

The Value of Laboratory Data and Addressing Payer Challenges with Clinical Lab Results

Presented by Bob Maluso

Agenda

- Challenges Facing Health Plans
- The Power and Challenges of Clinical Lab Data
- How Clinical Insights Can Solve Problems of Payers
- Client Use Case in ACA Exchange Market
- Leveraging Lab Data for Quality Management
- Questions?

Challenges Facing Health Plans

Health Plans Face More Challenges Than Ever

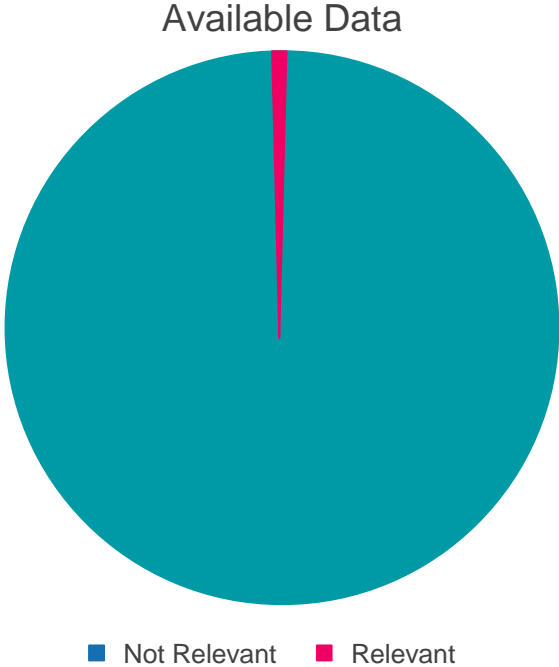
Feeling the pain: Obamacare premiums soar

NEWS, TOP STORIES



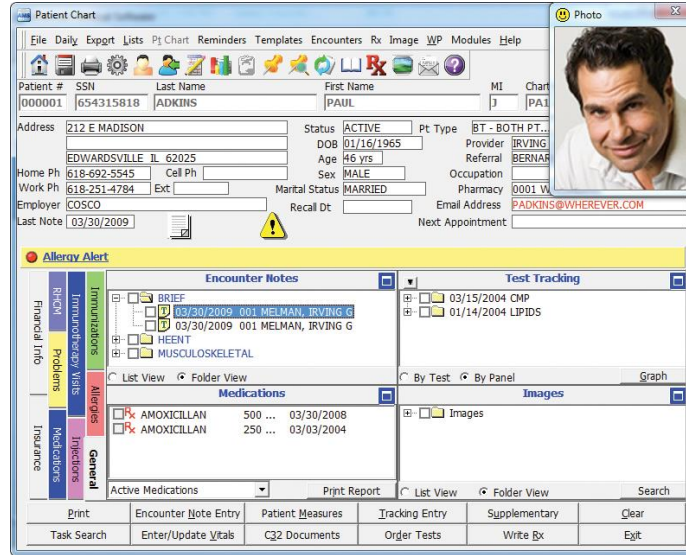
Big Data vs. Relevant Data

The Data Problem: Relevance & Volume



Source: Chillmark Research

Critical Decisions Based on Untimely, Missing, Misleading or Incomplete Data



The screenshot shows a patient chart for Irving G. Melman. The patient's information includes: Patient # 000001, SSN 654315818, Last Name ADKINS, First Name PAUL, MI J, Chart PA1. Address: 212 E MADISON, EDWARDSVILLE IL 62025. Home Ph 618-692-5545, Cell Ph 618-251-4784, Ext. Employer COSCO, Last Note 03/30/2009. Status ACTIVE, Pt Type BT - BOTH PT., DOB 01/16/1965, Age 46 YRS, Sex MALE, Referral BERNAR. Occupation 0001 W, Pharmacy PADKINS@WHEREVER.COM, Email Address PADKINS@WHEREVER.COM, Next Appointment. The interface also displays an Allergy Alert, Encounter Notes (BRIEF, 03/30/2009 001 MELMAN, IRVING G, HEENT, MUSCULOSKELETAL), Medications (AMOXICILLAN 500 ... 03/30/2008, AMOXICILLAN 250 ... 03/03/2004), and Test Tracking (03/15/2004 CMP, 01/14/2004 LIPIDS). A sidebar on the left lists categories like Financial Info, Problems, Allergies, and Insurance.



These limitations affect your ability to raise your scores and maximize your incentive reimbursements
30-40% of health conditions are NOT disclosed in claims

More Than One-Third of Diabetes Cases are Miscoded

38%

of diagnosed diabetic populations did not have diabetes diagnosis in their medical records and were only identified by the presence of diabetic medications



- Related medications
- Symptoms and clinical findings
- Lab values and diagnostic procedures
- Risk factors and complications
- Other factors

Source: *Canadian Medical Association Journal*

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
- Payments based of Risk Basis
- Platinum Plans on decrease
- Subsidies continue to be critical
- Most profitable - at least 1 HCC₁
- Extremely Complex cases may not be fully reimbursed by R/A
- Payers need to compete on cost, quality and efficiency.

