

# Alzheimer's Disease example



## Hierarchical stratifications

- Active
- Historical
- Suspected
- At risk



## High scoring features

- Cholinomimetics – ACHE Inhibitors
- Age-related cognitive decline
- Disorientation, unspecified
- NMDA Receptor Antagonists



## Advanced analytics

- Target: ICD10: I27\*, I50\*, I0981
- Threshold: 95th percentile
- Cool-off: 0 months

## Sample stratifications based on Alzheimer's Disease

- 1 Active Alzheimer's Disease**  
Diagnosis in last 12 months
- 2 Historical Alzheimer's Disease**  
No diagnosis in last 12 months, but diagnosis in previous 36 months
- 3 Suspected Alzheimer's Disease**  
No diagnosis but over the age of 40 with MCI, prescriptions for antimentia agents
- 4 At risk of Alzheimer's Disease**  
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 Alzheimer's Disease

### Group 1: Suspect Alzheimer's Disease by Meds

If all of the following are true:

- The member has a medication fill for a Dementia medication (Donepezil, Memantine, etc.) in the last 6 months
- The member is 40 years old or older

### Group 2: Suspect Alzheimer's Disease by Mild Cognitive Impairment

If all of the following are true:

- The member has a diagnosis of Mild Cognitive Impairment in the current or previous calendar year
- The member is 40 years old or older

Disease model  
 Alzheimer's Disease

Member status  
 5 selected

Age  
 55 – 90

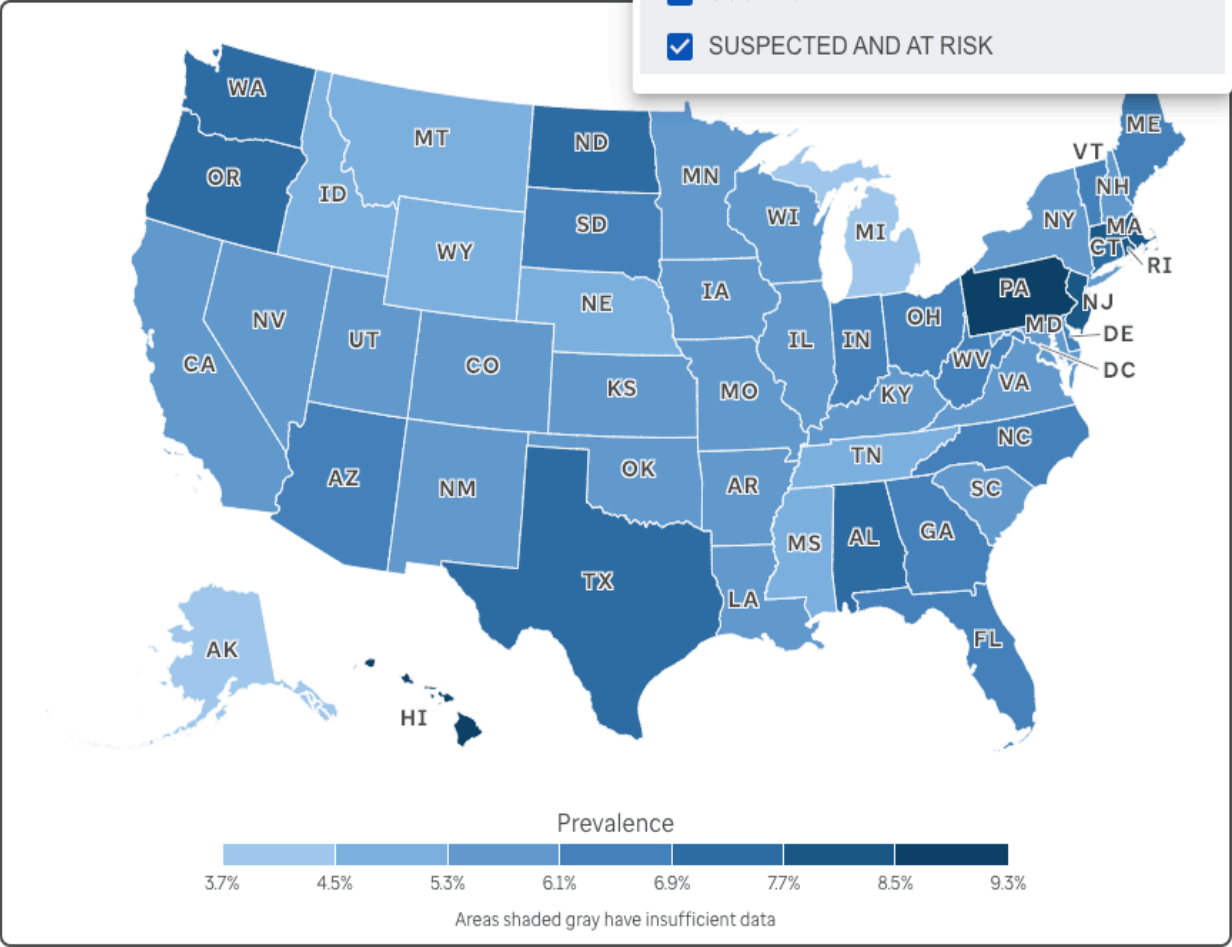
Gender  
 All

Area  
**United States**

- ACTIVE
- AT RISK
- HISTORICAL
- SUSPECTED
- SUSPECTED AND AT RISK

Prevalence  
**6.4%**

Target members  
**807,203**



Area ↑	Total members	Prevalence	Target members
AK	1,748	3.7%	65
AL	310,511	7.0%	21,825
AR	141,867	6.0%	8,555
AZ	451,772	6.1%	27,697
CA	809,414	5.7%	45,743
CO	346,624	5.5%	19,046
CT	225,484	7.1%	16,044
DC	24,135	6.6%	1,593
DE	33,123	6.7%	2,207
FL	1,137,869	6.8%	77,009
GA	437,462	6.9%	30,000