ABSTRACT

Background: The Medicare Part D program represents one of the largest changes in drug delivery to senior citizens in the U.S.; however, little is currently known regarding physician–patient communication about Part D.

Objective: We conducted a study to assess physicians' familiarity with Medicare Part D, their perceived responsibility in advising patients about Part D enrollment, and some of the attributes of physicians who have accepted that responsibility.

Methods: We used a cross-sectional survey of physicians practicing in two midwestern states.

Main Outcomes: The response rate of the physicians was 48% (N = 257). Overall, 13% of physicians surveyed indicated that they perceived that it was their responsibility to advise patients about Part D enrollment. Nevertheless, 66% reported advising their patients about Part D. Similarly, 2% of physicians reported a responsibility to advise patients about plan selection, and 23% reported providing such advice. Bivariate analyses demonstrated a positive relationship between physicians' perceived responsibility to advise patients about Part D and access to information about patients' annual drug costs, information about the formulary content that would best serve patients, and information about the least expensive plan for patients. Using bivariate analyses, we found a positive relationship between physicians' reported use of information technology and their access to information about patients' annual drug costs and the content of formularies that would best serve the patient.

Conclusion: These preliminary findings suggest that although few of the physicians surveyed perceived that it was their responsibility to advise patients about Part D, many more reported rendering advice. Providing physicians with access to information may facilitate this process, which may be especially important during periods of open enrollment for Part D.
on primary variables of interest. We also used an alpha value of 0.05 and a power of 0.80, as per convention, and a two-sided test. The 2:1 (460:230) ratio was used mainly to ensure adequate representation from both states and was factored into the calculations for the chi-square test.

Membership in the MMA and the NDMA included approximately 65% of practicing physicians in each state. Surveys were mailed between March 2006 and May 2006. Up to two additional surveys were mailed to non-responders. A follow-up postcard reminder was mailed approximately two weeks after the first and second survey mailings.

Approximately two weeks after the last survey mailing, non-responders were contacted by telephone and were sent an additional survey if they requested one. Phone surveys were conducted for physicians who indicated that preference.

The study received the approval of North Dakota State University’s institutional review board.

**Survey Design**

The survey was adapted from an instrument developed and used by Shrank et al. This modified instrument was pilot-tested on practicing physicians in Minnesota and North Dakota, and based on their responses, the survey was refined. The final survey consisted of 43 items, including a variety of questions on:

- physicians’ perceptions and beliefs about prescribing, drug costs, and out-of-pocket costs (i.e., out-of-pocket drug costs) in three-tier pharmacy benefit systems
- physicians’ personal awareness of patients’ out-of-pocket costs at the time of prescribing
- awareness of the determinants of those costs (i.e., insurers, formularies, pharmacy benefit structures)
- Medicare Part D

The survey consisted of multiple-choice, 5-point Likert-type scale, and open-ended questions. We also asked physicians for their comments.

**Data Analysis**

Descriptive statistics were used to portray the characteristics of the respondents and to report the primary variables of interest of the study. The primary variables of interest were (1) physicians’ perceived responsibility for advising their senior patients about Medicare Part D enrollment and plan selection and (2) the percentage of senior patients they were advising about Medicare Part D enrollment and plan selection.

Other variables assessed (for potential associations with the primary variables of interest) were as follows: physicians’ access to necessary information about the patient’s medication regimen and annual drug costs; the content of formularies that would best serve the patient; and the least expensive plan for the patient.

We also assessed whether a physician’s specialty (generalist or specialist), formulary usage, or use of information technology when prescribing was associated with any of the aforementioned variables of interest.

We performed chi-square analyses with Fisher’s Exact Test to assess these associations using SAS 9.1 (SAS Institute, Cary, NC, 2005).

All bivariate analyses were based upon subgroup responses, not total response rate, because data imputation was not performed. Statistical significance was established at $P = 0.05$.

**RESULTS**

**Survey Response**

The overall response rate, including two surveys completed over the telephone, was 48% (257 of 537). Of the 625 surveys mailed (excluding pediatricians), one was returned from a non-physician; 70 other addresses were deleted from the denominator (624) because correct addresses or phone numbers were not available (the physicians could not be contacted). We excluded an additional 17 physicians who reported that they did not make any decisions concerning prescription drugs (n = 11) or that they no longer practiced medicine (n = 6). Therefore, our final sample size was 537 for this article.

Demographic characteristics of respondents are listed in Table 1. A total of 150 of 349 (a 43% adjusted response rate) physicians from Minnesota responded, and 107 of 188 (a 57% adjusted response rate) from North Dakota responded. The age and sex of responding physicians in this sample were similar to the national averages.

