# Leveraging Data Science and AI to Improve Care Management


**Presented By:**

**Matt D'Ambrosia – CEO, Vital Data Technology**
**Holly Toomey – Vice President of Product Management, Vital Data Technology**
**Debbie Hill – Director of Product, Care Management, Vital Data Technology**


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# Webinar Participant Tips

- All participant lines are muted. To protect your privacy, you will only see your name and the presenters  names in the participant box.
  - To submit a question to the presenters any time during the event;
  - In the Event window, in the Panels drop-down list, select Q & A.
  - Type your question in the Q & A box.
  - Click “Send”.

# Presentation Speakers

**Matt D'Ambrosia**
President & CEO
Vital Data Technology

**Holly Toomey, RN, BSHCA, CCM**
Vital Data Technology

**Debbie Hill, MSN, RN, CCM**
Director of Product, Care Management
Vital Data Technology

# Real World Success Stories

## Who is most likely to engage in case management?

An adolescent was identified as being high risk for depression and substance use disorder.  Previous outreached was unsuccessful.

## Result

The predictive model identified the member and prompted the case manager to attempt outreach right away.

> *The referral revealed that previous  unsuccessful member outreach attempts had been made. On the day I called, I'll never forget Derek's mom saying, 'you reached us at the perfect time on the perfect day,' as he was having a tough time.*

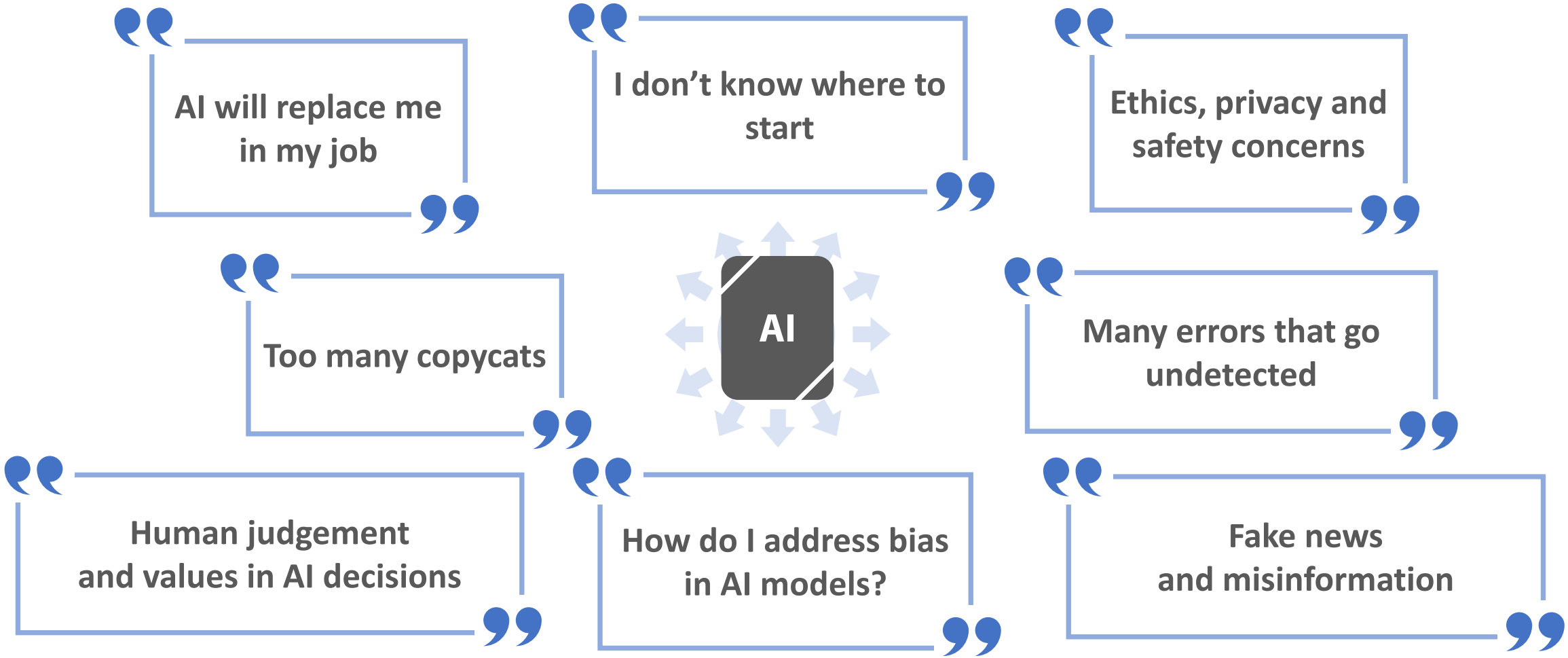
# AI has reached an inflection point in healthcare...

