</b> (exacerbations requiring systemic steroids)		0-1/ year	2-3/ year      > 3/ year
<b>5. SEVERITY</b> (if new or different today)	Intermittent	Persistent	
		Mild	Moderate      Severe
<b>OR CONTROL</b>	Well Controlled	Not Well Controlled	Very Poorly Controlled      ACT® score:
<b>6. STEPWISE TREATMENT</b>	1	2	3
	4	5	6
<b>7. INFLUENZA VACCINE</b>	administered		egg allergy testing
	refused documented		reminder
<b>8. EDUCATION for self-management</b>	basic facts	controllers vs quick-relievers	spacer technique
			environmental trigger avoidance
<b>9. Referrals</b>	spirometry		tobacco cessation
	allergy testing		integrated pest management
<b>10. RTC</b>	Every 2-6 weeks until "well controlled"		Every 1-6 months if "well controlled" for 3 months

Developed by the South Bronx Asthma Partnership @ Bronx Lebanon Hospital Center (718) 960-1020



# 2005-2011 Asthma Severity Documentation: Compliance for All Sites Combined





## National Asthma Control Initiative

The National Heart, Lung, and Blood Institute Launches New Effort to Put What Works into Action

### The Challenge

Today, 23 million people in the United States have asthma, including seven million children under 18 years of age. More than half of these individuals had at least one asthma attack in the previous year.

Asthma accounts for more than 10 million missed work days and almost 13 million missed school days each year. Moreover, ethnic and racial disparities in asthma morbidity and mortality persist, as does the disproportionate burden of asthma on individuals who live in lower-income, inner-city environments.

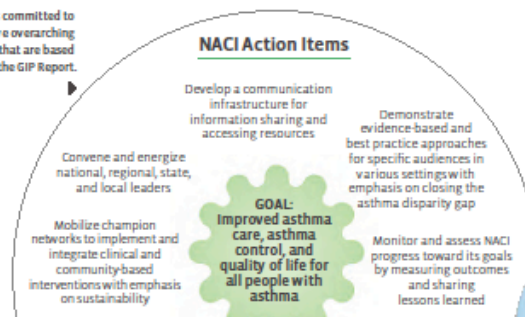
Implementing evidence-based clinical practice guidelines for asthma has demonstrated effectiveness. Yet, getting most clinicians to implement guidelines-based care for their patients with asthma and getting patients to adhere to their treatment plan remain a challenge.



### Moving from Evidence to Action

The National Asthma Control Initiative (NACI) is a new initiative of the National Asthma Education and Prevention Program (NAEPP), coordinated by the National Heart, Lung, and Blood Institute (NHLBI). The NACI aims to use the recommendations of the NAEPP's Expert Panel Report 3 (EPR-3)—Guidelines for the Diagnosis and Management of Asthma and its companion Guidelines Implementation Panel (GIP) Report to mobilize multisector stakeholders and bring about meaningful change in asthma clinical care practices and quality of life for people who have asthma.

The NHLBI is committed to supporting five overarching action items that are based on the GIP Report.



### Get Involved:

To learn more about the NACI, sign up for NACI updates, or become a NACI champion, go to the NACI Web site at <http://naci.nhlbi.nih.gov>

### GIP Priority Messages

The NACI will build on the GIP's six priority messages, selected for their feasibility and potential to positively impact patient outcomes:

1. Use inhaled corticosteroids
2. Use asthma action plans
3. Assess asthma severity
4. Assess and monitor asthma control
5. Schedule follow-up visits
6. Control environmental exposures





# GIP Priority Messages

1. Use inhaled corticosteroids
2. Use asthma action plans
3. Assess asthma severity
4. Assess and monitor asthma control
5. Schedule follow-up visits
6. Control environmental exposures





# Clinical Asthma Champions Leadership Training Program







# Clinical Asthma Champions Leadership Training



## CONGRATULATIONS !



### Workshop Dates and Participants

#### CHAMPIONS GROUP #1: FRIDAY, SEPTEMBER 9TH AND SATURDAY, SEPTEMBER 10TH

Champion	Institution	City
Traci A. Downs, MD	Stony Brook Children's Hospital	East Setauket, NY
Anil Gogineni, MBBS	Bronx-Lebanon Hospital Center	Bronx, NY
Jason Hughes, DO	Koolauloa Community Health and Wellness Center	Kahuku, HI
Edward Nwanegbo, MD	Michigan State University	East Lansing, MI
Megan Pierce, MD	Children's Hospital at Erlanger	Chattanooga, TN
Anele Slezinger, MD	Bronx-Lebanon Hospital Center	Bronx, NY

#### CHAMPIONS GROUP #2: FRIDAY, SEPTEMBER 16TH AND SATURDAY, SEPTEMBER 17TH

Champion	Institution	City
Sheba Alexander, MD	Morris Heights Health Center	Bronx, NY
Elliott S. Attisha, DO	Henry Ford Health System, School-Based & Community Health Program	Detroit, MI
Kenneth Etokhana, MBBS	Bronx-Lebanon Hospital Center	Bronx, NY
Tabasum Imran, MBBS	UAMS Ahec Fort Smith	Fort Smith, AR
Aarti Kapoor, MBBS	Bronx-Lebanon Hospital Center	Bronx, NY
Sheila Krishan, MD	Morris Heights Health Center	Bronx, NY
Nader J. Nakhleh, DO	Jersey Shore University Medical Center	Neptune, NJ
Jamie M. Pinto, MD	K. Hovnanian Children's Hospital	Neptune, NJ

#### CHAMPIONS GROUP #3: FRIDAY, OCTOBER 14TH AND SATURDAY, OCTOBER 15TH

Champion	Institution	City
Shirish Balachandra, MD	Urban Health Plan	Bronx, NY
Kelly Clark, MD	Munson Medical Center	Traverse City, MI
Matthew Grisham, MD	Greenville Hospital System University Medical Group	Greenville, SC
Leon Matsuo, MD	West Hawaii Community Health Center	Kailua-Kona, HI
Sharyn Miskovitz, MD	Montefiore Medical Center	Bronx, NY
Pamela Ponce, MD	Orlando Health	Orlando, FL

