



# Prevent Patient Readmissions

## Challenge

- Facing steep costs for readmissions
  - Services 4,000,000 members per year
  - 14 percent readmission rate
  - Average cost of patient readmitted is \$15,000
- Hard to identify why patients are returning
- Need a better way to analyze and regulate

## Solution

- Rapidly prototyped ML model based on:
  - Attributes
  - Behavioral patterns
  - Claims data
    - E.g., emergency room visits that are not emergencies
- Built and deployed supervised learning model to:
  - Scan for at-risk readmittance patients
  - Accurately flag high-risk patients
- Targeted marketing and education for members
  - Getting the appropriate level of care
  - Importance of following discharge instructions

## Impact

- 4M members x 14% rate = 560k readmissions
- 560k x \$15k = \$8.4 billion per year cost
- Achieving 0.1% improvement in rate:
  - \$8.4M in cost savings
  - Faster resolutions, better outcomes
  - Healthy, satisfied members

**Problem type:** Classification

**Universal relevance:** Most businesses relish in repeat business. For healthcare providers, readmissions are detrimental to public health and their bottom line. Identify attributes and behavioral patterns that may lead to repeat customers, for better or worse.