U.S. Department of Health and Human Services

REPORT TO CONGRESS

DEMONSTRATION PROJECT ON COMMUNITY HEALTH INTEGRATION MODELS IN CERTAIN RURAL COUNTIES

INTERIM REPORT 2018

Executive Summary

Across the United States, there are 1,346 Critical Access Hospitals (CAHs).[1] These small, rural hospitals often serve as the hubs for health care in the most sparsely populated areas isolated from population centers, known as "frontier" areas, where the provision of essential health care services may not be financially viable given low patient volumes. Congress authorized a demonstration project to "test new models for the delivery of health care services in eligible counties for the purpose of improving access to, and better integrating the delivery of, acute care, extended care, and other essential health care services to Medicare beneficiaries."

Section 123 of the Medicare Improvements for Patients and Providers Act of 2008 (P.L. 110-275), as amended by Section 3126 of the Affordable Care Act of 2010 (P.L. 111-148), authorizes the "Demonstration Project on Community Health Integration Models in Certain Rural Counties." The Federal Office of Rural Health Policy (FORHP) in the Health Resources and Services Administration (HRSA) and the Centers for Medicare & Medicaid Services (CMS) jointly administer the demonstration project, implemented as the Frontier Community Health Integration Project Demonstration (FCHIP). The purpose of the demonstration is to explore ways to increase access to, and improve the adequacy of, payments for acute care, extended care, and other essential health care services provided under the Medicare and Medicaid programs in eligible counties; and to evaluate regulatory challenges facing such providers and the communities they serve. The authorizing legislation also requires two reports to the Congress: An interim report due within 2 years of the implementation of the demonstration project and a final report due within 1 year of completion of the demonstration project. This interim report presents the background, design, and structure of FCHIP and preliminary findings from the first year.

Based on the legislative criteria and the response to the 2014 solicitation, the demonstration project includes 10 participating CAHs located in three states: Montana, Nevada, and North Dakota. The demonstration, which began on August 1, 2016, will operate for 3 years, and includes three interventions:

1. **Ambulance services**: Allows Medicare to pay participating CAHs for ambulance services at 101 percent of the reasonable costs instead of the Medicare ambulance fee schedule rate even if there is another CAH or other providers or suppliers of ambulance services located within a 35-mile drive of the participating CAH.

2. **Skilled nursing facility/nursing facility beds**: Allows participating CAHs to have up to 35 inpatient beds instead of the statutory limit of 25 acute care inpatient beds. Participating CAHs can only use the additional swing beds to provide skilled nursing facility (SNF) or nursing facility (NF) care.

3. **Telehealth**: Allows Medicare to pay participating CAHs serving as originating sites in hosting telehealth services at 101 percent of costs for overhead, salaries, fringe benefits,

[1] As of April 16, 2018

and the depreciation value of telehealth equipment, instead of the fixed originating site facility fee.

Two sites have implemented multiple interventions, while eight sites have implemented one intervention. Under the demonstration project, Medicare pays for ambulance services at two sites and for serving as an originating site to host telehealth services at eight sites using cost-based payment instead of the Medicare ambulance fee schedule or physician fee schedule, respectively. The SNF/NF beds intervention permits the three participating CAHs to increase from 25 inpatient beds up to 35 inpatient beds in order to deliver more SNF/NF care to community residents. Medicare pays for covered swing bed services using cost-based payment. The scope of Medicare coverage has not changed under the demonstration and the demonstration does not change the payment methodology for SNF care furnished in participating CAHs.

As required by the authorizing legislation, FORHP, part of HRSA, is providing technical assistance to the participating CAHs focused on activities such as improving community awareness of new or increased health services to facilitate local residents' access and establishing beneficial provider partnerships for telehealth specialty care. CMS's implementation activities include making payments, securing necessary Medicare waivers, and monitoring progress in the demonstration. CMS also monitors selected hospital-level and intervention-specific performance and quality measures.

Participating CAHs reported that the ambulance and SNF/NF bed interventions were implemented relatively easily with little burden on the participating CAHs, as they were able to use existing resources or idle capacity. For the telehealth intervention, as reported by the eight participating sites, efforts in the first project year were largely start-up in nature, though common operational and administrative challenges often beyond the scope of Medicare policy did limit change. The number of times that the eight participating sites served as originating sites to host telehealth services grew from one in the year prior to the demonstration project to 57 encounters by the end of the first year.

FCHIP offers opportunities for participating CAHs to make progress in increasing access to care, increasing coordination of care, and improving the quality of care in their communities. After the first year, inadequate data was available to make an accurate assessment of budget neutrality. There was also insufficient evidence to make recommendations at this time regarding ways to improve access to, and the availability of, health care services in eligible counties of FCHIP. More information from the remaining 2 years of the demonstration is necessary to assess the effects of FCHIP on care delivery, as well as implications for payment adequacy.

DEMONSTRATION PROJECT ON COMMUNITY HEALTH INTEGRATION MODELS IN CERTAIN RURAL COUNTIES INTERIM REPORT

Table of Contents

List of Tables

Acronym List

CAH	Critical Access Hospital
CMS	Centers for Medicare & Medicaid Services
ED	Emergency Department
EDTC	Emergency Department Transfer Communication
FCHIP	Frontier Community Health Integration Project Demonstration
FORHP	Federal Office of Rural Health Policy
HAI	Healthcare-Associated Infection
HCAHPS	Hospital Consumer Assessment of Healthcare Providers and Systems
HRSA	Health Resources and Services Administration
LTC	Long-term care
MBQIP	Medicare Beneficiary Quality Improvement Project
MDS	Minimum Data Set
MHREF	Montana Health Research and Education Foundation, Inc.
MIPPA	Medicare Improvements for Patients and Providers Act of 2008
NEMSIS	National Emergency Medical Services Information System
NF	Nursing facility
NQF	National Quality Forum
SNF	Skilled nursing facility

Legislative Authority

Section 123 of the Medicare Improvements for Patients and Providers Act of 2008 (P.L. 110-275) (MIPPA), as amended by Section 3126 of the Affordable Care Act of 2010 (P.L. 111-148), authorizes the "Demonstration Project on Community Health Integration Models in Certain Rural Counties." The Department of Health and Human Services implements the demonstration project as the Frontier Community Health Integration Project Demonstration (FCHIP). The authorizing legislation's stated purpose for the demonstration project is to "(1) explore ways to increase access to, and improve the adequacy of, payments for acute care, extended care, and other essential health care services provided under the Medicare and Medicaid programs in eligible counties; and (2) evaluate regulatory challenges facing such providers and the communities they serve."

