

# Pediatric Asthma Disease Specific Care Certification

Miller Children's & Women's Hospital of Long Beach  
Asthma Center of Excellence

July 28, 2023

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# Objectives

After this presentation, participants will be able to extrapolate information from Miller Children's & Women's Hospital Long (MCWHLB) to develop a disease specific certified program for pediatric asthma.

- What is a Center of Excellence (COE)
- Who Validates or Designates a COE
- How Does a Hospital Become a COE
- About Memorial Care MCWHLB
- Journey to Asthma Disease Specific Certification
- Program Development
- Performance Improvement
- Program & Team Integration
- Impact of Certification

# What is a Center of Excellence?

- A **center of excellence (COE)** is an established collective of hospital staff and administrators that band together to commit to delivering the highest quality of care in a specific specialty.
- Hospitals adopt the designation **Center of Excellence** to publicly highlight and market expertise and dedication to a focused clinical service, like asthma, diabetes, etc.
- As the term center of excellence continues to become more widely understood by physicians and patients alike, establishing your care center as “excellent” becomes an increasingly valuable means to stay at the top of the game.

# Who Issues and Oversees a COE Designation?

- The designation **Center of Excellence** varies from disease to disease.
- For pediatric asthma, there are a few regulatory bodies that have regulated certification programs
- **The Joint Commission (TJC)** is among the most reputable
- TJC is an independent, non-profit organization that accredits and certifies health care organizations and programs in the United States.
- Holds their accredited programs to the most rigorous standards
- In addition to general accreditation, they offer Disease-Specific Care Certification

# Hospitals and Organizations Joint Commission ACOE Certified

CA	County of Los Angeles	Pediatric Asthma
CA	Children's Hospital of Orange County	Pediatric Asthma
CA	<b>Earl &amp; Loraine Miller Children's Hospital</b>	Pediatric Asthma
NC	University of North Carolina Hospitals	Pediatric Asthma
NJ	HMH Hospitals Corporation, HUMC	Pediatric Asthma
NY	Wyckoff Heights Medical Center	Pediatric Asthma
NY	Lincoln Medical and Mental Health Center	Pediatric Asthma
OH	The Toledo Hospital	Pediatric Asthma
PA	Reading Hospital	Pediatric Asthma
TX	McAllen Hospitals L.P.	Pediatric Asthma

Source: Loren Salter Associate Director, Hospital Business Development The Joint Commission



# How Does a Hospital Begin the Process of Becoming a Center of Excellence?

To begin the road towards becoming a Joint Commission-designated center of excellence, a hospital must determine some initial basic criteria:

- Identify an area to obtain designation (i.e., Pediatric Asthma)
- Demonstrate a high level of expertise and quality in treating specific medical conditions or performing certain procedures within the area chosen for the designation journey
- Should treat a high volume of patients with a particular condition
- Utilize evidence-based practices and protocols.
- Have highly skilled and specialized staff
- Develop performance improvement measures and track outcomes.

# How Does a Hospital Begin the Process of Becoming a Center of Excellence?

- Review Disease Specific Care Standard Manual from The Joint Commission
- Develop robust infrastructure to program:
  - Determine team, team structure, & roles
  - Program Mission & Goals, Clinical Practice Guidelines, Performance Improvement Measures
  - Program Scope: Population defined within facility
  - At what point in time will you capture these patients
  - What are the benefits being sought
- Team integration
- Seek guidance resources from The Joint Commission
- Document your journey!

# Disease Specific Care Manual

The Joint Commission's Disease-Specific Care (DSC) Manual is a key resource for healthcare organizations pursuing DSC certification.

- The manual outlines best practices and standards from initial diagnosis to post-treatment follow-up for various diseases.
- It emphasizes:
  - Patient-centered interactions
  - Evidence-based treatment protocols
  - Safety measures
  - Quality assessments
  - Performance improvement strategies
- It provides guidance on:
  - Educating patients and caregivers
  - Coordinating care across different healthcare settings
  - Utilizing data for continuous improvement
- Its application aids in enhancing patient outcomes, safety, and satisfaction.

