

## Tobacco Control Efforts in Managed Care: What Do the Doctors Think?

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**Objectives:** To use physician reports to evaluate their awareness of health plan tobacco control guidelines and cessation support coverage and to validate the extent to which health plan cessation support material had been disseminated and implemented in clinical settings.

**Study Design:** Comparison of survey responses of physicians with tobacco control activities reported by key informants in the health plans with which those physicians were associated.

**Methods:** A total of 100 primary care physicians in the care delivery organizations associated with 9 nonprofit health plans were randomly selected to receive a survey asking about their health plan's tobacco cessation guidelines, coverage, and support for clinician action. Their responses were compared to data reported by the plan with which they were associated.

**Results:** Responses were obtained from 91%. Although 88% were aware of their health plan's tobacco cessation guidelines, considerably fewer were correctly aware of whether the health plan covered medications and cessation classes or counseling. Physician reports of cessation supports during care bore little relationship to health plan reports of those supports.

**Conclusions:** Physician reports may be a useful way to verify health plan dissemination and implementation of tobacco control activities. Even these relatively high-performing plans have ample room for further improvement.

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Provision of preventive services has been one of the bright spots for managed care organizations (MCOs) during a time of widespread attacks on their efforts to control costs and improve quality,<sup>1,2</sup> especially in staff model nonprofit plans.<sup>3-5</sup> Some of these plans have been leaders in tobacco control,<sup>6,7</sup> and both governmental and private sector groups have identified MCOs as important vehicles for addressing the epidemic of tobacco-related disease in the United States.<sup>7-12</sup> Managed care tobacco control efforts have been encouraged by public recognition awards from the American Association of Health Plans as well as by targeted research funding programs (eg, The Robert Wood Johnson Foundation program entitled, Addressing Tobacco in Managed Care). The US Public Health

Service (USPHS) Tobacco Use and Dependence Clinical Practice Guideline<sup>13</sup> even includes specific recommendations for health plan tobacco control efforts:

- Implement a tobacco-user identification system in every clinic
- Provide education, resources, and feedback to promote the delivery of tobacco cessation services by clinicians
- Include tobacco-dependence treatments (both counseling and pharmacotherapy) as paid or covered benefits for all members
- Reimburse primary care clinicians and specialists for delivery of effective tobacco-dependence treatments

However, to date evaluation of health plan efforts to implement these recommendations has been scarce. Two surveys of health plan leaders about their specific policies and activities in tobacco control have been published but no documentation is available about whether these policies are really in place, other than the Health Employer Data and Information Set (HEDIS) reports of health plan rates of advice to quit.<sup>14,15</sup> The HEDIS ratings provide no direct information about the recommendations or about comparison with nonmanaged care plans, and the methodology employed has been somewhat controversial.<sup>16,17</sup>

We recently completed a survey of 9 nonprofit health plans with above-average HEDIS rates of tobacco cessation advice, to learn what policies might be responsible for these rates and whether these plans followed the

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USPHS recommendations.<sup>14</sup> Because all of the recommendations relate directly or indirectly to physician support for smoking cessation, a survey of physicians should provide a more objective assessment of whether these policies were truly in place and thoroughly implemented. We were encouraged by the findings of Borowsky and colleagues that physicians will provide critical feedback when asked about the performance of the health plans with which they contract.<sup>18</sup> Therefore, we surveyed primary care physicians about their awareness of the tobacco control policies and practices of the health plans with which they were associated. We hypothesized that physicians could help to verify the extent to which tobacco control programs had been disseminated and implemented in medical practice settings.

Our study was conducted by 9 of the 10 public domain research organizations associated with nonprofit health plans that have collaborated in the Cancer Research Network in order to conduct research studies of cancer prevention and treatment under a grant from the National Cancer Institute. The research project described in this paper is called Project HIT (HMOs Investigating Tobacco) and was funded to study health plan tobacco control policies and their effect on smoking cessation and healthcare costs. These 9 plans provide health insurance coverage for 8 million people in 8 states from Massachusetts to Hawaii, and deliver a full range of healthcare services, mostly through staff-model-integrated delivery systems. In 1999, all 9 plans had HEDIS rates for advising smokers to quit that ranged from 66.7% to 81.6% and were substantially above the national average of 63.6%.<sup>19</sup>

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## METHODS

In 1999, we surveyed multiple key informants in each of these MCOs and reviewed each plan's written tobacco guidelines to verify their content.<sup>14</sup> In 2000, we repeated that survey to obtain updated information about each health plan's use of tobacco clinical guidelines, implementation efforts, incentives and supports for clinician cessation actions, coverage for various cessation services, and other tobacco-related activities.

