Severe Asthma example

Hierarchical stratifications
- Active
- Historical
- Suspected
- At risk

High scoring Features
- Pulmonary eosinophilia not elsewhere classified
- Shortness of breath
- Dyspnea unspecified
- Polyp of nasal cavity

Advanced analytics
- Target: ICD10: J45.50, J45.51, J45.52
- Threshold: 95th percentile
- Cool-off: 0 months

Sample stratifications based on Severe Asthma

1 **Active Severe Asthma**
Diagnosis in last 12 months

2 **Historical Severe Asthma**
No diagnosis in last 12 months, but diagnosis in previous 36 months

3 **Suspected Severe Asthma**
No diagnosis but taking Biologics, LABAs, ICS combinations

4 **At risk of Severe Asthma**
Not currently diagnosed or suspected, but likely to be diagnosed shortly

Clinical rules engine

Library of **200+ rules to identify members** that have no documented diagnosis for a condition, but are suspected of having the condition based on their medical history

Set of clinical rules made, approved and curated by medical professionals

Multiple data sources provide longitudinal insights into entire episodes of care (Claims, Rx, Lab Results, EMR Data)

Continuously updated to expand the rules library and incorporate new rule criteria

Run periodically to capture new claims data and new members

Rule identified by clinical team for suspecting Severe Asthma

Group 1: Suspect Severe Asthma by Prednisone Meds

If all of the following are true:

- The member has 3 or more medication fills of any Prednisone Meds, with a dosage less than 5 mg, in the past 3 months

- The member has any asthma code at any time

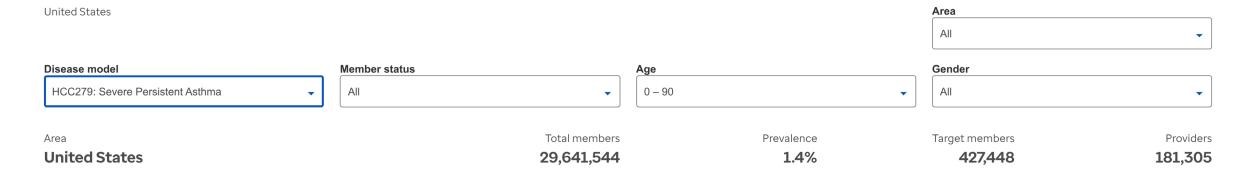- The member does not have a severe asthma code at any time
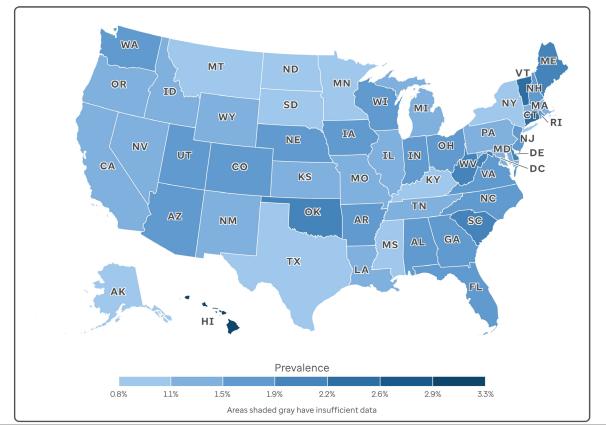
Group 2: Suspect Severe Asthma by Procedure

If all of the following are true:

- The member has had Bronchial Thermoplasty in the last 6 months

- The member does not have a severe asthma code at any time

Optum

United States

Area	
All ▾	

Disease model	**Member status**	**Age**	**Gender**
HCC279: Severe Persistent Asthma ▾	All ▾	0 − 90 ▾	All ▾

Area	Total members	Prevalence	Target members	Providers
United States	**29,641,544**	**1.4%**	**427,448**	**181,305**

Prevalence

0.8% 1.1% 1.5% 1.9% 2.2% 2.6% 2.9% 3.3%

Areas shaded gray have insufficient data

Area ↑	Total members	Prevalence	Target members	Providers
AK	9,216	1.0%	93	75
AL	556,938	1.8%	10,056	3,401
AR	281,024	1.6%	4,558	2,018
AZ	947,811	1.9%	17,551	5,752
CA	1,973,774	1.4%	27,541	11,885
CO	793,699	1.8%	14,022	4,923
CT	416,809	2.3%	9,647	3,442
DC	74,251	2.2%	1,635	693
DE	54,650	1.9%	1,061	556
FL	2,470,436	1.6%	38,718	14,772
GA	926,383	1.8%	16,687	6,267