Summary

The Adirondack Region Medical Home (ARMH) pilot is a joint initiative of medical providers and public and private insurers to transform health care delivery in the rural, upstate New York region. Its goals are to improve care, expand access to care, and contain costs. The population of the affected region is approximately 230,000, of which there are more than 120,000 attributed patients (those who qualify to be part of the medical home pilot).

The ARMH pilot employs the patient-centered medical home (PCMH) model for health care services; its physicians are trained to provide first contact, continuous, and comprehensive care, emphasizing preventive care and active management of chronic conditions. Instead of care that is based on episodes of illness and patient complaints, the PCMH approach emphasizes coordinated care and a long term healing relationship between patients and their primary care physicians.
The ARMH pilot developed from the pressing need to increase support for primary care in the region, and to address a growing and potentially critical shortage of primary care physicians.

Since the program’s inception, the number of providers has grown from 33 individual practices to 40. The Adirondack region has seen a steady and growing decline in the availability of doctors in recent years and has the highest patient-to-primary-care-doctor ratio in New York State.

The ARMH pilot is based on the following ideas about health care delivery:

• A coordinated, team approach, with a primary care physician in the lead, is the best way to keep patients healthy, especially for those with chronic conditions.

• Keeping people as healthy as possible costs less than treating them late in the disease.

Under the terms of the ARMH pilot, primary care providers will receive increased payment for services in exchange for expanded responsibility for coordinating care, providing preventive care, and managing chronic diseases. The increased reimbursement is expected to be offset by decreased costs from fewer hospital admissions, fewer referrals to specialists, lower prescription costs, and overall better health of the population.

Providers must participate in all activities of the ARMH pilot, including fully participating in one of the pods, attending meetings, completing assigned tasks, and providing necessary practice information.

Additional requirements relate to enhanced access to care, coordination of care/disease management, post hospitalization/emergency department (ED) care, evidence-based guidelines and measurements, and quality reporting and data sharing, as described below.

• **Access to care.** Providers will assign each patient to a personal clinician who will provide continuity of care for that patient. Same day appointments will be available to patients requiring urgent care, and patients will also have phone access to the practice around the clock.

• **Care coordination/disease management.** Providers will create a dedicated care coordination/disease management team to care for patients with chronic diseases that will initially include diabetes, coronary artery disease, hypertension, and asthma. In addition to the primary care physician, the care coordination team will include an RN, pharmacist, dietitian, and licensed clinical social worker. Each patient with a clinically important condition (as defined by the National Committee for Quality Assurance - NCQA) will receive evidence-based care to achieve NCQA level 2 recognition.

• **Post hospitalization/ED care.** Post-acute care patients will be actively engaged by the assigned primary care clinician and care coordination team. The team will facilitate effective transitional care, medication review and reconciliation, and appropriate follow-up care. The cases of patients with potentially avoidable hospitalizations or frequent ED visits will be flagged for review by their personal clinician to determine if changes are needed in the delivery of care.

• **Evidence-based guidelines and measurements.** Practices with adult patients must include at least diabetes and their choice of two of the following clinical topics for NCQA recognition: hypertension, hyperlipidemia, coronary artery disease, congestive heart failure, or depression. Pediatric practices must choose well child care/prevention and at least two of the following: overweight/obesity, asthma, or ADHD. Practices with combined populations of adults and children will identify the clinically important conditions per NCQA recognition requirements.

• **Quality reporting.** Providers will participate in an organized disease registry and develop data reporting capabilities to enable reporting on access to care, clinical process measures, clinical outcome measures, and patient experience of care using common metrics and methods.
The ARMH pilot seeks to improve care and contain costs for several high-risk, high-frequency chronic conditions: diabetes, hypertension, coronary artery disease, and asthma. These conditions were chosen based on region-specific clinical and insurance claims data.

For the general patient population, primary care practices focus on providing preventive care, age- and gender-appropriate screenings, and counseling. These services include annual physicals, routine immunizations, pap smears, mammograms, colonoscopies, pediatric lead screenings, smoking cessation programs, and counseling for diet and depression. Primary care providers proactively contact patients to schedule appointments and keep patients on schedule for future routine examinations and screenings.

