APPENDIX 7

MEMORANDUM

Date	:	April 7, 2010
To	:	Health Care Managers / Chief Executive Officers Chief Medical Officers / Chief Medical Executives Directors of Nursing / Chief Nurse Executives
From	:	Denny Sallade, Statewide Health Care Administrator Karen Rea, PHN, MSN, FNP, Chief Nursing Executive Dwight Winslow, M.D., Chief Physician Executive Regional Medical Executives Regional Nurse Executives Regional Administrators
Subject	:	Monitoring and Improving Asthma Care

In 2008, California Prison Health Care Services (CPHCS) piloted an approach to asthma care at six institutions emphasizing team-based care, evidence-based practice, patient self-management and using data to evaluate and improve care. In 2009, this approach was implemented statewide. As part of the asthma initiative, institutions received training in asthma care and were provided forms, algorithms, and patient education materials.

The asthma initiative focused on three main treatment strategies:

- Control asthma symptoms through treatment, monitoring, and self-management activities.
- Classify the severity of the patient's asthma condition.
- Use oral corticosteroids in the treatment of acute asthma exacerbations.

These three treatment strategies were selected to optimize patient outcomes and mitigate asthma-related complications as recommended by the nation's leaders in asthma management. Evidence-based medical literature regarding asthma management has identified certain clinical measures that correlate to patient outcomes. Regional Leadership recently adopted a series of quality improvement performance objectives for 2010, consistent with the evidence. With the asthma initiative strategies in mind, the Regional Leadership Team set the following performance objective for our asthma patient population:

- By December 31, 2010 the ratio of short-acting beta agonist (SABA) to inhaled corticosteroid (ICS) prescription for asthmatic patients will be less than 2:1.

- By December 31, 2010 the percentage of total patients with asthma prescribed an inhaled corticosteroid (ICS) will be >50%.

In March 2010, Regional Leadership gathered pharmacy data, available centrally, to determine the status of these two performance measures for each institution shown in Attachment I.

Many institutions are already meeting the objectives for the aforementioned measures, and should continue their current practice. Those institutions not yet at goal should take appropriate action to bring their performance in alignment with the performance objectives.

To support the primary care teams to provide excellent care, an updated CPHCS Care Guide for Asthma is provided, included as Attachment II. In addition, Clinical Support Unit staff have contacted some of the well-performing institutions with regard to this analysis, and collected recommendations for improvement activities, which is provided in Attachment III.

Institutions with SABA to ICS ratios exceeding 3 to 1 will receive additional data to support improvement activities, including prescribing information at the individual provider level. These institutions will be contacted through separate correspondence.

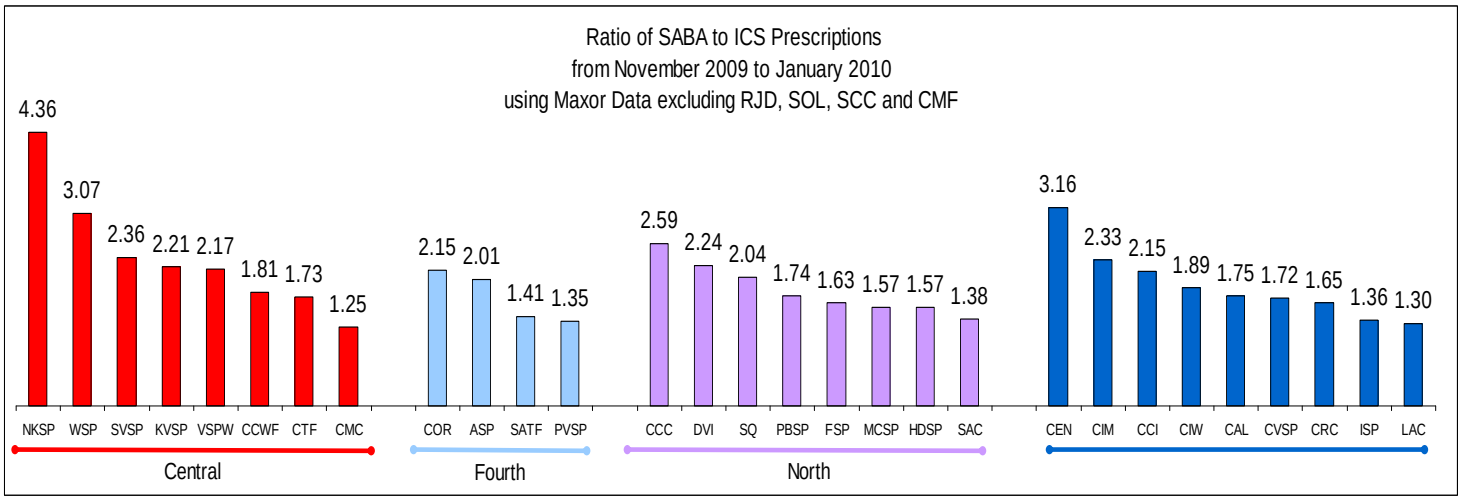
During the remainder of 2010, Regional Leadership will continue to monitor performance on these two measures over time and will periodically issue reports and feedback to the institutions. Should you have any questions regarding this quality initiative, please contact your regional leadership.

