Track D
Transforming Healthcare Through Data: Leveraging Cognitive Computing to Reimagine Chart Processing, Risk Adjustment, and Quality

Moderator:
Tam Pham, Solutions Executive
APIXIO

Panelists:
Jennifer Pereur, Director, Government Programs
HILL PHYSICIANS MEDICAL GROUP

Doug Loop, Vice President for Risk Adjustment
OPTUMCARE CDQI

Russ Shust, Director, Medicare Finance
GROUP HEALTH COOPERATIVE

Alicia Wilbur, Manager, Medicare Risk Adjustment Operations
MARTIN’S POINT HEALTH CARE
Tam Pham is Solutions Executive at Apixio, guiding the development of high-performing risk adjustment and quality products. She has a decade of experience executing risk adjustment and HEDIS measures, building software and quality teams from scratch, and advising on managed care operations. Before joining Apixio, Tam was VP of HCC Programs at SCAN Health Plan, where she built and led a team that performed risk adjustment throughout the organization. At SCAN, Tam also designed a provider network incentive program that built organization-wide engagement around the issues of risk adjustment and quality performance. She has previously directed risk adjustment for Prospect Medical Systems and Monarch Health Care.
Jennifer Pereur – Biography

Jennifer Pereur is the Director of Government Programs for Hill Physicians Medical Group, an independent practice association (IPA) in Northern California. The group consists of over 3,000 contracted physicians who provide care to 300,000 managed care members. Jennifer oversees both the Medicare and Medicaid lines of business. Her primary focus since establishing the department in 2011, has been improving the accuracy of Medicare Advantage risk scores. Jennifer has 10 years of prior experience in Network Management at Hill Physicians. She has an extensive background in value-based physician payments, including the development of physician profiles and reporting metrics. Jennifer took time away from her work at Hill Physicians to lead the client support team at MedeAnalytics. In her role there as the Director of Payer Services, she worked with health plans to integrate analytics into their utilization management and cost containment decision making process. Using the MedeAnalytics platform, she developed dashboards that helped payers and providers collaborate on their shared performance goals. Jennifer has an MBA from St. Mary’s College and currently sits on the Practice Improvement Program (PIP) Advisor’s Committee for the San Francisco Health Plan.
Transforming Healthcare Through Data
March 6, 2017

Moderator: Tam Pham
Panelists: Jennifer Pereur (Hill Physicians Medical Group), Russ Shust (Group Health Cooperative), Alicia Wilbur (Martin’s Point Health Care), Doug Loop (OptumCare CDQI)

Agenda

• Introduction
• Hill Physicians Medical Group
• Group Health Cooperative
• Martin’s Point Health Care
• Optum CDQI
How Can You Reimagine Your Risk Adjustment?

- Missing conditions
- Costly and disruptive
- Error-prone and inefficient
- Can be incomplete
- Lack of transparency
- Lack of timely feedback
What Would the Ideal Situation Look Like?

- Fast, seamless, less costly
- Accurate & efficient
- Complete transparency
- Audit risk uncovered
- Document improvement
- Complete condition capture

Machine Assisted Coding Workflow

- Acquire EMR and Scanned Charts
- Analyze Text With Algorithms
- Identify New Codes or Validate Reported Codes
- Present Evidence for Expert Approval
Approaches to Processing Natural Language

Rule-based

Limitations
• Incomplete, especially post OCR
• Does not generalize very well
• Unable to easily handle exceptions
• Requires customization

Machine Learning

Strengths
• Superior performance with language models (vs expert trained systems)
• Handles exceptions & data errors well
• Can model to client specific needs

Today’s Panelists

Jennifer Pereur
Director, Government Programs
Hill Physicians Medical Group

Russ Shust
Director, Medicare Finance
Group Health Cooperative

Alicia Wilbur
Manager, Medicare RA Operations
Martin’s Point Health Care

Doug Loop
Vice President for Risk Adjustment
OptumCare CDQI
Hill Physicians Medical Group

Organization Profile
- Large provider group based in the San Francisco Bay Area
- 350,000 total lives under management; 30,000 MA lives; 4,000 physicians
- Pulls scanned/PDF and EHR charts for analysis
- Adopted cognitive computing platform since 2013

Group Health Cooperative

Organization Profile
- Large provider group based in Seattle; 1000 physicians
- 95,000 Medicare Advantage lives and 80,000 ACA lives
- Epic EHR (interact with other EHRs in our contracted network)
- Adopted cognitive computing platform in 2016
Martin’s Point Health Care

- Medicare Advantage Health Plan based in Portland, Maine
- 40,000 MA Lives
- Offers US Family Plan, a TRICARE Prime option available to active-duty family members, military retirees, and dependents
- 7 primary care locations in ME and NH
- 18,000 scanned/PDF charts processed and analyzed
- Adopted cognitive computing platform in 2016

OptumCare

- 600,000 MA members
- 17,000 primary care providers and specialists
- 18 contracted MA payers
- Operations in 12 states
Thank you!
Population Health Analytics: Leveraging Non-Clinical Social Determinants Data to Impact Quality and Risk Adjustment Scores

Elizabeth Bainter, *Vice President, Clinical Quality Improvement*
**PACIFICSOURCE HEALTH PLANS**

Aerste Howells, *Senior Vice President, Sales*
**MATRIX MEDICAL NETWORK**
Elizabeth Bainter, VP Clinical Quality Improvement

Elizabeth Bainter, RN, joined PacificSource in 2014. She serves as the Vice President for Clinical Quality Improvement at PacificSource. In her role, she accountable for key quality programs, including CMS Stars, NCQA Accreditation, Risk Assessment HEDIS and CAHPS. Elizabeth is an essential leader in the development of member and provider engagement strategies to support quality improvement goals. Elizabeth is passionate about quality and is dedicated to ensuring that PacificSource members receive quality care.

Prior to joining PacificSource, Elizabeth was Vice President of Health Services for Lovelace Health Plan (LHP) in New Mexico. She worked at LHP for 8 years where she served leadership roles in Case Management, Utilization Management, Risk Adjustment, and Quality across Medicare, Medicaid and Commercial lines of business. Elizabeth was instrumental in aligning quality, risk adjustment and care management strategies.
As Senior Vice President, Sales, Ms. Aerste Howells is focused on the business, clinical and operational needs of health plans and providers. Through her leadership, Matrix is at the forefront of designing, developing and implementing innovative service solutions to meet those needs.

Ms. Howells joined Matrix in 2011 as vice president, client services for the western region of the U.S. During her two years in the position, she was responsible for business development, client implementations, operations, contract renewals and expansion.

Prior to joining Matrix, Ms. Howells was with Healthways, serving as director, account services, employer and government Division. During her seven years with the company, she was responsible for creating measurable multi-year inception, retention and expansion strategies for employer and government markets.

Ms. Howells has a Bachelor of Arts degree in Marketing and Communications from Brigham Young University.
POPULATION HEALTH ANALYTICS: LEVERAGING NON-CLINICAL SOCIAL DETERMINANTS DATA TO IMPACT QUALITY AND RISK ADJUSTMENT SCORES

Presented by:
Elizabeth Bainter, RN, BSN
Vice President, Clinical Quality Improvement
PacificSource Health Plans

Aerste Howells
Senior Vice President, Sales
Matrix Medical Network

Overview

Using all available data helps better target those members who would most benefit from intervention

A member-centric approach focused on doing what’s right for the member allows quality and risk to naturally fall in place

The future of health care is about empowering members with information and resources necessary to improve care and outcomes
Transforming Healthcare Delivery

- Meeting with members where they live provides a much deeper understanding of the health challenges they face and the support they need.
- A more engaged approach produces the immediate insights needed to provide informed, personalized care to health plan members.
- Innovative solutions, proven technology, and operational excellence help balance cost and revenue, grow membership, and improve quality care outcomes.

How Well Do We Know Our Members?

*It is more than claims data; it is understanding members and the challenges that hinder engagement.*

- **PacificSource cultural diversity**
  - Culturally and ethnically diverse
  - Non-Clinical (environment/education/language) vs. Clinical (complex medical & behavioral health conditions)
  - Care teams must have an understanding of a member’s complexity in order to make appropriate, informed care decisions.
- **In-Home Assessments**
  - PacificSource members received an in-home visit in 2016 using a broad targeting approach
  - Targeting strategy considers all programs for which the member is eligible
- **Impact on our members**
  - Member-centric care offers unique insight into health, environmental, and social concerns
  - Engages members who have not responded to traditional interventions
  - Reaches members in rural areas with access issues
It’s All About the Member

Just one story, of many, where an in-home assessment caught an adverse health event in time to make a difference.

Do what is right for each member and both quality and risk will naturally align

Alignment Actualized

Risk adjustment, quality and care management analytics inform and guide the target cohort

- Step 1: Know your population
  - Understand population demographics
  - Consider what other programs a member has access to
  - Track efficacy and outcomes
- Step 2: Target those most likely to benefit
  - Consider all population data available: risk, quality and care management
Optimizing the Quality and Care Management Impact

Improving the member’s experience and outcomes

- **In-Home Screening**
  - HbA1c
  - Microalbumin
  - Fecal Immunochemical Test (FIT)
  - Peripheral Artery Disease (PAD) testing

- **Comprehensive Medication Review**
  - Augments current MTM program for high risk or non-compliant members
  - Takes into consideration prescription, over-the-counter medicines and vitamin supplements

- **Documentation**
  - CAT II codes via 837P vs. relying on supplemental data
  - Leverage quality report we receive for HEDIS chase
  - Automate the input of XML assessment data into data warehouse

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Key Drivers of Success

- **AVERAGE COLLECTION RATE**
  - 65-70% collection rate for available in-home tests

- **PAD IDENTIFIED**
  - 59% of diabetics tested were newly identified as having Peripheral Artery Disease and were referred to their doctor for follow up care and treatment

- **COMPREHENSIVE MEDICATION REVIEW**
  - 100% of targeted members were reached

- **PCP FOLLOW-UP**
  - 82% of members visited see their PCP within 120 days of the assessment

- **CODING ACCURACY**
  - 99.5% coding accuracy according to monthly external audits

(Note: Statistics reflect all health plan clients' members targeted by Matrix in 2016.)
Results

How do you measure the comprehensive value proposition?