# Our Program

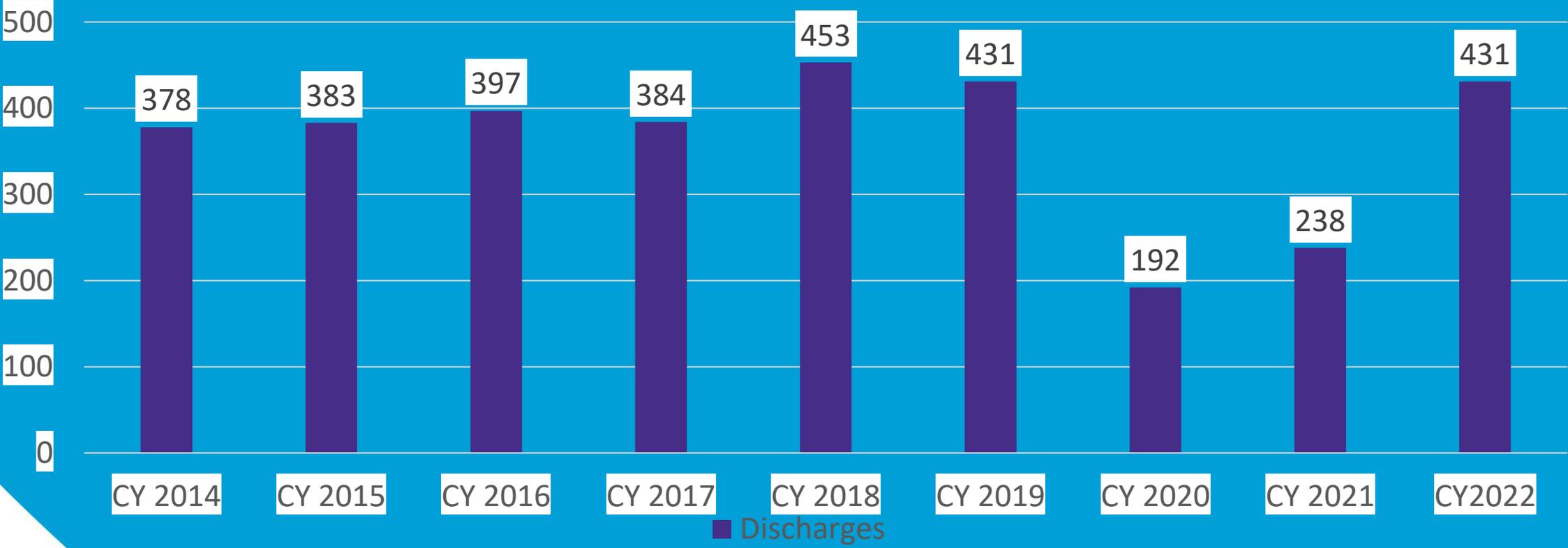


# About MemorialCare Miller Children's & Women's Hospital Long Beach (MCWHLB)

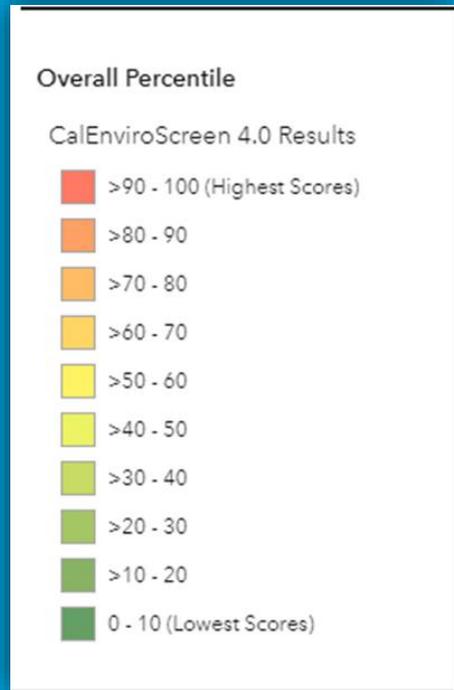
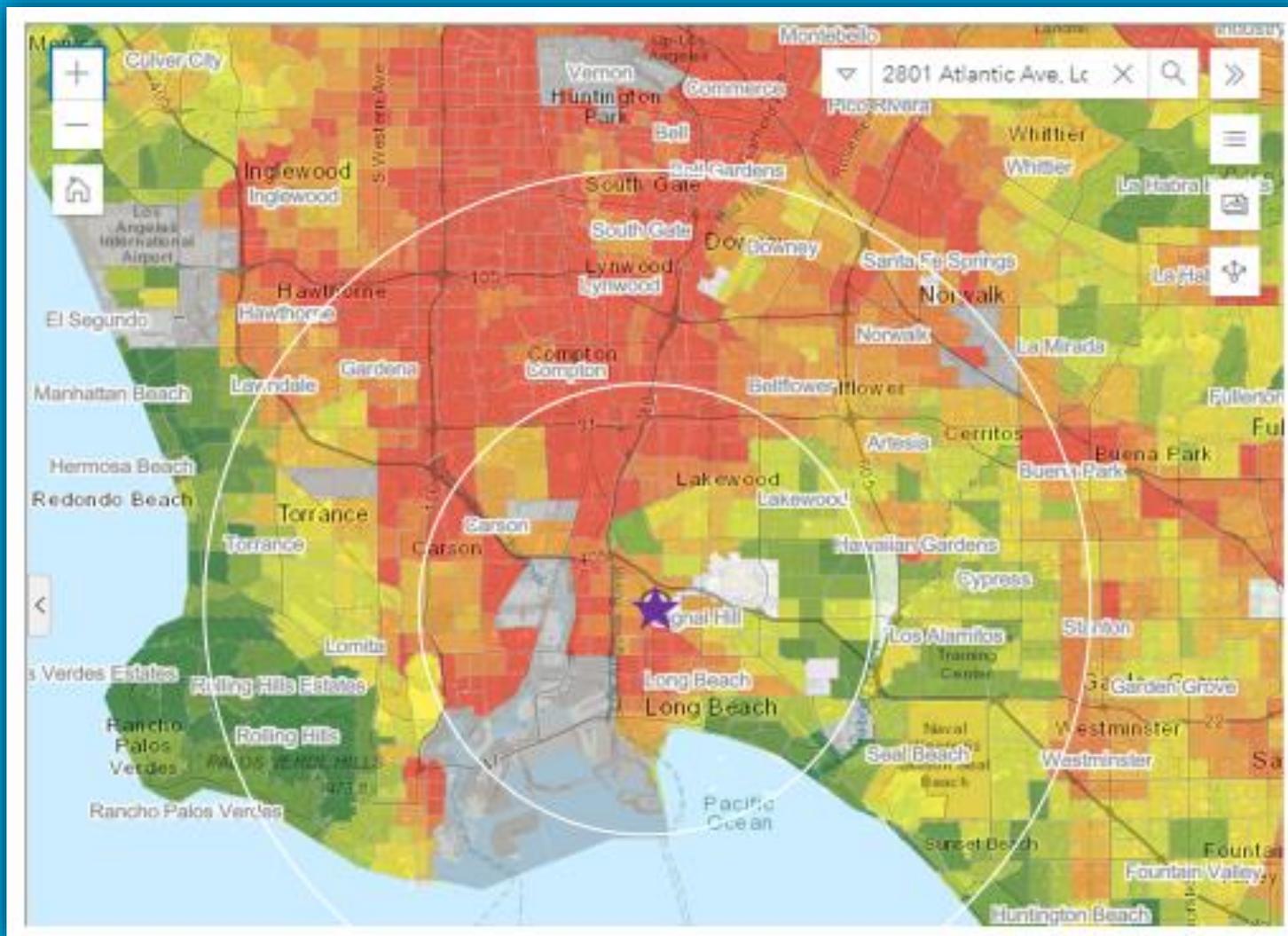
- One of eight not-for-profit community-based California children's hospitals
- Opened in 1970
- Hospital Beds: **357**
  - **138** Pediatric
  - **95** Intensive Care Newborn Nursery
  - **59** Perinatal
  - **30** Intensive Care
  - **35** Unspecified General Acute Care
- Extensive Training Programs: Physician Residency, Registered Nurses, & other disciplines



