
Boston Medical Center HEALTH SYSTEM

Accountable Care Necessitates Health Information Exchange

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Agenda

- Explain the BMC health system and priorities related to ACOs and value-based care
- Review need for health information exchange
- Demonstrate value of health information exchange
 1. Risk stratification
 2. Medical cost management and care coordination
 3. Risk coding
 4. Quality measure performance
- Future directions

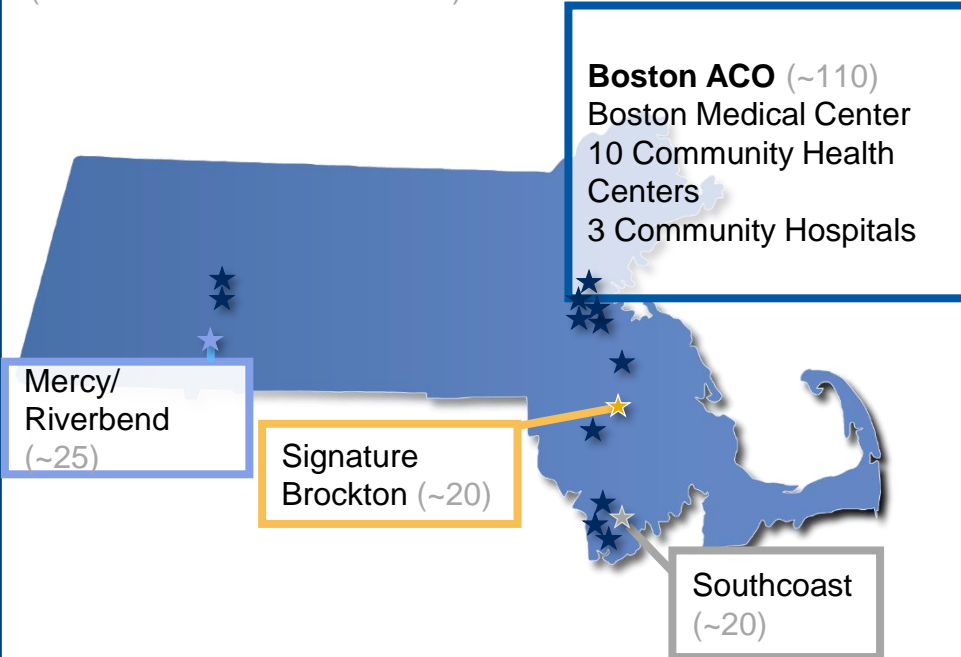
Boston Medical Center Health System: 4 Medicaid ACO Joint Ventures, encompassing BMC HealthNet Plan, 6 hospitals, and 18 Community Health Centers

BMC Health Plan

220K Medicaid lives in MA (170K ACO; 50K MCO)

ACO partner organizations by region

(Number of lives in thousands)



Boston Accountable Care Organization (BACO)

Boston Medical Center

BMC Faculty Practices

- BU Affiliated Practices (BUAP)
- BU Child Health
- General Internal Medicine
- BU Family Medicine

Community Hospitals

- Holyoke/Valley Health Partners
- South Shore Health System & PHO
- Sturdy Memorial Hospital

Boston Area Community Health Centers

- Boston Health Care for the Homeless Program
- Codman Square Health Center
- DotHouse Health
- Greater Roslindale Medical & Dental Center
- Manet Community Health Center
- Mattapan Community Health Center
- South Boston Community Health Center
- South End Community Health Center

Fall River/New Bedford Health Centers

- Greater New Bedford Community Health Center
- Health First Care Center
- Stanley Street Treatment and Resources (SSTAR)

There are four major levers to drive performance in the Medicaid ACO program

Enrollment

- **Protects revenue:** No revenue collected during periods of coverage lapses from redeterminations

Quality

- **Determines ACO performance:** Performance on Quality program determines clinical and financial performance of ACO

Medical Expense Management & Care Coordination

- **Minimizes TCOC:** ACOs share upside and downside risk. The primary lever is management of utilization as other medical expense levers are controlled (e.g. network pricing)

Risk Coding/ Risk Adjustment

- **Increases revenue:** Increased complexity of attributed lives results in larger budget. Need to demonstrate complexity to MassHealth and understand drivers of cost v. funding.
 - Massachusetts recognition of SDOH needs as driver of outcomes and TCOC

The shift to ACO has driven a heightened need for real-time information and analytics

