Hitchhiker's Guide to Population Health



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Health Care Market Transformation - 2 Major Vectors of Change

Before 2014

Regulatory Reform/Private Sector Restructuring

- Federal/state regulations
- Interpretation and preparationPrivate exchange

investments

 Rationalizing DB health coverage/self vs fully insured

Innovation, Proto-types and Proof of Concept

- Patient Centered Medical Homes
- Bundled Payment/(warranty)
- Accountable Care Organizations
- EMR, HIE and Analytics
- P4P, Shared savings, Shared risk

2014 - 2020

Implementation & Adaptation

- Public exchanges open
- Private exchange adoption
- Movement from B2B to B2C
- Benefit and network redesign
- Re-emergence of PSP models
- Consumer activation and agitation

Volume to Value

- Provider-driven health management
- Carve-in / re-aggregation of total costs
- Provider accountability/control
- Adaptation/maturity of care models
- Emergence of new enablers/intermediaries – data, analytics, services, devices

2020 and 2025

New Normal

Localized choice

Level playing field & competition

Regulatory refinement

New Normal

Broad range of collaborative care models

Cost, quality and patient experience transparency

Competition based on cost and quality

Clinical data interoperability

Radical improvement in quality & value

Care Delivery & Reimbursement Transformation

Insurance

Coverage

Transformation

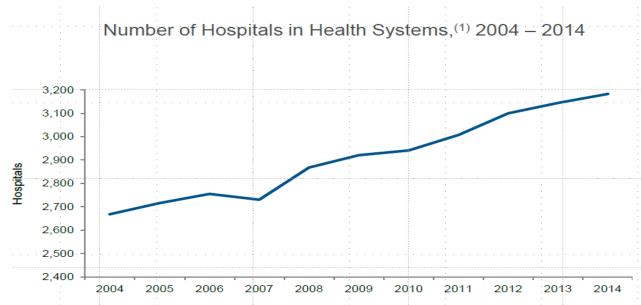
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Macro Context: Provider Consolidation

Delivery systems and providers continue to consolidate

- Access to capital
- Collective contracting power
- Improved access to information technology
- Economic viability and survival for community hospitals
- Acquisition of primary care foundational for population health and referral volume capture



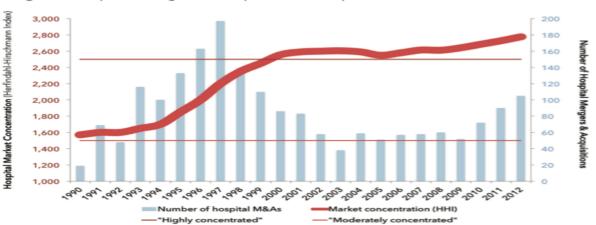
Source: Analysis of American Hospital Association Annual Survey data, 2014, for community hospitals.

Hospitals that are part of a corporate body that may own and/or manage health provider facilities or health-related subsidiaries, as well as non-health-related facilities including freestanding and/or subsidiary corporations

With more scale, health systems are better positioned to succeed with value-based contracts

- Scale creates leverage against dominant incumbent payors
- Duopoly dynamics in many markets triggers advanced strategies for capturing market share, particularly with top 1 and 2 health systems

Figure 18. Impact of Mergers and Acquisitions on Hospital Market Concentration, 1990-2012



A new wave of hospital mergers is driving market concentration higher. The blue bars denote the number of hospital merger and acquisition transactions in a given year; in the 1990s, penetration of managed-care insurers, with a mandate for more aggressive cost control, led hospitals to merge in response, strengthening their market power over the insurers. The Federal Trade Commission and the U.S. Department of Justice normally consider markets with HHI above 1,500 as "moderately concentrated" and markets with HHI above 2,500 as "highly concentrated," triggering antitrust litigation. However, consolidated hospital markets have largely avoided antitrust litigation. Today, more than half of the hospital markets in the United States have an HHI above 2,500, meaning that the DOJ and FTC would consider them to be "highly concentrated." (Source: A. Roy analysis, Robert Wood Johnson Foundation, Martin Gaynor, Irving Levin Associates, HHS ASPE)