- The market for AI in healthcare is expected to increase at a **CAGR of 48.1%** to reach an estimated **$427.5 billion in 2032**.[2]
- Despite already demonstrating groundbreaking and tangible benefits, healthcare executives remain **slow to integrate certain AI technologies** into their operations.[3]
- While **72%** of healthcare executives trust AI to support non-clinical administrative processes, only **40%** place diagnosis and predictive outcomes in the top three potential improvements in patient outcomes due to AI.[4]

***According to Gartner, AI-driven decisions and experiences for all healthcare stakeholders will determine the future of the healthcare industry.[1]***

1) "U.S. Healthcare Insurance Payer Trends: Imperatives for Intelligent Health," Bishop, M., Gartner, March 6, 2024
2) "Better Health Report – 2023," Bordon, J., Et al., Simon Kucher, September 2023
3) "AI Survey: Healthcare Organizations Continue to Adopt Artificial Intelligence to Help Achieve Better, More Equitable and Affordable Patient Outcomes," Optum, December 15, 2021
4) Conor Stewart, "Level of AI Functionality in Healthcare in the United States as of 2021," Statista, June 7, 2022

# ...and with it, confusion, worries, and doubts



# So, how can we best apply AI and data science in healthcare?

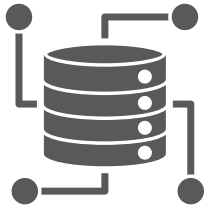
| | |
|---|---|
| **Care Coordination and Management** | • Target and prioritize members for high-impact care management opportunities and automated care interventions<br>• Member-preferred communications for care planning and engagement<br>• Robust feedback loops from member operational data to refine interventions |
| **Imaging and Diagnostics** | • Medical imaging<br>• Diagnostic error prevention<br>• Cohort conditions<br>• Precision medicine based on genetic testing |
| **Clinical Operations** | • Extracting data from medical charts<br>• Optimized chases<br>• Fraud detection<br>• Provider "Gold Carding"<br>• Ongoing refinement to auto authorization rules |

# Multiple pain points around population health and care management

**Payer Example**

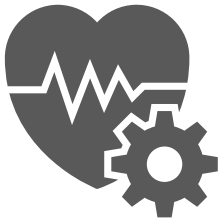
1. There are too many people to engage
2. Members are not engaging with care managers in the traditional telephonic models
3. Lots of resources are spent on outreach with minimal return
4. The right people are not proactively targeted
5. Wellness, prevention, and care programs are reactive
6. Lack of automation within care and utilization management programs
7. Teams acting off aged clinical data for analytics and intervention (often 90+ days old)

# Data, AI, analytics, and operating systems remain separate for most health plans









## Data

Lack of holistic data sets; fails to give a true 360-degree member view

## Analytics

Typically based on data that is 3 to 12 months old (or longer)

## AI

Lack of clinician trust; not leveraged for clinical workflows

## Operating Systems

Don’t leverage real-time insights; little ability to intelligently automate next-best actions

# Five Step Process to Success

Seamlessly incorporate structured and unstructured data to integrate behavioral and clinical profiles.

Population Health analytics risk stratify members with and segment according to condition, clinical opportunity and potential impact.

With automated triggers in their workflow, health plan teams can act on those groups identified for prescriptive intervention.


Designated predictive models are deployed to identify cohorts for improved engagement and outcomes, reaching members at the right time.

Intelligent automation prioritizes interventions and next-step actions for members, care coordinators/ care managers/utilization management nurses, and medical directors.

