AHI PPS

A Roadmap for Population Health Management

September, 2016

Background

Population health management (PHM) means the proactive application of strategies and interventions to defined groups of individuals across the continuum of care in an effort to improve the health of the individuals within the group at the lowest necessary cost. PHM is an important focus for the AHI PPS as we prepare for value-based reimbursement and risk contracting.

Our more than 100 partner organizations represent diverse sectors of the Northern New York/Adirondack region across multiple settings of care:

- Hospitals
- Primary care providers
- Mental health and substance abuse treatment providers
- Skilled nursing facilities, and others.

These organizations have joined together as a clinically integrated network to provide patient-centered care across the continuum.

This clinically integrated network is designed to increase efficiency and reduce redundancy in providing health care by coordinating delivery of a broad range of health and community services throughout the network.

Coordination of care is contingent on sharing health information (through Regional Health Information Organizations (RHIOs) and/or the Statewide Health Information Network for New York (SHIN-NY) among clinical partners. Information exchange should include DIRECT exchange (secure messaging) as well as alerts and patient record lookup.

The relationship between health care organizations and Health Information Exchange (HIE), and the leveraging HIE to connect what has traditionally been a fragmented system is vital to success of the AHI PPS.

As healthcare continues to move forward with performance- and risk-based reimbursement models, the need for patient-centered coordinated care increases. A paradigm shift from focusing on data in an electronic medical record to a focusing on HIT systems and providers proactively sharing data is needed.

Health Information Exchange (HIE) is the electronic mobilization of clinical and administrative data across organizations, communities, states and beyond in an effort to provide more relevant, responsible and cost-effective care for entire populations while simultaneously improving outcomes.

This *Roadmap for Population Health Management* outlines the AHI PPS's plan to optimize clinical data sharing to ensure success in achieving the goals and objectives of the PPS in developing our clinically integrated network.

A number of key themes emerged as we developed the network:

- The importance of advancing primary care into comprehensive team-based care;
- The need to manage the care of high-risk patients closely;
- The need to develop Population Health Networks and enable primary care physicians and specialists to work more closely together;
- The crucial role that community based organizations and public agencies (including local health departments, local social services agencies, Office for the Aging, etc.) have with expertise in addressing social determinants of health and in advancing population health, and the need to engage them as partners in an integrated network;
- The importance of also engaging hospitals and post-acute care facilities, as well as behavioral health providers.

Community Needs Assessment

A DSRIP Community Needs Assessment (CNA) was completed in December, 2014 for the AHI North Country Performing Provider System (PPS). The needs identified through this assessment process determined the projects selected for implementation by the PPS to achieve the Delivery System Reform Incentive Program (DSRIP) project goals of systems transformation, clinical improvement demonstrated through health metrics, and population-wide implementation strategies and including its focus on reducing avoidable hospital use among the Medicaid-insured and uninsured populations by 25 percent over 5 years.

Through assessing the community, including its demographics, health services delivery structure, health status, health services utilization patterns, and its assets and resources, areas of need were identified. While focusing predominantly on health status, health services utilization, and health services structure, the interrelatedness across socio-economic, environmental, and health factors moves health care further toward a population accountability. This movement toward population health is an underlying and key premise of DSRIP.

The AHI PPS is comprised of nine counties: Clinton, Essex, Franklin, Fulton, Hamilton, Saint Lawrence, Saratoga, Warren, and Washington. Overall, the area can be described as *predominantly rural* with significant proportions of residents who are vulnerable to *poor access to health care* and poor health status. Most notably residents of this region are *older*, have lower incomes, are more likely to have a disability, and have lower levels of educational attainment, in comparison to all residents of New York State.

The negative consequences associated with living in a predominantly rural region with limited economic resources and opportunities are demonstrated through an overview of the health behaviors and health outcomes experienced by the residents of the region.

There is a large and growing body of evidence for the effects that certain health risk factors, such as obesity, lack of physical exercise, poor nutrition, tobacco use, and risky drinking/alcohol abuse have on health status and the burden of chronic disease. Some of the health related behaviors of the population contribute to elevated incidence of chronic disease in the region. *(Based on data from the NYS Expanded Behavioral Risk Factor Surveillance System (eBRFSS) 2013-2014.)*

The preponderance of the measures for the region have poorer outcomes in comparison to New York State. The elevated prevalence of adults who are overweight or obese, who lack physical fitness, have poor nutrition, smoke, binge drink and report 14 or more days of poor physical and mental health during the past month are the leading risk factors associated with chronic diseases, such as heart disease, hypertension, diabetes, cancer, depression, and anxiety.