- **Gap closure: lift in results**
  - Colorectal
  - BMI
  - CMR

- **Care management value**
  - Care management referrals
    - The great majority of referrals were for further assistance with medical, functional ability, mental health and medication needs.

Statistics provided by PacificSource Health Plan and reflect those PacificSource Health Plan members targeted by Matrix in 2016.

Social Determinants Have a Significant Impact on Health Outcomes

- It’s more than just claims data: there’s a growing recognition that a broad range of social, economic, and environmental factors shape individuals’ opportunities and barriers to engage in healthy behaviors.

- Social determinants of health are “the structural determinants and conditions in which people are born, grow, live, work and age.”* They include factors such as:
  - Socioeconomic status
  - Education
  - Physical environment
  - Employment
  - Social support networks

Social Determinants Impact Member Health

- Utilize social determinants data to effectively target membership
- Members have fundamental needs which, if unmet, will impede their ability to self-manage their health:
  - A means of financial support to meet basic needs such as food, shelter and transportation
  - Access to health and community resources
  - Public and private physical safety

Maslow’s Hierarchy of Needs

Purpose-Built Analytics

- **Predict Accurately**
  Predictive analytics help better target those members who would most benefit from intervention

- **Engage the Member**
  Use SDH data about each member to customize outreach and interventions to best fit that member’s priorities and perspectives

- **Greater Impact**
  Utilize whole person insights to make member-specific guidance that helps improve health outcomes

Use all available data - integrating traditional and non-clinical social determinants of health data is key to better health outcomes
Social Determinants of Health Data Increases Accuracy

*Prediction of 30-day readmissions improves 25%*

![Graph showing sensitivity and specificity for claims only and claims & SDH](image)

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Member Engagement

*Member engagement is a continual process that uses *multiple channels* to deliver *targeted communications* to achieve desired outcomes. A personalized touch-point like an in-home visit:

- Likelihood of cancellation
- Safety analysis
- Modalities
- Behavioral segmentation*
Person-Specific Guidance

- Member may need transportation assistance to the hospital or pharmacy.
- Member seems to have issues with care coordination.
- Member may have financial difficulty and may need assistance paying for PCP visit and medications.
- Member has history of non-acute ED visits, and lives near ED and far from her PCP.

Program Risk Profile
Focus on the right members and quickly get to the root of the member’s challenges

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**Impact Member Health**

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**Contact Information**

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Senior Vice President, Sales  
Matrix Medical Network  

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Risk Adjustment Coding: Leveraging Data Analytics Tools to Drive Coder Accuracy and Efficiency

Karena Weikel, ASA, FAHM, CSFS, Vice President of Risk and Revenue Management
GEISINGER HEALTH PLAN

Shahyan Currimbhoy, Senior Vice President, Product Management & Engineering
TALIX
She is directly accountable to the Chief Financial Officer/Chief Actuary for Geisinger Health Plan. She is a risk professional, responsible for managing our overall cost of care (expense, vendor), trend mitigation, Health Plan data management, vendor relationship management, underwriting, provider impact modeling, risk adjustment operations and performance, operational reporting, payment innovation, rate filing support, and organization-wide analytics (FWA, employer group, regulatory, compliance, government, etc.) for all lines of business (Commercial, Medicare Advantage, Medicaid). Karena leads a team of 62 highly skilled and experienced staff whom blends math, statistics and business knowledge to develop the analytics and improve revenue and expense that drive GHP’s success. Her team informs and makes decisions that lead to profits, savings, stability and continued services to our healthcare community and membership. She provides direct administrative oversight to Certified Professional Coders, Actuaries, Analysts, and Business professionals that support a variety of functional areas (actuarial, underwriting, sales, finance, vendors, employer groups, IT, provider network management, FWA, compliance, operations, etc.).

Karena’s 15 years of healthcare experience includes Director Actuarial Services, Director Actuarial Informatics, and AVP of Clinical Informatics.

Karena is an Associate of the Society of Actuaries and earned her ASA credential in May 2016. She is a graduate of Bloomsburg University with a Bachelor of Arts in Mathematics and Statistics Track, and a Bachelor of Science in Secondary Education. Karena has earned the FAHM and CSFS designations, and is currently pursuing her fellowship certification in the Society of Actuaries.
Risk Adjustment Coding: Leveraging Data Analytics Tools to Drive Coder Accuracy and Efficiency

March 7, 2017 | RISE Nashville 2017

Introductions

Karena Weikel, ASA, FAHM, CSFS
VP, Risk and Revenue Management
Geisinger Health Plan

Shahyan Currimbhoy
SVP, Product Management & Engineering
Talix
Agenda

- Risk Adjustment Coding: Key Challenges
- Leveraging Data Analytics
- Case Study: Geisinger Health Plan

Risk Adjustment Coding: Key Challenges
Key Challenges: Manual Processes and Inefficient

- Coders must review all electronic medical records or paper charts to find undocumented condition codes as well as keep track of changing CMS regulations
- Hinders coder productivity
- Inefficient, time-consuming and expensive
- Leads to costly errors and missed codes
- Inefficiencies demand the need for more coders

Key Challenges: Enrollment Growth ➔ More Charts, More Complexity

- Medicare Advantage (and ACA) enrollees up significantly over recent years
- Coding complexity increasing (e.g., ICD-10)
- More patient data being generated
- Huge potential impact on quality of care and plan revenue
- Increased number of providers
- Many EMRs, all configured differently
Key Challenges: Incomplete Member Data

- Many rely solely on claims data, which is retrospective and incomplete, and only code a subset of member charts
- 80% of clinical data is unstructured (e.g., free-text care plans, historical chart notes, specialist reports) – but many payers don’t leverage this data (or leverage it at a high cost)
- Results in missed and inaccurate codes

Leveraging Data Analytics
Improving Coder Accuracy and Efficiency

• Aggregate data into a single system
  – Clinical & financial; structured & unstructured
• Automate time-consuming member reviews
  – Identify missed and/or inaccurate codes
  – Accuracy is critical
• Unify coder processes into single workspace
  – Reduce moving parts; minimize clicks

Process higher chart volumes while maintaining (or even improving) accuracy

Managing Coder Workflow and Financial Performance

• Support varied workflows and configurations
  – Retrospective vs. concurrent vs. prospective
  – In-office staff vs. remote staff vs. outsourced coders
• Manage assignments, progress and productivity
• Drive continuous improvement
  – Coding gaps, quality metrics, training needs
• Track financial impact of risk adjustment program

Improve plan revenue and overall department performance
Engaging Physicians

- Implement change at the source
- Leverage physician analytics to identify coding areas of improvement
- Engage physicians to ensure they follow documentation and coding best practices at the point of care
- Increase coding accuracy and completeness
- Reduce retrospective coding burden

Improve documentation completeness, and more importantly, patient care

Preparing for Audits

- Medicare Advantage RADV audits will increase in 2017
- Commercial ACA audits (IVA) began in 2016
- Documenting supporting evidence is important
- Easily searchable evidence will speed up the reconciliation process
- Mitigates the financial impact of a CMS audit

Reduce risk of penalties from RADV audits
Case Study: Geisinger Health Plan

Geisinger Health Plan: An Overview

- Not-for-profit health plan based in Danville, PA; part of Geisinger Health System
- 554,000 members in PA, DE and ME
- Among highest-rated private and Medicare health plans in the nation (NCQA)
- Health Plan Coding organization consists of 18 coders and 5 admins
**GHP: Risk Adjustment Challenges**

- GHP membership increase
- Expansion of Risk Adjustment programs with ACA
- Build Risk Adjustment program in-house:
  - Communication is key throughout (Communicate)
  - Start with provider relationships (Trust)
  - Develop efficient coder workflow (Process)
  - Advance analytics (Targeting)
  - Maximize coder productivity while maintaining low staff levels (Staff)
  - Risk Adjustment Coding Education (R.A.C.E.)
  - Chart retrieval centralization and repository (Charts)
  - Increase EMR access beyond Geisinger Health System (Access)
  - Coding retrospective move towards prospective (Point of Care)

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**GHP: The Search for a Solution**

**Criteria:**

- Improve coder efficiency and productivity while maintaining high accuracy
- Integrate with coder workflow (adaptability)
- Preferred by the coders, flexible, organizational, cultural, and strategic fit, transparent (exceptional customer service)
- Full comprehensive solution on missed diagnosis opportunities (advance our analytics)
- Decrease provider abrasion (better our technology)
- Ensure audit readiness
GHP: Implementing Advanced Data Analytics for Risk-Adjusted Coding

- Implemented Coding InSight application
- Leverages advanced NLU, taxonomy and clinical rules to accurately identify uncoded or miscoded conditions in member charts to help close coding gaps
- Streamlines risk adjustment coding for improved productivity and accuracy – better coding performance

Coding InSight’s Natural Language Understanding: Medical Taxonomy

<table>
<thead>
<tr>
<th>CONCEPTS-BASED ARCHITECTURE</th>
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<td>Concepts inclusive of attributes, such as:</td>
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<tr>
<td>- Synonyms, Abbreviations, Acronyms</td>
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<tr>
<td>- Misspellings</td>
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<tr>
<td>- Homonym Identification</td>
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<td>- ICD-9, ICD-10</td>
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<td>- RXNORM, NDC</td>
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<th>SEMANTIC RELATIONSHIPS WITH RANKINGS</th>
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<td>Weighted relationships to other concepts in the taxonomy</td>
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<td>- Disease to Symptoms</td>
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<td>- Disease to Treatments</td>
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<tr>
<td>- Disease to Diagnostic Procedures</td>
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<tr>
<td>- And many others with Ranking strength</td>
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Coding InSight’s Natural Language Understanding: Mining Unstructured Data

The patient came in today with ongoing issues with glycemic control. We have been fairly aggressively adjusting her insulin. The patient has been on insulin for a long time. Despite frequent increases in her insulin regimen, she continues to have somewhat high blood glucose, most notably in the evening.

The patient underwent an ultrasound-guided core needle biopsy with clip placement of the 2.3cm mass in the upper outer quadrant of the right breast.

Metastatic carcinoma was seen in 3/4 sentinel lymph nodes.

Therefore, the patient was found to have T2N2M0, stage IIIA breast cancer.