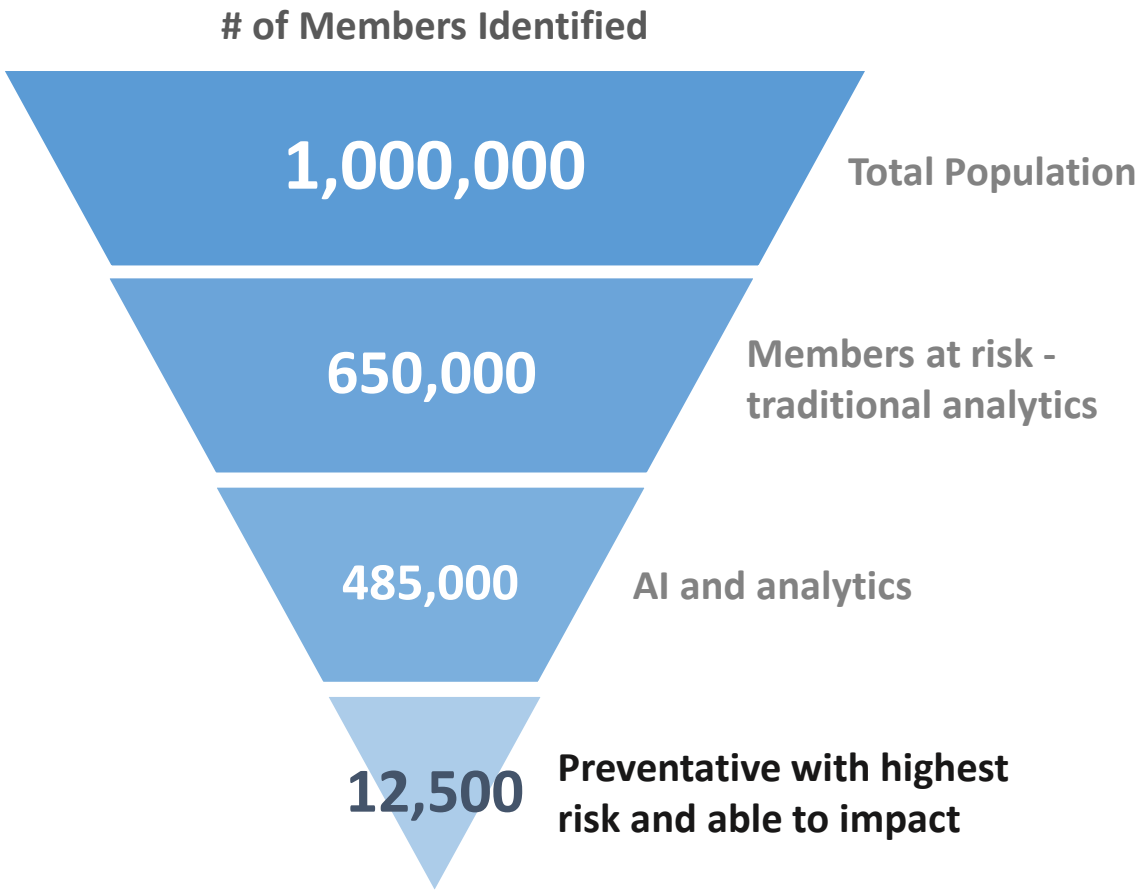
# Problems the health plan wanted to address

- How can we safely begin to implement AI for clinical workflows?
- Who are my highest-risk members?
- How can we increase touches with members?
- How can we increase engagement with members?
- How can we assess a member’s ability to engage?

# Identifying the most at-risk and impactable members for prioritization

AI implemented through clinical and operational rules-based automation

Rules help reduce the number of members to a manageable size by selecting a cohort predicted to be at the highest risk and greatest ability to impact.



# Example of how models lead to next-best actions in Population and Care Management

| **Example 1:** Medium-risk of pre-term birth + long distance to ObGyn | **Example 2:** Predicted SUD + BH Dx + ER Visit + Transportation | **Example 3:** Top 10% cost + predicted ESRD progression with real-time ER visit data |
|---|---|---|
| Recommended Action | Recommended Action | Recommended Action |
| **Tertiary** | **Single Touch** | **Active Case Management** |
| ▪ Pushing out communication to provider<br>▪ Mailer or mobile app<br>▪ Educational materials<br>▪ Access to services<br>▪ Outsource to third party vendors | ▪ Social Work<br>▪ Quality Improvement (closing care gaps)<br>▪ Automated referrals inside the health plan environment – to CM, UM, etc. | ▪ Case management outreach, case manager queue |



