

# Incentivising, facilitating, and implementing an office tobacco cessation system

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Although the development and publication of a national evidence based clinical guideline for smoking cessation from the Agency for Health Care Policy and Research (AHCPR)<sup>1</sup> has clarified the approach that should be used in medical practice settings, clinicians are still a long way from following it consistently.<sup>2-7</sup> Cromwell *et al* have studied the cost effectiveness of applying the recommendations in the AHCPR guideline and concluded that at \$1915 per quality adjusted life year, it is one of the most cost effective of all preventive services.<sup>8</sup>

However, if we are to realise the potential that clinicians have to facilitate cessation and achieve these health and life gains, we shall have to find some way to make large changes in the current behaviour of clinicians. One of the obvious resources for stimulating this type of change is the managed care health plans that have contracts with most of the primary care clinics in the country.<sup>9</sup> If the excess medical costs of smokers to the age of 65 years are really \$9000 to \$11 000,<sup>10</sup> Cromwell calculates that the medical care savings per quitter should average about \$6000 per quitter.<sup>8</sup> If so, and if health plans could count on enough member continuity to achieve some portion of those savings, they would have a real incentive to try to change clinician behaviour in this area.

Fortunately, it is now also becoming clear what types of changes will lead to more effective implementation of this guideline. As with the implementation of any guideline, simple educational efforts will have little effect.<sup>11-12</sup> Instead, office systems that start with making identification of smoking status a vital sign are clearly the key to consistent adherence to the guideline.<sup>13-20</sup>

Thus, the question becomes what can a health plan do to try to encourage the development and effective use of systems in office settings? In particular, what can be done when there is not a direct ownership relationship with care systems, but the much more common contractual one? Although there are several examples of notable clinical smoking cessation systems in staff model health maintenance organisations (HMOs),<sup>21-23</sup> the real need is to demonstrate an HMO's ability to affect this in contracted care systems. Although the health plan usually will only have a minority of the patients in such clinics, the opportunity to influence the care of a much broader patient population is also much greater.

It seems likely that health plans should be able to do at least three things that would help: (1) incentivise their contracting medical groups to want to set up systems that

implement the guideline; (2) facilitate the development and operation of those systems; (3) provide examples of feasible and effective systems.

## Incentives for establishing office tobacco cessation systems

There are many possible incentives for physicians to improve their thus far dismal record of smoking cessation support for their patients. Physicians still have a great deal of professional pride. They want to do what is best for their patients, and the AHCPR guideline and support from professional associations stressing the importance of addressing tobacco use are making it clear that it is the right professional thing to do. This can be reinforced by colleague peer pressure and by data feedback on inadequate advice and support rates. However, it is very clear that just wanting to do better is not enough—in the absence of a support system, behaviour is not going to change very much for all the desire in the world. We physicians work in an environment that has enormous time pressures and both our training and patient demands force us to concentrate on immediate medical problems rather than long term issues such as preventive services.<sup>14-24</sup> In addition, we are thoroughly embedded in a paradigm of one to one relationships that makes understanding of or support for systems and team approaches difficult.

Other potential incentives are mostly not significant factors for this issue. Smoking patients may occasionally bring up smoking cessation when they want a prescription for medications that might help them to quit, but otherwise patient demand clearly is not going to drive this change. Purchasers could also be demanding change, but asking clinicians to perform more services has not been a prominent part of most purchaser concerns so far. Finally, medico-legal fears have certainly driven many other clinician behaviour changes, but I am not aware of any legal suit for physician malpractice because of not having provided smoking cessation advice.

There is reason to believe, however, that financial incentives might be feasible and effective. There are two real life examples in Minnesota of significant financial incentives for private medical care systems to implement the AHCPR guideline more effectively. At HealthPartners, a health plan with two thirds of its 800 000 members in the contracted care division, we have developed an outcomes recognition program (ORP) to spur various evidence based clinical behaviours among

contracted medical groups, including support for smoking cessation.<sup>25</sup> In order to be part of this financial incentive program, a medical group needs to have a HealthPartners enrollment of at least 2500 people, so there is enough of a sample size to be able to determine statistically valid adherence to the selected targets. In 1997, there were five target topics for the ORP—mammography, pap (cervical) smears, child immunisations, smoking cessation, and patient satisfaction. Achieving specified target rates for each one of these topics provides a medical group with a significant financial bonus on top of all normal contracted payments—that is, not from any withheld payments. We started doing the measurements for this program in 1996, and in 1997, when the first ORP payout occurred, a total of \$2.25 million was at stake and \$575 000 was actually paid out to the medical groups.

For smoking cessation, a group had to achieve an 80% smoking status identification on chart review and also document cessation counselling in 80% of identified smokers. Between 1996 and 1997, 12 medical groups improved their identification rates while only two groups worsened; the average rate for all groups rose from 49% to 56%. Counselling rates improved in six groups while only one group worsened; the overall average counselling rate rose by 14%. Although none of the groups achieved the high rates required in both categories to get the bonus for tobacco in 1997, several were close. Anecdotally, many of the medical groups have been coming to us with interest in learning how to put more effective smoking cessation systems in place.