Key features of ACO model

- Providers take **financial risk** – upside and downside
- Providers empowered to **manage total cost of care**
- Premium on **care coordination**
- Pay for performance **Quality measures**
- Focus on **Social Determinants of Health** (SDOH)

Data & Analytics needs

- Need to **provide and interpret claims data** and financial performance to numerous provider stakeholders
- Ability to drill down into **performance drivers** – both TCOC and revenue (rate adequacy, risk adjustment)
- Central ability to identify TCOC opportunities and **develop programs/resources** to address
 - **Risk stratification** capability
- Providers/care managers **need access to data sitting in different systems**
 - Need **real-time actionable alerts** (ADT data)
- Requires **EHR-claims integration** to report hybrid measures
 - Ability to generate **gap lists**, track performance
- **Patient segmentation** by SDOH factor (homelessness, SUD, etc.)
 - **Disease registry** information

Integrating disparate systems and data is crucial to managing ACO performance

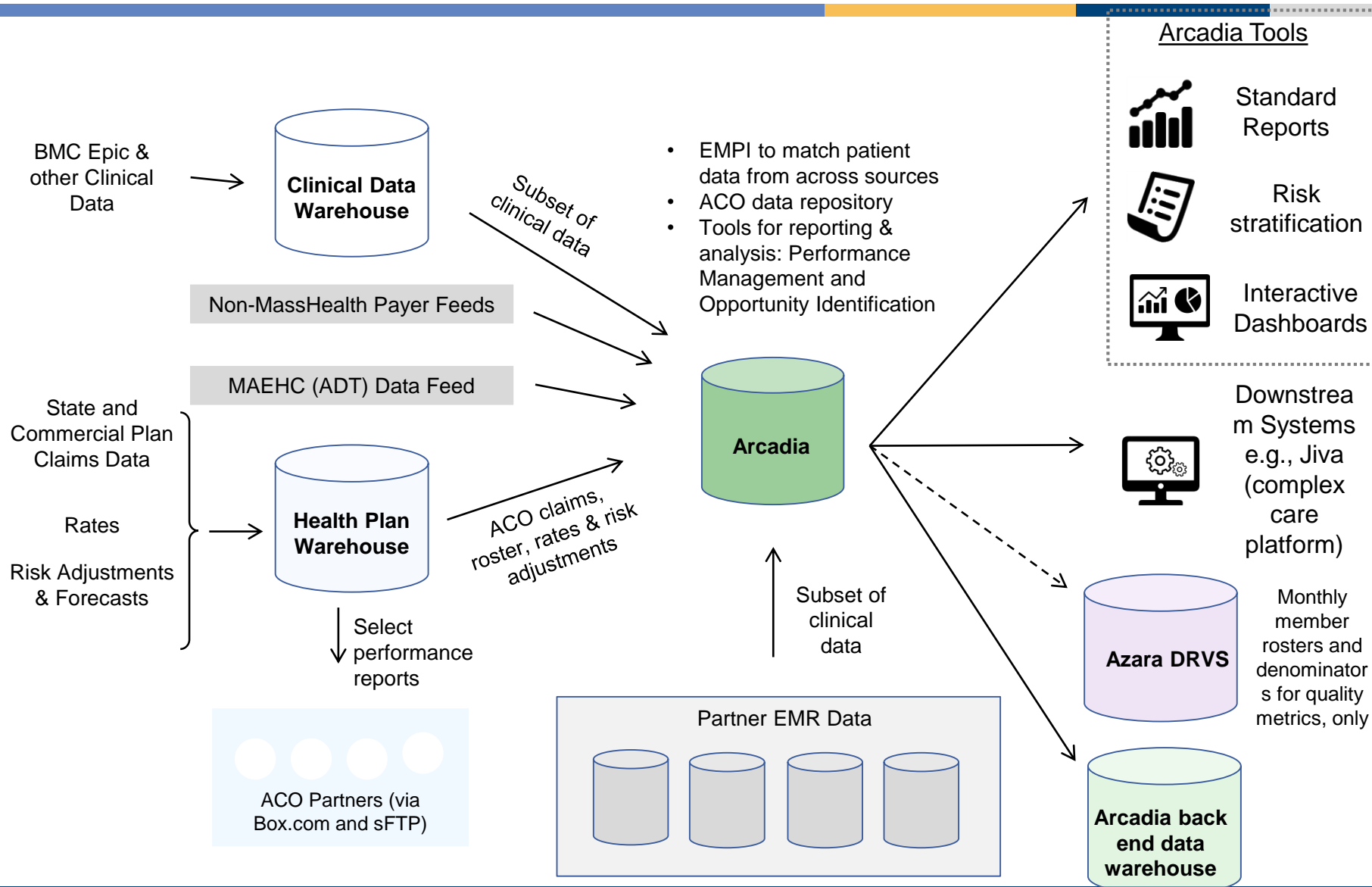
Data

- Clinical (multiple EHRs)
- Claims – BMCHP
- Claims – Other risk contracts (e.g, BCBS)
- ADT
- Inpatient Auths / Behavioral Health discharges
- ACO Enrollment
- PCP Attribution
- Provider rosters
- Care Management enrollment
- Risk

