

# RUPRI Center for Rural Health Policy Analysis

## *RUPRI Center Data Report*

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## Medicare Accountable Care Organization Growth in Rural America, 2014–2016

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### Purpose

This RUPRI Center data report describes accountable care organization (ACO) growth in non-metropolitan U.S. counties from 2014 to 2016. ACOs are the most-widespread of the Centers for Medicare & Medicaid Services (CMS) value-based payment programs and demonstrations.

### Key Findings

- The number of counties with five percent or more of Medicare fee-for-service beneficiaries attributed to a Shared Savings ACO increased in both metropolitan and non-metropolitan areas from 2014 to 2016. The growth rate in non-metropolitan counties (89.6 percent) was more than twice the rate in metropolitan counties (40.9 percent).
- The number of counties with at least one Shared Savings ACO with attributed Medicare beneficiaries increased in both metropolitan and non-metropolitan areas from 2014 to 2016. The growth rate in non-metropolitan counties (26.7 percent) was nearly three times the rate in metropolitan counties (9.4 percent).

### Background

CMS defines ACOs as “groups of doctors, hospitals, and other health care providers, who come together voluntarily to give coordinated high quality care to the Medicare patients they serve. . . . When an ACO succeeds in both delivering high-quality care and spending health care dollars more wisely, it will share in the savings it achieves for the Medicare program.”<sup>i</sup> ACOs are one of several value-based care models, including Episode-Based (bundled) Payment Initiatives and Primary Care Transformation models.<sup>ii</sup> ACOs are based on a fee-for-service platform and thus represent an iterative step toward greater emphasis on value-based care.

CMS administers the Medicare Shared Savings program (MSSP, a.k.a. the Medicare ACO program), and the CMS Innovation Center administers demonstrations that either build on the MSSP or test variations of the program. The ACO Investment Model (AIM), for example, assists small and rural providers with capital necessary for an ACO to participate in the MSSP, while the Next Generation ACO model is a smaller scale demonstration that includes higher



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levels of risk and reward to experienced ACO providers. Although CMS administers many value-based programs and demonstrations, the MSSP and ACO demonstrations are the most wide-spread, reaching every state. CMS has not been the only payer offering ACO options. At the end of the first quarter of 2017, Leavitt Partners, in partnership with the Accountable Care Learning Collaborative, cataloged 923 active public and private ACOs across the U.S., covering more than 32 million lives.<sup>[i]</sup>

Several ACO demonstration iterations have been released by CMS's Innovation Center, many modifying previous demonstrations, or building on the MSSP to be more inclusive of small and rural providers. As a result, ACOs have expanded broadly into rural areas, albeit with lower beneficiary attribution numbers than in urban areas.

## Data and Methods

We used CMS data on the number of Medicare beneficiaries attributed to Shared Savings ACOs in U.S. counties for 2014, 2015, and 2016.<sup>iii</sup> The county ACO count data were merged with Medicare enrollment data,<sup>iv</sup> which provided counts of Medicare fee-for-service beneficiaries. Enrollment data was only available for 2014 and 2015; therefore, enrollment for 2016 was extrapolated from the earlier years. For those counties with fewer than 11 ACO attributions, CMS censored the count data. In those counties, a conservative value of two attributions was used. Urban Influence Codes (UICs) were used to classify counties as metropolitan or non-metropolitan.<sup>v</sup> For this report, *metropolitan* counties include UICs 1 and 2, and *non-metropolitan* counties include UICs 3-12.

In this brief, *Number of ACOs with Attributed Medicare Beneficiaries* indicates the geographic presence of ACOs manifest by attributed beneficiary residence, and includes those counties with 0 to 4 or more ACOs with 11 or more attributed Medicare beneficiaries residing in the county. *Beneficiaries Attributed to an ACO per County* indicates the percentage of ACO-attributed beneficiaries (or number, if fewer than 11 ACO or fee-for-service beneficiaries residing in the county) compared to all Medicare fee-for-service beneficiaries in the county.

The data in this report describe the residence of ACO-attributed beneficiaries, not where the beneficiaries receive care. Those beneficiaries who receive most of their primary care outside their home county (e.g., they spend a portion of the year wintering in the south, or they travel some distance for primary care) may give the appearance that an ACO is active in a county where it actually has no providers.