The relative levels of poverty and lack of economic opportunity combined with the noted risk behaviors for poor health outcomes result in elevated incidences of mortality in the region as a result of cancer, cardiovascular disease, chronic respiratory disease, diabetes and suicide.

It is well-recognized that low income populations are less likely to have a usual source of primary care, less likely to have a routine check-up, and less likely to be screened for illnesses, such as breast cancer, prostate cancer, or colon cancer. Data also suggests that low-income populations are more likely to use hospital emergency department and inpatient services for care that could be avoided or prevented altogether with better more accessible primary care services.

In general, data from New York's Expanded BRFSS show that residents in the region are less likely than the NYS population overall to have health insurance, although they are less likely to report that costs were an impediment to accessing care. Adults in the region report having a regular health care provider, but the percent who report having a routine checkup within the past year lags behind the NYS average. The following data also illustrates that there is room for improvement as far as meeting statewide averages for the receipt of screening and preventive services.

Particularly important is engaging patients from culturally and linguistically isolated patient communities. A well-documented pattern of health disparities exists in the United States. This pattern is apparent in health care outcomes and utilization and is evidenced by the disproportionate incidence of disease, disability and death among specific racial and ethnic groups.

Health disparities are defined by the NYS Department of Health as "Differences in health among groups of people. These differences can include: how frequently a disease effects a group; how many people get sick; or how often the disease causes death."

Particular communities ("an interacting population of various kinds of individuals in a common location" [Webster's dictionary]) present challenges to engagement posed by growing diversity. Factors impacting community diversity involve more than race and ethnicity. Other factors include geographic location, population density, age distribution, social history, disability, and economic climate. Regional community health assessments and community health service plans have designated poverty or economic disparity as the primary disparity in the PPS service area. The others exist but by and large the main driver of poor health outcomes is related to poverty which influences location, transportation, engagement in health care (particularly preventive care), healthy foods access, recreation and potentially experienced trauma.

The data from the American Community Survey following illustrate some of the characteristics of the region that present challenges to accessing care.

% of Persons 65 Years and Older

Region	***%age***
New York State	14.7%
Essex County	**20.5%**
Hamilton County	**25.8%**
Clinton County	**14.8%**
Franklin County	14.4%
St. Lawrence County	**15.7%**
Fulton County	**18.1%**
Warren County	**19.8%**
Washington County	**17.3%**

% with a Disability, Under 65 Years of Age

Region	***%age***
New York State	7.3%
Essex County	**11.2%**
Hamilton County	**9.5%**
Clinton County	**10.6%**
Franklin County	**10.7%**
St. Lawrence County	**10.2%**
Fulton County	**12.4%**
Warren County	**9.4%**
Washington County	**9.6%**

AHI's work with facilitating the identification of priority populations and advancing efforts to address the poor health outcomes experienced by residents in the region, predates the establishment of the PPS. Since 2002, AHI has overseen the activities of the Adirondack Rural Health Network (ARHN). ARHN is a partnership of local health departments and hospitals that regularly convene to discuss and plan efforts to address the region's health needs. In particular, ARHN is instrumental in providing extensive population and community health data to its members to assist in the development of Community Health Assessments and Community Health Improvement Plans. The data, and corresponding analysis, form the basis for the identification of the NYS Prevention Agenda priorities and focus areas by ARHN members. Reflective of the Community Needs Assessment discussed above, ARHN members have identified prevention of chronic disease, promotion of mental health and prevention of substance abuse as the primary Prevention Agenda priorities that they will address.

In addition to ARHN, AHI manages a Population Health Improvement Program (PHIP). PHIP further supports the identification of target populations through a review and analysis of population and health data to document populations in the region who are experiencing some of the poorest health outcomes (health disparities). As noted in the Community Needs Assessment, people with incomes below the poverty level, low educational attainment, socially and physically isolated, and lacking access to

economic opportunities have higher rates of obesity, smoking, chronic disease, and mental distress in comparison to other regional residents. Gender differences exist for some of the poor health outcomes and it has been noted that single female heads of households with children experience the poorest outcomes in several health measures. To supplement the health improvement efforts conducted by ARHN members, PHIP attempts to engage a broader spectrum of community sectors (e.g. behavioral health, economic development, community action, housing, disability, education, etc.) in similar efforts with a particular focus on environmental and policy initiatives that may have a positive impact the region's health. As an example, the PPS' support of a two-day training workshop, *Bridges Out of Poverty,* for staff from a broad range of agencies recognized the need to increase the capacity of agencies to effectively work with and provide services to people with low incomes.