#### CHAMPIONS GROUP #4: FRIDAY, OCTOBER 21ST AND SATURDAY, OCTOBER 22ND

Champion	Institution	City
Janice Lichtenberger, MD	The Children's Hospital at Monmouth Medical Center	Long Branch, NJ
Kristin Miller, MD	Sinai Hospital of Baltimore	Baltimore, MD
Vijay Naraparaju, MBBS	Hurley Medical Center	Flint, MI
Jenese Reynolds, MD	McLaren Family Medicine Residency Program	Flint, MI
Lakshmi Uppaluri, MBBS	UMDNJ/ Robert Wood Johnson Medical School	New Brunswick, NJ
Christine Verna, MD	Center for Advanced Pediatrics	Norwalk, CT

#### CHAMPIONS GROUP #5: WEDNESDAY, NOVEMBER 16TH AND THURSDAY, NOVEMBER 17TH

Champion	Institution	City
Annette Cameron, MD	Hospital of Saint Raphael	New Haven, CT
Rhonique Harris, MD	Children's National Medical Center	Washington, D.C.
Ann Sahakian, MD	Hospital of Saint Raphael	New Haven, CT
Justin Sanders, MD	Montefiore Medical Center/Family Health Center	Bronx, NY
Teresa Shinder, DO	Waianae Coast Comprehensive Health Center	Waianae, HI
Karen Thompson, MD	Spectrum Health Medical Group	Grand Rapids, MI





# "Change Projects"

- Embedding guidelines into routine care
- Using non-clinical team members more effectively
- Planned pro-active encounters for preventive asthma care
- Using brief educational encounters to provide structured self-management support
- Coordinating case management for high risk patients
- Linkages to effective community resources
- Enhancements to clinical information systems (registries)

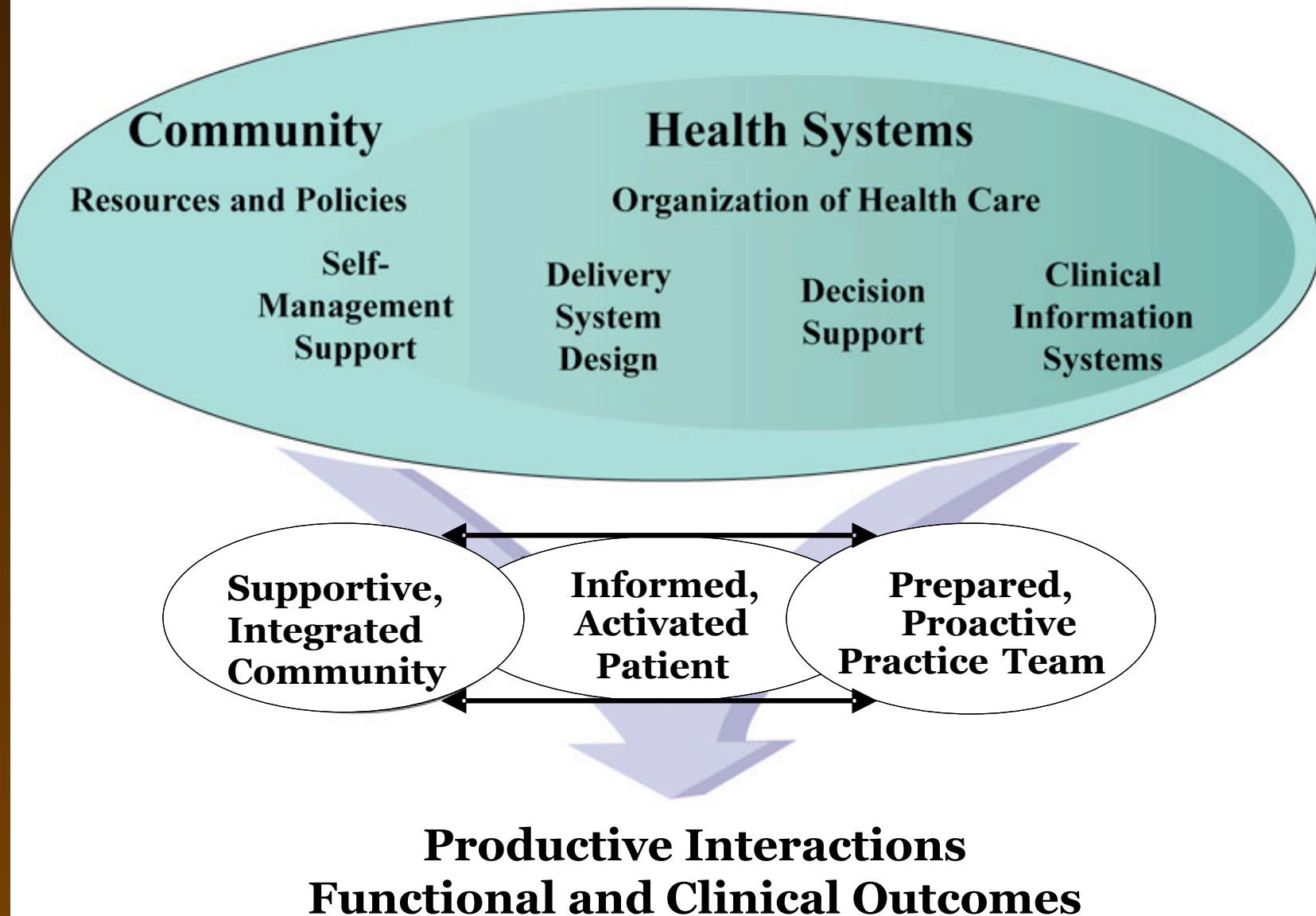


# Workshop Overview

- Part 1: Friday Morning
  - Stepwise approach for long-term asthma management
  - Communication strategies that promote asthma self-management
- Part 2: Friday Afternoon
  - Defining the current systems
  - Developing, implementing and testing a change
- Part 3: Saturday Morning
  - The change project proposal
  - Making the business case
  - Expectations, next steps