## Results/Findings

From 2014-2016, nearly every U.S. county had at least one resident Medicare beneficiary attributed to an ACO. Metropolitan counties with 4 or more ACOs with attributed beneficiaries increased from 383 (32.8 percent) in 2014 to 625 (53.6 percent) in 2016. Non-metropolitan counties with 4 or more ACOs with attributed beneficiaries increased from 129 (6.5 percent) in 2014 to 423 (21.4 percent) in 2016.

Metropolitan counties with 30 percent or more of their eligible Medicare beneficiaries attributed to an ACO increased from 202 (17.3 percent) in 2014 to 360 (30.0 percent) in 2016. Non-metropolitan counties with 30 percent or more of their eligible Medicare beneficiaries attributed to an ACO increased from 179 (9.1 percent) in 2014 to 440 (22.3 percent) in 2016.

Table 1 and Figures 1 and 2 display the number (and percentage) of ACOs with attributed beneficiaries in U.S. counties, and the number (and percentage) of Medicare beneficiaries attributed to an ACO in U.S. counties. They show that the number of counties (both

metropolitan and non-metropolitan) without attributed beneficiaries consistently declined from 2014-2016; and that the number of counties with multiple ACOs with attributed beneficiaries consistently increased during the same period. Similarly, the number of counties (both metropolitan and non-metropolitan) with 30 percent or more of their Medicare beneficiaries attributed to an ACO has consistently increased from 2014-2016. This is very similar to the information provided in the “2018 Medicare Shared Saving Program Fast Facts” (<https://www.cms.gov/Medicare/Medicare-Fee-for-Service-Payment/sharedsavingsprogram/Downloads/SSP-2018-Fast-Facts.pdf>).

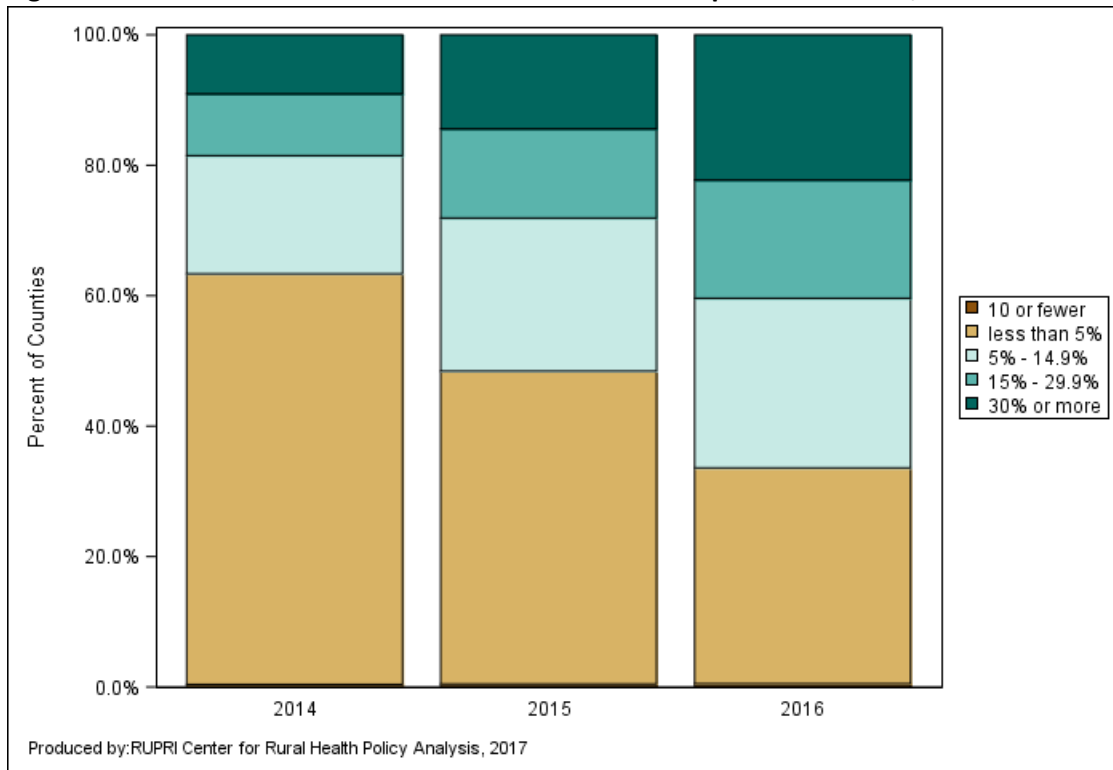
**Table 1: Metropolitan and Non-Metropolitan Counties, ACOs, and Medicare Beneficiaries Attributed to an ACO, 2014–2016**