Macro Context: Shift of Network Definition

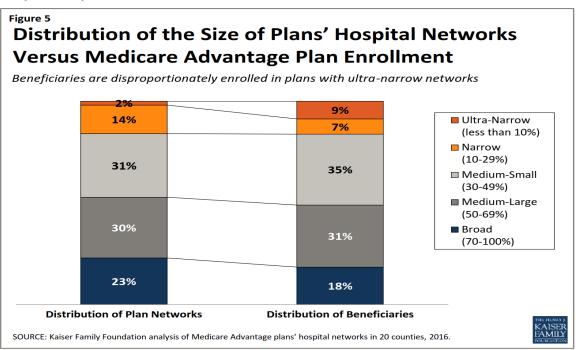
Provider Networks Have Evolved

- Promise of better value as a result of integration
- Alignment of incentives among in-network providers value based payments
- Affiliations are still relevant, even with consolidation

THREE-TIERED PROVIDER NETWORK Contracted Independent **Affiliates** Founders **Providers** Initial and ongoing No governance capital investment Ownership/governance • FFS with performance Downside risk (but less) Medical management infrastructure For example: development Downside risk Skilled nursing facility Clinical Integration Level of Commitment and Participation

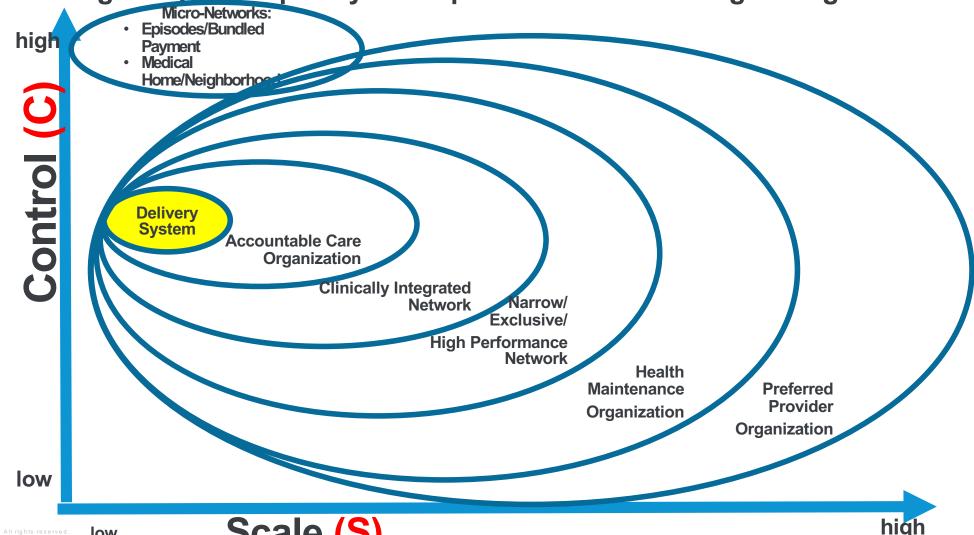
Prevalence of Narrow Networks

- 47% of Medicare Advantage networks are narrow or small (< 49% of hospitals in network)
- 51% of MA beneficiaries are in a small or narrow network (≈8.7MM lives)
- Tradeoff between cost and access from both members and plan sponsors