# Discharges with Primary Diagnosis of Asthma: Ages 2-17 years



# Pollution Burden Percentile



# Asthma Burden Percentile

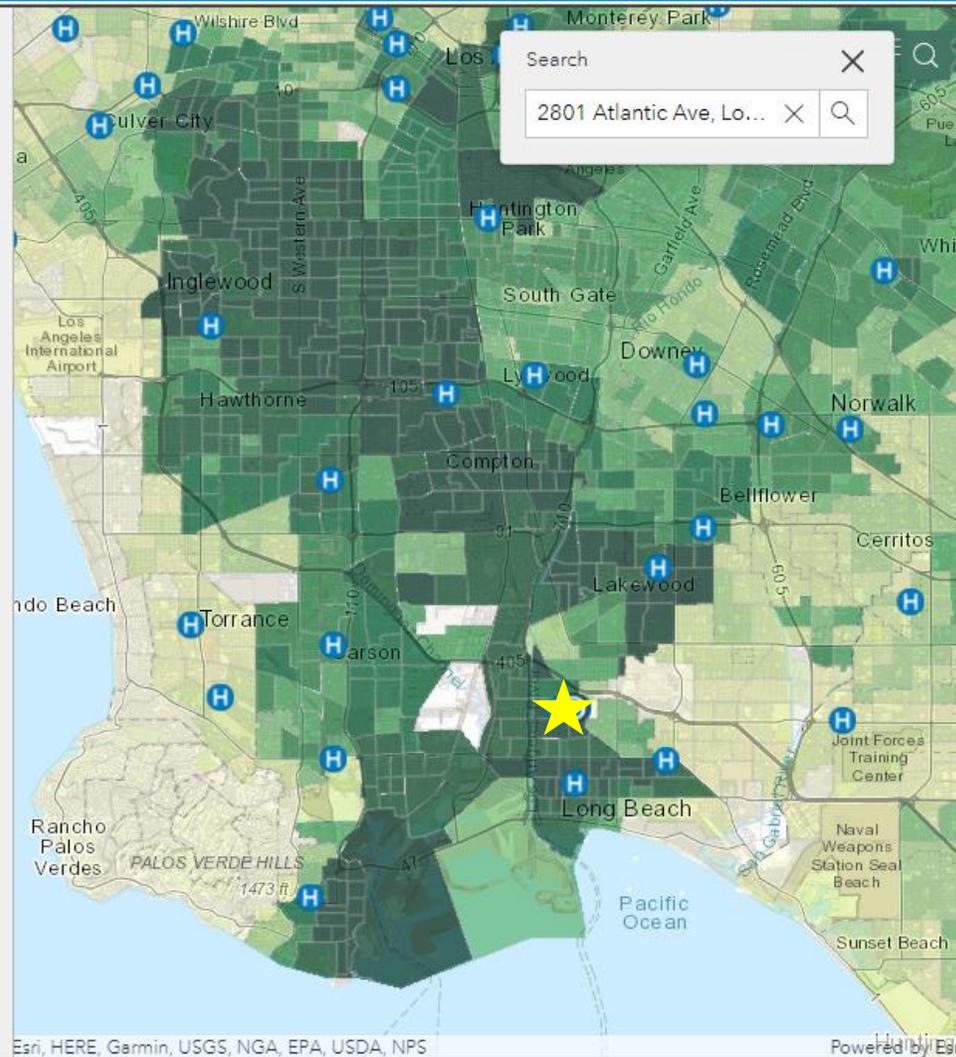


## What is Asthma?

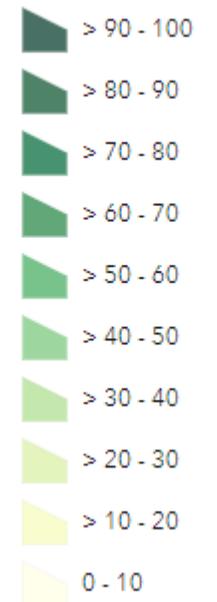
Asthma is a disease that affects the lungs and makes it hard to breathe. Symptoms include breathlessness, wheezing, coughing, and chest tightness. The causes of asthma are unknown but both genetic and environmental factors can be involved.

Five million Californians have been diagnosed with asthma at some point in their lives. People with asthma can be especially susceptible to pneumonia, flu and other illnesses. Outdoor air pollution can trigger asthma attacks.

More information can be found in the [Asthma chapter](#) in the CalEnviroScreen 4.0 report.



## Asthma Percentile



# MCWHLB Asthma Journey

Processes prior to  
Disease Specific  
Certification

2007 CAC Core  
Measures BPT  
developed  
guidelines



2012 / 2015  
recognized by  
TJC as a "Top  
Performer" for  
quality  
measures



2014 Lean  
Rapid Process  
Design (RPD)  
2015  
Synchronizatio  
n & Transition



2016 Pediatric  
Asthma Disease  
Specific  
Certification



2018  
Redesignated  
Pediatric  
Asthma Disease  
Specific  
Certification



2020  
Redesignated  
Pediatric  
Asthma Disease  
Specific  
Certification



2022  
Redesignated  
Pediatric  
Asthma Disease  
specific  
Certification



# Mission Statement

Using a Patient and Family Centered Care approach, the Miller Children's & Women's Hospital Long Beach Asthma Center of Excellence endeavors to improve the health of children with asthma through best practices across the continuum.

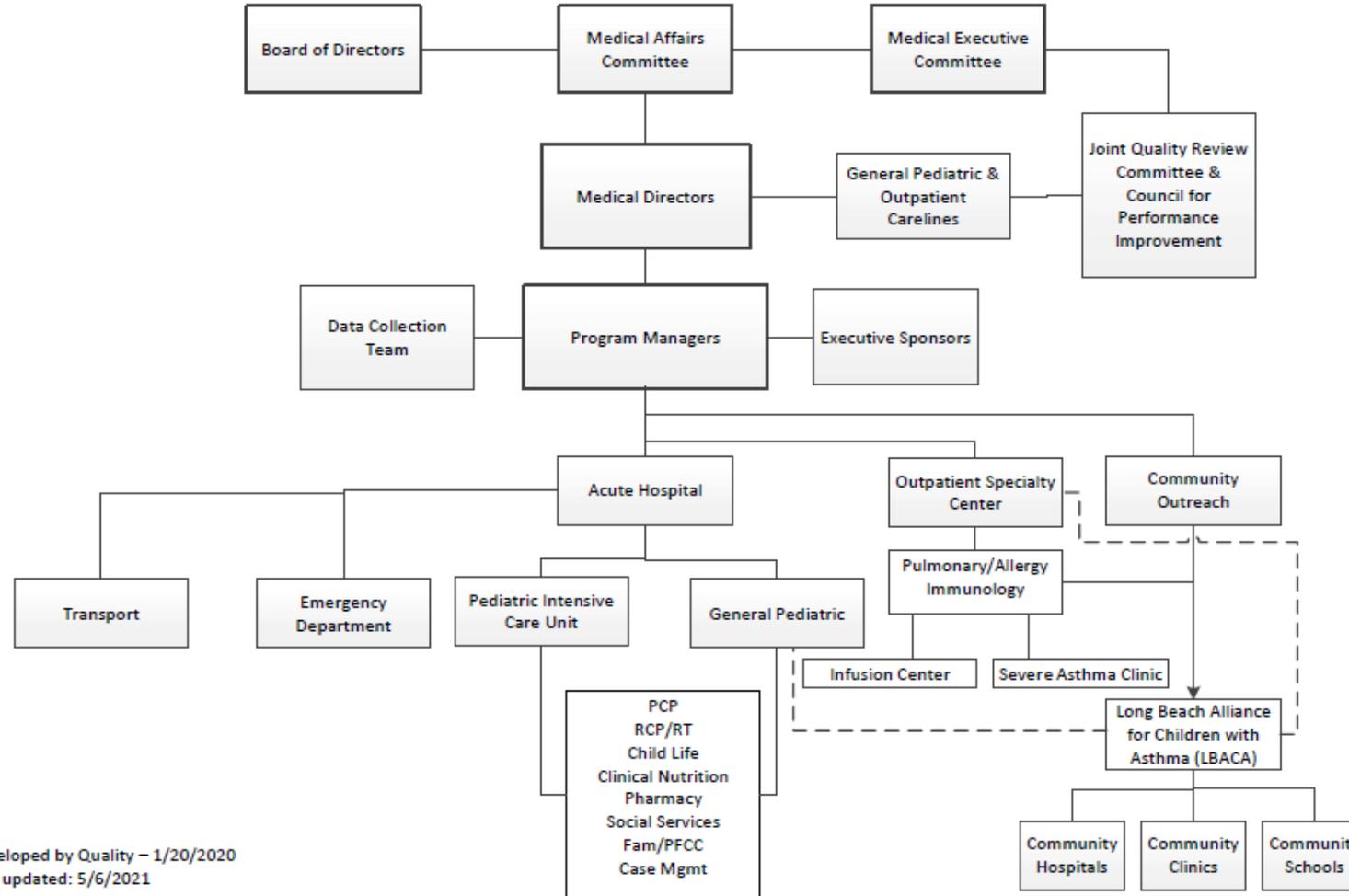
# Asthma Center of Excellence Goals & Objectives