This roadmap builds on these themes and other information obtained from our research, with the goal of improving care, lowering costs and realizing a healthier future for the residents of the communities we serve.

Advancing Primary Care

NCQA's patient centered medical home (PMCH) criteria includes components such as patient-centered access, team-based care and performance measurement. In addition to using data to identify patients in need of preventive services, medical homes also show PHM capabilities in areas such as care management and care coordination.

A PCMH ensures patients receive recommended preventive and chronic care, track patients' health conditions systematically, reach out to noncompliant patients and those who do not regularly see their doctors, provide patient education and self-management coaching and address poor health behaviors – all integral to PHM.

Roadmap to Advancing Primary Care

- *Strategy:* change provider behavior, provide team-based care, improve access, coordinate care, fill care gaps, consider non-traditional visit care
- *Challenges:* physician resistance, workflow changes, infrastructure costs
- *Technology:* EHRs, PHM solutions, patient registries, analytics to identify care gaps, outreach automation tools
- *Recommended Strategy:* form physician-led champion teams, continuously analyze population and care data to improve efficiencies and optimize budgets

Roadmap to Engage Patients

- *Strategy:* use automated alerts to patients with care gaps, provide online educational material, embed behavioral health specialists in primary care sites, address barriers to care
- *Challenges:* insufficient number of care managers, outreach tools not interfacing with all EHRs, lack of behavioral care and lack of integration with community resources

- *Technology:* EHRs, outreach tools, online educational materials, text reminders, telehealth consults, remote patient monitoring
- *Recommended Strategy:* form strategies with EHR vendors to promote interoperability, collaborate with providers to improve educational resources, develop EHR ability to incorporate behavioral health data, leverage CBO partners to assist with engaging patient communities. Community based organizations (CBOs) are organizations working in the community, public or private non-profit (including a church or religious entity) that is representative of the community and is engaged in meeting human, educational, environmental or public safety community needs.

Roadmap to Engage Primary Care Physicians (PCPs)

- *Strategy:* enlist PCPs as care team leaders; encourage PCPs to work more closely with specialists, teach primary care teams how to use IT tools to improve population health
- *Challenges:* PCPs are used to fee for service practice; difficulty getting PCPs to change to an ongoing care management for the patient panel concept; transition to leading care teams
- *Technology:* EHRs, patient registries, analytics to understand population, automation tools for care management / identifying care gaps, telehealth, remote monitoring
- *Recommended Strategy:* apply basic technologies to enable patient monitoring, select practice champions, leverage technology to allow seamless communication across facilities and with specialists

PHM Requirements for Advancing Primary Care

- *Data/Information Exchange*
    - Provide different views based on user level (physician, care manager, nurse, administrator)
    - Send various types of care gap alerts, documents or messages to the care team through the EHR system
    - Automate pre-visit planning by identifying gaps in a patient profile prior to visit, based on evidence-based guidelines
    - Ability to capture psychosocial data
    - Update and incorporate emerging standards/guidelines
    - Provide a standard set of evidence-based protocols, and the ability to customize protocols by practice
    - Include medication reconciliation, medication therapy management, drug utilization review and medication adherence information
    - Ability to import pharmacy data, and update script data in real time
    - Ability to capture community level prescription information (data on prescriptions filled at community stores and/or those processed outside of insurance claims data)
    - Ability to capture advance directives
    - Ability to be accessed from a device other than an EMR/kiosk
    - Provide data download capabilities to practices without an EHR – and – ability to download data to those practices with an EHR in real time
    - Ability to update pharmacy scripts in real time
    - Provide data field standardization where appropriate

- Ability to import claims data from multiple payers, and in real time
- In addition to the standard data flow, should have the ability to interface with multiple EHRs
- Ability to interface with HIEs and claim systems to provide a single patient portal
- Provide the administrator the ability to customize the PHM solution

