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Use of pharmacists or pharmacies as Medicare Part D information sources

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Abstract

Objective—To characterize beneficiaries who used a pharmacy or pharmacist as a Medicare Part D information source.

Methods—This cross-sectional descriptive study involved 4,724 Medicare Part D beneficiaries who graduated from Wisconsin high schools in 1957. The main outcome measure was beneficiary self-reported use of a pharmacy or pharmacist as a Medicare Part D information source.

Results—Only 13% of the total sample and 15% of those with three or more medications used a pharmacy or pharmacist for Medicare Part D information. Adjusted logistic regression revealed that beneficiaries living in rural communities, compared with metropolitan areas, and with higher out-of-pocket prescription costs were more likely to use a pharmacy or pharmacist for Medicare Part D information. Beneficiaries with lower educational attainment were less likely to use a pharmacy or pharmacist for Medicare Part D information.

Conclusion—Pharmacists have the knowledge and are in the position in the community to effectively educate beneficiaries about the Medicare Part D program. However, this study suggests that few beneficiaries are using pharmacists or pharmacies for Medicare Part D information.

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Keywords

Medicare Part D; community pharmacies; pharmacists; information sources; rural setting; prescription costs

Since the implementation of Medicare Part D in 2006, millions of Medicare beneficiaries have gained access to much needed prescription medication benefits. Medicare Part D is designed to offer the beneficiary a choice between prescription drug plans, so beneficiaries can select a plan that will best meet their needs.¹ As a result, many plan options are available to the beneficiary. However, the complexity of the program is causing increasing concern, and research has shown that many beneficiaries are overwhelmed by the numerous Part D options.^{2,3}

When uncertainty is high in insurance plan selection, relevant information and knowledge become an essential commodity.⁴ Medicare Part D is based on a competitive model in which competition among insurance plans ideally will drive down costs and ultimately help the beneficiary save money. But an underlying assumption of the competitive model is that consumers have the ability to make an informed decision when comparing plans, with access to a free flow of information that will enable them to make an informed decision.⁵ When such access to information is not achieved, confusion can manifest as inappropriate use of health care and medications or expressions of general dissatisfaction.⁶ Therefore, research that elucidates whether and where beneficiaries are receiving Medicare Part D information is essential in preventing suboptimal medication use resulting from beneficiaries selecting Part D plans that do not fit their needs.

To date, many pharmacies have Medicare Part D plan information available for beneficiaries; however, very little research is available examining who is using a pharmacy or pharmacist as a Medicare Part D information source. Knowing who is using a pharmacy or pharmacist for Medicare Part D information will allow us to tailor interventions to susceptible beneficiaries so that we can implement targeted community Medicare Part D information services. Serving as a Medicare Part D information resource would be a relatively new role for pharmacists, considering their traditional role of dispensing and educating patients about medications.

Objective

The purpose of this study was to characterize beneficiaries who used a pharmacy or pharmacist as a Medicare Part D information source.

Methods

The sample was drawn from the Wisconsin Longitudinal Study (WLS), a longitudinal study of a random sample of 10,317 men and women who graduated from Wisconsin high schools in 1957.^{7,8} Hereafter, “graduates” will refer to those men and women who are part of the original WLS sample. The graduates were surveyed in 1957, 1964, 1975, 1993, and 2004 along with supplemental topical surveys administered to the graduates throughout the study course. The WLS is a unique cohort study that goes beyond recording basic demographic information by covering psychological measures, health information, social characteristics, and retirement. This study used the 2004 wave and the supplemental 2007 Medicare Part D mail survey. In 2004, the graduates were surveyed using a 1-hour computer-assisted telephone interviewing survey, followed up with a 48-page mailed survey. Of the surviving graduates in 2004, the response rate was 88% for the telephone and 87% for the mailed surveys. In 2007, the graduates were mailed a supplemental questionnaire that inquired

about their experiences with Medicare Part D. Of the graduates still alive in 2007, 63% participated in the Medicare Part D survey. All graduates were eligible for Medicare Part D in the program's induction year of 2006. Graduates were included in this study if they completed both the 2004 survey wave and the supplemental 2007 Medicare Part D questionnaire. All graduates were included in this study regardless of whether the graduate intended to enroll in Medicare Part D. Because graduates enrolling in Medicare Part D may have differed from graduates not enrolling in Part D, a sensitivity analysis was performed that excluded graduates who did not enroll in Part D because they already had prescription drug coverage. Results did not change substantially, despite inflated SEs resulting from smaller sample sizes. The final sample for this study was 4,724.

Measures

Dependent variable (use of a pharmacy or pharmacist for Medicare Part D information)

The outcome variable was obtained from the 2007 supplemental Medicare Part D questionnaire. The graduate was asked (yes or no) whether they used or sought information from 17 different sources for Medicare Part D enrollment purposes. Two of the 17 sources were materials provided by a pharmacy or information sought directly from a pharmacist. Because of potential overlap between items, information resources were combined based on a principal components analysis (PCA). The PCA resulted in a five-factor solution identifying pharmacy and pharmacist information as one factor. The remaining factors were included in the model as control variables.

