EVALUATION OF THE MEDICARE FRONTIER EXTENDED STAY CLINIC DEMONSTRATION

REPORT TO CONGRESS

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Under Section 434 of the Medicare Prescription Drug Improvement and Modernization Act of 2003 (MMA), Congress established the Medicare Frontier Extended Stay Clinic (FESC) Demonstration to test the feasibility of providing extended stay services to Medicare beneficiaries at clinics in isolated rural areas under Medicare payment and regulations (P.L. 108-173) . Congress directed the Secretary of the U.S. Department of Health and Human Services to submit a report on the demonstration with recommendations for future legislation or administrative action, as appropriate, no later than one year after the completion of the demonstration. The Medicare FESC Demonstration ended on April 15, 2013. This report is submitted to Congress in fulfillment of that requirement.

Background

In frontier areas of the country, weather and distance can prevent patients who experience severe injury or illness from obtaining immediate transport to an acute care hospital. Further, some extended stay patients do not need an acute inpatient level of care but simply require monitoring and observation for limited periods. However, extended stay services are not reimbursable under traditional Medicare. Nor are they reimbursable under state Medicaid plans, except in Alaska during the FESC demonstration, or covered by commercial insurers. Frontier clinics have always provided extended stay services when necessary, but have had to rely on other sources of funding to subsidize the cost of extended stay services, which could undermine their ability to meet the primary care needs of their communities. Frontier extended stay clinics, unlike other clinics serving remote rural communities, are defined primarily by the capacity to stabilize or monitor and observe patients seeking emergency care when immediate transportation to a hospital is either not possible due to severe weather or might be avoided with appropriate

diagnosis and treatment in the ambulatory setting. This capacity requires the clinical expertise to stabilize emergency cases, the radiology and laboratory supplies and equipment to triage and diagnose such cases, and the physical infrastructure to keep patients for extended periods.

The Consolidated Appropriations Act of 2004 included funding for a separate but related demonstration program to be administered by the Health Resources and Services Administration (HRSA) Office of Rural Health Policy (ORHP) to examine the effectiveness and appropriateness of frontier clinics in providing extended stay services to all patients. HRSA began providing annual capacity-building grants in 2004 (and later extended to 2013 [HRSA 2012]) to assist eligible outpatient clinics in acquiring the equipment, infrastructure, and administrative and staffing resources needed to support the provision of extended stay services in frontier communities. HRSA awarded funding under the FESC Cooperative Agreement Program (as it later became known) to the Southeast Alaska Regional Health Consortium (SEARHC), an Alaska Native health corporation. SEARHC established the Alaska FESC Consortium, a partnership of five frontier providers in Alaska and Washington State, to administer the program.

In 2010, the Centers for Medicare & Medicaid Services (CMS) implemented the FESC Demonstration, as mandated by Section 434 of the MMA to conduct, "a demonstration project under which frontier extended stay clinics…in isolated rural areas are treated as providers of items and services under the Medicare program." The FESC Demonstration allowed clinics in isolated rural areas to treat Medicare beneficiaries for more extended periods, including overnight stays, than are provided in routine clinic visits. The Alaska Department of Health and Social Services (DHSS) began paying an enhanced rate for extended stay services for Alaska Medicaid recipients at the same time.

To participate in the demonstration, the statute required that a clinic be (1) located in a community in which the closest short-term acute care or critical access hospital (CAH) was at least 75 miles from the community or inaccessible by public road; and (2) equipped to address the needs of seriously or critically ill or injured patients who, due to adverse weather conditions or other reasons, could not be transferred quickly to acute care referral centers, or of patients who need monitoring and observation for a limited period.

CMS announced the Medicare FESC Demonstration and published a request for proposals in the *Federal Register* in August 2006 after which CMS began the certification process. The first selected applicant completed the federal certification process and Medicare began paying for extended stay services on April 15, 2010.[1] The FESC Demonstration lasted for 36 months following that date (through April 14, 2013), regardless of when a clinic received certification and began receiving enhanced Medicare payments for extended stay services. Under the Medicare FESC Demonstration, participating clinics received an extended stay payment rate of $479 to $541 *per 4-hour unit of time* for stays longer than 4 hours up to a maximum of 48 hours, compared with the $78 to $447 *per visit* they would have received under the Federally Qualified Health Center (FQHC) and Rural Health Center (RHC) all-inclusive rate (AIR) payment policy.[2] (Medicare payment rates vary depending on the type and location of the clinic. Under traditional Medicare, tribal clinics receive a higher all-inclusive payment rate than nontribal FQHCs and

[1] This was Inter Island Medical Center (IIMC) in Washington, with the second lowest FESC volume. It was several months before the other facilities certified, which shortened the period the clinics in Alaska were eligible to submit claims for extended stay services under the demonstration.

[2] Under traditional Medicare, participating clinics are paid an all-inclusive rate, subject to a payment limit, for all qualified services furnished on the same day. The all-inclusive payment rates for each of the participating clinics are described in Chapter II and presented in Table II.1.

RHCs that includes most ancillary services.) The FESC bundled payment rate was based on the payment rate that Medicare uses to pay for observation bed stays in hospital outpatient departments under the hospital outpatient prospective payment system (OPPS).

CMS's Conditions of Participation

As part of the demonstration, CMS and the Alaska state Medicaid agency had to develop a set of requirements for ensuring the safety of patients who received observation and emergency services (and, in some cases, overnight care) in health care settings designed and used primarily for outpatient ambulatory care. To qualify as an extended stay facility and bill Medicare for extended stay services under the demonstration, the five demonstration clinics had to meet federal conditions of participation (in addition to those they already had to meet to obtain their level of federal and state licensure as outpatient clinics) relating to (1) staff type and coverage, (2) facility services and physical structure, and (3) administrative procedures.[3]

To help facilities meet the conditions of participation in the demonstration, HRSA provided clinics with annual extended stay capacity-building grants from 2004 (six years before the initiation of enhanced payments for extended stay services by Medicare) to 2013, totaling nearly $13 million, in addition to grant funding that FQHCs were eligible to receive under Section 330 of the Public Health Service Act from HRSA. The clinics used the funds, which were administered by the Alaska FESC Consortium through a cooperative agreement with HRSA, to (1) expand staffing, (2) improve infrastructure and upgrade facilities, (3) purchase medical equipment, and (4) develop administrative protocols for ensuring patient safety.

[3] Alaska developed its own set of Medicaid certification requirements for nontribal extended stay clinics. Tribal clinics in Alaska are exempt from state licensure.

Overview of Demonstration Clinics

Six rural clinics in three states applied for and were accepted into the Medicare FESC Demonstration, but only five became eligible to receive enhanced payment for extended stay services (see Table ES.1). The five participating clinics were located in remote areas or islands in two states: four in Alaska and one in Washington State. Of these, four clinics were certified as FQHCs and received supplemental funding under Section 330 of the Public Health Service Act, two of which were tribally affiliated clinics and received enhanced funding under IHS. Inter-Island Medical Center in Friday Harbor, Washington, converted to a CAH in November 2012 and thus became ineligible to receive FESC payments five months before the end of the demonstration. A sixth site located in Broadus, Montana, applied for and was accepted into the demonstration, but later withdrew, citing the high cost of becoming a Medicare-certified extended stay facility.

Table ES.1. Clinics Selected to Participate in the Medicare FESC Demonstration, by Certification Date

	State	Federal Funding	FESC Certification Date	FESC End Date
Powder River Medical Center	Montana	n.a.	n.a.	n.a.
Inter-Island Medical Center	Washington	n.a.	April 2010	November 2012
Iliuliuk Family and Health Services	Alaska	HRSA	July 2010	April 2013
Haines Health Center	Alaska	HRSA/IHS	October 2010	April 2013
Alicia Roberts Medical Center	Alaska	HRSA/IHS	December 2010	April 2013
Cross Road Medical Center	Alaska	HRSA	April 2011	April 2013

Note: Powder River Medical Center in Broadus, Montana, withdrew from the demonstration when it learned the Medicare conditions of participation. Inter-Island Medical Center in Friday Harbor, Washington, converted to a CAH in November 2012 and thus became ineligible to receive FESC payments.

HRSA = Health Resources and Services Administration; IHS = Indian Health Service.

n.a. = not applicable.

Evaluation Methodology

The evaluation of the Medicare FESC Demonstration was based on two key components: (1) a qualitative analysis of information obtained through background document review, stakeholder interviews, and site visits; and (2) a quantitative analysis of Medicare claims and extended stay encounter forms submitted by clinics to CMS and their Medicare Administrative Contractor. The evaluation employed a mixed-methods approach to addressing research questions related to both implementation effectiveness and impacts. We relied on a review of previous program assessments conducted by SEARHC under contract with HRSA; telephone interviews with program stakeholders at the national, state, and local levels; in-person discussions with clinic administrators and medical staff; direct observation of extended stay equipment and facilities; and a quantitative analysis of extended stay encounter forms and Medicare claims.

As a condition of participation, clinics were required to submit a patient encounter form to their Medicare Administrative Contractor for every Medicare beneficiary whose stay in the clinic equaled or exceeded four hours.[4] The form included patient observation time; diagnosis or condition; and documentation that the attending clinician assessed patient risk to determine that the beneficiary would benefit from an extended stay level of care. The clinic was also required to include documentation of weather or other conditions that delayed the transfer of the beneficiary, if relevant. The Medicare Administrative Contractors were required to conduct a retrospective review of the extended stay documentation forms to confirm that beneficiaries met medical necessity requirements for extended stays. We used these extended stay encounter forms to

[4] Clinics began submitting encounter forms for all patients receiving extended stay services under HRSA funding in 2004, six years before they received certification to bill Medicare for enhanced federal payments under the demonstration.

describe the characteristics of extended stays under the Medicare FESC Demonstration. We used Medicare claims to estimate the impact of enhanced federal funding for extended stay care on the use and cost of emergency transfer and inpatient services.

The main challenge of the evaluation was obtaining robust estimates of the impact of the demonstration on emergency transfer and hospitalization rates and, hence, the level of Medicare savings, if any, associated with the program. First, the number of Medicare beneficiaries living in frontier communities in Alaska is small and the proportion of elderly residents requiring extended stay care is even smaller, so capturing statistically significant effects of the program is difficult. Second, the lack of a billing code for extended stay services in ambulatory care settings under the traditional Medicare fee-for-service system makes it difficult to determine the number of beneficiaries receiving extended stay care who would have been transferred without the additional capacity and enhanced payments provided by the demonstration. Third, the clinics that chose to participate in the demonstration generally had more staffing and provided a higher level of services than other clinics in isolated rural areas in Alaska. The limited number of frontier clinics in Alaska and the unique characteristics of those that participated in the demonstration make it difficult to identify a comparison group of outpatient facilities for this study.

To address these challenges, we used Medicare claims to measure emergency transfer and hospitalization rates among all beneficiaries with an outpatient visit at a demonstration clinic (including beneficiaries whose visits did not result in an extended stay), as well as at a matched comparison group of clinics, before versus after the implementation of the demonstration. The model measures the impact of the demonstration on overall emergency transfer and hospitalization rates, not just among beneficiaries receiving extended stay care. We identified all clinics in Alaska that met the distance requirements of the demonstration and found two that

matched the participating clinics on most facility (size, scope of services, and staffing) and beneficiary (demographic and health status) characteristics. Under the assumption that the comparison clinics provide a reasonable proxy for what would have occurred at participating clinics in the absence of the demonstration, our model provides a meaningful estimate of the direction and magnitude of the impact of the demonstration on service use and costs. We supplemented our claims-based regression analysis with a descriptive analysis of extended stay encounter forms and found that the two sources provide similar results.

Summary of Key Findings

Of the numerous findings described in the report, five are key lessons learned.

1. **The costs of building and maintaining extended stay capacity are high.** It took clinics several years and more than $10 million in grant funding from HRSA to achieve and maintain the certification standards, particularly conditions of participation relating to staffing, equipment and facilities, and quality assurance. One clinic, without grant funding from HRSA, withdrew from the demonstration due to concerns about the high cost of meeting the certification requirements. Under contract with SEARHC, Stroudwater Associates estimated that the incremental *annual* labor costs of providing extended stay services (in 2006 dollars) ranged from $500,000 to $700,000, depending on the clinic (Shell 2007). The Rural Policy Research Institute (RUPRI), also working under a contract with SEARHC to evaluate the demonstration, estimated that, after including equipment and supplies, the total cost of maintaining extended stay capacity could reach $1 million each year per clinic (MacKinney et al. 2012).
2. **The demand for extended stay services among Medicare beneficiaries is low.** Based on an analysis of Medicare claims, only one percent of all outpatient visits among Medicare beneficiaries at participating clinics during the demonstration were for extended stay services. There were only 159 paid claims for extended stay services across the five participating clinics during the first 32 months of the 36-month demonstration paid by Medicare, out of a total of 16,575 outpatient visits. In addition, clinics submitted 166 patient encounter forms for extended stay services to CMS during the demonstration.[5] An earlier analysis conducted by SEARHC of encounter forms for all patients found that, of the 2,226 extended stays that occurred

[5] Because of the lag in claims reporting and differences in reporting periods, the number of encounter forms exceeds the number of claims used for this study.

during the first five years of HRSA funding, slightly more than one-fourth included Medicare as the primary payer and almost 10 percent included Medicaid. Given the demographic characteristics of the local population in these frontier communities, the remaining patients who received extended stay services during this period were likely to be either Native Alaskans (and thus covered under the IHS) or transient workers in the fishing industry or tourists (and thus possibly covered under an employer-sponsored plan).