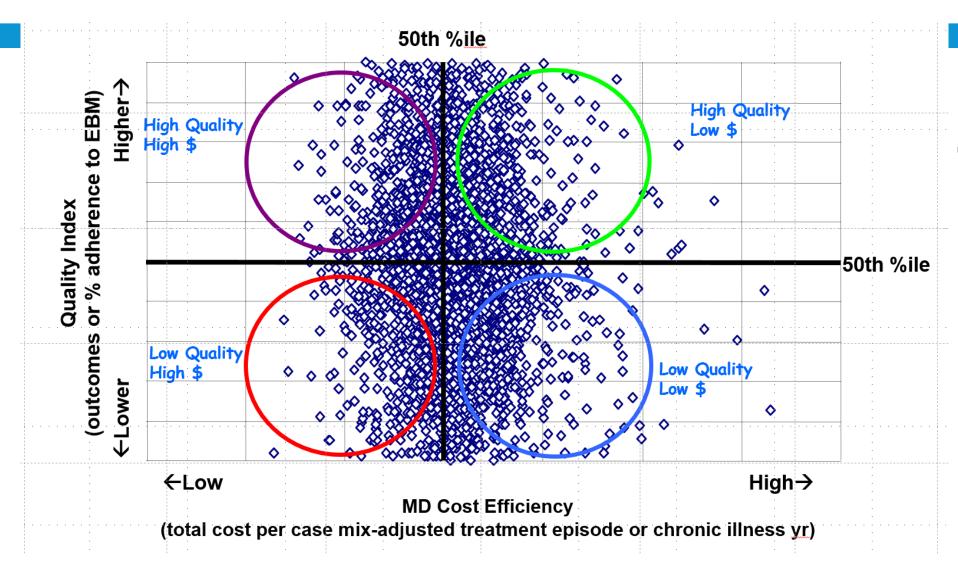


Provider Network Performance Management

Cα1/S: Control - the ability to manage performance, is inversely proportional to the scale, heterogeneity & complexity of the provider network being managed



Credible Provider Performance Measures



Opportunities

- ✓Increase high performer volume through-put
- ✓ Drive up lower performers
- √Trim poor performers

Provider Risk Continuum & Capabilities

Sophistication Required

None

Basic

Intermediate

Advanced

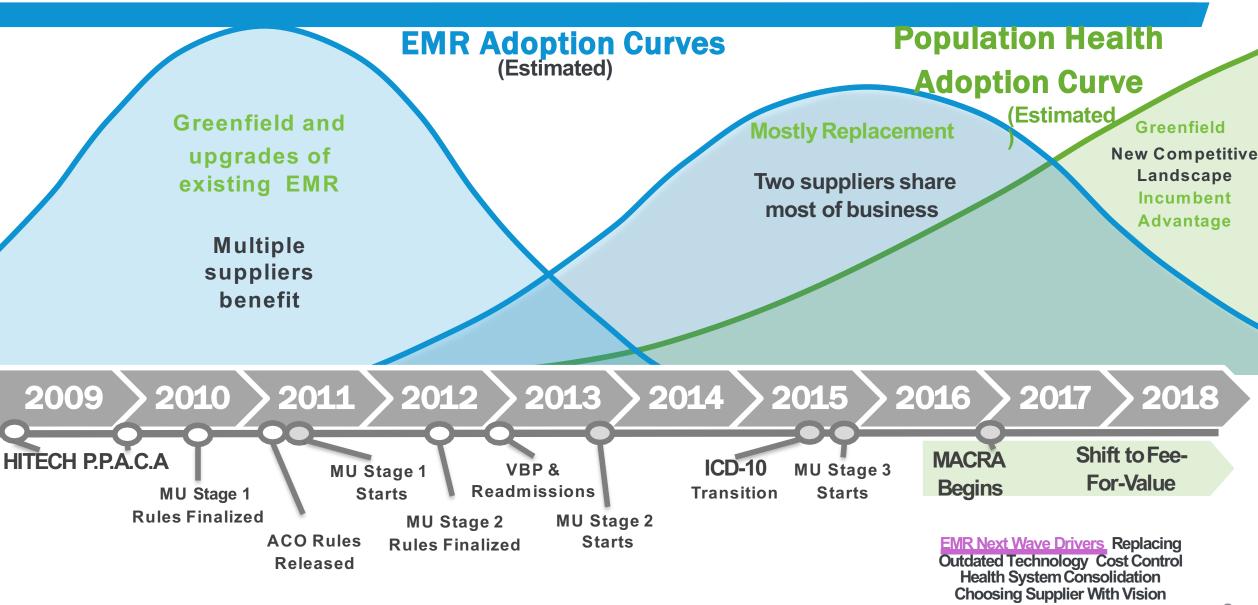
Providers contend with a sliding scale of required capabilities based off Fee-For-Service / Fee-For-Value Mix