The authorizing legislation requires eligible participants in the demonstration to be (1) a Rural Hospital Flexibility Program grantee under Section 1820(g) of the Social Security Act (42 U.S.C. 1395i-4(g)); and (2) located in a state in which at least 65 percent of the counties in the state are counties that have 6 or less residents per square mile. Based on these criteria, only Critical Access Hospitals (CAHs) located in five states were eligible to participate in this demonstration project: Alaska, Montana, Nevada, North Dakota, and Wyoming. The legislation limited the demonstration to not more than four states. Within the qualifying states, CAHs were eligible to participate if they (1) furnished one or more of home health services or hospice care and (2) had an average daily inpatient census of five or less. There was an additional requirement that skilled nursing facility (SNF) services were available in the county in a CAH using swing beds or a local nursing home. The demonstration project must be budget neutral, meaning that the aggregate payments do not exceed the amount paid if there were no demonstration project.

The authorizing legislation requires two reports to the Congress: An interim report due within 2 years of the implementation of the demonstration project, and a final report due within 1 year after completion of the demonstration project. This interim report presents the background, design, and structure of FCHIP and preliminary findings from the first year of the demonstration project. The final report will expand on the interim report using the information gained from the last 2 years of the demonstration project.

Introduction

Health care providers eligible for FCHIP must be Medicare Rural Hospital Flexibility Program grantees. Section 1820 of the Social Security Act (42 U.S.C. 1395i-4) established the program, under which individual states may designate certain facilities as CAHs. The Centers for Medicare & Medicaid Services (CMS) will certify a facility as a CAH if the facility is located in a state that has established a Medicare Rural Hospital Flexibility Program, the facility has been designated as a CAH by the state in which it is located, and the facility meets other criteria such as the CAH conditions of participation. Regulations governing payments to CAHs for services to Medicare beneficiaries are located in 42 CFR Part 413.

There are 1,346 CAHs across the United States.[2] CAHs are small rural hospitals that, as required by statute, provide 24-hour emergency care; have no more than 25 acute care inpatient beds; are at least a 35-mile drive from another hospital or CAH or at least a 15-mile drive from another hospital or CAH in an area with mountainous terrain or only secondary roads;[3] and provide inpatient care for a period that does not exceed, as determined on an annual, average basis, 96 hours per patient. CAHs often serve as the hubs for health care in the most sparsely populated areas isolated from population centers, known as "frontier" areas, where the provision of essential services may not be financially viable given low patient volumes.

For certain services furnished to Medicare beneficiaries (i.e., inpatient, outpatient, SNF-level services), Medicare pays CAHs at 101 percent of reasonable cost. Despite cost-based payment, some CAHs, particularly those with lower inpatient volumes and those serving market areas with smaller populations, experience poorer financial performance than other rural hospitals.[4] In their applications to participate in FCHIP, several CAHs reported that financial constraints often limited the extent of their available health care services. These facilities hoped their participation would illustrate some of the unique considerations of facilities in frontier areas due to low volume and small size.

FCHIP tests whether enhanced payments using alternative payment methodologies will increase access to care, increase the integration and coordination of care among providers within the community, and improve the quality of care for Medicare and Medicaid beneficiaries. A specific objective of FCHIP is to support CAH and local delivery systems in keeping patients, whom the CAH might otherwise transfer to distant providers, in the community.

Overview

The Federal Office of Rural Health Policy (FORHP) in the Health Resources and Services Administration (HRSA) and CMS jointly administer the 3-year demonstration project, which started on August 1, 2016.[5] CMS and FORHP collaborated on outreach to providers and other stakeholders and coordinated monitoring, technical assistance, and evaluation activities.

Key provisions of MIPPA integral to the design of the demonstration project include the purpose, payments, and affected services, as follows:

- **Purpose**: "(1) explore ways to increase access to, and improve the adequacy of, payments for acute care, extended care, and other essential health care services provided

[2] As of April 16, 2018.
[3] There is an exception to the statutory distance criteria. If the facility does not meet either of the distance criteria, as an alternative, it must be certified as a CAH prior to January 1, 2006, based on State designation as a "necessary provider" of health care services to residents in the area (Section 1820(c)(2)(B)(i)(II) of the Social Security Act).
[4] Holmes, George M., et al. "The Financial Performance of Rural Hospitals and Implications for Elimination of the Critical Access Hospital Program." *The Journal of Rural Health*, vol. 29, no. 2, 2013, pp. 140-149. DOI: 10.1111/j.1748-0361.2012.00425.x
[5] The process of implementing the demonstration project authorized in Section 123 of MIPPA spanned 8 years from 2008 to 2016 to accommodate the development and approval of the project and its mandated provisions of budget neutrality and applicable Medicare payment waivers.

under the Medicare and Medicaid programs in eligible counties; and (2) evaluate regulatory challenges facing such providers and the communities they serve."

- **Payment**: "Health care providers in eligible counties selected to participate…shall…instead of the payment rates otherwise applicable under the Medicare program, be reimbursed at a rate that covers at least the reasonable costs of the provider in furnishing acute care, extended care, and other essential health care services to Medicare beneficiaries"

- **Services**: The demonstration focuses on acute care, extended care, and other essential health care services. Extended care services means "(A) home health services, (B) covered skilled nursing facility services, [and] (C) hospice care." Other essential health care services mean "(A) ambulance services, (B) physician services…, (C) public health services…, [and] (D) other health care services determined appropriate by the Secretary."