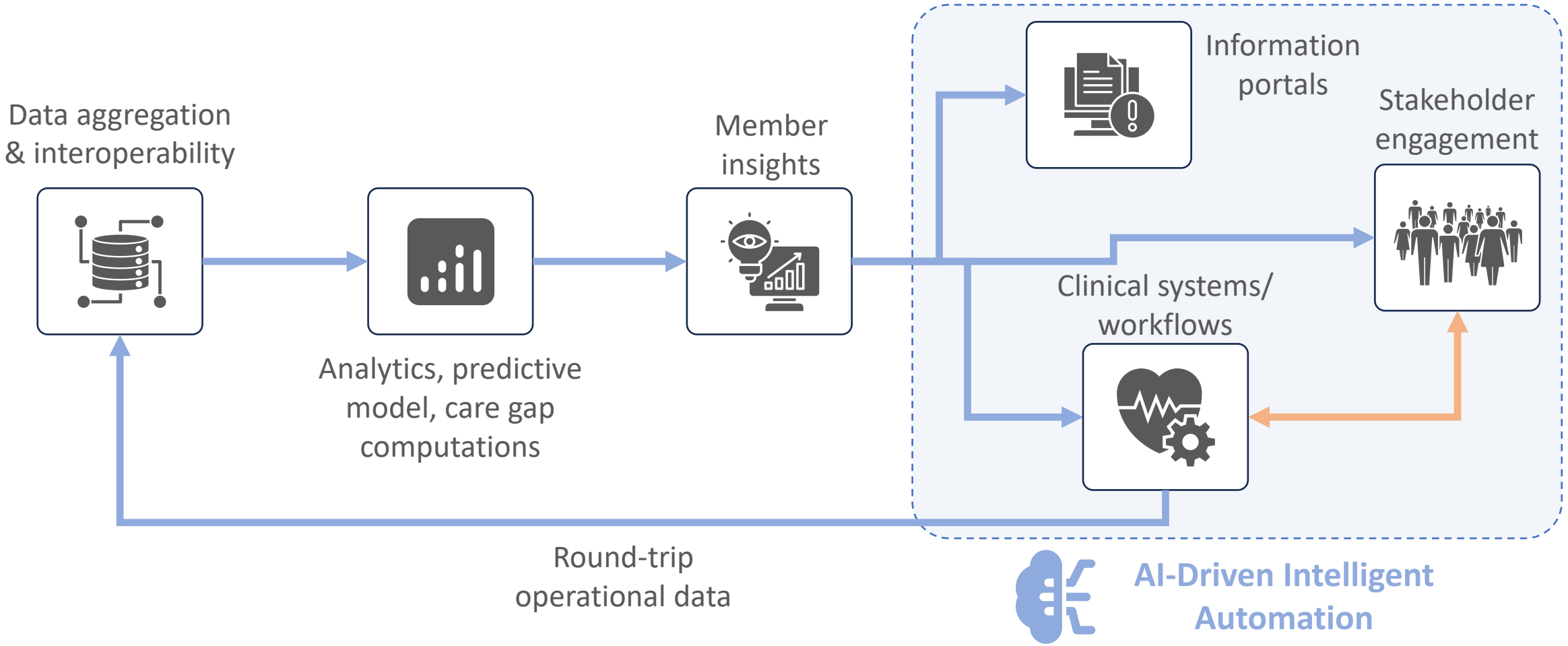
SUD: Substance Use Disorder
BH: Behavioral Health
PTB: Pre-term Birth
ESRD: End-stage Renal Disease

# How can we use AI and predictive models to prioritize interventions?

**Intelligent automation is about more than just automating repetitive and routine tasks.**

**Combined with predictive models embedded into the clinical workflows, health plans can identify potential issues faster, improve engagement with members, and prevent conditions from worsening**

