# ISSUE BRIEF

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# Competition Among Medicare's Private Health Plans: Does It Really Exist?

Brian Biles, Giselle Casillas, and Stuart Guterman

**Abstract** Competition among private Medicare Advantage (MA) plans is seen by some as leading to lower premiums and expanded benefits. But how much competition exists in MA markets? Using a standard measure of market competition, our analysis finds that 97 percent of markets in U.S. counties are highly concentrated and therefore lacking in significant MA plan competition. Competition is considerably lower in rural counties than in urban ones. Even among the 100 counties with the greatest numbers of Medicare beneficiaries, 81 percent do not have competitive MA markets. Market power is concentrated among three nationwide insurance organizations in nearly two-thirds of those 100 counties.

#### INTRODUCTION

Fostering competition among private insurance plans offering Medicare coverage is seen by some as having the potential to control program spending and provide beneficiaries with coverage that is more responsive to their needs. Advocates of converting Medicare into a "premium support" program, in which beneficiaries would receive a fixed amount to buy coverage from either a private Medicare plan or traditional Medicare, say such a move would introduce even more competition, leading to even lower costs for Medicare.

But with consolidation among private payers raising concerns about dwindling competition in many regional markets, how much can plan competition be relied on to hold down Medicare prices and increase quality of services?<sup>3</sup> In this brief, we examine the degree of competition among private Medicare plans at the county level to assess the potential for competitive forces to foster greater efficiency within those plans.

#### PRIVATE PLANS' EVOLVING ROLE IN MEDICARE

Since the 1970s, beneficiaries have had the option of obtaining their Medicare benefits through private health insurance plans (at first, only health maintenance organizations, or HMOs, were included). Allowing private insurers to participate in Medicare was intended to further two goals: 1) expanding beneficiaries' choices to include plans that can offer more-coordinated care and more-comprehensive benefits than those provided through traditional Medicare; and 2) taking advantage of the presumed efficiencies of those plans.<sup>4</sup>

Under the Balanced Budget Act of 1997 and then the Medicare Modernization Act of 2003, beneficiaries' choices have been expanded to include additional types of private plans, in what is now called Medicare Advantage (MA).<sup>5</sup> Beginning in 2006, payments to each MA plan have been set according to the bid that a plan submits. The bids represent the average cost to the plan of providing traditional Medicare benefits to a typical enrollee in the counties it serves. The plan's bid is compared with a benchmark rate (based on per capita spending by traditional Medicare in each county), and its payment is set equal to its bid plus a rebate amount based on the difference between its bid and the benchmark rate.<sup>6</sup>

As noted above, there has been interest in expanding the role of MA plans and promoting competition among these plans and traditional Medicare, on the premise that increased competition will hold down program spending.<sup>7</sup>

## DETERMINING COMPETITION IN MEDICARE ADVANTAGE MARKETS

Generally, greater competition is seen as beneficial to consumers and purchasers, in terms of controlling costs and promoting quality. This has been found to be true in health care markets as well. For this reason, the trend toward greater consolidation of market power among both providers and payers has raised concerns. In particular, recent or anticipated mergers and acquisitions among insurance companies that have large shares of Medicare business have raised concerns about how these moves might affect the MA market.

To provide an indication of the extent to which competition exists in MA markets, we used the most recently available Medicare data on MA plan enrollment in each county to calculate an index of market concentration, a useful indicator of the degree of competition that exists. A standard measure of market concentration is the Herfindahl-Hirschman Index (HHI), which is what we use for our study. The U.S. Department of Justice Antitrust Division and the Federal Trade Commission, the agencies primarily responsible for administration of federal antitrust laws, generally classify markets into three categories:

- nonconcentrated markets: HHI below 1,500;
- moderately concentrated: HHI between 1,500 and 2,500; and
- highly concentrated: HHI above 2,500.