GHP and Coding InSight: Program Results

- Productivity Improvement: ~400%
  - 2014: 15 coders for 24,000 members (1,600/coder)
  - 2016: 17 coders for 131,000 members (7,700/coder)
- Administrative Savings: > $10M
- Revenue Increase: > $3M
- ROI Improvement: From 3.6:1 to 26:1
What’s Next?

• Expand Coding InSight usage to Geisinger Health System
• Integrate with Geisinger Health System’s EMR for unified workspace
• Prospective reviews in addition to concurrent and retrospective reviews
• Improve care planning and documentation accuracy
• Increase coder-physician collaboration

Q&A

Questions?
THANK YOU

Karena Weikel
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Shahyan Currimbhoy
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New Ways to use Analytics to Drive and Manage HCC Strategies

Trish Baesemann, President
APPLECARE MEDICAL MANAGEMENT | PART OF OPTUMCARE

Harshith Ramesh, President
EPISOURCE, LLC
Trish Baesemann, President

AppleCare Medical Management

Trish has more than 25 years of experience in senior leadership roles across the health care spectrum including IPA and medical group management, business development, and operations. She is very knowledgeable of managed care and the healthcare delivery business and has a long track record of success in her relationships with physicians, health plans, and hospitals. She has demonstrated success in improving service delivery, patient satisfaction, and building sound relationships with physicians. In her role as President of AppleCare, she remains focused on bringing value to the physician network through clinical and administrative support to enhance the physician and member experience.

Trish is a member of the CAPG Board of Directors.
About Harshith Ramesh

Harshith is primarily responsible for new product development and global operations at Episource. Prior to joining Episource, he was in the investment banking industry, focusing on M&A, restructuring, and capital markets assignments. He has worked for a range of global institutions, including Moelis & Co., Bain & Co., and Bear, Stearns & Co. Harshith earned his Bachelors at Tulane University, and an MBA from the Wharton School.
New Ways to use Analytics to Drive and Manage HCC Strategies

March 7, 2017

Harshith Ramesh
President, Episource

Trish Baesemann
President, AppleCare

COMPANY BACKGROUND
About AppleCare

• AppleCare Medical Group is a Medical Group and Independent Physician Association

• Service Area: Los Angeles & Orange County

• 100,000 Patients (Senior, Dual-eligible, MediCal, Commercial, Exchange)

• Risk-bearing Organization
  – MSO + 2 IPAs
  – Hospitalist Group
  – High-performing Clinical Infrastructure

• 900 Primary Care Physicians & Specialists
ABOUT THIS SESSION

1. Analytics are good, but **Analytics tied to Workflows are better.**

2. Often ignored, but also important: **Program Analytics.**

3. HCC Suspecting: finding the **hidden value.**
Analytics & Workflows

Find the opportunity

What is analytics? How do I identify opportunity within my patient population?

Organize to win

How do I organize my RAF programs? Which processes, tools, and operating mechanisms (chart audits, NP programs) do I need to put in place?

Get the opportunity

How do I simplify my process to launch a program and realize potential value?

Campaign Management

<table>
<thead>
<tr>
<th>Name</th>
<th>Date of Birth</th>
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<th>2017 Projected RAF</th>
<th>2017 Opportunity</th>
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## Campaign Management

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**Export Member Index (with Filters):**

- Start Monitoring Campaign from this Population
- Start Medical Record Retrieval + Chart Coding Campaign from this Population
- Start Medical Chart Coding Campaign from this Population
- Start HCC Gap Letter Campaign from this Population

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## Campaign Management

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<td>Medical Chart Coding</td>
<td>0.707</td>
<td>0.707</td>
<td>-</td>
</tr>
<tr>
<td>Provider Reach Out</td>
<td>Launched</td>
<td>HCC Gap Letter</td>
<td>0.637</td>
<td>0.637</td>
<td>Edit</td>
</tr>
</tbody>
</table>
Dear Dr. Stewart,

On behalf of [Your Client], [Your Company] is collecting the following information regarding your patient’s medical condition.

**Diagnoses Previously Reported**

Please indicate the current status of these previously reported conditions. If the condition exists currently, please attach supporting documentation from a face-to-face patient encounter showing evaluation and treatment of the diagnosis.

<table>
<thead>
<tr>
<th>MCC Code</th>
<th>Code</th>
<th>Description</th>
<th>Can You Confirm</th>
</tr>
</thead>
<tbody>
<tr>
<td>M34315</td>
<td>E112</td>
<td>Type 2 diabetes mellitus without complications</td>
<td>Currently Present</td>
</tr>
<tr>
<td>M34319</td>
<td>E113</td>
<td>Type 2 diabetes mellitus with complications</td>
<td>Currently Present</td>
</tr>
<tr>
<td>M3431B</td>
<td>E114</td>
<td>Type 2 diabetes mellitus with hyperpyemia</td>
<td>Currently Present</td>
</tr>
<tr>
<td>M3431D</td>
<td>E115</td>
<td>Type 2 diabetes mellitus with hyperpyemia and neuropathy</td>
<td>Currently Present</td>
</tr>
<tr>
<td>M844</td>
<td>M844</td>
<td>Inflammatory polyarthritis</td>
<td>Currently Present</td>
</tr>
</tbody>
</table>

Please return this form via Fax:

Fax Number: (760) 325-0170

LTE# 1203157

**Analytics + Workflows**

**Lynwood Clinic**

Directing members to visit clinic for health assessments

**YoY Recoding**

- Identify missed YoY opportunities in a strategic way

**GAP Letter Program**

- Manual process in 2016
- New process in 2017
Our analytics platforms provide information at both **member/provider** level and at the **program level** (chart audit, nurse practitioner program, etc.)

Having this **real-time** helps you manage programs and ensuring each program is worth your time, money and effort.
RAF Value & Net Financial Contribution By Programs

Gap Letter, assuming $500 base rate, would have contributed $10.5MM

<table>
<thead>
<tr>
<th>Program</th>
<th>Total RAF Value</th>
<th>Program Net ROI</th>
</tr>
</thead>
<tbody>
<tr>
<td>3-HCC Gap Letters (PCP)</td>
<td>1,754</td>
<td>9.54%</td>
</tr>
<tr>
<td>5-PCP Chart Audit</td>
<td>1,084</td>
<td>7.13%</td>
</tr>
<tr>
<td>8-NP Program (outsourced)</td>
<td>197</td>
<td>1.20%</td>
</tr>
<tr>
<td>7-Hospital Chart Audit</td>
<td>181</td>
<td>0.81%</td>
</tr>
<tr>
<td>6-SPC Chart Audit</td>
<td>160</td>
<td>0.72%</td>
</tr>
<tr>
<td>2-NP Program (internal)</td>
<td>146</td>
<td>0.16%</td>
</tr>
<tr>
<td>4-HCC Gap Letters (SPC)</td>
<td>1</td>
<td>-0.04%</td>
</tr>
</tbody>
</table>

Net Financial Contribution

- 3-HCC Gap Letters (PCP): 9.54%
- 5-PCP Chart Audit: 7.13%
- 8-NP Program (outsourced): 1.20%
- 7-Hospital Chart Audit: 0.81%
- 6-SPC Chart Audit: 0.72%
- 2-NP Program (internal): 0.16%
- 4-HCC Gap Letters (SPC): -0.04%

Program Analytics

- What metrics are important for AppleCare
- How do you prioritize programs for ROI purposes
- How real-time access to analytics impacted your processes and organization
HCC Suspecting
Defining HCC Suspects

- YoY
- Clinical
  - Data Driven
  - Coder Driven

YOY Recapture Matters

<table>
<thead>
<tr>
<th>Code Types</th>
<th>Approx. % of HCC Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>YoY Recapture</td>
<td>65%</td>
</tr>
<tr>
<td>New Chronic</td>
<td>22%</td>
</tr>
<tr>
<td>Acute/Others</td>
<td>10%</td>
</tr>
<tr>
<td>Clinical Suspects</td>
<td>3%</td>
</tr>
</tbody>
</table>
The Strategy

- Focus on YoY
- Coder driven suspecting leads to better conversion
  - Data driven suspecting can be wrong, wasting resources, and frustrating providers
  - Typically HCC that is data driven converted 20% of the time, vs Clinical convert 45-50% of the time.

HCC Suspecting

- YoY Recapture, what is AppleCare doing to improve it
- Coder driven vs Data driven suspecting
Thank you.

QUESTIONS?

CONTACT US:
solutions@episource.com
Vulnerable Populations: Targeting For Outreach and The Benefits of Reaching These Populations

Ana Handshuh, Vice President, Managed Care Services
ULTIMATE HEALTH PLANS

Jim Dalen, Chief Health Economist
ALTEGRA HEALTH
Ana Handshuh, Principal at CAT5 Strategies, is a government programs executive with expertise in creating and implementing corporate programs for the healthcare industry. Her background includes Quality, Core Measures, Care Management, Benefit Design and Bid Submission, Accreditation, Regulatory Compliance, Revenue Management, Communications, Community-based Care Management Programs and Technology Integration. Ms. Handshuh currently serves on the Board of the Resource Initiative and Society for Education (RISE), the preeminent national professional association dedicated to managed and accountable care financing and delivery. She is a sought after speaker on the national healthcare circuit in the areas of Quality, Star Ratings, Care Management, Member and Provider Engagement, and Revenue Management. Her recent consultancy roles have included assisting organizations create programs to address the unmet care management needs in the highest risk strata of membership, document their processes and procedures, achieve accreditation status, design and submit government program bids, institute corporate-wide programs and create communications strategies and materials. She possesses sophisticated business acumen with the ability to build consensus with cross-functional groups to accomplish corporate goals. Ms. Handshuh served as the Vice President of Managed Care Services at Central Florida Inpatient Medicine (CFIM). In this role, she provided leadership and strategy on CFIM projects and collaborations with physicians, risk entities, hospital health care systems, and health plans. CFIM is the largest Hospitalist group in Central Florida, with 70 providers discharging over 50,000 patients annually from multiple hospitals across two health care delivery systems and 24 skilled nursing facilities. At CFIM Ms. Handshuh previously served as the Vice President of Operations. Prior to those assignments, she worked with Precision Healthcare Systems as their Vice President of Quality Improvement. In that capacity, she led the IPA’s Quality efforts and collaborated with payers on implementing programs to move the needle on Quality and Star Rating initiatives. Ms. Handshuh also served as the Director of Corporate Program Development at Physicians United Plan. In this role, she led the Quality Management and Corporate Communications departments and spearheaded the development of innovative integrated technology solutions to drive business excellence and Star Rating achievement initiatives. For the past fifteen years Ms. Handshuh has taken an active role in redefining and implementing changes that have led to improvements and greater efficiency within Government programs and healthcare delivery. Prior to joining Physicians United Plan Ms. Handshuh was the founder of I-Six Creative. Under Ms. Handshuh’s vision and leadership, I-Six Creative provided expertise in the areas of managed Medicare benefit design, MSO/IPA operations, provider network strategy, new market launches, technology integration, corporate communications and quality improvement.
Jim currently serves as Altegra Health's Chief Health Economist. Jim started working with Social Service Coordinators, a predecessor company to Altegra as a consultant in 2004, joining them as Vice President & Sr. Economist in 2011. Jim's responsibilities at Altegra Health include predictive modeling, demographic analysis, and design and oversight of analytical reporting.

