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Rural Hospital Participation in Medicare Accountable Care Organizations

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Purpose

This policy brief summarizes national and regional rates of rural hospital¹ participation in Medicare Shared Savings Program (SSP) Accountable Care Organizations (ACOs) and identifies factors associated with ACO participation. Hospital participation in ACOs is a means of transitioning to alternative payment models. Identifying characteristics associated with participation will inform future policy development to address rural-specific barriers and challenges for participation.

Key Findings

- In 2016, 743 hospitals participated in Medicare SSP ACOs. Metropolitan hospitals had a higher participation rate, 21 percent (492 out of 2,308 hospitals), than nonmetropolitan hospitals, 12 percent (251 out of 2,108 hospitals).
- Among nonmetropolitan hospitals, those located in the Northeast census region, not-for-profit, Critical Access Hospitals (CAHs), or affiliated with health systems had higher Medicare SSP ACO participation rates.
- Nonmetropolitan hospitals that had fully implemented electronic health record (EHR) systems or had medical home programs had higher Medicare SSP ACO participation rates than nonmetropolitan hospitals that had not established such capacities.
- Nonmetropolitan hospitals that had previous risk experience such as health maintenance organization (HMO), preferred provider organization (PPO), or capitated or bundled payment contracts had higher Medicare SSP ACO participation rates than nonmetropolitan hospitals that did not have such experience.

Background

The U.S. Department of Health and Human Services is committed to transitioning the U.S. health care system toward value-based payment models. ACOs represent a popular model in both the Medicare and Medicaid programs. Research shows the spread of Medicare SSP ACOs² into rural areas, with noticeable regional variations.³ In 2018, the Centers for Medicare & Medicaid Services (CMS) reported that 1,517 prospective payment system (PPS) hospitals and 421 CAHs participated in 561 Medicare SSP ACOs.⁴ However, a majority of rural hospitals (including CAHs) have not yet participated in ACOs or other value-based payment models.

Rural hospitals are disproportionately underprepared for transitioning to value-based payment models because many of them have limited infrastructure (e.g., lack of EHR functionality and care coordination capacity) and face unique financial and market circumstances (e.g., cost-based



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reimbursement, lower margins, lack of the critical mass of patients required for delivering cost-effective services). CMS had facilitated participation of rural providers in Medicare SSP ACOs by implementing the ACO Investment Model (AIM) demonstration program⁵, retaining the one-sided risk model up until 2019⁶, and changing beneficiary assignment rules to implement the 21st Century Cures Act requiring incorporating use of services furnished by RHCs and FQHCs, and the Bipartisan Budget Act of 2018 allowing for choice of beneficiary assignment methodology¹⁰. However, on December 21, 2018, CMS issued a final rule, referred to as “Pathways to Success,” which set a new direction for the Medicare SSP. The new rule includes participation options that allow eligible ACOs to begin under a one-sided risk model, but requires them to incrementally phase-in higher levels of risk. To inform the ongoing policy development, it is important to assess factors that influence rural hospital participation in Medicare SSP ACOs.

Data and Methods

We used the 2016 CMS SSP Provider-Level Research Identifiable File (RIF) to identify PPS hospitals and CAHs that participated in Medicare SSP ACOs. The data were linked to the 2016 American Hospital Association annual survey which provided data on hospital attributes, prior experience with risk-bearing contracts; and to 2015 CMS Medicare Advantage (MA) enrollment data to identify, MA penetration in the local market. Rural-urban commuting area (RUCA) codes were used to classify the level of rurality of hospital locations: 1-3 indicate metropolitan areas; 4-6 indicate micropolitan areas; 6-9 indicate small town areas, and 10 indicates rural areas. We identified rural hospitals as those with a RUCA code of 4-10, which indicated that a hospital was located in a nonmetropolitan area.

We summarized rates of hospital participation in Medicare SSP ACOs and compared participation rates among hospitals in different census regions and with different levels of rurality. Further, we compared participation rates among metropolitan and nonmetropolitan hospitals with different hospital attributes and risk experiences.⁷

Results

From the CMS data, we identified 743 hospitals⁸ that participated in 192 Medicare SSP ACOs in 2016. Metropolitan hospitals had a higher participation rate, 21 percent (492 out of 2,308 hospitals), than nonmetropolitan hospitals, 12 percent (251 out of 2,108 hospitals, including CAHs). Table 1 shows participation rates by rurality and census region among all hospitals. Hospitals located in rural, small town, and micropolitan areas had similar participation rates, ranging from 10.0 to 12.9 percent, which were significantly lower than that of metropolitan hospitals. Hospitals located in the Northeast census region had the highest participation rate of 30.9 percent.