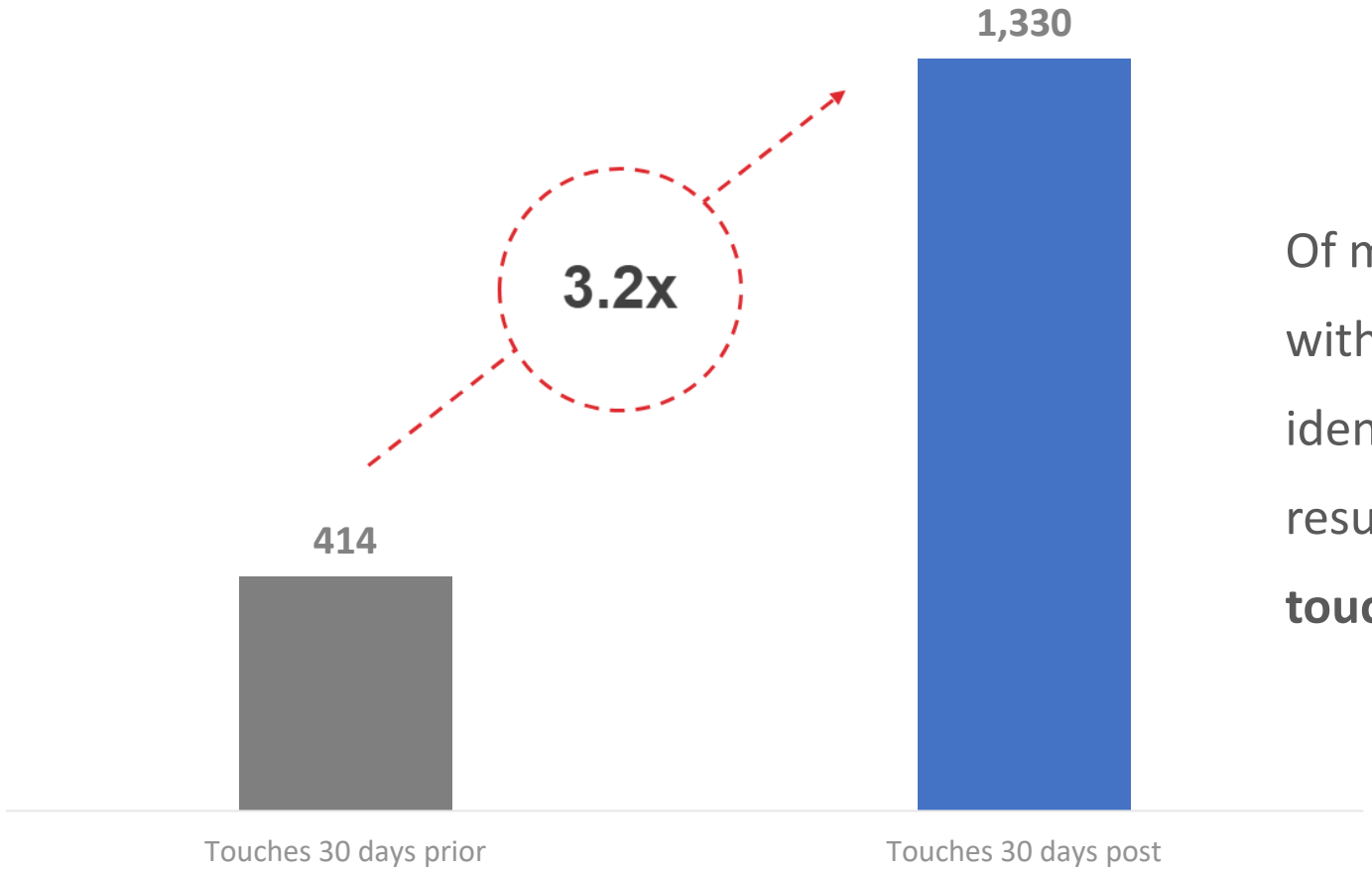
# Combining analytics with execution for maximum impact



# Example #1: Discovering high-risk members unidentified by other means

A member could be identified as high risk by different means at different times, e.g., a member may also be discovered by analytics, customer service, or referrals.