Soon after this policy survey update, we conducted a mail survey of a random sample of 100 primary care physicians from the care delivery organizations associated with each of the 9 HIT health plans. Both surveys were approved by the Institutional Review Boards associated with each of the participating health plans. To be included in the sample, the subjects needed to be adult primary care physicians (internists, family physicians,

or obstetrician-gynecologists) who had worked for their current group for at least 1 year and who worked at least half time in a nonurgent care setting. The questionnaire was a 1-page, 19-item document that asked about the respondents' awareness and the perceived implementation of 8 important aspects of their health plans' tobacco control policies. A 5-point Likert scale was used for all responses, with *Yes*, *Probably Yes*, *Unsure*, *Probably No*, and *No* responses for most questions and 5-point *Always* to *Never* responses for questions about the availability of 5 cessation support resources at the time of a patient visit. The anonymous questionnaire was mailed to the physicians' office or home addresses with a cover letter from their medical leader and an official from the National Cancer Institute. This first mailing was followed by a reminder postcard in 1 week and by another questionnaire 2 weeks after that. To maintain anonymity, physicians responding to the survey were also asked to return a postcard at the same time that they separately returned the anonymous questionnaire. Although the postcard did include an individual identifier, the questionnaire did not. Nonresponders were contacted at 6 weeks by someone from their health plan's research group to encourage return of the questionnaire. These protocols were reviewed and approved by the Institutional Review Boards of each study health plan.

Completed responses were summarized and compared with the relevant data from our survey of the tobacco control policies at each health plan. Where there were differences among the plan policies (eg, whether or not the plan provided performance feedback or financial incentives), we separately analyzed the responses from physicians associated with those plans that did and did not have the policy. In cases where there were multiple components to an aspect of plan policies or programs, we made decisions about what was most relevant to practicing physicians. For example, the health plan policy survey asked about a variety of approaches to training about tobacco control recommendations, but we limited the physician survey comparison to awareness of training for clinicians at their practices and the availability of central workshops.

In addition, questionnaire items were compiled into contingency tables, along with the plan characteristics, and simple response frequencies (and range of frequencies among plans) were computed. The physician responses to the question about plans having cessation as a priority area were further investigated with logistic regression. The positive responses of physicians (*Yes* or *Probably Yes* with respect to cessation as a priority) were tested relative to their sex, age, and half-days

**Table 1.** Physician Awareness of Health Plan Guidelines for Tobacco Cessation in 9 MCOs\*

Question <sup>†</sup>	Yes	Probably Yes	Unsure	Probably No	No
Does your plan have a guideline for tobacco?	72 (46-97)	16 (1-27)	9 (0-23)	2 (0-8)	2 (0-4)
a. Does it recommend identifying smokers at every visit?	88 (66-98)	9 (2-23)	2 (0-9)	0 (0-2)	0 (0-5)
b. Does it recommend advising all smokers to quit?	89 (76-99)	9 (0-19)	2 (0-5)	0 (0-2)	0 (0-2)
c. Does it recommend assisting smokers to quit?	88 (70-98)	9 (2-21)	2 (0-7)	0 (0-4)	0 (0-2)

Values are % (range) of correct answers among MCOs.

\*Each of the 9 plans has a guideline that recommends each of these actions.

<sup>†</sup>For the 3 questions (a-c) about guideline specifics, only the 637 physicians reporting awareness of the guideline were included.

MCO indicates managed care organization.

worked per week, and to the plan characteristics (as documented in the key informant survey).

**RESULTS**

Despite efforts to assure that only eligible physicians were sent surveys, 65 respondents did not fit the inclusion criteria. Of the remaining 835 subjects, completed surveys were obtained from 761, for an adjusted response rate of 91% (range 86%-95%) among the 9 plans. Forty percent of respondents were female (range 33%-52%) and the mean age was 46 years (SD 10 years). Participants reported working a mean of 7.5 half-day

clinic sessions per week.

**Table 1** shows physician awareness of health plan clinical guidelines for tobacco cessation. All 9 plans had guidelines with similar recommendations, and the vast proportion of physicians reported knowing the guideline existed and its specific content. However, in 2 plans (plans E and H), 23% and 21% of physicians were unsure whether their plan had such a guideline and larger proportions than in any other plan (11% and 6%) reported that there was no guideline.

