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Project Title	***Improving Chronic Care in Rural Communities***

Rationale for the Project

Problem Statement

Residents of rural communities in eastern Washington state face a variety of challenges that contribute to poor health and higher mortality rates. Rural residents are generally older and poorer than those living in urban centers and are more likely to smoke and have poor nutrition. These factors all contribute to higher rates of hypertension, diabetes and self-reported poor health. At the same time rural residents can experience difficulty in accessing health care services due to long distances and often dangerous driving conditions. When combined all of these elements describe a population in need of supportive health care services but limited ability to access those services.

Supporting Research for Proposed Project

To address this issue the Critical Access Hospital Network (CAHN), a coalition of 15 hospitals and associated rural health clinics in eastern Washington, is proposing the Improving Chronic Care in Rural Communities (ICCRC) project. The ICCRC will implement a telehealth-based Remote Patient Monitoring (RPM) program in multiple rural communities, with a focus on high need Medicaid enrollees. The target population includes those with multiple chronic conditions, evidence of difficulty managing a chronic condition, or frequent emergency department use related to chronic conditions. The ICCRC will improve access to care, increase the efficiency of health care services, and ultimately lead to improved health outcomes and lower costs.

The ICCRC will use an RPM program that is currently being pilot tested in Lincoln County, where early participants are already showing improvements in clinical indicators. The RPM program is based on one developed by the Roanoke Chowan Community Health Center (RCCHC) in North Carolina. An external evaluation by the Wake Forest School of Medicine determined that the RCCHC program improved clinical indicators including blood pressure, weight and blood sugar levels; increased patient and provider satisfaction; and led to significant decreases in hospital bed days and ED visits, resulting in a 72% reduction in health care costs for the participating patients.

Relationship to Federal Medicaid Objectives

The ICCRC project will address multiple federal Medicaid objectives including: 1) Increasing and strengthening coverage for low income individuals; 2) Increasing access to and strengthening provider networks that are available to serve Medicaid and low income populations; 3) Improving health outcomes for Medicaid and low income populations; and 4) Increasing the efficiency and quality of care for Medicaid and other low-income populations through the transformation of service delivery networks.

Project Description

Medicaid Transformation Goals

X Reduce avoidable use of intensive services
X Improve population health, focused on prevention
X Accelerate transition to value-based payment
X Ensure Medicaid per-capita growth is below national trends

Transformation Project Domain(s))

X Health Systems Capacity Building
X Care Delivery Redesign
_ Population Health Improvement – prevention activities

Region(s) and sub-population(s) impacted by the project.

CAHN members are located in 11 counties across eastern Washington state: Adams, Asotin, Columbia, Ferry, Garfield, Grant, Lincoln, Pend Oreille, Stevens, Whitman and Yakima. Each county is entirely or predominantly rural, with ten of the counties covering a total of 17,493 square miles and having a population of approximately 260,000. Including

Yakima county, the total population is approximately 510,000 across 21,789 square miles. Fourteen of the 15 CAHN members are Critical Access Hospitals, and all serve a patient population that primarily relies on Medicaid or Medicare for insurance coverage. There are 92,000 adult Medicaid enrollees across all 11 counties.

The ICCRC project will focus on adult Medicaid enrollees (ages 19 to 64) with chronic health conditions including diabetes, congestive heart failure, and cardiovascular disease. Potential participants will be identified using claims and clinical data or by recommendation of primary care providers, with an emphasis on individuals with multiple chronic conditions or frequent emergency department (ED) use related to chronic conditions.

Relationship to Washington's Medicaid Transformation goals.

WA Medicaid Transformation Goal -- Avoidable use of intensive services. In the ICCRC remote patient monitoring will allow rapid identification of at-risk individuals through at-home, daily monitoring of key metrics. Nurses monitor these results and intervene at signs of problems, significantly reducing ED and inpatient utilization.

WA Medicaid Transformation Goal – Improve population health through prevention and management of chronic disease. The remote patient monitoring program is not stand-alone, but instead is closely integrated with primary care services. Nursing staff in the remote monitoring service coordinate all care with primary care staff. Local care coordinators also work to connect patients with local community services that support the whole person.

WA Medicaid Transformation Goal -- Accelerate transition to value-based payment systems. Because of the number of hospitals and clinics in the CAHN and the large pool of potential patients across all eleven counties, the ICCRC will have the ability to collect a significant amount of clinical and financial data to show the impact of remote patient monitoring on Medicaid enrollees in rural communities, providing data that will help define new payment systems.

Project goals, interventions and outcomes expected during the waiver period

Goal 1*:* Increase access and improve the quality and coordination of health care services for Medicaid enrollees with chronic disease who live in rural eastern Washington communities.