	2014	2015	2016
Number of ACOs with Attributed Beneficiaries in Metropolitan Counties (n = 1,167)			
0 ACOs	139 / 11.9%	74 / 6.4%	42 / 3.6%
1 ACO	197 / 16.9%	137 / 11.7%	112 / 9.6%
2 ACOs	260 / 22.3%	223 / 19.1%	207 / 17.7%
3 ACOs	188 / 16.1%	184 / 15.8%	181 / 15.5%
4 or more ACOs	383 / 32.8%	549 / 47.0%	625 / 53.6%
Number of ACOs with Attributed Beneficiaries in Non-Metropolitan Counties (n = 1,976)			
0 ACOs	629 / 31.8%	427 / 21.6%	270 / 13.7%
1 ACO	585 / 29.6%	531 / 26.9%	449 / 22.7%
2 ACOs	420 / 21.3%	441 / 22.3%	472 / 23.9%
3 ACOs	213 / 10.8%	281 / 14.2%	362 / 18.3%
4 or more ACOs	129 / 6.5%	296 / 15.0%	423 / 21.4%
Beneficiaries Attributed to an ACO per County* in Metropolitan Counties (n = 1,167)			
10 or fewer	3 / 0.3%	3 / 0.3%	3 / 0.3%
less than 5%	443 / 38.0%	311 / 26.7%	266 / 22.8%
5%–14.9%	242 / 20.7%	218 / 18.7%	228 / 19.5%
15%–29.9%	277 / 23.7%	319 / 27.3%	310 / 26.6%
30% or more	202 / 17.3%	316 / 27.1%	360 / 30.0%
Beneficiaries Attributed to an ACO per County* in Non-Metropolitan Counties (n = 1,976)			
10 or fewer	8 / 0.4%	9 / 0.5%	10 / 0.5%
less than 5%	1,244 / 63.0%	948 / 48.0%	654 / 33.1%
5%–14.9%	358 / 18.1%	464 / 23.5%	514 / 26.0%
15%–29.9%	187 / 9.5%	270 / 13.7%	358 / 18.1%
30% or more	179 / 9.1%	285 / 14.4%	440 / 22.3%

\* Percentage of county Medicare fee-for-service beneficiaries attributed to an ACO.

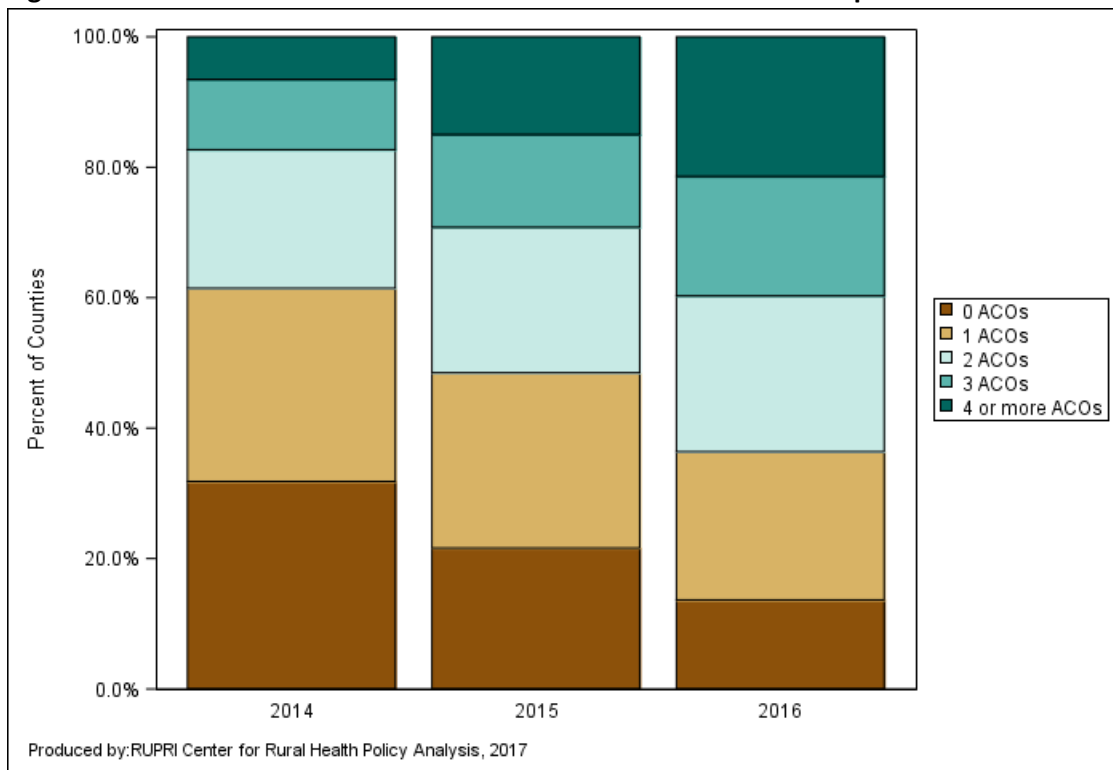
Data sources: ACO assigned beneficiaries: [https://www.cms.gov/Research-Statistics-Data-and-Systems/Downloadable-Public-Use-Files/SSPACO/SSP\\_Benchmark\\_Rebasing.html](https://www.cms.gov/Research-Statistics-Data-and-Systems/Downloadable-Public-Use-Files/SSPACO/SSP_Benchmark_Rebasing.html); Medicare enrollment: [https://www.cms.gov/Research-Statistics-Data-and-Systems/Statistics-Trends-and-Reports/Medicare-Geographic-Variation/GV\\_PUF.html](https://www.cms.gov/Research-Statistics-Data-and-Systems/Statistics-Trends-and-Reports/Medicare-Geographic-Variation/GV_PUF.html)

