



Safety Net Clinics Serving the Elderly in Rural Areas: Rural Health Clinic Patients Compared to Federally Qualified Health Center Patients

Andrea D. Radford, DrPH; Victoria A. Freeman, RN, DrPH; Denise A. Kirk, MS;
Hilda A. Howard, BA; Mark Holmes, PhD

BACKGROUND

Rural Health Clinics (RHCs) and Federally Qualified Health Centers (FQHCs) are important primary care providers in rural communities. These safety net programs are similar in that they both are located in areas with inadequate access to health care services. In addition, RHCs and FQHCs are federally-designated entities reimbursed by Medicare based on all-inclusive per visit payments rather than the Medicare Physician Fee Schedule used for most other primary care providers. Required

services differ, however, despite the similar missions of the programs. For example, in addition to primary care provided in both settings, FQHCs are required to provide, either on-site or by arrangement, many other health care services such as pharmacy, dental care, and case management, and RHCs are not. RHCs must be located in non-urbanized areas, while FQHCs may operate in urban areas as well.¹ Because they are similar in mission but may be different in practice, understanding their respective Medicare patient profiles is important.

Using data extracted from 2009 Medicare outpatient provider claims, we looked at the location of clinics, the number of beneficiaries served, and the number of and cost per claim for each type of rural safety net clinic. We further examined characteristics of Medicare beneficiaries comparing their age, the health problems for which they sought care, and the distance they travelled to obtain care. In most analyses, values for urban beneficiaries are also provided for comparison. It is important to emphasize that the information provided here is for Medicare beneficiaries and does not consider the total population of patients served by each type of clinic.

This findings brief is the third in a series on RHCs which draws on a large, national dataset that includes claims data on the approximately 90% of RHCs that billed Medicare in 2009. Other findings briefs in this series profile in greater detail RHCs' Medicare billing and reimbursement, the distribution and characteristics of individual clinics,² and the characteristics of Medicare beneficiaries served by RHCs.³

KEY FINDINGS

- RHCs outnumber nonmetro FQHCs three to one (3,494 vs. 1,101) but are not evenly distributed across the country. RHCs comprise only 50% of these safety net providers in New England compared to 91% in the West North Central Census Division of the country.
- On average, RHCs submit more Medicare claims per year (2,339 vs. 1,569 in 2009) and see more Medicare beneficiaries (535 vs. 388 in 2009) compared to nonmetro FQHCs. Charges and reimbursement per claim are similar for RHCs and nonmetro FQHCs (charges: \$106.38 vs \$105.67; payments: \$99.02 vs. \$100.30), but a larger portion of reimbursement for RHCs comes from the patient (29.8% vs. 21.4%) and a smaller portion from Medicare (69.6% vs. 78.1%).
- Compared to FQHC patients, RHC Medicare patients are older and more likely to be white. Overall nonmetro FQHC Medicare beneficiaries travel 1.7 miles farther to their clinic appointments (8.7 miles vs. 7.0 miles). For patients in the West South Central Census Division, that extra distance is even larger (12.6 miles vs. 7.1 miles).
- The health conditions for which Medicare beneficiaries are treated at RHCs and nonmetro FQHCs are similar. Notable exceptions include diabetes, which makes up 11% of nonmetro FQHC claims compared to 7% for RHCs. Also of interest is the higher percentage of mental health claims filed by FQHCs (consistent with the requirement they provide access to mental health services), which may indicate a difference in the patient population served or the services offered.

RESULTS

Geographic Distribution of Safety Net Clinics Billing Medicare

The 2009 Medicare outpatient provider claims file includes over 8.1 million claims submitted by 3,494 RHCs in 45 states and 5.1 million claims submitted by 3,260 FQHC service delivery sites in all 50 states, the District of Columbia, and three territories. Note that these numbers of RHCs and FQHCs are smaller than the total numbers because not all clinics provide care to Medicare beneficiaries.⁴ A smaller proportion of FQHC than RHC delivery sites bill for Medicare services, due in part to the diversity of FQHC sites. For example, in 2014, 1,266 FQHC delivery sites were located in schools, and another 2,010 were Migrant Health Centers.