3. **Extended stay services improve beneficiaries' experiences.** Almost two-thirds (65.1 percent) of the 166 extended stays for which an encounter form was submitted to CMS were admitted for monitoring and observation only; local clinicians determined that, with appropriate diagnostic information and clinical expertise, these beneficiaries could likely be sent home after several hours of monitoring and observation and possibly be referred to nonemergency follow-up care locally. In the absence of the demonstration, most of these beneficiaries would have been transferred to a hospital as soon as travel conditions improved. According to clinicians' assessments as reported on the encounter forms, nearly half (45.4 percent) of those extended stay beneficiaries admitted for monitoring and observation avoided an emergency transfer and hospitalization as a result of the demonstration. For half, the availability of extended stay services also prevented having to send the beneficiaries home without adequate care. Because clinics can provide the appropriate level of care during an extended stay, in many cases the extended stay eliminated the need to transfer the patient to the hospital for emergency care and represented a clinically appropriate shift in the site of care for certain cases from the hospital to the extended stay facility. Anecdotally, clinic staff reported that treating patients locally also helped reduce the risks associated with sending patients home without adequate care or during transfer to an acute care facility. In addition, clinic staff stated that treating patients closer to home enabled them to benefit from the support of their families and social networks and to avoid the high expense of having family members drive (if possible) or fly to the hospital location, stay in a hotel for several days, and then travel home again.

4. **Extended stay services promote appropriate monitoring and observation services.** For beneficiaries with potentially emergency conditions, the demonstration promoted the appropriate use of monitoring and observation services in the local community and helped to avoid unnecessary transfers and hospitalizations. The multivariate analysis of Medicare claims found that the demonstration reduced the seven-day post-visit emergency transfer rate by 21.4 percent and the seven-day post-visit hospitalization rate by 23.9 percent. (Both results were marginally statistically significant due in part to the small number of beneficiaries needing extended stay care. But the results were corroborated by clinicians' assessment as reported on the extended stay encounter form.) By reducing the number of beneficiaries who required emergency transfers and inpatient care, we estimate that the demonstration resulted in a net reduction in Medicare spending for medical services. Based on a regression analysis of Medicare claims, we estimate that total Medicare savings per year from 26 averted transfers were $285,558 and, from 26 averted hospitalizations,

$423,904. After adding the amount that Medicare would have paid for the extended stay visits under the traditional Medicare payment methodology in the absence of the demonstration ($8,800) and subtracting the annual amount that Medicare paid for extended stay services under the demonstration ($101,680), we estimate that the demonstration led to a net reduction in Medicare spending of $616,582 per year, or $7,707 per extended stay. However, as noted above, the estimated savings to Medicare does not include the cost of building and maintaining extended stay capacity. After factoring in HRSA funding to help clinics meet the conditions of participation, the demonstration did not show cost savings to the federal government.

5. **Frontier communities would likely not be able to sustain extended stay capacity under fee-for-service Medicare.** The cost of maintaining enhanced and extended after-hours and weekend staffing[6] for Medicare beneficiaries to ensure access to quality emergency care in frontier communities, combined with low Medicare beneficiary volumes, challenges the financial sustainability of the extended stay care model when Medicare is the sole payer participating in the FESC Demonstration program. Although clinics might not be at full capacity, as providers of extended stay care they must provide services to patients if and when needed. They must also purchase and maintain the equipment and supplies needed to provide moderate-complexity laboratory and radiology services and develop the physical infrastructure to safely keep patients overnight. With an average Medicare payment of $541 per extended stay, Iliuliuk Family and Health Services would have had to provide 938 Medicare extended stays per year to cover its incremental labor costs and Cross Road Medical Center, with an average Medicare payment of $1,588, would have had to provide 436 Medicare extended stays per year to break even. With low patient volumes, even getting Medicaid and commercial insurers to pay for extended stays at the higher rate is unlikely to generate sufficient revenue to cover the high cost of providing extended stay care.

Policy and Program Implications

The Medicare FESC Demonstration showed that providing Medicare extended stay services in frontier communities of Alaska improves the experience of care and lowers Medicare spending for emergency transfers and hospitalizations. However, the high cost of building extended stay capacity and providing extended stay services limits the available savings to the federal government. The number of clinics that participated in the demonstration and the number

[6] Enhanced staffing can be provided through an on-call provider, but must be available 24 hours a day, seven days a week. Laboratory and radiology equipment could also be used for treating nonextended stay patients as well.

of beneficiaries who benefited from the program were also low. The demonstration also illustrated the challenges and high fixed costs of building and maintaining extended stay capacity in remote rural regions of the country and the difficulty of recovering those costs under a fee-for-service payment system due to the low volume of extended stay cases.

The lessons learned from the Medicare FESC Demonstration are based on a small application of the extended stay model of care primarily in four isolated Alaskan communities. The findings might not apply in less isolated frontier communities, where hospitals are not as distant and emergency transportation via roads is an option. In addition, although many communities where travel to hospital services is problematic could potentially benefit from the extended stay model of care, becoming an extended stay facility is difficult and requires a high level of staffing, infrastructure, and administrative capacity that is beyond the resources available to many clinics in frontier areas, particularly those without access to additional funding under the Public Health Service Act and from IHS. Review of the potential of the extended stay model of care in remote geographic areas of the country should include consideration of the appropriate level of services; the mix of Medicare, Medicaid, and commercial payers; the complement of staffing and facilities to deliver those services; and the potential for health care savings.

I. INTRODUCTION

Under Section 434 of the Medicare Prescription Drug Improvement and Modernization Act of 2003 (MMA), Congress established the Medicare Frontier Extended Stay Clinic (FESC) Demonstration to test the feasibility of providing extended stay services to Medicare beneficiaries at clinics in isolated rural areas under Medicare payment and regulations ((PL 108-173). Congress directed the Secretary of the U.S. Department of Health and Human Services to submit a report on the demonstration with recommendations for future legislation or administrative action, as appropriate, no later than one year after the completion of the demonstration. The Medicare FESC Demonstration ended on April 15, 2013. This report is submitted to Congress in fulfillment of that requirement.

A. Background and Rationale for the Medicare FESC Demonstration

In frontier areas of the country, weather and distance can prevent patients who experience severe injury or illness from obtaining immediate transport to an acute care hospital. Further, some extended stay patients do not need an acute inpatient level of care but simply require monitoring and observation for limited periods. In some instances, when patients are unable to be transported, local clinics staffed by physicians or other health professionals may offer observational or stabilization services until the patient can be transferred or is no longer in need of transport. These services require additional staffing, equipment, and quality assurance programs beyond those usually found in rural clinics—services that are similar to, but not as extensive as, those provided in acute care hospitals. However, extended stay services in rural health centers are not paid under traditional Medicare and Medicaid programs, or by other third-party payers. Lack of funding for these services raises concern about the quality of care at clinics

in isolated rural areas when emergency transport is not immediately available or when emergency transport is available but observation and monitoring on an extended stay basis is all that is required. Frontier clinics have always provided extended stay services when necessary, but have had to rely on existing revenue streams to cover the cost of extended stay services, challenging their ability to fulfill their core mission, which is to meet the primary health care needs of their communities.

The Consolidated Appropriations Act of 2004 included funding for a separate demonstration program to be administered by the Health Resources and Services Administration (HRSA) Office of Rural Health Policy (ORHP) to examine the effectiveness and appropriateness of frontier extended stay clinics in providing health care services in certain remote locations for all patients. HRSA began providing annual capacity-building grants in 2004 (and later extended in a program notice [HRSA 2012] to 2013) to assist eligible outpatient clinics in developing the equipment, infrastructure, and administrative and staffing resources needed to support the provision of extended stay services in frontier communities. HRSA awarded funding under the FESC Cooperative Agreement Program (as it later became known) to the Southeast Alaska Regional Health Consortium (SEARHC), an Alaska Native health corporation. SEARHC established the Alaska FESC Consortium, a partnership of five frontier providers in Alaska and Washington states, to administer the program. In 2010, the Centers for Medicare & Medicaid Services (CMS) entered into federal provider agreements with the five frontier clinics participating in the FESC Cooperative Agreement Program and initiated higher payments for extended stay services. The Alaska Department of Health and Social Services (DHSS) also began paying an enhanced rate for extended stay services for Alaska Medicaid recipients at the same time.

B. Description of the Medicare FESC Demonstration

The MMA defined a FESC as a clinic (1) located in a community in which the closest short-term acute care hospital or critical access hospital (CAH) is at least 75 miles from the community or inaccessible by public road; and (2) equipped to address the needs of seriously or critically ill or injured patients who, due to adverse weather conditions or other reasons, cannot be transferred quickly to acute care referral centers, or of patients who need monitoring and observation for a limited period. The Medicare FESC Demonstration targeted clinics located in remote areas that currently provide diagnosis and treatment in the outpatient setting, where patients generally visit the clinic during the day for a brief encounter. Although the demonstration did not specify a particular type of clinic, facilities certified under the demonstration had to be able to provide primary and ambulatory care, as well as extended stay services. Alaska's Medicaid program also participated with a separate Medicaid coverage and payment arrangement for FESC services.

To qualify for payment under the demonstration, extended stays had to meet one of two criteria: either (1) transfer of the beneficiary to an acute care hospital must have been prevented by adverse weather conditions or other reasons or (2) clinicians must have used prudent clinical judgment to determine that the beneficiary did not meet Medicare's inpatient hospital admission criteria but did need monitoring and observation for an extended period. The presumption was that beneficiaries who required hospitalization would have been transferred to an acute care facility as soon as emergency transportation was available. Even though some beneficiaries might have recovered during an extended stay and have been discharged home or referred for nonemergency follow-up care at another outpatient facility while waiting for emergency transport to become available, the demonstration was not intended to substitute extended stay

services for inpatient care, except for situations when there was severe illness or injury and weather or other circumstances prevented emergency transport.

CMS announced the Medicare FESC Demonstration and published a request for proposals in the *Federal Register* in August 2006 (CMS 2006). After the certification process, the Medicare FESC Demonstration began on April 15, 2010, and lasted for 36 months (through April 15, 2013), regardless of when a clinic received certification and began receiving Medicare payments for extended stay services. The five clinics that participated in the demonstration were located in remote areas or islands in two states: four in Alaska and one in Washington (see Table I.1 and Figure I.1). Inter-Island Medical Center in Friday Harbor, Washington, converted to a CAH in November 2012 and thus became ineligible to receive FESC payments. A sixth site located in Broadus, Montana, applied to and was accepted into the demonstration, but later withdrew citing the high cost of becoming a certified extended stay facility. The nearest hospitals to these clinics are generally distant, so air (and, in some cases, boat) transport is the only option for emergency transport services, and severe weather can prevent transfer for days.

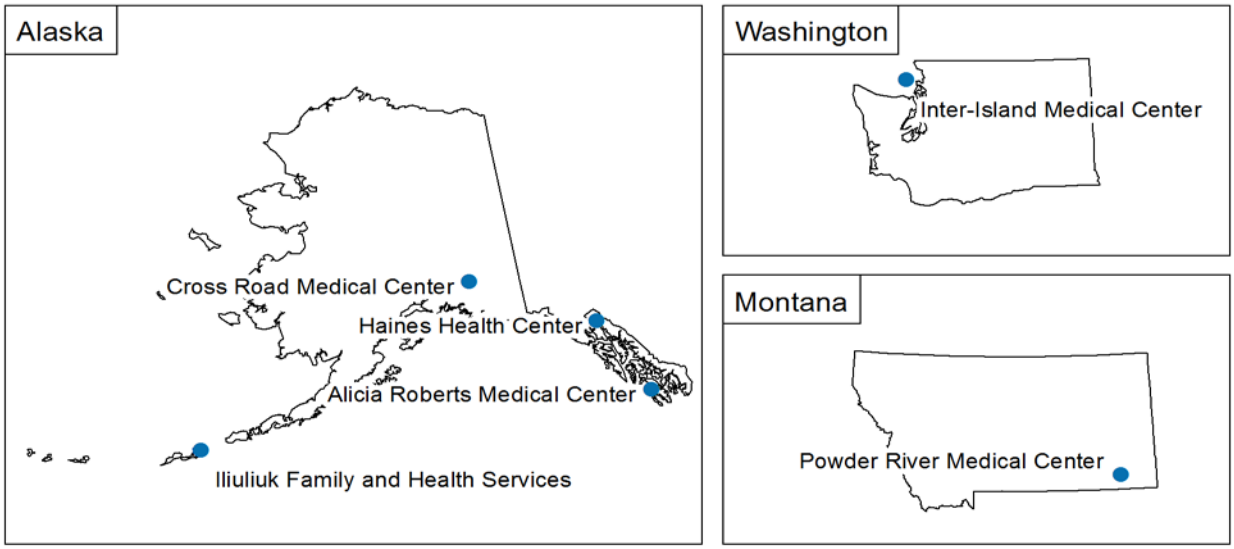
Table I.1. Clinics Selected to Participate in the Medicare FESC Demonstration, by Certification Date

Clinic	City	State	FESC Certification Date	FESC End Date
Powder River Medical Center	Broadus	Montana	n.a.	n.a.
Inter-Island Medical Center	Friday Harbor	Washington	April 2010	November 2012
Iliuliuk Family and Health Services	Unalaska	Alaska	July 2010	April 2013
Haines Health Center	Haines	Alaska	October 2010	April 2013
Alicia Roberts Medical Center	Klawock	Alaska	December 2010	April 2013
Cross Road Medical Center	Glennallen	Alaska	April 2011	April 2013

Note: Powder River Medical Center in Broadus, Montana, withdrew from the demonstration when it learned the Medicare conditions of participation. Inter-Island Medical Center in Friday Harbor, Washington, converted to a critical access hospital in November 2012 and thus became ineligible to receive FESC payments.

n.a. = not applicable.