In administering the demonstration, the legislation requires CMS to determine the provisions of titles XVIII and XIX of the Social Security Act that should be waived that are relevant to the development of alternative reimbursement methodologies and directs FORHP to provide technical assistance to participants. A cooperative agreement between FORHP and the Montana Health Research and Education Foundation (MHREF) of the Montana Hospital Association produced materials to inform the design of the demonstration project. In collaboration with the Montana Office of Rural Health and administrators from nine Montana hospitals, MHREF conducted fieldwork to identify unique challenges facing hospitals in frontier communities and developed a series of white papers on these issues entitled "Framework for a New Frontier Health System."[6] CMS considered these documents in the development of FCHIP.

CMS designed FCHIP to meet the goals and objectives of the authorizing legislation, and identified four interventions for which CMS could implement specific waivers of Medicare payment rules as authorized by Section 123(i) of P.L. 110-275. These interventions are discussed below.

1. Ambulance services

CAHs and entities owned and operated by CAHs are currently eligible to receive cost-based payment (101 percent of reasonable costs) for ambulance services only if:

- The CAH or entity is the only provider or supplier of ambulance services located within a 35-mile drive of the CAH; or

[6] Montana Health Research and Education Foundation. *Framework for a New Frontier Health System: A Proposal to Establish a New "Frontier Health System" Provider Type and Conditions of Participation*. Nov. 2012. Available at https://www.ruralhealthinfo.org/new-approaches/pdf/framework-for-a-new-frontier-health-system-model.pdf. Accessed 26 Sept. 2017. See "Frontier Community Health Integration Program (FCHIP)" at https://www.ruralhealthinfo.org/new-approaches/frontier-community-health-integration-program for access to the white papers.

- There is an entity owned and operated by a CAH that is more than a 35-mile drive from the CAH, and that entity is the closest provider or supplier of ambulance services to the CAH.

If these conditions are not met, Medicare pays for a CAH ambulance service based on the Medicare ambulance fee schedule.

FCHIP allows Medicare to pay participating CAHs 101 percent of reasonable costs of furnishing ambulance services irrespective of other providers or suppliers of ambulance services located within a 35-mile drive of the CAH. All other rules affecting the provision of ambulance services still apply. CMS designed this intervention with the intent to improve access to emergency medical services by providing reasonable cost-based reimbursement to participating CAHs for payment for ambulance services, thereby allowing them to invest in needed staff, training, and support. This higher payment may allow them to improve the coverage of their service areas and minimize the use of more expensive air transport services due to gaps in ground-based coverage.

2. SNF/NF beds

The statute currently limits CAHs to no more than 25 inpatient beds. A CAH with CMS approval to provide post-hospital SNF care may use any of its 25 inpatient beds as "swing beds" to furnish SNF-level services. The demonstration allows participating CAHs to have up to 35 inpatient beds. However, the CAH can use the 10 additional inpatient beds only to provide SNF or nursing facility (NF) levels of care. Medicare pays for the covered services furnished to a Medicare beneficiary in a CAH swing bed based on 101 percent of reasonable costs.

Swing beds allow CAHs to use some acute beds for non-acute services where patients still require an inpatient level of care and are not ready to be discharged to a community setting. This can include skilled nursing-level services, such as occupational or physical therapy, wound care, intravenous antibiotic administration, hospice care, and long-term care (LTC). In areas with no or very few rehabilitation or skilled nursing facilities, swing beds may be the only avenue to receive these health care services locally.

CMS designed the SNF/NF bed intervention with the intent to improve access to SNF and NF care and to reduce the need to refer patients out of the community for LTC services due to availability issues (e.g., waiting lists, delays in admissions). The intent is that allowing the CAH to use up to an additional 10 inpatient beds may allow participating CAHs to:

- Reduce delays in discharge from higher-cost inpatient care, thereby lowering acute care lengths of stay;
- Provide an appropriate level of care within community by improving access to rehabilitation and LTC services;
- Limit out-migration of patients by providing needed services in the community; and
- Improve utilization of staffing and facility resources (i.e., economies of scale).

3. Telehealth

Medicare pays for telehealth services furnished via a telecommunications system by a physician or certain other practitioner to an eligible individual who is not at the same location. Medicare defines telehealth services to include professional consultations, office visits, office psychiatry services, and other services specified by the Secretary, only when furnished under specific conditions.[7] Payment is limited to those services on CMS' approved list of Medicare telehealth services.

Medicare telehealth services are furnished in a permissible "originating site,"[8] where the patient is located, by a practitioner located at a separate site, the "distant site," using telehealth technology (equipment) with secure transmission as the bridge between the two. Most Medicare telehealth services must be furnished using synchronous (i.e., real-time, live-video) technology, rather than asynchronous (store-and-forward) modalities.[9] The distant site practitioner who furnishes a Medicare telehealth service is paid under the Medicare Physician Fee Schedule an amount equal to the amount that the practitioner would have been paid if the service had been furnished in-person. Under the Medicare Physician Fee Schedule, the originating site is paid an originating site facility fee, which amounts to approximately $25 in 2018.

By law, only certain types of health care settings in certain geographic areas are allowed to serve as originating sites. The statute includes CAHs among the allowable types of settings that can serve as an originating site. CAHs, however, must also meet the statutory geographic requirements to be able to serve as originating sites.

FCHIP pays participating CAHs serving as originating sites in hosting telehealth services at 101 percent of costs for overhead, salaries, fringe benefits, and the depreciation value of the telehealth equipment instead of the Medicare Physician Fee Schedule originating site facility fee. The Medicare payment to distant site practitioners for telehealth services has not changed under the demonstration project and will continue to be equal to what they would have been paid if the services had been furnished in-person. All other Medicare requirements regarding payment for telehealth services continue to apply, including that Medicare only pays for telehealth services furnished using synchronous audio-video technology to connect the practitioner and patient. The demonstration project does not cover services that use asynchronous technologies, including those involving data collected, stored, and sent to a practitioner for later review.

