

# Impact of Changing Medicare Advantage Landscape on Rural Enrollees

# Lisa Pollack<sup>1</sup>, Leah Kemper<sup>1</sup>, Timothy D. McBride<sup>1</sup>, and Keith Mueller<sup>2</sup> <sup>1</sup>Washington University in St. Louis and <sup>2</sup>University of Iowa

#### Introduction

In the 1970s, Congress created the precursor to the Medicare Advantage (MA) program, in hopes that offering private plans as an option would increase competition and drive down Medicare spending. However, what actually happened is that, on average, Medicare pays private plans far more for beneficiaries than it would if the beneficiary were covered under the traditional fee-for-service program, leading to excess expenditures and inequities without improving quality. On average, Medicare payments to private health plans exceed local fee-for-service costs by 9-13% (MedPAC, 2011).

# Purpose

This study analyzes the market and beneficiary characteristics associated with enrollment in MA in urban and rural areas. A key question is the association between MA enrollment and the ratio of Medicare benchmark payment rates for MA plans, relative to Medicare FFS average per capita cost in each county (while controlling for other factors). In counties where payments are higher relative to costs, it is hypothesized that plans then have more incentive to enter a county (and stay) and to offer more generous plans to beneficiaries, attracting a greater number of enrollees.

#### **Data and Methods**

The data for this analysis was obtained from the Centers for Medicare & Medicaid Services (CMS), the Economic Research Service (ERS) and the Area Resource File(ARF), merged using the Federal Information Processing Standards (FIPS) code. After accounting for missing data, there were 3,126 counties with MA enrollment information.

A multiple regression analysis examines the relationship between MA enrollment, the decision-making of private plans, and the choices made by beneficiaries. The key determinant of enrollment tested here is the ratio of the benchmark payment rate for MA plans in each county relative to the average Medicare FFS per capita costs in each county. The analysis controls for the effects of factors such as: age, county type (metropolitan, micropolitan, or rural), HMO penetration rate (proxy variable for existing private plan infrastructure), the percentage of medical doctors and allied health professionals per county (proxy variables for infrastructure to attract private health plans), median household income and poverty rate as measures of financial status, percentage of white population and educational attainment (proxy variables for county level preferences for MA).

# **MA Enrollment Trends**

Medicare Advantage (MA) enrollment has changed dramatically in recent years as enrollment has shifted from private fee-for-service (PFFS) plans into preferred provider organization (PPO) plans. PFFS plans dominated the growth of the rural MA market from 2005 to 2010; however, legislative and regulatory changes have led to a nationwide reduction in the number of plans offering PFFS coverage, from 413 plans in 2010 to 220 plans in 2011. As a result, rural Medicare beneficiaries have fewer options for MA health insurance coverage in 2011 — an average of 16 MA plans to choose from, compared with 24 plans on average in 2010.

While the drop in PFFS plans has led to a decline in PFFS enrollment, rural MA enrollment has continued to grow in the last year due to sizeable increases in PPO and health maintenance organization (HMO) enrollment of 306,309 enrollees and 69,900 enrollees, respectively. In March 2011, national MA enrollment had grown to over 12 million (24.7% of eligible beneficiaries), while rural MA enrollment had grown to over 1.5 million (14.5% of eligible beneficiaries) (Table 1).