Figure I.1. Geographic Location of Clinics Selected to Participate in the Medicare FESC Demonstration



C. Purpose and Outline of the Evaluation Report

This report is intended to provide Congress with information on the Medicare FESC Demonstration. The report is organized as follows. Following this introduction, Chapter II describes two critical actions that CMS needed to complete before it could implement the demonstration: (1) establishing the federal certification requirements for frontier extended stay clinics and (2) developing the payment methodology for extended stay services. Chapter III describes our evaluation methodology, with details on the model we used to estimate the impact of the demonstration on emergency transfers and hospitalizations. Chapter IV provides a brief description of the five participating clinics, highlighting the unique characteristics they share, which could limit the applicability of the extended stay model of care in other frontier communities. Chapter V summarizes three key findings from the evaluation that are important for considering extended stay services in frontier communities: (1) What are extended stay services? (2) How do extended stay services affect the patient experience and the cost of care? and (3) Are extended stay services sustainable under Medicare's payment system?

II. IMPLEMENTATION OF THE MEDICARE FESC DEMONSTRATION

Section 434 of the MMA created a new type of service and clinic under Medicare, requiring CMS to develop the conditions of participation and payment methodology before it could implement the demonstration. In this chapter, we describe the CMS conditions of participation for the demonstration. We also describe the Medicare and Medicaid payment methodology and rate, and compare the payments with the amount clinics would have received without the demonstration.

A. CMS's Conditions of Participation

As part of the demonstration, CMS and the Alaska state Medicaid agency developed a set of requirements for ensuring the safety of patients who received observation and emergency services (and, in some cases, overnight care) in health care settings designed and used primarily for outpatient ambulatory care. To qualify as an extended stay facility and bill Medicare for extended stay services under the demonstration, the five demonstration clinics had to meet federal conditions of participation (in addition to those they already had to meet to obtain their level of federal and state licensure as outpatient clinics) relating to (1) staff type and coverage, (2) facility services and physical structure, and (3) administrative procedures.[7] In this section, we describe the standards required by CMS to be certified as an extended stay facility under the demonstration in each of these areas.

Staffing. The certification requirements for staffing specify the type of clinicians permitted to provide bedside care, the types of procedures clinicians with different medical training are allowed to provide, the availability of clinicians during working and nonworking hours, and staff

[7] Alaska developed its own set of Medicaid certification requirements for nontribal extended stay clinics. Tribal clinics in Alaska are exempt from state licensure.

supervision. To comply with the staffing requirements, a physician, a nonphysician clinician (such as a nurse practitioner or physician assistant), or a registered nurse must be on call or on site 24 hours a day, seven days a week.[8] If on call, the clinician must be on site within 30 minutes of a patient's after-hours arrival. A physician or nonphysician clinician is required to determine whether a patient should be admitted for an extended stay of four or more hours. When a patient is admitted for an extended stay, a licensed practical nurse, emergency medical technician, or paramedic is allowed to provide bedside care if a physician, nonphysician clinician, or registered nurse is not available. In addition, a clinical staff person must be on site whenever the facility has one or more extended stay patients. A clinic cannot treat more than four extended stay patients at one time.

CMS's initial conditions of participation stipulated that a physician, nurse practitioner, or registered nurse must provide the bedside care of extended stay patients. However, because of the chronic staffing shortages and transportation barriers facing frontier communities, many clinics in isolated rural areas in Alaska have historically relied on clinical staff with less medical training than physicians and nurse practitioners to treat patients in need of extended stay care. After discussions, CMS agreed to allow licensed practical nurses, physician assistants, emergency medical technicians, and paramedics to provide bedside care when a physician, nurse practitioner, or registered nurse was not available, on the condition that sites had tried and failed to fill that position. CMS did not extend the exemption to community health aides, a staffing model used throughout Alaska's tribal health system.

[8] A physician or nonphysician clinician must be available on site at least 60 percent of the time during the clinic's normal hours of operation or at least 32 hours per week, whichever is less. For extended stays, physicians are required to supervise the patient care provided by other practitioners.

The clinics in Alaska also sought approval from the Alaska Board of Nursing to modify its scope-of-practice rules to allow registered nurses to take patient x-rays in frontier clinics. Although registered nurses had historically performed x-rays in frontier clinics in Alaska, CMS was willing to sanction this practice in the demonstration facilities only if it was authorized by the state nursing board. After six months of discussions, the state nursing board agreed to permit registered nurses to perform x-rays at demonstration clinics, conditional on their meeting additional training and continuing medical education requirements and completing competency assessments in radiology.

Facilities and services. CMS also required all extended stay facilities to upgrade from general business occupancy life safety codes to more stringent ambulatory health care occupancy life safety codes (National Fire Prevention Association 2000). The rationale for requiring extended stay clinics to achieve and maintain the higher life safety codes was because, unlike ambulatory health centers, extended stay clinics had to be able to operate as observation and emergency facilities for up to 48 hours. Specifically, all rooms used for extended stay services have to be separated by a fire wall and smoke barriers (capable of retarding smoke), and the clinics are required to have sprinkler systems to meet federal fire safety standards. To provide extended stay care services 24 hours a day, extended stay facilities are also required to have an approved moderate complexity laboratory and radiology services for diagnosis and treatment; appropriate equipment, supplies, drugs, chemicals, and biologicals to treat extended stay cases; a physically separate area for treating extended stay patients; and ancillary services such as food and laundry.

Administrative procedures. Finally, CMS required clinics participating in the demonstration to implement a number of administrative procedures to help ensure the safety of extended stay patients. First, extended stay facilities were required to have formal agreements

with acute care hospitals or CAHs to facilitate the referral, transfer, and inpatient treatment of extended stay patients. If agreements are not in writing, CMS required the extended stay clinic to demonstrate that referred patients are accepted and treated upon transfer. CMS also required facilities to develop and maintain a clinical records system that documents the weather or transportation issues preventing hospital transfer; the time of extended stay admission and discharge; and clinical information associated with the extended stay, including diagnoses, procedures, and outcomes. This information is also captured in the patient encounter forms that the participating clinic was required to send to its Medicare Administrative Contractor (MAC) for medical necessity review. The clinic was also required to ensure that the patient's health records were transferred to the referral hospital. Finally, as a condition of participation in the demonstration, clinics were required to develop a quality assessment and performance improvement program and to have procedures to evaluate extended stay services annually to measure and improve patient safety, quality of care, and satisfaction.

To help facilities meet the conditions of participation in the demonstration, HRSA provided clinics with annual extended stay capacity-building grants from 2004 (six years before the initiation of enhanced payment for extended stay services by Medicare) to 2013, totaling nearly $13 million, in addition to grant funding that FQHCs were eligible to receive under Section 330 of the Public Health Service Act from HRSA. The clinics used the funds, which were administered by the Alaska FESC Consortium through a cooperative agreement with HRSA, to (1) expand staffing, (2) improve infrastructure and upgrade facilities, (3) purchase medical equipment, and (4) develop administrative protocols for ensuring patient safety. The goal of the Alaska FESC Consortium, which consisted of all five clinics participating in the Medicare FESC

Demonstration, was to demonstrate the effectiveness and appropriateness of the extended stay model of care in remote communities.[9] The Alaska FESC Consortium also assisted clinics with developing written policies and procedures to comply with the conditions of participation and to prepare the documentation they needed to obtain certification through self-attestation, that is, through signing their own certification documents and acknowledging their status.

B. Payment Methodology

Under the Medicare FESC Demonstration, participating clinics received a wage-adjusted FESC payment rate per 4-hour unit of time for stays longer than 4 hours up to a maximum of 48 hours. For stays of fewer than 4 hours, the clinics received their per visit rate.[10] For stays 4 hours or longer, the clinic received the enhanced FESC payment rate. For these stays, the clinic, in submitting the number of units on the claim, rounded down to the lower number of units for an incremental amount of time fewer than 2 hours, and rounded up to the greater number of units for an incremental amount of time greater than or equal to 2 hours but fewer than 4 hours.[11]

Medicare FESC payments were expected to cover nearly all of the laboratory, x-ray, and physician services associated with an extended stay in a clinic in an isolated rural area. Types of services outside the defined bundle of services eligible for the per-visit payment under the demonstration were paid separately under Medicare Part B. Because the bundle of services

[9] The lead agency for the Alaska FESC Consortium (and the holder of the cooperative agreement with HRSA) was SEARHC, a nonprofit tribal health consortium that serves the health interests of the Native people of Southeast Alaska. SEARHC operates a hospital, 12 community clinics, and three substance abuse treatment programs. Two of the clinics that participated in the demonstration (Haines Health Center and Alicia Roberts Medical Center) are members of SEARHC.

[10] Medicare has special payment policies for RHCs and FQHCs that recognize the unique roles these facilities play as providers of primary care in underserved communities. RHCs and FQHCs are paid an all-inclusive rate, subject to a payment limit, for all qualified services furnished on the same day.

[11] For example, for a stay of three hours, Medicare paid at the customary clinic visit rate. For a stay of five hours, Medicare paid the FESC payment rate for one unit of time. A stay of seven hours was paid at the demonstration rate at two units of time and a stay of nine hours was paid at two units of time.

included in the extended stay payment rate was designed to capture most of the services and procedures typically associated with an ambulatory visit at an RHC or FQHC, separate billing was expected to be uncommon and represent a relatively small proportion of total costs incurred during an extended stay.

The FESC bundled payment rate was based on the payment rate that Medicare uses to pay for observation bed stays in hospital outpatient departments under the hospital outpatient prospective payment system (OPPS) using Ambulatory Payment Classification group 0339. The standardized payment rate was adjusted for regional wage variation. The bundled payment rate was also supposed to include any cost-of-living adjustments for supplies and other nonlabor resources that were applied under the outpatient and inpatient prospective payment systems and to be updated annually based upon the market basket adjustment applicable to the OPPS. However, the bundled payment rate for extended stay services per four-hour unit of stay remained unchanged throughout the demonstration.

Table II.1 summarizes the Medicare payment rates under the demonstration, as well as under traditional RHC and FQHC payment rules, for each participating site. In fiscal year (FY) 2012, the four FQHCs participating in the demonstration in Alaska received $541.24 per four-hour unit of stay for extended stay beneficiaries covered under Medicare and the one RHC in Washington received $479.74 per four-hour unit of stay. Under the RHC/FQHC all-inclusive rate system, these clinics would still have treated beneficiaries who needed extended stay care, but they would have been able to bill only up to the Medicare upper payment limit, ranging from $78.54 per visit at the RHC in Washington to $447.00 per visit at the two tribal clinics in Alaska. Under the demonstration, the four FQHCs treating a beneficiary with an extended stay of 6.9 hours would have received $1,082.48 (two units), significantly higher than the bundled per-visit

payment rate that they would have received in the absence of the demonstration. These rates remained in effect for the full three years of the demonstration.

Table II.1. Medicare Payment Rates for Extended Stay Services, Fiscal Year 2012

Clinic	Tribal Status	RHC/FQHC Certification	RHC/FQHC Payment Rate (per visit)	FESC Payment Rate (per 4-hour unit)
Inter-Island Medical Center	Nontribal	RHC	$78.54	$479.74
Alicia Roberts Medical Center	Tribal	FQHC	$447.00	$541.24
Haines Health Center	Tribal	FQHC	$447.00	$541.24
Cross Road Medical Center	Nontribal	FQHC	$109.90	$541.24
Iliuliuk Family and Health Services	Nontribal	FQHC	$109.90	$541.24

Source: Centers for Medicare & Medicaid Services and Alaska Department of Health and Social Services.

Note: Inter-Island Medical Center converted to CAH status in November 2012 and became ineligible to continue to receive FESC payments. Cross Road Medical Center is a nontribal FQHC, but has a contract with a regional tribal health consortium to provide outpatient and short-term urgent care to American Indian/Alaskan Native residents in the region.

CAH = critical access hospital; FESC = frontier extended stay clinic; FQHC = federally qualified health center; RHC = rural health clinic.

The Alaska Medicaid program also decided to pay an enhanced amount for extended stay services under the demonstration, establishing payment rules that mirror those for Medicare. But rather than adopting Medicare's bundled payment rate of $541.24 for sites in Alaska, the state Medicaid program chose to use its existing all-inclusive payment rate for ambulatory visits as the basis of the payment rate for extended stays (multiplied by the number of four-hour units of time).[12] Alaska's Medicaid payment rates for extended stay encounters under the demonstration were based on each facility's historic costs and, as a result, vary by clinic and differ depending on the clinic's tribal status. Under the demonstration, the Alaska Medicaid all-inclusive payment

[12] Alaska Medicaid uses an all-inclusive payment rate for ambulatory visits and does not permit clinics to bill separately for ancillary services. As a result, demonstration clinics are not allowed to bill Medicaid separately for ancillary services that Medicare excluded from its bundled extended stay rate.

rate for extended stay encounters at the two tribal clinics (Alicia Roberts Medical Center and Haines Health Center) was $490.00, whereas for the nontribal clinics (Cross Road Medical Center and Iliuliuk Family and Health Services), the Medicaid all-inclusive payment rates for extended stay encounters were $342.24 and $315.93, respectively, slightly lower than the rates paid by Medicare (see Table II.1).[13]

Alaska Medicaid ceased paying for extended stay claims with a date of service after March 31, 2013. Alaska reported that over the three-year demonstration period, 70 Medicaid FESC encounters were provided, in which 42 potentially averted patient transfers. Based on Alaska Medicaid's enhanced payment rate for extended stay services, total payments for the 70 Medicaid recipients with an extended stay encounter was approximately $87,000. The Medicaid program in Washington opted not to pay enhanced rates for extended stay care at Inter-Island Medical Center during the demonstration. As previously noted, two of the four participating clinics in Alaska were tribally owned and a third contracted with the regional tribal health consortium to provide services to its members.