Performance Risk

Insurance Risk

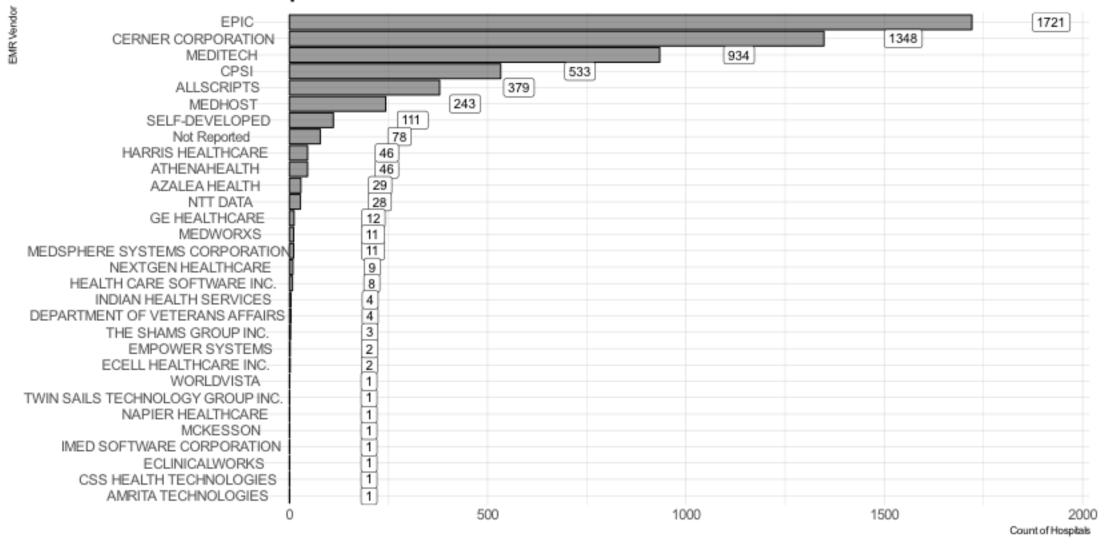
Capability	FFS	Value-based FFS	Episode/ Bundled Payments	Shared Savings	Shared Risk/ Global Capitation	Provider- sponsored Plan/ Full Risk
Data Operations						
Network Assessment & Management						
Referral Management						
Provider Performance Management						
Provider Contracting						
Risk Adjustment						
Care Management						
Actuarial Modeling						
Health Plan Operations					WILLIAM CONSANT OF CALLAL	