Jim has been working with health care data for more than 22 years, and has worked in the managed care space for nearly 20 years. He spent seven years with a large regional health insurer where he oversaw quality and utilization reporting as well as all survey research. He has extensive experience in quality data analysis and reporting, and is a former Certified HEDIS TM Compliance Auditor.

His graduate work and Masters's degree in Economics, concentrating in Econometrics from the University of Arizona provide a strong academic backbone to his work.

TM. HEDIS is a registered trademark of the National Committee for Quality Assurance (NCQA)
Vulnerable Populations: Targeting for Outreach and the Benefits of Reaching These Populations

RISE Nashville Summit
March 7, 2017

PRESENTATION OVERVIEW

- Vulnerable populations and the face of the social determinants of health: Dual and Potential Dual MA populations
  - Demographic, condition & risk score profiles
  - Population prevalence
- Advanced analytics and the role of predictive modeling in targeted member outreach
  - Overview
  - Examples
- Outreach’s positive impact on member satisfaction & loyalty in addition to higher risk scores and improved quality of care metrics
- Key takeaway’s
THE FACE OF SOCIAL DETERMINANTS OF HEALTH: DUAL & POTENTIAL DUAL POPULATIONS

WHAT DOES THE TYPICAL MA POPULATION LOOK LIKE?

- Not Dual-Aged: 70%
- Not Dual-Disabled: 7%
- Partial Dual-Aged: 7%
- Partial Dual-Disabled: 3%
- Full Dual-Aged: 8%
- Full Dual-Disabled: 5%
- Total Dual: 23.2%
- Partial Dual: 10.4%
- Full Dual: 12.8%

N=1,517,021
Community Members Only

Based on 2016 CMS MMR & MOR files
**POPULATION PROFILE, AGE-GENDER DISTRIBUTION**

**Non-Dual Beneficiaries**

<table>
<thead>
<tr>
<th>Age Group</th>
<th>Female</th>
<th>Male</th>
</tr>
</thead>
<tbody>
<tr>
<td>Under 65</td>
<td>4.7%</td>
<td>4.4%</td>
</tr>
<tr>
<td>65 to 69</td>
<td>10.7%</td>
<td>13.2%</td>
</tr>
<tr>
<td>70 to 74</td>
<td>12.2%</td>
<td>14.5%</td>
</tr>
<tr>
<td>75 to 79</td>
<td>8.3%</td>
<td>9.9%</td>
</tr>
<tr>
<td>80 to 84</td>
<td>5.1%</td>
<td>6.7%</td>
</tr>
<tr>
<td>85 to 89</td>
<td>2.7%</td>
<td>4.2%</td>
</tr>
<tr>
<td>90 to 94</td>
<td>1.0%</td>
<td>1.8%</td>
</tr>
<tr>
<td>95+</td>
<td>0.2%</td>
<td>0.5%</td>
</tr>
</tbody>
</table>

N=1,165,687
Community Members Only

Low proportion of disabled beneficiaries

**Partial Dual Beneficiaries**

<table>
<thead>
<tr>
<th>Age Group</th>
<th>Female</th>
<th>Male</th>
</tr>
</thead>
<tbody>
<tr>
<td>Under 65</td>
<td>16.1%</td>
<td>19.0%</td>
</tr>
<tr>
<td>65 to 69</td>
<td>7.2%</td>
<td>11.7%</td>
</tr>
<tr>
<td>70 to 74</td>
<td>6.7%</td>
<td>11.5%</td>
</tr>
<tr>
<td>75 to 79</td>
<td>4.4%</td>
<td>8.3%</td>
</tr>
<tr>
<td>80 to 84</td>
<td>2.6%</td>
<td>5.7%</td>
</tr>
<tr>
<td>85 to 89</td>
<td>1.2%</td>
<td>3.3%</td>
</tr>
<tr>
<td>90 to 94</td>
<td>0.4%</td>
<td>1.3%</td>
</tr>
<tr>
<td>95+</td>
<td>0.1%</td>
<td>0.3%</td>
</tr>
</tbody>
</table>

N=157,787
Community Members Only

Substantially more Disabled beneficiaries
**HCC PROFILE, BENEFICIARIES WITH NO HCC’S**

- Not Dual-Aged: 37.8%
- Not Dual-Disabled: 24.6%
- Partial Dual-Aged: 25.6%
- Partial Dual-Disabled: 19.4%
- Full Dual-Aged: 25.9%
- Full Dual-Disabled: 24.4%

N=1,517,021
Community Members only

**HCC PROFILE, BENEFICIARIES WITH 3+ HCC’S**

- Aged: 19.8%, 30.0%, 30.9%, 28.2%
- Disabled: 29.3%, 34.7%

N=1,517,021
Community Members only

46% + more beneficiaries with no HCC’s

50% more Aged Duals with 3+ HCC’s
### HIGH PREVALENCE HCC’S, *MEDICARE ONLY, AGED*

<table>
<thead>
<tr>
<th>#</th>
<th>HCC Number, Name</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>HCC108-Vascular Disease</td>
<td>13.7%</td>
</tr>
<tr>
<td>2</td>
<td>HCC019-Diabetes without Complication</td>
<td>13.7%</td>
</tr>
<tr>
<td>3</td>
<td>HCC018-Diabetes with Chronic Complications</td>
<td>12.4%</td>
</tr>
<tr>
<td>4</td>
<td>HCC096-Specified Heart Arrhythmias</td>
<td>12.0%</td>
</tr>
<tr>
<td>5</td>
<td>HCC111-Chronic Obstructive Pulmonary Disease</td>
<td>11.4%</td>
</tr>
<tr>
<td>6</td>
<td>HCC085-Congestive Heart Failure</td>
<td>9.7%</td>
</tr>
<tr>
<td>7</td>
<td>HCC012-Breast, Prostate, and Other Cancers and Tumors</td>
<td>6.3%</td>
</tr>
<tr>
<td>8</td>
<td>HCC058-Major Depressive, Bipolar, and Paranoid Disorders</td>
<td>5.0%</td>
</tr>
<tr>
<td>9</td>
<td>HCC040-Rheumatoid Arthritis and Inflammatory Connective Tissue Disease</td>
<td>4.8%</td>
</tr>
<tr>
<td>10</td>
<td>HCC022-Morbid Obesity</td>
<td>4.4%</td>
</tr>
</tbody>
</table>

N=1,060,533 – Community members only

### HIGH PREVALENCE HCC’S, *MEDICARE ONLY, DISABLED*

<table>
<thead>
<tr>
<th>#</th>
<th>HCC Number, Name</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>HCC058-Major Depressive, Bipolar, and Paranoid Disorders</td>
<td>19.3%</td>
</tr>
<tr>
<td>2</td>
<td>HCC111-Chronic Obstructive Pulmonary Disease</td>
<td>15.1%</td>
</tr>
<tr>
<td>3</td>
<td>HCC019-Diabetes without Complication</td>
<td>15.0%</td>
</tr>
<tr>
<td>4</td>
<td>HCC018-Diabetes with Chronic Complications</td>
<td>13.8%</td>
</tr>
<tr>
<td>5</td>
<td>HCC022-Morbid Obesity</td>
<td>12.6%</td>
</tr>
<tr>
<td>6</td>
<td>HCC108-Vascular Disease</td>
<td>9.5%</td>
</tr>
<tr>
<td>7</td>
<td>HCC040-Rheumatoid Arthritis and Inflammatory Connective Tissue Disease</td>
<td>9.2%</td>
</tr>
<tr>
<td>8</td>
<td>HCC085-Congestive Heart Failure</td>
<td>8.6%</td>
</tr>
<tr>
<td>9</td>
<td>HCC055-Drug/Alcohol Dependence</td>
<td>6.0%</td>
</tr>
<tr>
<td>10</td>
<td>HCC096-Specified Heart Arrhythmias</td>
<td>5.8%</td>
</tr>
</tbody>
</table>

N=105,154 – Community members only
### HIGH PREVALENCE HCC’S, **PARTIAL DUAL**

<table>
<thead>
<tr>
<th>HCC Number, Name</th>
<th>Aged</th>
<th>Disabled</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Rank</td>
<td>Percent</td>
</tr>
<tr>
<td>HCC018-Diabetes with Chronic Complications</td>
<td>1</td>
<td>20.6%</td>
</tr>
<tr>
<td>HCC108-Vascular Disease</td>
<td>2</td>
<td>20.2%</td>
</tr>
<tr>
<td>HCC111-Chronic Obstructive Pulmonary Disease</td>
<td>3</td>
<td>19.2%</td>
</tr>
<tr>
<td>HCC019-Diabetes without Complication</td>
<td>4</td>
<td>17.1%</td>
</tr>
<tr>
<td>HCC085-Congestive Heart Failure</td>
<td>5</td>
<td>14.3%</td>
</tr>
<tr>
<td>HCC096-Specified Heart Arrhythmias</td>
<td>6</td>
<td>11.7%</td>
</tr>
<tr>
<td>HCC058-Major Depressive, Bipolar, and Paranoid Disorders</td>
<td>7</td>
<td>7.6%</td>
</tr>
<tr>
<td>HCC022-Morbid Obesity</td>
<td>8</td>
<td>7.3%</td>
</tr>
<tr>
<td>HCC040-Rheumatoid Arthritis &amp; Inflammatory Connective Tissue</td>
<td>9</td>
<td>6.0%</td>
</tr>
<tr>
<td>HCC012-Breast, Prostate, and Other Cancers and Tumors</td>
<td>10</td>
<td>5.4%</td>
</tr>
<tr>
<td>HCC055-Drug/Alcohol Dependence</td>
<td>n/a</td>
<td>n/a</td>
</tr>
<tr>
<td>HCC057-Schizophrenia</td>
<td>n/a</td>
<td>n/a</td>
</tr>
</tbody>
</table>

