USAID
ამერიკელი ხალხისგან

ჯანდაცვის
გაუმჯობესების
პროექტი

<u>IMPROVEMENT OBJECTIVE # 1:</u> Decrease asthma/COPD morbidity and mortality in affected adults and children through improved quality of asthma/COPD case-management (ambulatory & hospital)

Cross-cutting ambulatory and hospital asthma & COPD high-impact interventions

- Bronchodilator for active symptoms
- ASTHMA: Inhaled steroid all persistent asthma (tailored to severity)
- COPD: LABA and/or anti-cholinergic (FEV1 < 60% or moderate-severe disease); ICS moderate-severe disease (FEV1 < 60%)
- Identification & control triggers & risk factors
- Exacerbation management (ambulatory vs. hospital): oral or IV steroid, nebulized bronchodilator, oxygen if needed
- Patient self-management support

<u>AMBULATORY</u> ASTHMA & COPD INTERVENTIONS & INDICATORS

Based on most recent GOLD, GINA, and NHLBI recommendations

Case-Management Category	**Essential Interventions**
Documentation at least once in Chart (any prior time)	• Diagnosis duration; prior history asthma/COPD hospitalizations/intubations & exacerbations • Family history (+ or -) • Allergies and triggers • Tobacco history (adults & teens): Current, Former or Never smoker quit)
Assessment <u>every</u> clinical encounter/visit	<u>Verbal interview</u> (+/- standardized self-assessment form) • Asthma symptoms & frequency bronchodilator use since last visit • Updated medication review: specific meds/doses, self-reported adherence, side effects • Illnesses or new diagnoses since last visit? • New triggers in home? (e.g. pets/smokers) • Tobacco status <u>Physical Exam:</u> • Pulmonary exam documented • Peak flow measure (if used in clinic or village doctor's office)
Asthma/ COPD control status	<u>Asthma:</u> Updated classification of asthma status every visit based on current control & future risk (see job

defined <u>every</u> visit (dynamic process based on assessment)	aid) • Classification categories: mild intermittent; mild, moderate or severe persistent • Uncontrolled:_Daytime asthma symptoms > 2x/week or nocturnal symptoms > 2x/month (regardless of current medications); impaired functioning due to symptoms <u>COPD</u>: severity/frequency cough, dyspnea; sputum production
Treatment Interventions every visit (based on control status)	<u>Asthma:</u> Tailor treatment to updated asthma status assessment every visit ("stepwise approach") • Inhaled steroid for all persistent asthma tailored to updated control status • Nebulized budesonide in case of persistent asthma in infants/young children and adults unable to use MDI. • Bronchodilator with appropriate delivery mechanism per patient age/ability (e.g. Inhaler, age-appropriate spacer; nebulizer, etc.) • Other oral asthma medications (e.g. leukotriene inhibitors) <u>COPD</u>: • Anti-cholinergic and/or LABA for moderate to severe COPD • Inhaled steroid for all moderate to severe COPD (based on clinical assessment or FEV1 < 60%) -Referral pulmonologist all uncontrolled moderate persistent asthma and moderate COPD
Risk Factor & Trigger Modification Plan every visit	• Tobacco cessation treatment plan all smokers • Allergen exposure reduction for known allergens • Trigger avoidance for identified triggers
Ambulatory Follow up & Patient Education	-Follow up specified (time & place) -Verification/demonstration proper medication and equipment technique every visit (age-appropriate spacer w/ inhaler, nebulizer use) (nurse or doctor—have patient bring meds to all visits) -Written asthma action plan (in the case of escalating symptoms) -Patient education counseling (nurse or doctor) & distribution patient education materials

Exacerbations: **Ambulatory Management** Appropriate if: -no respiratory distress after initial bronchodilator treatment or no signs of severe illness -Able to comply with ambulatory treatment & follow up	Ambulatory Treatment for asthma exacerbation (escalating frequency & severity of symptoms despite treatment adherence): • Oral steroid x 5 days (fixed dose--specify) or increase in inhaled steroid with close follow up • Increased regular frequency of bronchodilator until exacerbation decreasing with as needed additional use • Treat any identified precipitating causes (e.g. pneumonia, strep pharyngitis, etc) • Patient education (danger sign review) and specific follow-up plan
Exacerbations: requiring hospital management Appropriate if: -Significant respiratory distress (incr. RR, retractions, accessory muscle use etc) -Dehydration (especially infant/young child) -Failed ambulatory management (not improving or worsening despite maximum treatment)	Hospital referral & Stabilization Interventions -Completion of standardized referral form & communication w/ hospital if possible -Transport plan per patient severity -Follow- up plan communicated to family -Follow-up with patient or family member by nurse or doctor within 2-3 days (e.g. phone call to family or hospital)

Acronyms:

BP Blood Pressure
COPD Chronic Obstructive Pulmonary Disease
FEV1 Forced Expiratory Volume in One Second (measured via spirometry)
ICS Inhaled Cortico-steroid
LABA Long-acting Beta2 Agonist (bronchodilator)
PEF Peak Expiratory Flow (measured via Peak Flow Meter)
PFM Peak Flow Meter (bed-side measure of expiratory air flow; variable evidence for impact on management)
RR Respiratory Rate
SOB Shortness of Breath