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The Frontier Extended Stay Clinic Model: A Potential Health Care Delivery Alternative for Small Rural Communities

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Key Findings

- The Frontier Extended Stay Clinic (FESC) demonstration project provided expanded emergency services and extended clinic stays to remote rural communities.
- Although the FESC demonstration ended this year, the FESC model may be appropriate in rural communities other than the five original demonstration sites.
- FESCs may also be alternatives to very low-volume rural hospitals.

Background

The Centers for Medicare and Medicaid Services (CMS) implemented a FESC demonstration to expand emergency care capacity and provide extended stay care (up to 48 hours) in five remote and/or isolated clinics (four in Alaska and one in Washington). The demonstration provided additional payment for extended stays at the five clinics. The Federal Office of Rural Health Policy (ORHP) supported the demonstration by providing funds to upgrade clinic facilities/equipment and expand staffing. To be eligible for the FESC demonstration, a clinic had to be at least 75 road miles, or inaccessible by road, from the nearest hospital. A recent assessment by the RUPRI Center for Rural Health Policy Analysis showed significant FESC project successes. The FESC project:

- Conservatively saved payers $14 million in medical transfer costs associated with the five participating clinics over five years;
- Reduced patient/family inconvenience and cost through avoided medical transfers;
- Increased emergency staff training and updated emergency facilities/equipment;
- Refurbished patient space for extended clinic stay;
- Improved FESC quality improvement focus;
- Established a learning network among the FESCs; and
- Developed processes for life safety code compliance and state Medicaid provider application.

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The additional value FESC services brought to both patients and payers prompted Alaska Medicaid to continue payment for extended clinic stays, and Premera (Alaska Blue Cross Blue Shield) to institute payment for extended clinic stays. A CMS contractor is currently evaluating the CMS FESC payment demonstration.

The FESC demonstration was limited to five clinics, and ended this year. To evaluate whether a FESC would be a reasonable emergency care and extended stay model for other sites, the RUPRI Center assessed multiple data sources to identify potential FESC sites in five states.

Methods

We selected Alaska, Wyoming, Montana, North Dakota, and New Mexico for analysis based on low population densities and geographic spread (Table 1).

Table 1. Population Density*

State	Persons per square mile of land area
Alaska	1.2
Wyoming	5.8
Montana	6.8
North Dakota	9.7
New Mexico	17.0

*U.S. Census Bureau. State Population-Rank, Percent Change, and Population Density. www.census.gov/compendia/statab/2012/tables/12s0014.pdf. Accessed July 25, 2013.

We collected multiple hospital and clinic characteristics for each state. Hospital characteristics include city, hospital name, city population, ZIP Code Tabulation Area (ZCTA), ZCTA population, ZCTA Rural Urban Commuting Area (RUCA) code, county (or borough or census area), county (or borough or census area) population, Urban Influence Code (UIC), Health Professional Shortage Area (HPSA) status, Critical Access Hospital (CAH) (Yes or No), licensed beds, Average Daily Census (ADC), and hospital control type. Clinic characteristics include city, clinic name, city population, ZCTA population, county (or borough or census area) name, county (or borough or census area) population, geographic context, nearest hospital name, nearest hospital city, nearest hospital ADC, drive miles to nearest hospital, drive time to nearest hospital, and air miles to nearest hospital. Data sources, state maps, hospital characteristics tables, and clinic characteristics tables are available as an appendix at the RUPRI Center website (http://cph.uiowa.edu/rupri/publications/policybriefs/2013/FESCExtensionAppendix.pdf).

We created cohorts of clinics that were 35-50 miles, 50-75 miles, and farther than 75 miles from the nearest hospital. The distances were based on the FESC program requirement that a FESC be located at least 75 miles from the nearest hospital, and on CAH requirements that a new CAH be located at least 35 miles from the nearest hospital. Clinics distant from a hospital may be suitable for emergency care and extended stay alternatives to exclusively outpatient care facilities. We also examined the number of low-volume hospitals in each state that fell within the ADC cohorts of six-10 patients, three-five patients, and two or fewer patients. These hospitals may be candidates for care delivery alternatives to CAH status.

Findings

Distance from Nearest Hospital

Among the five states we examined, Alaska is unique. One hundred and twenty-two Alaska clinics are farther than 75 road miles from the nearest hospital or inaccessible by road. Medical transfer by air (fixed or rotary wing aircraft) is commonplace in Alaska, and expensive. Thus, alternative care models, such as a FESC, that reduce medical transfers have the potential to save payers money and reduce patient/family inconvenience. Only a few clinics in the four other states are located farther than 75 miles from the nearest hospital, but all five states have multiple clinics that are located 35 miles or farther from the nearest hospital (Table 2). Although drive times may be a more important measure of transfer travel burden than road miles, we selected road miles because FESC demonstration requirements and CAH regulations use road miles from the nearest hospital.

Table 2. Number of Clinics by Mileage from Nearest Hospital

State	35-50 miles	50-75 miles	> 75 miles*	Total
Alaska	2	5	122	129
Wyoming	2	3	5	10
Montana	1	6	5	12
North Dakota	0	1	5	6
New Mexico	2	12	16	30

*Or inaccessible by road.

Average Daily Hospital Census

We also assessed the number of hospitals with very low ADC (defined for this brief as 10 or fewer patients) (Table 3). In contrast to the large number of Alaska clinics that are located farther than 75 miles from the nearest hospital (or inaccessible by road), relatively few Alaska hospitals have very low ADCs. Of the states studied, Montana has the most low-volume hospitals, 21, with an ADC of 10 or fewer patients. Although low ADC does not necessarily correlate with risk for hospital financial distress, hospitals with low ADCs typically experience diseconomies of scale; that is, volume decline will more likely result in profitability loss. A hospital's ADC changes from year to year. Data for this analysis were obtained from the American Hospital Association's annual survey database for 2011. Current ADCs may differ.

Table 3. Number of Hospitals by Average Daily Census

State	6-10 patients	3-5 patients	≤ 2 patients	Total
Alaska	2	3	1	6
Wyoming	4	3	0	7
Montana	6	10	5	21
North Dakota	6	7	5	18
New Mexico	6	5	3	14

Policy Relevance

Local health care delivery configurations should be locally determined. However, health care financing greatly influences health care delivery design. Cost-based reimbursement for CAHs has helped stabilize small rural hospital financial status and realize a very low closure rate, manifest by the fact that there are now over 1,300 CAHs representing approximately one-quarter of all acute care hospitals in the United States. However, as the demand for health care cost control grows, new health care delivery alternatives will be needed to cost efficiently meet the essential health care needs of small rural communities.

For many small rural communities, the most essential local health care needs are 24/7 emergency care, robust primary care, sophisticated diagnostic services, and access to specialty care (through

outreach, telehealth, or transportation). A FESC, built around Patient-Centered Medical Home processes and infrastructure, could provide the menu of health care services many small rural communities require. Despite the financial stability provided to rural hospitals through the CAH program, very low patient volumes continue to place many small rural hospitals in financial jeopardy. In a fee-for-service environment, small volumes may inadequately cover stand-by and other fixed costs necessary to maintain a hospital. Clinic expansion to a FESC might appropriately serve a rural community that does not currently have a hospital, and a comprehensive FESC might more efficiently serve a rural community than a financially struggling very low-volume CAH.

FESC program success shows the conceptual potential for FESC-like services to meet the needs of some small rural communities. Although the FESC demonstration ended this year, the FESC experience can inform policy discussions about the future of rural clinics distant from a hospital, and of extremely low-volume rural hospitals. FESCs could be one health care delivery alternative among several to serve small rural communities.