**Figure 1: Beneficiaries Attributed to an ACO in Non-Metropolitan Counties, 2014-2016**



Note: Less than 1.0 percent of counties had “10 or fewer” attributed beneficiaries in 2014, 2015, and 2016. Data sources: ACO assigned beneficiaries: [https://www.cms.gov/Research-Statistics-Data-and-Systems/Downloadable-Public-Use-Files/SSPACO/SSP\\_Benchmark\\_Rebasing.html](https://www.cms.gov/Research-Statistics-Data-and-Systems/Downloadable-Public-Use-Files/SSPACO/SSP_Benchmark_Rebasing.html); Medicare enrollment: [https://www.cms.gov/Research-Statistics-Data-and-Systems/Statistics-Trends-and-Reports/Medicare-Geographic-Variation/GV\\_PUF.html](https://www.cms.gov/Research-Statistics-Data-and-Systems/Statistics-Trends-and-Reports/Medicare-Geographic-Variation/GV_PUF.html)

**Figure 2: Number of ACOs with Attributed Beneficiaries in Non-Metropolitan Counties**



Data sources: ACO assigned beneficiaries: [https://www.cms.gov/Research-Statistics-Data-and-Systems/Downloadable-Public-Use-Files/SSPACO/SSP\\_Benchmark\\_Rebasing.html](https://www.cms.gov/Research-Statistics-Data-and-Systems/Downloadable-Public-Use-Files/SSPACO/SSP_Benchmark_Rebasing.html); Medicare enrollment: [https://www.cms.gov/Research-Statistics-Data-and-Systems/Statistics-Trends-and-Reports/Medicare-Geographic-Variation/GV\\_PUF.html](https://www.cms.gov/Research-Statistics-Data-and-Systems/Statistics-Trends-and-Reports/Medicare-Geographic-Variation/GV_PUF.html)

From 2014 to 2016, the non-metropolitan growth in the percentage of fee-for-service Medicare beneficiaries attributed to ACOs (89.6 percent) was over twice that of metropolitan growth (40.9 percent) (Table 2).