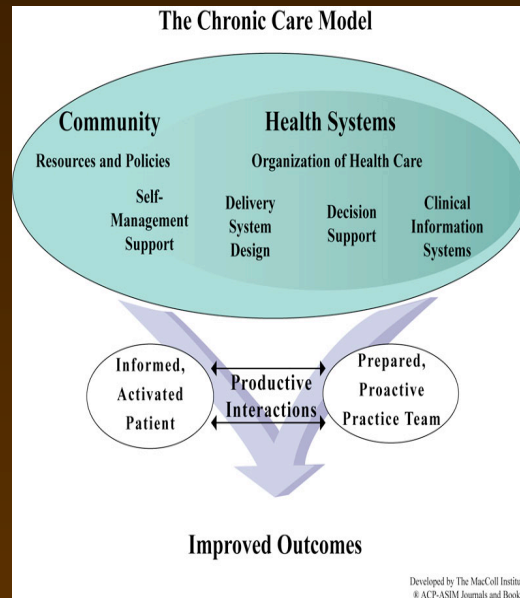


# The Chronic Care Model





**Practice  
Elements**

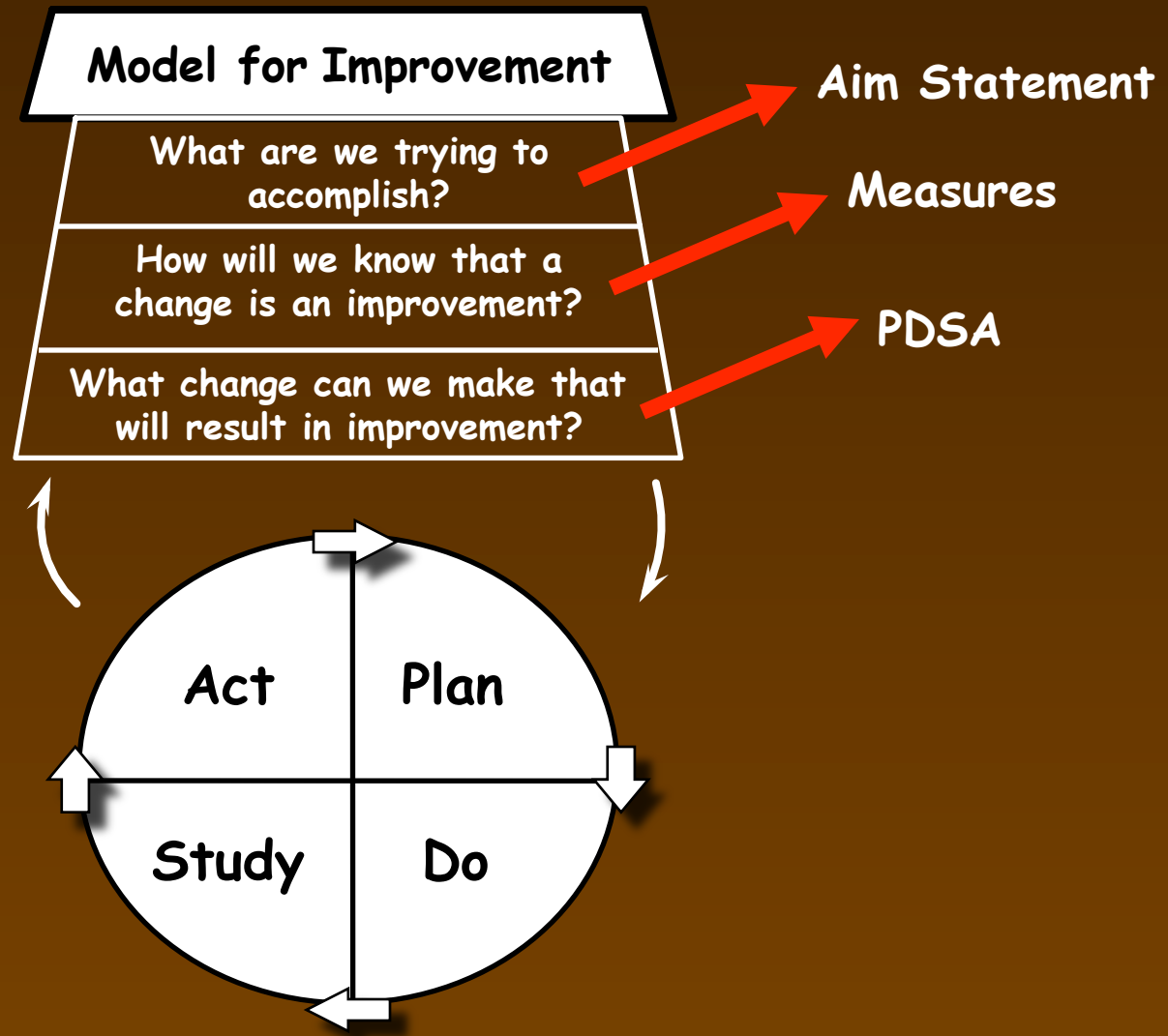


**System  
Elements**

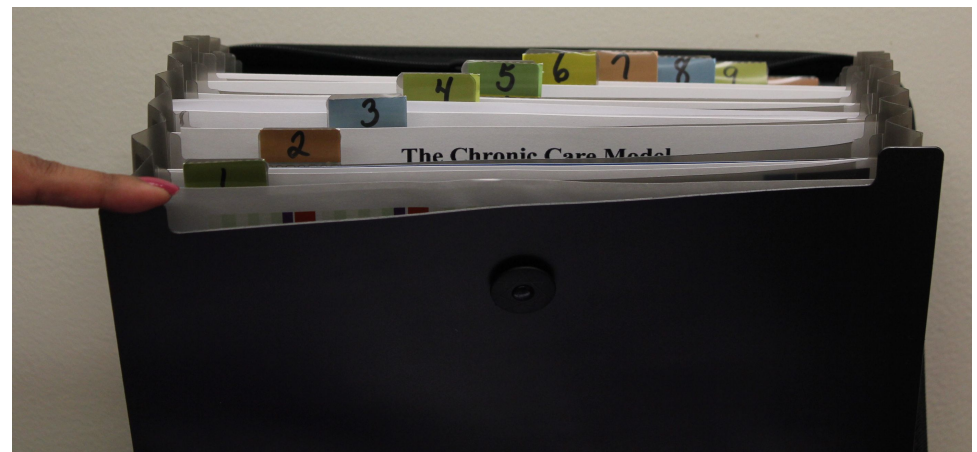
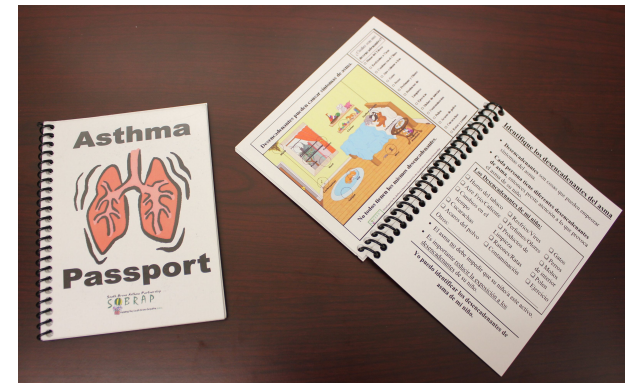
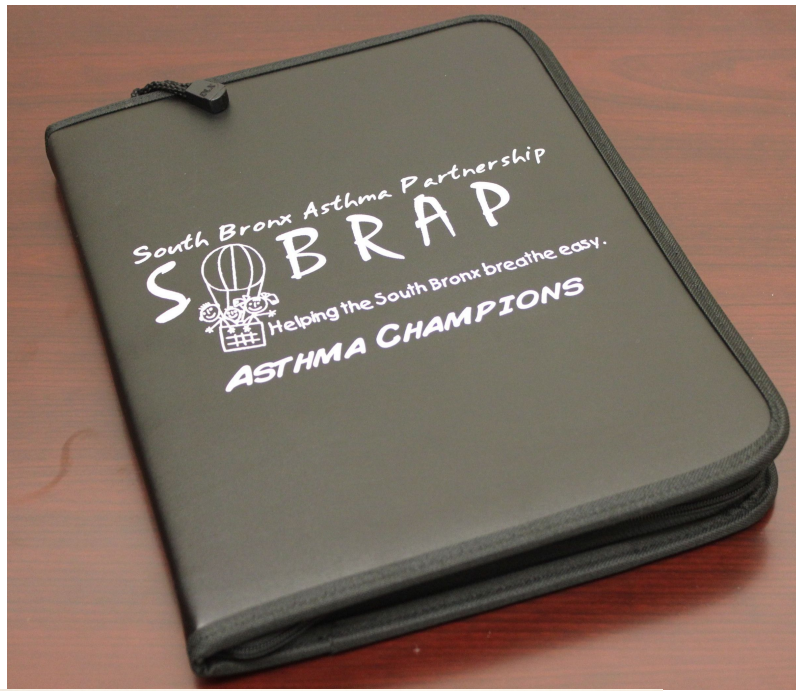
The Chronic Care Model requires changing practice culture and infrastructure as well as changing specific aspects of patient care.



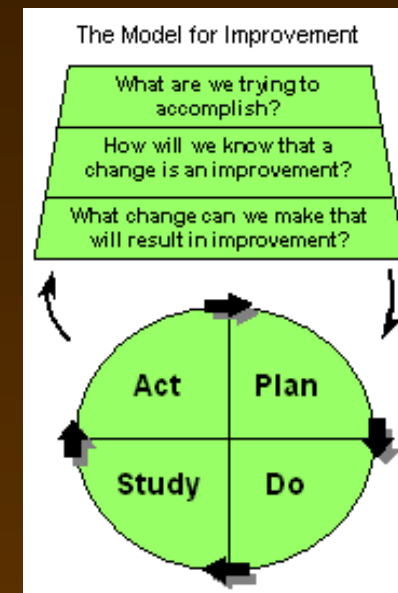
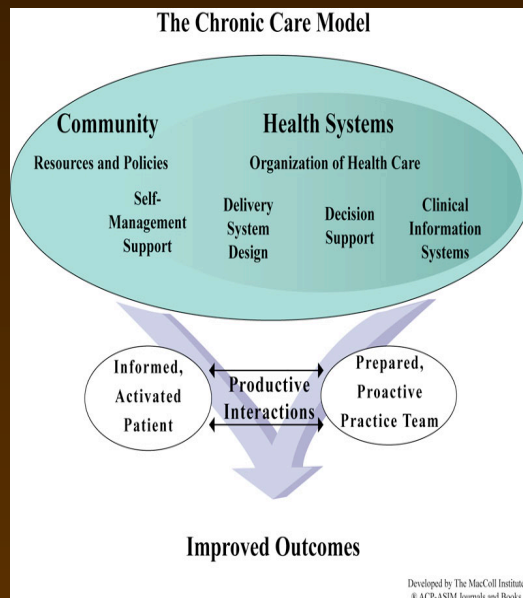
# Three Fundamental Questions















## Using Hospital-based EMR to Monitor Utilization Patterns of Pediatric Asthma Visits in an Urban Community Hospital

Lalit Bansal MD, Mamta Reddy MD, Ram Kairam MD, Ronald Bainbridge MBBS, Caroline Leeds BA and Richard Neugebauer PhD, MPH  
Department of Pediatrics, Bronx-Lebanon Hospital Center, Bronx, New York

### Background

- Asthma remains a major public health problem.
- Prevalence amongst children age 0-17 years is 9.4% nationally, 11.2% in New York City and as high as 17% in the South Bronx.<sup>1,2,3</sup>
- Unfortunately, such statistics catalogued by state and national databases often lag by several years, complicating real-time analysis of disease-specific burden and resource allocation for high-risk populations.