Systems

- EHR (multiple)
- Claims Data warehouse(s)
- Care Management systems
- Provider-facing tool (Arcadia)
- ADT Platforms

Achieving ACO objectives requires complex integration of multiple data sources



Some examples of programs where we utilize health data

- 1 Risk stratification and securing appropriate revenue
- 2 Medical management / complex care management
- 3 Risk coding
- 4 Quality

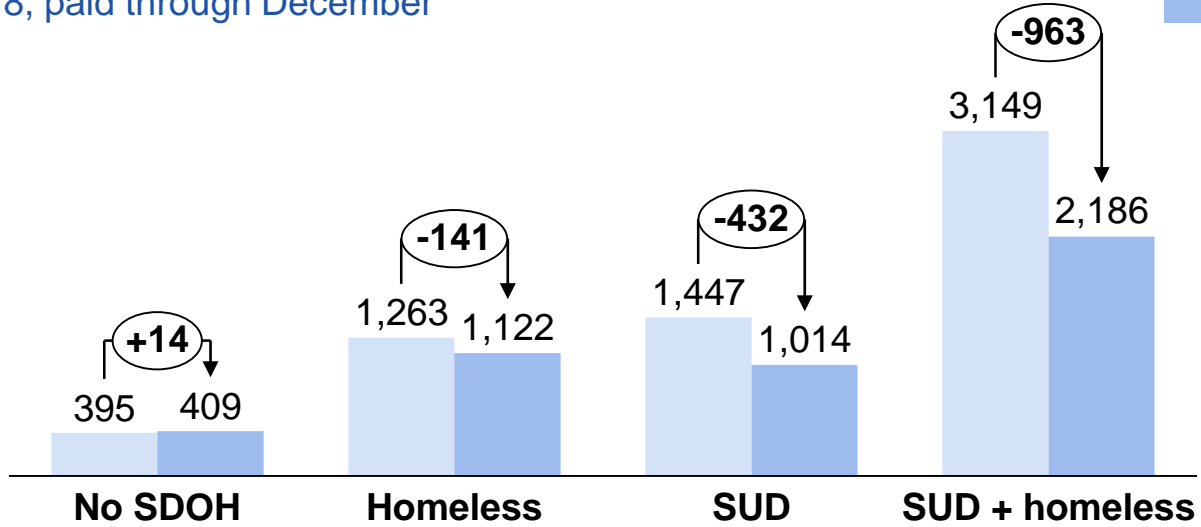
We use claims and SDOH data to better understand the drivers of our medical expense v. our funding

TCOC performance by SDOH status, all BMCHP MassHealth products

March-December 2018, paid through December

Cost PMPM
Revenue PMPM

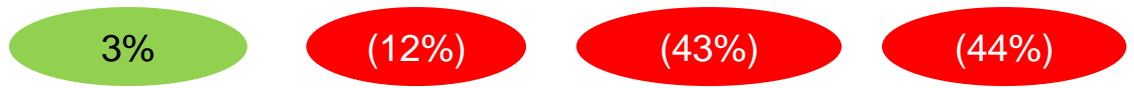
PMPM, \$



Avg. Members, K



Surplus/Deficit, %



9% of BMCHP members with SUD drive \$114M deficit

HIE plays a key role in our Complex Care Management (CCM) program for our most high-risk and complex patients

CCM Core team: RNs and Community Wellness Advocates (CWA) who work in pairs within primary care practices; supported by PharmD's and pharmacy techs at some sites



Complex Care
Manager RN



Community
Wellness Advocate

Over a period of 3-6 mos, CCM teams partner with patients on goals related to:

- Chronic disease self management
- Behavioral health
- Social determinants of health

Key additional supports:

- Nurse manager
- Local group medical champion & operational lead
- Local group behavioral health & OBAT teams, when available
- PCPs; Specialists—Medical & BH
- Community agencies