**Table 2: Growth in Percentage of Fee-for-Service Medicare Beneficiaries Attributed to ACOs in Metropolitan and Non-Metropolitan Counties, 2014–2016**

	2014	2015	2016	Chg 2014 to 2016
<b>Metropolitan Beneficiaries</b>				
FFS enrollment	26,520,613	26,568,391	26,616,169	
ACO attribution	4,580,208	6,182,130	6,478,000	
ACO percentage	17.3%	23.3%	24.3%	40.9%
<b>Non-Metropolitan Beneficiaries</b>				
FFS enrollment	7,382,160	7,393,056	7,403,812	
ACO attribution	740,627	1,083,400	1,408,018	
ACO percentage	10.0%	14.7%	19.0%	89.6%

Data sources: ACO assigned beneficiaries: [https://www.cms.gov/Research-Statistics-Data-and-Systems/Downloadable-Public-Use-Files/SSPACO/SSP\\_Benchmark\\_Rebasing.html](https://www.cms.gov/Research-Statistics-Data-and-Systems/Downloadable-Public-Use-Files/SSPACO/SSP_Benchmark_Rebasing.html); Medicare enrollment: [https://www.cms.gov/Research-Statistics-Data-and-Systems/Statistics-Trends-and-Reports/Medicare-Geographic-Variation/GV\\_PUF.html](https://www.cms.gov/Research-Statistics-Data-and-Systems/Statistics-Trends-and-Reports/Medicare-Geographic-Variation/GV_PUF.html)

Similarly, from 2014 to 2016, growth in non-metropolitan counties with Medicare beneficiaries attributed to an ACO was nearly three times greater (26.7 percent) than growth in metropolitan counties (9.4 percent) (Table 3).

**Table 3: Growth in Percentage of Metropolitan and Non-Metropolitan Counties with Medicare Beneficiaries Attributed to an ACO, 2014–2016**

	2014	2015	2016	Chg 2014 to 2016
<b>ACOs with Attributed Beneficiaries in Metropolitan Counties (n = 1,167)</b>				
0 ACOs	139 / 11.9%	74 / 6.4%	42 / 3.6%	
1 ACO	197 / 16.9%	137 / 11.7%	112 / 9.6%	
2 ACOs	260 / 22.3%	223 / 19.1%	207 / 17.7%	
3 ACOs	188 / 16.1%	184 / 15.8%	181 / 15.5%	
4 or more ACOs	383 / 32.8%	549 / 47.0%	625 / 53.6%	
<b>Metro Counties TOTAL 1+ ACO</b>	<b>1,028</b>	<b>1,093</b>	<b>1,125</b>	<b>9.4%</b>
<b>ACOs with Attributed Beneficiaries in Non-Metropolitan Counties (n = 1,976)</b>				
0 ACOs	629 / 31.8%	427 / 21.6%	270 / 13.7%	
1 ACO	585 / 29.6%	531 / 26.9%	449 / 22.7%	
2 ACOs	420 / 21.3%	441 / 22.3%	472 / 23.9%	
3 ACOs	213 / 10.8%	281 / 14.2%	362 / 18.3%	
4 or more ACOs	129 / 6.5%	296 / 15.0%	423 / 21.4%	
<b>Non-Metro Counties TOTAL 1+ ACO</b>	<b>1,347</b>	<b>1,549</b>	<b>1,706</b>	<b>26.7%</b>

Data sources: ACO assigned beneficiaries: [https://www.cms.gov/Research-Statistics-Data-and-Systems/Downloadable-Public-Use-Files/SSPACO/SSP\\_Benchmark\\_Rebasing.html](https://www.cms.gov/Research-Statistics-Data-and-Systems/Downloadable-Public-Use-Files/SSPACO/SSP_Benchmark_Rebasing.html); Medicare enrollment: [https://www.cms.gov/Research-Statistics-Data-and-Systems/Statistics-Trends-and-Reports/Medicare-Geographic-Variation/GV\\_PUF.html](https://www.cms.gov/Research-Statistics-Data-and-Systems/Statistics-Trends-and-Reports/Medicare-Geographic-Variation/GV_PUF.html)

In 2014, all metropolitan counties in 22 states (43.1 percent) included at least 1 ACO with 11 or more attributed Medicare beneficiaries. In 2016, that number had increased to 32 states (62.7 percent). In 2014, all non-metropolitan counties in 7 states (13.7 percent) included at least 1 ACO with 11 or more attributed Medicare beneficiaries. In 2016, that number had increased to 10 states (19.6 percent).

In 2014, all metropolitan counties in 8 states (15.7 percent) had a minimum of 5 percent of fee-for-service Medicare beneficiaries attributed to an ACO. In 2016, that number had increased to 11 states (21.6 percent). In 2014, all non-metropolitan counties in 3 states (5.9 percent) had a minimum of 5 percent of Medicare fee-for-service beneficiaries attributed to an ACO. In 2016, that number had increased to 5 states (9.8 percent).