Intervention: Use remote monitoring tools and Patient Centered Medical Home principles to expand access to chronic disease management services for at-risk individuals.

Outcomes expected: Reduced use of intensive services, improved clinical outcomes and patient satisfaction.

Goal 2: Increase access and quality of health information available to health care providers, Medicaid enrollees and families/caregivers in the project service area.

Intervention: Use remote patient monitoring to enable the earlier detection and quicker assessment of health status and provide timely and more comprehensive information for decision-making.

Outcomes expected: Improvements in patient activation and patient engagement in healthcare; improvements in provider satisfaction based on availability of more support for care processes.

Goal 3: Reduce healthcare expenditures and improve health outcomes for Medicaid enrollees with chronic conditions who live in the project service area.

Intervention: Use clinical and claims to analyze the impact of remote patient monitoring on the health outcomes and healthcare utilization of project participants.

Outcomes expected: Availability of sufficient data to demonstrate impact and provide evidence to support expanded use of remote patient monitoring programs in other rural communities.

Goal 4**:** Reduce health disparities among low income and minority populations in rural communities.

Intervention: Use targeted outreach to low income and minority residents of rural communities to increase enrollment in remote patient monitoring program and overall access to care.

Outcomes expected: Improvements in access to care for low income and minority residents in rural communities; improvements in patient activation and patient engagement in healthcare.

Links to complementary transformation initiatives

All CAHN member organizations are actively engaged in one or more complementary transformation initiative. All are committed to the development of community-based population health collaboratives in their service areas to support and engage with the Accountable Communities of Health in their region. Six are currently enrolling or are already participating as Community Based Organizations in the Washington Health Home program. Two CAHN members are

moving toward integration of primary care and behavioral health.

Potential partners, systems, and organizations

CAHN members are located in three different Accountable Community of Health regions: Better Health Together, Greater Columbia, and North Central. The CAHN Board has committed to having each member organization connect with health and social service providers in their own communities and with the appropriate ACH. These activities will help assure that the ICCRC project is fully integrated into community and regional planning. CAHN members have also begun to engage more actively with Medicaid Managed Care Organizations. Participation by and support from these MCOs will be critical to the success of the ICCRC in order to support outreach to the target patient population, supply data and assist development of new payment models for sustainability after the end of the waiver project period.

Core Investment Components

Proposed activities

1) Identification of high-risk patients through analysis of claims and clinical data; 2) Training and preparation for care teams at each facility; 3) Outreach to high-risk patients regarding program; 4) Education for participating patients; 5) Operation of remote patient monitoring program; 6) Data analysis and evaluation. Patients will be enrolled in the remote monitoring program for six months and then continue to self-monitor and interact with local care coordinators as needed. The target population is 2000 high risk Medicaid enrollees over the course of the project.

Timeline

- Year 1 – planning, staff training, outreach, enrollment (6 months); first cohort of 250 (six months)
- Year 2 – second and third cohort of 500 each for six months
- Year 3 – final cohort of 750; collecting data, analyzing results; developing alternate payment models

Estimated Costs and ROI

- Estimated program implementation and operation costs over three years = $4,560 per person
- Estimated cost savings (ROI) over three-years = $5,543 per person (net savings after subtracting program costs)
    - Based on reductions in ER and inpatient utilization seen in RCCHC project. In that project, pre-intervention costs for ER and inpatient stays were $20,940 per person. During and post-intervention costs for ER and inpatient stays were $7,470 per person.

Project Metrics

Outcome Measures

From state measure set – benchmark data to be established by analysis of clinical and claims data for the year prior to the implementation of the remote patient monitoring program.

Ambulatory Care Sensitive Conditions Hospital Admissions (claims data); Diabetes Care: Blood Pressure Control (clinical data); Diabetes Care: Hemoglobin A1c Poor Control (clinical data); Hypertension: Blood Pressure Control (clinical data); Potentially Avoidable ED visits (claims data); Medicaid per Enrollee Spending (claims data)

Other Outcome Measure

- Patient Activation Measure – *benchmark to be established by administering PAM survey to enrolled patients prior to implementing remote patient monitoring program*

Process Measures

Care management – benchmarks to be established through medical records review to determine number of contacts between patients and Care Team in the year prior to program implementation

- Number and severity of alerts received through the remote patient monitoring system;
- Number of calls Care Team members make to each patient.

Compliance – benchmark to be established by patient surveys to assess patients self-monitoring behaviors in the year prior to program implementation

- Frequency and completeness of patient self-monitoring (tracked through RPM information system)

Satisfaction – benchmarks to be established by conducting patient and provider satisfaction surveys prior to program implementation

- Patient and provider satisfaction with RPM program (tracked through periodic surveys)