

HealthMine: The Only Expert System in Wellness That Can:

1. Analyze comprehensive clinical and behavioral data at the population and individual level
2. Detect risk and illness against 13 of the most common chronic diseases/health risks
3. Engage individuals with personalized care plans, including dynamically managed medical and behavioral health actions

44,000 Diagnostic Codes:

Our Expert System measures an individual's health status across the 13 most common chronic diseases/health risks. It analyzes an individual's health data against more than 44,000 clinical codes—like those a physician sees on an electronic health record or lab result. Our knowledge base has grown over 22 years through management by data scientists and clinicians, plus learning through analysis of health data from more than 1 million members.

Condition/Risk Identification Logic includes:

- + Diagnosis codes from a medical claim
- + Connected device data
- + Procedure codes
- + Prescription history
- + Biometric lab results
- + Self reported risks



Powerful Rule Sets:

We track the 13 most common chronic diseases/health risks with flexible and powerful rule sets, organized into four key functions:

- 1.** Clinical Condition Segmentation — Segments the population by condition. For example, it will identify and group those individuals who are pre-diabetic or who are smokers.
- 2.** Personal Health Action Planner — Based on the identified risk, a personalized care plan of health actions is automatically delivered to the individual. We use clinical, evidence-based guidelines and an individual's particular interests and health status (identified risks, age, gender, clinical data, claims, etc.) to tailor the plan to the individual. Nationally recognized guidelines include US Preventive Services Task Force, American Cancer Society, HEDIS, etc. for appropriate preventive screenings and condition management, based on age, gender, health, and other clinical exclusions.
- 3.** Personal Clinical Data Filter — This filters out recommended health actions that might be appropriate for the condition, but not the individual. Our expert system can filter actions by exception, for example a pregnant woman with gestational diabetes (a temporary condition) should not receive the same health actions as a diabetic. Our expert system looks at all inputs below to personalize health actions:
 - + Medical claims
 - + Pharma claims
 - + Biometric lab results
 - + HRA data
 - + Health coaching programs
 - + Tracking devices such as Fitbits
 - + Any other data source that can contribute to identification of health conditions and the next appropriate health action(s)
- 4.** Personal Health Action Tracking — automatically tracks a member's progress through a care plan, or set of health actions. We track both participation and outcomes to verify completion of recommended actions and goals set by clients and individuals. Verified participation can consist of activity within the HealthMine platform, through clinical and connected device data, and offline participation in client-sponsored events.



The 13 Chronic Diseases/Health Risks Managed:

1. Asthma
2. COPD
3. Coronary Artery Disease
4. Diabetes
5. Elevated Risk for Cardiovascular Disease
6. Heart Failure
7. Hyperlipidemia
8. Hypertension
9. Metabolic Syndrome
10. Obesity
11. Pre-diabetes
12. Smoking
13. Symptoms of Depression

Finding The Overlooked:

In many cases our system has been able to identify diabetes missed in groups. In one group of 120,000 members we identified more than 7,100 previously undiscovered diabetics.