- *Patient Engagement*
  - Provide reminder and notification alerts to patients
  - Capability to communicate directly with patients through secure messaging
  - Allow two-way secure communication between the care team and patient via a patient portal
  - Capture patient information when not connected to the Internet (i.e., at the patient home)
  - Provide industry standard patient satisfaction surveys

- *Reporting & Decision Support*
  - Ability to export patient registry lists
  - Analyze utilization patterns to identify waste and drive appropriate use of medical resources (generic vs. brand name drugs, conditions driving utilization)
  - Ability to benchmark quality measures, and compare performance outcomes (by physician/practice/network/region) against national or custom thresholds
  - Aggregate various payer variations of cost and quality measures for patient population, and pull commonalities into a single set of benchmarks and quality measures, along with payer specific sets
  - Ability to automatically compare performance outcomes at the physician/practice/network/region and PPS levels combined to industry standard for clinical measures
  - Incorporate pre-programmed established standard clinical measures such as NCQA, HEDIS, PQRS, IHA, CMS SSP ACO, and others
  - Ability to create custom reports such as DSRIP project reports, PCMH-required reports and ad hoc reports to facilitate clinical quality improvement
  - Provide ability to distribute funds based on combined attribution numbers, outcomes results and performance reporting
  - Determine the efficiency of practices and physicians (evaluate the financial risk and cost efficiency index on a risk-adjusted basis)
  - Provide physicians with a synthesized view of their risk-adjusted performance relative to peers, with drill down capability to efficiency details
  - Analyze variations in practice patterns comparing physicians on a cost, utilization and efficiency perspective
  - Provide reports that highlight overall trends, costs, disease drivers – and – clinical and pharmacy cost savings opportunities
  - Provide reports that identify trends and inform stop loss reserve setting and contracting
  - Compare provider treatment patterns using medical episode groupers, including hierarchical condition categories (HCCs)
  - Capability to allow the appropriate level administrator to create custom clinical measures

- Ability to drill-down in the data at least six levels (PPS, region, partner, site, provider, patient)
- Support predictive modeling and analytics to include risk stratification and prediction of population served (high risk, rising risk, acute episodic) based on cost, diagnosis or other custom characteristics
- Ability to export reports from the PHM solution to standard Microsoft Word, Excel .pdf or other formats
- Integrate risk modeling for accurate and credible clinical, financial and performance risk assessment

Manage the Care of High-Risk Patients

While population health, by definition, includes managing the wellness of the entire panel of attributed patients, a focus on high-risk patients is needed as the sickest patients contribute to a substantially larger proportion of health spending.

Management of these patients will serve to keep them out of the hospital and the emergency department – thus accomplishing the overarching goal of DSRIP: to reduce unnecessary hospital use by at least 25% over the five year program.

New York State (State Innovation Model, "Advanced Primary Care" Milestone 4 – Care Management / Care Coordination) has defined:

- Care management – focus on the comprehensive support of the highest risk subset of a patient population
- Care coordination – contributes to seamless care of all patient transitions across all environments

The primary task of our case managers is to manage high-risk patients so they do not become sicker and require more expensive care. Care managers and other team members use analytic tools (such as registries, outreach applications, online educational materials) to help patients with less serious conditions take better care of themselves. And, the care team ensures that health patients receive appropriate preventive care and are encouraged to maintain their health.

Roadmap to Manage the Care of High Risk Patients

- *Strategy:* care coordination, risk-stratify population, manage high-risk patients, ensure other (rising-risk or relatively healthy) patients also receive necessary care, coordinate with specialists, improve transitions of care, connect patients with community based resources to address social factors influencing their health
- *Challenges:* identifying high-risk patients, finding relevant data, patient outreach, hiring and retaining care management staff
- *Technology:* EHRs, data warehouses, PHM solutions used in PCMHs, plus risk stratification and tools to help care managers prioritize cases and locate relevant information
- *Recommended Strategy:* collaborate with clinicians to construct care management teams, analyze and categorize sub-populations from EHRs and data warehouses to identify high-risk

patients, leverage technology for remote monitoring; initialize telehealth programs; develop a system for communication and referrals to CBOs, utilize CBOs for outreach to patients identified as high-risk when possible