Independent variables (patient characteristics)—All independent variables were obtained from the 2004 WLS survey wave. Sociodemographic characteristics included age (years), education, marital status, job status, insurance, internet use, and gender. Race was not included in this analysis because of lack of variation, as more than 95% of the sample was white. Rurality was included because research has shown that where a person lives may influence their health.⁹ Rurality was classified by the 2003 Rural Urban Continuum Codes¹⁰ and was condensed into three categories: metropolitan (>250,000 population), urban (<250,000 and >20,000 population), and rural (<20,000 population). Household income was constructed using 14 measures of spousal, personal, and other household members' income. Perceived financial success was also examined by asking the graduate to rate their financial success on a four-point Likert-type scale.

Graduates' level of satisfaction with access to health care was assessed using the Group Health Association of America satisfaction survey, which is a validated scale to measure access to health care satisfaction.¹¹ The summary score consists of the average of 11 items measured on a five-point Likert-type scale. One item, prescription service satisfaction, was excluded from the summary score and included in the analysis separately because it is specific to prescription services. Further, to help estimate the graduates' need for Part D, the graduates' out-of-pocket prescription expenses in the past 12 months, the 12-Item Short-Form Health Survey (mental and physical health), the number of prescription medications, and the number of comorbid diseases were also included.

Data analysis

We used Stata version 11.0 (Stata, Stata-College Station, TX) for the analysis. Sample characteristics were summarized with descriptive statistics. Multiple logistic regression examined the association between patient characteristics and likelihood of using a pharmacy or pharmacist for Part D information; adjusted odds ratios (AORs) and 95% CIs are reported. SEs were adjusted for potential clustering within counties.

Results

The WLS sample characteristics are presented in Table 1. The use of a pharmacy or pharmacist for Medicare Part D information was reported by 13% percent of all graduates and 15% of those with three or more medications. At the time of the 2004 survey wave, the mean age of the sample was 64 years, 47% were male, and 67% did not pursue formal education after high school. More than one-half of the sample was taking zero to two medications and 72% spent less than \$500 out of pocket per year on prescription medications. Of the sample, 72% lived in a metropolitan area while 21% and 7% lived in urban and rural areas, respectively.

Table 2 contains adjusted AORs for factors associated with using a pharmacy or pharmacist for Medicare Part D information. Multiple logistic regression results revealed that graduates with less education were less likely to use a pharmacy or pharmacist for Medicare Part D information (AOR 0.80 [95% CI 0.64–0.99]). Out-of-pocket prescription expenses were also significantly associated with using a pharmacy or pharmacist for Medicare Part D information. Relative to those graduates with \$0 up to \$500 in out-of-pocket prescription expenses, graduates spending \$500 to \$1000 or more than \$1000 in out-of-pocket expenses were more likely to use a pharmacy or pharmacist for Medicare Part D information (1.30 [1.01–1.68] and 1.64 [1.15–2.23], respectively). Graduates living in rural compared with metropolitan communities were 1.45 times more likely to use a pharmacist or pharmacy for Medicare Part D information (95% CI 1.03–2.03).

Discussion

To our knowledge, this was the first study to characterize beneficiaries who used a pharmacist or pharmacy as a Medicare Part D information source. Based on our findings, the factors associated with using a pharmacy or pharmacist for Medicare Part D information were education levels, location of community of residence, and how much the graduate was spending out of pocket for prescription medications. However, only a few beneficiaries reported using a pharmacy or pharmacist for Medicare Part D information—only 13% of the total sample and 15% of those with three or more medications.

Although many beneficiaries obtain medications from their community pharmacy, some beneficiaries may not realize that Part D plan selection assistance from a pharmacist can decrease their prescription out-of-pocket costs.^{12,13} Cutler et al.¹² found that beneficiaries reduced their prescription out-of-pocket costs up to 68% by using pharmacist Part D plan counseling recommendations. On the other hand, pharmacists may be reluctant to assist beneficiaries with plan selection because such assistance would be considered “marketing,” a disallowed provider activity emphasized by the Centers for Medicare & Medicaid Services (CMS).¹⁴ However in 2008, CMS further defined marketing activities and clarified that “assisting in enrollment” and “education” do not constitute marketing.¹⁴ Therefore, pharmacists can assume an important role of assisting and educating about Part D plan enrollment to help beneficiaries choose a plan that best fits their needs.

Results from this study may be used to help target beneficiaries for Medicare Part D counseling services. For example, pharmacies and pharmacists may identify beneficiaries with high out-of-pocket prescription costs and provide them with easy to understand information comparing Medicare Part D plans. Further, pharmacies and pharmacists in rural communities may have additional Medicare Part D services and extend phone services to assist beneficiaries. Even though pharmacists cannot choose Part D plans for beneficiaries, pharmacists may be a resource to help beneficiaries understand their options.