These agencies use the HHI, and the change in HHI, as a basis for evaluating the potential antitrust implications of market acquisitions and mergers across many industries, including health care. The HHI is also commonly used to portray the degree of market concentration and competition in market areas within an industry. <sup>12</sup>

The HHI is calculated by summing the squares of the market shares of individual firms. Here are two hypothetical examples:

- Region A has five firms, with market shares of 40 percent, 30 percent, 20 percent, 5 percent, and 5 percent. The HHI would therefore be: 1,600 + 900 + 400 + 25 + 25 = 2,950. Market A would be described as *highly concentrated*, or less competitive.
- Region B has 10 firms, each with equal market shares of 10 percent. The HHI would be:  $10 \times 100 = 1,000$ . Market B would be described as *nonconcentrated*, or more competitive.

In general, a market with a high degree of concentration—dominated by a small number of firms with large market shares—is less likely to exhibit the positive effects of competition. A market that is not highly concentrated is more likely to be competitive.

For this study, we obtained data on March 2012 MA plan enrollment and payment from the Centers for Medicare and Medicaid Services (CMS), which administers both traditional Medicare and Medicare Advantage, to determine market concentration in the more than 2,900 counties in the U.S. with 10 or more Medicare beneficiaries enrolled in a MA plan. We then performed more detailed analysis for the 100 urban counties with the largest numbers of MA enrollees; together, these counties accounted for 47 percent of MA enrollees and 38 percent of beneficiaries nationwide. (See "How This Study Was Conducted" for further details.)

#### **FINDINGS**

Our analysis of Medicare Advantage plan market shares for 2012 indicates there is little competition anywhere in the nation.

## MA Plan Markets Are Highly Concentrated Across the U.S.

We find that 2,852 (97%) of the 2,933 counties studied meet the criterion for highly concentrated markets (Exhibit 1). These counties have 77 percent of total MA enrollment and serve 84 percent of all Medicare beneficiaries nationwide. Eighty counties, representing 22 percent of MA enrollees and 15 percent of Medicare beneficiaries, meet the criterion for moderately concentrated markets. Only one county in the nation (Riverside, Calif.), with an HHI of 1,486, meets the criterion for a nonconcentrated market—though just barely.

MA plan markets are highly concentrated in both urban and rural counties across the nation. In urban counties, the average HHI score is well above the criterion for highly concentrated markets, at 3,712, while in rural counties, the average HHI score of 5,245 indicates even more highly concentrated MA plan markets (Exhibit 2).

Exhibit 1. Level of Market Concentration Among Medicare Advantage Plans in U.S. Counties, 2012

Level of market concentration	Number of counties	Percent of all counties nationwide	Percent of MA plan enrollees	Percent of Medicare beneficiaries
Nonconcentrated (HHI < 1,500)	1	-	1	1
Moderately concentrated (HHI = 1,500-2,500)	80	3	22	15
Highly concentrated (HHI > 2,500)	2,852	97	77	84

Source: Authors' analysis of Medicare Advantage and Medicare data for 2012.

Exhibit 2. Average Level of Market Concentration Among Medicare Advantage Plans in Urban vs. Rural Counties, 2012

	MA plan enrollees	Percent of MA plan enrollees	Percent of Medicare beneficiaries	Average HHI
National	8,829,576	100	100	3,783
Urban	8,422,171	95	92	3,712
Rural	407,405	5	8	5,245

Source: Authors' analysis of Medicare Advantage and Medicare data for 2012.

# The Pattern Holds in the 100 Largest Counties

To further illustrate the level of competition in MA plan markets, we examined the pattern of MA plan enrollment in the 100 U.S. counties with the largest number of Medicare beneficiaries (Exhibit 3). Although this group represents only 3 percent of counties in the nation, it includes 47 percent of all MA plan enrollees and 38 percent of all Medicare beneficiaries nationwide.

Exhibit 3. Level of Medicare Advantage Market Concentration in the 100 U.S. Counties with the Largest Numbers of Medicare Beneficiaries, 2012

Level of market concentration	Number of counties	MA plan enrollees	Percent of MA plan enrollees	Medicare beneficiaries	Percent of Medicare beneficiaries
Total	100	4,141,776	100	18,343,640	100
Nonconcentrated (HHI < 1,500)	1	103,836	2	285,633	2
Moderately concentrated (HHI = 1,500-2,500)	18	1,394,811	34	5,215,275	28
Highly concentrated (HHI > 2,500)	81	2,643,129	64	12,842,732	70

Source: Authors' analysis of Medicare Advantage and Medicare data for 2012.