During the initial months of the ARMH pilot, specific clinical benchmarks are set for the chronic care conditions. Use benchmarks and goals are set for reduction of ED visits, inappropriate hospitalizations, and length of stay in the hospital. The ARMH pilot also sets goals for screenings and preventive services.

The ARMH pilot has developed a clinical process flow that standardizes the care framework for every patient. Once patients are identified, initial outreach by a nurse starts, and based on an assessment, the patient is stratified into one of three tracks depicted below.

The ARMH pilot is organized as three geographic pods: Northern Adirondack (Plattsburgh and surrounding communities), Tri-Lakes (Saranac Lake and surrounding communities), and Lake George (Lake George and surrounding communities).

The pilot’s reimbursement model will include a fee-for-service component, a care coordination fee, and a performance-based payment that reflects improved clinical outcomes.

The ARMH pilot has a five-year window to demonstrate that these changes in the delivery of care have improved patient health and contained costs.

**Patient Identification**

**Inclusion Criteria**

Patients of participating primary care practices are automatically considered part of the pilot if they have had an office visit within the past two years. Immediate family members in the household of active patients are also included. However, these family members must see their primary care physician within one year of the start of the pilot to continue to be included.

The ARMH pilot uses the practice management system to identify patients with upcoming visits or important conditions. The care coordinator uses the EMR to incorporate their clinical details into the registry to increase efficiency of care.

**Data Sources and Tools Used**

The ARMH pilot uses the EMR of each participating practice to identify patients. Participating practices must be able to capture patient information electronically to ensure that each member of a patient’s care team has easy access to that information, which includes electronic prescriptions.
Capturing patient data in an EMR system is expected to improve the quality of care provided to patients and will enable an accurate assessment of whether clinical and utilization benchmarks are met.

To facilitate the use of EMRs, the ARMH pilot participants secured a grant of $7 million in late 2009. The funds, received through the HEAL NY Program, are being used to streamline the sharing of patient information.

**Ranking/Stratification Methodology**
The ARMH pilot analyzes EMR data with a commercially-available predictive modeling system, which stratifies patients based on disease burden and likelihood of hospitalization.

**Ongoing Data Collection Methods**
The ARMH pilot’s health information exchange, Health Information Exchange New York (HIXNY), aggregates patient medical information from a variety of sources. These data include: information about primary care providers and specialists, patient medication history, patient demographic and allergy data, lab results, image reports, and hospital discharge summaries. The program architecture for data collection and sharing is illustrated in the graphics below and on page 5.
Assessment

Tools Used
Each enrollee goes through a battery of assessments administered by a case manager and primary care physician, which includes a risk assessment, age-appropriate screening tests, and an assessment of immunization compliance, all of which are built into the EMR templates.

In addition, each patient is screened for depression using the Beck Hopelessness Scale (BHS), for alcoholism using the CAGE (cut down, annoyed, guilty, eye opener) questionnaire, and for smoking using another questionnaire.

Assessment Elements
For each of the identified diseases (diabetes, coronary artery disease, hypertension, and asthma), patients participate in a targeted history and physical examination to document the extent of their disease, their current state of health, activities of daily living, and extent their social support system.

Timing and Location
The initial assessment is completed within six weeks of enrollment and is conducted in the physician’s office and by telephone.
Care Management Team

Team Composition
The ARMH pilot is organized into three different bodies: ADK Governance Council, pods, and practices. The table on the right delineates the various roles and expectations of each body.