The numbers of RHCs and FQHC service delivery sites submitting claims to Medicare in 2009 are shown in Table 1. Overall, RHCs outnumber nonmetro FQHCs three to one. Of all FQHC delivery sites billing Medicare, 34% are in nonmetro areas. RHCs represent 50% of safety net clinics in New England and more than 75% in the nation's midsection and far west.

Table 1: Number* of RHCs and FQHC Service Delivery Sites Billing Medicare in 2009 by Census Division

Census Division	RHCs	NonMetro FQHCs	Metro FQHCs	Total FQHCs
New England	66	65	131	196
Middle Atlantic	64	51	233	284
East North Central	469	112	333	445
West North Central	974	100	101	201
South Atlantic	421	236	356	592
East South Central	378	147	129	276
West South Central	504	118	157	275
Mountain	198	143	160	303
Pacific	420	129	526	655
All Divisions	3,494	1,101	2,126	3,227

*Does not include 28 FQHC service delivery sites in Guam, Puerto Rico, Virgin Islands and District of Columbia plus 5 FQHC sites that could not be classified.

Medicare Claims, Beneficiaries, and Payments

Based on claims filed, in 2009 RHCs treated 1.6 million Medicare beneficiaries. FQHCs treated 1.1 million beneficiaries with about one-third of them treated in nonmetro FQHCs and two-thirds treated in metro FQHCs. RHCs submitted, on average, 50% more Medicare claims in 2009 than did nonmetro FQHCs, and RHCs saw 38% more Medicare beneficiaries (Table 2). There was, however, large variation in the number of claims and beneficiaries for each type of provider due to the size of the clinic and the population served. The mean number of Medicare patients and claims was similar for FQHCs regardless of their location.

Table 2: Medicare Claims and Beneficiaries per RHC and FQHC Service Delivery Site in 2009

	Mean	Median	10 th Percentile	90 th Percentile
Number of Claims				
RHC	2,339	1,502	265	5,292
FQHC NonMetro	1,569	994	106	3,645
FQHC Metro	1,594	856	61	3,655
Number of Beneficiaries				
RHC	535	364	91	1,161
FQHC NonMetro	388	258	44	853
FQHC Metro	397	243	30	887

Table 3 presents per claim averages for charges and payments.⁵ The average charges and total payment for a Medicare visit is similar for RHCs and nonmetro FQHCs, but the amounts paid by Medicare and by beneficiaries differ. Medicare pays, on average, \$9.37 less for an RHC claim compared to a nonmetro FQHC claim, but an RHC beneficiary pays, on average, \$8.01 more compared to a nonmetro FQHC beneficiary. This is likely due to the fact that the Part B deductible is waived for FQHC services but not for RHC services. In addition, a sliding scale fee structure is required for all FQHCs but not for all RHCs.

Table 3: 2009 RHC & FQHC Average Medicare Claim Charges & Payments

Type	# of Claims	Charges	Payments by Source							
			Medicare		Beneficiary ⁱ		Other ⁱⁱ		Total	
RHCs	8,173,882	\$ 106.38	\$ 68.93	69.6%	\$ 29.54	29.8%	\$ 0.55	0.6%	\$ 99.02	100%
FQHCs										
NonMetro	1,810,391	\$ 105.67	\$ 78.30	78.1%	\$ 21.53	21.4%	\$ 0.48	0.5%	\$ 100.30	100%
Metro	3,357,432	\$ 126.02	\$ 84.52	76.6%	\$ 25.55	23.2%	\$ 0.23	0.2%	\$ 110.30	100%
Total FQHCs	5,167,823	\$ 118.89	\$ 82.34	77.1%	\$ 24.15	22.6%	\$ 0.31	0.3%	\$ 106.80	100%