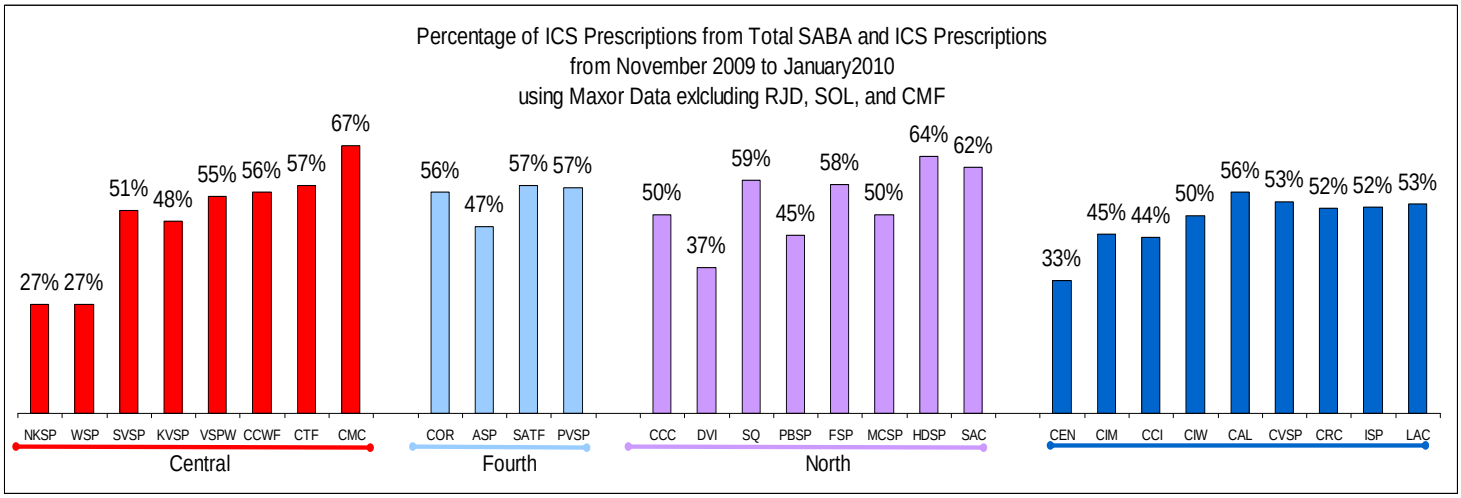
We look forward to working with you further to evaluate and improve patient care.

cc: C. Kelso
E. Bush
B. Noble
A. Frueh
D. Peterson
R. Barnett
J. Mohle-Boetani

Attachment I

Asthma Performance Measures – Initial Analysis





CPHCS Care Guide: Asthma

GOAL- "CONTROL" OF SYMPTOMS

SYMPTOMS: SOB, WHEEZE, COUGH	≤ 2 DAYS/WEEK
NIGHT TIME AWAKENINGS	≤ 2 X'S/MONTH
ACTIVITY INTERFERENCE	NONE
SABA USE FOR SYMPTOM CONTROL	≤ 2 DAYS/WEEK
FEV_1 OR PEAK FLOW	> 80% PREDICTED OR PERSONAL BEST
EXACERBATIONS REQUIRING ORAL STEROIDS	0-1/ YEAR

ALERTS

- ⇒ Losing control: ↑ symptoms, ↑ SABA use, ↓ PEF, etc.
- ⇒ SpO2 < 92 %
- ⇒ Can't speak more than 1-2 words/breath
- ⇒ PEF < 50% Predicted/Personal Best
- ⇒ Silent Chest, Cyanosis, Confusion or Coma.

