

Is The Informed-Choice Policy Approach Appropriate For Medicare Beneficiaries?

More than half of the Medicare population has difficulty using comparative health plan information.

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CURRENT POLICY APPROACHES rely on Medicare beneficiaries to make informed choices about their care and their coverage. It is assumed that with information to explain the options, beneficiaries will be able to make choices that fit their individual needs and preferences. However, little is known about decision-making skill in the older population. General evidence suggests that older adults seek less information and exhibit less sophisticated reasoning in making decisions.¹ Further, we do not know whether beneficiaries welcome having more choices or view them as a burden.

Making decisions requires skills in several areas: being able to correctly interpret data; weighting factors in ways that match one's individual needs; making trade-offs; and bringing all of the factors together into a choice. In this study we examine the lowest-level skill in decision making: correctly interpreting comparative data. We compare the skills of a Medicare and a nonelderly sample in their ability to interpret comparative information, and we determine whether skill in using information is related to attitudes about making plan choices.

Study Methods

Two separate convenience samples were used in the study: A Medicare sample age sixty-five and older ($n = 253$), and a non-Medicare sample ages eighteen to sixty-four ($n = 239$). The Medicare beneficiaries were recruited at senior centers. The non-Medicare group was recruited at the University of Oregon from among the nonfaculty staff. Participants in both groups reviewed the same information and completed tasks related to using information in making health plan selections. The Medicare group received information printed in a larger type size to accommodate age-related declines in vision. The Medicare sample was younger, had higher educational levels, and reported better health than the Medicare population as a whole (Exhibit 1).

■ **Dependent variable.** The comprehension index assesses the ability to accurately interpret comparative plan performance information when it is presented in tables, charts, and text. It assesses the ability to identify optimal choices when viewing unambiguous data on single measures. The index summarizes thirty-five tasks; the score on the index represents the number of errors; and a

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EXHIBIT 1**Characteristics Of The Medicare And Non-Medicare Study Samples, 1998**

	Medicare 65+ sample ^a	MCBS	Nonelderly sample ^a	U.S. Census ^b
Age				
18-34	-	-	35%	39% ^c
35-64	-	-	65	61 ^c
65-79	81%	73%	-	-
80 or older	19	27	-	-
Education				
Less than high school	9	40	3	11 ^c
High school diploma	31	32	15	33 ^c
Some college/vocational school	37	14	41	29 ^c
College graduate or more	24	14	41	27 ^c
Sex				
Female	61	56	77	47 ^c
Self-reported health status				
Excellent/very good	44	45	61	NA
Good	40	30	32	NA
Fair/poor	17	25	8	NA
Household income				
Less than \$20,000	50	60	27	25 ^d
\$20,000-\$39,999	34	29	35	26 ^d
\$40,000-\$59,999	11	5	22	19 ^d
\$60,000 or more	5	6	16	30 ^d
Marital status				
Married	54	56	64	60 ^e

SOURCES: See below.

NOTES: MCBS is Medicare Current Beneficiary Survey. NA is not available.

^a Authors' analysis.

^b U.S. Census Bureau, 1998 Current Population Reports.

^c Includes only those currently working and ages eighteen to sixty-four.

^d Includes all households.

^e Includes only those ages eighteen to sixty-four.

higher score indicates less skill.

■ **Predictor variables.** The five predictor variables used in the study are (1) the decision burden index: a seven-item summed index, indicating the degree to which plan choices are viewed as burdensome; (2) desire to delegate health plan choice to an expert; (3) desire for choice/information index: two items on the degree to which having many choices and lots of information is welcome; (4) seeking decision assistance from a "knowledgeable person"; and (5) screening index: a three-item index of education, age, and self-rated health (Medicare sample only), used as a proxy measure for comprehension skill. The index is constructed using an additive nonlinear approach with weights derived from regression analysis.

Findings

We found striking differences between the Medicare and the younger sample in ability to use information accurately. Medicare beneficiaries made almost three times as many errors as the younger respondents did (25 percent versus 9 percent). In addition, there was more variability among the Medicare sample. Medicare participants in the quartile with the most errors on the comprehension index averaged 57 percent errors, while those in the quartile with the fewest errors averaged only 5 percent. Among the nonelderly sample, the highest error rate reported was 26 percent.

■ **Predicting comprehension skill.** Among the Medicare sample, those in poorer health, with less education, and who were older tended to make more errors. In contrast,

education was the only demographic variable correlated with comprehension for the under-sixty-five sample. Errors among the Medicare participants were almost double those of the nonelderly participants at each level of educational attainment. In a regression equation combining both samples, age remained a significant predictor of comprehension index score after controlling for education (beta = .31, $p < .001$).