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<th>BODY</th>
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<tr>
<td>ADK Governance Council</td>
<td>• Overall governance, evaluation, and measurement</td>
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<td>• Provider/payer participation</td>
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<td>• Health information technology</td>
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<td>• Project databases (EMRs, clinical and claims)</td>
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<td>Pod</td>
<td>• Local, physician-led governance of pods</td>
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<td></td>
<td>• Assistance with PCMH certification and EMR implementation</td>
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<td></td>
<td>• Organize, staff, and provide shared services:</td>
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<td></td>
<td>• Care coordination, complex case management</td>
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<td>• Care transition management</td>
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<td>• Pharmacy and social service consultations</td>
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<td>Practice</td>
<td>• Implement EMR, electronic prescribing, registries</td>
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<td>• Achievement of PCMH standards, certification</td>
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<td>• Improved access, team-based care, referral tracking</td>
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<td></td>
<td>• Reengineered visits, evidence-based medicine</td>
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<td>• Improved chronic disease management</td>
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The governance committee of participating payers and providers is chaired by an official of the New York State Department of Health and has the following responsibilities:

- Monitoring the progress of practices and making initial and continuing participation decisions when necessary
- Making decisions about new applications for participation from providers and practices
- Resolving attribution disputes (if necessary)
- Enforcing terms and conditions
- Assessing overall pilot performance
- Clinical/quality performance
- Financial performance
- Developing process and procedures for data access
- Ensuring regulatory compliance
- Managing grants and funds
- Meeting logistics
- Communications and education
- Internal (participants)
- External (press, interested parties, employer groups)
- Compensation and participation requirements (terms and conditions)
- Oversee any changes or revisions needed
- Pay for performance
- Acting as liaison with other governance entities or statewide projects including Rural Health Networks and HEAL 10, among others
- Creating and defining subcommittee activities

Team Roles and Education
The pod — regional collection of practices — provides care coordination, complex case management, care transitions management, and disease registry management. The pods are staffed by care managers, data consultants, dieticians, information support coordinators, information technicians, patient educators/diabetic educators, patient navigators, pharmacists, psychiatric NPs, and social workers.

The ARMH pilot also focuses on chronic conditions including diabetes, hypertension, and coronary artery disease, which were chosen based on region-specific clinical and insurance claims data. In each pod, two care managers have been embedded to focus on patients with diabetes, while six staff members have been trained as chronic disease self-management peer-to-peer trainers.

PCP Involvement
Participating primary care providers must complete a practice self-assessment, including a detailed work plan and appropriate timeline, leading to recognition as a patient-
centered medical home by the NCQA at level 2 or higher within one year from the beginning of the pilot.

The NCQA standards that shape the model of care for the patient-centered medical home are the following:

- **Access to care**
  - Same-day appointments
  - Round-the-clock coverage
  - Each patient assigned to a personal clinician/team

- **Care management — health coach**
  - Transitional care
  - Referral and lab follow-up
  - Patient education and access to community resources, (i.e., Champlain Valley Physicians Hospital (CVPH) Diabetes Center)

- **Enhanced overall quality of health care**
  - Continuity of care

- **Recruitment and retention of primary care physicians in the community**

- **Physician payment enhancements**
  - Involvement of seven commercial payers, New York State Medicaid, and Medicare

Participating primary care providers include CVPH and physicians in the Plattsburgh/Malone area, Elizabethtown Community Hospital, the Adirondack Medical Center and the Trudeau Health System, Alice Hyde Medical Center and the physicians in Malone, Hudson Headwaters Health Network, Inter-Lakes Health, and the Smith House Health Care Center.

Providers who join a participating practice are automatically considered participants for the purposes of the pilot. Providers in newly organized practices within participating counties may apply to the governance committee to request participation in the demonstration.
Shared Management
There are no specific comanagement agreements within the ARMH pilot. The care and coordination are a collaboration between the hospitals and payers.

Participating payers include both public (New York State via Medicaid and its civil service program) and private insurers (Blue Shield of Northeastern New York, Capital District Physicians’ Health Plan, Empire Blue Cross, Excellus, Fidelis Care, MVP Healthcare, and United Healthcare).

Ongoing Care
Frequency of Outreach
For each disease state, physicians follow the same evidence-based guidelines and develop a care plan accordingly. Each patient who is diagnosed with the selected disease is monitored using the same criteria and measurements. This information is collected through the practice EMR system as reportable data. These data are collected across the entire cohort. The ARMH pilot uses automated reminders and follow-up calls to monitor and motivate patients.

