

RAND Report Summary: Consumer Use of Information When Making Treatment Decisions



**BlueCross BlueShield
Association**

An Association of Independent
Blue Cross and Blue Shield Plans

A Blue Cross and Blue Shield Association Analysis

EXECUTIVE SUMMARY

Main Point: Treatment decision tools can empower consumers with medical conditions to take a more active role in choosing the appropriate care for themselves or family members. This report demonstrates how better knowledge can lead to better, more affordable care for consumers.

- Treatment decision tools can be effective in improving medical treatment. Consumers who use these tools are:
 - ❖ more informed about their condition
 - ❖ less conflicted over their treatment options
 - ❖ more realistic expectations about their care
 - ❖ less likely to have certain types of elective surgery
 - ❖ more likely to receive medical screenings and other preventive treatment
- Consumers want some say in their own medical care and are very interested in health information when they face important treatment decisions. Consequently, the demand for treatment decision tools is potentially quite high.
 - ❖ Consumers are very interested in health information and generally satisfied with what they find.
 - ❖ Those seeking health information are higher healthcare utilizers and therefore more likely to benefit from treatment decision support.
 - ❖ The type of specific information consumers seek and the method by which they seek it are conducive to decision-making tools.
 - ❖ There is a strong belief among consumers that this information can be of value to them.
- There are a number of opportunities to leverage treatment decision tools to improve the quality and affordability of care such as:
 - ❖ *underuse of effective treatments* such as medical therapies after heart attacks (e.g., beta blockers, ACE inhibitors and statins)
 - ❖ *overuse of unnecessary invasive treatments* such as hysterectomies for uterine fibroids and abnormal bleeding
 - ❖ *unnecessary use of costly medication* such as Cox-2 inhibitors for many arthritis patients

In sum, there is substantial evidence to suggest that treatment decision tools can play an important role in improving the quality and keeping healthcare affordable.

INTRODUCTION

Much of the current interest in healthcare information has focused on supplying information on healthy lifestyle choices and provider cost and quality to a broad audience of consumers. While these are important endeavors, this study – commissioned by the Blue Cross and Blue Shield Association and conducted by the RAND Corporation – suggests the potential for supplementing these efforts with actionable health information for patients facing treatment decisions.

Treatment decision tools provide structured health information to consumers so they can participate in their own treatment decisions. Specifically, this information allows consumers to:

- Be aware of the available treatment options.
- Understand the consequences associated with each treatment option.
- Translate their individual preferences into selecting the right treatment option for them.

THE IMPACT OF TREATMENT DECISION TOOLS

A review of the literature shows that treatment decision tools can have a substantial impact on consumer attitudes and decisions about their treatment. Treatment aids help consumers better deal with their treatment challenges. Previous research studies have demonstrated that consumers who have used these decision tools have the following attitudes:

- more realistic expectations about their treatment outcomes,
- less decisional conflict,
- and greater patient satisfaction.

More important, treatment decision tools have been shown to change consumer treatment decisions. Studies have revealed many opportunities where patients who use these tools are less likely to choose elective surgery in favor of less invasive procedures and more likely to get preventive care. For example, one study found that the use of decision aids versus usual care reduced cardiac revascularization rates by 29%. More detailed decision aids often have a greater impact than simpler ones. In one study, the proportion of patients undergoing back surgery was 26% among those using a detailed aid versus 33 percent for those using a simpler aid. Finally, decision aids can be used to encourage more informed use of less precise screening tests such as the PSA test or to increase use of more generally recommended tests such as screening tests for colon cancer.¹ In short, for many conditions, decision tools can improve the quality of treatment without raising costs or reduce the cost of treatment without harming quality.

¹ For a comprehensive review of the literature on decision aids, see O'Connor AM, Stacey D, Entwistle V, et al. *Decision aids for people facing health treatment or screening decisions (Cochrane Review)*. In: *The Cochrane Library*, Issue _____. Retrieved September 2004 from <http://212.49.218.200/newgenMB/ASP/printDocument.asp>.

CONSUMER INTERACTION WITH HEALTH INFORMATION

To better understand the nature of current consumer demand for health information, Harris Interactive fielded an Internet survey in August 2004. The survey drew 4,304 responses, and the results were extrapolated to the adult U.S. population ages 18-64.² The data, analyzed by RAND, demonstrate a strong consumer demand for health information that likely translates into a desire for effective decision-support tools.

Consumer Interest

Most consumers in our sample want to take an active role in their own treatment decisions. Fifty-two percent of survey respondents want to make the final decision while another 38 percent want to make the decision together with their doctor.

This high level of desired involvement is consistent with their high level of interest in health information.

- Sixty-one percent of respondents sought health information for themselves or a family member in the last 12 months (referred to as “searchers” in this report).
- Ninety-four percent of those who did not search for information said they would if faced with a medical decision.
- Half of all searchers spent more than one hour searching for information, and most found the type of information for which they were looking.

Consumers were generally satisfied with the information they found.

- Fifty-five percent of searchers said they were very satisfied with the information.
- An additional 38 percent said they were somewhat satisfied.
- Only 7 percent were dissatisfied with the information they found.