Role of HIE data in CCM program:

- + Generating risk scores to identify top 2% patients
- + Providing teams patient information on chronic diseases, housing status, etc...
- + Providing real-time alerts on IP or ED utilization (MAeHC data through a care management tool)
- + Tracking performance / ROI

Complete coding will impact overall Medicaid ACO performance

In yesterday's fee for service world:

- BMC was paid for every unit of service we provided



Incentive in this payment model:
Focus on episodic care and accurate billing of (on site) services that are reimbursed by health insurers

In today's ACO world:

- BMC is given a pool of money intended to cover all of the services our patients need in a year
- The size of the pool is based on the complexity of the patients we serve
- The state knows how complex patients are based on the diagnosis codes we submit on our bills



Incentive in this payment model:
Focus on understanding and documenting the social and medical complexity of our patients

3

Capturing all relevant conditions has impact on the total pool of money we are given to care for a patient

Total budget to care for an average ACO patient	\$\$
If we code homelessness	+ \$\$
If we code major depression	+ \$\$
If we code major obesity	+ \$
Updated Budget if we accurately code	\$\$\$\$\$\$

A successful risk coding plan requires a multi-pronged approach, which can be enhanced with more complete data about each individual

Pre-visit Planning

- Regular visits in Primary Care

More information would be available with integration of multiple data sources

Point of Care

- Screening for high value conditions
- Pre-visit planning processes
- Real-time reminders and alerts to remind providers to code
- Leveraging Complex Care Management Teams

Post-Visit

- Retrospective claims corrections
- Holding claims for review

Identification of codes hampered by lack of algorithms that account for DxCG risk model

ACO Quality Program is a key driver of overall performance; P4P started January 1st 2019 with 8 quality measures

2018

- **20 quality measures** designated by MassHealth
- **Pay for Reporting:** All 20 measures

2019

- **Pay for Performance:** 8 Measures

2020 onward

- **Additional 12 measures** move to **Pay for Performance**

The initial 8 Pay for Performance metrics touch on a broad spectrum of patient populations and conditions

		Measure Name
Prevention & Wellness	Hybrid	Childhood Immunization Status
		Adolescent Immunization Status (Tdap, Meningococcal, HPV)
		Timeliness of Prenatal Care (Visit in first trimester)
Chronic Disease Management	Hybrid	Diabetes control- Poor HbA1c (HbA1c <9.0)
		Asthma Medication Ratio (controller to total meds ratio >0.5)
Behavioral Health	Claims	Metabolic Monitoring Pediatrics on Antipsychotics
		Follow-up after hospitalization for Mental Illness (7 days)
		Initiation and Engagement for SUD Treatment

An additional 12 measures are added to the Pay for Performance slate on January 1, 2020 – many are specific to the MassHealth program

		Measure Name
BH & SUD	Claims	Follow-up after ED for mental illness (7 days)
		ED visits for adults with mental illness and/or SUD
	Hybrid	Depression remission and response
		Depression screening and follow-up plan
Inpatient	Claims	Acute readmissions
		Acute unplanned admissions for individuals with diabetes
		Community tenure
Primary care	Hybrid	Controlling high blood pressure
		Health related social needs screening
BMC HP	Claims	Oral health evaluation for children
		LTSS community partner engagement
		BH community partner engagement

Require non-traditional data sources

Example: Bringing together health plan and provider data allow us to tailor interventions to subsets of patients with diabetes

- Combining medical and plan data together to deliver on our quality metrics is changing how we deliver care
- For example, providers have insights into patient medication adherence to guide care plans

Data providers traditionally have

	A1c value	Medications
Patient 1	9.6	Oral medications
Patient 2	10.2	Oral medications

Clinical recommendation

Change medication regimen
– (i.e., switch to insulin)