[13] Under Medicare, tribal FQHCs and RHCs receive a higher all-inclusive payment rate than nontribal FQHCs and RHCs that includes most ancillary services.

III. EVALUATION DESIGN AND METHODOLOGY

The evaluation of the Medicare FESC Demonstration was based on two key components: (1) a qualitative analysis of information obtained through background document review, stakeholder interviews, and site visits; and (2) a quantitative analysis of Medicare claims and extended stay encounter forms submitted by clinics to CMS and their Medicare Administrative Contractor. In this section, we describe our evaluation methodology, including the model we used to estimate the impact of the demonstration on emergency transfers and hospitalizations among Medicare beneficiaries and, thus, the effect of the special financing provision on Medicare payments.

A. Qualitative Data and Analysis

One year after Medicare started paying for extended stay services under the demonstration, we conducted semistructured telephone interviews with nine key program stakeholders at the national, state, and local levels. The purposes of the interviews were to better understand each stakeholder's role in planning and implementing the demonstration and to collect more detailed information on specific issues, such as Medicare's certification requirements, payment methodology, and coverage of extended stay services; billing forms and procedures; and medical necessity review. We also solicited stakeholders' perspectives on the challenges of implementing the demonstration and the desirability and feasibility of covering extended stay services at frontier clinics as a Medicare benefit after the demonstration ended in April 2013. Table III.1 lists the stakeholder organizations interviewed for this study and describes their contributions to the demonstration.

Table III.1. Organizations Interviewed for Medicare FESC Demonstration Evaluation

Organization		Role in Demonstration
Centers for Medicare & Medicaid Services (CMS)	National Headquarters	Responsible for implementing the demonstration, including developing the payment methodology, and establishing the certification requirements
	Regional Office (Region 10)	Responsible for verifying that clinics met the certification requirements through self-attestation
	Medicare Administrative Contractors	Responsible for processing claims for extended stay services and verifying medical necessity of extended stay based on review of patient encounter forms
Office of Rural Health Policy, Health Resources and Services Administration		Responsible for managing cooperative grant fund to help clinics build capacity for providing extended stay services
Alaska Department of Health and Social Services, Alaska Office of Rural Health		Responsible for overseeing rural health policy and planning in Alaska, including promoting enactment of FESC legislation at the state and federal levels
Alaska Department of Health and Social Services, Division of Health Care Services		Responsible for state licensure of nontribal extended stay clinics, development of state payment methodology for extended stay services, and processing and medical review of extended stay claims for Medicaid beneficiaries
Alaska FESC Consortium		Responsible for managing the FESC initiative for the clinics in Alaska and Washington and providing technical assistance to clinics participating in the demonstration. However, CMS was responsible for managing the federal demonstration.

We also conducted one-day site visits to each of the participating clinics in August 2012, approximately halfway through their 36-month period of participation in the demonstration. The purpose of the site visits was to understand the issues they face treating patients with extended care needs, the challenges they encountered in implementing the extended stay model, and the strategies they used to overcome those challenges. We also wanted to understand the equipment, staffing, and systems needed to operate an extended stay clinic; to identify the factors that influence the success of the extended stay model of care; and to discuss the feasibility of sustaining extended stay capacity after the end of the demonstration. In addition, the site visits served as an opportunity to validate and update preliminary findings from our document review

and stakeholder interviews. Discussion topics included participation goals; clinic operations; experiences with staffing, facilities, and equipment; certification requirements and billing procedures; payment regulations; the role of Medicaid; and sustainability and replicability of the extended stay model. While in Alaska, we also conducted in-person interviews with staff from the Alaska FESC Consortium, the Alaska Office of Rural Health, and the Division of Health Care Services (Medicaid).

B. Descriptive Analysis of Extended Stay Characteristics Based on Patient Encounter Forms

We relied on two sources of quantitative data for this study: self-reported patient encounter forms and Medicare claims. Clinical staff from participating sites completed the encounter forms and sent them to CMS and, in some cases, their Medicare Administrative Contractor, to verify that the beneficiary met the medical requirements for receiving extended stay services. Encounter forms provided more clinical information about extended stays than could be obtained from Medicare claims. For example, encounter forms included information on the chief complaint at admission, the time and duration of the stay, the type of admission (monitoring or transfer), the clinical outcome of the extended stay, and the discharge diagnosis. The encounter forms also included an assessment by the attending clinician of the impact of an extended stay on subsequent care (including whether the extended stay averted an emergency transfer or prevented sending a beneficiary home without adequate monitoring and observation care).

We obtained 166 encounter forms for Medicare extended stay beneficiaries on a rolling basis from March 2010 through April 2013. We used them primarily to describe the characteristics of extended stay encounters among Medicare beneficiaries. Encounter forms also provided an alternative source of information on the effect of extended stay services on follow-up care. However, because encounter forms did not always result in a final action claim for

extended stay services and the information they contained was self-reported by the attending clinician, we did not use them to estimate the impact of the demonstration on emergency transfers and hospitalizations or Medicare payments.

C. Identification of Comparison Clinics for Estimating Impact of Demonstration on Medicare Service Use and Expenditures

The Medicare FESC Demonstration was designed to reduce emergency transfers and hospitalizations among Medicare beneficiaries seeking extended stay care at clinics in isolated rural areas. Attributing observed changes in these outcomes to the extended stay model of care requires the identification of a comparison group of similar facilities for which, in the absence of the demonstration, trends in emergency transfers and hospitalizations between participating and nonparticipating clinics would have been the same. We identified two comparison clinics in Alaska that served this purpose.

To identify comparison clinics, we began with a list of potential clinics in Alaska and Washington provided by SEARHC. The criteria for selecting comparison clinics from this list included (1) location in a rural area; (2) certification as a Medicare provider; (3) designated as an RHC or FQHC; (4) meeting the distance criterion from the nearest hospital as stipulated in the authorizing legislation for the demonstration; (5) staffed by physicians and advanced practice nurses or advanced practice nurses working with a visiting physician; (6) providing comprehensive primary care services, including laboratory testing and radiology services; (7) not operating an emergency or urgent care unit; and (8) billing under its own national provider identifier.

Table III.2 provides information about the demonstration and candidate comparison clinics considered for this analysis. After reviewing the facilities' characteristics and speaking with administrators from several clinics, we determined that only two clinics met the criteria for

inclusion in the study: Sunshine Community Health Center in Talkeetna, Alaska, and Dahl Memorial Clinic in Skagway, Alaska. Although several clinics met the rural and proximity requirements of the demonstration, only Sunshine Community Health Center and Dahl Memorial Clinic approached the same level of staffing and scope of services as the demonstration clinics. Sunshine Community Health Center employed both physicians and advanced practice nurses and Dahl Memorial Clinic managed care through three advanced practice nurses. Both clinics also offered comprehensive primary and behavioral health care services. Sunshine Community Health Center provided dental and some specialty care services as well.

Table III.2. Facility Characteristics of Demonstration and Potential Comparison Clinics

Clinic	Location	Facility Type	Tribal Affiliation	Drive Context	Straight Miles	Drive Miles	Total Number of Medicare Beneficiaries (2008-2012)	Total Number of Medicare Claims (2008-2012)	Total Number of Medicare FESC Claims (2010-2012)	Staffing	On-Site Services
Demonstration Clinics											
Inter-Island Medical Center	Friday Harbor	RHC	Nontribal	Island	19	n.a.	2,352	5,321	12	6 MDs 2 APNs	Comprehensive primary, behavioral, dental, pharmacy, lab, radiology, limited specialty
Alicia Roberts Medical Center	Klawock	FQHC	Tribal	Island	57	n.a.	1,267	7,642	54	3 MDs 3 APNs	Comprehensive primary, behavioral, dental, pharmacy, lab, radiology, limited specialty
Haines Health Center	Haines	FQHC	Tribal	Isolated	72	n.a.	1,480	8,537	47	4 MDs 1 APN	Comprehensive. primary, behavioral, dental, pharmacy, lab, radiology, limited specialty
Cross Road Medical Center	Glennallen	FQHC	Contracted	Interior	87	112	1,312	4,955	45	1 MD 3 APNs	Comprehensive primary, behavioral, dental, pharmacy, lab, radiology, limited specialty
Iliuliuk Family and Health Services	Unalaska	FQHC	Nontribal	Island	471	n.a.	84	227	3	1 MD 4 APNs	Comprehensive primary, behavioral, dental, pharmacy, lab, radiology, limited specialty
Comparison Clinics											
Sunshine Community Health Center	Talkeetna	FQHC	Nontribal	Interior	46	184	1,523	5,042	n.a.	2 MDs 2 APNs	Comprehensive primary, behavioral, dental, some specialty
Dahl Memorial Medical Clinic	Skagway	FQHC	Contracted	Isolated	86	110	545	2,086	n.a	3 APNs	Limited primary and behavioral (No on-site SEARHC services)
Other Candidate Comparison Clinics											
Hooper Bay Clinic	Hooper Bay		Tribal	Isolated	133	n.a.	n.a.	n.a.	n.a.	Unknown	Comprehensive primary, behavioral, dental, lab, radiology
Aniak Sub-Regional Clinic	Aniak		Tribal	Isolated	177	n.a.	n.a.	n.a.	n.a.	Unknown	Comprehensive primary, behavioral, dental, lab, radiology
Jessie Norma Jim Health Center	Angoon	FQHC	Tribal	Island	42	n.a.	243	1,429	n.a.	APNs, itinerant MD	Limited primary, behavioral, dental, radiology

Table III.2 *(continued)*

Clinic	Location	Facility Type	Tribal Affiliation	Drive Context	Straight Miles	Drive Miles	Total Number of Medicare Beneficiaries (2008-2012)	Total Number of Medicare Claims (2008-2012)	Total Number of Medicare FESC Claims (2010-2012)	Staffing	On-Site Services
Kake Health Center	Kake	FQHC	Tribal	Island	52	n.a.	273	1,451	n.a.	APNs, itinerant MD	Limited primary, behavioral, dental, radiology
Hydaburg Health Center	Hydaburg	FQHC	Tribal	Island	46	n.a.	208	1,352	n.a.	APN, itinerant MD	Limited primary and dental
Hoonah Health Clinic	Hoonah	FQHC	Tribal	Island	50	n.a.	258	1,024	n.a.	APN, itinerant MD	Limited primary and behavioral
Yakutat Community Health Center	Yakutat	FQHC	Nontribal	Isolated	152	n.a.	205	794	n.a.	Itinerant MD	Limited primary and dental
Delta Junction Family Medical Center	Delta Junction	Private	Nontribal	Interior	95	95	n.a.	n.a.	n.a.	Unknown	Unknown
Tri-Valley Community Center	Healy	FQHC	Nontribal	Interior	77	110	105	156	n.a.	1 NP	Limited primary

Sources: University of Alaska, Anchorage 2011 and Medicare claims for beneficiaries treated at clinics, 2008 to 2012. The data were extracted in April 2013.

APN = advanced practice nurse; FQHC = federally qualified health center; MD = medical doctor; NP = nurse practitioner; RHC = rural health center; SEARHC = Southeast Alaska Regional Health Consortium.

n.a. = not applicable.

Table III.3 *(continued)*

To further assess the suitability of the comparison clinics for this evaluation, we compared the demographic characteristics and chronic condition prevalence among Medicare beneficiaries with at least one visit at one of the five demonstration clinics with those seeking care at either of the two comparison clinics in 2010 using information from the Master Beneficiary Summary File and the Medicare enrollment database. Table III.3 presents the number and distribution of Medicare beneficiaries by demographic and clinical characteristics for each type of facility. The results show that beneficiaries who received care at the two comparison clinics were younger (74 years old or younger) and less likely to be American Indian or Alaska Native than those at the demonstration clinics. However, the beneficiary populations at the two types of facilities have similar chronic condition prevalence, suggesting that although the beneficiaries differ demographically, they share similar clinical characteristics.

