



# Data Analytics Platforms



NAACOS Summer 2021 Boot Camp

June 22, 2021



# NAACOS 2021

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Kimberly Aswell  
Vice President, Technical Product Management

# For us, it was advantageous to **build our own** population health management tool



- **Why** did we decide to do it?
- **What** did we do?
- **How** does it work?



# Several principles guided our build/buy decision-making process



## BUILD

*We want to build things that are unique to our approach to VBC.*

*We want to build most components of provider/user-facing technology because of the impact on driving outcomes.*

**Examples:** Predictive Models; Patient Prioritization; End-user workflows



## BUY/PARTNER

*We want to buy things that we consider to be commodities and can be the same for everyone.*

**Examples:** Risk Models; Medication History; Telehealth; Interfaces; Data Mappings

# We have a diverse in-house team available to support our ACOs

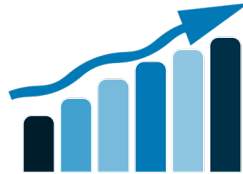


## Software Development



Software Engineers,  
Designers, Product  
Managers

## Data Insights



Business & Data Analysts,  
Research Scientists

## Coaching, Training & Workflow Optimization



Industrial Engineers,  
Educators, Industry & Policy  
Experts, Clinicians

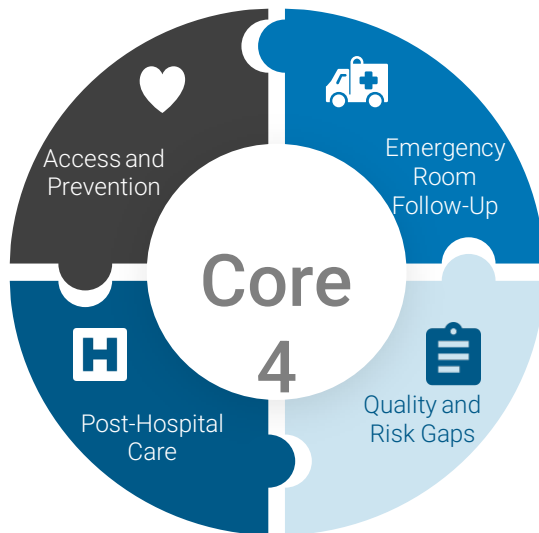
# How does it all come together?

## Invest in high-quality data sources

### Purchase or Connect

- Risk Algorithms
- EHR Integration
- HIEs
- Claims (CCLF)
- Claims (Commercial)
- ADT
- Medication History

## Use Data to prioritize initiatives unique to your ACO



## Use Technology to drive user-level behavior change

**Bailey, Kathleen** 12-04-1943 (Age: 76) 01-07-2020 10:15 AM

Seeing Today: Dr. Victor Teot  
Assigned PCP: Unassigned  
Paper: NESP-Medicare

Year to Date Risk Score: 0.451  
2019 Risk Score: 1.380  
CM Status: Not Reviewed

**History of Falls, Syncope**

**RISK SUGGESTIONS** Do any of these diagnoses apply? YTD Status: 31% of total opportunity billed

**SUGGESTED DIAGNOSIS**

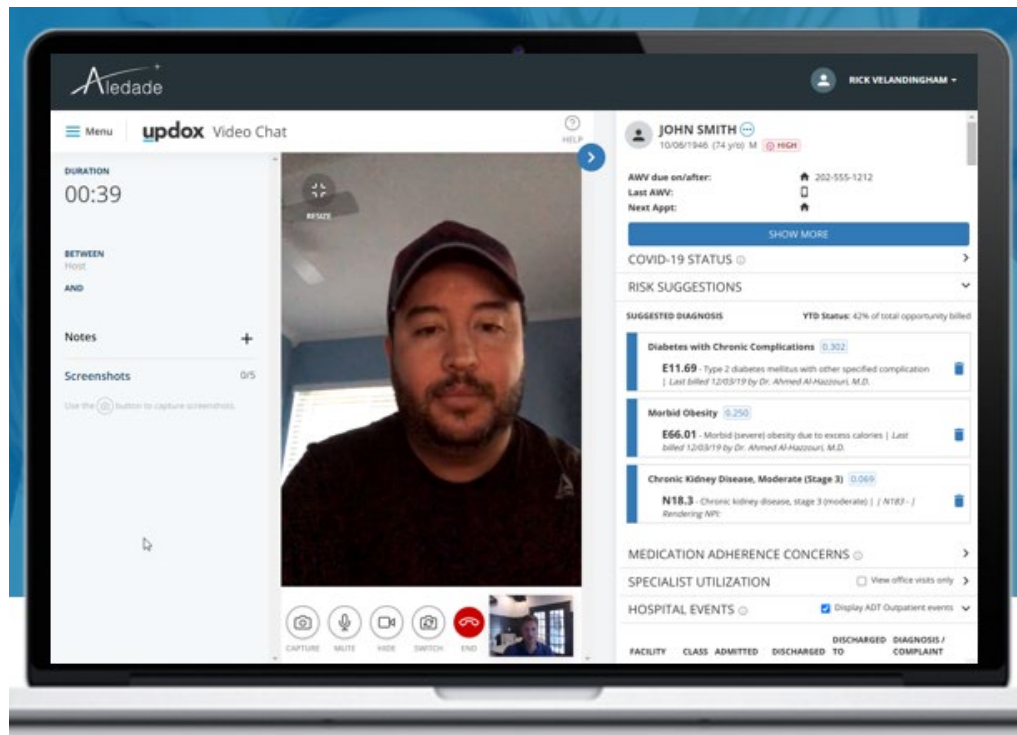
- MM6.9** Rheumatoid arthritis, unspecified | Last billed 11-13-2018 by Associated Clinical Laboratories
- M20.0** Dilated cardiomyopathy | Last billed 10-09-2018 by Christiana Care Health Services, Inc.
- M23.9** Cardiomyopathy, unspecified | Last billed 10-17-2018 by Dr. Josephine Andrews, M.D.
- D68.6** Thrombocytopenia, unspecified | Last billed 12-28-2018 by Dr. Fabio Schuchman, M.D.
- N18.3** Chronic kidney disease, stage 3 (moderate) | Last billed 08-28-2019 by Dr. Shirley Nagel, M.D.

