



Population Health Management Solutions

*An Opportunity to Advance
Primary Care and Public
Health Integration
CHIC Presentation,
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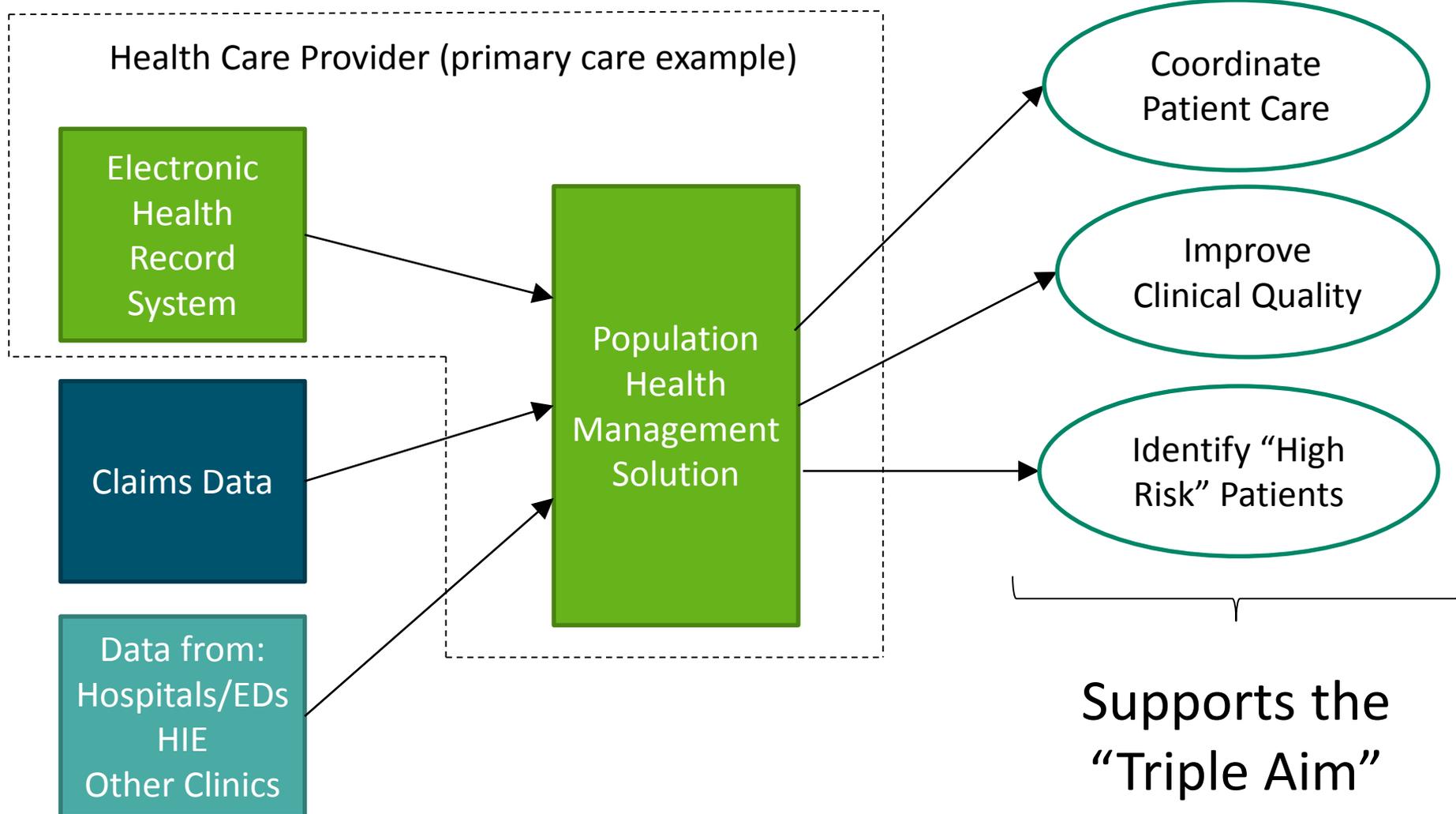
Background

- Small- or medium-sized ambulatory primary care practices may have EHRs with less robust functionality than those in larger practices
- Wide variety of vendors that offer population health management (PHM) solutions
- Both healthcare providers and public health agencies seek guidance on selection and use of PHM solutions