1 Wakely Creating Stability in Undstable Times December 2017

Clinical Visibility in Risk Adjustment

Dramatic Improvements in Coding and Corresponding PMPY

No Conditions Coded (Demographic data Only)		Some Conditions Coded (Claims Data Only)		All Conditions Coded (eg using Lab data)	
76 year old female	.468	76 year old female	.468	76 year old female	.468
Medicaid eligible	.177	Medicaid eligible	.177	Medicaid eligible	.177
DM not coded	-	DM no manifestations	.118	DM w/ vascular manifestation	.368
Vascular disease not coded	-	Vascular disease no complication	.299	Vascular disease w/ complication	.410
CHF not coded	-	CHF not coded	-	CHF coded	.368
No interaction	-	No interaction	-	DM + CHF interaction	.182
Patient total RAF	.645	Patient total RAF	1.062	Patient total RAF	1.973
PMPM	\$452	PMPM	\$743	PMPM	\$1,381
PMPY	\$5,418	PMPY	\$8,921	PMPY	\$16,573

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

Source: Iora Health, RISE West, September 2016

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

Medicare Star Ratings and HEDIS Quality Scores

Quality performance metrics such as HEDIS, CMS Star Ratings and standardized core quality measures (CMQs) give consumers objective indications of healthcare payer quality.

- Claims alone do not tell the full picture
- Lab Data Can be used as a supplemental data source to close HEDIS gaps.
- Lab data enhances more accurate identification of health state of Medicare members and can increase star ratings.
 - Increasing Star Rating from 3.5 to 4.5 equates to \$16 PMPM in additional revenue.
 - For 100,000 member Medicaid Plan = \$19.2M in additional revenue.

The Power and Challenges of Clinical Lab Data

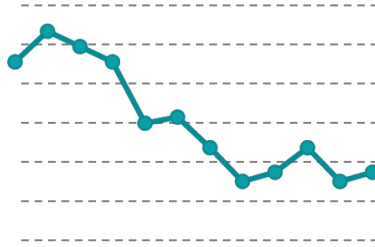
We Identified the Value of Lab Data as a Historic and Real Time Solution to Understand Our Members Risk

Diagnosis



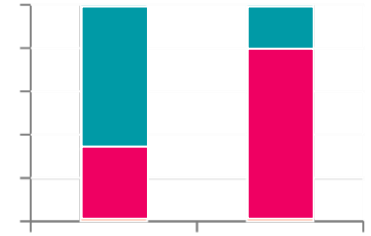
- Who are the patients at risk for disease?
- What intervention does he or she need?

Monitoring



- Is a patient responding to therapy?
- Is his or her disease state improving?

Outcomes

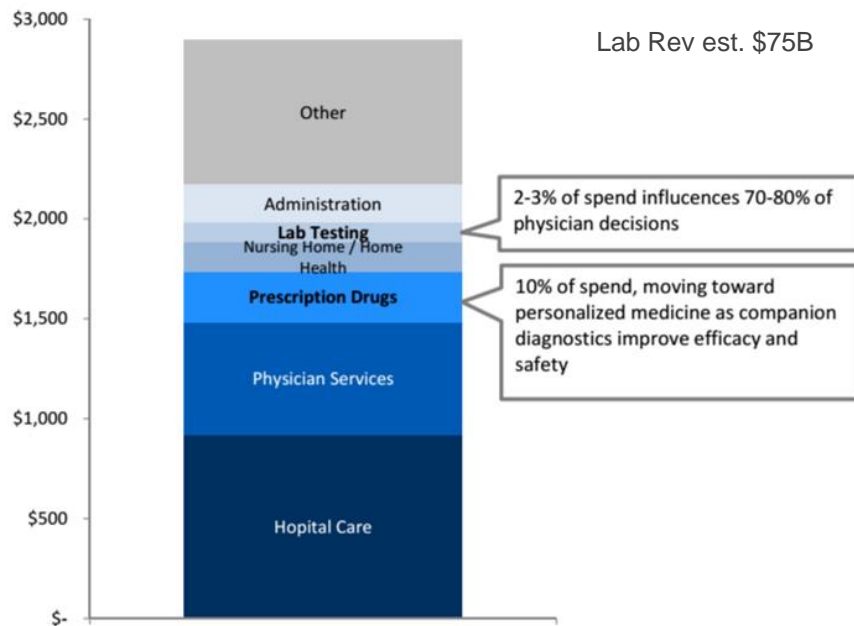


- Has the intervention effectively managed the disease?
- Has a patient reached a new steady state?