Physicians whose medical specialties were emergency medicine, family practice (including geriatrics), general practice, gynecology, internal medicine (including geriatrics), obstetrics

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**Table 1: Sample Demographics and Characteristics of Physicians’ Practices**

<table>
<thead>
<tr>
<th>Physician Characteristic</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age, mean ± standard deviation (n = 244)</td>
<td>48 ± 9 years</td>
</tr>
<tr>
<td>Gender (n = 249), male (n = 173)</td>
<td>69%</td>
</tr>
<tr>
<td>Physicians specialty (n = 256)</td>
<td></td>
</tr>
<tr>
<td>Generalist</td>
<td>71%</td>
</tr>
<tr>
<td>Specialist</td>
<td>29%</td>
</tr>
<tr>
<td>Practice location (n = 234)</td>
<td></td>
</tr>
<tr>
<td>Urban</td>
<td>69%</td>
</tr>
<tr>
<td>Rural</td>
<td>31%</td>
</tr>
<tr>
<td>No. of physicians practicing (practice size) (n = 246)</td>
<td></td>
</tr>
<tr>
<td>Small (1–4 physicians)</td>
<td>17%</td>
</tr>
<tr>
<td>Medium (5–150 physicians)</td>
<td>59%</td>
</tr>
<tr>
<td>Large or very large (&gt;150 physicians)</td>
<td>24%</td>
</tr>
<tr>
<td>Use of computer order entry</td>
<td></td>
</tr>
<tr>
<td>when prescribing (n = 252)</td>
<td>40%</td>
</tr>
<tr>
<td>Use of PDA when prescribing (n = 250)</td>
<td>34%</td>
</tr>
<tr>
<td>No. of formularies prescribed from (n = 249)</td>
<td></td>
</tr>
<tr>
<td>Less than six</td>
<td>30%</td>
</tr>
<tr>
<td>Six or more</td>
<td>27%</td>
</tr>
<tr>
<td>Unknown</td>
<td>43%</td>
</tr>
<tr>
<td>Percentage of patients enrolled in Medicare (n = 195)</td>
<td></td>
</tr>
<tr>
<td>0–25%</td>
<td>34%</td>
</tr>
<tr>
<td>26–50%</td>
<td>49%</td>
</tr>
<tr>
<td>51–98%</td>
<td>17%</td>
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</tbody>
</table>

n = total responses to the item of interest. Variations exist because of missing data.

Percentages do not always add up to 100% because of rounding or because of missing data.
and gynecology, or obstetrics alone were considered to be generalists. Physicians reporting any other medical specialties were considered to be specialists.

Physicians’ Familiarity with Medicare Part D

On a Likert-type scale, physicians were asked to rank their familiarity with Part D (1 = poor familiarity; 3 = average or moderate familiarity; 5 = outstanding familiarity). Approximately half (46%) of the physicians indicated that their familiarity with Part D was less than average (Likert-type scale response < 3). Another 41% indicated that their familiarity was average (Likert-type scale response = 3). Only 13% of physicians reported that their familiarity with Part D was either above average or outstanding (Likert-type scale response > 3).

In bivariate analyses using Fisher’s Exact Test, generalists, compared with specialists, were almost three times ($P = 0.03$) as likely to report “above average” or “outstanding familiarity” with Medicare Part D (Likert-type scale response > 3) compared with specialists.

Physicians’ Perceived Responsibility

On a Likert-type scale, physicians were asked to rank to what extent they thought it was their responsibility to advise seniors whether or not to enroll in Medicare Part D (Table 2). Physicians were also asked to rank to what extent they thought it was their responsibility to advise seniors about plan selection (see Table 2). The actual wording of the questions is included as footnotes to Table 2.

Although only 13% of physicians indicated that they perceived it was their responsibility to advise patients about Part D enrollment, 45% reported rendering advice about Part D enrollment to at least some of their senior patients and 21% reported rendering advice to more than half of their senior patients (Table 3). Only 2% of physicians reported a responsibility to advise patients about plan selection; however, 21% reported providing such advice to at least some of their senior patients and 2% reported providing such advice to more than half of their senior patients (see Table 3).

The actual wording of the questions is included as footnotes to Table 3.

### Access to Information

Physicians were asked if they had access to a list of pertinent information when trying to help seniors enroll in a Medicare Part D plan. As shown in Table 4, physicians were generally aware of certain information, such as the patient’s medication regimen, but they were significantly less aware of other information. The actual wording of the questions is included as footnotes to Table 4.