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Health plan data



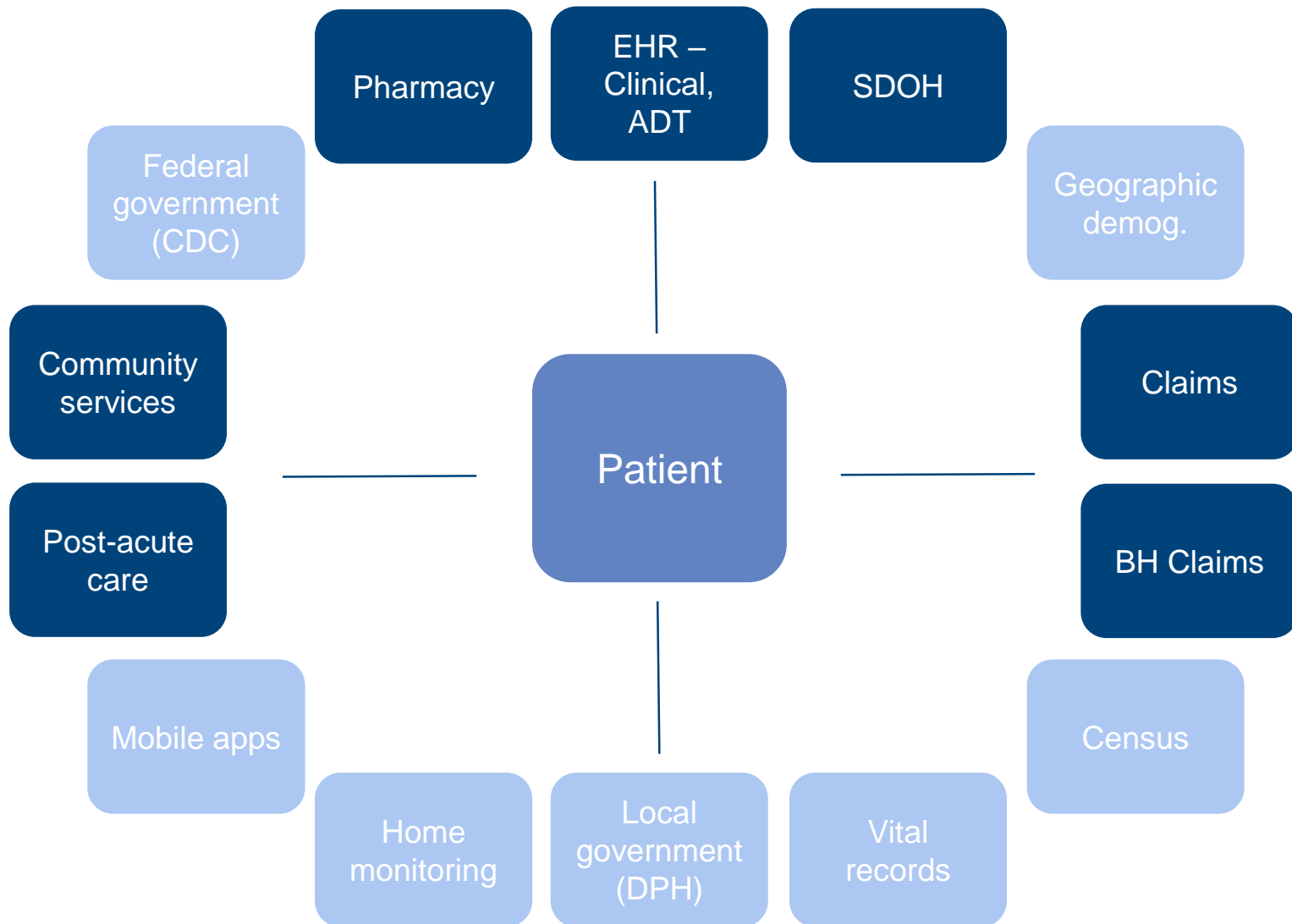
New insights for care

	A1c value	Medications	% Meds in hand
Patient 1	9.6	Oral medications	38%
Patient 2	10.2	Oral medications	90%

Address adherence

Change medication regimen
– (i.e., switch to insulin)

There is a vast amount of health-related data, only a small portion of which we harness currently, and none of which integrates easily



What we have learned about data integration and analytics platforms

What has worked well

- **Data integration:** EMR data integration has gone smoothly
- **Back-end platform:** Back-end database enables Analytics team to rapidly pull data on cost, utilization, patient demographics, risk profile, conditions
- **Risk stratification/segmentation:** While algorithm could be improved, have been able to identify high-risk patients for care management
- **Quality:** Able to validate the quality metrics across claims and hybrid, build dashboards, and provide up-to-date gap lists

Ongoing challenges

- **Risk coding:** Lack of support for DxCG (MA risk adjustment model)
- **Workflow:** Front-end system difficult to learn/navigate; not integrated in normal PCP workflow
- **Platform flexibility:** Difficult to add needed fields or to create custom analyses on front end
- **ADT data:** Lack a common back end ENS provider and also front end platform to share ADT alerts across PCPs, care managers, care coordinators

Questions?

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