Approximately 70% of medical decisions are based on lab results

Clinical Lab Testing Influences over 70% of Physician Decisions, But Data Set Analysis Vastly Underutilized by Industry

Figure 1. 2013 Estimated U.S. Healthcare Spend \$2.9 Trillion



Source: Cain Brothers: "STRATEGIES FOR HEALTHCARE LEADERS, Volume 78, Summer 2015

Diagnostics Data Is...

INFLUENTIAL

70% or more of medical decisions are based on lab testing

TIMELY

Diagnostic data can be delivered within a few days of testing, well before treatment decisions have been made

ACCURATE

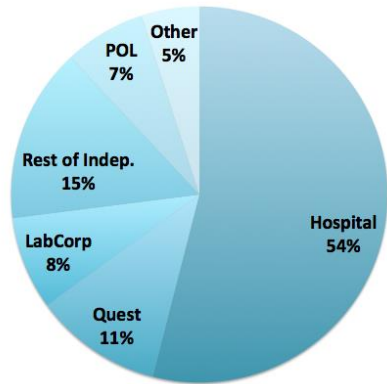
Diagnostic testing is conducted using rigorous statistical analysis that includes extensive quality control

TARGETED

Diagnostic data is the only way to find patients based on result ranges

The lab data ecosystem is inherently complex

Fragmented



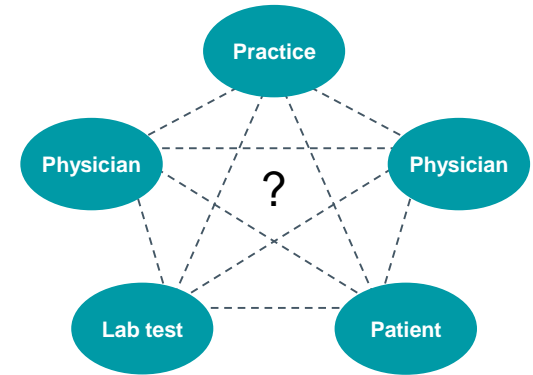
5,000+ Hospital Labs
1,000+ Independent Labs