- **Improve the quality** of patient and family-centered care through **continuous** program improvement and evaluation
- Provide **comprehensive asthma center of excellence education** to empower patient and family disease management
- **Reduce variation** in clinical processes and the risk of error by establishing a consistent approach to patient and family-centered care
- Provide **cohesive information** and services across the continuum of care

# Asthma Center of Excellence Goals & Objectives (continued)

- Provide and sustain a framework for program structure and management
- Meet and exceed state and national metrics for pediatric asthma care
- Provide **continuous educational opportunities** to enhance the knowledge, skills, and abilities of care providers
- Promote a **culture of excellence** across the organization
- Provide a **seamless transition** throughout the health care delivery system

# Asthma Center of Excellence PROGRAM SCOPE



Developed by Quality – 1/20/2020  
Last updated: 5/6/2021

# ACOE Team Structure -MCWHLB

- **Program Sponsors** (Executive Team) – Strategic Guidance/program direction
- **ACOE Leadership** (Senior Leadership team, Program Leader, Program Manager)
  - Program coordination, define program targets and objectives.
  - Leadership members are executive sponsors, medical, and department directors who oversee program.
- **Workgroup** (Multidisciplinary Team of Healthcare Providers, Unit Leaders, Front line staff, ad hoc members)
  - Drive program activities. Lead data gathering & analytical work.
  - Review & appraise evidence based practice recommendations.
  - Develop Education
  - Review performance for our performance improvement measures.
  - Workgroup members include frontline staff and others team members who drive day to day practices to meet program goals.

# Evidence Based Practice Measure Selection Criteria

- Guidelines for the Diagnosis and Management of Asthma, National Heart, Lung and Blood Institute (NHLBI)
- Global Initiative for Asthma (GINA)
- Agency for Healthcare Research and Quality (AHRQ)
- National Quality Measures Clearinghouse (NQMC)
- Pediatric Health Information System (PHIS) National Database
- Patient population served at Miller Children's and Women's Hospital Long Beach
- Clinical expertise

# Performance Improvement Measures 2022-2024

## Process Measures:

1. Combination (LABA/ICS) Inhaler at Discharge
2. Outpatient Follow Up Within 2 Weeks
3. Pulmonary Function Test for Moderate/Severe-Persistent Asthma

## Outcome Measures:

4. Accessibility of Asthma Medications at Discharge F/U Calls

# Clinical Practice Guideline Reference Selection

To develop clinical practice guidelines best suited for a pediatric asthma center of excellence, it is wise to reference guidelines and recommendations from respected health and medical organizations. We currently use the following :

- 2020 Focused Guidelines for Management of Asthma , National Heart, Lung and Blood Institute (NHLBI)
- Global Initiative for Asthma (GINA)
- American Academy of Allergy, Asthma & Immunology (AAAAI)
- Centers for Disease Control and Prevention (CDC)
- Asthma & Allergy Foundation of America (AAFA)
- National Asthma Education and Prevention Program (NAEPP)

# Clinical Respiratory Score (CRS)

The CRS is comprised of 4 parameters:

- RR by age
- Retractions
- Peak Flow/FEV1 OR  
Dyspnea
- Auscultation

Total possible score = 12

RR	Four Elements of Assessment
(1-3)	Respiratory rate: assessed over 60 seconds
(0-3)	Retractions: work of breathing
(0-3)	Dyspnea: shortness of breath
(0-3)	Auscultation: wheezing on lung exam
(1-12)	Total

# Asthma Care Progression Guidelines

- Phase 1: Emergency Dept (1<sup>st</sup> hour, 2<sup>nd</sup> hour, 3<sup>rd</sup> hour)
- Phase 2: PICU (Mag, IV steroids, Continuous Albuterol, Heliox, NIV, Intubation)
- Phase 3-6: General Pediatrics (Neb Tx's/steroids, EDUCATION!)

\*ALL DRIVEN BY CLINICAL RESPIRATORY SCORE

# Asthma Care Progression Guideline

## Asthma Care Progression Guideline

Reassess and Score at the end of each hour	<b>PHASE 0 ED Triage</b>	<b>*CRS 1-5</b> Start Asthma STAT path or Order Set Albuterol <sup>^</sup> MDI Use initial CRS without Peak Flow	<b>*CRS 6-12</b> Start Asthma STAT path or Order Set Move to room in ED Use initial CRS without Peak Flow	
	<b>PHASE Ia 1<sup>st</sup> Hour ED</b>	<b>*CRS 1-5</b> Albuterol <sup>^</sup> MDI 8 puffs / neb 2.5 mg Dexamethasone dose is 0.6mg/kg X1 (max dose 16mg)	<b>*CRS 6-12</b> Albuterol 2.5 mg Neb q20mins x3 Ipratropium 0.5 mg Dexamethasone dose is 0.6mg/kg X1 (max dose 16mg)	
	<b>PHASE Ib 2<sup>nd</sup> Hour ED</b>	<b>*CRS 1-4</b> **Discharge Asthma Action Plan LBACA	<b>*CRS 5-8</b> Albuterol <sup>^</sup> MDI 8 puffs/ neb 2.5 mg 1 hour observation	<b>*CRS 9-12</b> Albuterol cont neb 20 mg/hr Ipratropium 0.75 mg (if not already given) Consider IM Epinephrine 1:1000 0.01mg/kg (up to 0.5 mg q20mins X 3 max) Consider Magnesium Sulfate 50 mg/kg (max 2 gms) Alternatively, initiate Magnesium Sulfate infusion as 50 mg/kg/hr x 4 hours (max 2 grams/hr, 8 gram total)
	<b>PHASE Ic 3<sup>rd</sup> Hour ED</b>	<b>*CRS 1-4</b> **Discharge Asthma Action Plan LBACA	<b>*CRS 5-6</b> Albuterol <sup>^</sup> MDI 8 puffs/ neb 2.5 mg Admit to Phase III (General Peds)	<b>*CRS 7-8</b> Albuterol <sup>^</sup> MDI 8 puffs/ neb 2.5 mg Admit to Phase II (PICU)

