VITAL DATA TECHNOLOGY

RIGHT INFORMATION. RIGHT PEOPLE. RIGHT TIME.™

Health Payer eBook

AI-DRIVEN INSIGHTS AND AUTOMATION

How a major health plan harnessed the power of artificial intelligence and data science to improve care and lower costs

CUSTOMER PROFILE AND PAIN POINTS

PROFILE

Lines of Business: Commercial, Federal Employees, Medicaid, Medicare, Exchange

National Footprint: Members in all 50 States

Population: Approximately 2 million members

Vital Data Solutions: Care Management, Data Science, Mobile Member App

PAIN POINTS

1. New technology needed to execute on digital transformation initiatives
2. Needed the ability to prioritize care programs with predictive insights
3. Lack of automation within its care management program
4. Manual, time-intensive processes across multiple systems
5. Reliant on clinical data that was often 90+ days old

HEALTH PLAN GOALS

CLIENT CAME TO VITAL DATA TECHNOLOGY TO ACHIEVE THE FOLLOWING:

Seamlessly incorporate a wide variety of data sources to integrate behavioral and clinical profiles

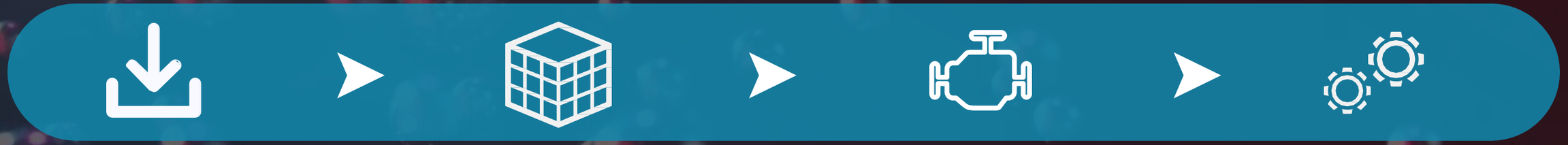
Engage members and other stakeholders across channels in real time using timely, usable information

Micro-target high priority members using advanced analytics and predictive modeling, and be able to reach them sooner and at the right time

Automatically prioritize and automate interventions and next-step actions for members and care coordinators

Improve operations and workflows so they could do more with the same number of resources and staff

HOW VITAL DATA TECHNOLOGY DELIVERED



1. STEP ONE

Aggregate all healthcare data for complete member profiles, including conventional and non-conventional data. This included structured clinical data such as claims, eligibility, and Rx. It also included underutilized data, including weather, SDoH, and CDC information.

2. STEP TWO

Process all data using configurable predictive data science models, analytics, HCC models, and client- specific measures. These models are expertly built and tailor-made to the health plans unique member populations.

3. STEP THREE

AI-driven CareFlow Rules™ (CFR) engine automatically identifies, stratifies, and segments members into specific queues based on client's needs. In this case, the client could immediately determine an array of potential outcomes, including who is at risk of pre-term birth, diabetes disease progression, or who are expected to be the highest cost members in the next 12 months.

4. STEP FOUR

Automatically push insights to workflows inside and outside the health plan's organization. For example, case managers receive real-time, updated work queues with the highest priority members pushed to the top for outreach.

HOW WE MEASURED SUCCESS

3 SEPARATE ASPECTS ENCOMPASSING ANALYTICS AND EXECUTION

Identifying Members

We compare how well members were identified by the health plan before using VDT's data science models, and after the models were in place and operational.

Member Management

Were more members actively managed by the plan before or after the models were in place? Outreach could include successful contact, an outreach, or a new case opened.

Automation & Efficiency

Did the insights, intelligent automation, and process efficiency make the Care Management staff more efficient and productive?

IDENTIFYING THE MOST AT-RISK MEMBERS

With data science models, we can predict a relatively large number of members who are potentially at risk. However, this may still be beyond the capability to manage them.