Table III.3. Characteristics of Medicare Beneficiaries Receiving Services at Demonstration and Comparison Clinics, 2010

	Demonstration Clinics		Comparison Clinics		Chi-Square *p*-Value
Beneficiary Characteristics	N	%	N	%	
Demographics					
Age					< .0001
Missing	258	9.0	93	8.9	
Younger than 65	461	16.1	237	22.6	
65 to 74	1,301	45.3	517	49.2	
75 to 84	617	21.5	164	15.6	
85 or older	235	8.2	39	3.7	
Gender					0.2659
Female	1,312	45.7	451	43.0	
Male	1,302	45.3	506	48.2	
Missing	258	9.0	93	8.9	
Race					< .0001
American Indian/Alaska Native	319	11.1	29	2.8	
White	2,238	77.9	905	86.2	
Other	53	1.8	20	1.9	
Missing	262	9.1	96	9.1	
Original Reason for Entitlement					0.0008
Old age and survivor's insurance	2,121	73.9	720	68.6	
DIB	488	17.0	235	22.4	

Table III.3 *(continued)*

Beneficiary Characteristics	Demonstration Clinics N	Demonstration Clinics %	Comparison Clinics N	Comparison Clinics %	Chi-Square *p*-Value
ESRD	1	0.0	2	0.2	
Both DIB and ESRD	4	0.1	0	0.0	
Missing	258	9.0	93	8.9	
Conditions					
Any Condition[a]					0.5344
Yes	1,824	87.4	652	86.5	
No	264	12.6	102	13.5	
Anemia					0.2864
Yes	346	16.0	114	14.4	
No	1,822	84.0	680	85.6	
Cataract					0.6933
Yes	371	17.1	131	16.5	
No	1,797	82.9	663	83.5	
Depression					0.9675
Yes	277	12.8	101	12.7	
No	1,891	87.2	693	87.3	
Diabetes					0.7596
Yes	404	20.2	149	20.7	
No	1,600	79.8	571	79.3	
Hyperlipidemia					0.0269
Yes	751	34.6	310	39.0	
No	1,417	65.4	484	61.0	
Hypertension					0.9629
Yes	1,000	46.1	367	46.2	
No	1,168	53.9	427	53.8	
Ischemic Heart Disease					0.9201
Yes	502	25.0	179	24.9	
No	1,502	75.0	541	75.1	
Rheumatoid Arthritis/Osteoarthritis					0.1057
Yes	514	25.6	207	28.8	
No	1,490	74.4	513	71.3	

Sources: Medicare claims and enrollment data for beneficiaries treated at demonstration and comparison clinics from January 2008 through December 2012. The data were extracted in April 2013.

Note: The any condition variable includes 27 chronic condition indicators. This table individually includes the eight most common conditions among beneficiaries receiving care at the clinics.

[a] The 26 chronic conditions included in the any condition analysis are acquired hypothyroidism, acute myocardial infarction, Alzheimer's disease, Alzheimer's disease and related disorders or senile dementia, anemia, asthma, atrial fibrillation, benign prostatic hyperplasia, breast cancer, cataract, chronic kidney disease, colorectal cancer, depression, diabetes, endometrial cancer, glaucoma, heart failure, hip/pelvic fracture, hyperlipidemia, hypertension, ischemic heart disease, lung cancer, osteoporosis, prostate cancer, rheumatoid arthritis/osteoarthritis, and stroke/transient ischemic attack.

DIB = disability insurance benefits; ESRD = end-stage renal disease.

D. Use of Medicare Claims to Estimate Impact of the Demonstration on Emergency Transfers and Hospitalizations

To estimate the impact of the demonstration on the use and cost of hospital inpatient and emergency transfer services, we first extracted outpatient claims for all beneficiaries who received care (including those who received nonextended stay services) at demonstration and comparison group clinics from January 2008 to December 2012, approximately three years before all of the participating clinics became certified as extended stay facilities (2008–2010) and two years after (2011 and 2012).[14] Using this reference file, we extracted all inpatient, outpatient, and professional claims for these beneficiaries during the same five-year period. The initial file contained 33,810 claims for outpatient visits at demonstration and comparison clinics, with 3,919 unique Medicare beneficiaries across all clinics and years in the study.[15] Table III.4 shows the total number and percentage of unique Medicare beneficiaries who received extended or nonextended stay care services during the study period by clinic.

[14] We extracted the claims in April 2013. At that time, claims from the last quarter of 2012 were only partially complete. Claims submitted during the first quarter of 2013 (the last quarter of the demonstration) are not included in the impact estimates. Although the first clinic became certified in April 2010, only 9 claims for extended stay services were submitted in 2010. By comparison, 77 extended stay claims were submitted in 2011 and 73 in 2012.

[15] Four beneficiaries who received outpatient services at more than one demonstration clinic were assigned to the first clinic at which they were treated. (All four received services at Alicia Roberts Medical Center and Haines Health Center, both members of the same health care consortium.) Three beneficiaries with visits at both a demonstration clinic and a comparison group clinic were dropped from the study. None of the beneficiaries excluded from the study or reassigned had an extended stay.

Table III.4. Number and Percentage of Medicare Beneficiaries in Impact Analysis, by Clinic

	Number of Beneficiaries	Percentage of Beneficiaries
Demonstration Clinics		
Alicia Roberts Medical Center	532	13.6
Cross Road Medical Center	575	14.7
Haines Health Center	591	15.1
Iliuliuk Family and Health Services	53	1.4
Inter-Island Medical Center	1,121	28.6
Comparison Clinics		
Sunshine Community Health Center	720	18.4
Dahl Memorial Clinic	327	8.3
Total	3,919	100.0

Sources: Medicare claims and enrollment data for beneficiaries treated at demonstration and comparison clinics from January 2008 through December 2012. The data were extracted in April 2013.

Note: Figures include beneficiaries receiving extended stay and nonextended stay services. Percentages might not sum to 100 due to rounding.

We defined the first episode of care for a given beneficiary as the 7-day period following the end of the first outpatient visit (including the extended stay) and included all outpatient visits, professional services, emergency transfers, and inpatient services occurring within that 7-day period as part of the initial episode. We used 7-day episodes to capture all follow-up services, including transfers and inpatient services, which might be associated with an ambulatory visit at a frontier clinic. A second episode was triggered by another outpatient visit at a demonstration or comparison group clinic after a "clean" period of 14 days with no outpatient claims following the end of the previous 7-day episode. We required a 14-day period with no outpatient services before starting a new episode in an effort to identify discrete episodes of care and to increase the chances that the follow-up care received during the episode was related to the index visit. In the end, we identified a total of 20,379 7-day post-outpatient visit episodes among the 3,919

beneficiaries during the study period. Medicare beneficiaries had on average 5.2 episodes during the five-year study period, approximately one episode per year.

Finally, we conducted a regression analysis to estimate the impact of the demonstration on the probability of having a transfer or hospitalization within seven days of a clinic visit, controlling for differences in transfer and hospitalization rates between demonstration and comparison clinics unrelated to the demonstration; external trends in transfer rates affecting all clinics; and a group of beneficiary characteristics (age, gender, race/ethnicity, dual eligibility, disability, and mortality) likely to be associated with being transferred and hospitalized. This analytic approach relies on the assumption that the rate of change in emergency transfers and hospitalizations would, in the absence of the demonstration, have been about the same for the demonstration clinics as it was in the selected comparison clinics in 2011 and 2012. We therefore ascribe differences in the rate of change among demonstration clinics relative to the comparison clinics, after accounting for beneficiary characteristics, to the effect of the demonstration itself. The accuracy and credibility of the results rest on the appropriateness of the comparison group. Although this cannot be definitively established, results previously shown in Tables III.2 and III.3 suggest that comparison clinics are mostly well matched on both facility and beneficiary characteristics to demonstration clinics. However, given the challenges of identifying an ideal comparison group for this study, results from the model should be interpreted as approximations of the direction and magnitude of the effect, rather than as point estimates.[16]

[16] Results from the regression analysis can be obtained from CMS on request.

IV. DESCRIPTION OF CLINICS IN THE DEMONSTRATION

In this section, we review key characteristics of the demonstration clinics and describe their scope of services and staffing capacity. Although demonstration clinics used their HRSA funding to hire new staff and purchase the equipment and supplies needed to expand their diagnostic and treatment capacity, the clinics that participated were larger and provided a broader range of services when the demonstration began compared with other clinics in isolated rural areas in Alaska. The text boxes in this section are from the final HRSA-funded evaluation report (McKinney et al. 2012).

A. Facility Characteristics

Like many clinics in Alaska, the five clinics that participated in the Medicare FESC Demonstration serve remote rural communities: one serving a fishing community in the outer Aleutian Islands, two serving isolated Native island communities in southeast Alaska (the Alaska Panhandle), one serving a sparsely populated and expansive region of the Copper River Basin in the eastern interior of Alaska, and one serving an island community in the San Juan Islands in northwestern Washington. Each of the clinics is the only provider of comprehensive primary care services in its community. With the nearest hospital requiring sea or air transport or a drive of more than 100 miles, they are also the only facilities able to offer immediate medical attention to residents, transient workers, and tourists with emergency care needs, including during evenings, weekends, and holidays when

> *Iliuliuk Family and Health Services is the only comprehensive medical provider in Unalaska, Alaska, a community in the outer Aleutian Islands approximately 800 air miles southwest of Anchorage and 1,700 air miles northwest of Seattle. Anchorage offers the best transportation choices for medical transfers. Unalaska has about 3,580 residents. In addition to its residents, the area has a fluctuating number of about 3,000 transient workers and fishermen due in large part to employment by seafood companies. The commercial fishing fleets also bring in about 10,000 people annually.*

health care services would otherwise not be available. (See Table IV.1 for key features of the demonstration clinics.)

Table IV.1. Characteristics of Clinics that Participated in the Medicare FESC Demonstration, 2012

Clinic	Transport Context	Straight Miles from Clinic to Nearest Hospital	Number of Medicare Beneficiaries Served	Medical Staff	Hours of Operation
Inter-Island Medical Center	Island	19.0	430	6 MDs 2 APNs 12 RNs	M–F 8:00 a.m.–5:00 p.m. Sat 10:00 a.m.–1:00 p.m. Sun closed After hours: off-site, on-call
Alicia Roberts Medical Center	Island	56.6	256	3 MDs 3 APNs 5 RNs	M–F 8:00 a.m.–5:00 p.m. (except W) W 1:00 p.m.–5:00 p.m. Sat and Sun closed After hours: on-site
Haines Health Clinic	Isolated Road	71.9	303	4 MDs 1 APN 4 RNs	M–F 8:00 a.m.–5:00 p.m. Sat and Sun closed After hours: off-site, on-call
Cross Road Medical Center	Normal Road	86.7	270	1 MD 3 APNs 7 RNs	M 9:00 a.m.–5:30 p.m. Tues, W, F 10:00 a.m.–4:30 p.m. Thur 10:00 a.m.–7:30 p.m. Sat 10:00 a.m.–2:00 p.m. Sun closed After hours: off-site, on-call
Iliuliuk Family and Health Services	Island	471.1	32	1 MD 4 APNs 4 RNs	M–F 8:30 a.m.–6:00 p.m. Sat 8:30 a.m.–5:00 p.m. Sun closed After hours: off-site, on-call

Sources: University of Alaska Anchorage 2010; and Medicare claims for beneficiaries treated at demonstration clinics in 2012. The data were extracted in April 2013.

APN = advanced practice nurse; MD = medical doctor; RN = registered nurse.

The four demonstration clinics in Alaska, like most rural clinics in the state, have also been certified by HRSA's Bureau of Primary Health Care as FQHCs and, before it became a CAH in November 2012, the demonstration clinic in Washington was recognized as an RHC (see Chapter II, Table II.1). FQHC designation entitles clinics to federal Section 330 grant funding

under the Public Health Service Act to offset the costs of uncompensated care and other key enabling services, access to medical malpractice coverage, OPPS payment for services to Medicaid beneficiaries, cost-based payment for services to Medicare beneficiaries, drug price discounts, federal loan guarantees for capital improvements, exemption from Part B copayments, and access to National Health Service Corporation-sponsored providers, among other benefits. RHC designation entitles clinics to cost-based payments under Medicare as well.

The Inter-Island Medical Center is located in Friday Harbor, the most populous of the San Juan Islands, situated in northwestern Washington. San Juan County includes 176 islands, of which 60 are inhabited, and has a population of more than 14,000. During the summer tourist season, the population in the San Juan Islands can double. Friday Harbor is connected to the mainland through the state ferry system. The ferry runs several times daily between Friday Harbor and Anacortes, where the nearest hospital is located; the journey takes 90 minutes. The island is also served by Friday Harbor Airport, with 30-minute flights to Seattle several times a day.

Two of the clinics are also affiliated with a tribal health care corporation, and one has a contract with another regional tribal health consortium (see Chapter II, Table II.1). Alicia Roberts Medical Center and Haines Health Center are owned and operated by SEARHC, a nonprofit, Native-administered health corporation serving the needs of rural residents of southeastern Alaska in 18 communities. Alicia Roberts Medical Center and Haines Health Center receive budget support from SEARHC to administer integrated health care programs for the Native residents in their communities. Cross Road Medical Center is an independent, faith-

Haines Health Center is located in Haines, Alaska, a sparsely populated community 80 air miles northwest of the capital city of Juneau. Access to the nearest hospital is available via the Alaska Marine Highway, a 4.5-hour ferry trip (operating twice weekly October through April and once daily during the summer), or by a 40-minute flight in a single- or twin-engine, propeller-driven commuter plane. Flights can be infrequent due to poor weather and short daylight hours in the winter. The flights can be accomplished only during daylight hours because steep mountains throughout the flight path require total visibility. This means that in winter, there is no air service before 9:00 a.m. or after 2:45 p.m.

based, not-for-profit 501(c)(3) corporation, but also benefits from a contract with the regional tribal health consortium to provide outpatient and short-term urgent care to Native residents of the Copper River Basin. One clinic (Inter-Island Medical Center) also receives significant contributions from local residents, foundations, and county tax dollars to support its capital improvement and expansion goals. In November 2012, Inter-Island Medical Center became a CAH and was unable to continue billing Medicare for extended stay services under the demonstration.