PHM Requirements to Manage the Care of High Risk Patients

- *Population Identification & Stratification*
    - Provide risk scoring for patient population
    - Ability to identify "at risk" patient populations, and prioritize based on care manager needs – and – ability to identify high-risk patients in need of immediate or long term clinical intervention
    - Ability to pinpoint patients at risk for hospitalization or emergency room use in the near future
    - Ability to monitor changes in patient panel risk at defined time intervals – and – monitor clinical events to identify intervention opportunities
    - Ability to identify at-risk patients by disease, and ability to drill down to clinical events with patient level detail
    - Ability to identify outliers based on custom criteria, including outlier outcomes based on a custom set of requirements
    - Ability to identify high-cost and high-risk patients, and alert the appropriate user for necessary intervention

- *Care Planning*
    - Provide notification and alerts to care managers
    - Provide care management recommendation reports
    - Ability to notify the appropriate level user of a patient's non-compliance with a prescription refill
    - Capability to assign work queues, based on evidence-based protocols, patients registries and care plans
    - Include industry standard care plan templates customized by the appropriate level administrator
    - Ability to assign tasks to specific people
    - Provide disease management capabilities specifically for: diabetes, hypertension, cardiovascular, COPD, pediatric obesity and asthma, pediatric prevention (immunization, well child visits), behavioral health/substance abuse
    - Allow appropriate level user the ability to review medication and treatment history of the patient
    - Ability to pre-identify patients not filling their scripts
    - Capability for ambulatory review and care coordination for patients in an outpatient setting, including referral management – and – concurrent review, including utilization management for patients in-hospital

- *Reporting & Decision Support*
    - Ability to export patient registry lists
    - Ability to create custom medication management reports

Develop the Population Health Network

Most hospitals and sub-acute facilities, and specialists, may be reluctant to transform along PHM lines until offered global risk contracts. However, coordination of care with primary care practices, is a core function; ensuring smooth transitions of care for patients across all care settings.
Technology offers hospitals ways to assist physicians in succeeding a PHM while also reeducating readmissions. The hospitals can (either directly or through RHIO) send primary care physicians alerts of admissions/discharges and ED visits.

This information is incredible important to the primary care practice. The primary care team is then able to contact the patient for schedule a follow up visit at the office if necessary – to ensure the patient's condition is controlled and the patient re-establishes that connection with the primary care practice.

Similarly, information exchange between primary care providers and specialists (including behavioral health providers) is necessary to ensure a single, comprehensive care plan that is managed by the primary care team for each patient.

Sending clinical information (CCD – clinical care document) including basic information such as problem list, medications, allergies and relevant testing improve communication and reduces unnecessary duplicate testing on the part of the specialist. Ensuring a report is received back from the specialist (ie, "closing the referral loop") ensures the primary care team is able to incorporate the specialists' recommendations in the care plan.

Roadmap to Engage Community Based Organizations

- *Strategy:* for individuals to achieve better health, primary care providers must connect their patients to social support and human services in the community while focusing on prevention and wellness in ways that emphasize behavior change
- *Challenges:* primary care practices are not always aware of the resources offered in the community. By partnering with community-based organizations (CBOs) and public agencies providers can help individuals manage their chronic diseases and meet their often overlooked social needs
- *Technology:* health information exchanges, particularly DIRECT messaging to facilitate communication between the primary care office and the CBOs; leveraging provider websites/patient portals (social media channels) to provide patients with contact information about community organizations in the neighborhood with direct links to each CBO's website where available. Social media channels can be particular effective in population messaging and getting educational information out to a broad range of people. It is comfortable and non-threatening. In addition, text messaging in the right environment while always being cognizant of PHI is an effective way to reach community members. RHIO connections for secure information sharing may be an option.
- *Recommended Strategy:* build relationships with CBOs to streamline the referral process with primary care providers, and assist primary care offices in maintaining a resource list of key community service areas of importance to the patient population, including programs and

services to help patients in self-care on key community service areas of importance such as: smoking cessation, weight management, exercise/physical activity, nutrition, parenting, dental, transportation to medical appointments, noncommercial health insurance options, obtaining prescription medications, falls prevention, meal support, hospice care, respite care, child development, child care, breastfeeding, etc. Ensure the practice reviews and requests feedback from patients/families/caregivers about community referrals, to evaluate whether it identified sufficient and appropriate resources for its population over time.