CMS designed this intervention that enhances payment for the originating site fee with the intent to encourage the increased use of telehealth to improve access to services, reduce travel barriers

[7] 42 U.S.C. Sec. 1395m (m)(4). https://www.gpo.gov/fdsys/pkg/USCODE-2016-title42/pdf/USCODE-2016-title42-chap7-subchapXVIII-partB-sec1395m.pdf. Accessed 20 Nov. 2017.
[8] 42 U.S.C. Sec. 1395m (m)(4)(C). https://www.gpo.gov/fdsys/pkg/USCODE-2016-title42/pdf/USCODE-2016-title42-chap7-subchapXVIII-partB-sec1395m.pdf. Accessed 20 Nov. 2017.
[9] 42 U.S.C. Sec. 1395m (m)(1) (asynchronous "store-and-forward" technology may be used for a federal telemedicine demonstration program conducted in Alaska or Hawaii). https://www.gpo.gov/fdsys/pkg/USCODE-2016-title42/pdf/USCODE-2016-title42-chap7-subchapXVIII-partB-sec1395m.pdf. Accessed 20 Nov. 2017.

for patients, and improve support for local providers. The increased use of telehealth at the participating CAHs may reduce:

- Unnecessary hospitalizations, readmissions, and emergency department (ED) use for ambulatory patients;
- The length of emergency department and inpatient hospital stays;
- The number of high-cost patient transfers for stroke and other emergencies;
- The need to refer patients to more expensive urban facilities to obtain specialty care; and
- Delays in receipt of care, thereby improving treatment of care at a less-acute stage of the illness.

4. Home health services

For home health services, CMS proposed an enhanced payment for home health travel mileage. This intervention was not implemented because none of the CAHs chosen to participate in the demonstration proposed to implement this intervention. Consequently, only three interventions were implemented by the participating CAHs.

Implementation

The process for soliciting applications from CAHs for the demonstration began in January 2014 when CMS issued a Request for Applications. In the application process, CAHs were required to meet the eligibility requirements in the authorizing legislation and to submit a proposal to enhance health-related services that would complement those currently provided by the CAH and better serve the community's needs.

CAHs in five eligible states (Alaska, Montana, Nevada, North Dakota, and Wyoming) were eligible to participate in the demonstration, although the authorizing legislation limited the number of participating states to four. Subsequently, ten CAHs in three states (Montana, Nevada, and North Dakota) met the criteria to participate in FCHIP. Only the ambulance, SNF/NF beds, and telehealth interventions were proposed by the applicants selected. Table 1 shows the ten participating CAHs and their proposed intervention(s). Two CAHs implemented the ambulance services intervention, three implemented the SNF/NF bed intervention, and eight implemented the telehealth intervention. Two CAHs implemented more than one intervention. The selected CAHs began their participation in FCHIP on August 1, 2016.

Table 1. Critical Access Hospitals Chosen for Frontier Community Health Integration Project Demonstration

Project Sites (CAHs)	Intervention (denoted by X)		
	Ambulance	SNF/NF Beds	Telehealth
Montana			
Dahl Memorial Healthcare Association, Ekalaka, MT			X
McCone County Health Center, Circle, MT		X	X
Roosevelt Medical Center, Culbertson, MT	X	X	X
Nevada			
Battle Mountain General Hospital, Battle Mountain, NV			X
Grover C. Dils Medical Center, Caliente, NV			X
Mt. Grant General Hospital, Hawthorne, NV			X
Pershing General Hospital, Lovelock, NV			X
North Dakota			
Jacobson Memorial Hospital Care Center, Elgin, ND		X	
McKenzie County Healthcare Systems, Watford City, ND			X
Southwest Healthcare Services, Bowman, ND	X		
Totals per intervention	2	3	8

Technical Assistance and Implementation Support

The legislation authorizing FCHIP requires FORHP and CMS to jointly administer the demonstration project. Section 123(e)(2)(B) of the authorizing statute requires FORHP to provide technical assistance to the selected participants related to the requirements of the demonstration project. Through a cooperative agreement funded by FORHP, MHREF is providing technical assistance to the participating CAHs, including the following activities:

- Improving community awareness of new or increased health services to facilitate local residents' access;
- Establishing beneficial provider partnerships for telehealth services; and
- Consulting with rural health experts to integrate new or increased services into the CAHs' clinical delivery systems, such as Telehealth Resource Centers funded by FORHP to provide assistance, education, and information to increase the availability of telehealth services to underserved populations.

In addition to making payments, CMS implementation activities include:

- Securing the Medicare waivers for the ambulance services, SNF/NF bed, and telehealth interventions;

- Providing direction and assistance for Medicare billing;
- Monitoring payments and quality metrics;
- Monitoring and establishing policies[10] to address budget neutrality; and
- Engaging an independent evaluator to perform evaluation activities. (Information from the evaluator and other contractors informs this report.)

CMS also monitors progress, identifies and resolves problems, and holds teleconferences on lessons learned from each site. CMS collects utilization and cost data and uses these data to:

- Monitor financial and quality performance,
- Document changes in utilization related to new or increased services, and
- Assess Medicare beneficiaries' access to needed services.

Performance Measures (Quality and Utilization)

As with all CMS demonstrations, monitoring performance and the quality of care is an essential part of FCHIP. Quality measures and performance measures included in the demonstration must meet the following criteria:

- Do not add significantly to the participants' reporting burden;
- Align with existing national and/or state measures;
- Can be calculated, whenever possible, from administrative data such as claims; and
- Apply to all hospitals universally (i.e., the core measures).

Existing quality and performance measures (modified as necessary) and protocols were found to meet these criteria. Each participating CAH must submit hospital-level and intervention-specific performance and quality metrics on a quarterly basis. These measures are discussed below.