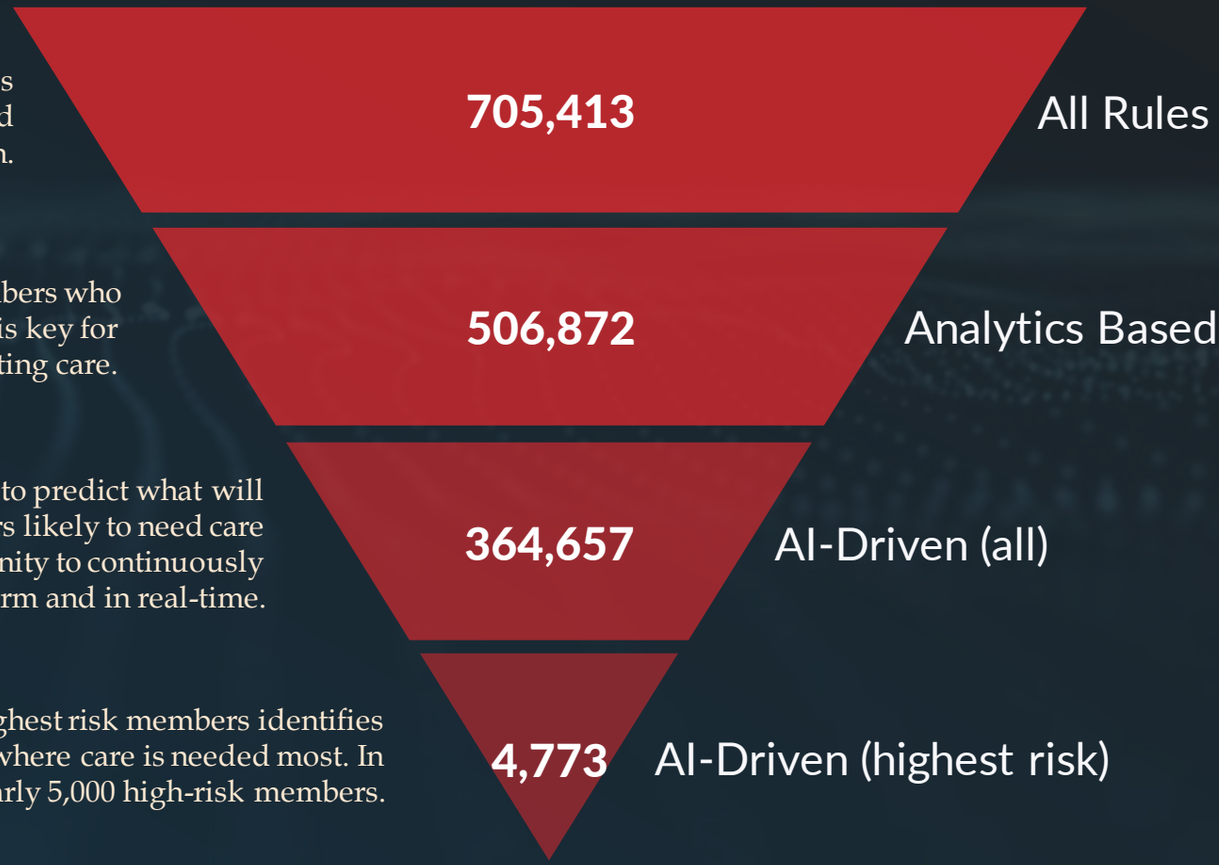
CareFlow Rules™ help reduce the number of members to a manageable size by selecting a cohort that is predicted to be at the highest risk.

Leveraging the full complement of integrated Care Management rules within our CareFlow Rules™ engine, over 700,000 members were identified for outreach and intervention.

Analytics-based rules rely on historical data to identify those members who are currently in the process of obtaining care. This identification is key for health plan management to ensure the right people are getting care.

Data science and artificial intelligence rules use data to predict what will happen in the future. These rules identify all members likely to need care before dollars are spent. They create more opportunity to continuously improve care and save money long-term and in real-time.

An AI-driven rule that focuses only on the highest risk members identifies significant opportunities for immediate action where care is needed most. In this case, the model identified nearly 5,000 high-risk members.