Among the Medicare sample, comprehension performance declined after age eighty—about four times the number of errors made by participants ages sixty-five to sixty-nine. Higher education levels were related to improved performance on the comprehension index up until age eighty. After age eighty, education was unrelated to performance (Exhibit 2). This suggests that lower performance in older age groups is not just a literacy effect, but an aging effect as well.

■ Delegating health plan decisions.

The desire to delegate health plan decisions was highly correlated with performance on the comprehension index (Exhibit 3). Those with poorer comprehension skills were more likely to indicate a desire to delegate. This relationship was significant for both population groups but stronger for the Medicare sample. Also, in both age groups, those with poorer comprehension skills viewed more information and options as unwelcome burdens.

Surprisingly, those who made more errors on the comprehension index were no more likely to report having sought help in the past when making a plan decision. Thus, although those with poor comprehension skills indicated a greater willingness to delegate decisions, they apparently were no more likely to seek decision assistance.

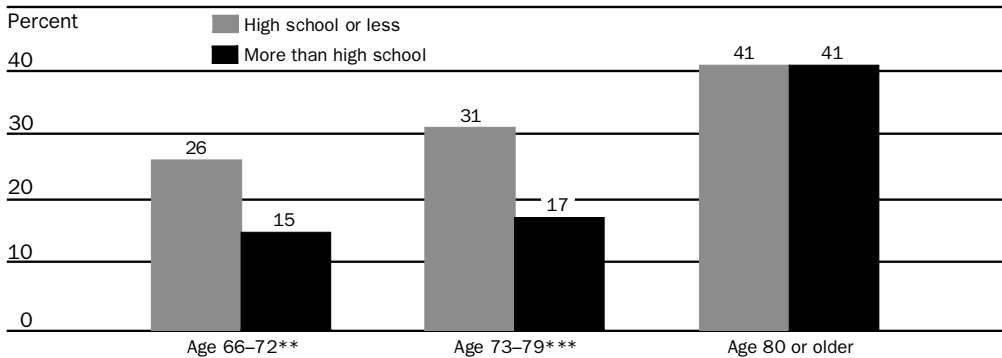
At the same time, those who wanted more choices and a lot of information tended to be those with higher comprehension skills. Thus, comprehension skill level is linked to attitudes about decision making, desire for choice, and preferences with regard to delegating choice for both elderly and nonelderly consumers. Because comprehension skill appears to be so much lower in the Medicare sample, it is important to determine the level of comprehension likely to exist in the larger Medicare population.

■ Estimating Medicare population with difficulty using comparative information.

Because the study population is a convenience sample, it is not possible to generalize the results directly to the larger Medicare population. Our goal, therefore, was to create a proxy measure of comprehension skill that would allow us to make that estimate. We found that the three-item screening index predicts with 70 percent accuracy performance on the comprehension index. By recreating the screening index, using a nationally representative

EXHIBIT 2

Average Percentage Of Errors (Comprehension Index Score), By Age And Education, Medicare Population Only, 1998



SOURCE: Authors' analysis.

** $p < .01$ *** $p < .001$

EXHIBIT 3**Correlations Between The Comprehension Index And Attitudes About Plan Choice**

	Nonelderly	Medicare 65+
Decisions are a burden (index)	.24***	.34***
Desire to delegate plan decision	.23***	.32***
Decision assistance sought	.01	.02
Desire information and options		
Prefer to have lots of information about each health plan choice	.03	-.30***
More likely to make a good choice if there are lots of different options to choose from	-.14**	-.22***

SOURCE: Authors' analysis.

** $p < .05$ *** $p < .001$

sample from the Medicare Current Beneficiary Survey (MCBS), we can estimate the proportion of the population likely to perform at the high and low ends on the comprehension index.² Using our findings, we can estimate the percentage of true positives, true negatives, false positives, and false negatives that we would expect if we used the screening tool in the larger Medicare population. Based on these calculations, we would expect about 56 percent of the beneficiary population to score on the high-error end of the comprehension index.

These estimates are based on the assumption that our screening tool can serve as a proxy measure of comprehension skill. Further testing with both the comprehension index and the screening index would be needed to confirm the validity of these predictions.

Discussion

Our results indicate that elderly consumers have much more difficulty accurately using comparative information to inform health plan choice than nonelderly consumers have. These differences are not explained by educational differences.