Hospital-Level Quality Measures

FCHIP collects 10 hospital-level quality measures. Four are from the FORHP-developed Medicare Beneficiary Quality Improvement Project (MBQIP).[11] Five are from the Hospital Consumer Assessment of Healthcare Providers and Systems (HCAHPS) survey, which is a survey administered to patients treated at a hospital to assess patient experience with care. The tenth measure is an all-cause readmission measure. Though based on the National Quality Forum (NQF) measure #1789, the all-cause readmission measure is unique to the CAHs in the

[10] In the Fiscal Year 2017 Hospital Inpatient Prospective Payment System final rule, CMS finalized a policy that, in the event it is determined that aggregate payments under the demonstration exceed the payments that would otherwise have been made, CMS will recoup payments through reductions of Medicare payments to all CAHs under both Medicare Part A and Part B. Given the 3-year period of performance for FCHIP and the time needed to conduct the budget neutrality analysis, in the event the demonstration is found not to have been budget neutral, any excess costs will be recouped over a period of 3 cost reporting years, beginning in Calendar Year 2020. See 81 Fed. Reg. 56762, 57064-57065 (Aug. 22, 2016).

[11] See https://www.ruralcenter.org/tasc/mbqip.

demonstration project, as not all components specified in the NQF measure are available. These 10 measures pertain only to the hospital inpatient and outpatient services and do not cover patients receiving swing bed services (LTC and post-acute). Table 2 lists the hospital-level quality measures.

Table 2. Frontier Community Health Integration Project Demonstration Hospital-Level Quality Measures

Medicare Beneficiary Quality Improvement Project (MBQIP) measures
Outpatient (OP)-20: Median time in emergency department before being seen by healthcare professional
OP-27: Influenza vaccination coverage among healthcare personnel (percent of healthcare workers given influenza vaccination)
Immunization (IMM)-2: Immunization for influenza. (percent of patients given influenza vaccination)
Emergency Department Transfer Communication (EDTC): Patients transferred from ED with necessary communication (percent of patients)
Hospital Consumer Assessment of Healthcare Providers and Systems (HCAHPS) measures
HCAHPS: Composite 1: Communication with nurses (always communicated well)
HCAHPS: Composite 2: Communication with doctors (always communicated well)
HCAHPS: Composite 3: Responsiveness of hospital staff (always received help when wanted)
HCAHPS: Composite 6: Discharge information (given information about recovery at home)
HCAHPS: Composite 7: Care transitions (understood care when left the hospital)
All-cause readmissions measure
Hospital-wide all-cause readmissions (modified from the NQF all cause readmission measure #1789; number of cases)

Appendix 1 provides more detail on the hospital-level quality measures.

Intervention-Specific Measures

***Ambulance*.** The performance measures collected for the ambulance intervention include (a) four National Emergency Medical Services Information System (NEMSIS) measures developed from a national database and protocols and (b) the number of transports. The participating CAHs implementing this intervention collect these NEMSIS measures:

- Chute time: time from dispatch notification to ambulance unit response (en route);
- Scene time: time of arrival until time left the scene;
- Unit back in service time: time the ambulance unit is released by the hospital; and
- Percentage of patients with suspected cardiac chest pain who were administered aspirin.

Of these four NEMSIS measures, only one, the "scene time," is useful for comparison purposes. Since the "chute time" can depend on the ambulance duty staffing arrangements (e.g., residing at

a garage or at home), the time at the scene may be a better measure of performance. There was an insufficient number of transports at the participating CAHs to compare the aspirin administration measure, and the "unit back in service" time measure did not have an available national benchmark.

SNF/NF beds. CAHs are exempt from submitting the Minimum Data Set (MDS), which is a federally mandated process for the clinical assessment of all residents in Medicare- and Medicaid-certified nursing homes. Because of the exemption, few, if any, CAHs voluntarily report their swing bed care through the MDS. Consequently, new data collection was necessary to capture clinical performance measures for the SNF/NF bed intervention. The demonstration uses three LTC quality measures from Montana's Performance Improvement Network, which includes a select set of swing bed performance measures.

The three measures are:

- Healthcare-Associated Infections: rate of four types of infections - catheter-associated urinary tract infection, central line-associated bloodstream infection, *Clostridium difficile* infection, and Methicillin-resistant *Staphylococcus aureus* infection;
- Healthcare-associated condition: pressure ulcers rate; and
- Annual percentage of residents vaccinated against Influenza.

Appendix 2 provides more detail on these measures.

Telehealth. With respect to the telehealth intervention, the performance measure is the number of originating site encounters furnished by the participating CAH.

Findings

The preliminary findings from the first year of demonstration are descriptive in nature and primarily based on information provided by the sites. Results focus on access to care, coordination of care, and quality of care. Since FCHIP does not collect these data for some of the measures from an independent source (e.g., claims) and the data reflect only the start-up year of FCHIP, there is insufficient evidence to draw conclusions at this time.

CMS contracted with an independent evaluator to conduct site visit interviews in order to provide additional insights into the first year results. The independent evaluator visited the demonstration sites in June and July 2017 to interview a variety of stakeholders, including hospital leadership (e.g., Chief Executive Officer, Chief Financial Officer, and Medical Director); affiliated providers; and hospital administrative support staff. Furthermore, there are some findings based on qualitative data collected in the provision of technical assistance to the sites, including site visits completed in June 2017, and limited quantitative data from the participating CAHs' quarterly submissions of quality measures.

In the analysis that follows, access to care is assessed using the utilization data provided by the sites participating in the telehealth services and swing beds interventions. The coordination of care is assessed at the hospital level through site personnel interviews. The quality of care is

assessed with hospital-level and intervention-specific quality measures using data provided by each site. The site visit interviews also provided participating CAHs' perspectives on staffing and infrastructure but no financial performance data were available at this time to assess payment adequacy.

The demonstration project must be budget neutral. The data needed to compute payment under FCHIP requires a modified Medicare cost report that was not available at the time of this report.

Hospital-Level Findings

Coordination of Care

The demonstration project is designed to promote services that coordinate care. In the site visit interviews, one of the most commonly cited benefits of FCHIP was the ability for the participating CAHs to provide more coordinated and continuous care to patients within their communities. Numerous respondents noted the importance of CAHs being able to provide care for community members in a manner that allowed them to remain close to home and near their support networks.