N=157,787 – Community members only

### HIGH PREVALENCE HCC’S, **FULL DUAL**

<table>
<thead>
<tr>
<th>HCC Number, Name</th>
<th>Aged</th>
<th>Disabled</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Rank</td>
<td>Percent</td>
</tr>
<tr>
<td>HCC018-Diabetes with Chronic Complications</td>
<td>1</td>
<td>21.3%</td>
</tr>
<tr>
<td>HCC108-Vascular Disease</td>
<td>2</td>
<td>18.8%</td>
</tr>
<tr>
<td>HCC019-Diabetes without Complication</td>
<td>3</td>
<td>16.8%</td>
</tr>
<tr>
<td>HCC111-Chronic Obstructive Pulmonary Disease</td>
<td>4</td>
<td>16.6%</td>
</tr>
<tr>
<td>HCC085-Congestive Heart Failure</td>
<td>5</td>
<td>13.7%</td>
</tr>
<tr>
<td>HCC096-Specified Heart Arrhythmias</td>
<td>6</td>
<td>9.8%</td>
</tr>
<tr>
<td>HCC058-Major Depressive, Bipolar, and Paranoid Disorders</td>
<td>7</td>
<td>8.0%</td>
</tr>
<tr>
<td>HCC022-Morbid Obesity</td>
<td>8</td>
<td>5.7%</td>
</tr>
<tr>
<td>HCC040-Rheumatoid Arthritis &amp; Inflammatory Connective Tissue</td>
<td>9</td>
<td>5.1%</td>
</tr>
<tr>
<td>HCC135-Acute Renal Failure</td>
<td>10</td>
<td>4.7%</td>
</tr>
<tr>
<td>HCC057-Schizophrenia</td>
<td>n/a</td>
<td>n/a</td>
</tr>
<tr>
<td>HCC079-Seizure Disorders and Convulsions</td>
<td>n/a</td>
<td>n/a</td>
</tr>
<tr>
<td>HCC055-Drug/Alcohol Dependence</td>
<td>n/a</td>
<td>n/a</td>
</tr>
</tbody>
</table>

N=193,547 – Community members only
HOW MANY DUALS ARE THERE?

- The current literature generally references about 9.97 million dual eligibles; ~7.4 million with full Medicaid and ~2.5 million with partial Medicaid*
- These figures are based on Medicare beneficiaries who are also enrolled in full or partial Medicaid
- Who are Dual Eligibles?
  - Medicare Beneficiaries
    - 65 years of age and older
    - Disabled or ESRD
  - Eligible for Full Medicaid or Partial Medicaid (Medicare Savings Program)
    - Asset Limitations
    - Income <= 150% of Federal Poverty Level**

* KFF.Org, data as of 2011
** Income limits higher in some states
CONSIDER THE FULL PICTURE: POTENTIAL DUALS

Estimating the Potential Dual Eligible Population:

- Include Medicare beneficiaries who would qualify for full or partial Medicaid if they applied, but are **not** enrolled in these programs
- Based on the most recent Census data of the elderly population and their poverty status
- Factor in the proportion of Medicare beneficiaries who are dual eligible due to disability
- Apply recent CMS figures regarding the current Medicare Population

ESTIMATING POTENTIAL DUAL ELIGIBLES

- The number of Potential Dual Eligibles i.e., Medicare members who qualify for full or partial Medicaid is **17 million** or nearly **29%** of the current overall Medicare population (58.7 million).
- The potential dual eligible population is **70%** higher than the ~10 million currently quoted duals figure.
- An AHIP May 2012 analysis of data from the Medicare Current Beneficiary Survey (MCBS) demonstrated that Medicare Advantage plans have a high proportion of low income members
  - When we factor this into our estimate, we find that 32% or more than 6 Million MA plan members are potentially dual eligible.
DUAL PENETRATION RATES ARE LOW AND DIVERSE

168 MAPD plans (unique contract numbers) with 7,092,223 total beneficiaries

Average Dual Penetration 11.5%

Notes: These data include MAPD plans only, known SNP Plans are excluded. All RA Factor types are included.
PREDICTIVE MODELING CONTINUUM

Basic Analytics  ➔  Advanced Analytics

Accuracy of Predictive Model

Rules Based Predictive Modeling  ➔  Probabilistic Predictive Modeling  ➔  Advanced Multivariate Predictive Modeling

RULES BASED PREDICTIVE MODELS

- Decision Tree Models
  - Rules are applied to given event to indicate possible outcomes

Decision Tree Diagram:
- A ➔ Outcome 1
- A ➔ Outcome 2
- C ➔ Outcome 3
- C ➔ Outcome 4
- B ➔ Outcome 5
- B ➔ Outcome 6
- B ➔ Outcome 7

- Decision
- Uncertainty (external event)
EXAMPLES OF RULES BASED MODELS

- Enrollment in Disease Management programs & Case Management
- Risk stratification driving intervention choice and intensity
- Medical record review for risk score improvement based on coding persistency
  - I.e., a plan member had diabetes in prior year, but it is not found in plan administrative data in the payment year, so include that member in a chart chase list

TRADITIONAL PROBABILISTIC PREDICTIVE MODELS

- These models output generally provide the probability of the unknown event or characteristic occurring
- These models may also identify causal factors and the magnitude of their impact on a known event
- Can be Univariate or Multivariate
- Generally are Regression Models
  - Ordinary Least Squares
  - Maximum Likelihood
  - Logistic regression
  - Generalized Linear Regression
PROBABILISTIC PREDICTIVE MODELS, DUAL ELIGIBILITY EXAMPLE

Under 100 | 100 to 199 | 200 to 299 | 300 to 399 | 400 to 499 | 500 to 599 | 600 to 699 | 700 to 799 | 800 to 899 | 900+ 
--- | --- | --- | --- | --- | --- | --- | --- | --- | --- 
1.7% | 1.6% | 2.2% | 4.9% | 8.2% | 19.7% | 53.8% | 71.8% | 78.8% | 83.2% 

Overall Model Accuracy = 93.8%

Altegra’s Predictive Eligibility Score / % Predicted Eligible

PROBABILISTIC PREDICTIVE MODELS, RISK SCORE MODEL EXAMPLE

Member-Specific Expected Value Score

Supplemental Data Expected Value Score

Rx Model Expected Value Score

Persistency Model Expected Value Score

Comorbidity-Coding Expected Value Score

Other Reported Sources-Expected Value Score

Supplemental Data

Pharmacy Claims Data

Historic Medical Conditions

Documented Medical Conditions

Other Sources of Reported Conditions

- Member Demographics
- Geographic
- Psychodemographics
- 175K+ ICD Codes
- MedSpan Mappings
- CMS-HCC Model
- HHS-HCC Model
- 13K ICD9 Codes
- 68K ICD10 Codes
- 100% HCC’s
- HCC Level Comorbidity Mapping
- Member Surveys
- Health Risk Assessments
- Plan UII Data
- Plan DM Files
ADVANCED STATISTICAL MODELING

- Member Claims Data
- Historic Conditions
- Prescribed Conditions
- Pharmacy Claims Data
- Comorbid Conditions
- UM & DM Data
- Health Risk Assessments
- Appendix Data & Psychographics
- Member Demographics

Advanced Statistical Modeling
(Including Machine Learning)

ADVANCED ANALYTICS

- Big Data
  - Health care data sets commonly number in the millions of records

- Machine Learning (Supervised/Unsupervised)
  - “Machine Learning is a method used to devise complex models and algorithms that lend themselves to prediction...to produce reliable, repeatable decisions and results...”*
  - These techniques allow for calculations using all possible combinations of available data enhancing the predictive power of a predictive model
  - Traditional Model fit statistics ($R^2$, C-Stat) are not the best evaluators of model performance, instead, a focus on model accuracy (Precision) and completeness (Recall) is more effective
  - Machine learning derived predictive models can be “tuned” to meet explicit accuracy and completeness goals unlike traditional predictive models ensuring that ROI is maximized while revenue targets are met.

* Definition from Wikipedia
Larger Precision values indicate fewer false-positive predictions. A well-performing model will hold a high Precision value into higher Recall values, indicating the ability to keep false-positives low while reaching a larger portion of the membership.

Note: Analysis based on Altegra MA HCC Predictive Modeling Experience
### INTERSECTION OF RISK SCORE AND DUAL OUTREACH

<table>
<thead>
<tr>
<th>Outreach Type</th>
<th>Demographic Payment</th>
<th>Conditions Payment</th>
</tr>
</thead>
<tbody>
<tr>
<td>No Outreach</td>
<td>$3,914</td>
<td>$3,914</td>
</tr>
<tr>
<td>Dual Outreach Only</td>
<td>$5,813</td>
<td>$5,813</td>
</tr>
<tr>
<td>Coding Outreach Only</td>
<td>$3,914</td>
<td>$4,460</td>
</tr>
<tr>
<td>$8,374</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dual &amp; Coding Outreach</td>
<td>$5,813</td>
<td>$6,695</td>
</tr>
<tr>
<td>$12,508</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

This example presents annualized payments based on a bid rate of $700 for a low income male, age 77, with a history of Vascular Disease and Acute MI.