Roadmap to Engage Hospitals

- *Strategy:* provide timely information to primary care providers on hospital admission and discharges – and – ED visits, implement medication reconciliation, coordinate care to improve handoffs, reduce readmissions
- *Challenges:* most hospitals not yet involved in PHM, inpatient EHRs may not be interoperable with primary care EHRs, inadequate post-discharge care
- *Technology:* health information exchanges, ADT alerts through EHRs and HIEs, post-discharge automated calls to identify patients in need
- *Recommended Strategy:* establish regular meetings with leadership teams across the health system, use and engage care management teams for handoffs of care, utilize HIEs an EHR data to share information, establish systems for continuous follow up with patients

Roadmap to Engage Specialists

- *Strategy:* encourage specialists to share responsibility for patient, provide key clinical information at the time of referral, send appropriate (with concise direction as to what is being asked of the specialist) referrals, work with specialists to receive reports back in a timely manner
- *Challenges:* specialists view PHM as the PCP's project, specialists do not receive care coordination payments, other incentives may not be sufficient
- *Technology:* EHR used by both PCPs and specialists in the same organization, health information exchanges, direct messaging, referral tracking tools that alert PCP when patient does not see specialist or when report has not come back
- *Recommended Strategy:* illustrate the business case for engagement with PCPs, create process for effective data exchange, utilize direct messaging, HIEs and EHR referral tools to enable seamless reporting

Roadmap to Engage Post-Acute, Long Term Care and Home Care Providers

- *Strategy:* encourage post-acute, long term care and home care providers to share responsibility for patient, provide key clinical information at the time of referral, send appropriate (with concise direction as to what is being asked of the post-acute, long term care and home care providers) referrals, work with post-acute, long term care and home care providers to update care plans as needed and to receive reports back in a timely manner
- *Challenges:* post-acute, long term care and home care providers do not receive care coordination payments, other incentives may not be sufficient

- *Technology:* health information exchanges, direct messaging, referral tracking tools that alert PCP when changes are needed to care plans and/or when reports are not received back from post-acute, long term care and home care providers
- *Recommended Strategy:* illustrate the business case for engagement with PCPs, create process for effective data exchange, utilize direct messaging, HIEs and EHR referral tools to enable seamless reporting

PHM Requirements to Develop the Population Health Network

- *Data / Information Exchange*
    - Ability to interface with multiple health information exchange/RHIOs

- *Care Coordination Between Providers*
    - Capture all patient data at care transitions, including discharge
    - Provide care coordinators the ability to coordinate clinical and community-based services
    - Ability to update and reconcile all medications at transitions of care
    - Offer secure messaging between providers

Operationalizing the PHM Roadmap

Our approach to operationalizing the PHM Roadmap focuses on key core requirements: data / information exchange, population identification & stratification, patient engagement, engaging primary care providers and reporting & decision support.

Data / Information Exchange

As we began our review of PHM solutions for the PPS, it became apparent investing time up front was necessary to build and integrated and reliable population-wide data systems. The PHM solution must provide timely, accurate, and meaningful reports to drive effective quality and care management processes and results.

Many EHRs are not designed for PHM or for interoperability with other systems. To fill these gaps in information technology, supplemental applications and health information exchanges are needed.

We plan to aggregate information from our providers EHRs systems in a data warehouse. The information in these systems can be used in building registries for tracking and monitoring population health.

Because EHRs often do not contain much information about the care that patients have received outside a provider organization, we plan to incorporate data from HIXNY (RHIO/SHIN-NY) as well as claims-based data feeds from various sources. All PPS providers are supported in efforts to connect with RHIO/SHIN-NY to facilitate the sharing of information about a patient's health problems, medications, lab results, and procedures, regardless of site, payer or tracking system.

Data management for PHM purposes is also challenging because each provider and health plan has a different system for patient identification and provider attribution. The PHM solution will include fields for linking data across data sets and matching patients to their primary care providers.

Although currently unstructured data in scanned documents and dictated notes continue to be part of the clinical record in EHRs and HIXNY, our efforts will focus on improving data integrity, increase the amount of discrete data, and use standardized measures.

Population Identification & Stratification

To manage population health effectively, population registries must be actionable: the population must be stratified by risk, conditions, or other criteria important to the practice, and automated algorithms and allow clinical teams to prioritize, distribute and monitor intervention activity and results continuously.

Rather than stratifying by condition (disease management) our approach is to identify patients "at risk" and require ongoing support from a care manager, those with less serious chronic conditions that warrant interventions to prevent them from worsening and/or those who are fairly healthy and just need preventive care and education (care management/health coaching).