Services
The services provided include medication reconciliation, health coaching, behavior modification and counseling, nutritional assessment and education, and transition services. Follow-up is coordinated by the care manager and primary care physician. Patients are assessed at each encounter and assigned to a physician for follow-up, a non-physician for clinical follow-up, or they are signed up for ongoing phone monitoring.

Care plans are designed at initial assessment and updated regularly to encompass chronic disease management as well as screening and health maintenance assessments. Patient-developed goals are identified, and progress is measured against them.

Care Transitions Support
To better coordinate care, the ARMH pilot uses transitional care nurses who identify patients that need help, reach out to these patients’ PCPs, work with the pharmacy to reconcile medications, and conduct home visits as needed.

A nurse and patient navigator assist patients as they transition from any of the following care settings to another: home, ED, hospital, or skilled nursing facility. They use the Coleman model.

Tools
Each patient is provided with a self-management support tool and chronic condition flow sheet, which is automatically filled out with pertinent medication and co-morbidity information, and outlines the patient’s goals and progress. All members of the care team, patients, and family members are given electronic access to the care plan.

The pilot also uses an automated patient communication system to deliver reminder calls and appointment ticklers to patients and practices, and reminders to patients and providers about preventive care visits, preventive care tests, and follow-up care for a chronic condition.

Outcomes
Outcome Measures
Measures of performance include:

- Measure adherence to the pilot’s evidence-based treatment guidelines:
  - Diabetes
  - Hypertension
  - Coronary artery disease
- Preventive services (i.e., pap smear, mammogram, colonoscopy) can be reported at multiple levels:
  - Patient
  - Provider
  - Health center
  - Network
  - Pod
  - Pilot
In addition, the pilot is measuring utilization rates, such as hospital admissions per thousand and ED visits per thousand. Annual financial spending is measured at the patient, provider, health center, network, pod, and pilot levels, and is compared to predictive models based on initial enrollment status.

**Results**

In 2010, the inpatient admission per 1,000 enrollees was 79. This rate decreased by 15.2% in 2011 to 67 admissions per 1,000 enrollees. There was also a corresponding 42% reduction in all-cause readmissions for one participating hospital.

ED visits decreased from 263 per 1,000 to 237 per 1,000 during the same time period: a 9.9% reduction.

**Technology/Innovation**

**Technology Enablers**

When it was first awarded the $7 million HEAL NY grant in 2009, the ARMH pilot enlisted the support of the Massachusetts eHealth Collaborative (MAeHC) to help with EHR selection, implementation, adoption, and meaningful use reporting. ARMH pilot uses MAeHC’s Quality Data Center (QDC) for quality reporting to providers. The MAeHC services include:

- Identifying HEDIS clinical performance measures
- Defining the required measure calculations, reporting requirements, attribution logic, and data standards
- Providing interfacing assistance between six EHR vendors and the regional health information exchange (HIXNY)
- Providing remediation support to ensure appropriate data entry for reporting success, assistance with EHR vendor upgrades, and training on populating and extracting reports from the QDC
- Providing data through the QDC that will be used to define processes for performance improvement, to promote evidence based medicine, and to engage patients

Physicians are capturing 45 measures across six disease states in their practices, with each measure having a distinct data field. With the MAeHC’s QDC, the pilot uploads raw EHR data, and the QDC handles all of the aggregation, analytics, and reporting, applying the latest best practices.

Pilot leaders have taken a hands-on approach, visiting physician offices to evaluate workflow, and to conduct data remediation and template development to streamline documentation of critical metrics in one standardized location.

To keep up with the information technology demands of the pilot and to allow for connection to HIXNY, some practices had to switch EHR providers (e.g., to MDsuite).

**Future Innovation/Direction**

With their passage of the 2009 budget bill, the state legislature endorsed the demonstration, including the antitrust immunity the payers had requested, as well as the provision of funds for Medicaid to participate in the Adirondack Medical Home Demonstration (AMHD), a federal demonstration project of the Department of Health and Human Services’ (HHS) Centers for Medicare & Medicaid Services (CMS).