In contrast, **Tables 2** and **3** display health plan tobacco control actions where there was substantial disagreement between plan key informant and physician reports and substantial variation among plans. The percentages

**Table 2.** Agreement Between Physician and Health Plan Reports of Guideline Implementation

Question	Plan Reports This Action			Plan Does Not Report Action		
	No. of Plans	MDs Report Action		No. of Plans	MDs Report Action	
		Yes*	No*		Yes*	No*
Have you received a copy of the tobacco guideline?	5	72 (61-90)	12 (1-18)	4	78 (66-92)	7 (2-12)
Does your plan train clinicians on smoking cessation?	6	55 (25-83)	29 (5-53)	3	45 (44-46)	28 (21-33)
Does your plan provide feedback on clinic rates of identifying smokers and advising quits?	5	48 (18-92)	37 (4-63)	4	17 (5-23)	69 (54-85)
Does your plan provide financial rewards for good rates of quit advice?	2	32 (4 & 61)	55 (25 & 84)	7	2 (0-5)	91 (85-97)

Values are % (range) of correct answers among MCOs.

\*Where Yes = Yes + Probably Yes and No = No + Probably No. The percentages do not add to 100% because the balance of physicians answered Unsure.

MCO indicates managed care organization.

**Table 3.** Physicians' Awareness of Cessation Treatment Coverage by Their Health Plan

Question: Does Your Health Plan Cover These [Tobacco Cessation Support Methods]?	Plan Reports This Action			Plan Reports No Such Action		
	No. of Plans	MDs Report Coverage		No. of Plans	MDs Report Coverage	
		Yes*	No*		Yes*	No*
Over-the-counter cessation medications	5	64 (46-84)	22 (4-37)	4	49 (31-67)	38 (19-58)
Prescription cessation medications (bupropion/nicotine)	9	87 (83-91)	5 (1-12)			
Cessation classes or counseling <sup>†</sup>	9	80 (53-96)	7 (0-24)			

Values are % (range) of correct answers among MCOs.

\*Where Yes = Yes + Probably Yes and No = No + Probably No. The percentages do not add to 100% because the balance of physicians answered Unsure.

<sup>†</sup>All plans cover at least some types of therapies partially, so this division regards all therapies versus some. MCO indicates managed care organization.

for Yes and No responses in these tables do not add up to 100% because physicians responding *Unsure* are not displayed. Table 2 indicates that physicians were no more likely to report having received a copy of their plan's tobacco guideline or awareness of physician training in plans that reported these implementation strategies than in plans that did not. However, physicians may be aware of performance feedback and financial rewards more often in health plans with those policies, although the proportion who were aware was not large and physicians in plans that did not have these policies were more often aware of the lack of such policies. All plans provided at least some coverage for prescription cessation medications and cessation classes or counseling. As seen in Table 3, a high proportion of physicians across plans seemed to be aware of this coverage, although almost half of the physicians in one plan (plan E) were unaware or unsure of coverage for cessation classes or counseling. Physicians may be less aware of their plan's coverage of over-the-counter (OTC) nicotine replacement therapies.

Although nearly all plans reported that they provide or encourage various types of tobacco cessation assistance, the proportion of physicians who reported awareness of such assistance for patient care varied widely (Table 4). Much of this variation was derived from responses of the physicians in plans E and H, who reported much lower likelihoods of each of these forms of assistance in working with their patients.

We also compared various actions by each health plan with the proportion of associated physicians reporting that tobacco control was a plan priority. Only 2 plans were rated by nearly all their physicians as having tobacco

control as a high priority, whereas only half the physicians in 2 other plans reported tobacco control to be a priority. The plan actions with the greatest difference in physician reports between these 2 extremes were:

- Providing feedback on clinic rates of assisting smokers to quit: 84% versus 13% (ie, in the 2 plans with high ratings for tobacco control as a priority 84% of physicians reported receiving feedback while in the 2 with low ratings only 13% reported feedback).
- Supporting clinic cessation assistance systems: 90% versus 38%
- Training MDs for cessation: 80% versus 34%
- Sponsoring community tobacco control activities: 55% versus 16%

For the other 5 plans, an intermediate level of physicians reported that their plans had a priority for tobacco control (70%-84%). Similarly, an intermediate level of those physicians reported each of the above actions.