### Objective

- To describe the eight-year burden of pediatric asthma-related visits within this community hospital using an electronic medical record (EMR) system.

### Methods

- Setting: urban/community teaching hospital.
- Using the hospital-based EMR, data were collected from 4/1/01-12/5/08 for children age 0-18 years.
- Data included: General and asthma-specific visits to the emergency department (ED), ambulatory care clinic (ACC) and hospital admissions.
- Asthma-specific visits were defined by principal diagnosis ICD-9 codes of 493.0-493.99.
- Annual asthma visits (ED + ACC visits) for a specific year were calculated as a percentage of general visits to the hospital.
- Asthma admission rate for a specific year was calculated as number of asthma-specific admissions per 1000 asthma-specific ED visits.
- ACC visit rate for a specific year was calculated as asthma-specific ACC visits per 1000 general ACC visits.
- Asthma ED visit rate for a specific year was calculated as asthma-specific ED visits per 1000 general ED visits.

### Results

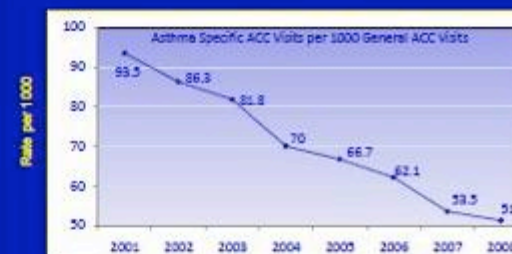
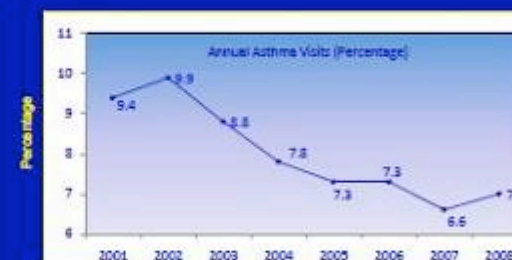
YEAR	2001	2002	2003	2004	2005	2006	2007	2008
General ED Visit	27287	36000	39085	36376	37090	41561	40709	37117
Asthma-specific ED Visits	2605	4523	4147	3769	3424	4241	4036	4469
General ACC Visits	46758	89907	106687	107542	102390	102084	103037	96789
Asthma-specific ACC Visits	4374	7764	8898	7530	6832	6345	5820	4963
General Admissions	3346	5768	6364	6064	6243	5756	5793	5204
Asthma-specific Admissions	414	838	1110	878	939	840	759	580

Data from 4/1/2001 -12/5/2008

- Asthma visits decreased by 2.4% from 2001- 2008 (9.4% to 7%).
- Asthma admission rate declined from 267.6 to 129.7 per 1000 asthma-specific ED visits between 2003-2008.
- ACC visit rate decreased from 93.5 to 51.2 between 2000- 2008.
- ED asthma visits, general ED visits and general ACC visits remained relatively constant between 2001-2008.