B. Number of Patients, Scope of Services, and Staffing Capacity

Participating clinics differ from other isolated rural health facilities in Alaska in three important aspects: size of practice, scope of services, and level of staffing. First, demonstration clinics are larger and serve more patients than most other isolated rural health facilities in Alaska. Four of the clinics that participated in the demonstration treated more than 250 Medicare beneficiaries in 2012. The largest treated 430 Medicare beneficiaries. In comparison, most other clinics in isolated rural areas in Alaska that would have qualified for the demonstration based on the rural proximity requirements treated fewer Medicare beneficiaries than this over the entire five-year period of the study (see Chapter III, Table III.2 and Table IV.1). In this regard, Iliuliuk Family and Health Services, located in the outer Aleutian Islands, is an outlier, having treated only 32 Medicare beneficiaries in 2012.

Cross Road Medical Center, located in Glennallen, Alaska, provides medical services to the 3,500 people living in the Copper River Basin, as well as the approximately 50,000 tourists who travel through the area each year. Glennallen is located at the convergence of the Glenn and Richardson Highways, the two major road systems in the eastern sector of Alaska. The Glenn Highway connects Glennallen to Anchorage (189 miles southwest); the Richardson Highway connects Glennallen to Valdez (120 miles south) and to Fairbanks (248 miles north). Valdez, Anchorage, and Fairbanks offer the nearest hospitals to the region.

Second, unlike almost all other health clinics in isolated rural areas in Alaska, demonstration clinics provide a wide array of family-oriented primary care services, including prenatal, pediatric, and adult medical; diagnostic (laboratory and x-ray); pharmacy; dental; behavioral health; drug and alcohol counseling; preventive health; and wellness programs (see Chapter III, Table III.2 and Table IV.1). Several clinics provide itinerant primary and preventive care services to residents in remote villages; some others rent office space to visiting specialists for scheduled specialty clinics. Each participating clinic also offers either on-call or on-site after-hours care. In addition, two clinics have historically maintained observation and surgical capacity. One clinic (Cross Road Medical Center) was a former hospital and has maintained four hospital-type beds for patients requiring longer observation visits. Two of these beds are for general use, one is maintained specifically for cardiac patients, and one is for obstetric patients. As a federally designated Level-5 trauma center, another site (Inter-Island Medical Center) offers initial evaluation, stabilization, and diagnostic capabilities before transfer and is licensed to provide limited surgical and critical care services.

Alicia Roberts Medical Center is located in the Native village of Klawock, Alaska, on Prince of Wales Island, the fourth-largest island in the United States at 135 miles long and 45 miles wide. Alicia Roberts is the largest primary care provider on POW Island and the only medical center providing after-hours emergency care for island residents. The population served by the clinic is approximately 3,000, but that number doubles in the summer months. The closest regional hospital is in Ketchikan, which is a 45-minute flight by small plane or a four-hour road/ferry trip. Patients may also be transported to Anchorage (720 air miles southeast) for specialized services.

Finally, demonstration clinics employ a large number of clinicians with advanced medical training, compared with other clinics in isolated rural areas in Alaska. At the time of the demonstration, all participating clinics had a minimum of five providers able to independently treat patients and prescribe medications, at least one of whom was a physician. (Inter-Island Medical Center had six physicians, Haines Health Center had four, and Alicia Roberts Medical

Center had three.) They also had a minimum of four registered nurses, plus a wide range of other medical personnel, including licensed practical nurses, medical assistants, pharmacists, lab technicians, and emergency medical technicians. Although some of this staffing capacity was built and maintained with HRSA funds, the four Alaskan clinics participating in the demonstration were larger and better equipped and offered more services than other health clinics in isolated rural areas of the state even before the demonstration.[17]

[17] As discussed in Chapter III, we examined the scope of services, level of staffing, and number of Medicare patients served for all health centers in Alaska meeting the distance requirement of the FESC program, and found only two that approached the capacity of the demonstration clinics. Discussions with staff from the Alaska Office of Rural Health in DHSS supported this finding.

V. KEY FINDINGS FROM THE EVALUATION

In this section, we use the findings from the qualitative and quantitative analyses to answer three questions related to meeting the needs for extended stay services in isolated geographic areas of the country: (1) What are extended stay services? (2) How do extended stay services affect patient experience and the cost of care? (3) Are extended stay services sustainable for frontier clinics under Medicare's payment system? We also examine the role that Medicare should play in maintaining extended stay services in isolated rural communities. The descriptive quantitative findings are based on an analysis of 166 extended stay patient encounter forms completed by the attending clinicians and submitted to CMS for medical review. The impact and cost estimates are based on an analysis of Medicare claims for all beneficiaries treated at demonstration and comparison clinics from 2008 through 2012, including 159 claims for extended stays paid under the demonstration.

A. What Are Extended Stay Services?

Frontier extended stay clinics, unlike other clinics serving remote rural communities, are defined primarily by the capacity to stabilize or monitor and observe patients seeking emergency care when immediate transportation to a hospital is either not possible due to severe weather or might be avoided with appropriate diagnosis and treatment in the ambulatory setting. This capacity requires the clinical expertise to stabilize emergency cases, the radiology and laboratory supplies and equipment to triage and diagnose such cases, and the physical infrastructure to keep patients for extended periods. According to the encounter form data, two-thirds (65 percent) of the extended stays billed for enhanced payment by Medicare under the demonstration were admitted for monitoring and observation; attending clinicians determined that, with appropriate

diagnostic information and clinical expertise, these beneficiaries could likely be sent home after several hours of monitoring and observation and possibly referred to nonemergency follow-up care in the community (see Table V.1). The remaining one-third of extended stay cases were determined at admission to require an emergency level of care; attending clinicians determined that these beneficiaries had to be stabilized and transported by air to a hospital as soon as weather conditions permitted.

Table V.1. Characteristics of Extended Stays under the Medicare FESC Demonstration Based on Encounter Forms

	All Extended Stay Admissions		Admissions for Monitoring/Observation		Admissions for Stabilization/Transfer	
	Number	Percentage	Number	Percentage	Number	Percentage
Total	166	100.0	108	100.0	54	100.0
Timing of Admission						
During regular hours	68	41.0	49	45.4	17	31.5
Outside of regular hours	98	59.0	59	54.3	37	68.5
Length of Stay						
4 to 8 hours	73	44.0	42	38.9	27	50.0
8 to 12 hours	23	13.9	7	6.5	16	29.6
12 to16 hours	17	10.2	14	13.0	3	5.6
16 to 20 hours	17	10.2	13	12.0	4	7.4
20 to 24 hours	11	6.6	9	8.3	2	3.7
24 or more hours	20	12.1	19	17.6	1	1.9

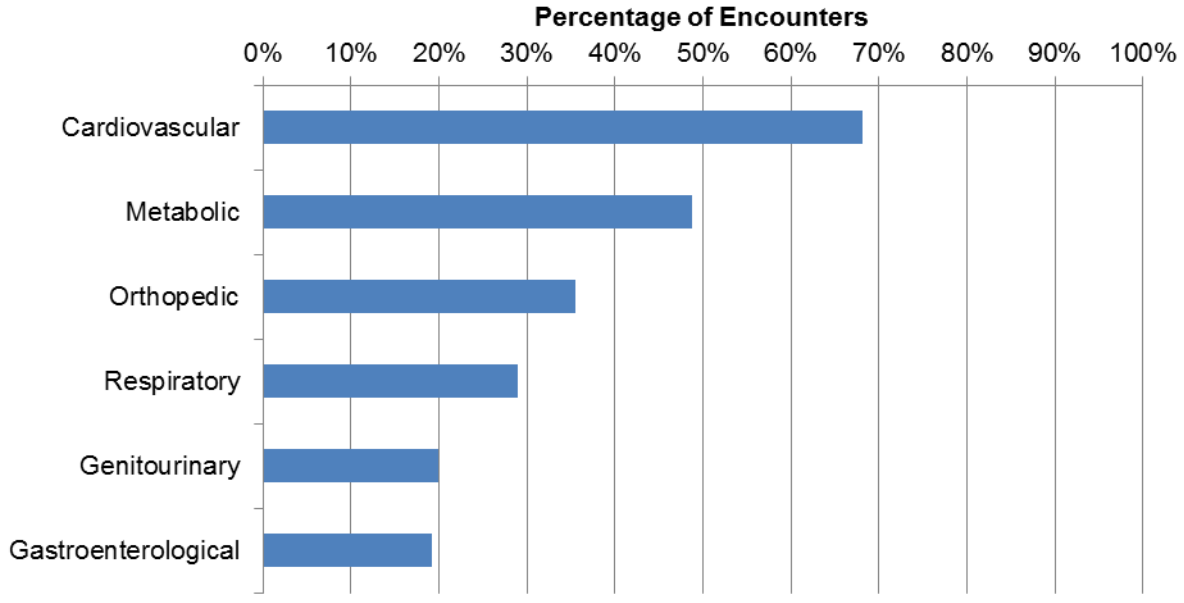
Source: Extended stay patient encounter forms submitted to CMS by participating clinics for services rendered from March 2010 to April 2013.

Note: Number of admissions for each characteristic might not sum to total admissions due to missing information. Percentages are based on the number of encounter forms with reported information.

Figure V.1 displays the six most common types of conditions for which extended stay beneficiaries required care, as reported on the encounter forms. (Clinicians were allowed to indicate more than one condition on the encounter form.) Cardiovascular conditions were the most common type of illness, with two-thirds (68 percent) of all extended stay beneficiaries

having some type of cardiovascular diagnosis, such as high blood pressure, congestive heart failure, and heart attack. Metabolic conditions, including diabetes and its complications, were the second most common type of illness among extended stay beneficiaries; around half (49 percent) of all extended stay beneficiaries had a metabolic condition. Approximately one-third (36 percent) of all extended stay beneficiaries had an orthopedic problem, frequently involving fractures or sprains. Slightly less than one-third (29 percent) had a respiratory condition, including pneumonia and asthma. Gastroenterological conditions (such as vomiting, diarrhea, blood in the stool, and acid reflux) affected nearly one-fifth (19 percent) of all extended stay beneficiaries, and another 19 percent presented with a genitourinary condition (such as a urinary tract infection or other urinary problem or kidney disease). Beneficiaries with cardiovascular conditions were more likely to be transferred to a hospital at the end of their extended stay, whereas beneficiaries with respiratory and (to a lesser extent) genitourinary conditions were more likely to be discharged home, with or without follow-up care.

Figure V.1. Percentage of Extended Stays for the Six Most Common Conditions



Source: Extended stay patient encounter forms submitted to CMS by participating clinics for services rendered from March 2010 to April 2013.

Another critical feature of frontier extended stay clinics is the ability to provide services during nonregular business hours, including evenings and nights, weekends, and holidays, and to keep patients for monitoring and observation for up to 48 hours. As previously mentioned, as a condition of participation in the demonstration, clinics were required to maintain on-call physicians or nonphysician clinicians 24 hours a day, seven days a week, who could be on site within 30 minutes of a patient's after-hours arrival and that a clinician be on site throughout each extended stay episode. Information reported on the encounter form indicates that 49 percent of all extended stay cases billed for enhanced payment under the demonstration were admitted to the clinic outside of regular business hours and 87 percent of all extended stays spanned nonregular working hours (see Table V.1). Although nearly half of all extended stays (44 percent) lasted fewer than 8 hours, nearly two-fifths of all beneficiaries requiring extended stay care remained in the clinic for more than 12 hours and 12 percent stayed for 24 hours or longer (see Table V.1).

The final point to make about extended stay services is that there are relatively few of them, even in frontier communities with the capacity to provide high quality basic acute and emergency care. Based on an analysis of Medicare claims data, only one percent of all outpatient visits among Medicare beneficiaries at participating clinics through December 2012 were for extended stay services. As shown in Table V.2, there were only 159 claims for extended stay services paid by Medicare across the five participating clinics during the demonstration, out of a total of 16,575 outpatient visits. An earlier analysis of extended stay encounter forms for all patients (including those not eligible for Medicare and/or Medicaid benefits) found that, of the

2,226 extended stays that occurred during the five years before clinics became certified, slightly more than one-fourth included Medicare as the primary payer and almost 10 percent included Medicaid as the primary payer. Given the demographic characteristics of the local population in these frontier communities, many of the remaining patients who received extended stay services during this period were likely to be either Native Alaskans (and thus covered under the IHS) or transient workers in the fishing industry or tourists (and thus possibly covered under an employer-sponsored plan).

Table V.2. Proportion of Total Visits for Extended Stay Services Among Medicare Beneficiaries Based on Medicare Claims, 2010–2012

Clinic	Total Number of Medicare Clinic Visits	Number of Medicare Visits for Extended Stay Services	Proportion of Total Medicare Visits for Extended Stay Services (%)
Inter-Island Medical Center	3,115	12	0.4
Alicia Roberts Medical Center	4,900	54	1.1
Haines Health Clinic	5,465	47	0.9
Cross Road Medical Center	2,950	44	1.5
Iliuliuk Family and Health Services	145	2	1.4
Total	16,575	159	1.0

Source: Medicare claims for beneficiaries treated at demonstration clinics from January 2010 through December 2012. The data were extracted in April 2013.

B. How Do Extended Stay Services Affect Patient Experience and Cost of Care?

In this section, we provide qualitative and quantitative evidence of the impact of the availability of extended stay services on the quality and cost of care for Medicare beneficiaries in frontier communities. In the first part of this section, we examine the effect of the demonstration on beneficiary outcomes using self-reported encounter data and then estimate the impact of extended stay services on emergency transfer and hospitalization rates using Medicare claims

and a matched comparison group of clinics. In the second part of this section, we use the results of our model to estimate the net effect of the demonstration on Medicare spending.