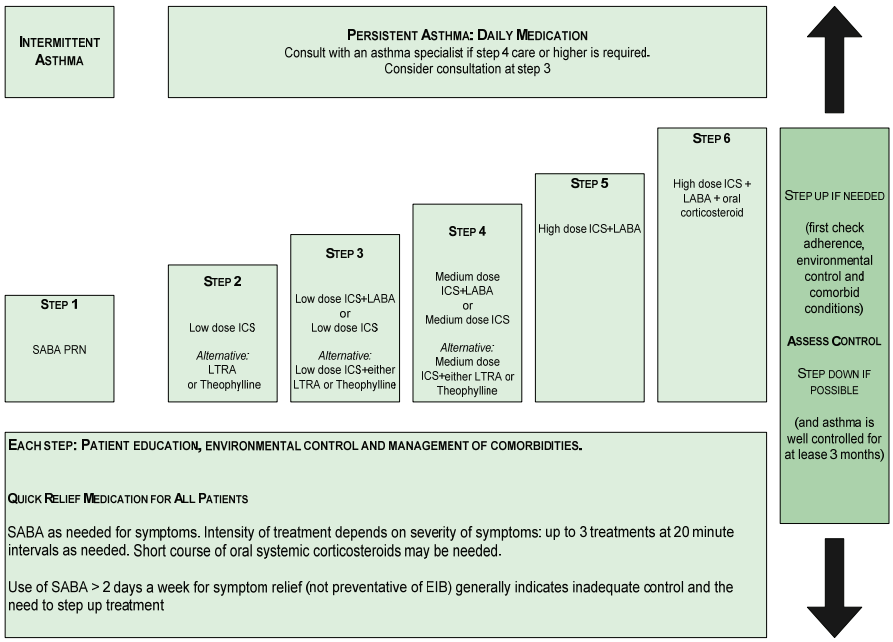
DIAGNOSTIC CRITERIA/EVALUATION- "CLASSIFY" SEVERITY

SEVERITY CLASSIFICATION	INTERMITTENT	PERSISTENT		
		MILD	MODERATE	SEVERE
SYMPTOM FREQUENCY	≤ 2 days/week	> 2 days/week but not daily	daily	throughout day
NIGHTTIME AWAKENINGS	≤ 2 x's/month	3-4 x's / month	>1x/ week but not nightly	often 7x/week
INTERFERENCE WITH NORMAL ACTIVITY	None	Minor	Some	Extreme
SPIROMETRY LUNG FUNCTION	Normal FEV_1 between exacerbations FEV_1 >80% predicted FEV_1/FVC normal	FEV_1 > 80 predicted Normal FEV_1/FVC normal	FEV_1 > 60% predicted but <80 predicted FEV_1/FVC reduced 5% daily	FEV_1 <60% predicted FEV_1/FVC reduced > 5%

COMPLETE HISTORY INCLUDING:

- Medications, smoking hx, hospitalizations/intubations due to Asthma; known triggers; seasonal variability; vaccination hx
- Baseline spirometry
- Exam including heart and lung, peak flow, complete vitals (BP, P, RR, O2Sat, T, Ht/Wt)
- Consider differential diagnosis: other pulmonary diseases, cardiac disease, infectious diseases, etc

TREATMENT OPTIONS- "CORTICOSTERIODS" TO TREAT



- Asthma is dynamic: Step ↑up therapy if not well controlled. Step ↓down therapy if well controlled on current therapy > 3 months.
- Before stepping up therapy-review adherence to meds, inhaler technique & comorbid conditions.
- Start on ICS if: > 2 days of symptoms/use of SABA per week
  - ⇒ 2 nocturnal awakenings per month
  - ⇒ 2 exacerbations requiring oral steroids/year
- Consider GERD treatment if frequent exacerbations occur or if persistent cough not improving
- Use spacers
- Asthma exacerbation = oral steroid burst
- Assign severity to the most severe category in which any feature occurs; considering both impairment and risk
- Smoking cessation

MONITORING

- Intermittent & well controlled asthmatics can typically be seen every 3-4 months
- If poor control follow closely

Definition of Terms: SABA - short acting beta agonist LABA - long acting beta agonist ICS - Inhaled Cortical Steroids EIB - Exercise Induced Bronchospasm LTRA - Leukotriene Receptor Antagonist