Finally, in the logistic regression, we assessed the effect of physician sex, age, and half-days worked per week on responses. Male physicians were less likely to report all forms of quit assistance being easily available. Older physicians were more likely to report that tobacco control was a priority for their plan, that their plan provided training, and that cessation classes and materials were easily available, but they were less likely to report that their plan provided financial rewards. Physicians working more half-days per week were somewhat less likely to report getting feedback reports, but more likely to report smoking status being identified and

**Table 4.** Physician Report of Experiencing Cessation Support Assistance During Patient Care

Question: How Often Are the Following Types of Quit Assistance Easily Available?	Plan Reports This Assistance			Plan Reports No Such Assistance		
	No. of Plans	MDs Report Assistance		No. of Plans	MDs Report Assistance	
		Frequently*	Infrequently*		Frequently*	Infrequently*
Tobacco status already identified	8	78 (47-97)	13 (0-40)	1	98	0
A prompt to advise cessation	8	49 (21-83)	45 (13-71)	1	50	45
Stop smoking patient materials	9	68 (34-93)	21 (2-51)	0		
Convenient cessation classes	9	73 (31-92)	20 (6-45)	0		
Phone or on-site counselors	9	49 (19-76)	46 (15-73)	0		

Values are % (range) of correct answers among MCOs.

\*Where Frequently = Always + Usually, and Infrequently = Never + Sometimes. The percentages do not add to 100% because the middle response group on this Likert scale is not displayed.

MCO indicates managed care organization.

classes and materials being readily available. Most of these associations, although statistically significant at the 95% confidence interval level, were small, and there were no other associations between these 3 physician characteristics and their responses to these questions.

DISCUSSION

By usual standards (eg, HEDIS measures), all of these health plans have successful tobacco control policies. However, our study showed substantial variation in physician awareness of various elements of the USPHS-recommended policies, and that the level of implementation and maintenance of practice cessation supports are both variable and suboptimal. If physicians delivering an important aspect of tobacco control efforts are unaware of a health plan's elements, the best-intentioned program will not succeed.

There are 2 ways to categorize health plan tobacco control policies for purposes of this study:

- 1. Objective and definitive:** For example, whether a clinical guideline exists for tobacco cessation support and whether cessation therapies are covered.
- 2. Subjective and dependent on the degree of implementation:** For example, extent of clinic system changes, training, performance feedback, and financial rewards.

For policies in the first category, very high proportions of physicians associated with most of these health plans were aware that the plans had tobacco cessation guidelines and covered classes, counseling, and pre-

scription cessation medications. However, few physicians knew whether their plan covered OTC cessation medications, perhaps because physicians are not as responsible for the use of these medications.

Physician reports on health plan policies in the second, more subjective, category should provide an opportunity to assess how thoroughly these policies have been implemented. Thus, incomplete implementation and alternate sources of guidelines and training probably accounts for the lack of relationship between the presence of these policies and awareness by physicians. Physicians in plans that do not provide feedback or financial rewards for cessation support rates are relatively aware of that, but the high proportions of physicians reporting that they have received a copy of the guideline or believe that their plan provides training for plans that do not do these things suggests that there may be other sources of those actions that confuse the respondents. However, the mixed responses for plans that do provide feedback or rewards probably reflect a limited distribution of this information. Although all plans reported encouraging or providing most of the various types of office cessation supports identified in Table 4, the highly variable physician reports of availability of those services is certainly a reflection of variable and incomplete implementation. The wide range of physician reports among plans for this information probably reflects this variation in distribution or implementation.

An interesting finding about these responses was that physicians associated with plans that do not have a particular policy appeared to be more likely to report that the policy was present (ie, false-positive reports) than



are physicians associated with plans that do have the policy to say it is not present (ie, false-negative reports). This observation suggests that these physicians have been made aware that their plans are interested in reducing tobacco use and that they tend to give their plans the benefit of the doubt if they are unsure whether certain specific tobacco control policies are present.

Finally, plans varied considerably in the extent to which affiliated physicians believed that tobacco control was a priority for their health plan. In contrast, the key informants from every health plan indicated that tobacco control was a high priority for their plan. The variance between plan actions and physician ratings of the priority of tobacco control suggested that if a health plan wishes to convince physicians that tobacco control is a high priority, a useful measure might be to provide and ensure physician awareness of training, feedback, and financial rewards.

The principal limitations of this study were that the survey was restricted to physicians closely affiliated with these health plans, all of which have relatively high performance rates for tobacco cessation support. Thus, one must be cautious in generalizing these results to other types of health plans. Also, our desire for a short survey with high response rates prevented our exploration of relationships between response items and specific physician characteristics.

Our findings suggest that physician reports of health plan policies may be a useful way to verify the extent to which those policies have been effectively implemented, but only for policies that directly affect the physicians and their work. In general, study physicians appeared to have high expectations for their health plan as far as tobacco control policies. Nevertheless, their reports indicated that these health plans that are leaders in tobacco control are not doing a very good job of making physicians aware of most of the assistance that they provide. The plans appear to have ample room for improvement by more thoroughly implementing the policies and systems that the USPHS guideline recommends.

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