**NON-ADHERENT MEDS** MEDICATION ON DATE (2019-01-01)  
Non-adherent medication data not available for this patient

**SPECIALIST UTILIZATION**  
No specialist visit data

HOSPITAL EVENTS (Last 3 Events)				PREVENTIVE SERVICES		
Facility	Class	Admitted	Discharged	Name	Provider	Date
Florida Hospital - Orlando	ED	11-16-2019		Adv Care Plan (A4)	Newsworld@n, Syst	08-05-2019
Ocala Regional Medical Center	ED	05-08-2019	05-08-2019	Cervical CA Screen (21)		
Ocala Regional Medical Center	IP	11-14-2018	11-18-2018	DEA (B5-1)	Mansfield, Ela	07-06-2017
Florida Hospital - Kissimmee	ED	04-28-2016	04-28-2016	Flu Shot (A2)	Arman, Stephan	07-30-2019
				Meningococ (55-76)	Jank, Cara	01-20-2017
				Pneumococ (B5-1)	Wise Clinical Diagnostics LLC	12-25-2018
				Pharvac (B5-1)		
				Shingles vaccine (25-1)		

# We've found opportunities to partner without compromising our desire to control the end-user experience



# Advice regarding Build/Buy

- If you build for yourself you can make a lot of simplifying assumptions
- Invest heavily in the right data sources
- Store your data
  - Store data that you don't think you need
  - Store multiple versions of data
  - Store clicks/interactions to sharpen your tools over time
- Building allowed us to be **outcomes focused** vs. feature focused
- Avoid conference room design: Go out and observe and speak to the people who are going to use it



# Building our own solution offered us **greater control**

## Surveillance

- What's going on with my patients?
- Are practices doing the work?
- What opportunities are still open?



## Workflow

- Can we help providers see and close coding gaps?
- How do we ensure each staff member is working at the top of their license?
- How can we optimize the EHR workflow?



## Coaching/ Adoption

- Help users know how all of this work relates to clinical care
- Provide education and training

# How do you get provider adoption of your tools?

**Bailey, Kathleen** 12-04-1943 (Age: 76) 01-07-2020 10:15 AM

Seeing today: Dr. Victor Test\* Year to Date Risk Score: 0.451  
Assigned PCP: Unassigned 2019 Risk Score: 1.980  
Payer: MSP-Medicare CM Status: Not Reviewed

**History of Falls, Syncope**

**RISK SUGGESTIONS** Do any of these diagnoses apply? YTD Status: 31% of total opportunity billed

**SUGGESTED DIAGNOSIS**

- Rheumatoid Arthritis and Inflammatory Connective Tissue Disease** (0.421)  
 M06.9 - Rheumatoid arthritis, unspecified | Last billed 11-13-2018 by Associated Clinical Laboratories
- Congestive Heart Failure** (0.331)  
 I42.0 - Dilated cardiomyopathy | Last billed 10-09-2018 by Christiana Care Health Services, Inc.  
 I42.9 - Cardiomyopathy, unspecified | Last billed 10-17-2018 by Dr. Jayaseelan Ambrose, M.D.
- Coagulation Defects and Other Specified Hematological Disorders** (0.192)  
 D69.6 - Thrombocytopenia, unspecified | Last billed 12-29-2018 by Dr. Fabio Echavarria, M.D.
- Chronic Kidney Disease, Moderate (Stage 3)** (0.069)  
 N18.3 - Chronic kidney disease, stage 3 (moderate) | Last billed 08-28-2019 by Dr. Shirley Nagef, M.D.

**NON-ADHERENT MEDS** PROPORTION OF DAYS COVERED (PDCD) = 50% IS NON-ADHERENT  
Non-adherent medication data not available for this patient

**SPECIALIST UTILIZATION**  
No specialist visit data

**HOSPITAL EVENTS** (ECH/IBS/IPP) 30-DAY RELEASHT **PREVENTIVE SERVICES** NO DATE = NO CLAIMS FOUND

Facility (Last 5 Events)	Class	Admitted	Discharged	Name	Provider	Date
Florida Hospital - Orlando	ED	11-16-2019		ABV (AB)	Naseeruddin, Syed	08-05-2019
				Adv Care Plan (AB)		
Orlando Regional Medical Center	ED	05-08-2019	05-08-2019	Cervical CA Screen (S1+)		
Orlando Regional Medical Center	IP	11-14-2018	11-18-2018	DEXA (S+)	Mavrofidis, Elia	07-06-2017
				Ru Shot (AB)	Asmann, Stephen	07-30-2019
				Mammogram (50-74)	Jakobi, Cara	01-25-2017
Florida Hospital - Kissimmee	ED	04-28-2016	04-28-2016	Pneumovax (S+)	Vista Clinical Diagnostics Llc	12-25-2018
				Prevnar (S+)		
				Shingles vaccine (S0+)		

- Meet Providers where they are
- The important thing is that providers engage with the data - it doesn't really matter *how* they do that



# Community Care Partnership of Maine: Navigating Data Analytic Platforms and Services

Tuesday, June 22, 2021

COMMUNITY CARE  
PARTNERSHIP OF MAINE

103 Maine Avenue | Bangor, Maine | [www.CCPMaine.org](http://www.CCPMaine.org)



# Community Care Partnership of Maine by the numbers

June 2021

# 8

Aetna | Aetna Medicare Advantage | Anthem | Anthem Medicare Advantage | Cigna | Harvard Pilgrim Health Care | MaineCare Accountable Communities Program | Medicare Shared Savings Program

## Payer Agreements



# 3,750

## Employees

Across Our Member Organizations

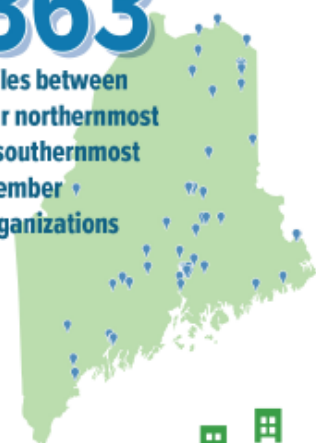
# 245,000



## Patients Served Annually

# 363

## Miles between our northernmost & southernmost member organizations



# 18

## Member Organizations

15 FQHCs

## 3 Community Hospitals

Bucksport Regional Health Center | Cary Medical Center | DFD Russell Medical Center | Eastport Health Care, Inc. | Fish River Rural Health | Greater Portland Health | Harrington Family Health Center | Health Access Network | Hometown Health Center | Islands Community Medical Services, Inc. | Katahdin Valley Health Center | Millinocket Regional Hospital | Nasson Health Care | Penobscot Community Health Care | Pines Health Services | Sacopee Valley Health Center | St. Croix Regional Family Health Center | St. Joseph Healthcare



# \$36.5 million

## in savings generated under the Medicare Shared Savings Program to date with \$16.4 million returned to CCPM and its member organizations