Hospital-Level Quality Measures

Table 3 compares hospital-level quality measures reported by the participating CAHs to the national averages of MBQIP data. The table shows the number of participating CAHs above and below the national averages, and the number that did not report. This analysis shows the direction (or sign) of the comparable measures. This approach only provides a snapshot of care provided at the participating CAHs because of the small amount of available data (only one quarter, October to December 2016, was available). Data points may not be available for certain metrics from some CAHs due to factors such as low reportable volumes or other technical issues in first quarter reporting.

As shown in Table 3, the participating CAHs that reported quality measures had as good or better performance on the four measures compared to the national MBQIP average. The average score on the five HCAHPS quality measures for the participating CAHs was 69 percent, slightly below the national average of 74 percent. Findings comparing site performance to an average for the all-cause readmission measure are not available because the measure does not have a comparable national or state average.

Table 3. FCHIP Participating CAH Performance on MBQIP Quality Measures

	Number of FCHIP Participating CAHs:		
Measure	**Better than national average**	**Less than national average**	**Data not reported**
OP-20 measure (median time in the emergency department before patient being seen by a healthcare professional)	6	2	2
OP-27 measure (influenza vaccination coverage among healthcare personnel (single rate for inpatient and outpatient settings)	5	5	0
IMM-2 measure (percentage of patients with immunization for influenza):	4	3	3
Emergency Department Transfer Communication (EDTC) measure (percentage of patients transferred to the emergency department with communication):	4	4	2

Intervention-Specific Findings

Ambulance Services (implemented at two CAHs)

Preliminary findings from the first demonstration year are as follows:

- ***Access.*** In the first year of the demonstration, the number of Medicare transports at one participating CAH decreased by one from the year prior to the demonstration (40 in year prior compared to 39 in the first project year), but increased by 16 at the other participating CAH (91 in year prior compared to 107 in the first project year).

- ***Performance.*** Both participating CAHs had slightly lower "scene times" (17 and 18 minutes), than the NEMSIS national average of 20 minutes.

- ***Staffing and infrastructure.*** The two participating CAHs stated they plan to hire additional staff using the additional funds provided by the demonstration project. They indicated that the new staff would replace volunteers, resulting in no net gain in ambulance personnel, and that the number of ambulance rigs in service did not change. One site stated it recruited a person who could provide advanced life support services.[12] The increased ambulance payment under the demonstration supported this position.

- ***Additional information from the site visit interviews.*** The two participating CAHs noted that there was no difference in the delivery of services prior to and after FCHIP implementation. As the administrator of one participating CAH stated, "[FCHIP] hasn't been a big change to how we do business." Most of the ambulance service providers at

[12] Advanced Life Support is a set of life-saving protocols and skills that extend basic life support to further support the circulation and provide an open airway and adequate ventilation (breathing).

the participating CAHs were volunteer crews with a coordinator/director employed by the CAH. One ambulance service provider noted that, regardless of the demonstration, emergency services always answer requests regardless of an individual's ability to pay and that a change in Medicare payment rates would not have an effect on community members' accessing or utilizing ambulance services.

SNF/NF Beds (implemented at three CAHs)

Preliminary findings from the first demonstration year are as follows:

- ***Access.*** The three participating CAHs implementing this intervention increased their bed capacity by 18 beds in total, a 20 percent increase. With this increased capacity, the participating CAHs indicated that they could treat more patients in their own communities. As the administrator of one participating CAH explained, the additional inpatient beds allowed under the demonstration and the revenue those beds generated enabled the CAH to serve patients previously turned away. Prior to the demonstration project, each of the participating CAHs reported having to make difficult decisions about which patients to admit or refer to the larger hospitals based upon daily bed census rather than the ability to provide the necessary services.

- ***Quality.*** Only two of the three participating CAHs had adequate numbers of reportable cases and only one of the two state averages were available (Montana) for comparison purposes. Preliminary findings based on first-year data (12 months of data collected) are as follows:

    - For the Healthcare-Associated Infection measure, one site had a lower rate (better) of infections, 1.16 per thousand, than the Montana state average of 2.49, while the other site had a higher rate, 5.06.
    - For the Healthcare-Associated Condition pressure ulcers measure, both sites had lower (better) rates, 0.52 and 0.22 per thousand, than the Montana state average, 1.79.
    - For the influenza immunization measure, both sites had higher rates (better), 65 percent and 56 percent of patients had immunizations, compared to the Montana state average of 44 percent.

- ***Staffing and infrastructure.*** The three participating CAHs reported that they needed to make changes in workflow and staffing to accommodate the expected increase in sub-acute to acute patients. Specifically, sites reported changes in staff assignments to reflect a mix of patient acuity and balance the workload across nurses and aides.

- ***Additional information from the site visit interviews.*** The participating CAHs reported that additional inpatient beds allowed them to admit patients and then transition them into a skilled nursing stay, all with the same bed and care team. The additional beds also allowed for the provision of more post-acute skilled nursing services to post-operative and stroke/cardiac rehabilitation patients often treated at larger, more specialized but distant hospitals. Interviewees noted that the need for additional swing bed capacity varies over the course of the year: utilization patterns often increase dramatically in

winter when aging persons and their family caregivers cannot travel to each other as easily for home-based care.

Telehealth (implemented at eight CAHs)

Preliminary findings from the first demonstration year are as follows:

- ***Access and performance.*** Based on site-reported statistics, the number of times that the eight participating CAHs served as originating sites to host telehealth services grew from one in the year prior to the demonstration project to 57 in the first demonstration year. Most of the increase, 70 percent, occurred in the second half of the year. The encounters in which the eight sites served as telehealth originating sites for Medicare beneficiaries accounted for 30 percent of the 189 total site encounters (all payers). Sites reported that the flexibility to receive cost-based payment for telehealth services allowed them to consider offering increased specialty services specific to the health care needs of their frontier communities. The increased use of telehealth occurred across many types of specialists. The top three specialties involved in Medicare telehealth encounters were behavioral health (37 percent), nephrology (37 percent), and dietary counseling (18 percent).