While the 100 largest counties tend to have a larger number of MA plans, 81 of these 100 counties have HHI scores that indicate a highly concentrated market and low level of competition. Eighteen of the 100 counties have moderately concentrated markets. There is only one nonconcentrated market (Riverside, Calif.) among the 100.

It is notable that while the 100 counties with the largest numbers of Medicare beneficiaries are not geographically concentrated, just six major insurers dominate in terms of number of beneficiaries enrolled. Across these counties, UnitedHealth is the dominant firm, with the largest number of MA plan enrollees in 38 counties; Blue Cross affiliates, including WellPoint, have the largest MA enrollment in 13 counties; and Humana has the largest enrollment in 12 (Exhibit 4).

Exhibit 4. Dominant Firms in the 100 Counties with the Largest Numbers of Medicare Beneficiaries, 2012

Firm	Number of counties
UnitedHealth Group	38
Blue Cross affiliated	13
Humana	12
Kaiser Foundation Health Plan	9
CIGNA	5
Tufts Health Plan	5
Other firms	18

Source: Authors' analysis of Medicare Advantage and Medicare data for 2012.

#### DISCUSSION

These findings should not be surprising. They are fully consistent with results of an analysis of employer and individual health insurance markets previously reported by the American Medical Association (AMA) and the Government Accountability Office (GAO). The AMA, in calculating HHI scores for private health insurers within metropolitan statistical areas, found that 72 percent of those markets are considered highly concentrated. The GAO, which assessed concentration of private health insurers at the state level for the individual, small-group, and large-group insurance market segments, reported that, in most states, enrollment was concentrated among the three largest insures. Within each of the three market segments, the three largest insurers had 80 percent or more of the total enrollment in at least 37 states. The states of the surprising the surprising should be an analysis of employer and individual analysis of employer analysis of emp

These data reflect the challenge of relying on the beneficial effects of competition among health insurers to produce the low costs and high quality generally expected from competitive markets. Although increased market power among health insurers may lead to lower prices from health care providers, it is not clear that it results in lower premiums for consumers and purchasers.<sup>15</sup>

The results of this analysis indicate that careful thought must be given to proposals that would rely on competition among plans to reduce cost growth and improve quality. Under a premium-support system, for example, local payment amounts would be heavily influenced by the bids submitted by a small number of health insurance firms in each local market; many of these firms have substantial market power nationwide, as well.

The benefits of competition can be relied on only in markets where the elements of competition exist. It is not clear that merely expanding the role of private plans would improve Medicare's ability to serve its beneficiaries, either in terms of the quality or cost of care.

## HOW THIS STUDY WAS CONDUCTED

Using March 2012 Medicare Advantage (MA) plan enrollment and payment data provided by the Centers for Medicare and Medicaid Services (CMS), we examined market concentration in all U.S. counties with 10 or more Medicare beneficiaries enrolled in an MA plan. We calculated the total payments from Medicare to each MA firm in each county for that month and then divided the total Medicare revenues paid to each firm by the total MA payments in the county. That amount was squared to determine the Herfindahl-Hirschman Index (HHI) score for each firm in each county. We then added the HHI scores for all MA firms in each county to determine the county HHI score for all of the 2,933 counties in our data set. 17

We separated the counties into three groups: counties with HHI scores of less of than 1,500 (nonconcentrated markets, which are considered more competitive); counties with HHI scores between 1,500 and 2,500 (moderately concentrated markets, which are considered moderately competitive); and counties with HHI scores of more than 2,500 (highly concentrated markets, which are considered less competitive).

More detailed analysis was performed for the 100 urban counties with the largest numbers of MA enrollees. These counties had a combined total of 47 percent of MA enrollees and 38 percent of beneficiaries nationwide.