HOW INTELLIGENT AUTOMATION WORKS

Problem:

Once data science identifies the most likely member pool, how can I manage the members most effectively?

10,000 members with hypertension and/or diabetes identified by **analytics**

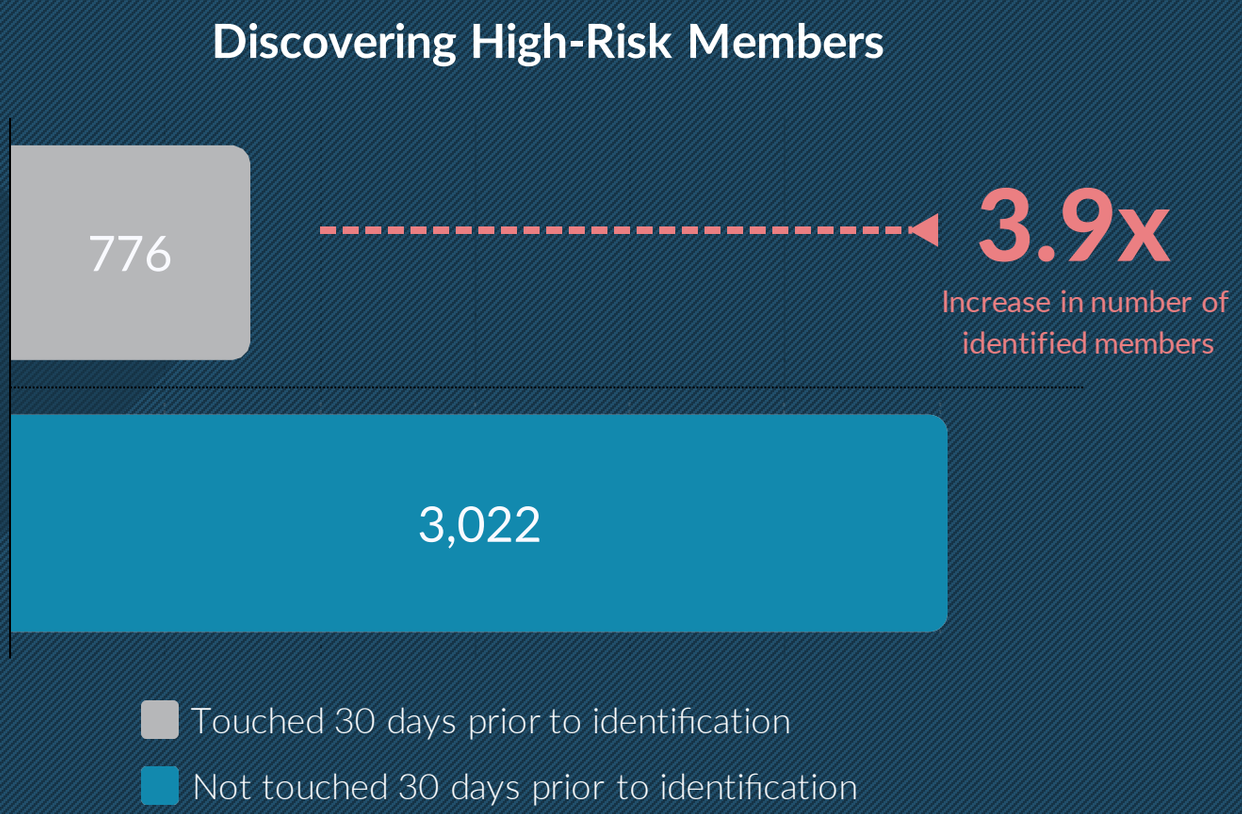
300 members identified by **data science** model predicts how likely these members are to go into dialysis, and how soon

Apply rules based on clinical and other impactful factors. Can also combine with another model (e.g., are these members also predicted to be high cost?)