The budget also articulated the role of the Department of Health as convener, chair, and monitor of the AMHD’s planning and implementation, which was necessary to ensure the antitrust protections.

In August 2009, the ARMH pilot proposal was awarded a $7 million HEAL grant to support investments in health information technology that were key to the AMHD. “HEAL-10 was particularly important,” noted one of the pod managers. “It’s the funding to make sure that the physicians have and can effectively implement EMRs in their practices; that their EMRs connect to the region’s RHIO and from there to the specialists and hospitals; and that the two data warehouses necessary for quality improvement and evaluation are in place.”

A month later, the AMHD was awarded a $2.7 million grant from the MSSNY to further support the regional HIT plan, including technical assistance provided by EastPoint Health and the Mass eHealth Collaborative to the participating
primary care practices, and the creation of the three regional pods, intended to provide shared services to participating practices and assist in providing care coordination.

Although the payers agreed, in concept, to pay the new fees for each enrollee receiving care from a participating practice, implementation proved challenging for payers whose IT and payment systems were not capable of generating monthly capitation payments. One payer explained, “Claims payment systems are built to do one thing: pay claims for visits and procedures. Everyone pretty much agrees that the payments should be per-member, per-month. However, the mechanics involved in doing that are substantial.” This issue was resolved by giving payers the option of paying either a $7 per member-month fee, or its equivalent, via an add-on payment attached to a specific, existing current procedural terminology billing code.

In October 2009, AMHD leaders sponsored a second Adirondack Health Summit to review the project and to gain final agreement by all payers to participate in the AMHD.

Throughout the planning process, payers varied in their responsiveness and interest in the demonstration. Following advocacy efforts by local and state officials, regional employers, and purchasers, by late October 2009, all of the payers agreed to participate.

After further negotiation, all of the 13 payers agreed to pay the participating primary care physicians $84 per member per year (i.e., $7 per member per month) for each of their plans’ eligible enrollees who received primary care at their practices. This medical home payment was to be over and above their current fee-for-service payments for visits and procedures. The financial commitment of the payers was significant. The new payments will generate an estimated $30–$35 million over the five-year project.

Of particular note, in this demonstration the payers committed to supporting the costs of developing the PCMH model in the practices. According to several participating payers, in most other demonstrations around New York and the country, payers have not made additional payments until after the practices achieved PCMH accreditation. One payer said, “The provision of the up-front payments was, for the payers, a leap of faith. But we’re committed to this for the five-year cycle. We expect to break even by year three, and to achieve a positive ROI with savings in years four and five.”

Another departure from the usual approach was the breadth of physician inclusion. The AMHD includes all primary care practices in the region. In most cases, payers work with fewer practices: those with more advanced HIT systems, and practices that are further along the road toward becoming a medical home. The providers also agreed to generate and report performance data related to their practice operations. For practices to receive the medical home money, they must prove that they are gathering and reporting data on their performance and that they meet quality standards. Practices must be able to demonstrate that they are adhering to evidence-based guidelines in six areas.

To cover the expenses of the pods’ shared services, the physicians have agreed to allocate the $7 per member-month in PCMH funding as follows:

- $3.50 to the primary care practice, as increased compensation
- $3.00 to the local pod, to support shared services
- $0.50 to support the overall project governance, management, data, and evaluation functions at the ADK Governance Council level

Author: Medimetry
The Health Commons Grant, an award of $17.3 million over three years from the Centers for Medicare and Medicaid Services (CMS) Innovation Center, helped Health Share of Oregon (HSO) to create a regional system to better serve the Medicaid population in the Portland metro area.

Health Share of Oregon launched or expanded five complementary care model interventions, which included hiring and training community health outreach workers. The goals of these interventions are to improve care coordination, enhance systems for learning and collaboration, and create a sustainable system of care across the community.

**Patient Identification**

**Inclusion Criteria**

There are five care model interventions under Health Share of Oregon. The overall criteria include high levels of avoidable use, ability and willingness to make change, and program fit. Three of the interventions have their own target population and identification sources:

- **Outreach** intervention, called Interdisciplinary Community Care Teams (ICCT), focuses on adults who have had at least six or more emergency department (ED) visits or one nonobstetric inpatient hospital admission in a year. Eligible patients are identified using a combination of claims data and care team referrals. Research is conducted to determine if these admissions were avoidable and might have been mitigated by additional supportive outreach or care coordination.