#### NOTES

- <sup>1</sup> S. D. Pizer and A. B. Frakt, "Payment Policy and Competition in the Medicare+Choice Program," *Health Care Financing Review*, Fall 2002 24(1):83–94.
- Congressional Budget Office, Designing a Premium Support System for Medicare (Washington, D.C.: CBO, Dec. 2006), https://www.cbo.gov/sites/default/files/109th-congress-2005-2006/reports/12-08-medicare.pdf.
- <sup>3</sup> A. Wilde Mathews and C. Weaver, "Health Mergers Could Cut Consumer Options," *Wall Street Journal*, June 21, 2015, http://www.wsj.com/articles/health-mergers-could-cut-consumer-options-1434937235.
- <sup>4</sup> T. G. McGuire, J. P. Newhouse, and A. D. Sinaiko, "An Economic History of Medicare Part C," *The Milbank Quarterly*, June 2011 89(2):289–332.
- B. Biles, G. Casillas, and S. Guterman, "Variations in County-Level Costs Between Traditional Medicare and Medicare Advantage Have Implications for Premium Support," *Health Affairs*, Jan. 2015 34(1):56–63.
- <sup>6</sup> B. Biles, G. Casillas, G. Arnold et al., *The Impact of Health Reform on the Medicare Advantage Program: Realigning Payment with Performance* (New York: The Commonwealth Fund, Oct. 2012).
- A. Rivlin and W. Daniel, *Could Improving Choice and Competition in Medicare Advantage Be the Future of Medicare?* (Washington, D.C.: The Brookings Institution, June 2015), http://www.brookings.edu/~/media/Research/Files/Papers/2015/06/04-medicare-2030-paper-series/060315RivlinDanielMedicareAdvantage.pdf?la=en.
- M. Gaynor and R. J. Town, *Competition in Health Care Markets* (Washington, D.C.: National Bureau of Economic Research, July 2011), http://www.nber.org/papers/w17208.
- R. A. Berenson, P. B. Ginsburg, and N. Kemper, "Unchecked Provider Clout in California Foreshadows Challenges to Health Reform," *Health Affairs*, April 2010 29(4):699–705; and Panel on Pricing Power in Health Care Markets, "Addressing Pricing Power in Health Care Markets: Principles and Policy Options to Strengthen and Shape Markets" (Washington, D.C.: National Academy of Social Insurance, April 2015), https://www.nasi.org/sites/default/files/research/Addressing\_Pricing\_Power\_in\_Health\_Care\_Markets.pdf.
- D. Altman, "Amid Merger Talk, a Look at Health Insurers' Medicare Business," Washington Wire, July 1, 2015, http://blogs.wsj.com/washwire/2015/07/01/amid-merger-talk-a-look-at-health-insurers-medicare-business/.
- <sup>11</sup> U.S. Department of Justice and Federal Trade Commission, "Horizontal Merger Guidelines," Aug. 2012, http://www.justice.gov/atr/public/guidelines/hmg-2010.html.
- U.S. Government Accountability Office, "Private Health Insurance: Concentration of Enrollees Among Individual, Small Group and Large Group Insurers from 2010 through 2013," Dec. 2014, http://www.gao.gov/products/GAO-15-101R.
- American Medical Association, "Competition in Health Insurance: A Comprehensive Study of U.S. Markets, 2014 Update," 2014, https://commerce.ama-assn.org/store/catalog/productDetail.jsp?product\_id=prod2560005&navAction=push.
- <sup>14</sup> U.S. Government Accountability Office, "Private Health Insurance," 2014.
- G. A. Melnick, Y.-C. Shen, and V. Yaling Wu, "The Increased Concentration of Health Plan Markets Can Benefit Consumers Through Lower Hospital Prices," *Health Affairs*, Sept. 2011 30(9):1728–33; and L. Dafny, M. Duggan, and S. Ramanarayanan, "Paying a Premium on Your Premium? Consolidation in the U.S. Health Insurance Industry," *American Economic Review*, April 2012 102(2):1161–85.
- <sup>16</sup> Firms may offer more than one plan in any county.
- <sup>17</sup> Our analysis excluded counties in which there were fewer than 10 MA enrollees.