# 293

## Primary Care Providers



# 80,000

## Attributed Lives Overseen



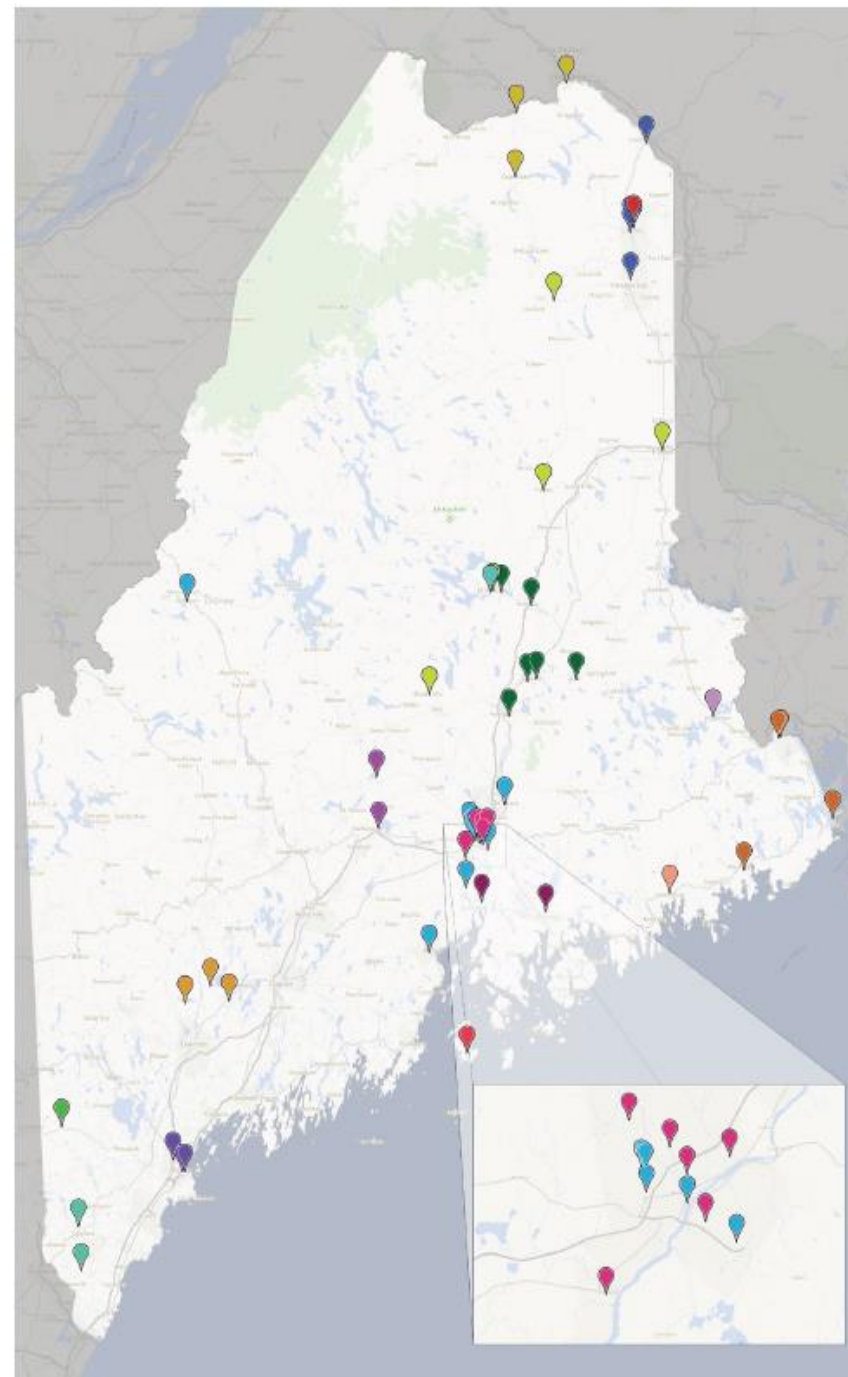
# Our Mission

Community Care Partnership of Maine (CCPM) is dedicated to improving the collective health of our communities through the **coordination of sustainable, innovative, and effective patient-centered care.**

CCPM member organizations are committed to **collaboration, resource sharing, and the implementation of best practices** for improving the patient and care team experience, achieving high-quality clinical outcomes, and managing costs.

**COMMUNITY CARE  
PARTNERSHIP OF MAINE**

103 Maine Avenue | Bangor, Maine | [www.CCPMaine.org](http://www.CCPMaine.org)



- Bucksport Regional Health Center**  
Bucksport • Ellsworth
- Cary Medical Center**  
Caribou
- DFD Russell Medical Center**  
Turner • Leeds • Monmouth
- Eastport Health**  
Eastport • Machias • Calais
- Fish River Rural Health**  
Eagle Lake • Fort Kent • Madawaska
- Greater Portland Health**  
Portland • South Portland
- Harrington Family Health Center**  
Harrington
- Health Access Network**  
Lincoln • Lee • Medway  
Millinocket • W. Enfield
- Hometown Health Center**  
Newport • Dexter
- Islands Community Medical Services, Inc.**  
Vinalhaven
- Katahdin Valley Health Center**  
Millinocket • Ashland • Houlton •  
Patten • Brownville
- Millinocket Regional Hospital**  
Millinocket
- Nasson Health Care**  
Springvale • North Berwick
- Penobscot Community Health Care**  
Bangor • Brewer • Old Town  
Belfast • Winterport • Jackman
- Pines Health Services**  
Caribou • Presque Isle • Van Buren
- Sacopee Valley Health Center**  
Porter
- St. Croix Regional Family Health Center**  
Princeton
- St. Joseph Healthcare**  
Bangor • Brewer • Hampden