### Member and Provider Outreach Activities are Often Independent

- Care & Quality Scores
- Risk Scores
- Enrollment & Eligibility
IMPACT OF MEMBER OUTREACH ACTIVITIES

- Risk Score Improvement
- Quality Score Improvement
- Low Income and Community Program Enrollment

Member Satisfaction, Loyalty & Plan Tenure

COORDINATED OUTREACH

LOW INCOME PROGRAM TENURE LIFT, MEDICARE ONLY

- Altegra Dual
  - N = 292,965
  - Average Tenure: 20 months
  - Average Months of Tenure: 54.1%

- Low Income Subsidy (LIS)
  - N = 45,747
  - Average Tenure: 25 months
  - Average Months of Tenure: 67.6%

- Altegra Dual + LIS
  - N = 37,433
  - Average Tenure: 43 months
  - Average Months of Tenure: 116.2%

Medicare Only Average Tenure
- N = 15,537,450
### LOW INCOME PROGRAM TENURE LIFT, ALREADY DUAL

<table>
<thead>
<tr>
<th>Program</th>
<th>Average Tenure</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td>Altegra Recert</td>
<td>15</td>
<td>1,070,712</td>
</tr>
<tr>
<td>Low Income Subsidy (LIS)</td>
<td>25</td>
<td>2,257</td>
</tr>
<tr>
<td>Recert + LIS</td>
<td>43</td>
<td>11,857</td>
</tr>
</tbody>
</table>

### Member Needs Are Diverse and Impact The Care They Receive

**13,000+ Private and Public Community Programs**

- Health and Wellness
- Financial Assistance
- Professional Assistance
- Everyday Life

80% of physicians conclude that addressing patients’ social needs is as critical as addressing their medical needs, but feel ill equipped to respond. - The Commonwealth Fund
Community Program Outreach

In addition to Dual and Part D Extra Help Enrollment Assistance, there are a myriad of programs available to assist health plan members and directly or indirectly facilitate better care for their conditions.

<table>
<thead>
<tr>
<th>Health and Wellness</th>
<th>Financial Assistance</th>
<th>Everyday Life</th>
<th>Professional and Public Services</th>
</tr>
</thead>
<tbody>
<tr>
<td>Food/Nutrition</td>
<td>Telephone Payment</td>
<td>Transportation</td>
<td>Legal Aid</td>
</tr>
<tr>
<td>Health Management</td>
<td>Utility Bill Reduction</td>
<td>Child Care Services</td>
<td>Accounting Services</td>
</tr>
<tr>
<td>Adult Care</td>
<td>Property Tax</td>
<td>Educational Assistance</td>
<td>Financial Advice</td>
</tr>
<tr>
<td>Emergency Assistance</td>
<td>Grant/Income Replacement</td>
<td>Home Goods</td>
<td>Veteran Assistance</td>
</tr>
<tr>
<td>Home Care</td>
<td>And more...</td>
<td>Recreation</td>
<td>Counseling</td>
</tr>
</tbody>
</table>

OUTREACH EXAMPLE 1

Tim Smith is a 67-year-old male with diabetes.

- He is disabled, low income and not dual enrolled
- He has no car.
- He does not live on a bus line.
- He has not had a physician visit yet this year.
  - Risk score gap for diabetes
  - Multiple Star Score gaps for diabetes

What is/are the optimal intervention(s)?

- Reminder letter to him
- Reminder letter to his provider
- Automated reminder call
OUTREACH EXAMPLE 1

Tim Smith is a 67-year-old male with diabetes.
- He is disabled, low income and not dual enrolled
- He has no car.
- He does not live on a bus line.
- He has not had a physician visit yet this year.
  - Risk score gap for diabetes
  - Multiple Star score gaps for diabetes

What is/are the optimal intervention(s)?
- Reminder letter to him
- Reminder letter to his provider
- Automated reminder call
  - Dual Enrollment assistance
  - Assistance with transportation

OUTREACH EXAMPLE 2

Sara Parker is a 67-year-old female with a cardiac condition.
- She has a limited income.
- She is on multiple medications.
- She cannot afford to refill her high blood pressure medication in addition to her other medications.

What is/are the optimal intervention(s)?
- Reminder letter to her
- Reminder letter to her provider
- Automated reminder call
OUTREACH EXAMPLE 2

Sara Parker is a 67-year-old female with a cardiac condition.
- She has a limited income.
- She is on multiple medications.
- She cannot afford to refill her high blood pressure medication in addition to her other medications

What is/are the optimal intervention(s)?
- Reminder letter to her
- Reminder letter to her provider
- Automated reminder call
- Assistance with enrollment in Part D Extra Help (LIS)
- Assistance enrollment in a State Pharmacy Assistance Program (SPAP)
**COMMUNITY PROGRAM TENURE, ALREADY DUAL**

![Bar chart showing average months of tenure for different categories: Cl Over Already Enrolled (N=42,203), Cl Over Recert (N=155,210), Cl Over LIS (N=1,140), Cl Over Recert and LIS (N=8,666).](chart)

**OUTREACH DRIVES MEMBER SATISFACTION**

“Using any number from 0 to 10, where 0 is the worst..., and 10 is the best..., what number would you use to rate your plan?”

64% of respondents rate their MA plan 9 or 10 compared to 59% nationally

![Pie chart showing distribution of ratings: 9 or 10: 64%, 10: 45%, 9: 19%, 1: 1%, 2: 0%, 3: 1%, 4: 1%, 5: 4%, 6: 3%, 7: 7%, 8: 19%.](chart)
During the next Open Enrollment Period do you plan on staying with your current MA plan?

9 in 10 respondents plan on staying with their current MA plan

- Definitely Will: 30%
- Probably Will: 60%
- Not Sure or Probably Will: 8%
- Definitely Not: 1%
- Probably Not, 1%

n = 3,495
Altegra IVR survey of MA members assisted with dual enrollment

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**KEY TAKEAWAY’S**

- Health plan vulnerable populations are substantially comprised of low-income and disabled beneficiaries
- Dual population demographic profile
  - High proportion of minority beneficiaries
  - High proportion of disabled beneficiaries
- Dual population condition profile
  - One third fewer duals (~25%) have no reported HCCs compared to non-Dual Aged (37.8%)
  - 50% more Aged Duals (~30%) have 3+ HCCS compared to non-Dual Aged (~20%)
- The disabled population has an overall condition profile similar to duals
  - About 30% have 3+ HCC’s
KEY TAKEAWAY’S

➢ The potential Dual population of 17 million is 70% higher than the often quoted figure of 9.97 million
  ▪ Potentially dual = already dual enrolled, or would qualify for dual enrollment if they applied

➢ When one considers all factors, about 32% of MA Enrollees (over 6 Million) are potentially Dual Eligible

➢ Overall dual participation rates in MA plans vary greatly, but tend to be low compared to their potential levels.

➢ Advanced statistical modeling including Machine Learning greatly increases the accuracy and efficiency of predictive models for outreach

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KEY TAKEAWAY’S

➢ The 2017 MA HCC Payment model brings dual status and risk score together
  ▪ The full dual add-on is not realized if all conditions are not captured
  ▪ The full value of condition is not realized if dual member is not dual enrolled

➢ Augmenting standard health plan outreach programs with Low Income and Community program outreach can directly target the reasons for incomplete care and close otherwise unclosable risk and quality score gaps

➢ The impact of health plan outreach activities can extend beyond closing risk score and quality measure gaps
  ▪ Increased member satisfaction
  ▪ Increased member loyalty
  ▪ Increased member tenure with the health plan
The Future of the Exchanges: Navigating the Impact of the Changing Political Landscape

Krista Drobac, Partner
SIRONA STRATEGIES
Krista Drobac has twenty years of experience in federal and state government, and in public affairs. She now provides strategic advice on a broad range of state and federal legislative and regulatory issues around Medicaid, Medicare, accountable care, commercial insurance, digital health, public health and other areas.

Krista serves as the Executive Director of the Alliance for Connected Care, a 501(c)(6) organization dedicated to ensuring that all patients are able to realize the benefits of connected care. She was previously the director of the Health Division at the National Governors Association’s Center for Best Practices where she directed technical assistance for governors’ health advisors in the areas of health IT, health insurance Exchanges, Medicaid, delivery system reform and public health programs.

Prior to NGA, she was a Senior Advisor at the Center for Medicare & Medicaid Services (CMS) working in Medicaid and private insurance regulation. She also served as Deputy Director of the Illinois Department of Healthcare and Family Services where she worked on policy related to Medicaid and state employee health benefits programs.

Krista spent five years on Capitol Hill where she was a health advisor to the Minority Whip Senator Dick Durbin, and a John Heinz Senate Fellow for health care for Senator Debbie Stabenow, a member of the Senate Finance Committee.

Krista holds a BA from the University of Michigan and an MPP from the Harvard University Kennedy School of Government.
The Future of the Exchanges:
Navigating the Impact of the Changing Landscape

RISE Conference
Nashville, TN
March 6, 2017

Presentation Overview

- Current State of Play (Federal & State)
- Political Realities that Aren’t Going Away
- Scenarios
- Bottom Line for Health Plans
State of Play – March 7, 2017

Time is not the friend of Republican leadership

Medicaid expansion, tax credits greatest source of division

House pushing ahead with mark-up of repeal bill TOMORROW

Governors working on a Medicaid plan. Non-expansion states want “equity”

Price tag of repeal is huge, without corresponding increase in coverage

Republicans promising pre-ex policy stay, Trump says universal coverage
Brief Overview of House Bill Marked Up Wednesday

**ACA Taxes and Mandates**
- Repeals the ACA’s cost-sharing subsidies starting in 2020.
- Repeals the individual and small business mandate in 2016
- Repeals the premium tax credit beginning in 2020.
- Repeals the Health Insurance Tax, Tanning Tax, Prescription Medication tax, the net investment income tax, medical device tax
- Amends the Cadillac tax so that it will not go into effect until 2025.

**Cost-Sharing Subsidy**

**Continuous Coverage**
- Issues may fine consumers failing to maintain continuous coverage (defined as having a lapse in coverage in the previous year no longer than 63 days), by increasing premiums by up to 30% for a up to a 12-month period after enrollment.

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**Tax Credits**
- Provides an advanceable, refundable, age-adjusted tax credit for the purchase of state-approved coverage up to $75k or $150k for a couple. Credits capped at $6,550 for individual and $13,100 for a family.