# Appendix Tables

# Appendix Table 1. 100 Counties with the Largest Number of Medicare Beneficiaries

	<b>5</b>	MA	County		Market share of the three largest firms in
County	State	enrollment	HHI	Largest firm in county	county
Los Angeles	CA	313,292	1,835	Kaiser Foundation Health Plan	63%
Miami-Dade	FL	159,555	1,802	Humana	69%
Maricopa	AZ	150,223	1,952	UnitedHealth	66%
Orange	CA	124,588	1,672	UnitedHealth	62%
San Diego	CA	123,404	2,969	UnitedHealth	83%
Riverside	CA	103,836	1,486	UnitedHealth	58%
Broward	FL	102,023	3,009	Humana	80%
Allegheny	PA	96,538	4,371	Highmark	97%
Harris	TX	95,938	1,777	Universal American Corp.	69%
Clark	NV	82,296	3,976	UnitedHealth	96%
Queens	NY	79,060	2,086	UnitedHealth	72%
Palm Beach	FL	77,530	3,607	Humana	92%
San Bernardino	CA	77,259	1,635	UnitedHealth	59%
Erie	NY	70,682	3,949	Independent Health Association	95%
Pinellas	FL	67,303	3,024	UnitedHealth	81%
Kings	NY	66,615	1,637	UnitedHealth	62%
Bexar	TX	62,194	3,662	UnitedHealth	92%
Philadelphia	PA	61,063	3,734	CIGNA	98%
King	WA	60,110	2,214	UnitedHealth	75%
Cook	IL	58,599	3,265	Humana	84%
Tarrant	TX	55,692	5,856	UnitedHealth	90%
Hillsborough	FL	54,175	2,973	Humana	83%
Dallas	TX	48,602	4,411	UnitedHealth	85%
Pima	ΑZ	47,748	3,806	UnitedHealth	90%
Santa Clara	CA	46,657	4,855	Kaiser Foundation Health Plan	87%
St. Louis	МО	43,988	2,767	Essence Holdings Corporation	92%
Cuyahoga	ОН	42,815	4,546	WellPoint	93%
Volusia	FL	41,848	3,466	Humana	95%
New York	NY	40,421	2,145	UnitedHealth	<b>74</b> %
Alameda	CA	40,254	6,071	Kaiser Foundation Health Plan	98%
Pasco	FL	40,100	2,670	Humana	81%
Sacramento	CA	40,091	3,819	Kaiser Foundation Health Plan	99%
Honolulu	HI	37,886	2,968	Hawaii Medical Service Association	83%
Suffolk	NY	37,781	6,437	WellPoint	98%
Bronx	NY	37,656	1,877	Healthfirst	65%

		MA	County		Market share of the three largest firms in
County	State	enrollment	HHI	Largest firm in county	county
Nassau	NY	36,904	4,203	WellPoint	93%
Monroe	NY	36,810	3,963	MVP Health Care	94%
Multnomah	OR	36,639	1,894	Providence Health & Services	66%
Middlesex	MA	35,707	5,500	TAHMO	96%
Salt Lake	UT	35,668	3,410	UnitedHealth	93%
Contra Costa	CA	35,157	5,161	Kaiser Foundation Health Plan	93%
Orange	FL	33,745	2,190	Humana	78%
Polk	FL	33,634	2,554	UnitedHealth	75%
Brevard	FL	33,579	4,331	Health First	84%
Jefferson	AL	33,550	2,642	UAB Health System	83%
Providence	RI	33,464	4,988	Blue Cross & Blue Shield of Rhode Island	100%
Snohomish	WA	33,434	2,162	UnitedHealth	<b>69</b> %
Franklin	ОН	33,152	2,599	Trinity Health	<b>79</b> %
Bernalillo	NM	33,116	4,098	Presbyterian Healthcare Services	97%
Wayne	MI	31,957	3,709	Health Alliance Plan (HAP)	96%
Montgomery	ОН	31,267	4,244	UnitedHealth	97%
Hamilton	ОН	31,003	3,512	UnitedHealth	97%
Worcester	MA	30,946	4,137	Fallon Community Health Plan	96%
New Haven	CT	30,129	3,657	UnitedHealth	94%
Lee	FL	29,820	4,314	UnitedHealth	90%
Hartford	CT	28,533	3,730	UnitedHealth	93%
Montgomery	PA	28,192	3,903	Independence Blue Cross	95%
Jackson	MO	27,995	3,805	Humana	99%
Hennepin	MN	27,307	5,820	UCare Minnesota	100%
Bucks	PA	26,957	4,944	Independence Blue Cross	93%
Milwaukee	WI	26,476	5,218	UnitedHealth	99%
El Paso	TX	26,128	2,741	UnitedHealth	83%
Summit	ОН	25,964	3,389	Summa Health System	91%
Ventura	CA	24,084	2,811	Kaiser Foundation Health Plan	83%
Oakland	MI	23,861	4,048	Blue Cross Blue Shield of Michigan	95%
Pierce	WA	23,860	2,209	UnitedHealth	68%
San Francisco	CA	23,464	2,774	Kaiser Foundation Health Plan	83%
Westchester	NY	23,462	3,910	WellPoint	89%
Kern	CA	23,078	2,385	Golden Empire Managed Care	73%
Duval	FL	22,704	2,604	Humana	83%
Marion	IN	22,627	1,997	WellPoint	64%
Fairfield	СТ	22,626	4,065	UnitedHealth	93%
Marion	FL	22,156	2,633	Preferred Care Partners Holding Corp	<b>74</b> %
San Mateo	CA	21,373	5,293	Kaiser Foundation Health Plan	94%
Fresno	CA	21,066	2,910	Kaiser Foundation Health Plan	86%