The study uses a convenience sample of elderly. However, because the sample is younger, better educated, and in better health, it can be assumed that any assessment of lower-functioning elderly would show that they have at least as much difficulty as what was observed in our sample. That is, if bias were introduced as a result of using this sample, it would be in the direction of underestimating the scope of the problem or overesti-

ating skill levels. In addition, we measured only the lowest level of skill needed for decision making: comprehension. It is probably safe to assume that if we had a measure of decision skill that included higher-level cognitive skills, we would observe a much higher percentage of the population with serious decision-making deficits. Thus, our estimates that 56 percent of the Medicare population has difficulty using comparative information are likely very conservative.

Given the population-related differences we observed, moving Medicare in the direction of mirroring the market approach used for the under-sixty-five population may not be feasible or desirable. The findings call into question a policy approach that relies on a level of consumer skill that more than half the population may not possess. Yet there appears to be a high degree of variability within the Medicare population, and many beneficiaries have adequate comprehension skills. Shouldn't they be given the choice and the supporting information they desire?

This is not likely to be a short-term dilemma solved when current elders are replaced by the next cohort to enter Medicare. Rather, the findings indicate that consumers under age sixty-five who have lower comprehension skill also find choice burdensome and are more likely to prefer to delegate decisions. Because comprehension differences are not explained away by education and because they increase after age eighty, we might assume that problems are, at least in part, aging-related and not just cohort-specific. This is

consistent with findings in the cognitive aging literature that demonstrate decline with age of some cognitive abilities.³

A further dilemma is that those with poorer comprehension skills and more willing to delegate decisions were no more likely to have sought help than were those with greater skills. Engaging in aggressive outreach to these beneficiaries may be necessary, but there is now no mechanism for doing so.

■ **Possible policy directions.** Given that a large proportion of the Medicare population will have difficulty using comparative information on their own, three directions seem possible. (1) Simplify the task that will be required of beneficiaries in Medicare decisions. This could be accomplished by having fewer types of plan designs to choose from and less complexity in the choices. Medigap choices were simplified by standardizing options, and similar approaches could be taken with Medicare+Choice. The benefit packages, cost structures, and case management mechanisms of the various Medicare options have a high level of complexity and likely are a barrier both for making choices and for navigating within a particular system. Proposals for modernizing Medicare and adding drug coverage also appear to introduce more complexity. These proposals should be examined in light of the burden they place on beneficiaries and adjusted to reflect realistic decisions for this population. In addition, if selective contracting, based on performance, were used by the Health Care Financing Administration to choose provider organizations, then beneficiaries would have less information to cope with in the choice process.

(2) Investigate approaches to make the information easier to understand and more accessible to lower-skilled beneficiaries, including nonprint approaches. This would entail researching ways to present information to those with less skill. It may also imply using more intermediary-mediated delivery of information and one-on-one decision assistance.

(3) Identify those most in need and provide them with assistance. The development of a screening tool to identify those with inadequate

skill may be a feasible approach. Such an approach could be used to triage help to those who come in for assistance or for reaching out to those who do not actively seek help.

AS WE EMBARK on policy directions that rely heavily on giving people more information and more choices, it is critical that we understand which portion of the older population has the skills to successfully cope with the information and the choices, support that portion with appropriate information, and not burden the less skilled portion with too much information and too many choices.

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NOTES

1. D.C. Park, "Aging and the Controlled and Automatic Processing of Medical Information and Medical Intentions," in *Processing of Medical Information in Aging Patients: Cognitive and Human Factors Perspectives*, ed. D.C. Park, R.W. Morrell, and K. Shifren (Mahwah, N.J.: Erlbaum, 1999).
2. Comprehension skill index is dichotomized on median score. Based on the distribution of the MCBS survey population, 63 percent of the population scores 8 or higher on our screening index, and 37 percent would score below the median screening index score. For the 63 percent who had a high score on the screening index, we would expect 70 percent to have a high error score. Thus, $.63 \times .70 = .44$, or 44 percent of the total population would be true positives. We would expect about 37 percent of all beneficiaries to score low on the screening index. Of these, 33 percent would be false negatives. Therefore, we would expect 12 percent of the population to be false negatives ($.37 \times .33 = 12$ percent) (true positives + false negatives = 44 percent + 12 percent = 56 percent).
3. T.A. Salthouse, *Theoretical Perspectives on Cognitive Aging* (Hillsdale, N.J.: Erlbaum, 1991).