Supplemental O2 should be supplied to keep O2 saturations ≥ 92%

**Signs of Clinical Deterioration**

- Failure to progress
- Drowsiness
- Confusion
- Silent Chest Exam
- PCO2 >40 mmHg
- Cyanosis/Pallor
- Need for mask O2 to maintain sats >92% or inability to maintain sats

**Phase Change by Clinical Respiratory Score (CRS) is the standard of care for patient on the Asthma Pathway. Scoring is performed by RCP and RN/MD when RCP unavailable.**

▶ If your patient has a unique clinical condition that requires their asthma treatment to be different than the standard of care then **Phase Change by Physician assessment and order ONLY.**

**Conditions in which this may be appropriate:**

- Complex asthma history (e.g. hx intubation for asthma)
- Medical comorbidity (e.g. chronic lung disease, morbid obesity)

**PHASE PROGRESSION PHASES III-VI**

\*CRS 1-4: Advance after 1 treatment at this Phase

\*CRS 5-6: Continue therapy at this Phase

\*CRS 7-8: For Phase III call MD. For Phases IV-VI step back to previous Phase, and call MD for assessment

\*CRS 9-12: Call MD, Consider Rapid Response

**RN/RCP to notify MD: 1) For all Phase transitions; 2) Failure to advance on pathway after 12 hours; 3) Persistent O2 requirement in Phase V**

**\*\*ED DISCHARGE CRITERIA**

- \*CRS 1-4 initially, treat then observe x 1 hour  
- D/C if CRS 1-4 after observation time
- \*CRS 5-12 initially, treat then observe x 2 hours  
- D/C if CRS 1-4 after observation time
- Tolerates oral intake
- Asthma Action Plan, Education, and LBACA referral completed
- Med RX filled or provided to designated pharmacy
- DME/neb RX dispensed in ED or for home delivery

**\*\*ED DISCHARGE INSTRUCTIONS**

- Continue to use Albuterol <sup>^</sup>MDI with spacer/neb q4 hrs until seen by health care provider (HCP)
- F/U with HCP 24-48 hrs

**ADMISSION CRITERIA: PHASE II (PICU):**

- \*CRS 9-12 at end of 2<sup>nd</sup> hr / \*CRS ≥ 7 at end of 3<sup>rd</sup> hr
- Endotracheal intubation with need for mechanical ventilation
- Impending respiratory failure
- >q2 continuous inhaled or nebulized medication
- History of intubation or nonadherence, high risk for fatal asthma

**PHASE III (General Peds):**

- \*CRS 5-6 at end of 3<sup>rd</sup> hr

\*Refer to Clinical Respiratory Score (CRS); <sup>^</sup>MDI is always used with a spacer; \*\*Discharge criteria/instructions

Note: MDI is reserved for use in suspected/confirmed cases of COVID-19. When possible, avoid use of nebulized/aerosolizing procedures due to the risk of transmitting infection.

## Asthma Care Progression Guideline

<b>PHASE II PICU</b>	<b>Albuterol</b> Continuous neb 20mg/hr Assessment q1hr	<b>Initiate asthma education</b> LBACA referral
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**Signs of Clinical Deterioration**

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▶ If your patient has a unique clinical condition that requires their asthma treatment to be different than the standard of care then **Phase Change by Physician assessment and order ONLY.**

**Conditions in which this may be appropriate:**

- Complex asthma history (e.g. hx intubation for asthma)
- Medical comorbidity (e.g. chronic lung disease, morbid obesity)

**ADMISSION CRITERIA PHASE II (PICU):**

- \*CRS 9-12 at end of 2<sup>nd</sup> hr / CRS > 7 at end of 3<sup>rd</sup> hr
- Endotracheal intubation with need for mechanical ventilation
- Impending respiratory failure
- >q2 continuous inhaled or nebulized medication
- History of intubation or nonadherence, high risk for fatal asthma

**TRANSFER CRITERIA TO PHASE III (General Peds):**

- \*CRS <7
- FIO2 < 50%
- Tolerates q2hr intermittent SABA (or less frequent)

\*Refer to Clinical Respiratory Score (CRS); <sup>^</sup>MDI is always used with a spacer; \*\*Discharge criteria/instructions

# Asthma Care Progression Guidelines

## Asthma Care Progression Guideline

### PHASE III GENERAL PEDS

**Albuterol**  
^MDI 8 puffs or neb q2hr  
Assessment q2h  
Begin discharge planning and teaching

### PHASE IV GENERAL PEDS

**Albuterol**  
^MDI 8 puffs q3h or neb  
Assessment q3h  
Continue with education

### PHASE V GENERAL PEDS

**Albuterol**  
^MDI 6 puffs q4h or neb  
Assessment q4h  
Continue with education

### PHASE VI GENERAL PEDS

**Albuterol**  
^MDI 4 puffs q4h/neb  
Assessment q4h  
Minimum of 2 treatments before

\*\*Discharge  
Asthma  
Action Plan  
LBACA

Supplemental O2 should be supplied to keep

### PHASE PROGRESSION PHASES III - VI:

- \*CRS 1-4: Advance after 1 treatment at this Phase
- \*CRS 5-6: Continue therapy at this Phase
- \*CRS 7-8: For phase III call MD. For Phases III - VI step back to previous Phase, and call MD for assessment
- \*CRS 9-12: Call MD, Consider Rapid Response

### RN/RCP to notify MD:

- For all Phase transitions
- Failure to advance on pathway after 12 hours
- Persistent O2 requirement in Phase V

### Inpatient Steroid Treatment:

Transition to prednisone or prednisolone (2mg/kg/day) for total of 3-5 days depending on severity of exacerbation

### Signs of Clinical Deterioration

- Failure to progress
- Drowsiness
- Confusion
- Silent Chest Exam
- PCO2 >40 mmHg
- Cyanosis/Pallor
- Need for mask O2 to maintain sats >92% or inability to maintain sats