1. Effect of Extended Stay Services on Patient Experience and Safety of Care

Without the capacity to provide extended stay services, frontier clinics transfer by plane most patients presenting with potentially life-threatening conditions to a hospital sometimes hundreds of miles away or treat them at the clinic without the proper resources to provide quality care.[18] However, qualitative results indicate that patients dislike being transferred to distant and unfamiliar cities and prefer to be treated closer to home, where they can benefit from the support of their families and social networks. Clinic administrators remarked that a high proportion of conditions with which patients present can be addressed at the clinic level, thus allowing patients to receive care locally. This is of particular importance to elderly Alaskan Native residents, who are unaccustomed to traveling from their villages for medical care. Anecdotes suggest that elderly Alaskan Natives may view a hospital transfer as being sent from their community to die. Travel is also a financial burden to patients and their families. Treating patients at the local level avoids the large expense of having family members drive (if possible) or fly to the hospital location, stay in a hotel for several days, and then travel home again. The financial benefit extends to the patient as well because Medicare does not cover the cost of the return home for the beneficiary.

[18] An analysis of extended stays between August 2005 and September 2010 conducted by the Rural Policy Research Institute (RUPRI) at the University of Iowa's College of Public Health under funding from HRSA found that transfer distances varied by clinic (MacKinney et al. 2012). Most transfers from Iliuliuk Family and Health Services in the outer Aleutian Islands were sent to a hospital in Anchorage, more than 800 air miles away. Most transfers from the two tribal clinics (Alicia Roberts Medical Center and Haines Health Center) were sent to hospitals in two towns in southeast Alaska, a distance of 135 and 70 air miles, respectively. Most transfers from Cross Road Medical Center in the interior of the state were sent to Anchorage, a distance of 154 air miles or 180 miles by road.

Interviews with program personnel also indicate that, under the demonstration, clinics became better equipped to treat urgent care cases when monitoring and observation services were sufficient, stabilize patients while waiting for daylight hours or improved conditions when an emergency transfer to an acute care facility was possible, and avert unnecessary emergency medical transfers and hospitalizations. Given that these clinics are the first point of medical care in their communities, clinic administrators noted that the ability to provide a broader array of services is more efficient and safer for patients if the illness or injury requires monitoring and observation for diagnosis and treatment. The demonstration provided time for clinicians to make a decision about the severity of a patient's condition and whether an immediate medical transfer was necessary. Based on observations from clinic administrators, treating patients locally also helped reduce patients' health risks associated with sending them home without adequate monitoring and observation care, or during transfer to an acute care facility. In addition, program administrators stated that demonstration funding aided in the recruitment and retention of clinical staff and mitigated the effect of long on-call hours per individual staff person on provider burnout.

A review of patient encounter data supports these qualitative findings. Based on self-reported encounter data, nearly half (48.2 percent) of all Medicare-eligible beneficiaries admitted for extended stay services at frontier clinics were discharged home at the end of their stays (see Table V.3). Five of the extended stay beneficiaries discharged home were referred to nonemergency follow-up care and another beneficiary recovered in the clinic while waiting for emergency transport, thus eliminating the need for transport. Nearly half (48.2 percent) of extended stay beneficiaries, including 27 admitted for monitoring and observation, required an emergency transfer for inpatient care following their extended stays. Clinicians reported that

beneficiaries admitted for monitoring and observation but then transferred to an acute care hospital either failed to improve as expected or their conditions deteriorated during their extended stays (Table V.3). According to the encounter forms, none of the extended stay beneficiaries died while receiving extended stay services.[19]

The encounter form also required attending clinicians to indicate how the availability of extended stay services affected the subsequent care provided. Because most beneficiaries admitted for emergency transfer were ultimately transferred, Table V.3 shows the effect of extended stay services on follow-up care for 108 beneficiaries admitted for monitoring and observation.[20] According to clinicians' assessment, nearly half (45.4 percent) of all extended stay beneficiaries admitted for monitoring and observation avoided an emergency transfer and hospitalization as a result of the availability of extended stay services in the community. The provision of extended stay services delayed emergency transfer and hospitalization for slightly more than one-sixth (17.6 percent) of all beneficiaries admitted for monitoring and observation. For half of all monitoring and observation cases, the availability of extended stay services prevented having to send the beneficiary home without adequate care. Extended stay services allowed five beneficiaries admitted for monitoring and observation and who might have been transferred to an acute care hospital in the absence of the demonstration to be treated locally and referred for nonemergency follow-up care. Because clinics can provide the appropriate level of

[19] An analysis of Medicare data found that five extended stay beneficiaries died within 14 days of their extended stay, four of whom had been transferred to a hospital at the end of their stay.

[20] All patients who received extended stay level of care at demonstration clinics were at high risk of being transferred to a hospital when weather conditions allowed. When assessing the impact of the demonstration on Medicare service use and expenditures, it is important to consider the effect on extended stay patients classified at admission as in need of monitoring and observation services, as well as those classified as in need of stabilization pending transfer.

care during an extended stay, in many cases the extended stay eliminated the need to transfer the patient to the hospital for emergency care and represented a clinically appropriate shift in the site of care for certain cases from the hospital to the extended stay facility.

Table V.3. Effect of Extended Stay Services on Follow-Up Care Based on Encounter Forms

	All Extended Stay Admissions		Admissions for Monitoring/Observation		Admissions for Stabilization/Transfer	
	Number	Percentage	Number	Percentage	Number	Percentage
Total	166	100.0	108	100.0	54	100.0
Discharge Disposition (All extended stay beneficiaries)						
Discharged home	80	48.2	76	70.4	4	7.4
Referred for nonemergency follow-up	5	3.0	5	4.6	0	0.0
Transferred to hospital	80	48.2	27	25.0	49	90.7
Recovered while waiting for transport	1	0.6	0	0.0	1	1.9
Died during extended stay	0	0.0	0	0.0	0	0.0
Other	3	1.8	1	0.9	2	3.7
Reason for Transfer (Beneficiaries admitted for monitoring and observation only)						
Patient deteriorated	n.a.	n.a.	7	25.9	n.a.	n.a.
Patient failed to improve as expected	n.a.	n.a.	23	85.2	n.a.	n.a.
Patient safely monitored until transport available	n.a.	n.a.	2	7.4	n.a.	n.a.
Other	n.a.	n.a.	10	37.0	n.a.	n.a.
Effect of Extended Stay on Follow-Up Care (Beneficiaries admitted for monitoring and observation only)						
Avoided emergency transfer	n.a.	n.a.	49	45.4	n.a.	n.a.
Delayed emergency transfer	n.a.	n.a.	19	17.6	n.a.	n.a.
Avoided risk of sending patient home	n.a.	n.a.	54	50.0	n.a.	n.a.
Allowed patient to seek nonemergency care	n.a.	n.a.	5	4.6	n.a.	n.a.

Source: Extended stay patient encounter forms submitted to CMS by participating clinics for services rendered from March 2010 to April 2013.

Note: Clinicians were required to report reason for transport and effect of extended stay on follow up care for beneficiaries admitted for monitoring and observation only. Clinicians were allowed to report more than one reason for transport and effect of extended stay on follow up

care for beneficiaries. Four encounter forms had missing information on type of extended stay admission.

n.a. = not applicable.

To estimate the impact of the demonstration on emergency transfer and hospitalization rates, we examined Medicare claims for all beneficiaries who received care (including those who received nonextended stay services) at the five demonstration clinics and two comparison clinics three years before the demonstration began (2008–2010) and two years after (2011 and 2012). The results of the claims analysis indicate that the provision of extended stay services under the demonstration resulted in a marginally significant 21.4 percent reduction in the probability of being transferred within seven days of a clinic visit, a decline in the seven-day transfer rate from 4.0 to 3.2 percent of all clinic visits (see Table V.4). The probability of being admitted to a hospital for inpatient care within seven days of a clinic visit also declined under the demonstration, by a marginally significant 23.9 percent (from 3.6 to 2.7 percent).[21] The estimated decline in the seven-day emergency transfer and hospitalization rates is equivalent to approximately 26 avoided emergency transfers and hospitalizations *per year* associated with the provision of extended stay services. Although the impact estimates from our claims-based analysis are only marginally statistically significant (due, in part, to the small number of events), the results of the multivariate model are consistent with the number of avoided transfers and hospitalizations per year reported by clinicians on the encounter forms in 2011 and 2012.

[21] The seven-day emergency transfer rate for Medicare beneficiaries receiving care at demonstration clinics was statistically significant at the 15 percent level and the seven-day hospitalization rate was statistically significant at the 12 percent level. Given the consistency with results from the self-reported encounter forms and previous evaluations conducted under HRSA funding, as well as anecdotal information from clinic administrators, the results from our multivariate model provide a reasonable indication of the direction and magnitude of the effect of the demonstration on emergency transfer and hospitalization rates among Medicare beneficiaries.

Table V.4. Claims-Based Estimate of Impact of Medicare FESC Demonstration on 7-Day Emergency Transfer and Hospitalization Rates

	7-Day Emergency Transfer Rate	7-Day Hospitalization Rate
7-Day Rate Before the Demonstration	4.0	3.7
Estimated 7-Day Rate After the Demonstration	3.2	2.7
Estimated Percentage Change in 7-Day Rate Due to Demonstration (%)	-21.4	-23.9
Estimated Number of Avoided Transfers and Hospitalizations per Year	26.5	26.2

Source: Medicare claims and enrollment data for beneficiaries treated at demonstration and comparison clinics from January 2008 through December 2012. The data were extracted in April 2013.

2. Effect of Extended Stay Services on the Utilization and Cost of Care

By reducing the number of beneficiaries who required transfer for inpatient care, the demonstration resulted in a net reduction in Medicare spending for medical services. To calculate federal savings, we first used claims data to estimate average Medicare payments for emergency transfer and inpatient services, in 2012 dollars, over a seven-day period following a clinic visit. It is important to consider emergency transfer and inpatient services rendered over several days because seriously ill patients can often be transferred twice, once from the frontier clinic to a community hospital and then from the community hospital to a tertiary hospital for specialized care. Actual average payment (as observed in the claims) for emergency transfer services received by Medicare beneficiaries over a seven-day period following a clinic visit was $10,983 and, for inpatient services, $16,304.[22] We then multiplied these actual payment amounts by the

[22] These figures reflect the average cost of all transfers and hospitalizations among beneficiaries at both demonstration and comparison clinics, and thus include the potentially higher cost of care for beneficiaries whose transfer and hospitalization could not have been averted with extended stay care. Although transfer costs would likely be the same regardless of the patient's condition because most of the expense is related to air travel, the average cost of an emergency hospitalization used in our analysis should be considered an upper-bound estimate.

estimated number of transfers and hospitalizations avoided *annually* to calculate total Medicare savings per year.

Total Medicare savings per year from averted transfers were an estimated $285,558 and, from averted hospitalizations, $423,904. To calculate net Medicare savings, we added the amount that Medicare would have paid for the extended stay visits at a nontribal clinic in the absence of the demonstration ($8,792) and subtracted actual Medicare payments for extended stay services per year under the demonstration, as reported in the claims ($101,680). Based on an analysis of claims, the demonstration resulted in an estimated net savings to the Medicare program of $616,582 per year, or $7,707 per extended stay (see Table V.5).[23, 24] However, as stated previously, after factoring in the cost of building extended stay capacity and meeting the conditions of participation, the FESC program was not budget neutral to the federal government.

Beneficiaries also benefited from approximately $90,000 in foregone copayments and deductibles for averted services per year, or slightly more than $1,100 per extended stay.[25] Savings from foregone patient liabilities among Medicare-Medicaid enrollees would accrue to the state.

[23] These estimates are based on the assumption that the foregone cost of an averted transfer and hospitalization would be equivalent to the actual cost of a nonaverted transfer and hospitalization. If a patient whose transfer and subsequent hospitalization are averted due to the provision of extended stay services is less severely ill than a patient whose transfer and hospitalization are not averted, then the foregone costs and savings of an averted transfer and hospitalization might be lower than the overall average costs used in this analysis.

[24] As explained in Chapter III, these results are adjusted for differences in age, gender, race/ethnicity, dual eligibility, disability, and mortality between beneficiaries in the demonstration group versus those in the comparison group.

[25] To calculate beneficiary savings, we multiplied the average amount that beneficiaries paid for emergency transfer and hospital services during the seven-day period following an extended stay by the number of averted transfers and hospitalizations per year and then divided that amount by the number of extended stays per year.

Table V.5. Estimated Annual Medicare Savings from the Medicare FESC Demonstration

		Without Demonstration		With Demonstration		Difference	
	Unit Cost	Number of Events	Total Costs	Number of Events	Total Costs	Number of Events	Total Costs
Extended Stays	$1,271	0	$0	80	$101,680	80	$101,680
Clinic Visits	$110	80	$8,800	0	$0	-80	-$8,800
Emergency Transfers	$10,983	124	$1,361,892	98	$1,076,334	-26	-$285,558
Hospital Stays	$16,304	110	$1,793,440	84	$1,369,536	-26	-$423,904
Total			$3,164,132		$2,547,550		-$616,582

Source: Medicare claims and enrollment data, calendar years 2008–2012, extracted in April 2013.

Note: We estimated the impact of the demonstration on emergency transfer and hospitalization rates using five years of Medicare claims (three before the demonstration and two after). By taking the produce of the estimated averted transfer and hospitalization rates and the number of extended stay counters per year, we express Medicare expenditures and savings on an annual basis.