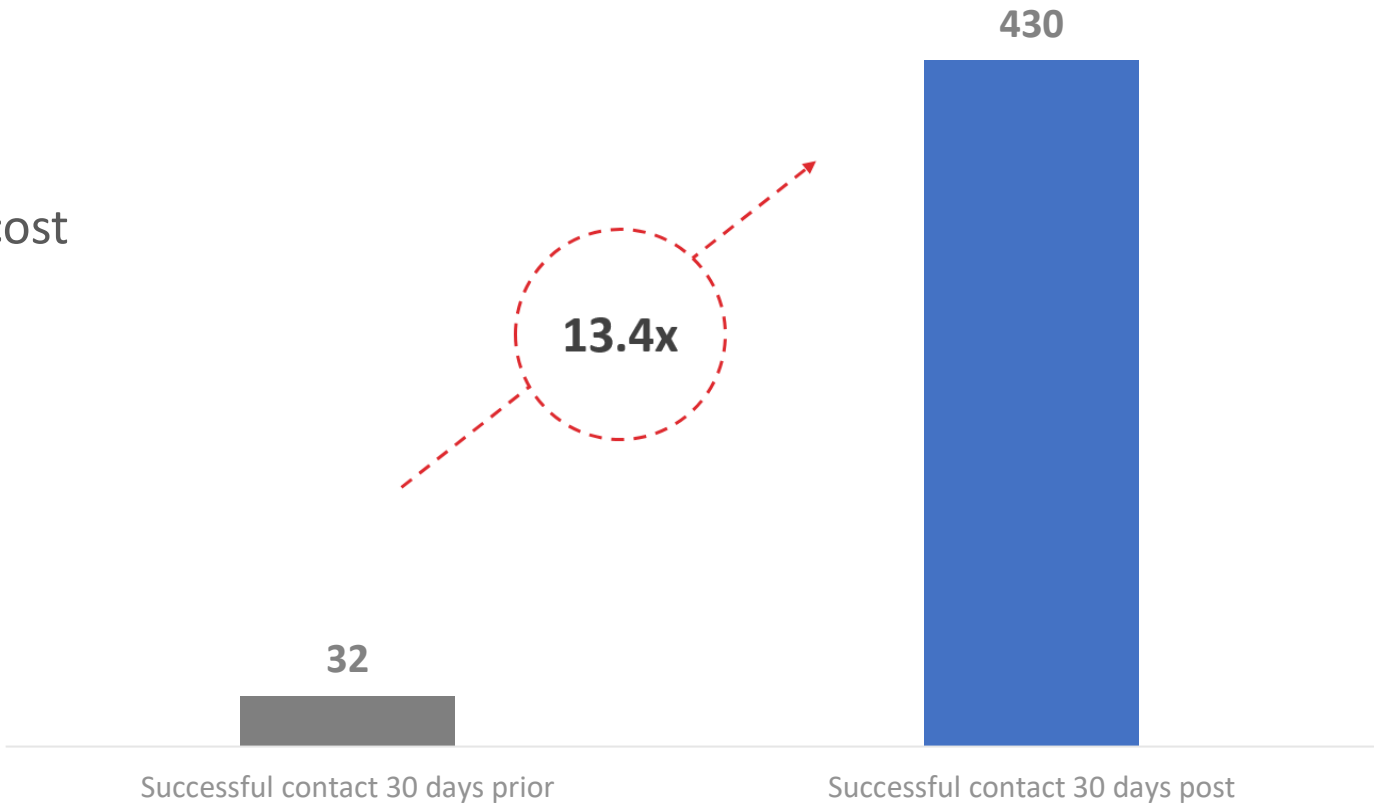
# Example #2: Increasing touches with high-cost members