EMR Waves Transition to Population Health



The acute EMR market is saturated

Hospital EMR Vendor Market-share



From Point Solutions to Population Health Platforms

Aggregate and normalize

Create and apply intelligence

Act and measure







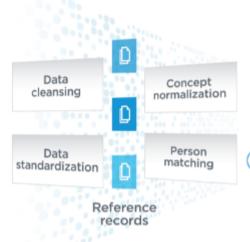




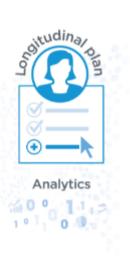








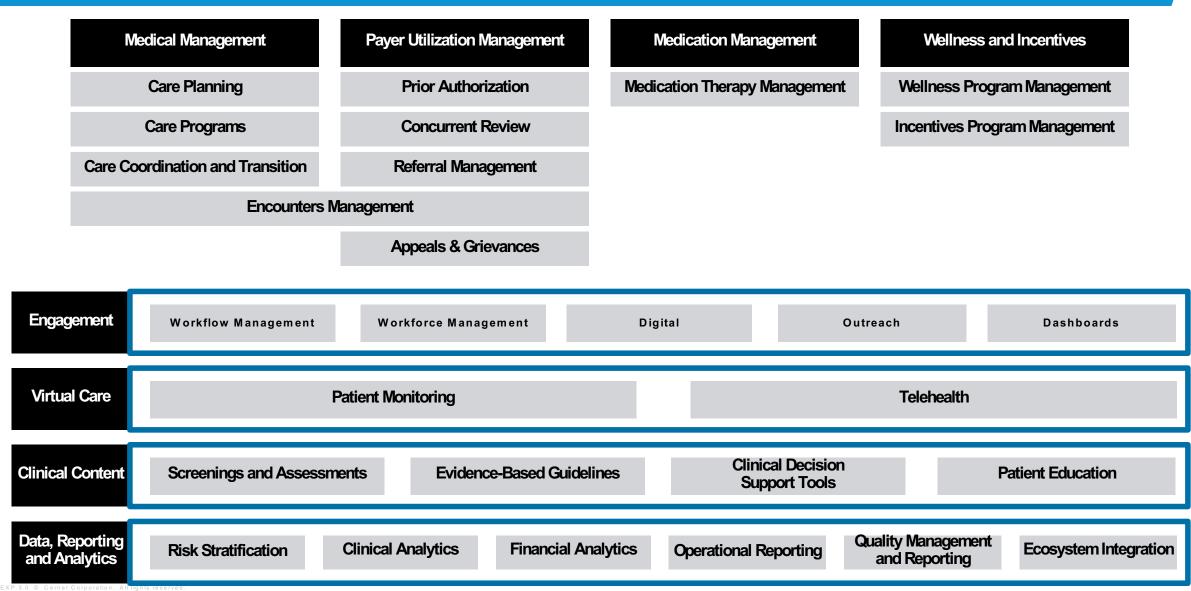






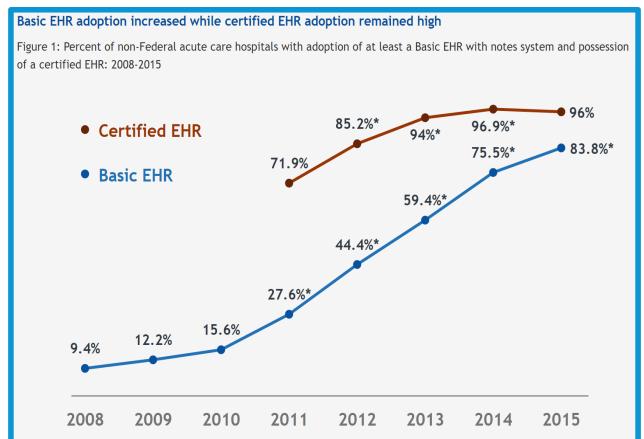
- → Person
 - Health coach
 - Care manager
- Home health assistant
- Clinician
- Provider
- Data scientist
- Executive

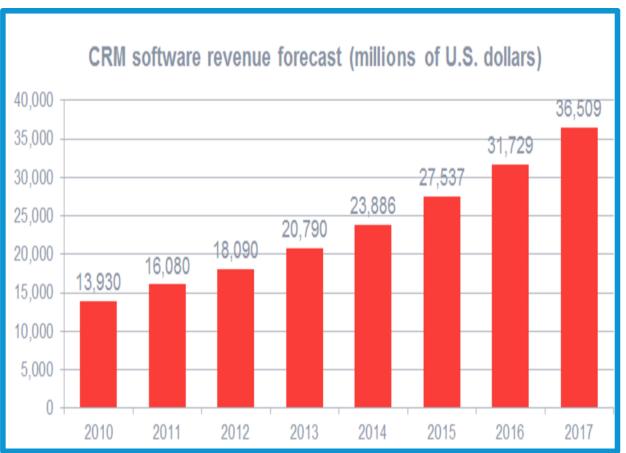
Population Health Management Capabilities Maturity Framework