Medications

MEDICATION CLASS	MEDICATION	SIDE EFFECTS	SPECIAL NOTES	FORMULARY STATUS*
INHALED CORTICAL STEROID (ICS)	**fluticasone (Flovent HFA)**	Headache, arthralgia, URTI, throat irritation, Oral candidiasis, Rare paradoxical bronchospasm,	Hypersensitivity to fluticasone or any component of the formulation; NOT for **primary** treatment of status asthmaticus or acute bronchospasm	F
	beclomethasone (QVAR)	See above	See above	NF
	mometasone (Asmanex)	See above	See above	NF
	triamcinolone (Azmacort)	See above	See above	NF
ORAL CORTICOSTEROID	Prednisone (to be used in burst fashion during exacerbation)	GI upset, Psychiatric disturbances, Bruising, Immunosuppression, Fluid retention, Hypertension	Hypersensitivity to any component of the formulation; systemic fungal infections; administration of live or live attenuated vaccines with immunosuppressive doses of prednisone	F
SHORT ACTING BETA-AGONIST (SABA)	**albuterol (Ventolin HFA, Proventil HFA, salbutamol)**	Tachycardia, Palpitations, Tremor, Hyperglycemia, Hypokalemia, Lactic acidosis, Rare paradoxical bronchospasm	Hypersensitivity to albuterol, adrenergic amines, or any component of the formulation	F
	levalbuterol (Xopenex HFA)	See above	Hypersensitivity to levalbuterol, albuterol, or any component of the formulation	NF
	metaproterenol (Alupent)	See above	Hypersensitivity to metaproterenol or any component of the formulation; pre-existing cardiac arrhythmias associated with tachycardia	NF
LONG ACTING BETA AGONIST (LABA)	**salmeterol (Serevent)**	Headache, Neuromuscular and skeletal pain, Throat irritation, pharyngitis	**Long-acting beta$_2$-agonists (LABAs) may** increase the risk of asthma-related deaths. Salmeterol should only be used as adjuvant therapy in patients not adequately controlled on inhaled corticosteroids or whose disease requires two maintenance therapies Do **NOT** use for acute asthmatic symptoms Hypersensitivity to salmeterol or any component of the formulation	F
COMBINATION INHALER MEDICATIONS	**fluticasone + salmeterol (Advair)**	Headache, URTI, throat irritation, Oral candidiasis, Neuromuscular and skeletal pain, Menstruation symptoms	Hypersensitivity to fluticasone, salmeterol, or any component of the formulation; status asthmaticus; acute episodes of asthma or COPD; severe hypersensitivity to milk proteins (Advair Diskus®)	F
LEUKOTRIENE INHIBITORS	montelukast (singulair)	Dizziness, Headache, Fatigue, Fever, Rash	Hypersensitivity to montelukast or any component of the formulation **Possible association between leukotriene inhibitor use and neuropsychiatric events including agitation, aggression, anxiousness, dream abnormalities, hallucinations, depression, insomnia, irritability, restlessness, suicidal thinking and behavior (including suicide) and tremor.**	NF
OTHER ASTHMA MEDICATIONS	theophylline (Theo-Dur)	Tachycardia, Flutter, Headache, Insomnia, Restlessness, Nausea, Vomiting Tremor, Difficulty urinating in men with prostatism signs and symptoms of theophylline toxicity (eg, persistent, repetitive vomiting)	Hypersensitivity to theophylline or any component of the formulation Cardiovascular disease: Use with caution in patients with tachyarrhythmias (eg, sinus tachycardia, atrial fibrillation) since use may exacerbate these arrhythmias. Hyperthyroidism: Use with caution in patients with hyperthyroidism; use may exacerbate this condition. Peptic ulcer disease: Use with caution in patient with peptic ulcer disease; use may exacerbate this condition. Seizure disorder: Use with caution in patients with a history of seizure disorder; use may exacerbate this condition.	F
	Ipatropium (to be used with Albeturol via oxygen driven nebulizer)	URTI, Bronchitis, Headache, Dyspnea,	Hypersensitivity to ipratropium, atropine (and its derivatives), or any component of the formulation	F

*Formulary Status (as of 4/6/10) - F = Formulary NF = Non Formulary

SPECIALTY REFERAL GUIDELINES
GENERALLY REFER PATIENT-INMATES TO PULMONOLOGIST WHO HAVE:
** DETAILED CRITERIA CAN BE FOUND ON INTER-QUAL SMART SHEETS**

1. Asthma with complications or comorbidity (e.g. CO2 retention, recent hx of mechanical ventilation)
2. Continued asthma symptoms after maximal recommended treatment (e.g. multiple ER visits despite therapy)
3. Chronic corticosteroid use (e.g. On oral steroids > 4 weeks, or prolonged high-dose ICS used)

PEAK FLOW PREDICTED-MEN

Predicted average peak expiratory flow for normal males (L/min)

Age	Height				
	60"	65"	70"	75"	80"
20	554	602	649	693	740
25	543	590	636	679	725
30	532	577	622	664	710
35	521	565	609	651	695
40	509	552	596	636	680
45	498	540	583	622	665
50	486	527	569	607	649
55	475	515	556	593	634
60	463	502	542	578	618
65	452	490	529	564	603
70	440	477	515	550	587

These values represent average normal values within 100 L/min. Predicted values for African American and Hispanic minorities are approximately 10 percent lower.
Redrawn from Leiner, GC, et al, Am Rev Respir Dis 1963; 88:644.

PEAK FLOW PREDICTED-WOMEN

Predicted average peak expiratory flow for normal females (L/min)

Age	Height				
	55"	60"	65"	70"	75"
20	390	423	460	496	529
25	385	418	454	490	523
30	380	413	448	483	516
35	375	408	442	476	509
40	370	402	436	470	502
45	365	397	430	464	495
50	360	391	424	457	488
55	355	386	418	451	482
60	350	380	412	445	475
65	345	375	406	439	468
70	340	369	400	432	461

These values represent average normal values within 80 L/min. Predicted values for African American and Hispanic minorities are approximately 10 percent lower.
Redrawn from Leiner, GC, et al, Am Rev Respir Dis 1963; 88:644.