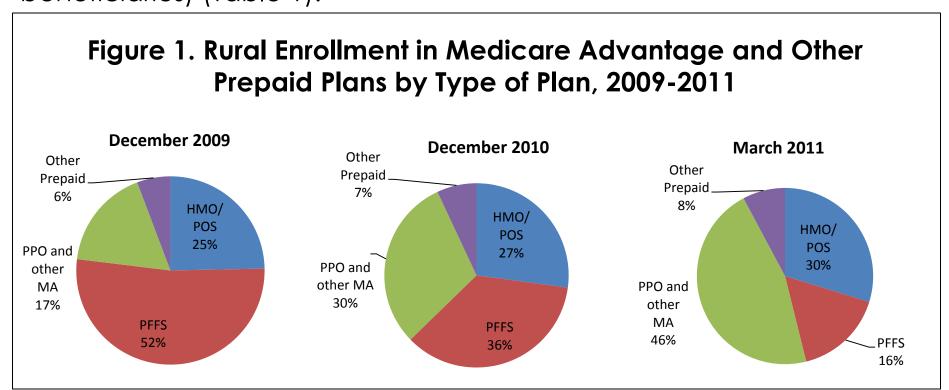


Table 1.							
Enrollment in Medicare Advantage, as Percent of Medicare Population							
Variable		Dec. 2009	Dec. 2010	Mar. 2011			
RURAL: Total in MA plans		13.6%	14.0%	14.5%			
	HMOs/POS	3.6%	4.1%	4.7%			
	PFFS	7.5%	5.4%	2.6%			
	PPOs and other MA	2.5%	4.6%	7.3%			
URBAN: Total in MA plans		23.8%	24.2%	24.7%			
	HMOs/POS	15.4%	15.9%	16.5%			
	PFFS	5.2%	3.4%	1.2%			
	PPOs and other MA	3.2%	4.9%	7.0%			

Note: Excludes enrollment in any county and plan if the plan enrolls 10 or fewer enrollees in that county (due to restrictions on data release by CMS) and excludes enrollees in US territories (due to data incompatabilities with geographic files).

### Results

<u>Descriptive results</u>. MA penetration rates are significantly higher in urban counties, as compared to rural counties, as are the penetration of commercial HMOs (Table 2). However, the ratio of MA payment rates to Medicare costs are similar in urban and rural areas. In general, however, MA plans are particularly attractive to lower, middle class White Americans. But median incomes are much higher in urban areas.

Table 2.						
Descriptive Results:						
Selected Characteristics of Counties and Enrollees						
Variable	Urban	Rural				
	Mean	Mean				
Percent enrolled in MA plans	24.7%	13.4%				
Ratio of MA Payment to Medicare Costs	1.193	1.189				
Percent enrolled in commercial HMOs	31.9%	8.8%				
Median Income	\$50,273	\$37,101				
Poverty rate	12.3%	15.5%				
Number of observations	1,083	2,022				
Descriptive statistics weighted by the size of the population in the county.						

Multivariate results. Table 3 presents the regression results demonstrating the relationship between MA enrollment penetration rates and county characteristics. The results indicate that the ratio of the Medicare benchmark payment rate for MA plans in each county relative to the average per capita cost in each county is a key determinant of enrollment, holding other factors constant (Table 2):

- An increase of 10 percentage points in the MA rate relative to Medicare costs is associated with a one percentage point increase in the MA penetration rate, holding the other variables constant.
- The penetration of commercial HMOs is also a key determinant of MA penetration, with a 10 percentage point increase in the HMO penetration rate associated with a 0.4 percentage point increase in the MA enrollment rate.
- Holding all characteristics equal, urban areas have a 3.7 percentage point higher penetration rate, as compared to rural areas.

## **Results - continued**

Table 3.							
Regression Results: Impact on Enrollment Rate in Medicare Advantage							
Variable	Coefficient (Std. Error)	Confidence Interval					
Ratio of MA Payment to Medicare Costs	.1106*** (.0130)	(.089,.131)					
Commercial HMO Penetration Rate	.3811*** (.0221)	(.351,.411)					
Urban county	.0375*** (.0057)	(.027,.047)					
Median income	0013*** (.0003)	(002,0001)					

\*\*\*Significant at 99-percent level. Observations: 3,103. R-squared: 0.296 Regression results shown for selected coefficients. Other variables included in model: medical doctors per capita, percent of population that is white, Percent of health and social service workers, percent of population with a college education.

# **Conclusions and Implications**

Rural enrollment in MA plans continues to grow, despite recent policy changes, though the enrollment is shifting to PPO plans from PFFS plans. Analysis shows that while MA enrollment is responsive to the payment rate paid to plans, relative to Medicare fee-for-service costs, other factors are important determinants of MA enrollment as well.

These findings are important in the context of the congressional debate and decision-making over payment to MA plans, now incorporated as part of the Affordable Care Act of 2010. This legislation slows the rate of growth in MA payment over time, but skews the growth in payment towards plans that deliver higher-quality, and plans operating in areas with lower enrollment. The results presented here show that enrollment will be expected to fall if payment becomes more aligned with Medicare per-capita costs.

#### **Contact Information**

Timothy McBride, Professor and Associate for Public Health, Brown School, Washington University in St. Louis, St. Louis, MO 63130, <a href="mailto:tmcbridet@wustl.edu">tmcbridet@wustl.edu</a>