*Phase Change by Clinical Respiratory Score (CRS) is the standard of care for patient on the Asthma Pathway. Scoring is performed by RCP and RN/MD when RCP unavailable.*

- ▶ If your patient has a unique clinical condition that requires their asthma treatment to be different than the standard of care then **Phase Change by Physician assessment and order ONLY.**

### Conditions in which this may be appropriate:

- Patient transferred from PICU
- Complex asthma history (e.g. hx intubation for asthma)
- Medical comorbidity (e.g. chronic lung disease, morbid obesity)

### TRANSFER CRITERIA TO PHASE II (PICU):

- \*CRS > 7
- Endotracheal intubation with need for mechanical ventilation
- Impending respiratory failure
- >q2 continuous inhaled or nebulized medication

### \*\*DISCHARGE CRITERIA GENERAL PEDS:

- \*CRS 1-4
- Afebrile
- Off O2 >6hrs; maintain O2 sats >92%
- FEV1 >60% (with exception of patients with existing lung disease)
- No signs or symptoms of respiratory distress
- Asthma Action Plan, Education, and LBACA referral completed
- Med RX filled
- DME / neb RX delivered to care giver prior to DC or plan for home delivery



# Respiratory Therapist Driven Protocols

Refer to Asthma Care Progression Flowchart and/or PICU Asthma Guidelines ONCE Complete Discontinue

Comments: Asthma Phase III-VI:

Clinical Respiratory Score (CRS) 1-4: Advance to next phase level after 1 treatment at current phase.

Clinical Respiratory Score (CRS) 5-6: Continue Treatment at this phase.

Clinical Respiratory Score (CRS) 7-8: Step back to previous phase & call MD for assessment

Clinical Respiratory Score (CRS) 9-12: Call MD for assessment and consider calling rapid response.

- Therapists are able to space and increase treatment frequency based on CRS. This allows for decreased length of stay and faster escalation to higher level of care if needed.

# Unit-Specific Asthma Order Sets

Order and Order Set Search

ASTHMA

Order Sets & Panels

Name
ASTHMA ADMISSION PEDS PULM IP (MCH)
ASTHMA ED PEDS (MCH)
ASTHMA TRANSITION FROM PICU TO GEN PEDS IP (MCH)
BPT ASTHMA ADMISSION ADULT PULM IP (LBM)
PICU ASTHMA ADMISSION PEDS CCM IP (MCH)
CONTINUOUS ALBUTEROL AEROSOL W/WO HELIOX ASTHMA RESCUE KIT (ARK)

Order Sets

ASTHMA ADMISSION PEDS PULM IP (MCH)

Clear All Orders

Manage User Versions Remove Order Sets

ADMISSION/DISCHARGE/TRANSFER

Admission

Admit as Inpatient

CODE STATUS

Code Status

Full Code  
Full Code, \*\*\* CODE TEAM WILL BE CALLED FOR ALL CODE STATUSES EXCEPT DNR \*\*

Do Not Resuscitate/DNR (Allow Natural Death/AND)  
DNR / AND (Allow Natural Death)

CLINICAL ASSESSMENT

Other Clinical Assessment

- Vital Signs and Clinical Assessment Per Unit Standard  
Routine, PER UNIT STANDARD, today at 1345, For 1 occurrence
- Nursing to Apply and Monitor Pulse Oximetry Document every 4 hours.  
Routine, EFFECTIVE NOW, today at 1345, For 1 occurrence, Document every 4 hours.
- Pediatric Clinical Respiratory Score  
Routine, ONCE, today at 1345, For 1 occurrence, RCP to perform at frequency according to Asthma Phase: Phase III: q2h Phase IV: q3h Phase V: q4h Phase VI: q4h
- Peak Flows - Pre And Post Bronchodilator  
Routine, ONCE, today at 1345, For 1 occurrence, For patients age 5 or greater Frequency According to Asthma Phase: Phase III: q2h Phase IV: q3h Phase V: q4h Phase VI: q4h
- Respiratory Therapy Type-in Order  
Routine, ONCE, today at 1345, For 1 occurrence  
Order requested: Measure and Record Patient's Predicted or Personal Best Peak Flow
- Complete Asthma Control Test for Ages 4-11 yrs old or 12 yrs and older. Place copy in remnant chart. Chart score in Assessment Flowsheet.  
Routine, EFFECTIVE NOW, today at 1345, For 1 occurrence, for Ages 4-11 yrs old or 12 yrs and older. Place copy in remnant chart. Chart score in Assessment Flowsheet.
- Weigh Patient And Record  
Routine, DAILY, First occurrence today at 1345

# MCWHLB Asthma Center of Excellence

## Program Activities

### Staff Education

- Physician Grand Rounds
- Resident Noon Conferences
- Skills Stations
- Roving Poster Boards
- You Learn Modules
- 1:1 in-services

### Patient Education

- Face to face bedside education Performed by **Respiratory Care Practitioners** and **Registered Nurses**
- Discharge medication education by **Pharmacist**

### Asthma Outreach

- Asthma Best Practices shared by Physicians
- Community Events
- World Asthma Day

### Information Technology

- Create order sets
- Explored ways to leverage resources to meet performance improvement initiatives

### GetWell Network

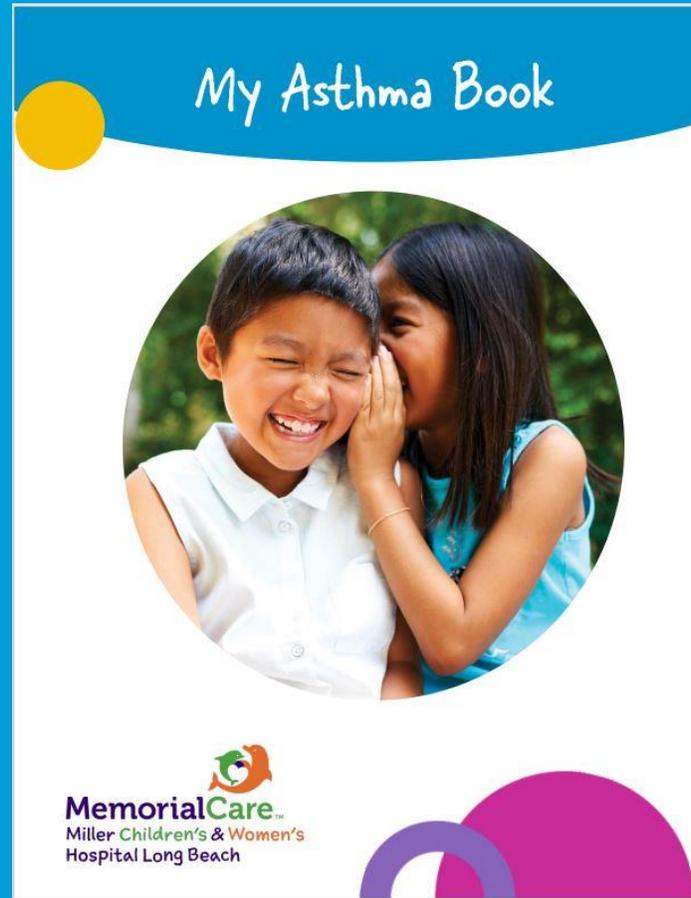
- Bundled asthma videos into an order set
- Videos played according to pathway: **New diagnosis** or **Existing diagnosis**