The PHM solution will have the tools for the stratification and monitoring the population, including the ability to:

- Target patients in greatest need of services by narrowing subpopulations;
- Make data on patients actionable by generating alerts to patients to seek appointments with providers;
- Make data actionable by generating alerts to providers about patient care needs.

Patient Engagement

To effectively manage the population, providers (and primary care teams) strive to deliver appropriate, evidence-based care during patient visits, but also ensure that care gaps are addressed when patients do not come into the office.

This requires motivating and collaborating with patients to help them take care of themselves. Providers need to find ways to help patients understand their care plans and the importance of complying with recommended guidelines.

The most powerful motivator is the patient-physician relationship itself. By leveraging the patient-physician relationship, providers can encourage patients to change their health behavior, leading to improved health.

Solutions under consideration include automated messaging to all discharged patients can urge them to see their providers, fill their prescriptions, and call their PCP if they have any questions about their care plan. Patient outreach may include phone, email, portal messages, text, mobile apps and wireless biometric devices.

Engaging Primary Care Providers (PCPs)

Primary care is the core of PHM, because primary care teams supply the continuity required to ensure that patients receive appropriate preventive and chronic care.

The PHM solution will provide valuable up-to-the-minute, comprehensive views of patient care by gathering data from a variety of sources.

AHI Practice Transformation resources will regularly meet with the primary care teams to review/discuss PHM reports. The goals of these meetings is to identify patients who may benefit from care management, engage "at risk" patients in care management earlier in their prognosis and avoid unnecessary hospital use.

Once patients are engaged in care management, the PHM solution can improve communication among physicians, care manager and patients.

The PHM solution can also automate some of what traditionally care managers have done: automated alerts about needed care (via phone, email, portal message or text message), notification post-discharge to connect patients back with the primary care team, distribution of tailored educational materials for patients with chronic conditions.

Automation allows care team members to spend less time performing routine tasks and more time interacting with patients who need their assistance. It helps prepare patients better for office visits, and enables primary care teams to conduct PHM without overburdening their resources.

Reporting & Decision Support

Data analysis is an integral part of PHM. Reports including mortality, health status, disease prevalence and patient experience must be available to providers, care managers and practice administrators to enable practices to measure cost and patient experience on a population-wide basis.

With the help of standardized reports displayed on a dashboard, practices can analyze the data over time to identify trends and spot gaps in PHM. Standardize reporting across provider organizations will be captured in order to create regional and national benchmarks.

Analyses of the health status of population segments can show where the PHM approach needs to be strengthened or modified. The PHM dashboard can also be used for risk stratification, for identifying the prevalence of health conditions by provider or site, and for evaluating provider and practice performance.

These reports may also be used as the basis for quality reporting to payers and other outside entities, including NCQA for recognition as a patient centered medical home and CMS for Merit Based Incentive Payment reporting among others. To do this effectively, the performance measures that organizations use in PHM should be aligned across programs and payers.

AHI's approach to decision support is partnering AHI Practice Transformation resources with practices to leverage the PHM data available to enable meaningful changes to how health care is provided. We are committed to ensuring that primary care physicians in our network are armed with the tools to deliver the value that they are uniquely suited to provide to their patients and the healthcare system.

Our Practice Transformation team provides expert services including: practice transformation, patient centered medical home (PCMH) recognition assistance, and quality improvement (QI) initiatives. Our process is targeted toward the needs and challenges of each primary care practice. Our model enables us

to effectively determine how ready a practice is to absorb a change; identify and address challenges; determine the level of support needed; and provide support to assist practices in meeting goals.

Summary

While PHM requires ability to provide patient registries and identify care gaps, risk stratification, benchmarking and clinical dashboards as well as ability to outreach to patients and automate work queues, the most important aspect for the AHI PPS is the ability to apply PHM information in meaningful ways to improve the quality of patient care being provided throughout the region.

The ability to execute on PHM depends on people, process and technology. Our physicians must accept the idea that PHM will improve quality of care, and prepare them for the value-based future. Care managers and the processes needed to implement PHM must be in pace. And, information solutions that augment EHR capabilities are needed to support the new care process in a cost-effective way.

Our goal for the AHI PPS is to provide comprehensive (including behavioral health), team-based, patient-centered care for both patients coping with illness and the healthy, to enable our providers to succeed with value-based reimbursement models.