- **Standardized Discharge** intervention focuses on Medicaid or dual-eligible individuals who experience an inpatient or outpatient hospital visit and are then discharged. In Year 1, the intervention will focus on 400 patients from the target population who are discharged from Legacy Emanuel Hospital to Legacy Emanuel Teaching Clinic, Legacy Clinic Northeast, and Multnomah County Northeast Clinic.

- **Mental Health** intervention focuses on high acuity patients with mental health and substance abuse needs who have had a psychiatric hospitalization or ED admission,
prioritizing Health Share members not connected with a community mental health care provider.

Ongoing Data Collection Methods
Measurement specification detail for metrics and reporting sources are currently in development. A detailed reporting package will be sent to CMS quarterly, in compliance with vendor specifications. Additional detail about the performance of the grant interventions against these and other measures will be provided to the grant oversight team as well as to each project lead to inform the evaluation and community learning system initiatives. These measures will be aligned with the overall HSO clinical metrics.

A community-wide care management data system is being built for the grant at the Center for Outcomes Research and Education at Providence Health and Services, the administrator of the Health Commons Grant. Once built, the data system will support informed, data-driven transformation across the community. The data system will include claims data, social determinants research data, geographic information, and demographic data and allow for the following types of analyses:

- Mapping undesirable outcomes within the delivery system across the entire community
- Locating neighborhoods in which those outcomes are concentrated to better understand causality
- Identifying the resulting suboptimal care pathways that are driving poor outcomes
- Deploying resources to divert those suboptimal pathways and maximize returns in efficiency and health

Assessment
To determine patient fit and readiness, information is gathered at the administrative level (e.g., through registry research, CareSupport documentation, and utilization management analysis) and at the clinic level (clinic team input and EHR information). A decision is then made to either move the patient to outreach or not, in which case a reason will be noted.

Care Management Team

Team Composition and Roles

- **Outreach (ICCT)** intervention has a staffing plan of 37 personnel including outreach specialists within partner organizations, outreach workers hired centrally by CareOregon, team supervisors, project managers, a process improvement coach, and project leaders.

- **Care Transitions Innovation, C-Train**, has a staffing plan of 8.6 FTEs, including transitional care nurses, pharmacy leads, physician champions, and a project manager. C-Train has four major components that target the specific needs of uninsured and low-income, publicly insured patients, including:
  1. A transitional care nurse who bridges care and provides self-management patient education
  2. Pharmacy consultation to tailor medication regimens, assess barriers, and provide support for discharge medications for the uninsured and for those without prescription drug coverage
  3. Clinic and hospital linkages that promote improved access and care coordination
  4. Monthly team meetings that convene diverse, multidisciplinary providers from across the care continuum to engage in quality improvement and systems integration

- **Standardized Discharge** intervention has a staffing plan of 3.4 FTEs, including project leads, project managers, and EHR analysts.

- **ED Guide** intervention has a staffing plan of 1 FTE.

- **Mental Health** intervention has a staffing plan of 5.5 FTE of mental health specialists that will be hired to staff the intensive transition teams (ITTs) for each of three Oregon counties. Clackamas County will hire 2.0 FTEs, Multnomah County will hire 3.0 FTEs via Cascadia, and Washington County will hire 0.5 FTE via Lifeworks Northwest.
PCP Involvement

The **Standardized Discharge** intervention pilot standardizes the hospital-to-PCP transition. The pilot will implement a standardized hospital discharge summary that will be sent to primary care providers, with the goal of communicating a patient’s diagnosis, procedures, medication changes, and condition at discharge. Workflows will reflect collaboration with transitional care nurses, outreach workers, mental health providers, and others involved in care as appropriate.

Upon notification of discharge, clinic teams will call the patient to check for understanding of any medication changes and to confirm that a follow-up appointment has been scheduled with the PCP.