ⁱ Beneficiary = patient deductible and coinsurance (may be covered by secondary insurance)

ⁱⁱ Other = primary payment responsibility is from source other than Medicare

Characteristics of Beneficiaries and Their Health Problems

Medicare patients seen at RHCs in 2009 were generally older than those seen at FQHC service delivery sites (Figure 1) with a median age of 72 years compared to 68 years for nonmetro FQHCs. The proportion of Medicare patients that are below the age 65 – especially in FQHCs – is notable and likely represents the segment of rural residents that are dually eligible for Medicare and Medicaid. Distribution by gender was the same across RHCs and FQHC services delivery sites at 58% female and 42% male. Ninety-one percent (91%) of RHC clients are white compared to 81% at nonmetro FQHCs.

Figure 1: Age Distribution of Medicare Patients Served by RHCs and FQHCs in 2009

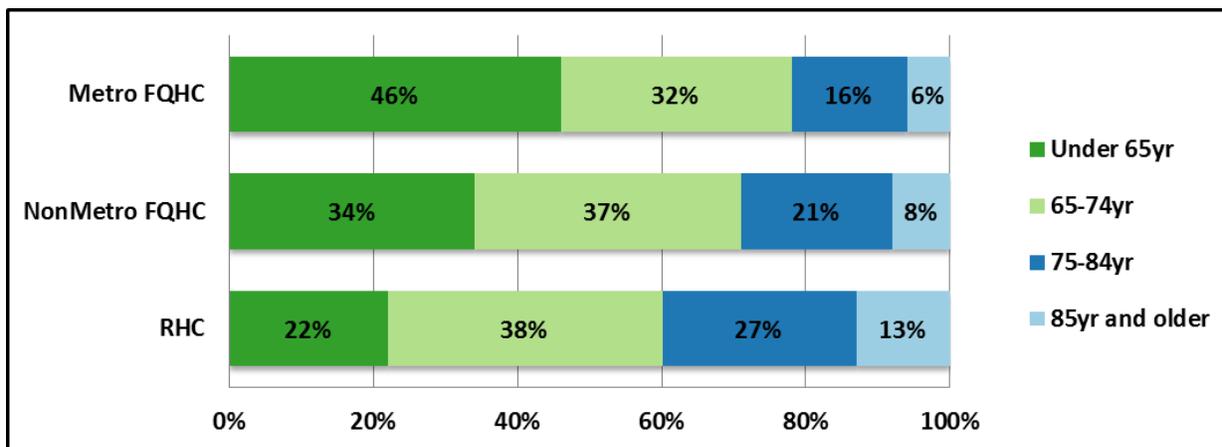


Table 4 lists by Census Division the median one-way distance Medicare beneficiaries traveled for care at RHCs and nonmetro FQHCs, calculated as the distance between the beneficiary's address ZIP centroid to the provider address ZIP centroid as listed for each claim. The 10th and 90th percentiles demonstrate the range of travel times. Medicare patients seen by nonmetro FQHCs had longer travel distances (median of 8.7 miles) than Medicare patients seen at RHCs (median of 7.0 miles). Medicare beneficiaries in the Mountain division traveled the farthest to both RHCs and FQHCs.