County	State	MA enrollment	County HHI	Largest firm in county	Market share of the three largest firms in county
Oklahoma	OK	19,893	5.606	UnitedHealth	97%
Delaware	PA	18.083	3.561	Independence Blue Cross	95%
Jefferson	KY	17,587	5,081	WellPoint	100%
Ocean	NJ	17,379	3,678	UnitedHealth	100%
Mecklenburg	NC	17,158	3,067	UnitedHealth	92%
Macomb	MI	16,772	4,021	Blue Cross Blue Shield of Michigan	98%
Fulton	GA	16,711	2,076	UnitedHealth	72%
Bergen	NJ	15,711	4,326	UnitedHealth	98%
Wake	NC	15,029	2,506	UnitedHealth	83%
Shelby	TN	14,651	2,569	CIGNA	<b>79</b> %
Sarasota	FL	14,594	2,870	UnitedHealth	80%
Norfolk	MA	13,734	5,669	Tufts	98%
Essex	NJ	13,580	3,619	UnitedHealth	87%
Middlesex	NJ	12,418	3,710	UnitedHealth	95%
Essex	MA	11,809	5,201	Tufts	100%
Bristol	MA	10,036	4,216	Tufts	100%
Monmouth	NJ	9,871	3,792	UnitedHealth	99%
Travis	TX	8,972	4,032	UnitedHealth	100%
Baltimore City	MD	6,451	6,466	CIGNA	100%
Suffolk	MA	6,223	3,997	Tufts	100%
Baltimore	MD	5,734	4,327	CIGNA	98%
DuPage	IL	3,947	7,319	Humana	100%
Fairfax	VA	2,469	6,315	Humana	98%
Prince George's	MD	2,151	4,144	CIGNA	98%
Montgomery	MD	1,397	4,075	Aetna	97%

Appendix Table 2. 81 of 100 Counties with Largest Number of Medicare Beneficiaries, with Average HHI > 2,500