C. Are Extended Stay Services Sustainable for Frontier Clinics under Medicare's Payment System?

In 2006, Stroudwater Associates conducted a detailed analysis of the labor cost of providing extended stay services at three of the five demonstration clinics, taking into account such factors as additional staffing needed to meet the certification requirements, incremental salary adjustments for nonphysician clinicians providing extended stay services, and stipends for on-call nurses and medical technicians. According to the study, the incremental annual labor cost of providing extended stay services (in 2006 dollars) ranged from $507,250 at Iliuliuk Family and Health Services to $692,038 at Cross Road Medical Center. With an average payment of $541 per extended stay, Iliuliuk Family and Health Services would have had to provide 938 extended stays per year to cover its incremental labor costs and Cross Road Medical Center, with an average payment of $1,588, would have had to provide 436 extended stays per year to break even (Shell 2007). Factoring in the cost of equipment and supplies and facility upgrades required

to become an extended stay clinic would further increase the number of extended stays needed to break even.[26] Without enhanced payments from Medicare and Alaska Medicaid, the number of visits for extended stay care needed to cover costs would be far higher.

However, the number of Medicare beneficiaries requiring an extended stay of four hours or more in frontier communities is low (ranging from approximately 27 per year at Alicia Roberts Medical Center to 3 per year at Iliuliuk Family and Health Services), meaning demonstration clinics operate in an environment with low patient volumes and high fixed staffing and medical costs. To build and maintain staffing for extended stay care under the demonstration, participating clinics used two-thirds of the roughly $1.5 million they received each year from 2004 to 2013 from HRSA to hire and retain physicians, nurse practitioners, physician assistants, registered nurses, and medical technicians for 24-hour care. Almost 10 percent went toward the purchase of equipment and supplies and 3 percent was used to pay for construction and facility upgrades. Due to these costs, it seems unlikely that clinics would have been able to afford the high cost of becoming a certified extended stay facility without HRSA funding. Indeed, a clinic located in Broadus, Montana, applied to and was accepted into the demonstration, but later withdrew due to concerns about the high cost of meeting the certification requirements without HRSA funding.

The cost of maintaining enhanced and after-hours and weekend staffing to ensure access to quality extended stay care in frontier communities, combined with low patient volumes,

[26] Under funding from HRSA, the RUPRI conducted a more recent analysis of the costs of providing extended stay services and, after factoring in both incremental labor and nonlabor costs, estimated that the total cost to provide after-hours extended stay services would be approximately $1 million per clinic per year, in 2011 dollars (MacKinney et al. 2012). The authors concluded that each clinic would have to provide care for 1,847 extended stays in four units of time per year, or five four-hour units of time per after-hours shift, to cover its costs.

challenges the financial sustainability of the extended care model. Although clinics might not be at full capacity, as providers of extended stay care they must provide services to patients if and when needed. They must also purchase and maintain the equipment and supplies needed to provide moderate complexity laboratory and radiology services and develop the physical infrastructure to keep patients overnight. With such low patient volumes, it is questionable whether payment from commercial insurers for extended stays at a higher rate would generate sufficient revenue to cover the high cost of providing extended stay care.

D. Summary of Findings

In summary, the proportion of elderly residents in isolated frontier communities tends to be small, relative to the rest of the country. Frontier communities can be difficult places to live and tend to have a disproportionate share of working-age adults employed in fishing, farming, mining, and tourist industries. Based on a review of patient encounter forms before clinics became certified to bill Medicare and Alaska Medicaid at the enhanced rate, Medicare was the primary payer for only one-fourth (26.9 percent) of the 2,226 extended stays from September 2005 to September 2010, and Alaska Medicaid was the primary payer for only one in 10 (9.1 percent) extended stays (University of Alaska Anchorage 2011). IHS and commercial insurers covered the remaining 65 percent of extended stays. Before the implementation of the FESC Demonstration, these isolated rural clinics received the Medicare and Medicaid payment rates for a regular outpatient clinic visit.

Both a descriptive review of patient encounter forms and a statistical analysis of Medicare claims data indicate that extended stay services improve patient experiences and have the potential to lower the cost of transportation and hospitalization to Medicare. However, the high start-up and maintenance costs incurred by the clinics (and covered initially through federal

grants from HRSA) exceed these potential savings to Medicare. The ability to monitor and observe beneficiaries in frontier clinics for extended stays reduces the number of beneficiaries who require an emergency transfer and inpatient hospitalization within seven days of the extended stay visit and results in savings to the Medicare program. Without extended stay services, these beneficiaries would be transferred as soon as weather conditions permit and Medicare would be billed the higher cost of the air transport and hospital stay. Extended stay services also help to reduce patient health risks associated with sending them home without adequate monitoring and observation care, or during transfer to an acute care facility. In addition, the higher per-unit-of-time payment rate for extended stay care reduces the financial stress on the clinics providing these services, compared to the single encounter payment rate under traditional Medicare. Isolated frontier providers are the *de facto* emergency departments for their communities, which affects their financial viability.

VI. CONCLUSION

The Medicare FESC Demonstration was a small initiative to test the feasibility and advisability of supporting extended stay services in remote frontier communities when adverse weather conditions prevent immediate transfer to a hospital or when monitoring and observation might be all that is medically required. Frontier clinics have always provided extended stay services when patients cannot be transferred to a hospital, and billed for them under the traditional fee-for-service system as a regular outpatient visit. To cover the high fixed costs of providing extended stay services, frontier clinics relied on funding from IHS from local Native-administered health corporations, local district tax revenues, or charitable contributions, depending on the clinic and community. However, under traditional payment regulations, the ability of frontier clinics to meet patients' extended stay care needs was limited and efforts to do so diverted resources away from their core mission of providing comprehensive primary care services in the communities they serve.

In establishing the FESC Demonstration, Congress wanted to test funding for extended stay services in isolated rural areas. With 10 years of grant funding from HRSA and 3 years of enhanced payment by Medicare and Medicaid, the five clinics that participated in the FESC cooperative agreement program with HRSA and the Medicare FESC Demonstration with CMS successfully developed the capacity to provide extended stay services in their frontier communities. The efforts needed to achieve this level of care were substantial and included (1) hiring staff with the appropriate training to provide 24-hour extended stay coverage, (2) expanding laboratory and radiology services to diagnose moderately complex patients, (3) purchasing equipment and supplies to stabilize and/or monitor patients with potentially emergency conditions for extended periods, (4) developing quality assessment and performance

improvement programs and upgrading facilities to meet the more stringent ambulatory health care occupancy life safety codes, (5) contracting with food and laundry service vendors, and (6) developing the administrative capacity to collect the information needed to demonstrate medical necessity and submit the additional paperwork for payment. Federal funding under the FESC cooperative agreement and the Medicare demonstration ended in April 2013.

In this section, we offer lessons learned from the CMS evaluation, building on results from previous HRSA-funded evaluations of the FESC cooperative agreement program.

The implementation of the Medicare FESC Demonstration required tremendous effort over an extended period among program stakeholders at federal, state, and local levels, as well as close collaboration between public and private organizations. We summarize five lessons learned from the 10-year experience relevant for assessing the advisability and feasibility of creating an alternative type of provider and payment system to promote the availability of basic acute and emergency care services in remote geographic regions of the country.

1. The availability of extended stay services in frontier communities improves the patient's experience of care.

The ability to provide high-level extended stay services improves the experience of care for patients seeking emergency treatment in frontier communities, particularly those needing medical attention during nonregular hours of operation and those requiring monitoring and observation services only. In the absence of certified extended stay services, many beneficiaries with potentially serious illness or injury delay seeking care and, after they seek care, are transferred as soon as possible by single- or twin-engine, propeller-driven commuter plane to a hospital for inpatient care hundreds of miles away, without the benefit of their families and other social and cultural supports. Many elderly residents in frontier regions are unaccustomed to traveling from their villages for medical care and often view a hospital transfer as being sent

from their community to die. With the availability of extended stay services in the community, beneficiaries can be observed or stabilized closer to home, while local health care professionals determine whether monitoring and observation services are sufficient or emergency transport and hospitalization are required. Many beneficiaries receiving extended stay services for monitoring and observation purposes, and even a small proportion of those receiving stabilization services until conditions allow transfer, are able to go home after several hours of observation, sometimes with a referral for nonemergency follow-up care in the community.

2. The availability of extended stay services in frontier communities strengthens the ability to monitor and observe potentially emergency care cases in local communities.

Under the demonstration, clinics became better equipped to treat urgent care cases when monitoring and observation services were sufficient, stabilize patients while waiting for daylight hours or improved conditions when an emergency transfer to an acute care facility was possible, and avert unnecessary emergency medical transfers and hospitalizations. The demonstration provided the time and equipment for clinicians to make a decision about the severity of a beneficiary's condition and whether an immediate medical transfer was necessary. According to patient encounter forms, nearly half of all extended stay beneficiaries admitted for monitoring and observation during the demonstration avoided an emergency transfer and hospitalization as a result of the availability of extended stay services. Supporting this claim, an analysis of Medicare claims for beneficiaries treated at a demonstration clinic versus those receiving services at a clinic from the matched comparison group indicated that the provision of extended stay services reduced the likelihood of being transferred to a hospital within seven days of a clinic visit by one-third, resulting in an estimated 26 avoided emergency transfers and hospitalizations per year. Treating beneficiaries locally also helped to reduce patients' health risks associated with sending them home without adequate monitoring and observation care. A review of encounter data found

that the provision of extended stay services prevented having to send the beneficiary home without adequate care for half of all monitoring and observation cases.

3. The availability of extended stay services in frontier communities reduces Medicare spending for emergency transfers and hospitalizations, but these savings are outweighed by the cost of building and maintaining extended stay capacity.

An analysis of Medicare claims also shows that, even with the enhanced payment rates offered under the demonstration, the provision of extended stay services in remote geographic areas lowers the per capita cost of care to Medicare for beneficiaries seeking treatment for potentially serious illness or injury. Medicare paid on average $1,271 for each extended stay at participating clinics during the demonstration. By comparison, Medicare paid on average $10,983 for all emergency transfer services and $16,304 for all hospital inpatient services administered within seven days following an outpatient visit at a demonstration clinic. Thus, a single averted emergency transfer and hospital stay saved the federal government on average $27,287 in lower Medicare payments. With approximately 80 paid Medicare claims for extended stays per year and an estimated 26 avoided transfers and hospitalizations, the demonstration resulted in an estimated $616,582 in net Medicare savings per year. However, it is important to note that the FESC Demonstration was not budget neutral to the federal government. These savings do not taken into account the $1.5 million in *annual* grant funding from HRSA to help clinics meet and maintain the federal extended stay certification requirements. In addition, a large part of the savings is due to the high cost of emergency transfers by plane from remote islands in Alaska. Medicare support for extended stay capacity in less remote frontier communities of the country, or geographic areas where emergency transportation via roads is an option, might not achieve the same high level of return.

4. Medicare certification requirements for providing extended stay services in frontier communities are expensive to achieve and maintain.

For relatively small clinics with limited resources, complying with the certification requirements for extended stay services was a challenge. The requirements for certification included expanded staffing, upgraded facilities, and enhanced administrative procedures. The most resource-intensive portion of these requirements was expanded staffing that would allow for appropriately credentialed staff to be either on site or on call and within 30 minutes of the clinic 24 hours a day, seven days a week. The facilities' requirements included complying with ambulatory health care occupancy life safety codes (primarily related to fire safety) and obtaining specific laboratory and radiology equipment. CMS instituted these requirements to ensure the safety of beneficiaries receiving extended stay care in ambulatory health care facilities and to ensure that medically appropriate and quality care was provided.

Significant resources were needed to meet these requirements, and one clinic (located in Broadus, Montana) dropped out of the demonstration, explaining that the high cost of obtaining certification required them to drop out. The remaining five clinics received additional grant funding from HRSA, which totaled nearly $1.5 million per year for nine years and provided them with the resources needed to comply.

5. Due to limited volume and high start-up and maintenance costs, the provision of extended stay services is not likely sustainable under Medicare fee-for-service.

To provide extended stay services, remote clinics must meet the enhanced levels of staffing and infrastructure needed to comply with the certification requirements and provide quality care in an extended stay environment. These resources are costly to maintain. A study of three demonstration clinics conducted by Stroudwater Associates under HRSA funding indicated that the cost of staffing alone was more than $500,000 a year per clinic, well above the amount they received in enhanced payments for extended stay services under the demonstration. However, the

number of beneficiaries who require extended stay services in frontier communities is relatively low and, even if all insurers provide enhanced payments for extended stays at the demonstration payment levels, the volume of extended stay encounters would not allow the clinics to break even on these services. Thus, because of the low volume of extended stay cases and the high costs of building and maintaining the capacity to provide such care, these services are not likely sustainable in clinics in isolated rural areas under the enhanced fee-for-service payment system implemented under the demonstration, even though the provision of extended stay services is cost-saving for insurers such as Medicare.

The lessons learned from the Medicare FESC Demonstration are based on a relatively small application of the extended stay model of care, primarily in four isolated Alaska communities (three located on remote islands and one located in the interior of the state). The findings from this evaluation might not be applicable in other less isolated frontier communities in the lower 48 states, where hospitals are not as distant and emergency transportation via roads is an option. In addition, although many communities where travel to hospital services is problematic could potentially benefit from the extended stay model of care, becoming an extended stay facility requires a high level of staffing, infrastructure, and administrative capacity that many health centers in frontier areas do not have. Efforts to identify a comparison group of clinics for this study found that most other rural and frontier clinics in Alaska had substantially lower levels of staffing and provided a more limited scope of services than those participating in the demonstration.

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