Unstandardized



Thousands of labs with
different standards and
multiple servers within
each lab

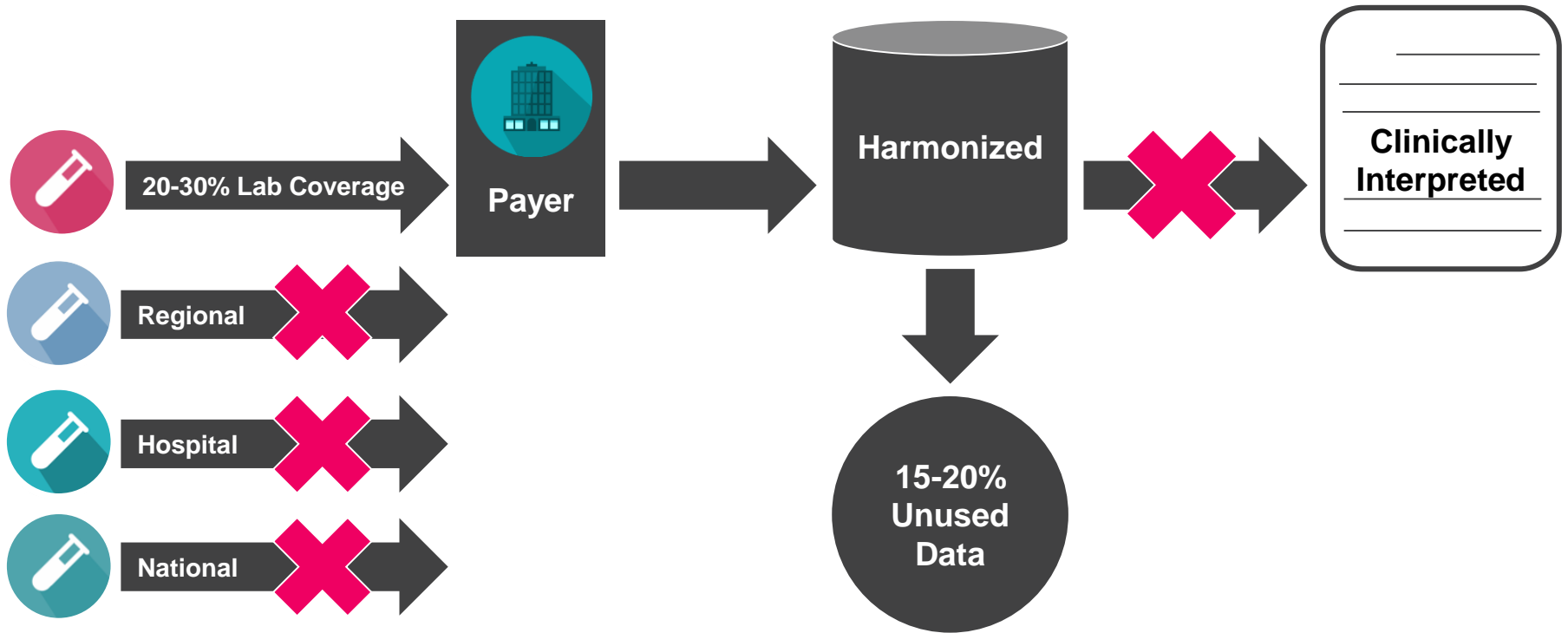
Inconsistent



No universal federal or
financial requirement to
identify ordering physicians

Lab data sourcing, harmonizing, and analytics requires expertise

Lab data processing inefficient



How Lab Data Can Provide Clinical Insights to Solve Payer Challenges

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

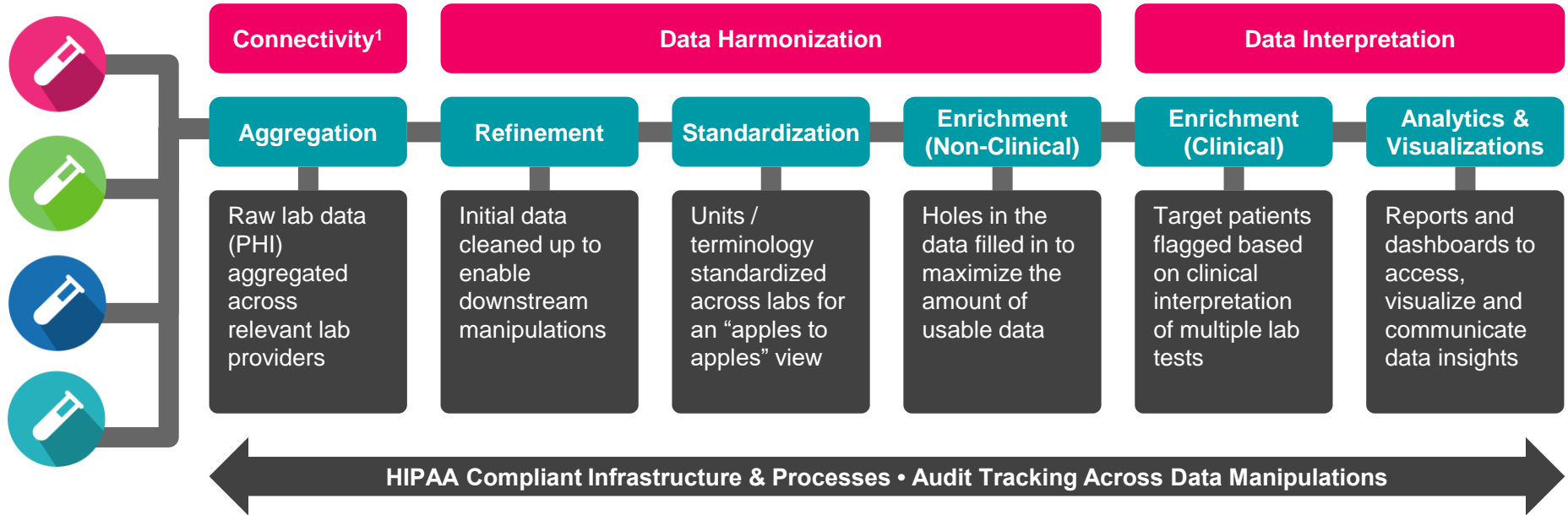
- 30-40% of health conditions not disclosed in claim
- Gain historical insights on members where claims are unavailable