### Perceived Responsibility and Access to Information

For this section, the response categories “strongly agreed” and “agreed” were collapsed and were referred to as “agreed;” similarly, the categories “strongly disagreed” and “disagreed” were collapsed and were referred to as “disagreed.” In bivariate analyses using Fisher’s Exact Test, we found the following:

- Of the physicians who agreed that they possessed information about patients’ annual drug costs, 24% thought that it was their responsibility to advise seniors about Part D enrollment. By comparison, of the physicians who were neutral or who disagreed about possessing information about patients’ annual drug costs, only 12% thought that it was their responsibility to advise seniors about Part D enrollment ($P = 0.048$).
- Of the physicians who agreed that they possessed information about the content of the formulary that would best serve the patient, 32% thought that it was their responsibility to advise seniors about Part D enrollment, compared with 12% of physicians who were neutral or who disagreed about possessing information about the content of the formulary that would best serve the patient ($P = 0.01$).

Physicians who “agreed” or “strongly agreed” (with cells collapsed) that they possessed information about the patient’s

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**Table 2: Physicians’ Responses (in Percent) to Questions Addressing Their Perceived Responsibility For Advising Patients about Medicare Part D**

<table>
<thead>
<tr>
<th>Physicians’ Responses</th>
<th>Perceived Responsibility to Advise Regarding Medicare Part D Enrollment (%) (n = 209)</th>
<th>Perceived Responsibility to Advise Regarding Plan Selection (%) (n = 201)</th>
</tr>
</thead>
<tbody>
<tr>
<td>“Not at all my responsibility” or “not my responsibility”</td>
<td>52%</td>
<td>84%</td>
</tr>
<tr>
<td>“Neutral”</td>
<td>35%</td>
<td>14%</td>
</tr>
<tr>
<td>“Entirely my responsibility” or “my responsibility”</td>
<td>13%</td>
<td>2%</td>
</tr>
</tbody>
</table>

*To what extent do you think it is your responsibility to advise seniors whether or not to enroll in Medicare Part D? (1 = Not at all my responsibility to 5 = entirely my responsibility) 1 2 3 4 5
†To what extent do you think it is your responsibility to advise seniors regarding what specific Medicare Part D plan to enroll in? (1 = Not at all my responsibility to 5 = entirely my responsibility) 1 2 3 4 5

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Physician–Patient Communication and Part D

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| Table 3 Percentage of Patients Who Were Being Counseled by Physicians about Medicare Part D |
|----------------------------------|----------------------------------|----------------------------------|
| Percentage of Patients (%)      | Advising about Part D Enrollment (%) (n = 215)* | Advising about Plan Selection (%) (n = 206)† |
| 0                               | 34                               | 77                               |
| 1 to 25                         | 31                               | 18                               |
| 26 to 50                        | 14                               | 3                                |
| 51 to 75                        | 6                                | 1                                |
| 76 to 100                       | 15                               | 1                                |

*What percent of your senior population in your practice are you advising about Medicare Part D enrollment? __% †What percent of your senior population in your practice are you advising about which specific Medicare Part D plan to enroll into? __%

medication regimen were more likely to advise more than 0% of their senior patients in their practice about enrollment (76% vs. 57%; P = 0.007). Internal consistency (reliability) between perceived responsibility and access to information was considered good, with a Cronbach alpha of 0.73.

Access to Information and Technology Usage

In bivariate analyses using Fisher’s Exact Test, respondents who reported using either computer order entry or a PDA (e.g., a Palm Pilot) or both, when prescribing were more than three times (P = 0.002) as likely to “agree” or “strongly agree” (with cells collapsed) that they possessed information about the patient’s annual drug costs.

Physicians who reported using a PDA when prescribing were almost three times as likely (P = 0.01) to “agree” or “strongly agree” (with cells collapsed) that they possessed information about the content of the formulary that would best serve the patient.

Perceived Responsibility and Physician Specialty

In bivariate analyses using Fisher’s Exact Test, generalists, as compared with specialists, “agreed” or “strongly agreed” (with cells collapsed) that they possessed information about the patient’s medication regimen (72% of generalists vs. 42% of specialists; P < 0.0001), and they were also more likely to advise more than 0% of their senior patients in their practice about Part D enrollment (71% vs. 53%; P = 0.02). There was a statistically significant difference in the use of a PDA between generalists and specialists (39% vs. 21%; P = 0.006) when prescribing.

Perceived Responsibility and Formulary Usage

In bivariate analyses using Fisher’s Exact Test, physicians who prescribed from six or more formularies (with cells collapsed), as opposed to physicians who prescribed from less than six formularies (with cells collapsed) in a typical week, “agreed” or “strongly agreed” (with cells collapsed) that they possessed information about the patient’s medication regimen (70% vs. 52%; P = 0.03). They were also more likely to advise more than 0% of their senior patients in their practice about enrollment.
both) when prescribing.