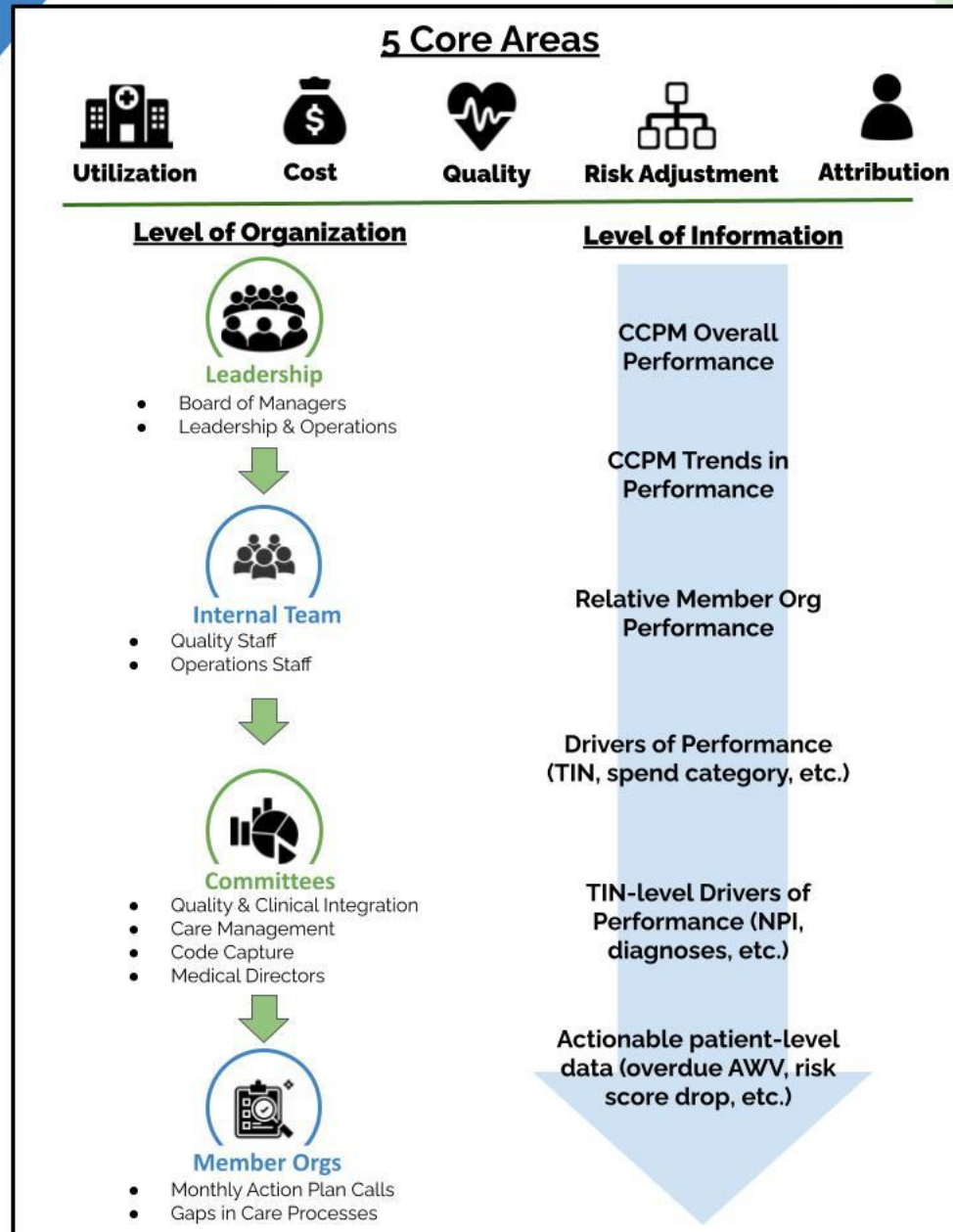
# Differentiating Factors

- FQHC and small community hospital comprised and informed model
- Attribution agnostic approach
- Best practices valued over standardization
  - Commitment to keeping care local and informed by best practices



## Our Process:

- Identified core areas of focus for data management and analytics
- Inventoried currently available for each of the 5 core areas
- Inventoried relevant stakeholders at all levels of the organization
- Created nested reports in each core area (ACO overall, TIN level, NPI level, actionable patient lists, etc.) - *Make or buy decision*
- Determined audience, frequency for each report



# CCPM Resources for Data Management & Analytics

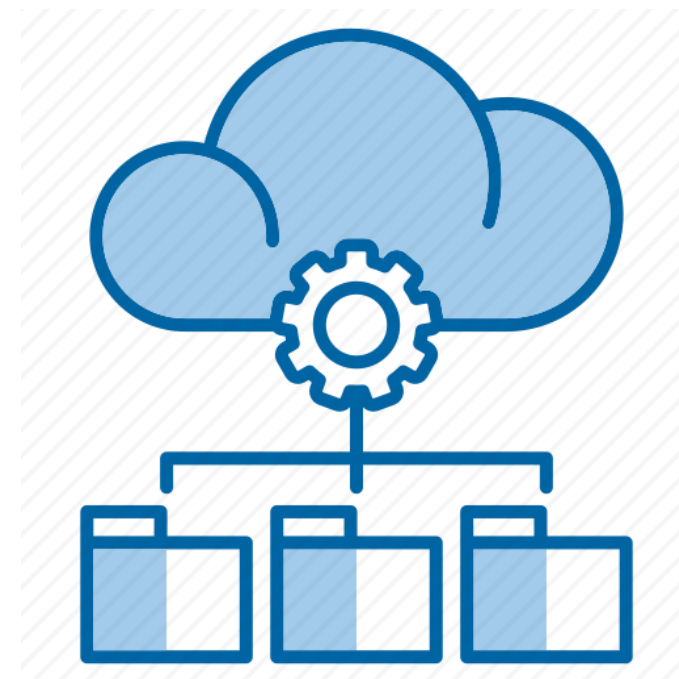


**CCPM Self Service Data Center:** Digital library for accessing clinical and quality reports; updated routinely

**Transparent Performance Benchmarking:** Establishment of ACO wide goals for 12 quality and utilization metrics with quarterly tracking of ACO average and TIN by TIN unblinded performance comparison

**Actionable Patient Lists:** Routine delivery of list of patient opportunities (overdue AWW, risk-spend outliers, missed HCC-mapping diagnosis codes)

**Targeted Performance Improvement Support:** Each TIN works with CCPM team to identify 2-3 quality or utilization metrics to move the needle on, monthly touch bases





# Key Data Management Vendors



- **Hospital Performance:** Compare actual-to-target performance for key performance indicators (KPIs) using case-mix and severity-adjusted targets
- **Volume and Market Share:** Track and trend volume and market share by service area, disease, payer and patient demographics
- **Population Risk:** Identify populations and individuals most at risk for future high costs, inpatient admissions, and emergency room visits
- **30-Day Readmission Risk:** Identify inpatient encounters most at risk for readmissions
- **Variation Management:** Understand resource variation by disease and cost category