MORE ACCURATE

Clinical accuracy

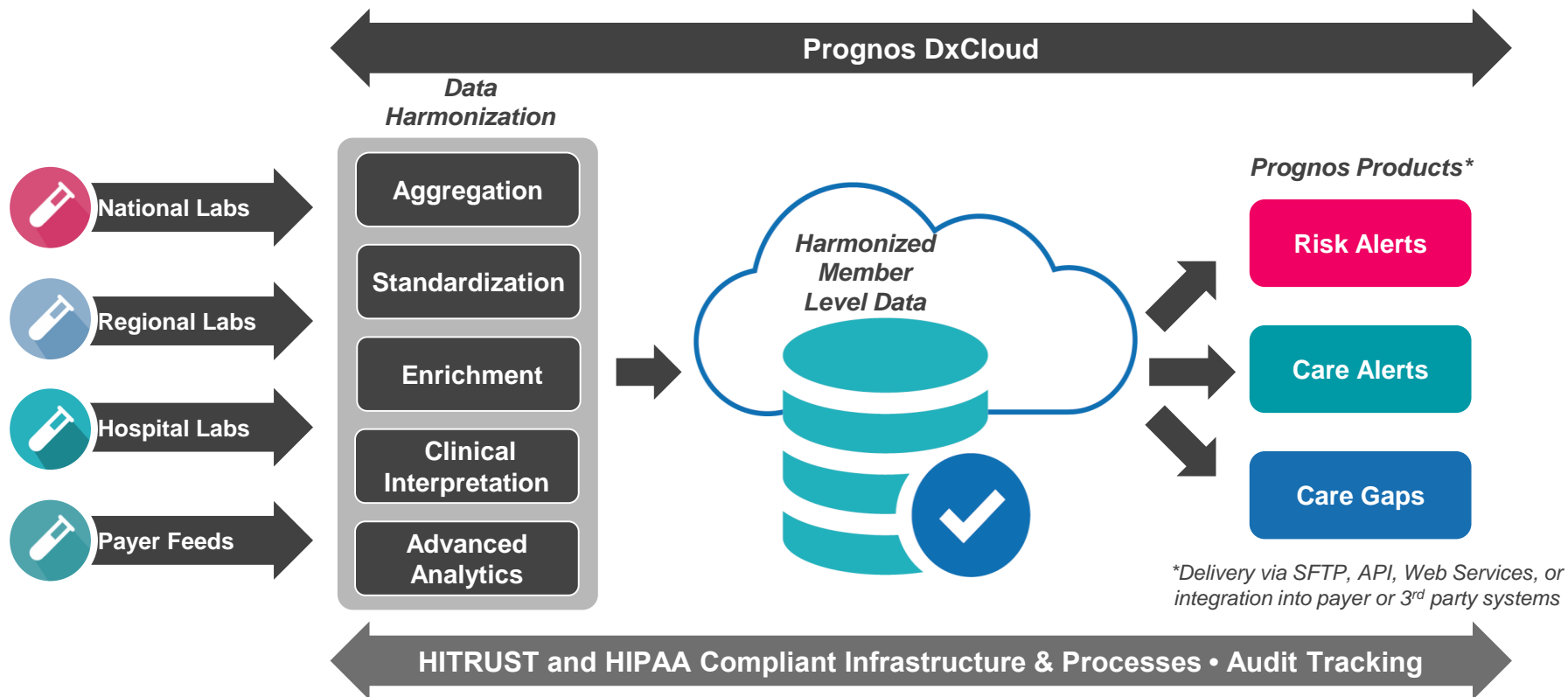
- Sidestep errors in billing / claims codes with lab data / clinical truth
- Sidestep data entry errors in EMR / EHRs
- Map results to HCCs

There are Many Steps in the Data Processes and Advanced Analytics are Required to Pull the Value From This Data



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

Prognos DxCloud enables access to lab data and analytics



Prognos products address key challenges in risk adjustment, disease management, and quality reporting

Risk Alerts

Key challenge: health plans need to identify health risks to optimize risk adjustment. Medical claims extracts and chart chases lack insight and are inefficient

***Prognos Risk Alerts** identify historic HCC's to support risk adjustment and improved reimbursement*

Care Alerts

Key challenge: health plans lack the ability to detect disease early and do so with with clinical specificity to support provider-payer collaborations

***Prognos Care Alerts** identify and monitor overall population health to flag critical care conditions*

Care Gaps

Key challenge: health plans require documentation to close high value HEDIS / Stars gaps, however this documentation is often missing or inaccessible

***Prognos Care Gaps** reports provide lab data extracts on members required to close gaps and drive quality ratings*

Analytics provide historic and going forward visibility

	Historic Insights	Going Forward Insights
Features	<p>24-month lookback on newly enrolled members or current members requiring clinical visibility</p>	<p>Weekly alerts on at-risk members as clinical intel (e.g. HbA1c values) is generated</p>
Impact	<ul style="list-style-type: none">• Stratify and target high-risk members from day one• Begin care management and risk adjustment operations well before the first claim is generated	<ul style="list-style-type: none">• Manage members and providers in real-time to drive clinical programs and close gaps in care• Minimize member and provider abrasion via highly targeted outreach and communications