- Under age 30: $2,000
- Between 30 and 39: $2,500
- Between 40 and 49: $3,000
- Between 50 and 59: $3,500
- Over age 60: $4,000

**Health Savings Accounts**
- Allows over-the-counter medications to count as qualified medical expenses, taxes nonmedical distributions at 10% rather than the current 20%
- Repeals the limit on contributions to Flexible Spending Accounts
- Increases the maximum contribution limit for HSAs to confirm with maximum out-of-pocket limits, allows catch-up contributions.
Brief Overview of House Bill Marked Up Wednesday

**Medicaid Financing**
- Reforms Medicaid financing from a federal match to a per-capita cap, set at FY2016 spending levels and set according to eligibility category: elderly, blind and disabled, children, non-expansion adults, and expansion adults. Funding increased would be set to CPI-U.
- Excludes DSH payments and administrative payment from the capped funding amounts.

**Medicaid Expansion**
- Freezes enrollment for Medicaid expansion on January 1, 2020.
- States that have not yet expanded eligibility have until January 1, 2020 to do so.
- Restores DSH funding for non-expansion states and establishes a five-year, $10B “Safety Net Fund” for non-expansion states to adjust payment rates for Medicaid providers.

**Safety Net Funding for Non-Expansion States**
- Provides $10 billion over five years to non-expansion States for safety net funding. For CY2018 through CY2022, each State that has not implemented the ACA Medicaid expansion as of July

**Repeals EHB for Medicaid**
Repeals the requirement that State Medicaid plans must provide the same “essential health benefits” that are required by plans on the exchanges, returning flexibility to the States in 2020.

**Patient and State Stability Fund**
Provides $30 billion for 2018-2019 over two years and then $10 billion each year for 2020 through 2026.
- High risk pools, preventive services, cost-sharing
Impact on Coverage

S&P Global Estimates:

Six to 10 million fewer people covered:
- 2-4 million fewer in the individual market
- 4-6 million fewer in Medicaid.

Medicaid Funding Impact
House Vote Count

- Need 218 Votes
- 237 Republicans
- 192 members in Expansion states
- 12 members in districts Hillary won
- Republican Study Committee
- Freedom Caucus (36)

Senate Vote Count

- Need 50 Votes
- 52 Republicans
- Senators from Expansion States
- Collins, Murkowski, Heller, Portman
- Non-expansion, Federal Ex.
- Paul, Lee, Cruz
Realities That Won’t Change

Dr. Robert Blendon Research (Harvard Professor)

Voters’ Beliefs About the Federal Government’s Role in Improving Health System

- **All Likely Voters**
  - Major role: 57
  - Minor role: 26
  - No role: 15

- **Democrats**
  - Major role: 87
  - Minor role: 10
  - No role: 1

- **Republicans**
  - Major role: 28
  - Minor role: 43
  - No role: 28

Dr. Robert Blendon Research (Harvard Professor)

Voters’ Views of the ACA Colored by Beliefs About the Government’s Role in Improving Health System

<table>
<thead>
<tr>
<th>Views of the ACA</th>
<th>ACA Working Well</th>
<th>ACA Working Poorly</th>
</tr>
</thead>
<tbody>
<tr>
<td>Major Role</td>
<td>87</td>
<td>30</td>
</tr>
<tr>
<td>Minor Role</td>
<td>22</td>
<td>78</td>
</tr>
<tr>
<td>No Role</td>
<td>2</td>
<td>96</td>
</tr>
</tbody>
</table>


Dr. Robert Blendon Research (Harvard Professor)

Voters’ Views – How Well is the ACA Working?

<table>
<thead>
<tr>
<th>Views</th>
<th>Very well</th>
<th>Somewhat well</th>
<th>Somewhat poorly</th>
<th>Very poorly</th>
</tr>
</thead>
<tbody>
<tr>
<td>All Likely Voters</td>
<td>11</td>
<td>32</td>
<td>16</td>
<td>38</td>
</tr>
<tr>
<td>Democrats</td>
<td>22</td>
<td>9</td>
<td>6</td>
<td>58</td>
</tr>
<tr>
<td>Republicans</td>
<td>2</td>
<td>10</td>
<td>20</td>
<td>68</td>
</tr>
</tbody>
</table>

Dr. Robert Blendon Research (Harvard Professor)

**Voters’ Top Choice – What Should Happen to the ACA?**

- **Replace with universal Medicare**: 14% (All likely voters), 5% (Democrats), 3% (Republicans)
- **Expand existing program**: 8% (All likely voters), 13% (Democrats), 3% (Republicans)
- **Keep as is**: 33% (All likely voters), 18% (Democrats), 5% (Republicans)
- **Replace with tax credit program**: 16% (All likely voters), 7% (Democrats), 7% (Republicans)
- **Scale back, give states control**: 24% (All likely voters), 14% (Democrats), 20% (Republicans)
- **Repeal completely**: 35% (All likely voters), 20% (Democrats), 2% (Republicans)


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Dr. Robert Blendon Research (Harvard Professor)

**Voters’ Evaluations of How Well Medicare is Working**

- **All likely voters**: 16% Very well, 54% Somewhat well, 17% Somewhat poorly, 8% Very poorly
- **Democrats**: 20% Very well, 56% Somewhat well, 15% Somewhat poorly, 4% Very poorly
- **Republicans**: 14% Very well, 55% Somewhat well, 15% Somewhat poorly, 10% Very poorly

Growth in Concern Over Cost

Have Difficult Time Affording Health Care

<table>
<thead>
<tr>
<th></th>
<th>PREMIUMS</th>
<th>DEDUCTIBLES</th>
<th>DRUG CO-PAYS</th>
</tr>
</thead>
<tbody>
<tr>
<td>2015</td>
<td>27</td>
<td>34</td>
<td>24</td>
</tr>
<tr>
<td>2017</td>
<td>37</td>
<td>43</td>
<td>31</td>
</tr>
</tbody>
</table>

Kaiser

Difficulty Paying $500 Medical Bill

Source: Kaiser
The Rising Cost of Health Care

A Bigger Bite

Middle-class families’ spending on health care has increased 25% since 2007. Other basic needs, such as clothing and food, have decreased.

Percent change in middle-income households’ spending on basic needs (2007 to 2014)

<table>
<thead>
<tr>
<th>Basic Need</th>
<th>Percent Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>Health care</td>
<td>-3.6</td>
</tr>
<tr>
<td>Food at home</td>
<td>-6.0</td>
</tr>
<tr>
<td>Housing</td>
<td>-6.3</td>
</tr>
<tr>
<td>Total</td>
<td>-6.4</td>
</tr>
<tr>
<td>Transportation</td>
<td>-7.6</td>
</tr>
<tr>
<td>Total food</td>
<td>-13.4</td>
</tr>
<tr>
<td>Food away from home</td>
<td>-18.8</td>
</tr>
<tr>
<td>Clothing</td>
<td>-24.8</td>
</tr>
</tbody>
</table>

Sources: Brookings Institution analysis of Consumer Expenditure Survey, Labor Department

THE WALL STREET JOURNAL.

Health Care Costs – Americans Covered by Commercial Insurance

Average deductible spending rises while average copayment spending falls, 2004-2014

Workers are also increasingly responsible for health care spending through out-of-pocket costs.

Deductibles rose 256% from 2004-2014, a period where wages only rose 32%
Health Care Costs –
Americans Covered by Commercial Insurance

Average Annual Premiums for Single and Family Coverage,
1999-2016

* Estimate is statistically different from estimate for the previous year shown (p < .05).


The Rise of High-Deductible Health Plans and Health Spending Accounts

Percentage of Covered Workers Enrolled in an HDHP/HRA or HSA-Qualified HDHP, 2006-2016

*Estimate is statistically different from estimate for the previous year shown (p < .05).

NOTE: Covered Workers enrolled in an HDHP/HRA or a HSA-Qualified HDHP. For more information, see the Survey Methods Section. The percentages of covered workers enrolled in an HDHP/HRA may not equal the sum of HDHP/HRA and HSA-Qualified HDHP enrollment estimates due to rounding.

Bottom Line for Health Plans

Key Issues

- Individual/Small Group Market
- Medicaid Expansion/Reform
- Health Savings Accounts
- State High Risk Pools
- Price Transparency
- Private Exchanges
- Opioid Abuse
- Drug Pricing
- Value-based Care
- Telemedicine
- Scope of Practice
- Medicare Advantage
- Regulatory Changes & HHS Resources

Magnitude/scope of change unclear; depends on politics

More or less important depending on legislative proposals

Continued need for solution under any scenario
Leveraging Lab Analytics to Improve Risk Adjustment in Exchange Markets

David Meyer, Vice President, Risk Adjustment, Encounters, Coding and Audit
SCAN HEALTH PLAN

Frank Jackson, Executive Vice President, Payer Markets
PROGNOS


Previously, Dave served as an independent consultant to healthplans, was Corporate VP, Operations (Revenue and Quality) at InnovaCare Health. He has also performed as Sr. Consultant, Risk Adjustment and Health Plan Operations for Dynamic Healthcare Systems, and in other roles with healthplans.
Frank has over 20 years of leadership experience in the payer industry building analytic capabilities and growing business. Prior to Medivo, Frank was SVP of Informatics/CIO at Community Care of North Carolina (CCNC) where he led the building and growing of analytic products to support Medicaid and Medicare customers. Frank is a thought leader in utilizing healthcare data to population manage patients and improve quality outcomes. Prior to CCNC, Frank led the healthplan operations and technology teams at Healthmarkets where he developed and grew supplemental health product lines to $100M. In 2005, Frank managed the technology team at Private Healthcare Systems (MultiPlan) which is the largest national Preferred Provider Organization (PPO) processing over 40 million claims annually. His experience includes senior leadership roles at Kaiser Permanente and Blue Cross Blue Shield of North Carolina where he was early advocate of utilizing data to drive decisions.
Lab Data...for RA?
* ACA Self-Help Group

David Meyer
VP Informatics, SCAN Health Plan
RISE: 11/11/2016

You are in this session because: You are so worried about getting the right risk adjustment data you are looking at LAB...
Your moment of Zen:

- As you head to your horrible job, remember these inspirational words...
- In the long run, we're all dead.

What do we know about lab data...

- Lab Encounters: 10 – 20%
- Lab Values: 20 – 30%
- Lab Reality: 90%

I skipped the part where you suffer for 90 years.
What drives this reality:

- The system is designed to get the right clinical info to the POC - - not to MG /HP administrators
  - Paying FFS: “David Meyer” (& it is checked)
  - Capitated: “Dvid Myer” (w dirty look if you say anything to the staff mbr)
  - Capitated focus is on getting the doctor right...