CHRONIC ASTHMA

ABBREVIATIONS:

ICS: Inhaled Corticosteroid

PEF: Peak Flow

FEV1: Forced Expiratory Volume in one second.

ASSESSMENT:

- History and Physical including PEFR.
- If needed, confirm diagnosis with spirometry.
- Patient education including nursing verification of correct inhaler technique
- Identify triggers-seasonal? URI? Fumes?

ICS Dosing: Flovent

Administer in divided doses twice daily:
"Low" dose: 110 mcg 1 puff q day or bid
"Medium" dose: 220 mcg 1 puff bid
"High" dose: 220 mcg 2 puffs bid

NIH Asthma Guidelines (NIH, 2007)

ASSIGN SEVERITY CLASSIFICATION TO EACH PATIENT

INTERMITTENT:

- Symptoms ≤ 2 x / week
- Nighttime symptoms ≤ 2 x / mos
- Asymptomatic and normal PEF between exacerbations
- Brief Exacerbations (hrs to days)
- FEV1 or PEF ≥ 80% predicted and variability < 20%

MILD PERSISTENT:

- Symptoms ≥ 2 times / week but not daily
- Nighttime symptoms 3-4 times per month
- Exacerbations with minor limitations
- FEV1 or PEF > 80% predicted and variability 20% o 30%

MODERATE PERSISTENT:

- Daily Symptoms
- Daily use of inhaled short acting beta-2 agonist
- Nighttime symptoms > 1 per week
- Exacerbations cause some limitations
- Exacerbations may last days
- FEV1 or PEF 60% to 80% predicted and variability > 30%

SEVERE PERSISTENT:

- Continual symptoms
- History of intubation or ICU admission
- ≥ 2 hospitalizations in past year
- Extreme physical limitations
- Frequent exacerbations
- Frequent nighttime symptoms
- FEV1 or PEF < 60% predicted and variability > 30%

INITIAL TREATMENT RECOMMENDATIONS BASED ON SEVERITY

INTERMITTENT TREATMENT:

1. Generally no ICS, unless seasonal use needed
2. "Rescue" Albuterol 2 puffs 4 times daily PRN

Controlled?

- YES → Follow-up every 3-6 months with history and peak flow*.
- NO → Re-evaluate classification. Start ICS under Mild Persistent Treatment. Follow up every month.

MILD PERSISTENT TREATMENT:

1. Low dose ICS
2. "Rescue" Albuterol 2 puffs 4 times daily PRN

Controlled?

- YES → Follow-up every 3 months with history and peak flow*.
- NO → Re-evaluate classification. Step up ICS to Moderate Persistent Treatment. Follow-up every month.

MODERATE PERSISTENT TREATMENT:

1. Medium dose ICS
2. "Rescue" Albuterol 2 puffs 4 times daily PRN

Controlled?

- YES → Follow-up every 2-3 months with history and peak flow*.
- NO → Re-evaluate classification. Step up ICS to Severe Persistent Treatment. Follow-up every month.

SEVERE PERSISTENT TREATMENT:

1. High dose ICS
2. "Rescue" Albuterol 2 puffs 4 times daily PRN
3. Serevent 1 puff twice daily

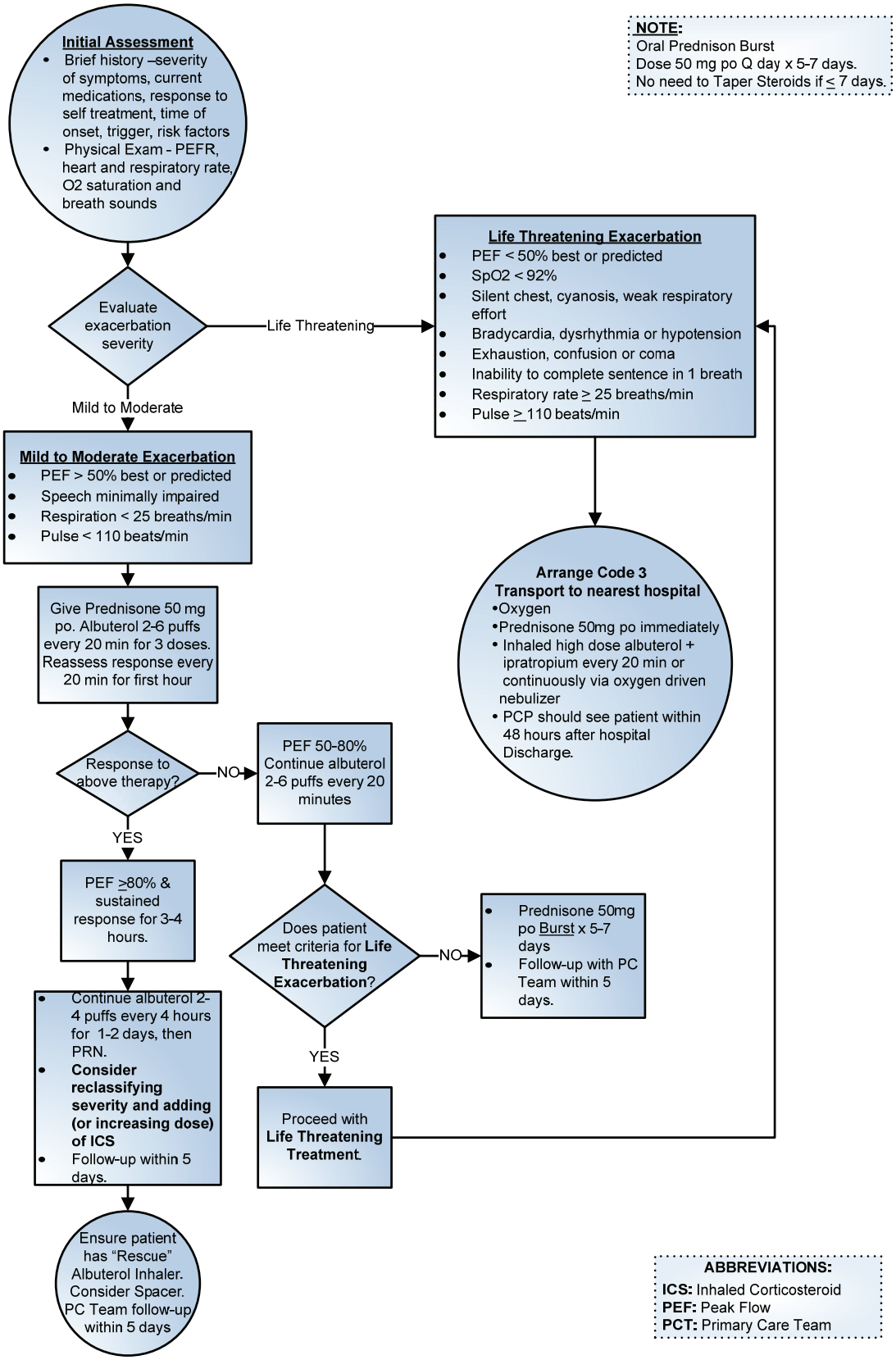
Controlled?

- YES → Follow-up every month with history and peak flow*.
- NO → Consider longer course of oral steroids. Referral to pulmonology. Follow-up every week.

National Asthma Education and Prevention Program Expert Panel Report2: Guidelines for the Diagnosis and Management of Asthma
http://www.nhlbi.nih.gov/guidelines/asthma/asthgdln.htm

*Spirometry every 1-2 years

ACUTE ASTHMA



References:
National Asthma Education and Prevention Program Expert Panel Report2: Guidelines for the Diagnosis and Management of Asthma
http://www.nhlbi.nih.gov/guidelines/asthma/asthgdln.htm
NCCHC Clinical Guidelines for Correctional Facilities: Treatment of Asthma in Adults in Correctional Institutions. Apr 2006.
http://www.ncchc.org/resources/clinicalguides/asthma.pdf

Asthma: What You Should Know

Q: WHAT IS ASTHMA?

A: Asthma is a chronic disease that effects your airways. The airways are the tubes that carry air in and out of you lungs.

Q: WHAT ARE THE DIFFERENT KINDS OF ASTHMA?

A: INTERMITTENT	PERSISTENT	EXERCISE RELATED
Usually you have symptoms that are off and on and mild, you generally don't need a “controller" inhaler. You may occasionally need to use a “rescue” inhaler.	Means you have more frequent and worse symptoms, you do need a "controller" inhaler to reduce the number and severity of your symptoms.	Some people only have asthma symptoms when they exercise. These people will often use the “rescue” inhaler before exercise.

Q: WHAT CAUSES ASTHMA?

A: There are different causes:

- Asthma can run in families
- Asthma is much more common in people with allergies
- Pollution can cause asthma or make it worse
- Exposure to certain viruses as a child increases the chance you will get asthma.

Q: WHAT ARE THE SYMPTOMS OF ASTHMA?