A Profile of Information “Searchers”

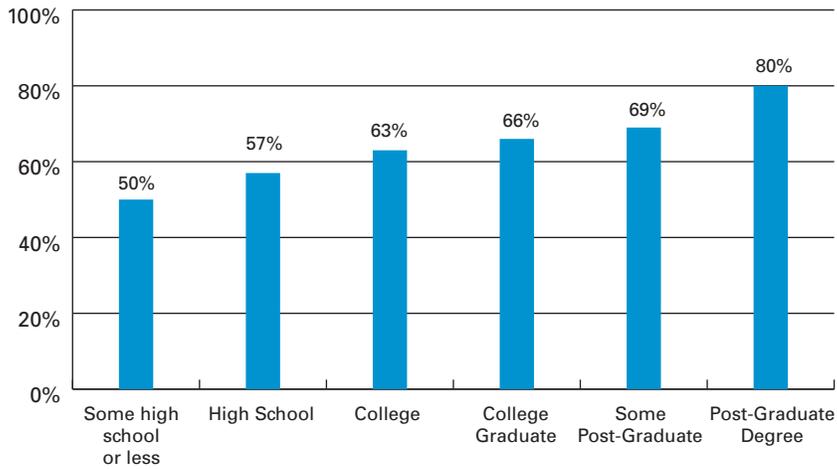
Segmentation of the consumer population demonstrates that the searcher population is both capable of using decision tools and likely to benefit from such tools. (Note: a comprehensive profile of information searchers can be found in the Appendix.)

2 *Harris Interactive commonly uses Internet surveys and post-weights the results to represent the U.S. population. This may not remove all bias related to an Internet-only panel; however, the increasing availability of on-line computers and the fact that any bias is toward our logical target group for Web-based tools, marginalizes the impact of bias for this study.*

Consumer Use of Information when Making Treatment Decisions

Searchers are generally more educated than non-searchers.

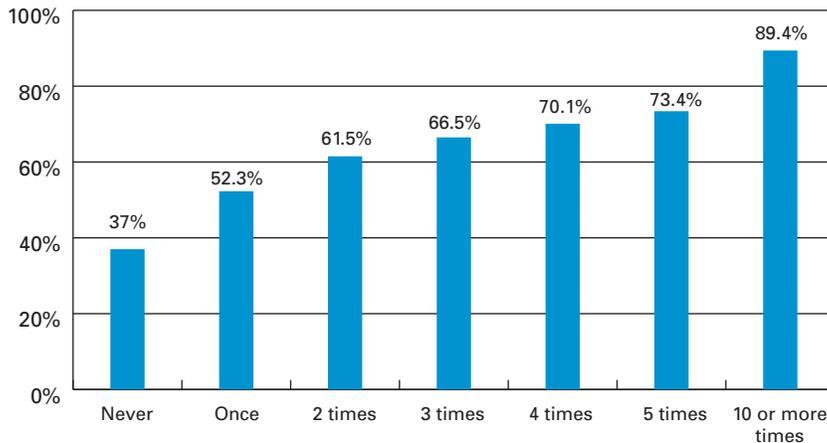
Table 1. Percentage of Respondents Who Searched for Information, by Level of Education



To broaden the appeal of decision tools to current non-searchers, they will need to be developed in a way that accommodates a variety of reading levels.

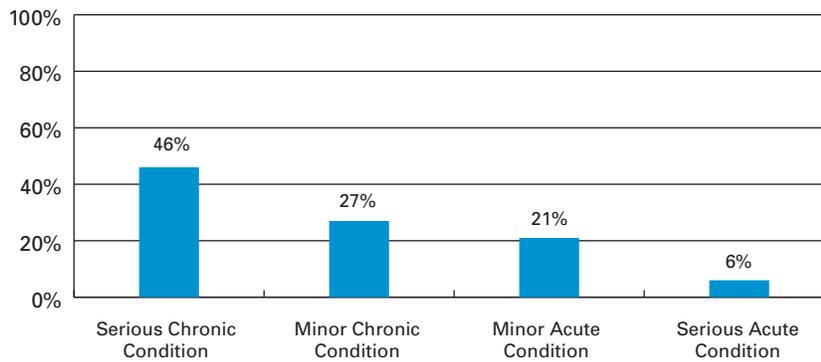
Searchers are heavier utilizers of the healthcare system and, therefore, are most likely to want and need treatment decision support. Searchers see physicians more often than non-searchers.

Table 2. Percentage of Respondents Who Searched for Information, by the Number of Physician Visits in the Last 12 Months



Searchers are also more likely to have serious chronic conditions than minor chronic or acute conditions.

Table 2. Percentage of Searchers with Each Type of Condition



Searchers with serious chronic conditions spent more time searching for information and were more likely to discuss the information with their physicians than searchers without serious chronic conditions.

- Forty-three percent of searchers with serious chronic conditions spent more than two hours searching for information versus 21 percent of those without serious chronic conditions.
- Sixty-five percent of searchers with serious chronic conditions said they discussed the information with their physicians versus 50 percent of those without such conditions.