Some states showed marked ACO growth in non-metropolitan counties between 2014 and 2016. For example, 3 states saw over 4-fold increases in the number of non-metropolitan counties with 1 or more ACOs present between 2014 and 2016: South Dakota (from 2 to 45 counties), North Dakota (from 9 to 43 counties), and West Virginia (from 8 to 33 counties). Additionally, the proportion of non-metropolitan counties in which ACO-attributed enrollees per county was 5 percent or more (of all Medicare fee-for-service beneficiaries in the county) increased dramatically in a number of states from 2014 to 2016, with nine states seeing over 4-fold increases: Alabama (5.3 percent of counties to 26.3 percent), Arkansas (from 16.4 percent to 69.1 percent), Colorado (from 10.6 percent to 55.3 percent), Kansas (from 10.5 percent to 47.7 percent), North Carolina (from 22.2 percent to 92.6 percent), North Dakota (from 17.0 percent to 76.6 percent), South Dakota (from 3.4 percent to 75.9 percent), Washington (from 11.1 percent to 50.0 percent), and West Virginia (from 11.8 percent to 64.7 percent).

For tables describing state-level ACO activity and national maps displaying county-level ACO activity, see [http://ruprihealth.org/publications/policybriefs/2018/ACO 2018 Maps and Tables.pdf](http://ruprihealth.org/publications/policybriefs/2018/ACO%202018%20Maps%20and%20Tables.pdf).

## **Conclusion**

Although non-metropolitan Medicare FFS beneficiaries accounted for only 21.8 percent of all Medicare FFS beneficiaries in 2016 and significant initial and current Medicare ACOs are metropolitan-based, there has been a marked increase in ACO-attributed enrollees who reside in non-metropolitan counties. Our finding illustrates how the reach of value-based innovation has expanded into rural areas and suggests that CMS Innovation Center efforts, such as the ACO Investment Model (AIM), may facilitate rural ACO participation. However, it is important to note that Medicare beneficiaries are attributed to the ACO where they receive a plurality of primary care, and therefore, the county of residence does not necessarily mean that the ACO provider is physically present in that county. For example, beneficiaries spending a portion of the year in a second residence (e.g., wintering in the south) may be attributed to an ACO based on primary care visits near their second home but appear in the data based on primary residence. Another example would be beneficiaries with a distant tertiary care hospitalization (with associated primary care visits) attributed to a distant ACO. Future RUPRI Center briefs will examine not only rural ACO beneficiary attribution, but also developing rural trends in ACO provider activity.

## References

<sup>i</sup> Centers for Medicare & Medicaid Services, Center for Medicare & Medicaid Innovation.

<https://innovation.cms.gov/initiatives/index.html#views=models>, accessed 1/5/2018.

<sup>ii</sup> Centers for Medicare & Medicaid Services, Center for Medicare & Medicaid Innovation.

<https://innovation.cms.gov/initiatives/index.html#views=models>, accessed 1/5/2018.

<sup>iii</sup> Health Affairs Blog.

<https://www.healthaffairs.org/action/showDoPubSecure?doi=10.1377%2Fhblog20170628.060719&format=full&>, accessed 1/5/2018.

<sup>iii</sup> Centers for Medicare & Medicaid Services. [https://www.cms.gov/Research-Statistics-Data-and-Systems/Downloadable-Public-Use-Files/SSPACO/SSP\\_Benchmark\\_Rebasing.html](https://www.cms.gov/Research-Statistics-Data-and-Systems/Downloadable-Public-Use-Files/SSPACO/SSP_Benchmark_Rebasing.html), accessed 12/28/2017.

<sup>iv</sup> Centers for Medicare & Medicaid Services. [https://www.cms.gov/Research-Statistics-Data-and-Systems/Statistics-Trends-and-Reports/Medicare-Geographic-Variation/GV\\_PUF.html](https://www.cms.gov/Research-Statistics-Data-and-Systems/Statistics-Trends-and-Reports/Medicare-Geographic-Variation/GV_PUF.html), accessed 12/28/2017.

<sup>v</sup> Economic Research Service. USDA. <https://www.ers.usda.gov/data-products/urban-influence-codes.aspx>, accessed 12/28/2017.