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Transforming Healthcare Data Into Actionable Knowledge for Medicaid – Using Predictive Modeling

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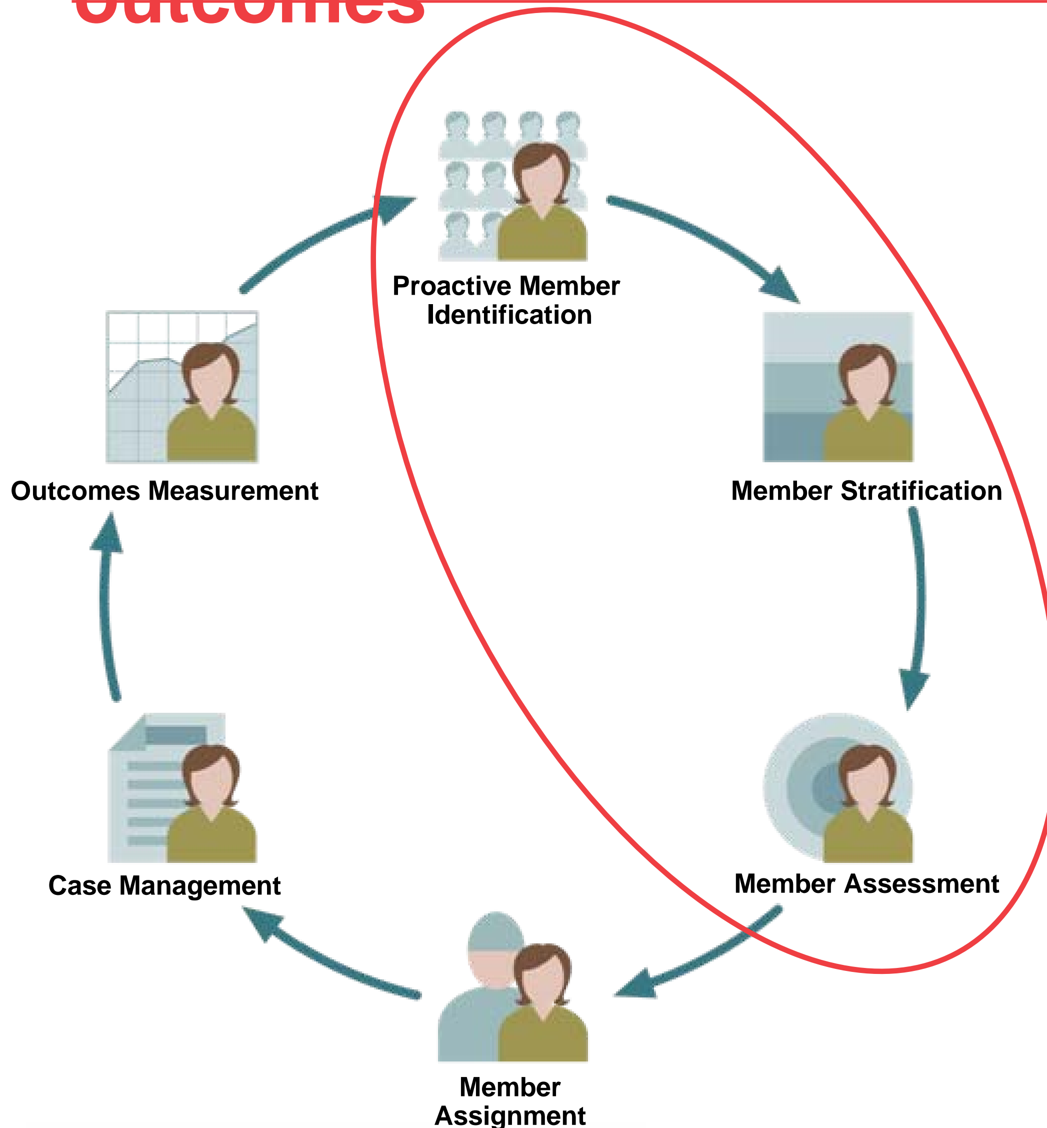
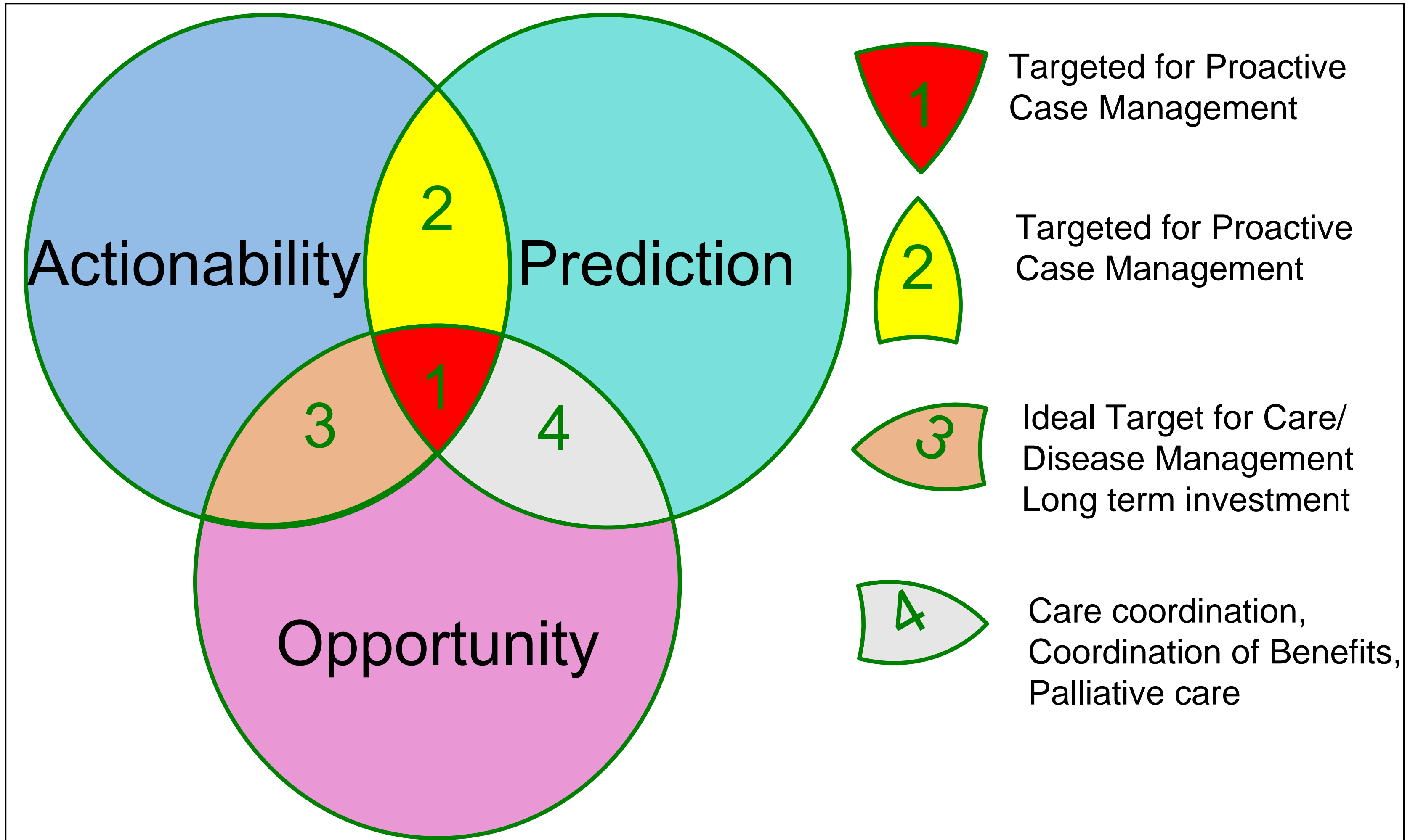
How can predictive modeling and care analytics help strengthen care management initiatives?