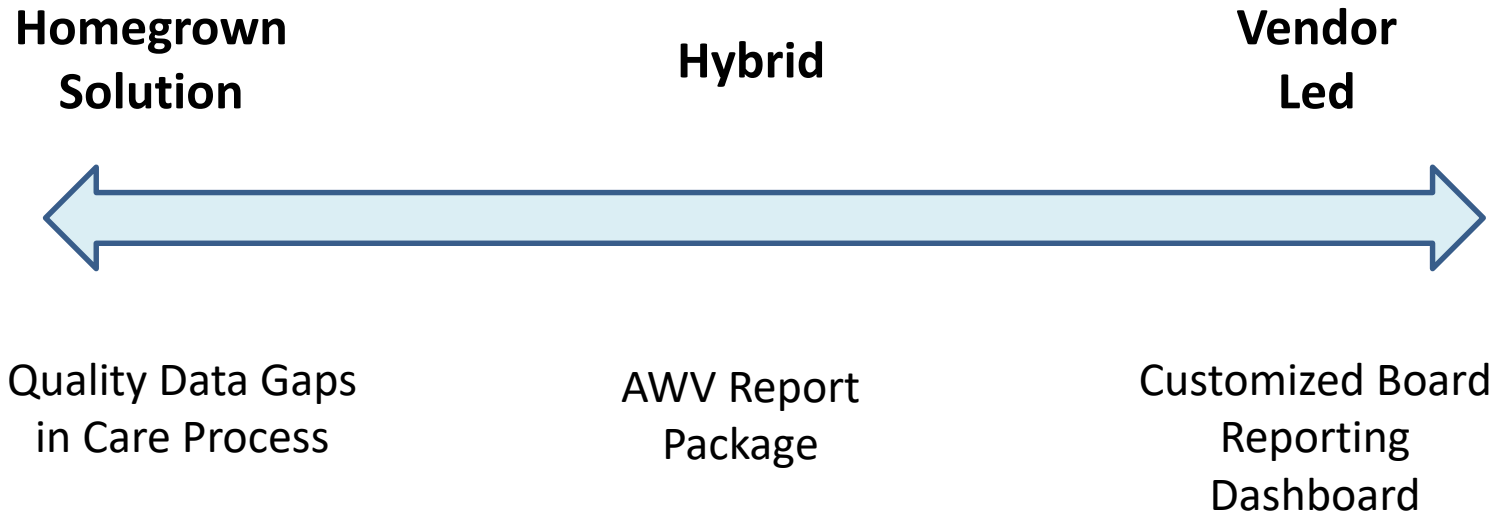


A Division of Salient Management Company

- **Control Risk:** Identify missed coding opportunities, develop strategies for follow-up, and measure impact of intervention.
- **Manage Quality of Care:** Create actionable, customized lists stratified by TIN or provider and monitor progress toward quality goals (AWV, etc.)
- **Control Utilization:** Evaluate patterns of ED utilization by beneficiary, TIN or NPI to inform intervention strategies.
- **Reduce Costs:** Evaluate TIN and NPI performance across all expenditure components and subcomponents and isolate beneficiaries that require further analysis.



# Data Management Continuum: *Make or Buy Decision*



# Homegrown Solution: Quality Data Management



- CCPM staff manages audits, gaps in care processes for all payers
- Read-only EMR access, bi-directional HIE exchange enables CCPM staff to take the lift off of member organizations

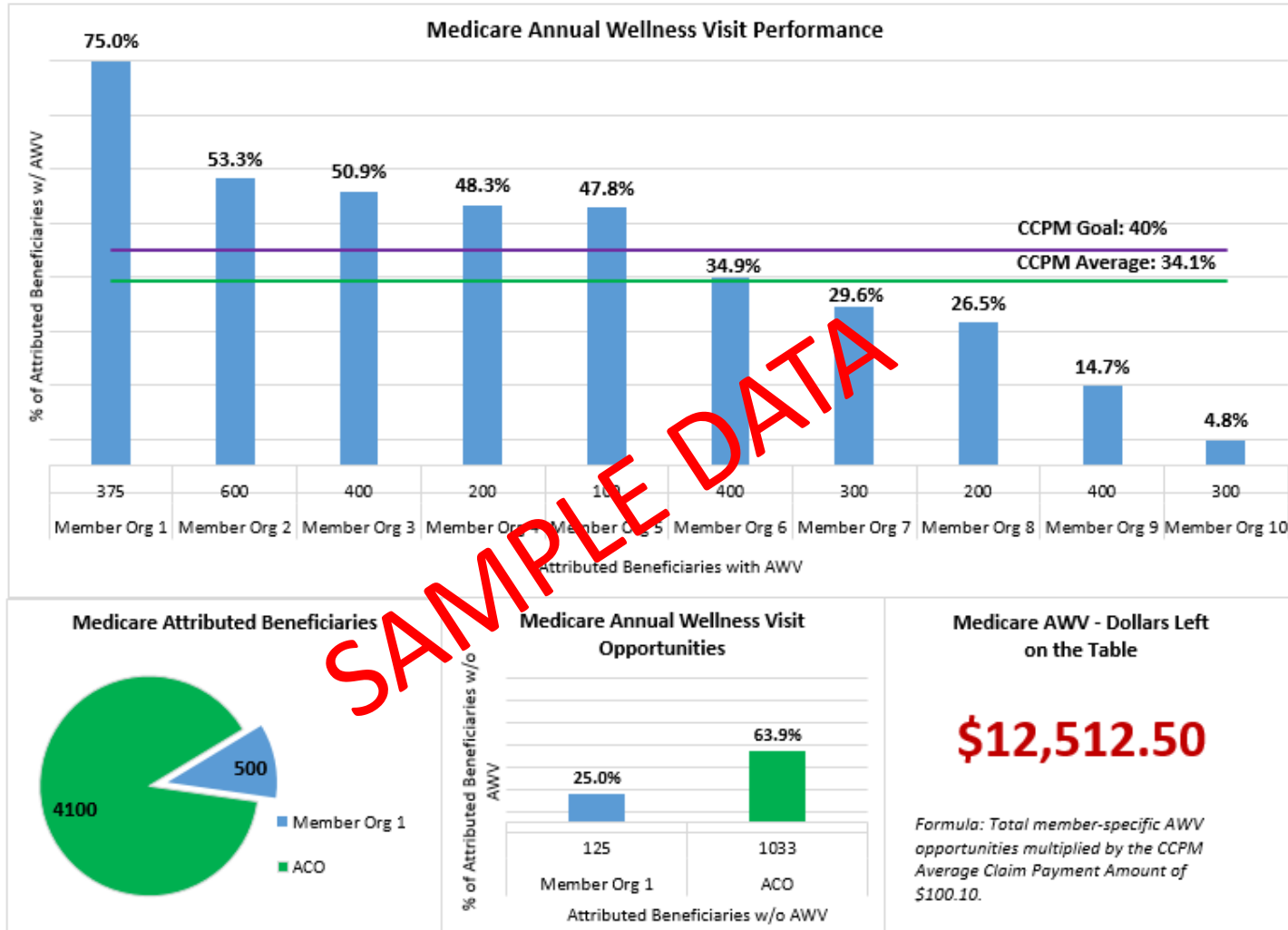
### Announcements: October Deliverables and Upcoming Auditing