EMR began 4/1/2001



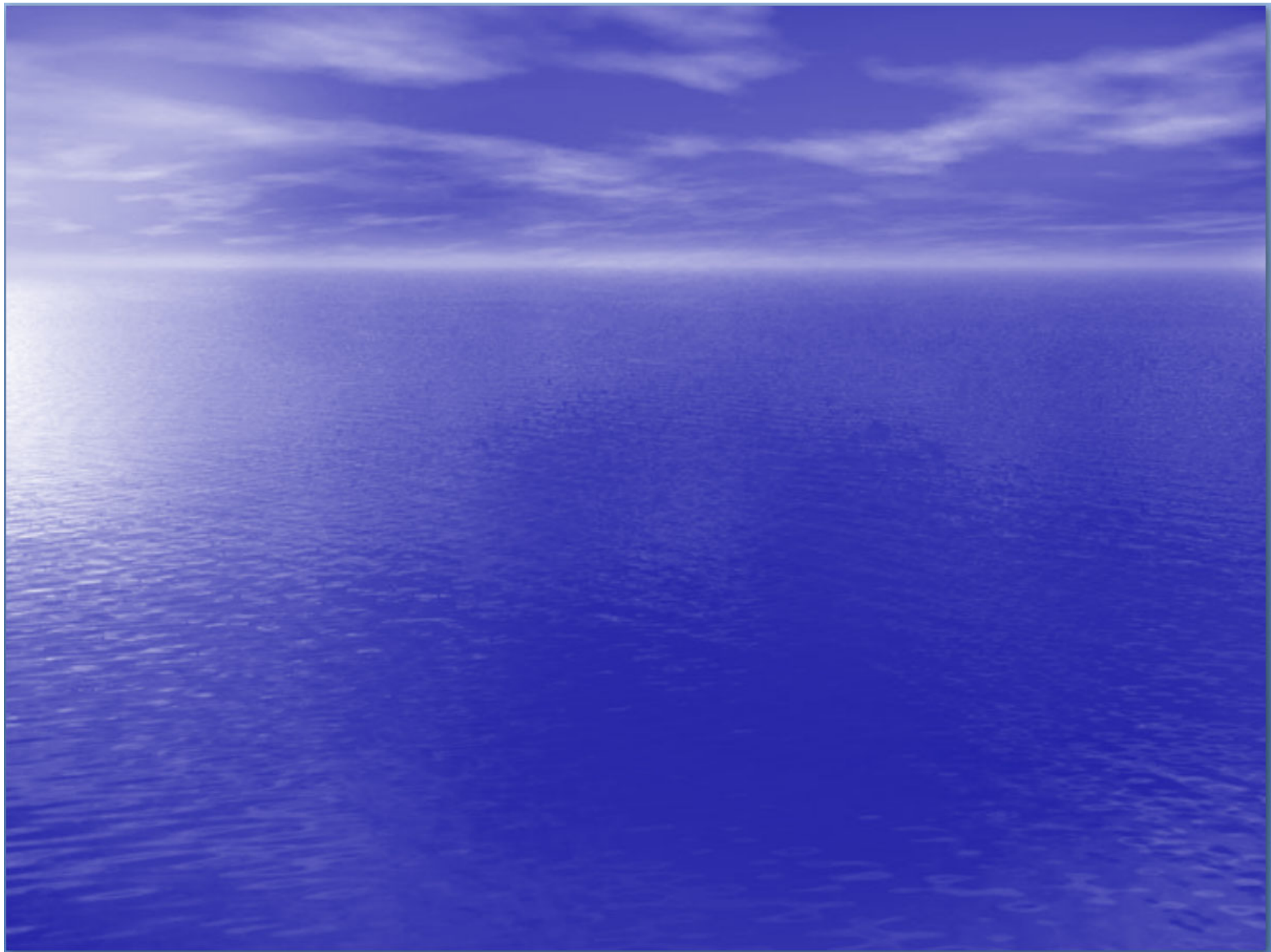
### Conclusions

- The burden of asthma visits has decreased at this institution over the past eight years.
- Based on the observed decrease in asthma-specific admissions, we speculate an overall decrease in the severity of exacerbations presenting to the ED.
- The ability to observe real-time utilization patterns through a hospital-based EMR system can help elucidate current burden.

### References

- Centers for Disease Control and Prevention. Asthma 2008 National Health Interview Survey (NHIS) data (Data file). Retrieved from <http://www.cdc.gov/asthma/nhis/08data.htm>
- New York State Department of Health, Public Health Information Group. (2005, October). "New York State Asthma Surveillance Summary Report (Cooperative Agreement #6U59E100021203)". Retrieved from: [http://www.health.state.ny.us/statistics/ny\\_asthma/pdr2005\\_asthma\\_surveillance\\_summary\\_report.pdf](http://www.health.state.ny.us/statistics/ny_asthma/pdr2005_asthma_surveillance_summary_report.pdf).
- Schwartz AG, McVeigh KH, Matte T, Goodman A, Kass D, Kerker B. (2008). Childhood Asthma in New York City. "NYC Vital Signs, 7"(1), 1-4.