WHY? Actual Quote from Lab executive:
  “Well.....they are the lowest payed staff we have”

What do they focus on?

Correct lab results – to be fair, most are very good at getting the # right...

...And either:
  - Volume (capitated patients)
  - FFS (you are getting / paying for business class

Before you judge...
Value of Lab Data

- This is one place where doing it on your own may not make sense...
- Registry based strategies offer a fast ramp up.
- Low hanging fruit is likely incremental to your existing analytics.
- Data gaps are real, but can be mitigated to a large extent by someone who has a solid background in this area.

Target Providers:
1. Understanding your lab data can help you understand something about your physicians...not just your patients.

2. Start to understand Disease level “adverse selection” and use that to focus on members and physicians that will give you significant yield.
SCAN - Lab Data

Current Focus:

Building data tracking analytics
• Goal – completeness / gap identification
• 18 current sources of data
• Hospital based and independent labs biggest challenge
• Not even close to using the data as a modeling input

Be a Cross Functional Hero!

In addition to the value for RA (Finance / Actuary)

HUGE value for HEDIS (HCS)
HUGE value for STARS (HCS)
HUGE value for DM and CM (HCS)
Leveraging Lab Analytics to Improve Risk Adjustment

Agenda

1. Risk adjustment challenges
2. Improving risk adjustment with lab analytics
3. How one client is facing risk adjustment challenges with lab analytics
Risk Adjustment Challenges

Importance of Risk Adjustment

- Payers have steadily improved their risk-adjustment so health plans need new methods to "hold gains" and improve payouts
  - New clinical data sources needed
  - Traditional chart pulls based on claims are not enough
  - Clinical insights needed to facilitate provider outreach
  - Payers have very limited view of member health risk profile for newly enrolled

- Managing medical expenses is crucial for ACA exchange and Medicare Population to maintain profitability
  - Identifying health risk with Risk-adjustment process key to early interventions
  - Clinical data specificity informs level of intensity of medical management and operational processes
Risk Adjustment Challenges

Operational Challenges
- Getting members to doctors for diagnosis
- Inefficiencies in chart chases
- Incorrect coding or Dx specificity
- Inaccessibility of provider data
- Potential RADV audits

Data Source Challenges
- No sources of data for new enrollees
- Lack of claims history
- Claims data time lag
- Lack of clinical specificity
- Second data source needed to pinpoint possible coding gaps

How Lab Analytics Improve Risk Adjustment
Augmenting Claim Based Risk-Adjustment With Timely Clinical Insights

Clinical lab insights improves both operational and data related challenges

MORE EFFICIENT
- Allows for more efficient use of payer operational resources
  - Take action on lab data vs. performing expensive and inefficient chart pulls
  - Gain insights months in advance of claims data

MORE COMPREHENSIVE
- Additional health complexity and co-morbidities drives RAF scores
  - 30-40% of health conditions not disclosed in claim
  - Gain historical insights on members where claims are unavailable

MORE ACCURATE
- Clinical accuracy
  - Sidestep errors in billing / claims codes with lab data / clinical truth
  - Sidestep data entry errors in EMR / EHRs
  - Map results to HCCs

Lab Data Provides Unique Value

<table>
<thead>
<tr>
<th></th>
<th>Lab Data</th>
<th>Claims Data</th>
<th>EMR/EHR Data</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Clinical Depth</strong></td>
<td>Tests administered and comprehensive clinical results</td>
<td>No clinical detail, only tests administered</td>
<td>Clinical data often incomplete (gaps may range from 35-65%)</td>
</tr>
<tr>
<td><strong>Reliability</strong></td>
<td>High degree of quality control from source labs</td>
<td>Dependent on provider scrutiny; coding errors frequent</td>
<td>Dependent on physician effort and connectivity to data</td>
</tr>
<tr>
<td><strong>Responsiveness</strong></td>
<td>Rapid, near real-time results</td>
<td>Weeks to months in lag depending on claims processing</td>
<td>Rapid, near real-time results</td>
</tr>
</tbody>
</table>
# Clinical Visibility in Risk Adjustment

## Dramatic Improvements in Coding and Corresponding PMPY

<table>
<thead>
<tr>
<th>No Conditions Coded (Demographic data Only)</th>
<th>Some Conditions Coded (Claims Data Only)</th>
<th>All Conditions Coded (eg using Lab data)</th>
</tr>
</thead>
<tbody>
<tr>
<td>76 year old female</td>
<td>76 year old female</td>
<td>76 year old female</td>
</tr>
<tr>
<td>Medicaid eligible</td>
<td>Medicaid eligible</td>
<td>Medicaid eligible</td>
</tr>
<tr>
<td>DM not coded</td>
<td>DM no manifestations</td>
<td>DM w/ vascular manifestation</td>
</tr>
<tr>
<td>Vascular disease not coded</td>
<td>Vascular disease no complication</td>
<td>Vascular disease w/ complication</td>
</tr>
<tr>
<td>CHF not coded</td>
<td>CHF not coded</td>
<td>CHF coded</td>
</tr>
<tr>
<td>No interaction</td>
<td>No interaction</td>
<td>DM + CHF interaction</td>
</tr>
<tr>
<td>Patient total RAF</td>
<td>Patient total RAF</td>
<td>Patient total RAF</td>
</tr>
<tr>
<td>PMPM</td>
<td>PMPM</td>
<td>PMPM</td>
</tr>
<tr>
<td>$452</td>
<td>$743</td>
<td>$8,921</td>
</tr>
<tr>
<td>PMPY</td>
<td>PMPY</td>
<td>PMPY</td>
</tr>
<tr>
<td>$5,418</td>
<td>$5,921</td>
<td>$16,573</td>
</tr>
</tbody>
</table>

Source: Iora Health, RISE West, September 2016

Data sourced from lab providers provide opportunities to identify conditions before claims are generated or charts are reviewed

---

## Client Use Case

Prognos - Confidential and Proprietary, Not Intended for Further Distribution. All Rights Reserved.
Health Plans Face More Challenges Than Ever

Feeling the pain: Obamacare premiums soar

Unique Challenges Health Plans Face in the ACA Exchange Market

- High turnover of members from year to year
- Lack of data on newly enrolled members
- Members were less healthy than models predicted
- Higher than expected medical claims for members
- Devolving of the risk corridor program
- 5 year penalty for exiting a market
### We Identified the Value of Lab Data as a Historic and Real Time Solution to Understand Our Members Risk

<table>
<thead>
<tr>
<th>Diagnosis</th>
<th>Monitoring</th>
<th>Outcomes</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Who are the patients at risk for disease?</td>
<td>• Is a patient responding to therapy?</td>
<td>• Has the intervention effectively managed the disease?</td>
</tr>
<tr>
<td>• What intervention does he or she need?</td>
<td>• Is his or her disease state improving?</td>
<td>• Has a patient reached a new steady state?</td>
</tr>
</tbody>
</table>

Approximately 70% of medical decisions are based on lab results

---

### However The Lab Data Ecosystem is Inherently Complex

- **Fragmented**
  - 5,000+ Hospital Labs
  - 1,000+ Independent Labs

- **Unstandardized**
  - Thousands of labs with different standards

- **Inconsistent**
  - No universal federal or financial requirement to identify ordering physicians

Lab data sourcing, harmonizing, and analytics requires expertise
There are Many Steps in the Data Processes and Advanced Analytics are Required to Pull the Value From This Data

- **Connectivity**
  - Raw lab data (PHI) aggregated across relevant lab providers

- **Aggregation**
  - Initial data cleaned up to enable downstream manipulations
  - Units / terminology standardized across labs for an “apples to apples” view
  - Holes in the data filled in to maximize the amount of usable data

- **Refinement**
  - Initial data cleaned up to enable downstream manipulations
  - Units / terminology standardized across labs for an “apples to apples” view
  - Holes in the data filled in to maximize the amount of usable data

- **Standardization**
  - Initial data cleaned up to enable downstream manipulations
  - Units / terminology standardized across labs for an “apples to apples” view
  - Holes in the data filled in to maximize the amount of usable data

- **Enrichment**
  - Target patients flagged based on clinical interpretation of multiple lab tests

- **Data Interpretation**
  - Reports and dashboards to access, visualize and communicate data insights

- **Analytics & Visualizations**
  - Reports and dashboards to access, visualize and communicate data insights

1Prognos manages connectivity directly or via third parties based on existing access

---

Prognos and a National Health Plan Create Innovative Solution to Address ACA Challenges

- For newly enrolled members, the health plan provides Prognos with key member identifiers.
- Prognos leverages direct connections to hundreds on labs to pull near real-time historic lab data on new members, collecting and harmonizing the clinical diagnostic data and mapping it against over 500 algorithms to identify historic and ongoing member health risks.
Lab Data Analytics Identify at Risk Members

<table>
<thead>
<tr>
<th>HCC Number</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>G01</td>
<td>Diabetes</td>
</tr>
<tr>
<td>G15</td>
<td>COPD/Asthma</td>
</tr>
<tr>
<td>HCC088</td>
<td>Major Depressive and Bipolar Disorders</td>
</tr>
<tr>
<td>HCC142</td>
<td>Specified Heart Arrhythmias</td>
</tr>
<tr>
<td>HCC130</td>
<td>Congestive Heart Failure</td>
</tr>
<tr>
<td>HCC012</td>
<td>Breast (Age 50+) and Prostate Cancer, Benign/U.…..</td>
</tr>
<tr>
<td>G18</td>
<td>Completed Pregnancy with/without Complications</td>
</tr>
<tr>
<td>AGE1_X_SEVERITY1</td>
<td>Lowest Severity Infant</td>
</tr>
<tr>
<td>HCC056</td>
<td>Rheumatoid Arthritis and Specified Autoimmune Disorders</td>
</tr>
<tr>
<td>HCC120</td>
<td>Seizure Disorders and Convulsions</td>
</tr>
</tbody>
</table>

The Results...

- Member health risk is identified within a few days of member enrollment.
- Proper risk adjustment payment is received from the first month, unlike historically having to wait for month for claims.
- High risk members are identified earlier for care management programs helping to improve their health status and lower the cost of care.
Thank you!

Questions?