Moving from re-active to pro-active care – Predictive modeling improves cost and outcomes



- Identify highest risk beneficiaries
- Stratify populations into relevant clusters that align with 1) best opportunities for results and 2) available intervention resources
- Identify gaps in clinical care using evidenced-based guidelines
- Assess current clinical profile of selected beneficiaries together with future

Key Elements of Enhanced Predictive Modeling
Finding the Right Balance



Examples of Predictive Modeling in Medicaid

Mississippi Medicaid

- **Established an Understanding of Member Risk Distribution**
  - 11,000 members or 2.4% to the total population will likely incur healthcare costs > $15K
  - 382,000 members (84.2% of the total population) projected to incur less than $5,000 in healthcare costs
  - 61,000 members are projected to incur healthcare expenses between $5K and $15K
- **Uncovered opportunities to better serve Mississippi's Medicaid stakeholders**
  - Expand Provider Educational Curriculum to:
    - Reduce variance among physicians when treating pneumonia.
    - Increase pneumonia & flu vaccination rates, reduce IP admissions and ER usage.
    - Promote use of standard practice guidelines
    - Support monitoring and evaluation of the state's new Disease Management Program
  - Enhance Recipient Outreach & Educational Programs to:
    - Identify and educate recipients with a high number of E/R visits
    - Focus on pre-natal programs for high-risk women

Kansas Medicaid

- Background
  - DRA Grant funded Impact Pro implementation
  - Ingenix provides predictive modeling and care management analytics, as well as education and ongoing support to case management staff
  - University of Kansas Medical Center, Schools of Medicine and Pharmacy, assist with selection of appropriate screening and monitoring criteria
- Project Overview
  - Targeted Population: Medicaid beneficiaries with disabilities
  - Impact Pro Users: Community Developmental Disability Organizations and Community Mental Health Centers
- Project Objectives
  - Apply advanced technologies to support proactive case management
  - Identify health-related problems in the earlier stages of the disease
  - Improve healthcare outcomes with timely screenings and preventative care compliance
  - Achieve improved quality of life for beneficiaries through better management of chronic conditions

Americhoice uses Ingenix predictive modeling to support care management of over 1.8M Medicaid beneficiaries

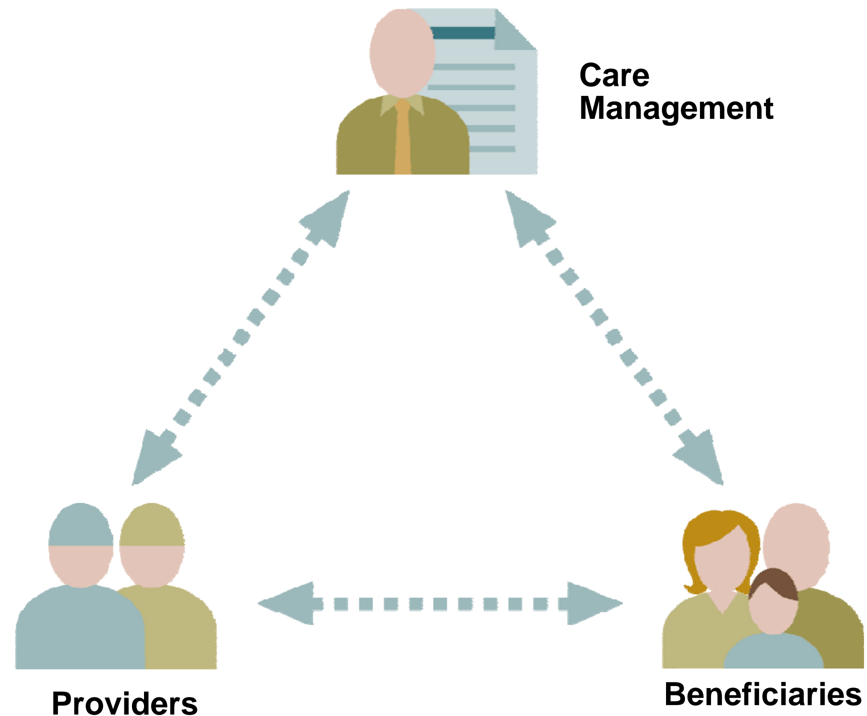
- **Examples Include:**
- **Georgia**
  - Impact Pro supports all case management activities and advances the program's holistic care management philosophy
  - Impact Pro utilized to accurately target recipients for inclusion in the program
  - Goal is to increase both client and provider satisfaction levels while yielding strong clinical and financial improvements