How Consumers Search for Health Information

Most searchers appear to be very targeted in the type of information they seek.

- Seventy-two percent of searchers look specifically for treatment information – which is only slightly below the 84 percent who seek “general information on the condition.”
- Thirty-nine percent of searchers seek information that explicitly compares treatment options.
- However, only 14 percent currently seek out the cost of these treatment options.

A complete listing of the types of information and the frequency with which they are sought is in the Appendix.

Consumer Use of Information When Making Treatment Decisions

Searchers also tend to seek out health information online. This is important because Web-based treatment decision tools are more likely to have features that are known to reduce the effort and improve the accuracy of decision-making. In fact, our survey finds consumers cite the Internet as a source of information more often than their own physicians or “other healthcare professionals.” Below is a listing of the top five sources of health information:

Source	Percent Who Use
Internet	69%
Personal Physician	59%
Other Physicians or Health Care Professionals	39%
Family or friends	34%
Books/Journals/Reports	32%

Consumer Belief in the Value of Treatment Information

About one-third of all searchers claimed that the information they found had an impact on the type of treatment they received and the facility they used to get their treatment. However, the fact that these frequencies are low – no more than about a third of all cases where the treatment information was found – suggests that there is an opportunity for improvement.

Table 4. Impact of Information by Type of Information

Percentage who said the following type of information affected...		
(Type of information)	The treatment received	The facility used
Information on available treatments	33%	6%
Information comparing treatments	31%	8%
Information on cost of treatment	35%	14%
Information about physician specialists	30%	24%
Information about facilities specializing in condition	27%	36%

LEVERAGING TREATMENT DECISION TOOLS TO IMPROVE QUALITY AND LOWER COSTS

In determining the type of treatment decisions to target for decision support, one should take into account the impact on both health and costs.

- The best targets are those where health can be improved with no increase in costs OR where costs can be reduced with no decline in the patient’s health. These situations are represented by the darkest shaded squares in Table 5.
- The intermediate targets are where there are tradeoffs between cost and quality, which need to be examined case-by-case. These are represented by the lightly shaded boxes in Table 5.
- The unacceptable targets are those that increase cost with no health benefit, worsen health with no reduction in cost or, worst of all, raise cost and harm health. These are represented by the unshaded boxes.

Table 5: Targeting Intervention Opportunities

Potential Health Benefits ↑	Higher Cost Better Health	Neutral Cost Better Health	Lower Cost Better Health
	Higher Cost Neutral Health	Neutral Cost Neutral Health	Lower Cost Neutral Health
	Higher Cost Worse Health	Neutral Cost Worse Health	Lower Cost Worse Health
	← Potential Savings →		

KEY:

- Definite
- Possible Targets

RAND has developed a methodology to do the following:

- identify conditions that meet the above criteria
- estimate how much current practice deviates from recommended practice and the potential financial and health costs associated with it. Following are two examples from their research that demonstrate how the use of treatment decision tools by patients and their doctors could impact treatment choices in beneficial ways.

Table 6. Examples of Treatment Tool Opportunities

Type of Intervention Opportunity	Condition/Treatment Medical Therapies After Heart Attacks:	Estimated Potential Benefit in First Year
Example 1: Where there is under-use of effective medical care that could save lives	a. Beta blockers b. ACE inhibitors c. Statins	a. 10,000 lives saved b. 7,000-20,000 lives saved c. 40,000 lives saved
Example 2: Where there is over-use of costly medication	Cox-2 inhibitors for arthritis patients	\$4.5 billion in cost savings*

* This estimate will probably be affected significantly by Merck’s recent withdrawal of Vioxx from the market.

In the first example, appropriate use of decision tools for post-heart attack treatment could save tens of thousands of lives in just the first year. In the second example, reduction in the inappropriate use of Cox-2 inhibitors could produce healthcare savings of \$4.5 billion without any discernable reduction in healthcare quality.

CONCLUSION

Consumers with medical conditions have a strong interest in health information. Current treatment practices in many areas can be improved by better decision-making based on sound clinical information. By empowering consumers to take a more active role in their own treatment decisions, decision tools are a potentially powerful way to improve the quality and efficiency of healthcare.

APPENDIX

The following table summarizes consumer characteristics associated with an increased likelihood to search for information.

Comprehensive Profile of Healthcare Information Searchers (Ages 18-64)

Characteristic	Searched for Self (A)	Searched for Family Member (B)	Searched for Information (A+B)
More educated	**	**	**
Worse self-reported health status	**		**
Older			**
Older than 18-29 years old		*	
Female	*	*	**
Frequent users of outpatient care	**	*	**
Hospital patients	**		**
Higher income	*		*
African-American	*		*
ER patients	*		*

**Stronger predictors of searching

*Weaker predictors of searching

The following table shows the frequency searchers looked for different types of treatment information.

Treatment Information Sought by Consumers (Ages 18-64)

Type of Information	Percentage of Searchers Looking for It
Information on available treatments	72%
Information comparing treatments	39%
Cost of treatment	14%
Physicians specializing in treatment	18%
Hospitals specializing in treatment	13%



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