

BRIEF REPORTS

Physicians' Changing Attitudes Toward Guidelines

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The objective of the study was to measure the change in physicians' attitudes toward preventive care guidelines over a 2-year period. The study was conducted at a Southern California managed care medical group that was experiencing intense price competition. We analyzed individualized survey responses of 62 HMO primary care physicians over the study period. We found that physicians increasingly believed that clinical guidelines were being used for cost containment (first survey 71% vs second survey 92%, $p < .005$) and less for quality improvement (first survey 85% vs second survey 67%, $p < .008$) over time. These findings may create a barrier to physicians' adoption of practice guidelines.

KEY WORDS: primary care physicians; practice guidelines; physicians' attitudes.

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Practice guidelines are reportedly being developed to improve the quality of health care and to control medical costs.¹ Although guidelines may hold great promise for improving quality and reducing costs, their implementation has proved to be difficult.²⁻⁵ An important issue concerning guideline implementation and acceptance is understanding physicians' attitudes toward guidelines,^{3,6} which may be helpful in creating strategies to successfully implement guidelines.^{4,7} Although there have been studies on physicians' attitudes about guidelines,^{2,6} no study, to our knowledge, has been done longitudinally to track the change in physicians' attitudes over time. We examined physician attitudes about practice guidelines during a period of intense price competition in a relatively mature managed care market (Southern California). Our hypothesis was that physicians, who are under pressure

to practice in a more cost-effective manner,⁸ may increasingly perceive guidelines as a tool for cost containment rather than for improvement of quality of care.

METHODS

Study Design

The study was a prospective cohort. The physician served as the unit of analysis.

Subjects

The subjects were all physicians practicing at a managed care medical group. All of the physicians from the Departments of Family Practice and Internal Medicine had agreed to participate.

Setting

The study took place at a medical group in Southern California. Guidelines at this medical group are developed through a central regional process. During the second survey, there was increasing guideline activity at the facility. In 1992 drug utilization review was implemented to monitor prescriptions. Feedback to physicians on prescriptions was done during this period.

Survey

Using a validated survey to measure physicians' attitudes toward guidelines,⁶ each physician commented on statements about guidelines on a 3- or 5-point ordinal scale. Physicians understood that their responses were confidential and the questionnaire's purpose was to gather information on their thoughts on guidelines.

The physicians took the survey twice. The first survey was from July 1992 to November 1992, and the second survey was from February 1994 to July 1994. The second survey was solicited only from physicians who remained on staff at the medical group. Only those physicians who completed both surveys were included in the analysis.

Statistical Analysis

Two tests, the McNemar's test and paired Student's *t* test, were used to detect a significant change in the physi-

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cians' responses. Significance was determined to be $p < .05$. The McNemar's test was used to determine the significance of changes in survey responses toward agreement or disagreement. Survey responses were categorically placed into agreement and disagreement groups. If the survey used a 5-point ordinal scale, agreement was categorized by the responses 4 or 5. Disagreement was categorized by the responses 1, 2, or 3. If the survey used a 3-point ordinal scale, agreement was defined by the response 3. The physicians' compared responses were grouped into four categories: (1) change to agreement with survey statement; (2) change to disagreement with survey statement; (3) constant agreement with survey statement; or (4) constant disagreement with survey statement. A paired t test was also performed.

RESULTS

Subjects

Of 71 physicians initially surveyed, 62 (87%) completed both surveys. Of the nine physicians who did not complete both surveys, five were no longer on staff, two had retired, and two never returned the second survey. Also, some physicians did not answer all of the survey questions. Only the physicians who answered the study items in both surveys were included. The study group was made up of 19 family practitioners, 24 internists, and 19 subspecialists. There were 47 men and 15 women. The mean age \pm SD was 41.4 ± 7.0 years (range, 31–66 years). The average number of years at the medical group was 9.1 ± 6.6 years (range, 1–32 years).

Physicians' General Attitudes Toward Practice Guidelines

In the second survey, more physicians agreed that the function of guidelines is to contain costs (first survey 71% vs second survey 92%, $p < .005$) (Table 1). Regarding the statement that guidelines, "would likely decrease total health care costs," physicians increasingly agreed in the second survey as compared with the first survey (first survey 74% vs second survey 88%, $p < .02$) (Table 1).