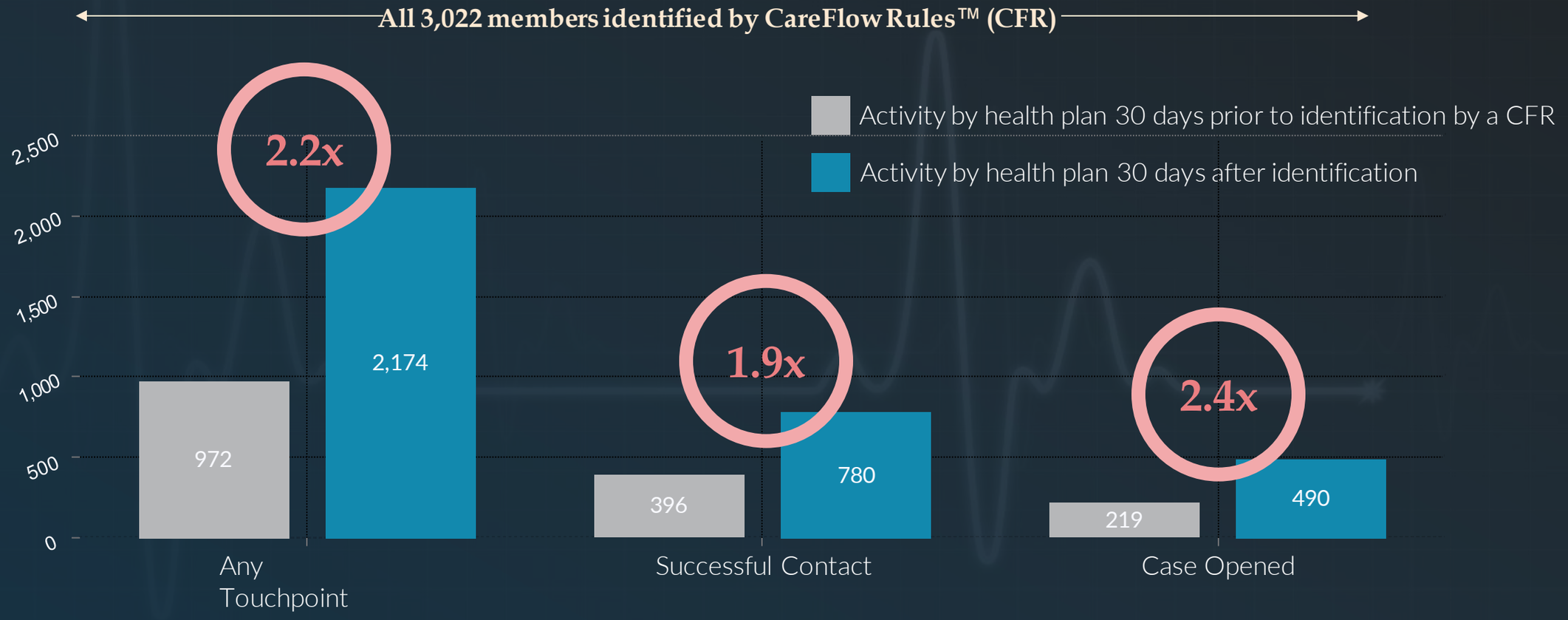
- **35** members identified for Intervention A (e.g., mailer to member or mobile app notification
- **40** members identified for Intervention B (e.g., single touch case management outreach or referral inside health plan)
- **20** members identified for Intervention C (e.g., push communication to provider and outsource to 3rd party vendor)

VDT IDENTIFIED 80% OF HIGH-RISK MEMBERS THAT WERE UNKNOWN TO THE PLAN

- A member could be identified as high risk by different means at different times, e.g., a member may also be discovered by analytics-based CareFlow Rules™ (CFRs), customer service, or referrals due to non-CFR reasons.
- Among the 3,798 members identified by AI-CFRs, 80% were not on the radar recently (30 days prior to being identified by AI-CFRs).