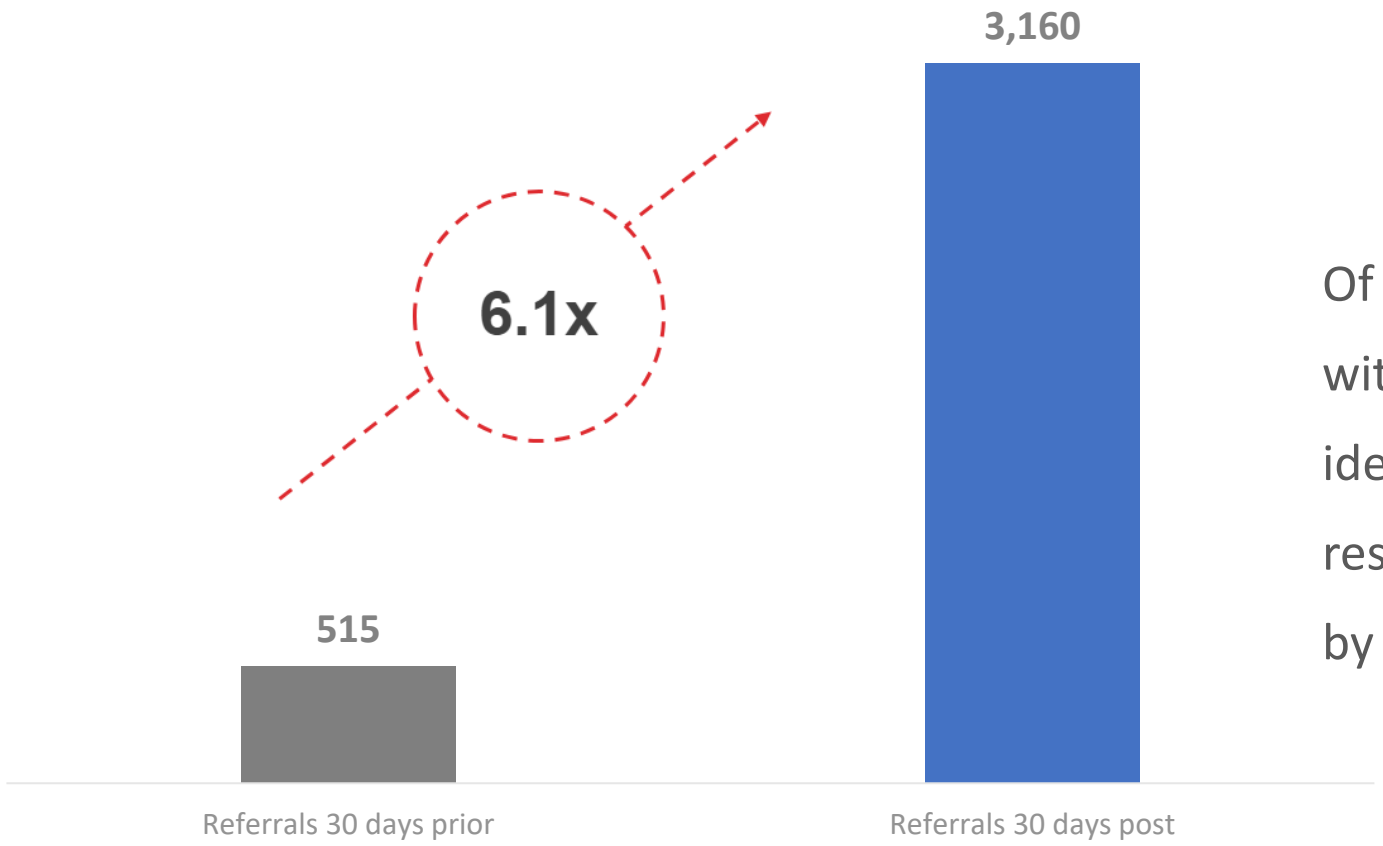

Of members predicted to be high cost within the next year, earlier identification of these members resulted in a **3.2x** increase in **members touched** by the health plan

# Example #3: Successful contact with high-cost members

Of members predicted to be high cost within the next year, earlier identification of these members resulted in a 13.4x increase in members who were **successfully contacted** by the health plan



# Example #4: Increasing referrals for high-risk members




Of members predicted to be high cost within the next year, earlier identification of these members resulted in a 6.1x increase in **referrals** by the health plan

# Real World Success Stories

**Help me target the right people we can impact**

A member was identified as being high risk for depression. She was not receiving treatment and was not in case management, and no previous contact had been made.

**Result**

The predictive model identified her as high risk and prompted outreach to a member the case manager wouldn't normally have been in contact with.

> *Because of the referral, I was able to reach out to Nina at exactly the right time. That same day we spoke, I was able to get her in touch with a practice that had an Italian-speaking doctor on staff, something Nina had been unable to do for some time.*

# Key Takeaways

AI has the potential to transform healthcare delivery systems in optimizing care but is not yet widely adopted to aid in clinical diagnosis and predictive outcomes.

AI needs to be embedded in clinical and operational workflows to enable the real-time identification of member cohorts at the highest risk and with the greatest ability to impact.

Health plans can automate actions to improve health and cost outcomes for key member cohorts.

# THANK YOU