Deliverable:	Due by:	Submit to:	Excludes:
MaineCare PY4 HBa1c Audit ( <b>see below</b> )	October 15 <sup>th</sup> *	Upload audit to ShareFile	EHC, HAN, SVHC
Monthly Provider Roster Review	October 15 <sup>th</sup> ***	Erin Leighton via email	N/A
Cigna Monthly Gaps Audit	October 31 <sup>st</sup> **	Upload forms to ShareFile	DFD, EHC, HAN, SVHC
Aetna Monthly Care Gaps	October 31 <sup>st</sup> **	Upload forms to ShareFile	DFD, EHC, HAN
Harvard Pilgrim Care Gaps	October 31 <sup>st</sup> **	Upload forms to ShareFile	DFD, EHC, HAN, SVHC

MaineCare recently requested that we self-report HBa1c results (i.e. percentage of members ages 18-75 with DM who have HBa1c < 8%) for the PY4 shared savings calculation slated for this fall. Accordingly, CCPM requests that our member organizations (excluding EHC, HAN and SVHC) review your EMRs to determine the result of each member's last HBa1c test for PY4 (8/1/17 - 7/31/18) and upload the report to ShareFile no later than October 15<sup>th</sup> for CCPM to submit to MaineCare. Note: CCPM is able to support the member organizations who have granted CCPM EMR access in completing this deliverable.

\* Delivered to member organizations on October 7<sup>th</sup>.  
 \*\* Delivered to member organizations between October 5<sup>th</sup> and October 15<sup>th</sup>.  
 \*\*\* Delivered to member organizations on October 1<sup>st</sup>.

# Hybrid: Merging Vendor Data with Homegrown Solutions



# Vendor-Led: Personalized Dashboard for Board Reporting



**SAMPLE DATA**

# Key Considerations Informing Our Data Decision Points:



- 1. Align data management approach with mission.**
- 2. Assume abundance, reduce waste.**



# Pop Health Data & Analytics

Anna Taylor, June 2021

## Our Mission

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Partnering for a healing and healthy future.

## Our Vision

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- » ***MultiCare Connected Care will be leading catalyst of patient and population centered value in the Pacific Northwest.*** We will:
- collaborate to achieve unparalleled performance in how people experience healthcare by delivering exceptional quality, efficiency and value.
  - be the preferred method to align with systems, patients, clinicians, payers and community stakeholders to address health and social needs across the continuum.
  - empower, engage and support our clinicians to deliver patient and family-centered care in a model that thrives in value-based agreements.

## Our Values

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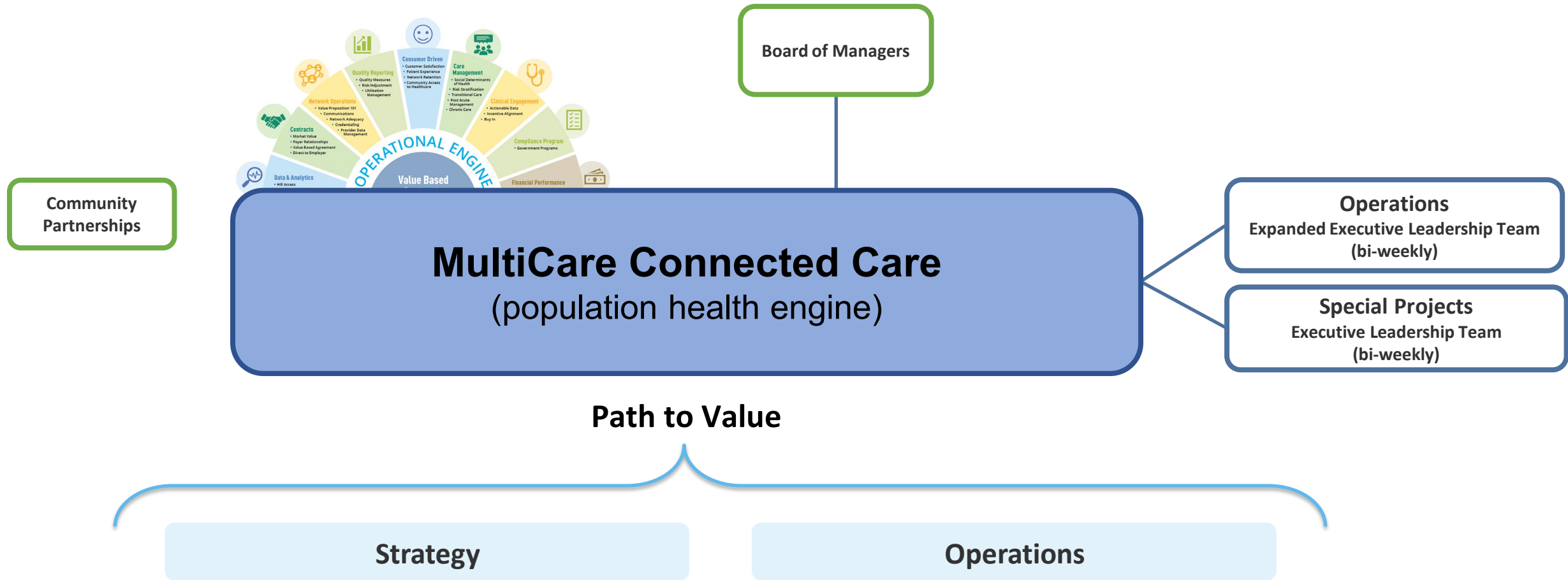
Respect | Integrity | Stewardship | Excellence  
Collaboration | Kindness