A: When you have asthma you may:

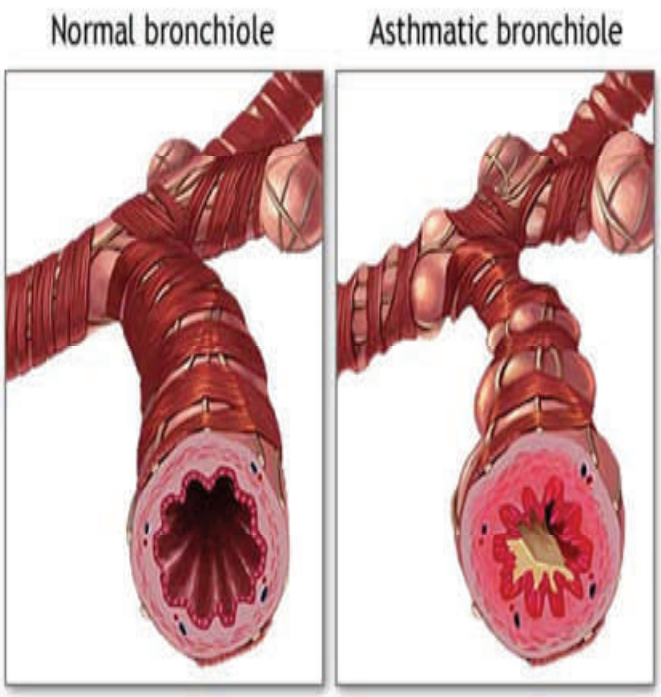
- Wheeze-making a loud or soft whistling noise that occurs when you breathe in and out.
- Cough a lot
- Feel short of breath
- Have trouble sleeping because of coughing or having a hard time breathing
- Quickly get tired during exercise
- You may notice symptoms can be worse at night

Q: HOW IS ASTHMA DIAGNOSED?

A: Along with asking you about your medical history and examining you, your provider may order lung tests. These tests include:

- **Peak expiratory flow (PEF):** You breathe quickly into a small handheld plastic device which measures how fast you can breathe out when you try your hardest and the number can tell if your asthma is better or worse.
- **Spirometry:** you breathe into a small machine to measure how quickly you can move air in and out of your lungs and how much air you move

Q: HOW IS ASTHMA TREATED?



A: ASTHMA ACTS ON YOUR LUNGS IN TWO WAYS:

Asthma causes the tiny muscles around your airways to tighten which constricts the airways and makes breathing more difficult.

- This can happen fast, but can also get better fast using a “quick relief”, “rescue" or “opener” (bronchodilator) inhaler
- You should only need this type of inhaler once in a while. If you are using it daily see your PCP
- Names of some “quick relief” inhalers: **albuterol,** proventil

Asthma also causes long term swelling inside the airways. This swelling narrows the airway and makes breathing more difficult.

- The swelling is present most of the time, but a “controller” inhaler can keep the swelling down and keep your airways open. Most controllers are low dose steroid inhalers which prevent the swelling
- In most cases you use a controller inhaler every day, because if you stop the swelling will come back.
- Names of some of the steroid/controller inhalers include: **Flovent**, QVAR, Asmanex

Asthma: What You Should Do

WHAT TYPE OF ASTHMA DO YOU HAVE? (CHECK ONE)

☐ INTERMITTENT	☐ MILD PERSISTENT	☐ MODERATE OR SEVERE PERSISTENT	☐ EXERCISE RELATED
Means you have asthma symptoms less than 2 times a week. Asthma does not interfere with you normal activity.	Means you have asthma symptoms more than 2 days a week but not everyday and your asthma affects your usual activity only a little.	Means you have symptoms everyday. You asthma interferes or prevents your normal activity	Means you only have asthma symptoms when you exercise.

WHAT TYPE OF MEDICATION ARE YOU TAKING? (CHECK ONE)

☐ QUICK RELIEF/OPENER

- ❑ Albuterol :_____
- ❑ Other:_____

Relax the tight muscles surrounding the airways and "open" the airways up. They help for a short time usually for 1-4 hours.

Dose:_____

Directions:_____

!!Warning: If you are using more than 2 times per week you need to schedule and appointment with you Primary Care Provider.

☐ CONTROLLER MEDICATION

- ❑ Flovent:_____
- ❑ Other_____

These inhalers prevent inflammation and swelling in the airways. These inhalers take 3-7 days to work so you must take every day. These inhalers will not help in an attack.

☐ OTHER

- ❑ _____
- ❑ _____
- ❑ _____

TO AVOID ASTHMA ATTACKS

✓ Don't Smoke

✓ Be on the look out for what brings on(triggers) your asthma and avoid if possible:

•Weather •Strong emotions •Exercise •Colds/lung infections

WHAT TO DO DURING AN ATTACK

1. Take your "rescue" inhaler immediately
2. Sit down and loosen any tight fitting clothing. Do not lie down.
3. If no immediate improvement during an attack, continue to take one puff of your "rescue" inhaler every minute for five minutes or until symptoms improve.
4. If your symptoms do not improve in five minutes seek medical attention **IMMEDIATELY.**

TO KEEP YOUR INHALER CLEAN

CLEANING:

- Once a day clean the inhaler and cap by rinsing them in warm running water. Let the inhaler dry before you use it again.
- Twice a week wash the plastic mouthpiece with mild dishwashing soap and warm water. Rinse and dry well.