Informatio n technology (computer order entry or a PDA or scribining from fewer than six formularies) in terms of using prescribing from six or more formularies and physicians pre-significant difference between these two groups (physicians obtainedin g their physicians' assistance with Part D may go unmet condition to providing advice. Patients' expectations about Medicare Part D, despite the fact that they did not perceive this function to be their responsibility. Their actions, in turn, might have demonstrated a significant aspect of professionalism (i.e., altruism), because physicians were filling a void and were considering their patients' best interests.

Our study has several implications for patients, physicians, and policymakers.

First, our finding of low perceived responsibility to act as the patient's Medicare Part D advocate may be explained, in part, by the fact that physicians might not have the information they need to counsel their patients about the Medicare drug benefit. In this study, the majority of physicians indicated that they were aware of the patient's medication regimen but were unaware of their patients' annual drug costs, information about the content of the formulary that would best serve the patient, or the least expensive plan for the patient. This finding was significant, because research suggests that patient-physician communication is compromised when physicians do not feel that they have viable solutions to offer their patients.

Second, we found an association between access to information and physicians' perceived responsibility for advising seniors about Part D enrollment. Access to information could be a precondition to providing advice. Patients' expectations about obtaining their physicians' assistance with Part D may go unmet if physicians do not have ready access to the necessary information.

Third, we found an association between using information technology (a PDA or computer order entry or both) when prescribing and having access to information. In addition, as with a previous study in which generalists had been found to be more familiar with patients' formularies, we found that generalists, compared with specialists, were more familiar with the patient's medication regimen, were more likely to advise their senior patients about enrollment, were more familiar with Medicare Part D, and were more likely to use information technology (e.g., a PDA) when prescribing. These results suggest that efforts to overcome information barriers can enable physicians to access pertinent information rapidly and may lead to a greater ability on the part of physicians to counsel patients about Part D.

We also found that physicians practicing in complex prescribing environments (prescribing from six or more formularies) had greater access to information and a greater likelihood of advising patients about Part D enrollment. It is logical to assume that physicians who are accustomed to dealing with multiple drug formularies are more adept at explaining the intricacies of Part D benefits to their patients than physicians who practice in less complex environments.

LIMITATIONS OF THE STUDY

Our study has several limitations.

This study reflected the perceptions of physicians who were members of the Minnesota Medical Association and North Dakota Medical Associations at the time, and a response rate of 48% might be considered a possible limitation.

An inherent limitation was our focus on only two states, and it is possible that the findings of this study might differ from those of a national survey. Conversely, we believe that there is no a priori reason to assume that physicians practicing in other parts of the U.S. would differ in their perceptions of Medicare Part D.

Similar to our study, in which most physicians indicated that their familiarity with Medicare Part D was below average, a national survey of physicians regarding Medicare Part D found that most physicians (64%) reported that they understood the benefit “not too well” or “not well at all.” Nonetheless, a future study representing a national sample might be needed with convergent findings before these findings can be generalized nationally.

As with any survey, our findings might be subject to a non-
response bias and a socially desirable response bias. A similar study that used a comparable survey tool, exclusive of Medicare Part D, also showed a 49.6% response rate. In that study, a telephone follow-up of 69 randomly selected non-responders (13%) was conducted, and it was determined that the populations of non-responders and responders were similar.

CONCLUSION

Despite the limitations of our study, our findings might be helpful in developing tools that address physicians’ need to access information so that they can counsel their patients about Part D. Alternatively, it is also possible that other factors besides access to information might mold physicians’ perceptions of the need to assist their patients with Part D. Nevertheless, as more senior citizens join the program, their demand for physician guidance will increase.

In general, even though many physicians perceive that it is not their responsibility to act as their patients’ Part D advocates, many of them do provide such assistance. This may be seen as evidence of their professionalism.

Although we believe that we did not establish a clear link in our study between the variables examined, our findings show that several attributes describe physicians who were more likely to advise patients about Part D. Among these were physicians’ access to information about the patient’s medication regimen, the use of a PDA when prescribing, and the complexity of the prescribing environment in which the physicians practiced. These findings suggest that physicians who have easy access to information and are accustomed to dealing with multiple formularies are more likely than their peers to advise their patients on Part D. Conversely, physicians with poor access to real-time information and minimal acquaintance with formulary prescribing are less likely to feel confident about advising their Part D patients.

Although very few physicians in this study felt that it was their responsibility to advise patients about enrollment in Part D, those who possessed the requisite information and experience were likely to do so. Providing physicians with access to requisite information may facilitate the process of advising patients, which may be especially important during periods of open enrollment for Part D.

Note: The survey instrument is available upon request from the corresponding author, Shamima Khan, MBA, PhD. Her e-mail address is s_nsk@yahoo.com.

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REFERENCES