## It starts with the business case:

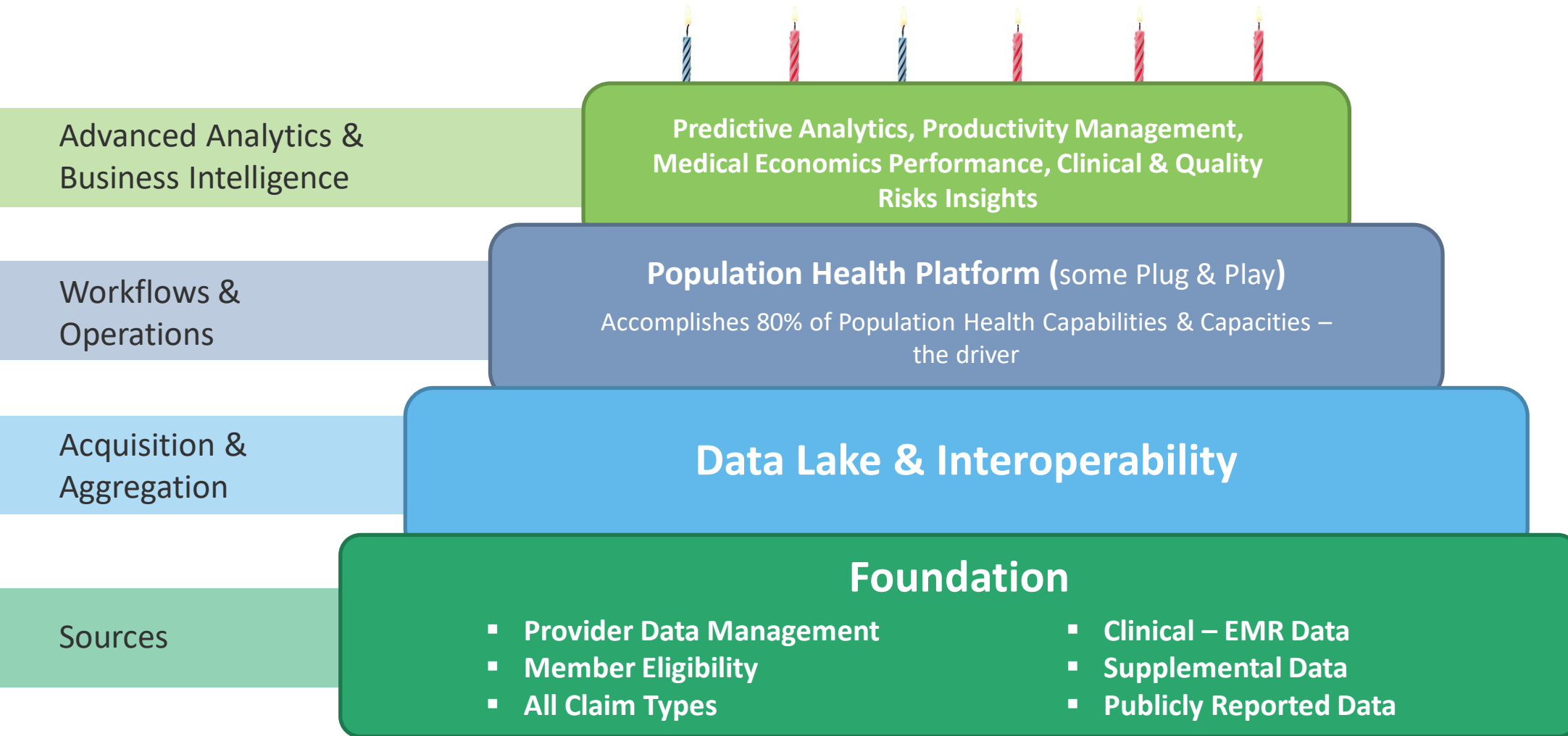




## Consistently Deliver on a Reporting Package

- » Choose KPIs that measure success in performing under your VBC
  - Prioritize your measures
- » Delivering measures to the governance structure
- » Don't get caught in the how: Operational leadership owns the "how," you're the subject matter expert

# Population Health Digital Ecosystem



*“Without the foundational base, the additional layers cannot be built”*

## Technology Guiding Principles

*We strive to partner, listen, and enable business strategies through the adoption of these guiding principles.*

- » Systems will be operationally owned and projects will be operationally led.
- » Existing integrated technology solutions are the preferred choice over functionality of a single system.
- » We adopt leading practices & value the recommendations of our strategic technology partners.
- » We are committed to keeping our systems current and secure.
- » We embrace innovation and avoid 'bleeding edge' technology.

## How we resource the model:

- » High-trust partnership with our internal Information Services & Technology, Performance Analytics & Digital Strategy
  - Internal Client Executive: Program Manager

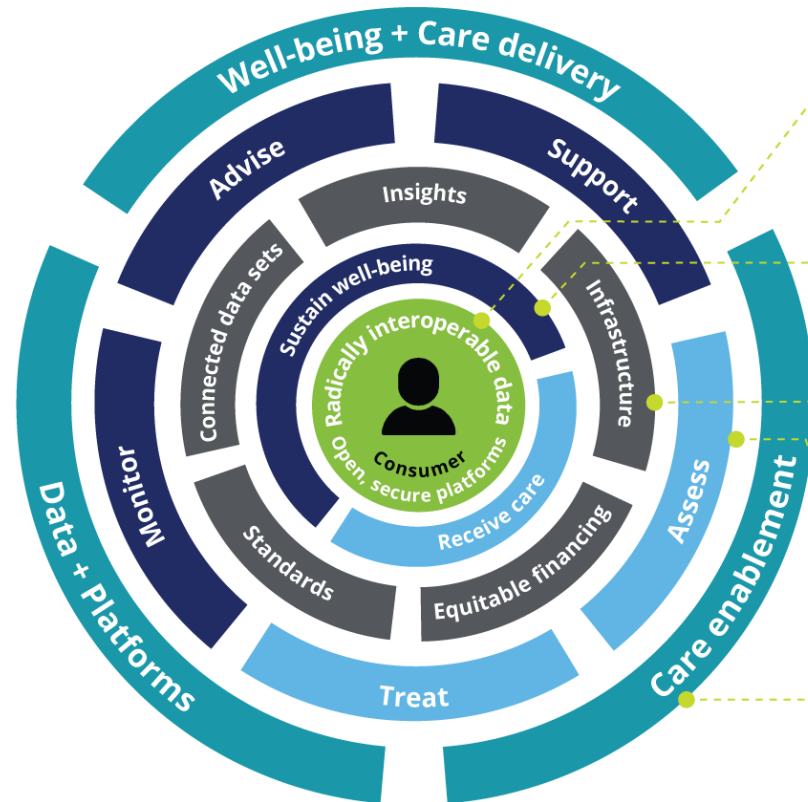
## What makes it all work: Interoperability

- » ***The mission:*** Partnering for healing and a healthier future
- » Data and information from partnering entities – disparate systems and operations
- » Investment in capability and capacity for interoperability



## The future of health will be driven by digital transformation enabled by radically interoperable data and open, secure platforms

Always-on sensors that capture data and platforms that aggregate, store, and derive insights from individual, institutional, population, and environmental data will catalyze the transformation.



The **catalyst for change**: Radically interoperable data will empower hyper-engaged consumers to sustain well-being and receive care only in the instances where well-being fails.

Two **jobs to be done** for consumers to holistically address their health (overall state of well-being encompassing mental, social, emotional, physical, and spiritual health).

Five **enablers** for consumers to accomplish their jobs to be done.

Five **tasks** that ecosystem players will perform on behalf of consumers.

Three categories of **business archetypes** in the future of health environment.

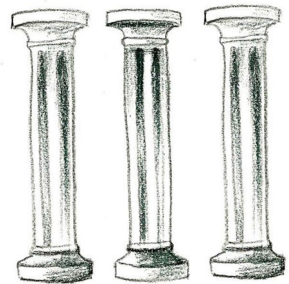
Source: Deloitte analysis.