Table 1. Rate of Hospital Participation in Medicare SSP ACOs by Rurality and Region, 2016

	ACO participant		Non-ACO participant		Total
	N	Row %	N	Row %	
1. Rurality (RUCA)					
Metropolitan	492	21.3%	1,816	78.7%	2,308
Micropolitan	91	12.0%	669	88.0%	760
Small town	112	12.9%	759	87.1%	871
Rural	48	10.0%	429	90.0%	477
2. Region					
Northeast	167	30.9%	374	69.1%	541
South	348	17.6%	1,629	82.4%	1,977
Midwest	143	13.9%	886	86.1%	1,029
West	85	9.8%	784	90.2%	869

Source: RUPRI Center for Rural Health Policy Analysis, analysis of Centers for Medicare & Medicaid Services' Medicare Shared Savings Program provider participation data.

Table 2 compares nonmetropolitan and metropolitan hospitals' Medicare SSP ACO participation by hospital attribute and risk experience. Among nonmetropolitan hospitals, those that were located in the Northeast census region, not-for-profit, CAHs, or affiliated with health systems had higher participation rates than their respective counterparts. Nonmetropolitan hospitals that had fully implemented EHR systems or had medical home programs had higher Medicare ACO participation rates than hospitals that had not established such capacities. Nonmetropolitan hospitals that had previous risk experience such as HMO, PPO, or capitated or bundled payment contracts had higher participation rates than those that did not have such experience. Metropolitan hospitals had similar participation patterns as nonmetropolitan hospitals except in two cases. First, larger metropolitan hospitals with more staffed beds had higher participation rates than smaller metropolitan hospitals (specifically hospitals with 50 or fewer beds). No clear pattern was seen regarding how ACO participation differs by number of staffed beds among nonmetropolitan hospitals. Second, CAHs located in metropolitan areas had a slightly lower participation rate than PPS hospitals, reversing the pattern found among nonmetropolitan hospitals. In addition, metropolitan hospitals with fully implemented EHR systems had a higher participation rate than metropolitan hospitals without such capacity; however, this difference is not statistically significant.

Among metropolitan hospitals, county-level MA penetration was lower for hospitals participating in Medicare ACOs (28.9 percent of Medicare beneficiaries were enrolled in MA) than those not participating in Medicare ACOs (31.8 percent). Among nonmetropolitan hospitals, ACO participating and nonparticipating hospitals had similar average county-level MA penetration (16.4 percent and 17.1 percent, respectively).

Table 2. Hospital Participation in Medicare SSP ACOs – Metropolitan and Nonmetropolitan Hospital Comparison, 2016

	Nonmetropolitan Hospital ACO Participation			Metropolitan Hospital ACO Participation		
	N	%	Total	N	%	Total
1. Region						
Northeast	48	30.6%	157	119	31.0%	384
South	97	11.4%	849	251	22.3%	1,128
Midwest	82	11.2%	734	61	20.7%	295
West	24	6.5%	368	61	12.2%	501
2. Ownership						
Government nonfederal	55	7.8%	704	30	11.6%	258
Not-for-profit	189	16.1%	1,176	441	28.6%	1,540
For-profit	7	3.1%	228	21	4.1%	510
3. Hospital attributes						
Bed size						
25 beds or fewer	165	13.1%	1,264	23	11.6%	198
26-50 beds	22	8.3%	266	10	8.1%	124
51-100 beds	31	9.7%	320	38	17.5%	217
101-200 beds	25	12.0%	209	127	20.2%	629
201-300 beds	6	16.2%	37	97	22.5%	432
301 beds or more	2	16.7%	12	197	27.8%	708
CAH vs. PPS						
CAH	158	13.3%	1,190	22	17.2%	128
PPS	93	10.1%	918	470	21.6%	2,180
System affiliation						
Yes	156	14.8%	1,055	430	24.0%	1,791
No	95	9.0%	1,053	62	12.0%	517
EHR capacity						

