



ESP CASE DETECTION ALGORITHM

Asthma

Document Version 3.12

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Modification History

| Version | Date | Modification | By |
|---------|------------|--|---------|
| 3.12 | 02/22/2022 | Add additional asthma medications | CII/DPM |
| 3.11 | 10/11/2017 | Added ESP logo and MDPH branding | DPM |
| 3.1 | 6/30/2017 | Put most recent version of algorithm on new template | DPM |
| 3.0 | 10/4/2016 | Updated algorithm | |
| 2.0 | 9/26/2016 | | |
| 1.0 | 5/29/2014 | Original case definition | |





1. Overview

The purpose of this document is to describe the criteria used to identify Asthma in MDPHnet data.

2. Criteria used to identify cases using ESP data

I. CASE CRITERIA

Asthma is defined as meeting criteria for any one of the following:

1. ≥2 ICD 9/10 codes or ≥2 prescriptions within a two-year period
 - a. Prescriptions must be ≥ 1 day apart unless they are different medications prescribed on the same day
 - b. Diagnoses must be ≥ 1 day apart

II. ICD-9/ICD-10 CODES FOR CASE CRITERIA

| | | | |
|--------|--------|--------|---------------------|
| Asthma | ICD-9 | 493.xx | Asthma |
| | ICD-10 | J45 | Asthma |
| | | J46 | Acute severe asthma |

III. MEDICATIONS FOR CASE CRITERIA

| Generic Name | Brand Names |
|-----------------|--|
| Albuterol | AccuNeb, Ventolin, Proventil, ProAir, VoSpire, Airomir, Asmavent, salbutamol |
| Levalbuterol | Xopenex |
| Pirbuterol | Maxair |
| Arformoterol | Brovana |
| Formoterol | Foradil, Perforomist, Oxeze |
| Indacaterol | Arcapta |
| Salmeterol | Serevent |
| Beclomethasone | Qvar |
| Budesonide INH | Pulmicort |
| Ciclesonide INH | Alvesco |
| Flunisolide INH | Aerobid,Aerospan |
| Fluticasone INH | Flovent |
| Mometasone INH | Asmanex |
| Montelukast | Singulair |
| Zafirlukast | Accolate |
| Zileuton | Zyflo |
| Ipratropium | Atrovent |
| Tiotropium | Spiriva |



| | |
|--------------------------|--|
| Cromolyn INH | Intal, Gastrocrom, Nalcrom |
| Omalizumab | Xolair |
| Fluticasone + Salmeterol | Advair |
| Albuterol + Ipratropium | Combivent, Duoneb |
| Mometasone + Formoterol | Dulera, Zenhale |
| Budesonide + Formoterol | Symbicort |
| Benralizumab | Fasenra |
| Mepolizumab | Nucala |
| Reslizumab | Cinqair |
| Theophylline | Theochron, Elixophyllin, Theo-24, Theo-Dur, Uniphyll, Uni-Dur, Aminophylline |
| Fluticasone + Vilanterol | Breo |