Project Objectives

1. Collaboratively determine PHM solution evaluation criteria
2. Evaluate PHM solutions against those criteria
3. Make related recommendations for healthcare – public health data sharing for improved cardiovascular disease (CVD) surveillance and patient outcomes

Defining Population Health Management Solution



Project Approach

- 2 Methods (implemented in phased sequence)
- 1st Phase
 - PHM Solution Evaluation Criteria
 - PHM Vendor Interviews
 - Assessment of PHM Solution Functionality
- 2nd Phase
 - Clinical End-User and Public Health Interviews
 - Themes: Improving CVD Surveillance and Patient Outcomes



Criteria Categories	Rationale
1. Identify patient sub-populations by user-selected parameters	A PHM core function is to identify groups of patients. Creating patient sub-population groups based on diagnoses, risk factors, care team, and other factors helps providers identify patterns.
2. Examine detailed characteristics of patient sub-populations	It is useful to be able to “drill-down” to individual patient details or forecast risks.
3. Create and send notifications	PHM solutions should facilitate communication between providers and patients. These communications encourage patients adherence to treatment guidelines.
4. Track clinical performance measures	Providers are required to report clinical performance measures to governmental agencies/other stakeholders. Some measures are similar to chronic disease prevalence indicators of interest to public health agencies.
5. Aggregate data	PHM solutions are intended to highlight patients at high risk for negative health outcomes or high cost procedures. These analytical procedures require inputs from a variety of data sources.
6. Share data with external systems	Information could be shared to create a depiction of chronic disease prevalence for an entire public health agency jurisdiction.

Select Clinical Quality Measures for 2014 CMS EHR Incentive Programs for Eligible Providers (“Meaningful Use”)

Electronic Clinical Quality Measure (eCQM)	Description
NQF 0018: Controlling High Blood Pressure	% patients 18-85 years of age who had diagnosis of hypertension and whose BP was adequately controlled (less than 140/90mmHg) during measurement period.
NQF 0059: Diabetes: Hemoglobin A1C Poor Control	% patients 18-75 years of age with diabetes who had hemoglobin A1C greater than 9.0% during measurement period.
NQF 0068: Ischemic Vascular Disease: Use of Aspirin or Another Antithrombotic	% patients 18 years of age and older discharged alive for acute myocardial infarction (AMI), coronary artery bypass graft (CABG) or percutaneous coronary interventions (PCI) in the 12 months prior to the measurement period, OR who had an active diagnosis of ischemic vascular disease (IVD) during the measurement period, AND who had documentation of use of aspirin or another antithrombotic during the measurement period.



- EHR agnostic; Not developed by EHR vendor
- Environmental Scan: 28 candidates based on recommendations, industry reports
- 20 met inclusion criteria
- 16 responded to project description and request for information
- 10 participated in interviews



- 10 PHM solutions total
 - 9 COTS products
 - 1 open source (PopHealth)
- Complete response from 8 vendors
- All participating vendors given an opportunity to provide feedback to evaluations and request changes (with appropriate documentation)
 - 3 vendors requested score changes and provided supporting documentation

Summary Vendor Assessment Results

	Identify patient sub-populations	Examine detailed characteristics	Create and send notifications	Track clinical performance measures	Integrate data	Share data with external systems
Acuere QOL						
Arcadia Analytics						
Azara DRVS						
BridgelT						
Enli Care Manager						
Healthagen Medicity						
i2i Tracks						
IBM Phytel						
PopHealth						
Wellcentive Advance						

Green = Meets Requirement

Yellow = Partially Meets Requirement

Red = Does Not Meet Requirement

Blank = Could Not Assess, Insufficient Information

SEE REPORT FOR DETAILS

Phase 2 – Key Informant Interviews

- 2 Physicians
- 1 Clinical Chief Health Information Officer
- 4 Public Health Representatives
- Purposeful, chain-referral sampling
- Semi-structured interviews