- **Washington State**
  - Create an enhanced community-based, data-driven, and collaborative chronic care management model for Medicaid's most vulnerable clients in the Aged, Blind and Disabled (ABD) category
  - Impact Pro supports Washington's new chronic care management model by identifying beneficiaries
  - Care Managers use Impact Pro to identify care opportunities and improve quality

Extending the Use of Predictive Modeling and Care Analytics

Common flow of care-focused information in health care

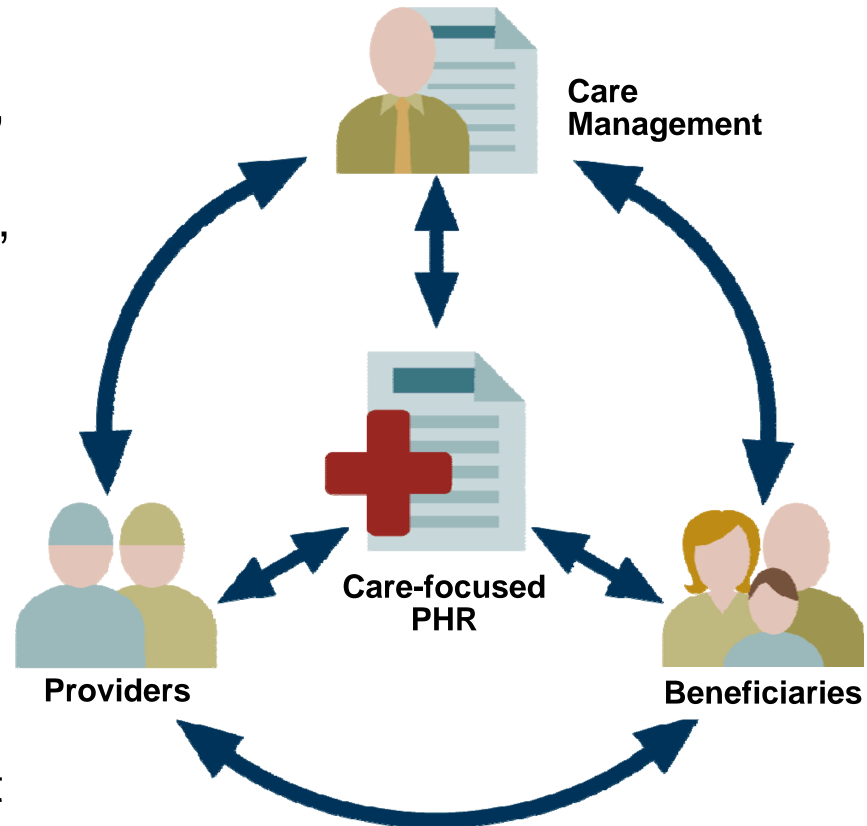
- **Care Management** – health information based on claims or HRA's
- **Providers** – health information based on services performed within their practice
- **Beneficiaries** – health information based on what they remember or understand



Sharing relevant care management information with all constituents

The Challenge:

- Get health information quickly and securely where it is needed, whether that is to a physician's office, hospital emergency room, health clinic, disaster site or directly to the patient.



The Solution:

- Translate care management information into a patient health record (PHR) that is communicated to the physician or patient in an appropriate language and context to support effective action.