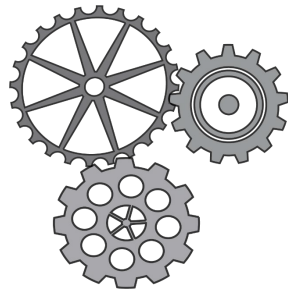
# Standardized Interoperability



Internal tipping points driving the transition from traditional methods of interoperability to an advanced standardized solution



Strategic Alignment



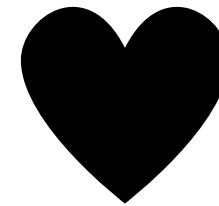
Operational Engine



Business Case (Requirements)



Federal Rulings & Compliance



Partnership



Funding



To ensure the success of the industry's shift to Value Based Care:



**Pre-Collaboration /  
Controlled Chaos:**  
Develop *rapid multi-stakeholder*  
process to identify, exercise and  
implement initial use cases.

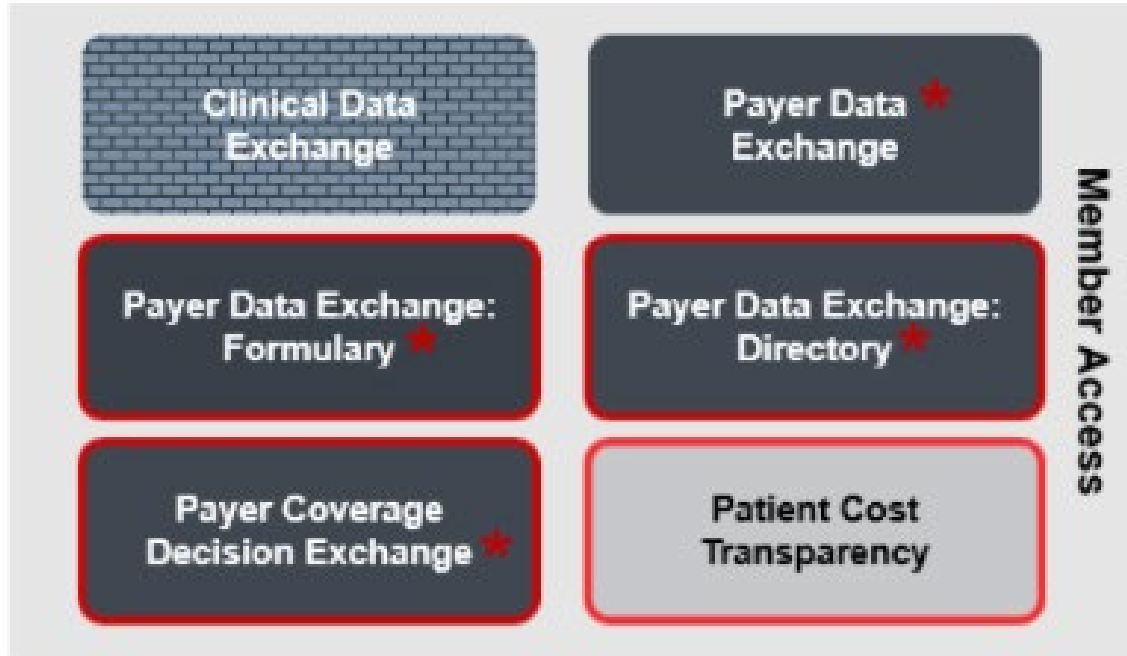
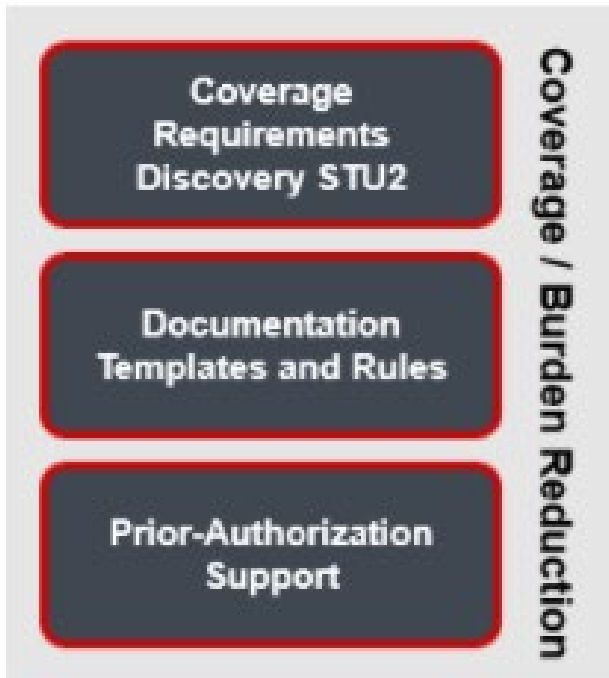
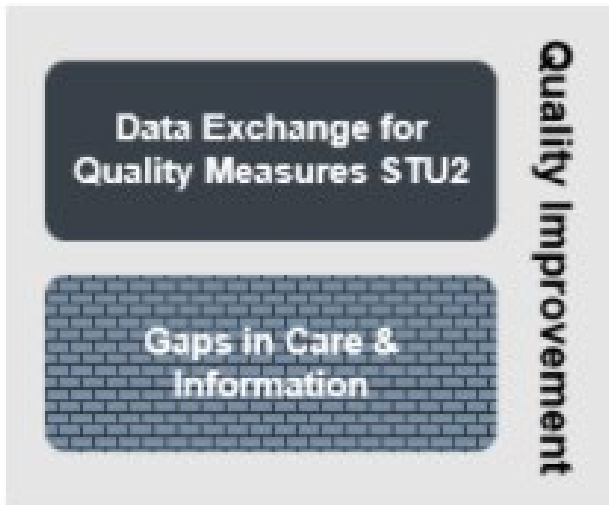


**Collaboration:**  
Minimize the development and  
deployment of *unique solutions*.  
*Promote* industry wide *standards*  
and adoption.



**Success Measures:**  
Use of FHIR®, implementation  
guides and pilot projects.

# Use Case Focus Areas



**Use Case HL7 Standards Progress**

- Published
- Balloting
- Build
- Future

- Aligned with proposed ONC or CMS rule
- Named or supports final CMS or ONC rule



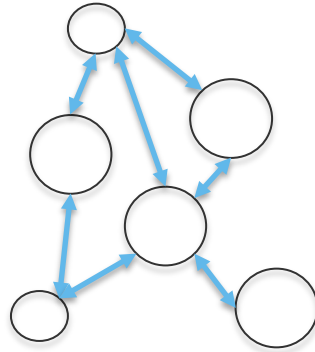
## How to address technological innovation in a buy model?

- » Partner
- » Embrace innovation
- » Pilot small and iterate

## Challenges and Hiccups



Provider Alignment



EHR &  
Interoperability



Big \$ Investment



# Thank you!

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