Interview Topics

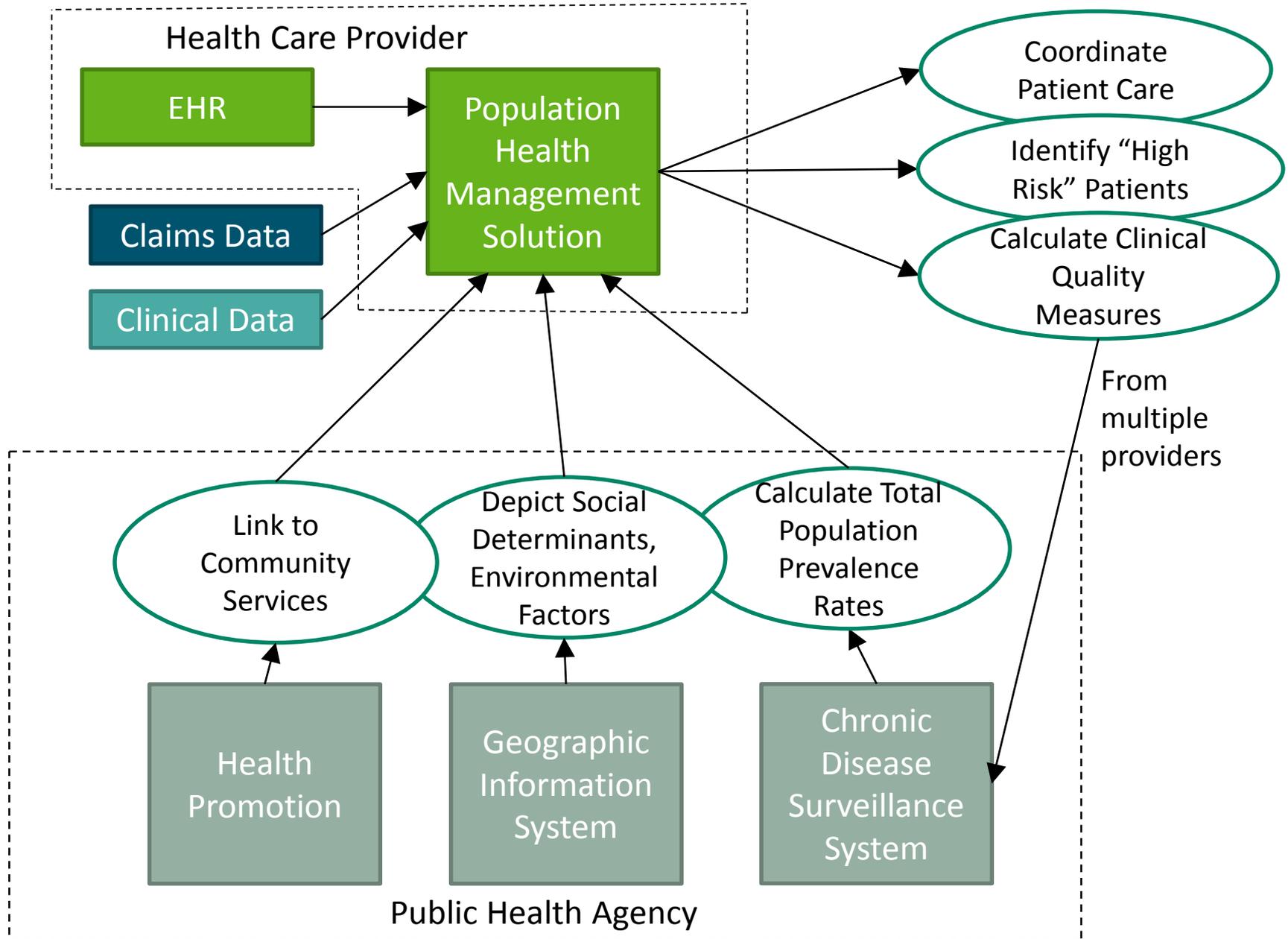
1. Establish experience with PHM solutions or related data
2. PHM implementation issues
3. Goals, questions PHM solutions are intended to address
4. Data sharing between clinical and public health entities
5. Advice to others considering PHM solutions



Key Themes

1. Know your purpose and skill-level before making a decision on a PHM solution.
2. Examine data governance, standardize documentation before implementing PHM solution
3. Considerable barriers to healthcare – public health data sharing

Recommendations for Future State



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Questions/Discussion?