Parallel Technology Growth Paths – EHRs and CRM





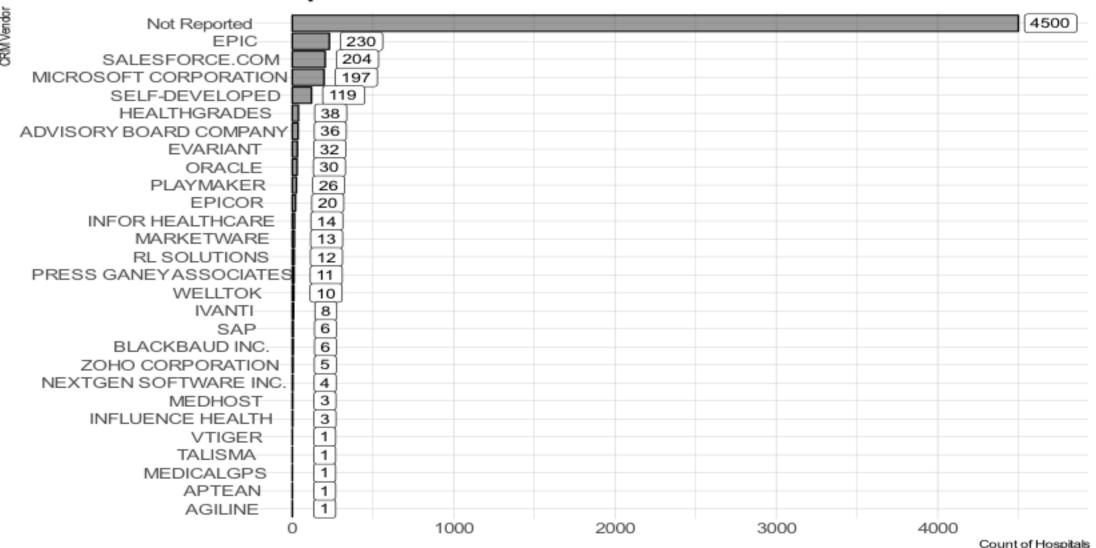
Gartner Says CRM Became the Largest Software Market in 2017 and Will Be the Fastest Growing Software Market in 2018

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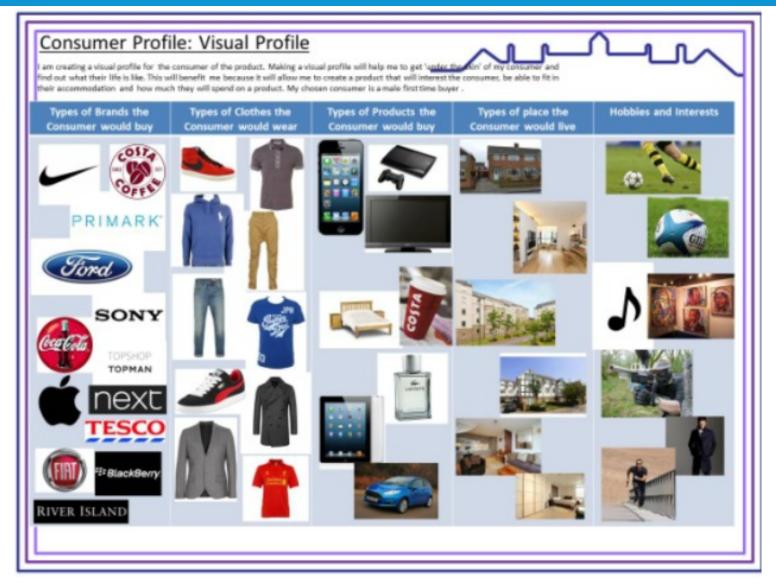
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Healthcare + CRM is a Greenfield Market

Hospital CRM Vendor Market-share



Profile Driven Health Care



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Master Consumer Profile

Entitlements

- Carrier/Sponsor
- Insurance coverage type, programs and services
- Network(s)
- Rx Formulary
- Carve outs

Social Determinants

- Personal Characteristics: Ethnicity, Language, military service
- · Family and Home
- Money and Resources
- Education status
- Family status/support
- · Child care
- Food/Transportation/utilities
- Stressors/emotional safety

Interaction History (Emerging)

- Modalities
- Frequency
- Content/Nature/Type

Individual Demographics/Attributes

- Name
- Identifiers (eMPI, coverage ID, other)
- Gender
- Age
- Marital status
- · Guardian/delegates
- Family/Affiliations
- Employer/sponsor
- Address
- · Contact info
- Communication preference(s)
- Occupation(s)

Attributed Care Team

- Primary Care Provider
- Specialists
- Ancillary
- Family/Friends
- Social services
- Care Manager(s)

Clinical Longitudinal Record

- Disease (real & suspected)
- Episodes/treatments
- Risk scores & predictors
- Rx
- Preventive services
- Health status
- Protocol adherence

Health Behaviors

- Psychographic/Attitudes
- Activation (PAM)
- Readiness to Change
- Knowledge/Skills self management
- Adherence/compliance