Fewer physicians agreed that guidelines were "motivated by a desire to improve quality of care" (first survey 85% vs second survey 67%, $p < .008$) (Table 1) and "would likely improve quality of care" (first survey 90% vs second survey 79%, $p < .04$) (Table 1). There was a decline in the physicians' agreement with the statement, "guidelines would be used for quality assurance review" (first survey 91% vs second survey 72%, $p < .008$) (Table 1).

The results from the paired t test analysis support these trends. Physicians increasingly agreed with the statement of "guidelines being motivated by the desire to cut costs" ($p < .0006$). Physicians increasingly disagreed with the statement that guidelines were motivated by a desire to improve the quality of care ($p < .0003$), would increase physician satisfaction ($p < .03$), and would decrease the total cost of health care ($p < .03$) (Table 2).

DISCUSSION

Physicians' attitudes about guidelines may be important for the success of guideline implementation efforts and guideline adherence.² This study provides some insight into the changing attitudes about practice guide-

Table 1. Physicians' Attitudes About Guidelines: McNemar's Test

Statement About Guidelines	Physician Agreement in First Survey, %	Physician Agreement in Second Survey, %	Change Between First and Second Surveys*, %		Significance of the Change in Physician Agreement, p Value
			From Disagreement to Agreement	From Agreement to Disagreement	
Motivated by a desire to cut costs ($n = 59$)	71.2	91.6	25.4	5.1	<.005
Likely to decrease costs ($n = 58$)	74.1	88.0	17.2	3.5	<.02
Motivated by a desire to improve quality ($n = 61$)	85.3	67.2	0.9	23.0	<.008
Likely to improve quality of patient care ($n = 58$)	89.7	79.3	1.7	12.1	<.04
Likely to be used for quality assurance ($n = 58$)	91.4	72.4	5.2	24.1	<.008
Improve physician's job satisfaction ($n = 58$)	36.2	22.4	6.9	20.7	<.05

*A 5-point Likert scale was used in the survey. The agreement change was determined by the specific physician's first survey value subtracted by the second survey value. Agreement was indicated with 5 indicating agreement and 1 indicating disagreement.

Table 2. Physicians' Attitudes About Guidelines: Student's Paired *t* Test

Statement About Guidelines	Difference of Physicians' Responses from First to Second Surveys*, Mean \pm SD	<i>p</i> Value
Motivated by a desire to cut costs (<i>n</i> = 59)	0.47 \pm 1.01	<.0006
Likely to decrease costs (<i>n</i> = 58)	-0.25 \pm 0.85	<.03
Motivated by a desire to improve quality (<i>n</i> = 61)	-0.34 \pm 0.70	<.0003
Likely to improve quality of patient care (<i>n</i> = 58)	-0.09 \pm 0.39	.1
Likely to be used for quality assurance (<i>n</i> = 58)	-0.22 \pm 1.03	.1
Improve physician's job satisfaction (<i>n</i> = 58)	-0.21 \pm 0.69	<.03

*A 5-point Likert scale was used in the survey. The agreement change was determined by the specific physician's first survey value subtracted by the second survey value. Agreement was indicated with 5 indicating agreement and 1 indicating disagreement.

lines, and chronicles those attitudes during a time of tense price competition in an aggressive managed care environment. Many factors can influence physician opinion about guidelines: practice environment (i.e., managed care or private practice), implementation strategy, process of guideline development, physician incentives to adhere to guidelines, and perceived effect of guidelines on patient outcomes. From the survey responses, there may be an increasing belief that the purpose of guidelines is to control costs rather than to improve quality of care.

Possible causes of the physicians' perceptions about guidelines may be that a limited number of physicians participated in guideline development or that attitudes about guidelines changed as a result of practicing in a more cost-competitive environment.

There are several limitations of this study. The study involved a single medical group, and these physicians may have had a unique experience with practice guidelines. We also studied physicians' perceptions about, rather than the actual purpose of, specific guidelines.

In conclusion, physicians' beliefs about practice guidelines changed as they perceived that guidelines were becoming more focused on cost than on quality of care than was the case 2 years earlier. Whether these changes in attitudes erode physician confidence in guidelines and cause barriers to guideline adoption is yet to be determined.

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