Improving Chronic Care Management

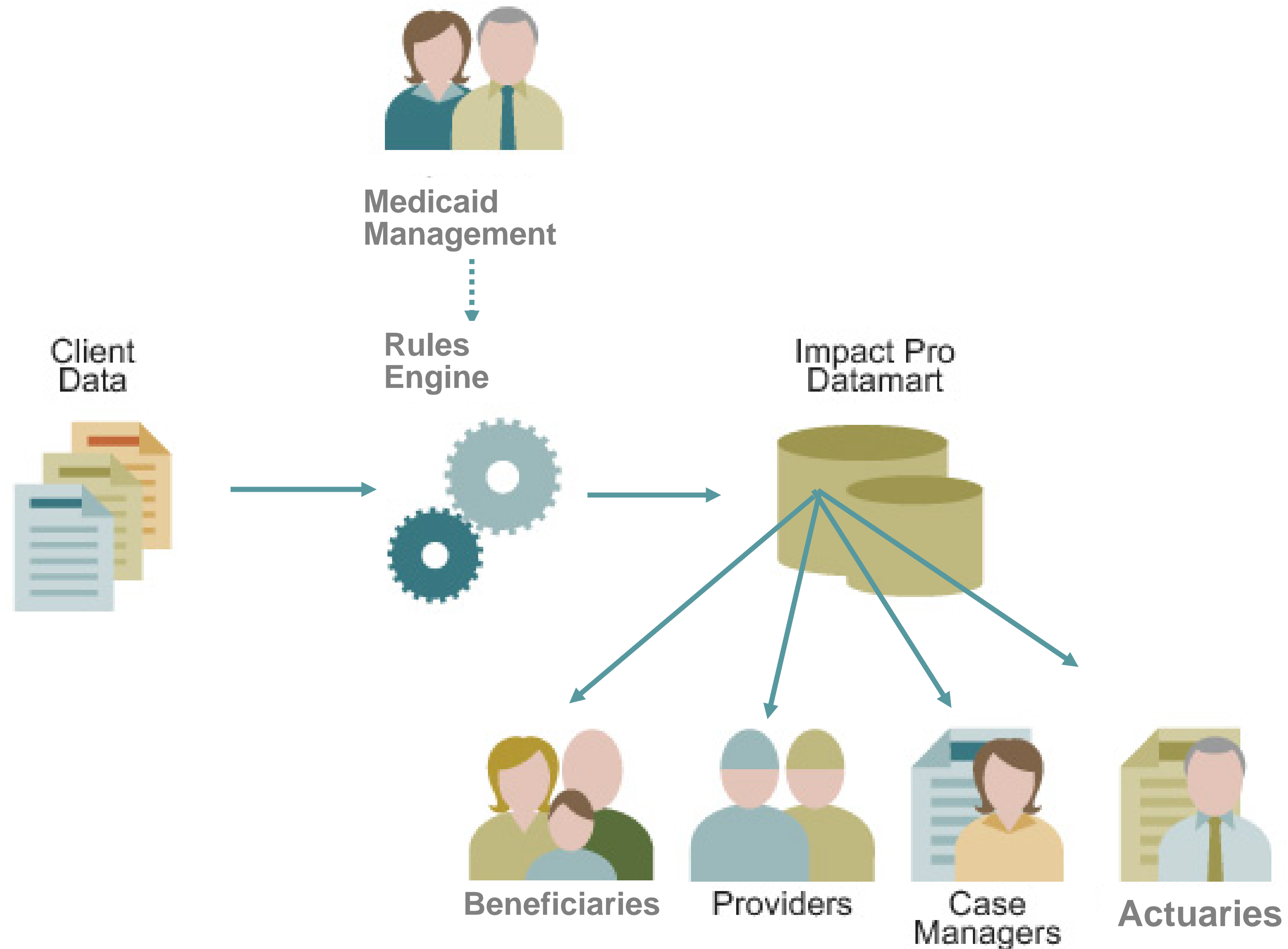
Informed, Activated Patients

- They have access to their personal health information, along with a relevant action plan to help them more effectively make decisions about their health and manage it.

Prepared Practice Teams

- They have the most complete and relevant patient information necessary to deliver high-quality care, available to them when they meet with the patient.

Deploying a Care Management Platform within an SOA architecture (consistent with MITA)



Q&A