Other factors

- Patient Experience Surveys
- Care preferences
- Wellbeing
- Interests

Profile Driven Health Care



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Master Physician Profile

Affiliations

Formal legal entity relationship and affiliations:

- Practice(s)
- Group(s)
- Health System(s)
- Region(s)
- CIN(s)
- ACO(s)
- Facilitiés

Payer Networks

Par status with payer defined networks:

- Payer specific network designations (PPO, HMO, EPO,
- Line of business (MA, Commercial, Medicaid)
- · Product specific designations

Patient Attribution

Direct and derived relationships:

- Panel size
- Panel density
- Panel profiles (age, risk, geo, payer mix)

Core Profile Attributes

Individual physician identifiers and descriptors:

- Name
- Identifiers (NPI, TIN, etc.)
- Gender
- Age, practice duration
- Specialty & Taxonomies
- · Training & Education
- Board Čertifications
- Geographic Location(s)
- Contact Information
- Language(s)
- Modalities of practice (F2F, Video, email etc.)

Interaction History (Emerging)

- Modalities
- Frequency
- Content/Nature/Type

Clinical Quality

Structure, process, and outcomes measures correlated to clinical quality:

- CMS MIPS Quality Payment Program
- Physician Compare
- HÉDIS & MA Stars
- MSSP ACO
- Malpractice history, sanctions

Cost Efficiency & Resource Utilization

Outcomes measures of associated resource utilization:

- Referral patterns
- Diagnostic and Rx resource use rates
- Peer-based: Risk-adjusted episodic cost efficiency by specialty

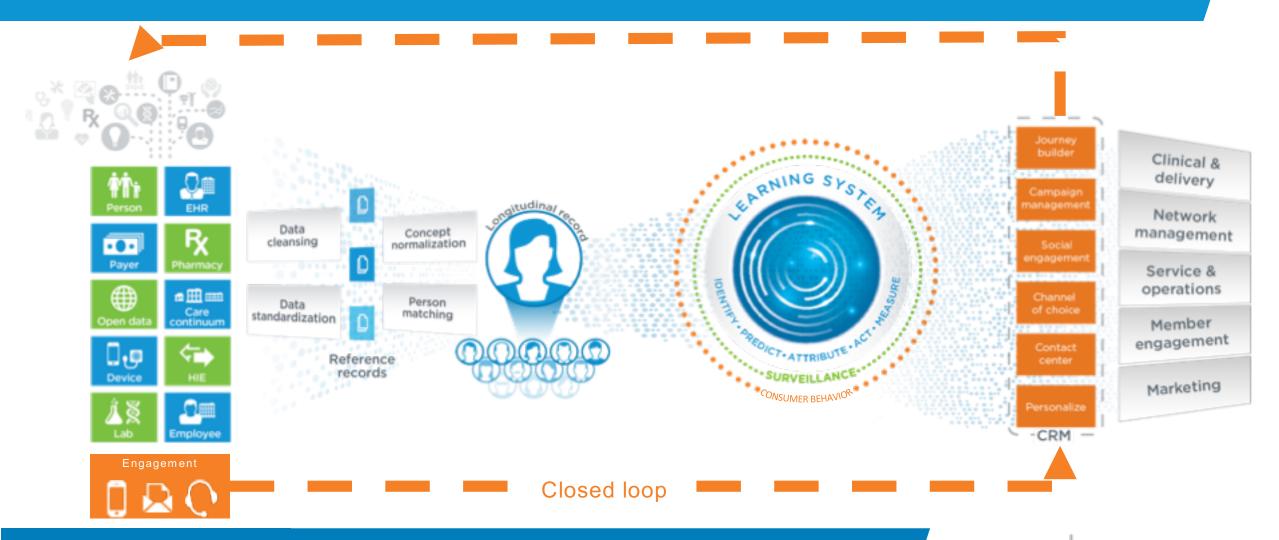
Misc.

Measurement of other performance attributes:

- Patient Experience (CAHPS)
- Patient Interaction and engagement profile
- EHR usage/adoption
- Participation and leadership

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Intelligent Data and Content Powering Precision Engagement







Next Wave of Innovation: Content



Clinical Knowledge Bases

Analytic Content

Journey Content

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