- ***Staffing and infrastructure.*** The eight participating CAHs implementing this intervention reported that they broadened telehealth responsibilities for existing staff but did not hire additional staff. New responsibilities included setting up equipment, managing referrals, and coordinating services between the CAH and distant site practitioners. The staff who took on new responsibilities included nurses, administrative support staff, ward clerks, and medical assistants. Existing staff also participated in activities related to training and outreach. For example, staff received training on how to use equipment, document hosting of telehealth services for Medicare payment, and incorporate hosting of telehealth services into the workflow.

- ***Additional information from the site visit interviews.*** Technical assistance to the sites identified limited knowledge of availability in the community as well as resistance to change among both patients and practitioners as factors contributing to the slow uptake and provision of telehealth services in the start-up phase of the demonstration. Despite low numbers in the first year, most participating CAHs expressed optimism that demand would continue to increase in the coming years as community members, patients, and providers learned about and experienced telehealth. Some sites reported the availability of mental health services via telehealth gave practitioners confidence to keep the patients in the local community.

  Sites reported that the greatest implementation challenges were due to administrative barriers, such as credentialing or access to and capacity limits of distant site practitioners. Several sites noted that despite participating in a telehealth collaboration network, they were not able to host services due to impediments to securing properly credentialed practitioners with availability. These sites faced challenges in obtaining the proper state credentials that give distant site practitioners the necessary privileges to provide services

for patients at the participating CAH. While this intervention is designed for CAHs to receive additional payment for telehealth services to increase access to telehealth services, these implementation challenges would exist regardless of the demonstration.

Many sites noted that hosting telehealth services was outside the usual scope of work for many practitioners and staff at the participating CAHs. For sites that initiated this service in the demonstration project, there was some reluctance to change. Participating CAH administrators described some local practitioners as older, operating independently, and disinclined to alter their practice to use telehealth. As opposed to employed practitioners, facilities also often rely on contracted or temporary practitioners whose transiency may limit their motivation to follow through on goals related to increased telehealth use. Telehealth services require referrals, additional paperwork, coordination of schedules, and staff presentation protocols with distant sites, which some practitioners are hesitant to take on except in rare circumstances. For originating site practitioners new to telehealth, the low volumes also offered few opportunities to gain and maintain familiarity with new systems and protocols. Further, changing leadership at five of the ten facilities participating in FCHIP required reeducation on the demonstration project and may have led to inconsistent implementation efforts.

Initial Recommendations

Section 123 of MIPPA, as amended by Section 3126 of the Affordable Care Act of 2010, requires initial recommendations on ways to improve access to, and the availability of, health care services in eligible counties based on the findings of the demonstration project. While there are some preliminary first year findings, there is insufficient evidence to make recommendations at this time.

Summary and Conclusions

This report found that the ambulance and SNF/NF bed interventions were implemented relatively easily with little burden on the participating CAHs, as they were able to use existing resources or idle capacity. For the telehealth intervention, as reported by the eight participating sites, efforts in the first project year were largely start-up in nature, though common operational and administrative challenges often beyond the scope of Medicare policy did limit change. The quality of patient care was on par with other CAHs not in the demonstration. Inadequate data was available in the first year to make an accurate assessment of payment adequacy.

The majority of participating CAHs are implementing the telehealth intervention. The sites developed protocols, purchased equipment, identified distant site provider networks, and made the community aware of the services. The number of times that the eight participating sites served as originating sites to host telehealth services grew from one in the year prior to the demonstration project to 57 encounters by the end of the first year. This intervention also presented the most operational challenges for the facilities, although these challenges would exist regardless of the demonstration. The participating CAHs identified credentialing issues, access

to and capacity limits of distant site practitioners, not being in the same health care networks of potential distant site practitioners, and resistance by local practitioners as reasons for not seeing greater increases in the hosting of telehealth services despite their increased capabilities.

FCHIP offers opportunities for participating CAHs to make progress in increasing access to care, increasing coordination of care, and improving the quality of care in their communities. More information from the remaining 2 years of the demonstration is necessary to assess the effects of FCHIP on care delivery, address any regulatory challenges, or consider implications for payment adequacy.

Appendix 1: Hospital-Level Quality Metrics

Each participating Critical Access Hospital (CAH) must submit both hospital-level performance data and intervention-specific quality metrics on a quarterly basis, regardless of the intervention. The Federal Office of Rural Health Policy (FORHP), located in the Health Resources and Services Administration (HRSA), developed four quality measures from the Medicare Beneficiary Quality Improvement Project (MBQIP).[13] The demonstration project takes five measures from the Hospital Consumer Assessment of Healthcare Providers and Systems (HCAHPS) survey, which is a survey administered to patients treated at a hospital to assess patient experience with care. National benchmarks are available for the MCQIP and HCAHPS measures. The tenth measure is an all-cause readmissions measure. Though based on the National Quality Forum (NQF) measure #1789, it is a measure unique to the CAHs in the Frontier Community Health Integration Project Demonstration (FCHIP), as not all components specified in the NQF measure are available. Consequently, there is no all-cause readmission benchmark to compare the FCHIP participants. Table 4 describes the measures in more detail. The data sources are hospital-reported data downloaded from the Centers for Medicare & Medicaid Services' Abstracting and Reporting Tool, HCAHPS, and Emergency Department Transfer Communication (EDTC) data.

Table 4. Ten Quality Measures Used in the Frontier Community Health Integration Project Demonstration

Measure	Operational Definition
Medicare Beneficiary Quality Improvement Project (MBQIP) measures	
Outpatient (OP)-20: Door to diagnostic evaluation by a qualified medical professional	Median time patient spent in the emergency department before they were seen by a healthcare professional
OP-27: Influenza vaccination coverage among healthcare personnel (single rate for inpatient and outpatient settings)	Percent of healthcare workers given influenza vaccination
IMM-2: Immunization for influenza	Percent of patients assessed and given influenza vaccination (inpatient)
EDTC measure Patients transferred from emergency department with necessary communication	Percent of patients transferred from emergency department to another healthcare facility that have all necessary communication with the receiving facility personnel
Hospital Consumer Assessment of Healthcare Providers and Systems (HCAHPS) measures	
HCAHPS: Composite 1: Communication with nurses	Percent of patients surveyed who reported that their nurses "Always" communicated well
HCAHPS: Composite 2:	Percent of patients surveyed who reported that their

[13] See https://www.ruralcenter.org/tasc/mbqip.