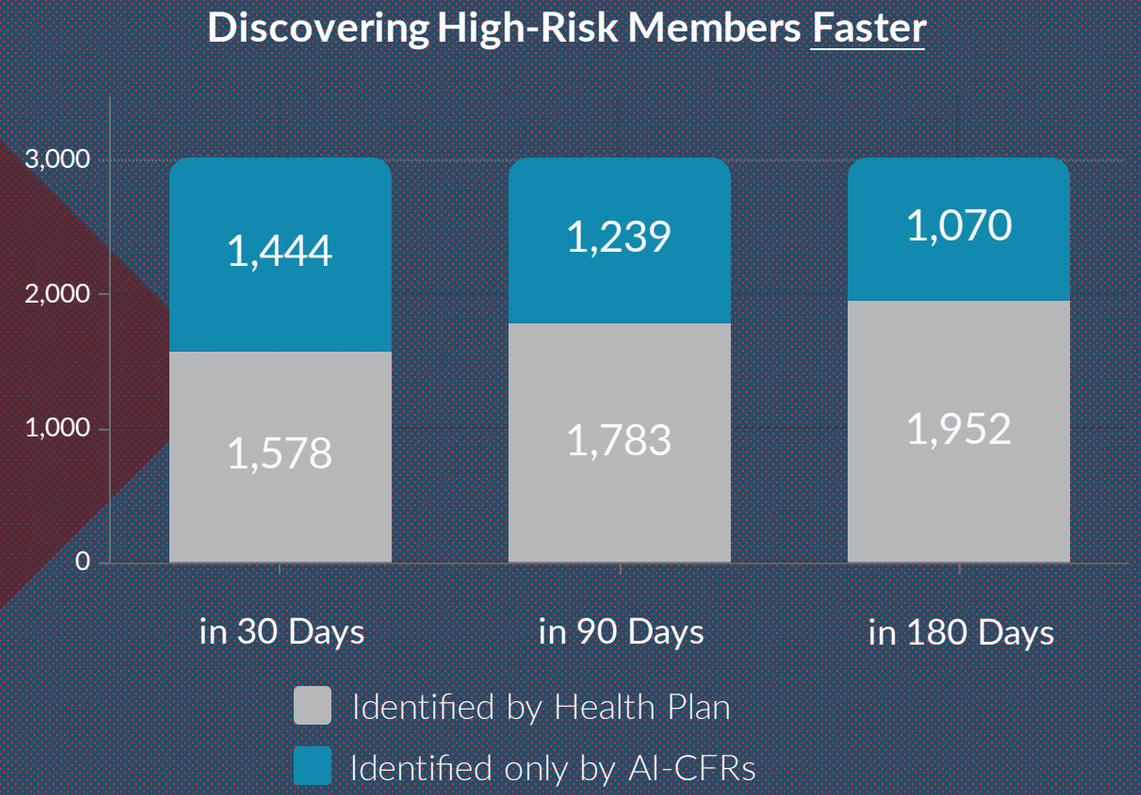


2x+ INCREASE IN ACTIVE MEMBER MANAGEMENT, ENGAGEMENT, AND TOUCHES AFTER DEPLOYING CARE FLOW RULES



IDENTIFYING MEMBERS FASTER THAN THE PLAN OVER EXTENDED TIME PERIODS

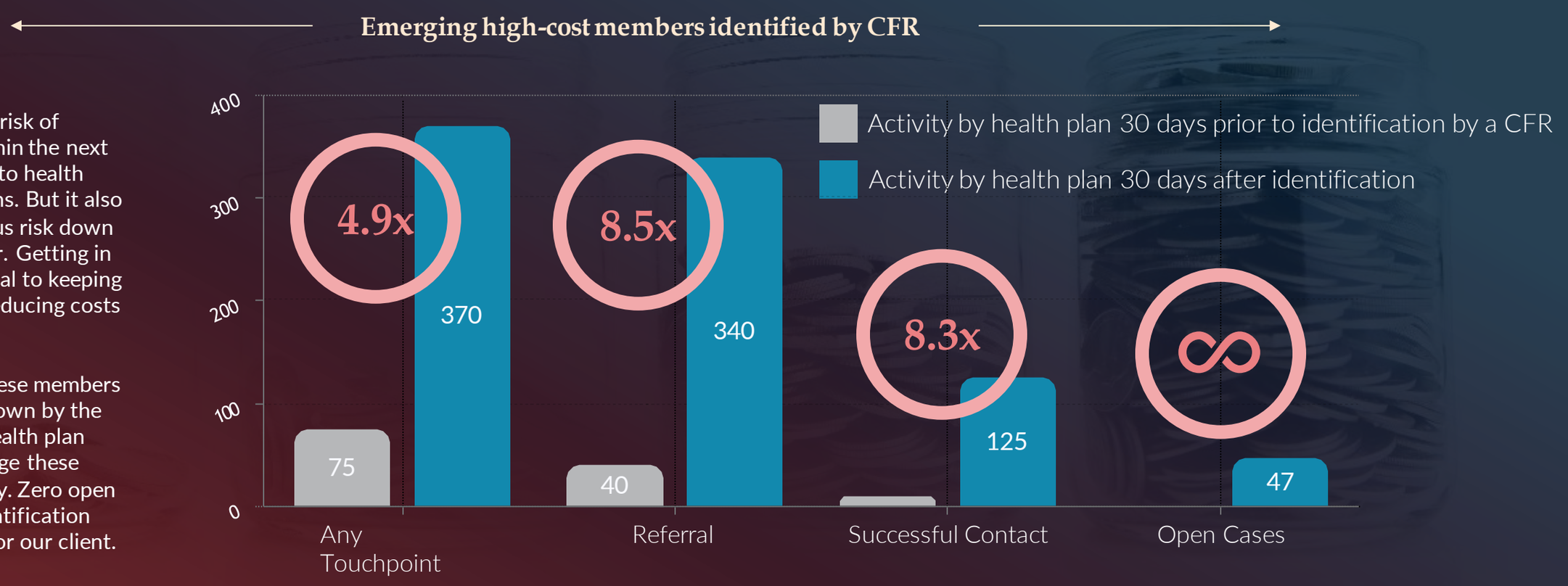
- Here, we look at what happened to those 3,022 members post identification by a CareFlow Rule™ (CFR). One potential risk to this analysis is that the health plan would have eventually identified these members by their own activities.
- It turns out that even 30, 90, and 180 days later, many members were still not identified by the health plan. The only means of identification was with VDT's data science models.
- Among the 3,022 members identified by AI-CFRs:
  - 38% can't be identified by other means in 30 days post being identified by AI-CFRs
  - 28% can't be identified by other means in 180 days post being identified by AI-CFRs



MEMBER MANAGEMENT FOR ALL EMERGING HIGH-COST MEMBERS

Identifying members at-risk of becoming high-cost within the next 12 months is important to health plan's ongoing operations. But it also signals potentially serious risk down the road for the member. Getting in front of these risks is vital to keeping members healthy and reducing costs for the plan.

However, identifying these members is a complex task. As shown by the chart to the right, the health plan was challenged to manage these members in any capacity. Zero open cases at the time of identification was a real eye-opener for our client.



DRIVING IMPROVEMENTS IN CARE MANAGEMENT

With a singular data foundation and patient-centric data repository fueled by data science and AI automation, the health plan experienced **significant productivity and efficiency gains.**

from 7 → 3

Number of systems used by care managers

from 75 → 30

Avg. minutes to open a new case

30%

Increase in number of new cases

87%

Increase in care management referrals

9%

Increase in number of active cases

WHY VITAL DATA TECHNOLOGY

OUR MISSION IS TO BUILD TECHNOLOGY THAT TRANSFORMS THE HEALTHCARE ECOSYSTEM BY CONNECTING DATA, SOLUTIONS, AND STAKEHOLDERS ON A UNIFIED PLATFORM THAT ALIGNS PAYERS, PROVIDERS, AND MEMBERS.

866.482.8399
sales@vitaldatatech.com

We build a suite of clinical applications that enable plans to improve the quality of care for their members.

We partner with health plans to develop analytical and predictive models that target your population for personalized interventions.

We help health plans act quicker, increase member engagement, and prevent conditions from worsening.