County	State	MA enrollment	County HHI	Largest firm in county	Market share of the largest firm in county
San Diego	CA	123,404	2,969	UnitedHealth Group	45%
Broward	FL	102,023	3,009	Humana	56%
Allegheny	PA	96,538	4,371	Highmark	58%
Clark	NV	82,296	3,976	UnitedHealth Group	52%
Palm Beach	FL	77,530	3,607	Humana	60%
Erie	NY	70,682	3,949	Independent Health Association	54%
Pinellas	FL	67,303		UnitedHealth Group	39%
Pinellas Bexar	TX	62,194	3,024 3,662	UnitedHealth Group	57%
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Philadelphia Cook	PA IL	61,063 58 599	3,734 3,265	CIGNA Humana	46% 50%
	TX	58,599	3,265		
Tarrant		55,692 54,175	5,856 2,073	UnitedHealth Group	77%
Hillsborough	FL	54,175	2,973	Humana	44%
Dallas Di	TX	48,602	4,411	UnitedHealth Group	65%
Pima	AZ	47,748	3,806	UnitedHealth Group	55%
Santa Clara	CA	46,657	4,855	Kaiser Foundation Health Plan	66%
St. Louis	МО	43,988	2,767	Essence Group Holdings Corporation	36%
Cuyahoga	OH	42,815	4,546	WellPoint	63%
Volusia	FL	41,848	3,466	Humana	55%
Alameda -	CA	40,254	6,071	Kaiser Foundation Health Plan	74%
Pasco	FL	40,100	2,670	Humana	45%
Sacramento	CA	40,091	3,819	Kaiser Foundation Health Plan	49%
Honolulu	HI	37,886	2,968	Hawaii Medical Service Association	<b>47</b> %
Suffolk	NY	37,781	6,437	WellPoint	78%
Nassau	NY	36,904	4,203	WellPoint	52%
Monroe	NY	36,810	3,963	MVP Health Care	53%
Middlesex	MA	35,707	5,500	Tufts	<b>74</b> %
Salt Lake	UT	35,668	3,410	UnitedHealth Group	48%
Contra Costa	CA	35,157	5,161	Kaiser Foundation Health Plan	68%
Polk	FL	33,634	2,554	UnitedHealth Group	38%
Brevard	FL	33,579	4,331	Health First	66%
Jefferson	AL	33,550	2,642	UAB Health System	39%
Providence	RI	33,464	4,988	Blue Cross & Blue Shield of Rhode Island	50%
Franklin	ОН	33,152	2,599	Trinity Health	41%
Bernalillo	NM	33,116	4,098	Presbyterian Healthcare Services	46%
Wayne	MI	31,957	3,709	Health Alliance Plan (HAP)	42%
Montgomery	ОН	31,267	4,244	UnitedHealth Group	46%
Hamilton	ОН	31,003	3,512	UnitedHealth Group	45%
Worcester	MA	30,946	4,137	Fallon Community Health Plan	62%
New Haven	СТ	30,129	3,657	UnitedHealth Group	52%
Lee	FL	29,820	4,314	UnitedHealth Group	62%

County	State	MA enrollment	County HHI	Largest firm in county	Market share of the largest firm in county
Hartford	СТ	28,533	3,730	UnitedHealth Group	43%
Montgomery	PA	28,192	3,903	Independence Blue Cross	56%
Jackson	MO	27,995	3,805	Humana	45%
Hennepin	MN	27,307	5,820	UCare Minnesota	75%
Bucks	PA	26,957	4,944	Independence Blue Cross	67%
Milwaukee	WI	26,476	5,218	UnitedHealth Group	67%
El Paso	TX	26,128	2,741	UnitedHealth Group	41%
Summit	OH	25,964	3,389	Summa Health System	49%
Ventura	CA	23,964	2,811	Kaiser Foundation Health Plan	49%
Oakland San Francisco	MI	23,861	4,048	Blue Cross Blue Shield of Michigan	56%
San Francisco	CA	23,464	2,774	Kaiser Foundation Health Plan	42%
Westchester	NY	23,462	3,910	WellPoint	57%
Duval	FL	22,704	2,604	Humana	36%
Fairfield	CT	22,626	4,065	UnitedHealth Group	60%
Marion	FL	22,156	2,633	Preferred Care Partners Holding Corp	44%
San Mateo -	CA	21,373	5,293	Kaiser Foundation Health Plan	68%
Fresno	CA	21,066	2,910	Kaiser Foundation Health Plan	45%
Oklahoma - ·	OK	19,893	5,606	UnitedHealth Group	72%
Delaware	PA	18,083	3,561	Independence Blue Cross	52%
Jefferson	KY	17,587	5,081	WellPoint	58%
Ocean	NJ	17,379	3,678	UnitedHealth Group	44%
Mecklenburg	NC	17,158	3,067	UnitedHealth Group	41%
Macomb	MI	16,772	4,021	Blue Cross Blue Shield of Michigan	51%
Bergen	NJ	15,711	4,326	UnitedHealth Group	57%
Wake	NC	15,029	2,506	UnitedHealth Group	36%
Shelby	TN	14,651	2,569	CIGNA	37%
Sarasota	FL	14,594	2,870	UnitedHealth Group	46%
Norfolk	MA	13,734	5,669	TAHMO	<b>74</b> %
Essex	NJ	13,580	3,619	UnitedHealth Group	53%
Middlesex	NJ	12,418	3,710	UnitedHealth Group	48%
Essex	MA	11,809	5,201	Tufts	69%
Bristol	MA	10,036	4,216	Tufts	59%
Monmouth	NJ	9,871	3,792	UnitedHealth Group	46%
Travis	TX	8,972	4,032	UnitedHealth Group	48%
Baltimore City	MD	6,451	6,466	CIGNA	78%
Suffolk	MA	6,223	3,997	Tufts	48%
Baltimore	MD	5,734	4,327	CIGNA	50%
DuPage	IL	3,947	7,319	Humana	85%
Fairfax	VA	2,469	6,315	Humana	<b>79</b> %
Prince George's	MD	2,151	4,144	CIGNA	55%
Montgomery	MD	1,397	4,075	Aetna	53%