Fully implemented	170	14.1%	1,204	377	25.1%	1,505
Not fully implemented	19	6.4%	299	43	19.8%	217
Medical home program						
Yes	58	21.3%	272	250	36.3%	689
No	132	10.5%	1,255	176	15.9%	1,105
4. Risk experience						
HMO contract						
Yes	141	15.4%	918	382	25.1%	1,523
No	51	8.1%	631	46	17.8%	258
PPO contract						
Yes	159	13.6%	1,167	402	25.7%	1,565
No	32	8.4%	379	26	12.3%	212
Capitated contract						
Yes	13	21.0%	62	64	32.5%	197
No	180	11.9%	1,509	367	22.7%	1,617
Bundled payment						
Yes	20	29.0%	69	159	28.5%	558
No	174	11.6%	1,495	272	21.9%	1,243

Source: RUPRI Center for Rural Health Policy Analysis, analysis of Centers for Medicare & Medicaid Services' Medicare Shared Savings Program provider participation data.

Conclusion

The Medicare Shared Savings Program continues to attract healthcare organizations, including hospitals, wanting to adapt to new value-based payment methodologies (alternative payment models). As indicated by data showing an increase in participation from rural hospitals, including CAHs, the ACO model appeals to many as a step in that transition. Therefore understanding characteristics that distinguish rural hospital entrants into the program is important to shaping policies making such entry possible, even attractive.

Despite the fact that nonmetropolitan hospitals had a lower participation rate in Medicare SSP ACOs than metropolitan hospitals in general, these two groups of hospitals showed similar patterns in how participation rates varied by most hospital attributes and risk experiences. Hospitals that are not-for-profit, are affiliated with health systems, have fully implemented EHR systems, have established medical home programs, or have prior risk-bearing contract experience are more likely to participate in Medicare SSP ACOs.

As participation in the Medicare ACO program will require a greater acceptance of downside risk, the hospital characteristics identified in this study are likely to be even more predictive of participation. In particular, generating savings while minimizing the risk of exceeding expenditure targets requires effectively managing all costs (facilitated by highly functional EHRs) and avoiding unnecessary utilization (facilitated by care management). Accelerating rural hospital (and other rural provider organization) participation in ACOs and advanced alternative payment models (a track of CMS' Quality Payment Program)⁹ will be conditioned on their readiness to accept risk. Investments in capacity building by hospitals, health systems, and public-private partnerships are warranted. As indicated by one of the findings from this research, participation in health systems may be one pathway to those investments. Should increased participation by all rural hospitals be a policy objective, new investments similar to the AIM program could be considered as a policy measure to encourage rural hospitals with limited resources to participate and to help them cover the initial investment costs. Finally, private foundations may invest in improved capacity in care management, both as a strategy supporting an essential local provider (the hospital) and as an investment in community health.

Endnotes

1. We use rural and nonmetropolitan simultaneously in this policy brief. Rural hospitals were identified using the rural-urban commuting area (RUCA) codes of four or higher, which indicated that a hospital was located in a nonmetropolitan area.
2. CMS (2019). "Shared Savings Program." <https://www.cms.gov/Medicare/Medicare-Fee-for-Service-Payment/sharedsavingsprogram/index.html?redirect=/sharedsavingsprogram/>
3. Kopping N, Mueller KJ, and Ullrich F (2018) "Spread of Accountable Care Organizations in Rural America." Rural Policy Brief 2018-4. Iowa City, IA: RURPI Center for Rural Health Policy Analysis. August.
4. CMS (2018) "2018 Shared Savings Program Fast Facts." <https://www.cms.gov/Medicare/Medicare-Fee-for-Service-Payment/sharedsavingsprogram/Downloads/SSP-2018-Fast-Facts.pdf>
5. CMS (2019) "ACO Investment Model." <https://innovation.cms.gov/initiatives/ACO-Investment-Model/>
6. CMS (2019) "Shared Savings Program Participation Options." <https://www.cms.gov/Medicare/Medicare-Fee-for-Service-Payment/sharedsavingsprogram/Downloads/ssp-aco-participation-options.pdf>
7. This analysis was conducted using two-way frequency tables and chi-square tests.
8. This number reflects all hospitals participating in Medicare SSP ACOs in 2016. It is smaller than the number reported by CMS for hospital participating in 2018.
9. CMS (2019) "Advanced Alternative Payment Models." <https://qpp.cms.gov/apms/advanced-apms>
10. CMS (2020) "Program Statutes and Regulations" <https://www.cms.gov/Medicare/Medicare-Fee-for-Service-Payment/sharedsavingsprogram/program-statutes-and-regulations>. Accessed March 2, 2020.