Limitations

This was a cross-sectional, nonexperimental study that only looked at one point in time: the period immediately after Medicare Part D was implemented. Therefore, different findings may have arisen if another time frame had been chosen. In addition, these results may not be generalizable to minority populations. All of the beneficiaries in this study had at least a high school degree, and the vast majority were white. Future research should include a more diverse sample of Medicare beneficiaries. Finally, this study used self-reported data and could be subject to recall bias and social desirability bias.

Conclusion

Providing patient education is an important professional role of the pharmacist and may encompass more than just education about medications. Pharmacists have the knowledge and are in the position in the community to effectively educate beneficiaries about the Medicare Part D program. However, this study suggests that few beneficiaries are using pharmacists or pharmacies for Medicare Part D information. Nearly 28 million Medicare beneficiaries are enrolled in a Medicare Part D plan, and more beneficiaries are expected to enroll as the population ages. Therefore, we must increase medication access and promote optimal medication use by exploring the use of pharmacists as a Medicare Part D information source to help beneficiaries with obtaining ideal drug coverage.

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Table 1

Description of beneficiaries self-reporting use of pharmacy/pharmacist for Medicare Part D information

Study variables	Mean or % ^a
Use of pharmacy/pharmacist for information, %	13.4
Age (years) ^b	64.3(0.7, 63–67)
Male, %	46.7
Married, %	80.5
High school education only, %	66.7
Unemployed, %	56.4
Perceived financial success, %	
Not at all/not very successful	5.2
Very/somewhat successful	94.8
Health insurance, %	
Any private	86.5
Public insurance only	9.5
Uninsured	3.1
Income, %	
<\$30,000	28.2
\$30000 up to \$45000	17.1
\$45000 up to \$60000	14.7
\$60000 up to \$75000	11.4
\$75000	28.7
Dissatisfaction with access to care ^{b,c}	2.4(0.7, 1–5)
Any internet usage, %	69
Rurality, %	
Metropolitan	71.9
Urban	21.3
Rural	6.8
Poorer Mental Health (SF12-MCS) ^{b,c}	41.6(6.1, 18.6–78.6)
Poorer Physical Health (SF12-PCS) ^{b,c}	25.6(9.2, 4.0–70.6)
Number of co-morbid conditions, %	
0–2	13.2
3–5	45.3
>5	41.4
Number of prescription medications, %	
0–2	57.1
3–5	31.8
>5	11.1
Dissatisfied with prescription services, %	3.8
Out-of-pocket prescription expenses, %	
<\$500	71.9

Study variables	Mean or % ^a
\$500–\$1000	20.0
>\$1000	8.2

^aPercentages may not add up to 100% due to rounding

^bData are presented as mean values, with standard deviations and ranges in parentheses

^cReverse coded; higher numbers are related to more of that characteristic SF12-MCS, Short-Form 12 item Mental Component; SF12-PCS, Short-Form 12 item Physical Component Summary

Table 2

Adjusted logistic regression analysis for use of pharmacy/pharmacist information for Medicare Part D information (n = 4,724)

	Adjusted	
	Odds Ratio	95% CI
Age	0.91	(0.76–1.10)
Male	0.99	(0.80–1.24)
Married	0.96	(0.74–1.23)
High school only	0.80 *	(0.64–0.99)
Unemployed	0.84	(0.68–1.03)
Perceived financial success		
Not at all/not very successful	1.37	(0.92–2.04)
Very/somewhat successful	Referent	
Health insurance		
Any private insurance	Referent	
Uninsured	1.36	(0.82–2.28)
Public insurance only	1.15	(0.77–1.74)
Income		
<\$30,000	1.24	(0.92–1.67)
\$30,000 up to \$45,000	1.18	(0.88–1.58)
\$45,000 up to \$60,000	1.17	(0.86–1.59)
\$60,000 up to \$75,000	1.16	(0.84–1.59)
>\$75,000	Referent	
Dissatisfaction with access to health care	0.96	(0.83–1.11)
Any internet usage	0.81	(0.66–1.01)
Rurality		
Metropolitan	Referent	
Urban	1.04	(0.81–1.34)
Rural	1.45 *	(1.03–2.03)
Poorer Mental Health (SF12-MCS) ^a	1.01	(0.99–1.02)
Poorer Physical Health (SF12-PCS) ^a	1.01	(0.98–1.01)
Number of diagnosed conditions		
0–2	Referent	
3–5	1.01	(0.80–1.28)
> 5	1.35	(0.98–1.86)
Number of prescription medications		
0–2	Referent	
3–5	1.17	(0.92–1.50)
> 5	1.20	(0.82–1.74)
Dissatisfied with prescription services	0.81	(0.44–1.43)
Out-of-pocket expense for prescriptions		
<\$500	Referent	

	Adjusted	
	Odds Ratio	95% CI
\$500–\$1000	1.30 *	(1.01–1.68)
>\$1000	1.64 **	(1.15–2.23)

* Significant at 5%,

** Significant at 1%

^a Reverse coded; higher numbers are related to poorer mental health and poorer physical health, respectively.

SF12-MCS, Short-Form 12 item Mental Component Summary score; SF12-PCS, Short-Form 12 item Physical Component Summary score.