Health Information Technology Framework for Population Health Management

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Population Health Management Along the Care Continuum

Population Risk Segments

Healthy/Low Risk
At Risk
High Risk
Chronic Disease
Complex & Catastrophic

Wellness Programs
Health Coaching
Chronic Condition Management
Intensive Case Management
Population Health Management

Population health management strives to address health needs at all points along the continuum of health and well being, through participation of, engagement with and targeted interventions for the population.

The goal of a population health management program is to maintain and/or improve the physical and psychosocial well being of individuals through cost-effective and tailored health solutions.
Core Components of PHM

- Central leadership role of the physician;
- Importance of patient engagement, education, activation;
- Capacity expansion of care coordination through non-physician team members.
PHM Conceptual Model

• Identifies the high level components of patient-centered population health
• PHM Framework expands on each component and begins to outline the operational flow of those components for program delivery.
PHM Framework Goal

• Identify the key components of a population health management framework
• Visually display flow of components into the program delivery process
Framework Evolution: July 2010

• Expand focus of health risk assessment to health assessment
• Expand risk stratification to three dimensional and include: physical health, emotional health, and trajectory of health
• Illustrate the relationship of incentives and rewards throughout process
• Add culture and environmental interventions as a health management intervention strategies
• Display the role and interaction with providers and new care models such as the medical home
• Show the model as a continuous process that take into account continuous quality improvement and ongoing program assessment
HIT Framework: Project Goal

• Identify key pieces of both health information and health technology needed to operationalize the PHM framework and PHM processes.

• Provide a “landscape” to allow purchasers and industry to identify key areas/core competencies. To support partnerships needed to create holistic solutions.
HIT Framework

Regional Data Liquidity
ACOs, HIEs, RHIOs*

Systems and Person Level Databases
EHR, Lab and Claims Processing Systems*

Infrastructure & Services
Rules Engines, Decision Support Tools, Intervention Level Databases*

Communication Enabling Devices
Home Health Hubs, PHR, Monitoring Devices*

End User Medical Devices
Cell Phones, Smart Phones, IVR, iPads, Personal Computers, Digital TVs*

*Examples only, not meant to be all inclusive
HIT Framework: Key Components

• Regional Data Liquidity
  – Regional Data Hubs
  – Data input from multiple sources
  – Examples:
    • RHIOs
    • ACOs
    • Health Information Exchanges
HIT Framework: Key Components

• Databases and Systems
  – Claims processing
  – Person level databases
  – Systems to collect, store, process information
  – PHM Processes Supported:
    • Identification
    • Health Assessment
    • Stratification
    • Enrollment/Engagement Strategies
    • Outcomes
HIT Framework: Key Components

• Infrastructures and Services
  – Intervention level databases
  – Devises and information used by health care providers to enhance service to health care users
  – PHM Processes Supported:
    • Enrollment/Engagement Strategies
    • Communications and Intervention Modalities
    • Health Management Interventions
HIT Framework: Key Components

• Communication Enabling Devices
  – Accessed by both the end users as well as health care providers to exchange and share information
  – PHM Processes Supported:
    • Enrollment/engagement strategies
    • Communications and intervention modalities
    • Health management interventions
    • Outcomes
HIT Framework: Key Components

• End User Medical Devices
  – Devices and other technologies used by the patient/consumer and health care providers to communication information to health care providers.
  – PHM Processes Supported:
    • Communications and intervention modalities
    • Health management interventions
Backup Slides
Systems and Person Level Databases
End User Medical Devices
Regional Data

PhM Program Process Framework

Population Monitoring/Identification

Health Assessment
- HRA
- Medical Claims
- Lab Data
- Other

Risk Stratification
- Healthy
- Health/Emotional Risk
- Chronic Illness
- End of Life

Incentives & Rewards
- Incentivize Enrolment/Engagement
- Reward Participation Outcomes

Enrollment/Engagement Strategies

Communication and Intervention Delivery Modalities
- Mail
- eMail
- Telephone
- Internet/Intranet
- Social Media
- Face-to-Face Visits

Health Management Interventions

Health Promotion, Wellness, Preventive Services
Health Risk Management
Care Coordination/Advocacy
Disease/Case Management

Tailored Interventions

Operational Measures
- Psychosocial Drivers
- Health Behaviors
  - Self-Management
  - Screening/Preventive Services

Program Outcomes
- Health Status and Clinical Outcomes
- Quality of Life
- Productivity
- Satisfaction
- Service Utilization
- Financial Outcomes

Timeframe for Impact

Notes:
1 For a more detailed discussion of monitoring and identification flow please refer to the work of the Operational Measures Workgroup.
2 Represents example components for each Essential Element. Does not necessarily reflect the universe of components.
3 Communication may utilize one or more touch points within the provider system.