Measure	**Operational Definition**
Communication with doctors	doctors "Always" communicated well
HCAHPS: Composite 3: Responsiveness of hospital staff	Percent of patients surveyed who reported that they "Always" received help as soon as they wanted
HCAHPS: Composite 6: Discharge information	Percent of patients surveyed who reported that "Yes" they were given information about what to do during their recovery at home
HCAHPS: Composite 7: Care transitions	Percent of patients surveyed who "Always" understood their care when they left the hospital.
All-cause readmissions measure	
Hospital-wide all-cause readmissions (modified from the NQF all cause readmission measure #1789)	The number of all hospital-level all-cause readmissions after admission for any eligible condition within 30 days of hospital discharge. There is no comparison benchmark for this measure.

Tables 5 and 6 show selected hospital-level quality measures reported by each site for the fourth quarter for 2016 (October 1, 2016, to December 31, 2016) for MBQIP and HCAHPS.

Table 5. Frontier Community Health Integration Project Demonstration Quality Measure Results, MBQIP

FCHIP Hospital-level Quality Measures for 4th Quarter 2016 (October 1, 2016, to December 31, 2016)				
	MBQIP Measures			
State/Hospital	**OP-20**: Median time patient spent in the emergency department before seen by healthcare professional (minutes)	**OP-27**: Healthcare workers given influenza vaccination (%)	**IMM-2**: Patients assessed and given influenza vaccination (%)	**EDTC**: Patients transferred from ED to another healthcare facility that have all necessary communication (%)
Nevada				
CAH 1	3	100	100	N/A
CAH 2	N/A	31	N/A	N/A
CAH 3	0	99	90	98
CAH 4	25	87	27	98
Statewide Averages	18*	N/A	88	86
North Dakota				
CAH 5	N/A	31	N/A	100
CAH 6	14	60	67	8
CAH 7	20	46	N/A	71
Statewide Averages	14*	N/A	85	75
Montana				
CAH 8	5	78	100	26
CAH 9	5	98	100	50
CAH 10	10	96	40	82
Statewide Averages	13*	82	81	65
National Averages	17*	86	85	75

Source: Social and Scientific Systems, Inc. Quarterly Report, August 2017
Notes:
* = Data provided are averages of medians
In cases where the FCHIP site did not report on a specific measure or measures, the cell is marked "N/A" (for not available).

Table 6. Frontier Community Health Integration Project Demonstration Quality Measure Results, HCAHPS Measures

FCHIP Hospital-level Quality Measures for 4th Quarter 2016 (October 1, 2016, to December 31, 2016)						
State/Hospital	**HCAHPS Measures** (% of patients reporting)					
	Composite 1: Nurses "Always" communicated well (%)	**Composite 2**: Doctors "Always" communicated well (%)	**Composite 3**: "Always" received help as soon as they wanted (%)	**Composite 6**: "Yes", given information about what to do during recovery at home (%)	**Composite 7**: "Always" understood their care when they left the hospital (%)	**Average HCAHPS Score** (%, average of Composite 1, 2, 3, 6, and 7)
Nevada						
CAH 1	N/A	N/A	N/A	N/A	N/A	N/A
CAH 2	75	75	67	88	50	71
CAH 3	82	84	75	87	43	74
CAH 4	78	89	67	100	50	77
Statewide Averages**	73	75	60	84	47	68
North Dakota						
CAH 5	72	78	50	100	28	66
CAH 6	100	83	100	100	33	83
CAH 7	83	83	100	100	50	83
Statewide Averages**	81	83	75	82	54	75
Montana						
CAH 8	50	50	50	50	50	50
CAH 9	100	100	50	100	16	73
CAH 10	67	100	N/A	0	0	42
Statewide Averages**	80	83	73	86	53	75
National Averages**	80	82	68	87	52	74

Source: Social and Scientific Systems, Inc. Quarterly Report, August 2017
Notes:
** = Prior 12 months
In cases where the FCHIP site did not report on a specific measure or measures, the cell is marked "N/A" (for not available).

CAHs vary in the timing of when they began reporting to MBQIP by measure. In some cases, a CAH may not report a measure during a given quarter due to data collection issues, an insufficient number of cases (as might be the case with the HCAHPS measures if an insufficient number of surveys were returned during the quarter in question), or other reporting challenges. The National Healthcare Safety Network website only reports annually the results for OP-27 – Influenza vaccination coverage among healthcare personnel. In this case, quarterly data is not available for this measure.

Appendix 2: Swing Bed Quality Measures

Measure	Definition
HAI-1: Healthcare-Associated Infection (HAI) per 1,000 (rate)	Number of HAIs in 4 types: Catheter-Associated Urinary Tract Infection, Central Line-Associated Bloodstream Infection, *Clostridium difficile* Infection, and Methicillin-Resistant *Staphylococcus aureus* infection. Exclude acute care; include only CAH swing/long-term care (LTC) beds cases.
	Numerator: Number HAIs x 1,000
	Denominator: CAH swing/LTC patient days (over same period)
HAC-1: Healthcare-Associated Condition: pressure ulcers per 1,000 (rate)	Number of pressure ulcers-Stages 2-4. Report all CAH swing/LTC bed patients with new/worsening Stage 2-4 pressure ulcers. Exclude acute care, include only CAH swing/LTC beds cases.
	Numerator: Number pres. ulcers x 1,000
	Denominator: CAH swing/LTC patient days (over same period)
IMM-2: Influenza immunization (percentage)	Number of patients given influenza vaccination during a year.
	Numerator: Number vaccinations at one time in year
	Denominator: CAH swing/LTC patient days at same time of year