HELPFUL HINTS

- Keep your rescue inhaler with you at all times. If you are going into an area where security concern may prevent you from keeping your rescue inhaler with you, leave meds with the custody staff that is in charge of that area. Inform them you may need your medication right away of a flare should occur.
- Plan ahead and refill prescriptions before they run out.
- If you are using your "rescue" medication too often, your asthma is getting worse. This can lead to permanent scarring of your breathing tubes or even death. Contact medical staff right away.
- Being depressed or anxious can make your asthma worse. Talk with your provider if you are experiencing symptoms of depression or anxiety.
- Stay well. Reduce your risk of colds and flu-which can trigger your asthma-by washing your hands often and getting a flu shot every year.
- Remember, a big part of your asthma control depends on you. The medical staff is available to help you but you must do your part to help them give you the best are possible.

ASTHMA ACTION PLAN FOR: _____

DOING WELL *In the Green Zone*	■ No trouble breathing ■ Can do usual activities And, if peak flow meter is used: Peak flow: more than_____ (80 percent or more of my best peak flow)	**MEDICINE**	**HOW MUCH TO TAKE**	**WHEN TO TAKE IT**	
		Rescue/Opener:		Daily	As needed
		Controller:		Daily	
		Other:		Daily	
ASTHMA IS GETTING WORSE *In the Yellow Zone*	■ Cough, wheeze, chest tightness, or shortness of breath, or ■ Waking at night due to asthma, or ■ Can do some, but not all usual activities Or Peak Flow: _____ to _____ (50 to 79 percent of my best peak flow)	1. Continue the medication in the doing well/green zone 2. Use Rescue/Opener medicine: ❑ 2 or ❑ 4 puffs, every 20 minutes for up to 1 hour 3. If you feel back to normal (an peak flow improved) after 1 hour: Continue monitoring to be sure you stay in the green zone. Or If you do not feel back to normal after 1 hour with above treatment: Take:_____ Contact Medical if:_____			
MEDICAL ALERT *In the Red Zone*	■ Very short of breath, or ■ Quick-relief medicines have not helped, or ■ Cannot do usual activities, or ■ Symptoms are same or get worse after 24 hours in Yellow Zone Or Peak flow: _____ less than ____ (50 percent of my best peak flow)	1. Use Rescue/Opener medicine 2. Start prednisone pills immediately _____mg 3. **CONTACT MEDICAL/CUSTODY TO BE SEEN IMMEDIATELY.**			

PLAN PREPARED BY: _____PCP/NP/RN

Attachment III

Recommended Practices

Recommended Practices

Institutions with excellent performance on the asthma measures have attributed their success to some or all of the practices listed below. The Primary Care Model – seemed to be integral to the success at managing chronic asthmatics. The team members share information at huddles and each team member is responsible for identifying patient-inmates who are poorly controlled.

To accomplish the three asthma goals:

Control Symptoms:

- Peak Flow measurement is taken on every asthmatic patient at every visit
- Team member reviews numbers of beta agonist canisters used at each visit
- Providers are asked not to give automatic refills on short acting beta agonists
- Pharmacist communicates with team/providers when rescue inhaler refills excessive
- Difficult cases are discussed in meetings, either Primary Care Team meetings, Medical Authorization Review (MAR) Committee or peer review settings- with focus on major messages and identification (and education) of outliers (both patients and providers)
- Only two teams found that use of ACAT on all asthmatic patients was useful. Most teams limit use to particularly difficult to manage patients or screening on new patients.
- Team members educate patients on self-management-including inhaler use

Classify severity

- Medical leadership requires that asthma severity classification be documented on each patient/each visit
- Providers educated on reading spirometry results and institutions have on-site spirometry
- Nurses screened all patients in the institution with existing asthma to classify them (During asthma pilot-reviewed any patient-inmate on asthma medication). A specified RN did this during asthma pilot; now could utilize Primary Care Nurse for new or difficult to control patients

Corticosteroids to treat

- During patient education, all team members reinforce the fact that use of beta-agonists alone in persistent asthma is not standard of care (i.e. if more than occasional use of SABA then it is likely an ICS is indicated)
- One facility asks providers not to put automatic refills on ICS as it was felt that this could lead to a false sense of success.
- Team members, including TTA nurses, are encouraged to ask about appropriateness of oral steroid burst for patients with exacerbations.