

# Heart failure example



## Hierarchical stratifications

- Active
- Historical
- Suspected
- At risk



## High scoring features

- Alpha-Beta Blockers
- Ischemic cardiomyopathy
- Unspecified atrial fibrillation
- Nonrheumatic aortic stenosis



## Advanced analytics

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

## Sample stratifications based on heart failure

- 1 Active heart failure**  
Diagnosis in last 12 months
- 2 Historical heart failure**  
No diagnosis in last 12 months, but diagnosis in previous 36 months
- 3 Suspected heart failure**  
No diagnosis but taking SGLT2 meds, NT pro-BNP lab > 1200 pg/mol, artificial heart device
- 4 At risk of heart failure**  
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 heart failure

### Group 1: Suspect heart failure by NT-proBNP Lab

If all of the following are true:

- The member has lab results from NT-proBNP Lab of greater than or equal to 1200 pg/ml in past 12 months

### Group 2: Suspect heart failure by SGLT2 Meds

If all of the following are true:

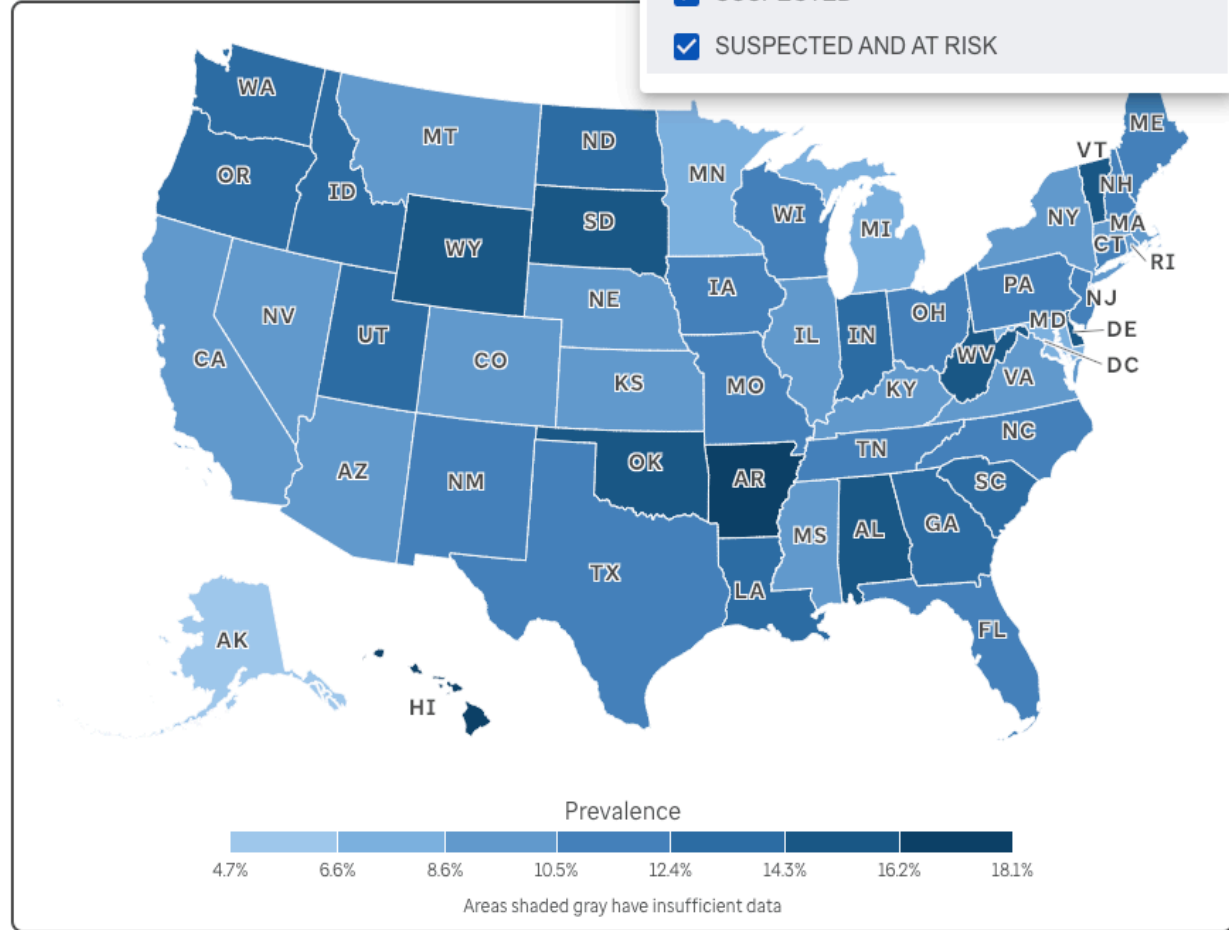
- The member has at least 1 medication fill for an SGLT2 inhibitors (Empagliflozin, Dapagliflozin, etc.) in the last 6 months
- The member does not have a diagnosis for any form of Diabetes in the current or prior calendar year

**Disease model**  
Heart Failure (Chronic) ▾

**Member status**  
5 selected ▴

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

Area  
**United States**



**Age**  
30 – 90 ▾

**Gender**  
All ▾

Prevalence  
**10.9%**

Target members  
**2,369,070**

Area ↑	Total members	Prevalence	Target members
AK	4,567	4.7%	216
AL	482,572	14.8%	71,189
AR	217,263	16.8%	36,427
AZ	717,345	9.7%	69,738
CA	1,408,004	8.7%	121,894
CO	599,414	8.6%	51,409
CT	322,760	12.1%	38,933
DC	47,077	10.5%	4,961
DE	45,121	14.4%	6,500
FL	1,898,087	11.3%	213,769
GA	699,140	13.5%	94,085