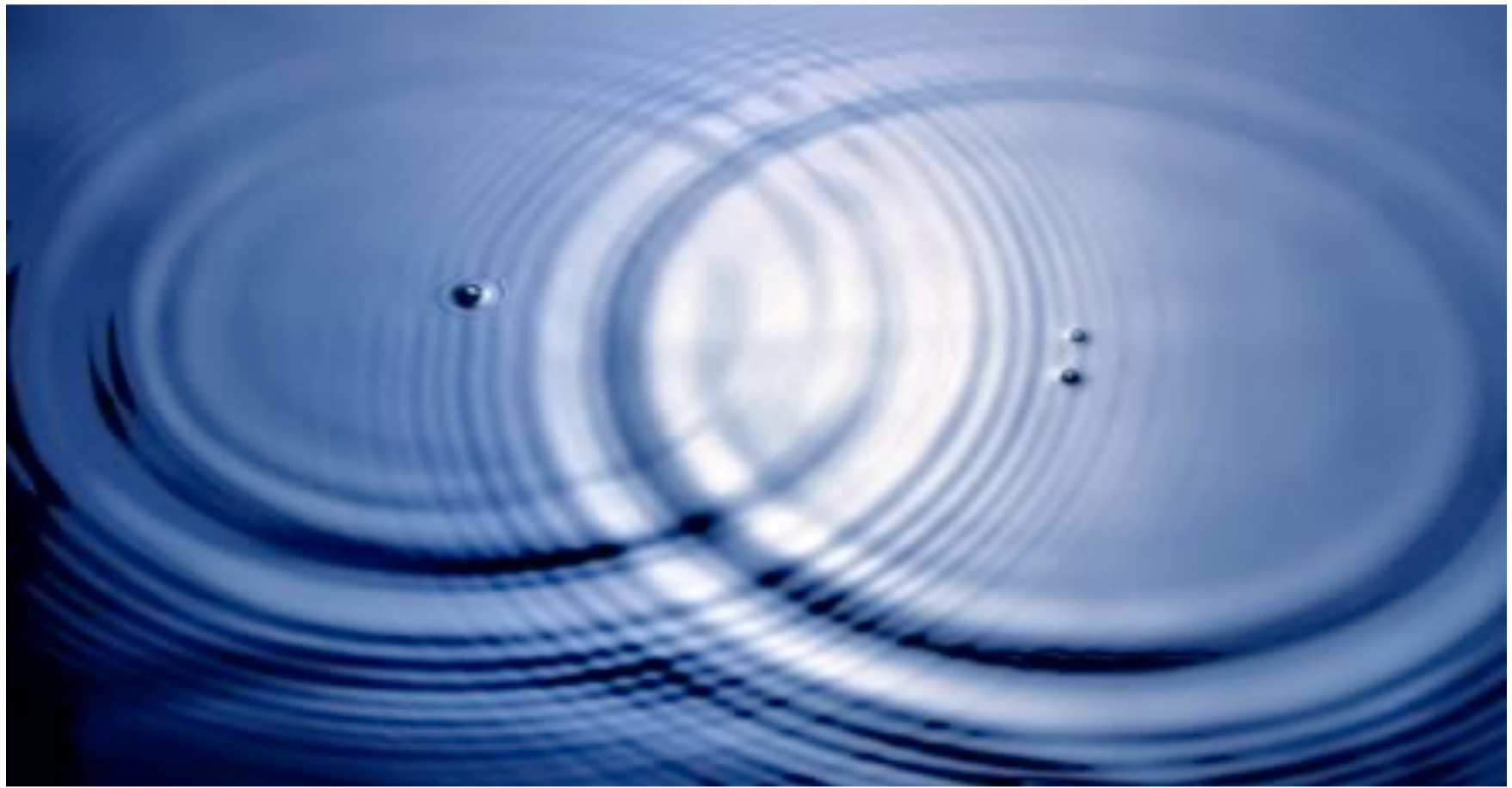
















Norman  
Rockwell

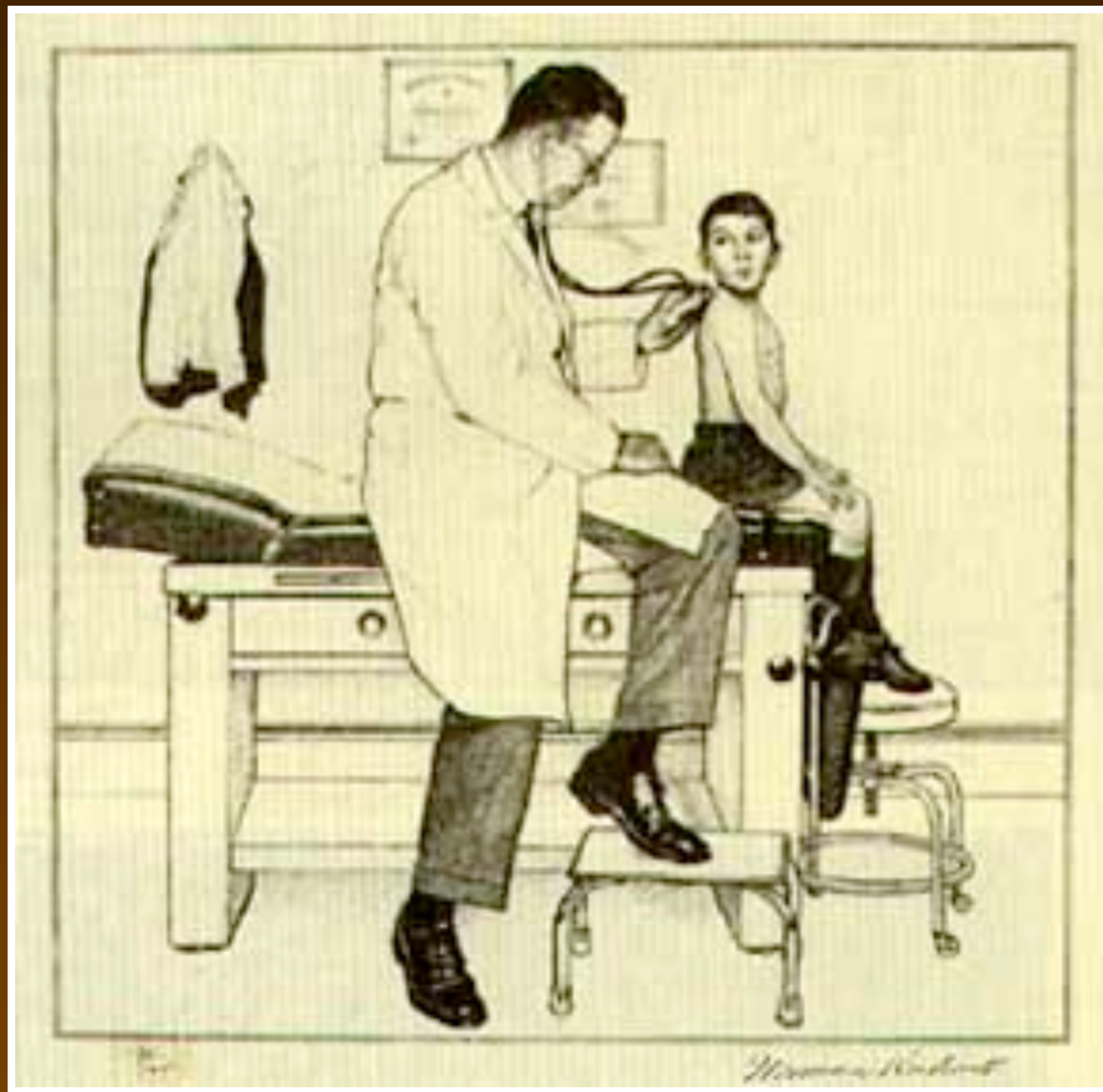












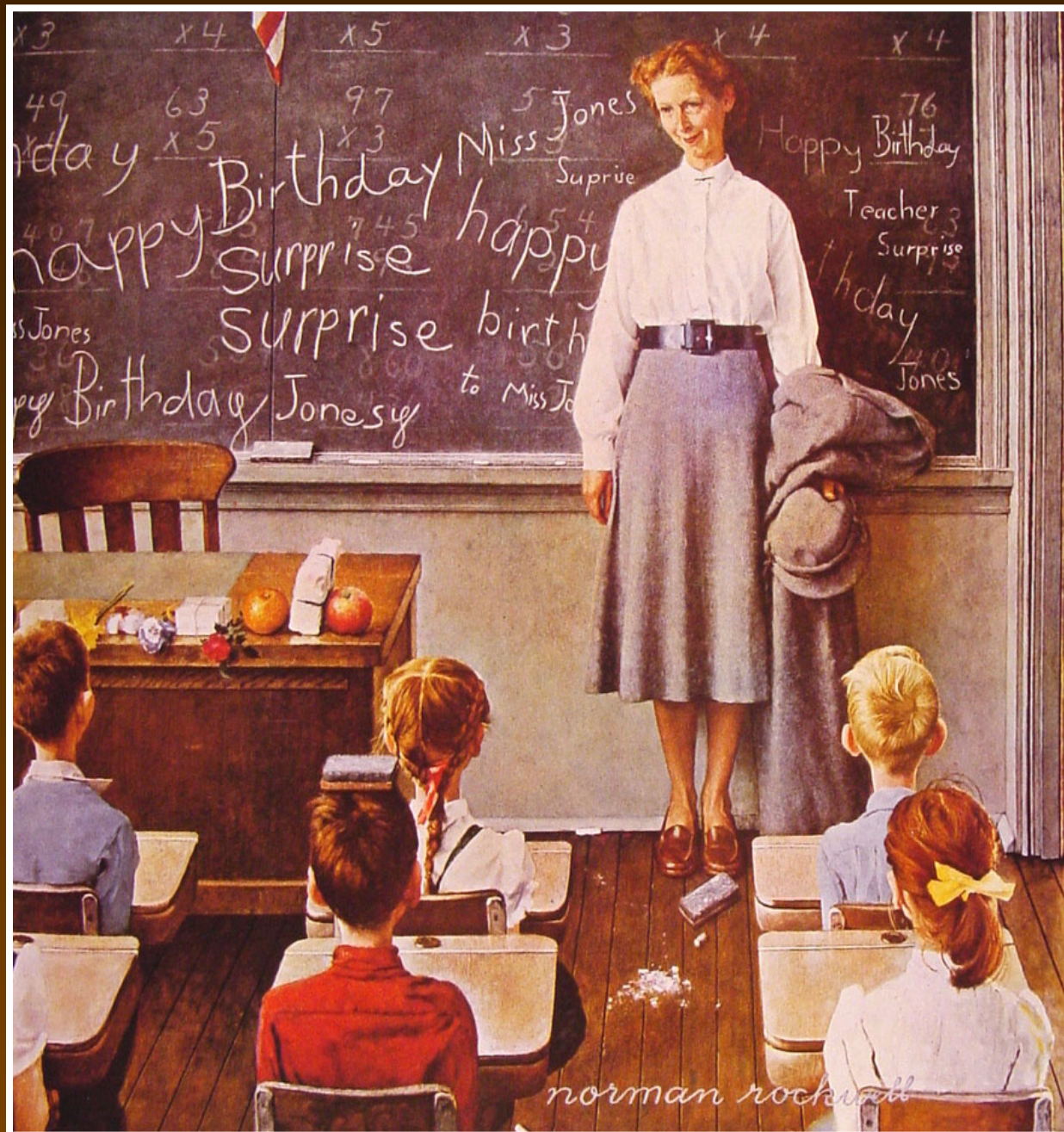
















NORMAN ROCKWELL  
High Dive









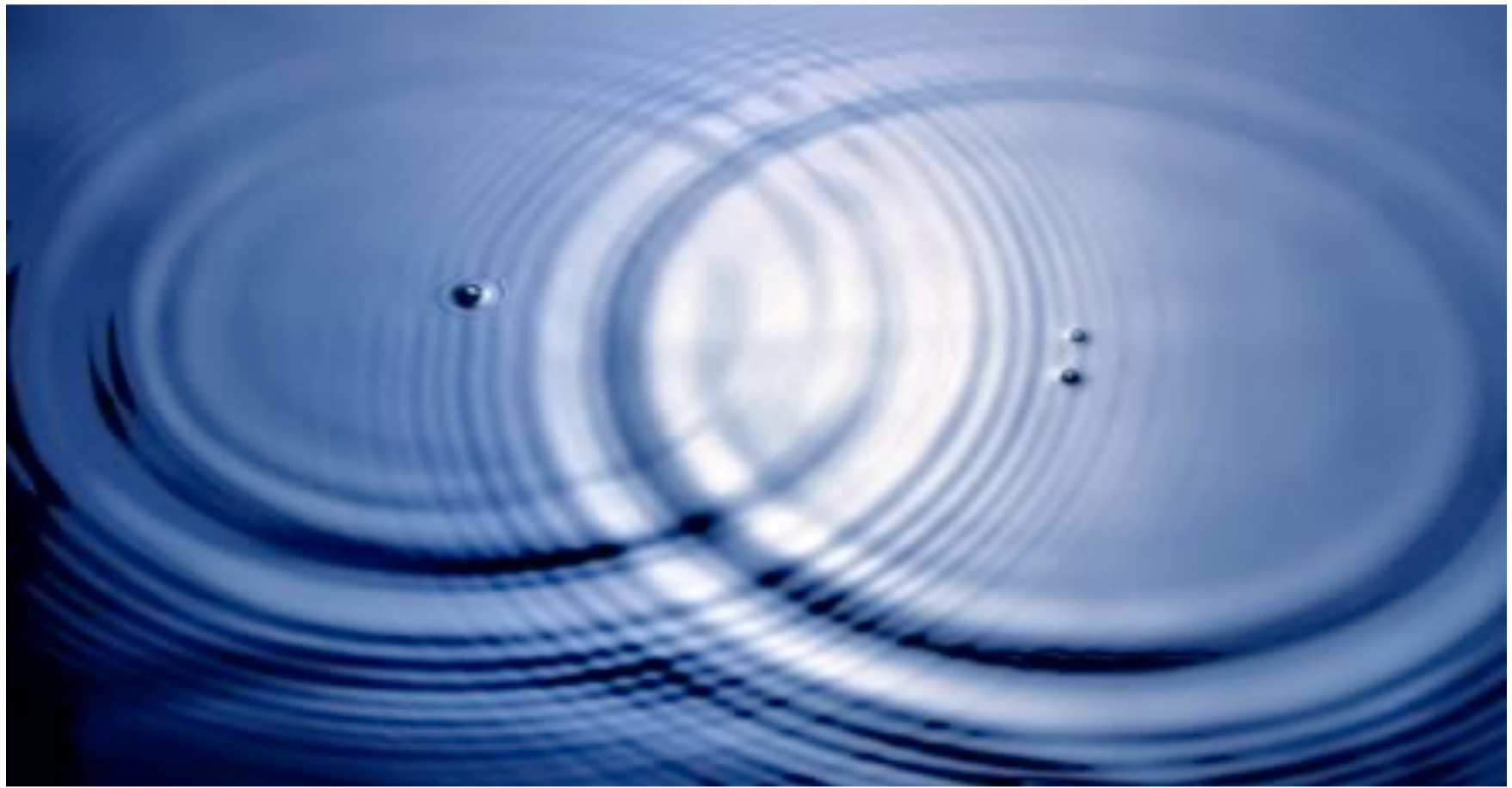














# A Pebble in the Water



Drop a pebble in the water: just a splash, and it is gone;

But there's half-a-hundred ripples circling on and on and on.

Spreading, spreading from the center, flowing on out to the sea.

And there is no way of telling where the end is going to be.

*~ James W. Foley*









**[mreddy@bronxleb.org](mailto:mreddy@bronxleb.org)**