# Appendix Table 3. HHI for Rural Counties by State

State	MA enrollment for rural counties in state	Average rural county HHI	Largest firm in rural counties in state	HHI of largest firm in rural counties in state	Market share of the three largest firms in rural counties in state
AL	9,625	5,266	Humana, Inc.	5,381	98%
AR	13,407	4,265	Humana, Inc.	4,362	87%
AZ	3,004	5,698	UnitedHealth Group, Inc.	4,302 5,793	95%
CA	3,322	7,311	UnitedHealth Group, Inc.	7,757	100%
CO	2,276	9,173	Humana, Inc.	9,337	100%
CO FL	9,137	4,517	UnitedHealth Group, Inc.	4,565	98%
GA	14,117	4,317	Humana, Inc.	4,713	98% 92%
IA	12,524	4,902	Humana, Inc.	5,109	93%
ID	7,620	5,951	Blue Cross of Idaho Health Services, Inc.	6,015	83%
IL	4,570	6,477	Humana, Inc.	7,483	87%
IN	9,216	4,926	WellPoint, Inc.	5,131	95%
KS	2,049	7,063	Humana, Inc.	7,598	100%
KY	19,132	4,914	WellPoint, Inc.	7,398 5,110	98%
LA	5,323	4,824	Humana, Inc.	4,940	83%
MA	5,525 14	10,000	UnitedHealth Group, Inc.	10,000	100%
	330		•		100%
MD ME	7,261	7,027 7,797	Universal Health Care Group, Inc.  Martin's Point Health Care, Inc.	8,209 8,028	97%
ME					96%
	14,860	4,712	Blue Cross Blue Shield of Michigan	4,892	
MN	17,321	4,316	UCare Minnesota	4,553	100%
MO	18,694	4,710	Humana, Inc.	5,654	93%
MS	7,929	5,654	Humana, Inc.	6,148	88%
MT	8,024	5,774	New West Health Services	7,439	84%
NC	16,060	4,078	Humana, Inc.	4,268	80%
ND	1,087	8,474	Humana, Inc.	8,857	100% 91%
NE	3,572	8,305	UnitedHealth Group, Inc.	8,401	100%
NH	257	10,000	Arcadian Management Services Inc.	10,000	
NM	2,727	6,035	Humana, Inc.	6,018	98%
NV	2,441	7,465	UnitedHealth Group, Inc.	7,555	99%
NY	17,256	2,904	UnitedHealth Group, Inc.	3,051	52%
OH	8,989	5,357	WellPoint, Inc.	5,546	97%
OK	6,685	5,035	Humana, Inc.	5,669	88%
OR	4,430	7,602	Cambia Health Solutions, Inc.	7,728	96%
PA	16,735	4,437	Highmark, Inc.	4,678	78%
SC	3,613	4,600	Humana, Inc.	4,734	94%
SD	1,822	7,729	Humana, Inc.	8,139	97%
TN	18,069	5,241	Humana, Inc.	5,625	83%
TX	18,643	5,323	Humana, Inc.	5,826	81%
UT	3,592	9,892	Humana, Inc.	9,994	100%
VA	27,035	5,638	Humana, Inc.	6,275	93%
VT	1,937	9,136	UnitedHealth Group, Inc.	9,159	100%
WA	4,988	6,783	Community Health Plan of Washington	6,910	81%
WI	49,628	5,456	Marshfield Clinic.	6,220	71%
WV	7,620	5,877	Humana, Inc.	6,122	99%
WY	464	8,183	UnitedHealth Group, Inc.	8,105	100%

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