Table 4: Miles Traveled to Clinic Visits by RHC & NonMetro FQHC Medicare Patients in 2009

Census Division	RHCs		NonMetro FQHCs	
	Median	10th-90th Percentile	Median	10th-90th Percentile
Northeast				
New England	7.5	2.2-25.3	7.5	1.7-25.2
Middle Atlantic	6.2	1.4-17.5	7.3	1.1-24.2
South				
South Atlantic	6.9	1.7-22.6	7.9	1.6-27.1
East South Central	6.5	1.9-21.1	9.0	1.7-31.5
West South Central	7.1	1.6-26.2	12.6	1.9-44.6
Midwest				
East North Central	6.5	1.3-23.3	7.3	1.3-25.7
West North Central	6.2	1.5-24.6	7.4	1.9-35.1
West				
Mountain	10.7	2.7-42.4	13.6	3.0-61.4
Pacific	7.6	2.1-28.8	9.1	3.2-35.9
All Divisions	7.0	1.6-24.7	8.7	1.8-33.2

Medicare beneficiaries were treated for similar health problems at RHCs and all FQHCs. Using primary diagnosis codes from Medicare claims, the 15 most common medical conditions for Medicare beneficiaries seen at RHCs and all FQHCs are ranked by number of beneficiaries in Table 5. Although the distribution of the conditions is qualitatively similar between the two, the difference is statistically significant ($p < .00001$ using Pearson chi-square) and there are some notable differences. For example, a diagnosis of diabetes mellitus is more common among patients seen at all FQHCs compared to RHCs (11.0% v. 7.0%) and mental illness related visits rank fifth for patients in FQHCs at 5.3%, but are not in the top 15 of primary diagnoses for Medicare beneficiaries seen in RHCs. It is not known if these differences represent a difference in the needs of the population served, or, particularly for mental health services, differences in requirements for and availability of services in FQHCs compared to RHCs.

Table 5: Most Common Medical Conditions for Medicare Patients at RHCs & FQHCs in 2009

Medical Condition ^a	RHC Patients			FQHC Patients		
	Rank	Number ^b	Percent	Rank	Number ^b	Percent
Hypertension	1	526,745	11.5%	1	379,340	14.8%
Respiratory infections	2	367,170	8.0%	4	156,422	5.6%
Symptoms/conditions/factors influencing care ^c	3	345,337	7.5%	3	269,048	9.7%
Diabetes mellitus	4	319,660	7.0%	2	306,518	11.0%
Diseases of the heart	5	247,015	5.4%	8	107,735	3.9%
Non-traumatic joint disorders	6	240,790	5.3%	6	122,498	4.4%
Spondylosis; other back problems	7	187,853	4.1%	9	106,838	3.8%
Diseases of the urinary system	8	183,114	4.0%	10	87,085	3.1%
Disorders of lipid metabolism	9	178,337	3.9%	7	113,172	4.1%
Skin infections/disorders	10	172,584	3.8%	11	79,155	2.9%
Other respiratory diseases	11	165,758	3.6%	15	47,844	1.7%
COPD/bronchiectasis	12	145,836	3.2%	12	71,635	2.6%
Other gastrointestinal disorders ^d	13	143,040	3.1%	<i>Not in top 15</i>		
Other connective tissue disease	14	135,772	3.0%	13	70,884	2.6%
Ear conditions	15	124,920	2.7%	14	56,111	2.0%
Mental illness ^e	<i>Not in top 15</i>			5	145,839	5.3%
All other conditions		1,096,816	23.9%		655,610	23.6%
TOTAL^f		4,580,747			2,775,734	

^a Diagnosis codes converted into Medical Conditions using Clinical Classifications Software (CCS) 2012. U.S. Agency for Healthcare Research and Quality; available at www.hcup-us.ahrq.gov/toolssoftware/ccs/ccs.jsp

^b Count of Medicare patients seen at an RHC or an FQHC with one or more claims with listed condition as primary diagnoses.

^c Symptoms/conditions/factors is a broad category that includes non-specific diagnoses such as nausea, allergic reactions, aftercare, and medical examinations.

^d Other gastrointestinal disorders comprise the primary diagnosis for < 1.3% of FQHC beneficiaries.

^e Mental illnesses comprise the primary diagnosis for 2.5% of RHC beneficiaries.

^f Counts of beneficiaries were deduplicated for each condition but not across all conditions. An individual Medicare patient will be counted in more than one category if s/he was seen at multiple times with different chief complaints.