Shared Management

The Health Commons Project was originally conceived as five connected but separate projects. These projects no longer feel entirely separate. The project leads continue to meet weekly to discuss strategies for building a complete, whole-person, patient-centered care experience and to reduce inefficiencies and duplication of care. This group has been helpful in ensuring that no one duplicates work, and the process has highlighted potential gaps in care.

Ongoing Care

**Services Provided/Coordinated**

**Outreach (ICCT)** intervention workers customize care for each patient while building deep trust and rapport that identifies and even removes barriers. Empowering patients to become more active in their well-being translates into a higher quality of life for patients and fewer expensive admissions.

ICCT is a concentrated effort to deploy nontraditional health care workers throughout the Tri-County area to reduce the total cost of care and/or hospital and ED use for a subpopulation of members — those who have experienced recent high “potentially avoidable” use — while improving the experience of care and indicators of health. This initiative represents the most significant potential savings across the Health Commons Grant interventions. ICCT program objectives are to:

- Engage and mentor targeted members toward an optimal relationship with a primary health home (physical and behavioral, if appropriate), one in which the member actively participates in a culturally appropriate, trusting, and respectful partnership with a care team.

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![CareOregon Community Care Program Client Status Mapping – Status Pathways](image-url)
Facilitate the connection between targeted members and beneficial community resources, including peer specialists, and advocate for critical social services.

Educate and coach targeted members to improve health literacy, condition-specific self-management skills, and activation in wellness.

Coordinate services and communication between various providers of services with or on behalf of members, including specialty health services.

To help a member avoid readmission to the hospital, community outreach workers may provide dietary education and food boxes when necessary, attend medical appointments and translate information or questions, model assertive behavior, and purchase a calendar for a member to help keep track of multiple appointments.

The Care Transitions Innovation (C-Train) aims to improve health care quality for hospitalized patients as they transition from inpatient to outpatient care. Through improved care coordination, patient education, and enhanced access to outpatient care, C-Train also aims to reduce high-cost inpatient use by reducing readmissions and post-hospital ED visits. C-Train patients are primarily responsible for maintaining day-to-day health and for negotiating follow-up, medications, transport, and equipment needs. External barriers, such as financial constraints, lack of transportation, confusion about follow-up, and uncertainty about medication changes, represent important targets for improving the inpatient to outpatient care transition.

The purpose of the ED Guide pilot intervention is to implement processes that will ease a patient’s way to the most appropriate level of connected care. The ED Guide program is designed to reduce the use of ED services for nonemergencies, using nontraditional workforce members to link patients to primary care homes and support services.

Outcomes

Results

As the program is just starting, it is too early to measure results. The program will track:

- 30-, 60-, and 90-day hospital readmission rates (medical and psychiatric):
  - Rate per total admissions
  - Percentage of program participants with 1+ readmit events
- Pre- and post-program engagement, including individual and aggregate frequency and periodicity of inpatient, ED, and PCP visit events (counted separately) prior to and after engagement in program
- Ratio of low-acuity ED visits by facility (ESI level 4 or 5)
Although the interventions are still being piloted, early experience on measured indicators for the ED Guide intervention include:

- 7% low-acuity repeat ED visits with guided patients compared to 16% for nonguided patients
- Cost measurement system being developed
- 98% guided patients received appointments within 12 to 24 hours of being guided
- 55% of low-acuity patients selected “top box” satisfaction on Press Gainey overall assessment question
- 98% of physicians believed program adds value for patients, clinicians, and Providence

### Ongoing Measures for QI

#### Anticipated Quality Measures

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<th>MEASURE</th>
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<td>Access to post-discharge follow-up care</td>
<td>Percentage of participants with primary care or specialist visit within 7 days of discharge for C-TraIn and ITT programs</td>
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<tr>
<td>Access to alternative care source</td>
<td>Percentage of guided patients who go to alternative care sources within 12 to 24 hours</td>
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<tr>
<td>Access to needed psychiatric or mental health services</td>
<td>Percentage of participants needing psychiatric or mental health services who were able to access needed care in timely manner</td>
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<td>Care of chronic conditions</td>
<td>PACIC (Patient Assessment of Chronic Illness Care) index</td>
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| Care transitions (CTM-3) | CTM-3 is a NQF-endorsed metrics comprised of 3 patient-reported questions asking whether:
  - Hospital providers respected patient’s preferences
  - Patients understood how to care for self when discharged
  - Patients understood purpose of each medication when discharged |
| Medication adherence | Morisky 8 Medication Adherence Questionnaire |