# Patient/Family Education is Multimodal

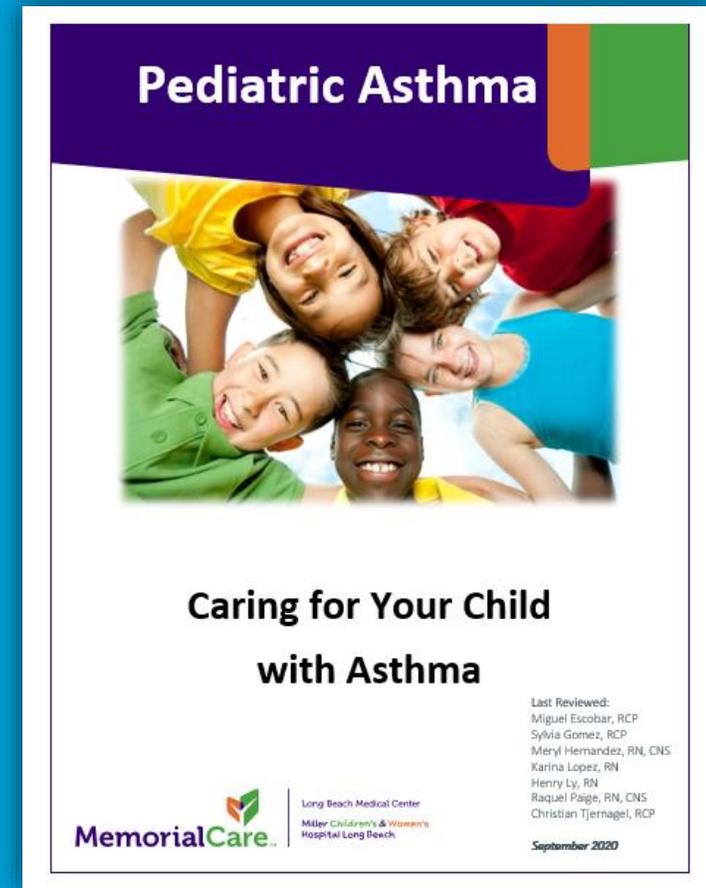
## My Asthma Book

Comprehensive information book  
about asthma care



## Asthma Flip Guide

1:1 verbal instruction by RCP or RN to  
patient/family (teaching tool)



# Patient/Family Education is Multimodal

## GetWell Network

Use of **interactive patient engagement technology**. Video Pathways are assigned as either **New or Existing Diagnosis**. Patient/families answer questions via remote to TV and can be reviewed by clinical staff.

getwell:)network<sup>®</sup>

Asthma Pathway – Training Guide

## Discharge Med Counseling

1:1 counseling before discharge on medications by pharmacist. Asthma Action Plan reviewed.

**Asthma Action Plan**

MemorialCare  
Miller Children's & Women's  
Hospital Long Beach

Patient Name: \_\_\_\_\_ Date of Birth: \_\_\_\_\_  
Attending/Encounter Provider: \_\_\_\_\_ Date of Encounter: \_\_\_\_\_  
Asthma Severity Classification: \_\_\_\_\_  
Triggers: \_\_\_\_\_  
Other Triggers: Investigating triggers

**Green = I Feel Good** (Use Green medicine every day)  
Breathing is normal  
No coughing, wheezing  
Or chest tightness  
Can play or work as normal  
Sleeps well at night  
Peak Flow (80% - 100% of Personal Best): 300 to 400

**Yellow = Take Action** (Continue the Green Zone Medicine and ADD)  
I Don't Feel Good  
Cough  
Wheezing or shortness of breath  
Or fast breathing  
Congested or Tight Chest  
Cough at night  
Exposure to unknown triggers  
First sign of cold  
Peak Flow (50% - 70% of Personal Best): 225 to 300

**Red = Emergency!** (Take your treatment NOW and if no relief in 15 minutes call 911 [immediately] or go to your nearest emergency room)  
I'm Getting Worse  
5-10 mins  
Hard to breathe / Severe chest congestion & tightness  
Uncontrolled cough  
Trouble talking or walking (Emergency)  
Blue lips/nails or drowsy (Emergency)  
Peak Flow (less than 40% of Personal Best): 225

Medicine Name	Strength	Dose	Route	How Often
Singular	90 mg	1 tablet	by mouth	once a day

Medicine Name	Strength	Dose	Route	How Often
Flonase		1 spray	nose	twice a day

Medicine Name	Strength	Dose	Route	How Often
Albuterol HFA	90 mcg	4 puffs w/inhaler	inhaled	every 3-4 hrs as needed x 4

Medicine Name	Strength	Dose	Route	Frequency
Albuterol HFA	90mcg	4 puffs w/inhaler	inhaled	every 20 mins

Authorization and Disclaimer from Patient/Guardian:  
I request that the school assist my child with the above asthma medication and the Asthma Action Plan. Yes / No  
My child may carry and take asthma medication and I release the school district and school staff from all claims of liability. Yes / No  
Parent/Guardian Name: \_\_\_\_\_ Signature: \_\_\_\_\_ Date: \_\_\_\_\_

# Community Outreach: Long Beach Alliance for Children with Asthma (LBACA)

- Community Health Worker (CHW) asthma home visitation program
- Home environment evaluation
- Asthma education
- Instructions and supplies on how to reduce asthma triggers in the home
- Supports physician asthma care education (PACE)
- Community Education and Awareness
- Advocacy/policy work to mobilize the community to respond to air quality issues



# MCWHLB Program Growth & Sharing

## Community Regional Medical Center



- Program Mentorship
- Interdisciplinary Efforts Shared
- MCWHLB as consultants for Disease Specific Certification

# Children's Outpatient Village



## Guidelines for Referral to an Asthma Specialist

The **MemorialCare Pediatric Best Practice Team** (BPT) supports asthma management in the primary care setting; however, there are times when referral to a specialist for asthma management is appropriate. These guidelines for referral to a specialist are meant to assist, not replace, the clinical decision making necessary to determine the most appropriate treatment to meet the individual patient's needs and circumstances.