CONCLUSION

RHCs and FQHCs are critical safety net providers with similar missions but different structures. There are many more RHCs than nonmetro FQHCs and their distribution around the country differs. The populations served by each type of clinic differ, with RHCs seeing higher numbers of Medicare beneficiaries, as well as Medicare beneficiaries who are older and more likely to be white. The top 15 conditions most commonly treated in the clinics are similar with notable differences for diabetes and mental health conditions. Although the reasons for these differences are not clear, they could represent differences in the health conditions of the population or, for mental health particularly, differences in services offered. RHCs and FQHCs charge about the same and are reimbursed a similar amount. Source of reimbursement varies, however, with RHCs receiving more from beneficiaries and less from Medicare compared to nonmetro FQHCs. Travel distances vary by Census Division but the median travel distance for all patients is 1.7 miles longer for patients going to FQHCs.

Presenting RHC and nonmetro FQHC data together provide a more complete picture of how the health care safety net protects rural Medicare beneficiaries. The data presented here provides a baseline by which to measure the impact of changes in Medicare and Medicaid policies on these outpatient care models.

DATA SOURCE AND METHODS

The study included all RHC and FQHC Medicare claims filed in 2009. Medicare RHC and FQHC claims data were obtained through an agreement between the Federal Office of Rural Health Policy and the Centers for Medicare and Medicaid Services (CMS). Medicare beneficiary data was taken from the Denominator File, populated from the CMS Enrollment Data Base. Distance values were calculated at the beneficiary level for RHC and nonmetro FQHC clients using Provider of Services (Centers for Medicare and Medicaid Services) data to identify the provider ZIP code and computing the distance between the beneficiary's residence ZIP and provider ZIP.

1. For more information, see Comparison of the Rural Health Clinic and Federally Qualified Health Center Programs at <http://www.ask.hrsa.gov/downloads/fqhc-rhccomparison.pdf>.
2. Radford AD, Kirk DA, Howard HA. Profile of Rural Health Clinics: Medicare Payments & Common Diagnoses. NC Rural Health Research & Policy Analysis Center, Findings Brief #107, December 2012.
3. Radford AD, Kirk DA, Howard HA, Holmes GM. Profile of Rural Health Clinics: Clinic & Medicare Patient Characteristics. NC Rural Health Research & Policy Analysis Center, Findings Brief #108, March 2013.
4. There were 3,900 certified RHC sites as of January 2012 (*CMS Name & Address Listing for RHC Based on Current Survey*, 01/09/2012. Available at www.cms.gov/Outreach-and-Education/Medicare-Learning-Network-MLN/MLNProducts/Downloads/rhclistbyprovidername.pdf). By contrast, as of February 2014, there are 1,248 federally-funded Health Centers with over 10,001 service delivery sites located in both metro and nonmetro communities, plus an additional 317 FQHC “look-alikes” that qualify for the FQHC program but do not currently receive funding through Section 330 of the Public Health Service (PHS) Act (Analysis of “Health Care Service Delivery and Look-Alike Sites Data Download”, HRSA Data Warehouse, <http://datawarehouse.hrsa.gov/Data/datadownload/hccDownload.aspx>, Downloaded 17 Feb 2014).
5. Charges for RHC and FQHC services are taken from the provider's usual and customary fee structure used for all insurers and may or may not be tied to cost; these charges are used to calculate the beneficiary's deductible and coinsurance amount. Thus, it is possible for total payment to exceed the total charge since the total payment is a combination of the cost-based rate and deductible / coinsurance.

This study was funded through Cooperative Agreement # UICRH03714 with the Federal Office of Rural Health Policy (ORHP), Health Resources and Services Administration, U.S. Department of Health and Human Services. The conclusions and opinions expressed in this brief are the authors alone; no endorsement by the University of North Carolina, ORHP, or other sources of information is intended or should be inferred.