### Outcome Trends

The program will monitor overall grant performance using 13 key metrics that relate to the goals on their driver diagram and that represent a distillation of their overarching transformation goals. These measures were selected because they represent general outcomes that can be tied to all five interventions; additional, program-specific outcomes measures may also be collected and used internally for process improvement. Metrics 8 to 13 are determined via patient survey outreach.

1. Total cost of care
2. Total paid costs by service domain
3. Total utilization by setting
4. Readmissions
5. Access to timely post-discharge follow-up care
6. Primary care home connectedness
7. Overall satisfaction with care
8. Access to care
9. Care transitions (CTM-3)
10. Health self-efficacy
11. Medication adherence
12. Health (SF-8 patient health survey)
13. Evolution of program

In December 2011, Providence submitted a grant proposal on behalf of a community collaborative that changed the name and scope of the Tri-County Health Commons. Since then, the program has been known as Health Share of Oregon.
funded the proposal in July 2012, awarding $17.3 million to be used to implement and spread elements of an innovative new model of care being developed as part of the clinical care transformation efforts of HSO. The project is one of 107 nationally and the only one based in Oregon. HSO emerged from a group of private and public organizations to address a complicated question: Can we together improve the quality of care and the care experience of Oregon Health Plan (OHP) members, and do it for less money? This community-wide partnership formed to create a Coordinated Care Organization (CCO) that will ensure quality, cost-effective care for Medicaid patients in the tri-county community.

Lessons
The care model interventions were originally conceived to support primary care. Many of the interventions inject new workers into the system to take on some of the region’s most challenging Medicaid patients and to lessen the load of existing PCPs. As the Health Commons Project launched, HSO realized that care coordination interventions such as ITT, ICCT, and C-TraIn would take more collaboration with primary care than originally anticipated, and HSO leaders are working to find the best model for that partnership.

A central challenge to a CCO system is the sharing of patient data. The Health Commons Project is a set of interventions that could potentially touch all providers in the region. Yet without a logical method for sharing data, providers might never be aware that an intervention has affected their patients. Similarly, because many of the Health Commons Grant interventions are targeted at high-use patients, it is important to track patient use across the community. However, as of now, providers across the community are not linked. As a solution, the Health Commons Project is developing PopIntel, a regional, internally developed care coordination registry. PopIntel allows the interventions to be informed of suitable patients for the program, keep track of enrolled patients, record patient touches and care plans, and collect program data. A version of PopIntel is already in use by the ICCT workers and will be available for all project workers next quarter.
Costs
The three-year funding total is $17,337,093, with anticipated three-year savings of $32,542,913, for a population of 19,000 patients. The cost per patient is approximately $300 per year, and the savings are targeted at $570 per patient per year.

The program will also be measuring:
- Total cost of care
- Cost of care by service type
- Total cost index

Technology/Innovation
Technology Enablers
The programs will use data to monitor performance and improve systems. In collaboration with key partners and Health Commons grant participants, the Health Share IT team is actively managing and participating in four complementary IT initiatives:

1. Standardized Discharge Summary
2. Event Notification System
3. Community Care Coordination Registry
4. Evaluation and QI Reports

Robust quantitative and qualitative data will inform development of care interventions.

Future Innovation/Direction
Primary goals of HSO:
- Implement key integrative care processes linking partner organizations and community resources for OHP enrollees
- Implement targeted, high-intensity, community-based programs that efficiently and effectively address the complex needs of high-acuity, high-use patients.
- Create a learning system to promote continuous workforce development and quality improvement.

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To learn about other complex care management programs, visit www.chcf.org.