Breadth and depth of disease characterization

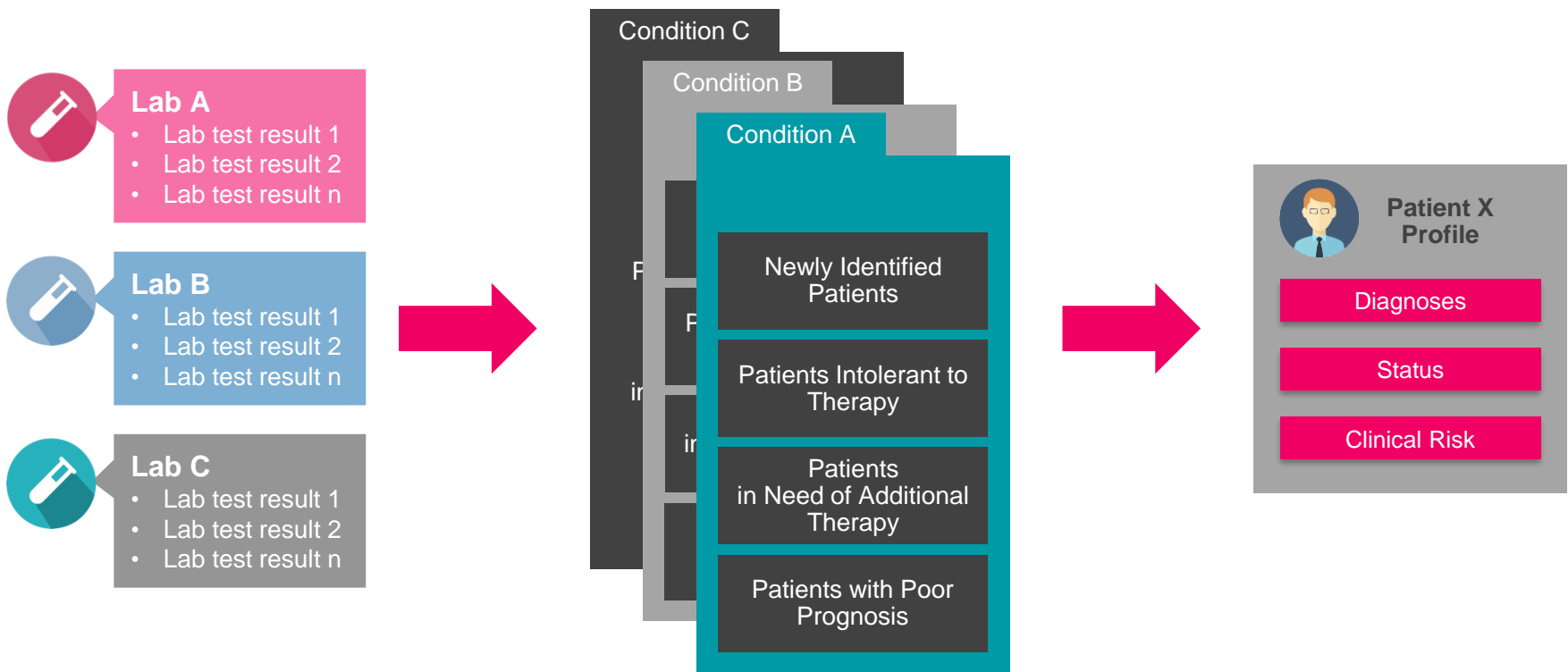
The screenshot displays the 'Patient Profile Catalog' interface, which is organized into a grid of disease categories. Each category contains several patient algorithms, each represented by a card with a title, a progress indicator (green bar), and a list of relevant tests or patient groups. The categories shown include:

- CML**: CML - Relevant Tests, CML - Dx Patients, CML - Newly Identified Patients, CML - Newly Identified Patients w/ BCR-ABL <= 10%, CML - Newly Identified Patients w/ BCR-ABL > 10%, CML - Existing Patients at MMR, CML - Existing Patients not at MMR.
- Acromegaly**: Acromegaly - Relevant Tests, Acromegaly - Dx Patients, Acromegaly - Patients with Abnormally High IGF-1 Test Results, Acromegaly - Patients with Abnormal High IGF-1 Test Results and Pituitary Glad Neoplasm ICD-9 Code or ICD-10 code, Acromegaly - Patients with Abnormal High IGF-1 Test Results and Acromegaly ICD-9 or ICD-10 Code, Acromegaly - Existing Patients with Abnormally High IGF-1 Test Results.
- HCV**: HCV - Relevant Tests, HCV - Dx Patients, HCV - Patients under treatment, not at goal, HCV - Patients under treatment, success, HCV - Patients warehoused, HCV - Patients Pending/Lost, HCV - Patients tested for HCV Genotype.
- HAE**: HAE - Relevant Tests, HAE - Dx Patients.
- NSCLC**: NSCLC - Relevant Test Results, NSCLC - Newly Diagnosed Metastatic patients.
- mMelanoma**: Metastatic Melanoma - Relevant Test Results, Melanoma - Newly Identified Metastatic Melanoma Patients, Melanoma - Metastatic Melanoma Patients tested for BRAF mutation, Melanoma - Metastatic Patients with positive BRAF mutation, Melanoma - Metastatic Melanoma Patients tested for NRAS mutation, Melanoma - Metastatic Patients with positive NRAS mutation.
- Iron Overload**: Iron Overload - Relevant Tests, Iron Overload - Dx Patients, Iron Overload - Newly Diagnosed Patients, Iron Overload - Existing Patients, Iron Overload - Newly Diagnosed Patients with SF < 1000, Iron Overload - Existing Patients with SF < 1000, Iron Overload - Newly Diagnosed.
- Renal Impairment**: Renal Impairment - Relevant Tests, Renal Impairment - Dx Patients, Renal Impairment - Patients with mild eGFR decrease, Renal Impairment - Patients with mild to moderate eGFR decrease, Renal Impairment - Patients with moderate to severe EGFR decrease, Renal Impairment - Patients with severe EGFR decrease.
- Diabetes**: Diabetes - Concept Map, Diabetes - Relevant Tests, Diabetes - Basic Definitions, Diabetes - Dx Patients, Diabetes - Newly diagnosed Patients, Diabetes - DX Patients tested that may Require Treatment Change, Diabetes - Dx Patients w/o ICD-9 or ICD-10 Code.
- CLL**: CLL - Relevant Tests, CLL - Dx Patients, CLL - Newly Dx Patients, CLL - Patients prepared for treatment, CLL - Patients who do not currently require treatment, CLL - Patients in remission, CLL - Patients with Relapse/Refractory.
- Other categories**: Multiple Myeloma, Hyperlipidemia, Breast Cancer, Cystinuria, BASD.

Two specific cards are highlighted with blue boxes: 'Diabetes - Dx Patients' and 'Diabetes - DX Patients tested that may Require Treatment Change'.

Prognos has an extensive catalog with over 900 patient algorithms in 50+ conditions. Chart is illustrative, not comprehensive.

Prognos harmonizes multiple tests across multiple labs to create longitudinal patient profiles



Conditions with Prognos Care Alerts

- Breast Cancer
- Colorectal Cancer
- Prostate Cancer
- ALL
- AML
- Bladder Cancer
- CLL
- CML
- Hepatocellular Carcinoma
- MDS
- mMelanoma
- Multiple Myeloma
- Myelofibrosis
- Neuroendocrine Tumor
- NSCLC
- Pancreatic Cancer

- Thyroid Cancer
- HIV
- HCV
- Rheumatoid Arthritis
- Chronic Kidney Disease (CKD)
- Multiple Sclerosis
- Diabetes (Type I)
- Diabetes (Type II)
- Asthma
- Ankylosing Spondylitis
- Allergy
- Afib
- Hyperlipidemia
- Hyperuricemia/Gout
- Hyperkalemia
- IBD

Client Use Case in ACA Exchange Market

Limited visibility into new ACA enrollees resulted in losses

Client Challenge

- Large national health plan with over 300,000 ACA lives across 9 states
- High degree of churn (30%) = no visibility on health status on a third of the exchange population each year
- Missed diagnoses and disease complexity, particularly comorbidities, resulted in inability to manage members and forgone risk adjustment revenue

Prognos Approach

- New enrollment historic risk alerts identified hard to detect conditions and complexities not flagged in claims
- Utilized early identification of risk to direct member home visits & provider interventions
- Identified new HCC's in 10% members increasing R/A scores 3x-5x

Risk Alerts: Provide Member Health Insights

Prognos' Risk Alerts provide historical and ongoing views into member's health history by identifying risks (mapped to HCCs) & enabling early detection of chronic disease.

Risk Alerts map harmonized lab test results to applicable HCCs using Prognos algorithms that identify severity from lab results.

Leveraging lab data across payers and across clinical conditions, applicable comorbidities are also identified and reported

Risk Alerts can go back 24 months to retrieve member lab results.