Based on the opinion of the National Heart, Lung, and Blood Institute's (NHLBI) Expert Panel, referral for consultation or care to a specialist in asthma care (usually a fellowship-trained allergist or pulmonologist or, occasionally, a physician with expertise in asthma management developed through training and experience) is recommended when:

- Patient has had a life-threatening asthma exacerbation.
- Patient is not meeting the goals of asthma therapy after 3-6 months of treatment, or is unresponsive to therapy.
- Signs and symptoms are atypical, or there are problems in differential diagnosis.
- Other conditions complicate asthma or its diagnosis (e.g., sinusitis, nasal polyps, aspergillosis, severe rhinitis, VCD, GERD, COPD).
- Additional diagnostic testing is indicated (e.g., allergy skin testing, pulmonary function studies, provocative challenge, bronchoscopy).
- Patient requires additional education and guidance on complications of therapy, problems with adherence, or allergen avoidance.
- Patient is being considered for immunotherapy.
- Patient requires step 4 care or higher (step 3 for children 0-4 years of age) — see Appendix A. Consider referral if patient requires step 3 care (step 2 for children 0-4 years of age).
- Patient has required more than two bursts of oral corticosteroids in 1 year or has an exacerbation requiring hospitalization.
- Patient requires confirmation of a history that suggests that an occupational or environmental inhalant or ingested substance is provoking or contributing to asthma.

**Patients with significant psychiatric, psychosocial, or family problems that interfere with their asthma therapy should be referred to an appropriate mental health professional for counseling or treatment.**

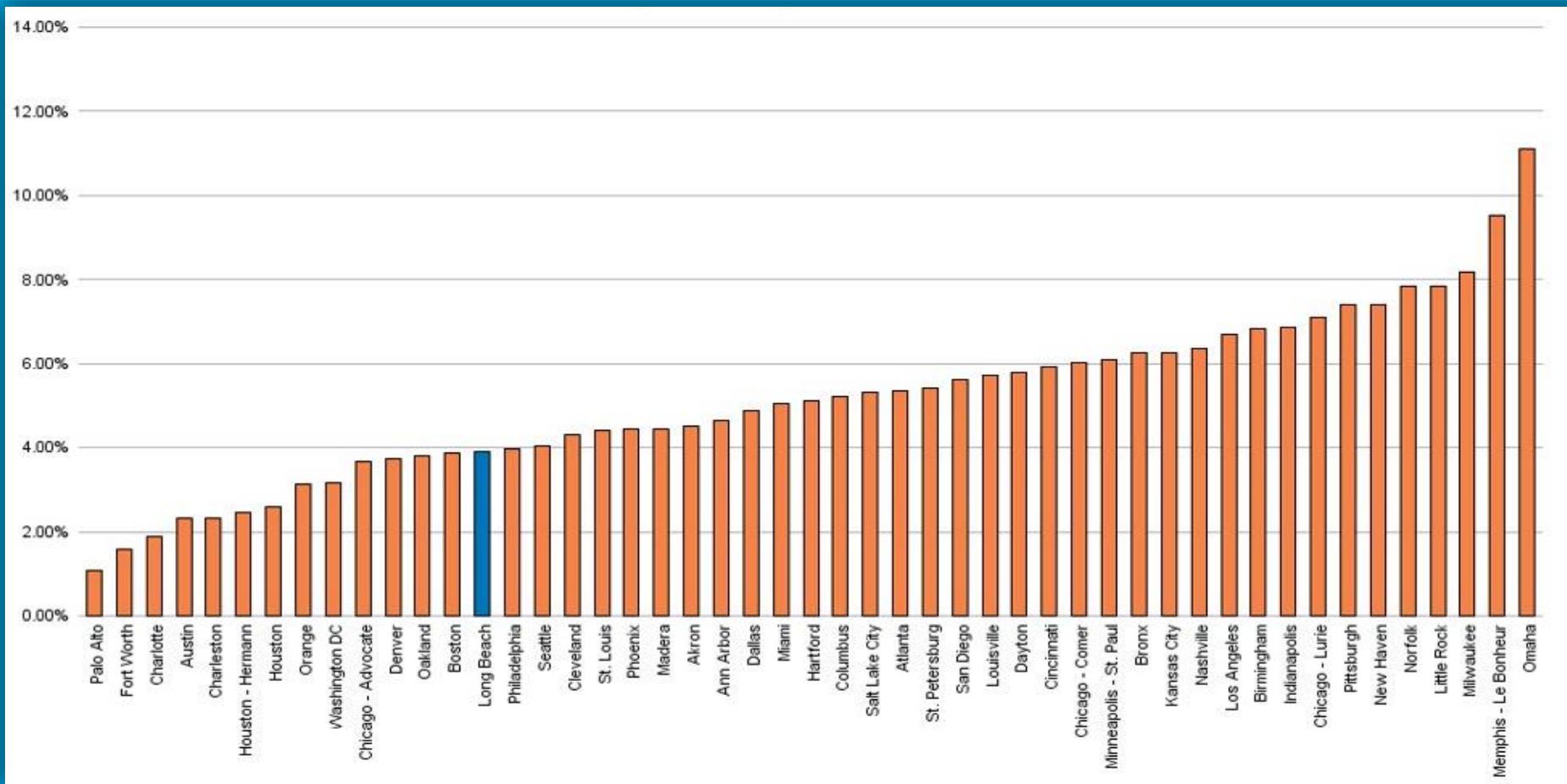
*Adapted from: Global Initiative for Asthma/GINA: Global Strategy for Asthma Management and Prevention 2017; National Heart, Lung, and Blood Institute/NIH: Asthma Clinical Practice Guidelines 2007.*



# Impact of MCWHLB Asthma COE on Pediatric Asthma Care

- **Streamlined** care and treatment of patients with asthma
- **Reduced** length of stay
- **Standardized** patient family-education process
- **Enhanced** focus on continuum of care
- **Strong** community partnership
- **Improved** Patient Satisfaction Scores
- **Better** patient outcomes

# In-patient to in-patient readmits within 90 Days Jan-Oct 2022



- 3.89% IP – IP readmit rate
- 13 patients total

- Average 5.06%
- Age 2-17

# MCWHLB Asthma Center of Excellence Future Plans

- Evaluate and develop robust frameworks for our asthma care progression processes
- Improve the transition of care across entities
- Explore and develop our community ties
- Leverage our use of technology to expand health care access
- Develop and recruit highly specialized staff

# Thank you from MemorialCare MCWHLB Asthma Center of Excellence Program!



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