Map to top conditions and HCCs for ACA & Medicare Advantage

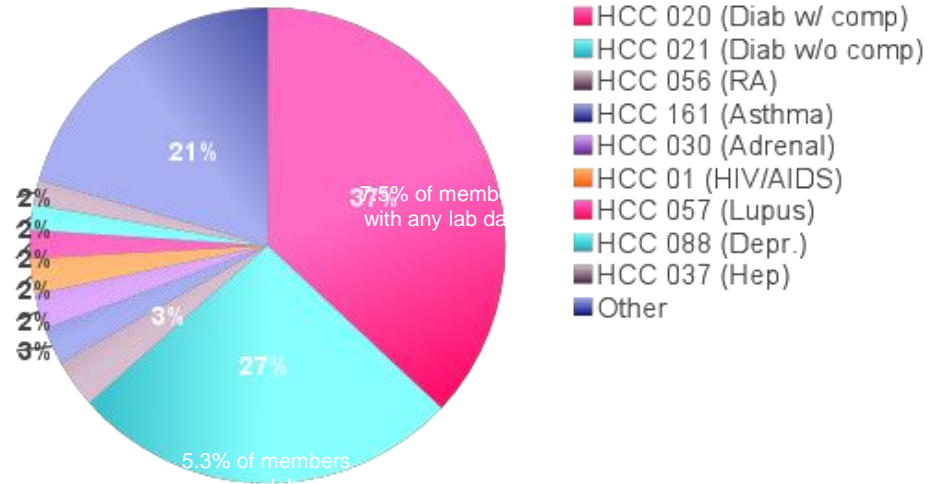
- **Summary Level**
 - Patient Information
 - All HCCs Identified from detail below
 - HCC Descriptions
- **Detail Level**
 - Patient Information
 - HCC code(s)
 - Diagnosis code(s)
 - Loinc Code
 - Test Name
 - Test Result
 - Units
 - Test Date
 - Ordering Physician Information (NPI)
 - Physician Specialization

Risk Alerts - Value for ACA Populations

Expansive National Lab Coverage including health systems that reference to national labs

- For newly enrolled members, Prognos found historic risk in **20% of members that did not show in subsequent claims** - first 9 months
- Even longer term members, Prognos found new **risk or additional complexity in 10% of members** that did not show in claims
- National client used risk alerts for early disease management and stratification of its new enrolled ACA members
- National Client increased their risk adjustment in certain disease areas 3x-5x

Prognos applies algorithms to find hard to detect risk



Care Gaps: Leveraging Lab Data for Quality Management

What does the Prognos **Care Gaps** product do?

Care Gaps accelerate steady **improvement of a Payer's HEDIS scores** through streamlined generation of supplemental data qualifier feeds.

*We target & locate hard to find member Lab Test Results and Test Dates for use as **Supplemental Data** to fulfill **HEDIS Care Gap** reporting requirements.*

Prognos has demonstrated the ability to **close 10-12%** of HEDIS/Star gaps utilizing retrospective lab data resources.



CARE GAPS uses directed search functions against lab data to improve HEDIS numerators and close gaps

Payer specifies HEDIS Reporting Gaps for particular members in a special CARE GAPS roster sent to Prognos

Prognos searches Lab results for that member in multiple Lab Repositories to identify Lab Results that match the Gap criteria.

CARE GAPS REPORT DETAIL FOR THE PERIOD <Nov 1 2017 - Nov 30 2017>					Lab Tests matched (X) and Test Date		HEDIS Measure
MEMBER ID	MEMBER FIRST	MEMBER LAST	GENDER	DOB	Test Name	Test Date	HEDIS Measure
112	Jeff	Doe	M	12/25/2000	HbA1C	10/18/2017	CDC
112	Jeff	Doe	M	12/25/2000	eGFR	10/18/2017	CKD
112	Jeff	Doe	M	12/25/2000	BUN	10/18/2017	CKD
112	Jeff	Doe	M	12/25/2000	ACR	10/18/2017	CKD
112	Jeff	Doe	M	12/25/2000	PCR	10/18/2017	CKD
112	Jeff	Doe	M	12/25/2000	RFigm	10/18/2017	RA
123	John	Doe	M	12/20/1947	HbA1C	10/10/2016	CDC
233	John	Doe	M	12/26/1937	FOBT	12/12/2016	COL
234	Jim	Doe	M	12/21/1953	HbA1C	12/12/2016	GDC
234	Jim	Doe	M	12/21/1953	eGFR	12/12/2016	CKD
234	Jim	Doe	M	12/21/1953	BUN	12/12/2016	CKD
234	Jim	Doe	M	12/21/1953	ACR	12/12/2016	CKD
344	Jean	Doe	F	12/27/1957	HPV	12/12/2016	CCS
344	Jean	Doe	F	12/27/1957	NAAT	12/12/2016	CHL
455	Jane	Doe	F	12/22/1947	HbA1C	10/18/2017	CDC
455	Jane	Doe	F	12/22/1947	LDL-C	10/18/2017	CVD
455	Jane	Doe	F	12/22/1947	eGFR	12/13/2016	CKD
455	Jane	Doe	F	12/22/1947	BUN	12/13/2016	CKD
456	Joe	Doe	M	12/28/1967	HbA1C	12/17/2016	CDC
456	Joe	Doe	M	12/28/1967	PSA	10/26/2015	PSA
457	Joan	Doe	F	12/29/1947	RFigm	10/16/2017	RA

The results are provided as Supplemental Data to close specific HEDIS gaps for that specific member.

Care Gaps

Thank You

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