Another local example of an actual financial incentive is that provided by a large business group in Minnesota—Buyer's Health Care Action Group (BHCAG).<sup>26</sup> Each year BHCAG makes one gold award for \$100 000 and three silver \$50 000 awards to care systems which best meet their criteria for quality. In order to be a contender, a care system must have at least 44% of their BHCAG member patients report being very satisfied on a satisfaction survey. Care systems achieving this rate must then have over 49% of their adult patient charts up to date on 18 selected preventive services, with tobacco identification and advice as two of those services. Finally, surviving groups compete on effectiveness of implementation of selected clinical guidelines. Last year, the gold award was won by a relatively small medical group with about 30 physicians who understand system changes better than most.

Clearly these two incentive programs have captured the attention of medical groups in our region. They provide carrots for addressing quality improvement in smoking cessation by medical groups who are experiencing enormous turmoil and competitive stress that might otherwise inhibit such action.<sup>27</sup>

#### **Facilitating office tobacco cessation systems**

Once medical groups become motivated by incentives like those described above to improve their smoking cessation support for

patients, and once they learn that training and exhorting clinicians will not accomplish anything, they become receptive to other kinds of approaches and assistance. An interested health plan can respond to this interest.

Although it is possible for a health plan to do this directly, HealthPartners has taken a different approach that seems to be working fairly well. It has provided about \$2 million per year to support a semi-independent collaborative of medical groups interested in working together on quality improvement. This collaborative is the Institute for Clinical Systems Improvement (ICSI).<sup>28</sup> ICSI has varied in size over time from 16 to 20 medical groups, ranging from the Mayo Clinic to a four doctor rural practice. While it is funded by HealthPartners, ICSI is actually governed by the medical groups themselves, which make substantial contributions of clinician and staff time to its various activities.

ICSI serves as the facilitator for each of the steps needed to improve smoking cessation activities (and every other improvement need): (1) development and maintenance of locally owned evidence based guidelines; (2) membership requirement to work actively on implementation of these guidelines; (3) development of specific knowledge products about improvement concepts and techniques; (4) education and consultation to help medical groups build a foundation for improvement; (5) implementation/improvement action groups to work together on specific guidelines.

A smoking cessation guideline was among the first developed,<sup>29</sup> and it has been revised annually so it is quite compatible with the AHCPR guideline in most ways. Although the early efforts at ICSI were focused almost entirely on guideline development, we have learned that development is the easy part—implementation is the real challenge. In order to facilitate implementation, steps 3–5 above have been receiving the greatest attention lately. The vehicle for most of this attention has been the operation of “action groups”, periodic meetings of implementation leaders from the medical groups who have chosen to work on selected common guidelines. The goal for these action groups is to spur faster and better improvement in the topic than would be possible if each group worked on its own. They do this by sharing ideas, methods, tools, results, lessons, and motivation. This approach is very different than if the health plan went out to its contracted medical groups and told them, “We know what is needed, so just do it and everything will be fine”.

The “preventive services action group”, which has tobacco as an important component, began with seven participating medical groups meeting bimonthly. The difference in size of these groups (ranging from 20 to 500 physicians) causes some difficulties in comparability of actions needed, but we have found useful lessons can flow both ways between such groups. Before each meeting there has been a measurement breakfast for people who want to talk about data collection and feedback issues, and there are often phone



Table 2 Tobacco quit rates at Nokomis Clinic, based on self report by those tobacco users who had at least two contacts recorded on the smoke cards

Definition	Eligible population	Number quit	Quit rate (%)
Quit at the latest contact	641	162	25.3
Quit at 12 months after the first contact	353	84	23.8
Known quit for at least 6 months	458	95	20.7
Known quit for at least 12 months	353	69	19.5

devised a helpful system of categories for smokers that reflected their quit interest and status, but today we would have used the Prochaska stages of readiness to change on the smoke card and as a guide to appropriate action.<sup>36</sup>

We found that 16.8% of the tobacco users we had identified during the first 16 months of using this system reported being non-smokers when surveyed at the end of that time. In contrast, only 3.7% of smoking patients who had a visit during the 16 months before starting the system reported as having quit at the end of that time period.<sup>17</sup> Thus, the system appeared to have multiplied the effectiveness of our efforts fivefold. At the end of four and a half years with the system, we had identified a total of 641 tobacco users in the course of normal patient encounters who had at least two recorded contacts with the physician. Review of their smoke cards showed that a quarter of them were quitters as of their latest encounter, and a third of the quitters had not been smoking for at least one year (tables 2 and 3). Since we had recorded information on the card about their quit efforts, we were able to show that 76% of the successful quitters had quit without any known help other than: multiple brief discussions with the physician during normal office visits; provision of educational materials; and a nurse phone call soon after promised quit dates. Eight per cent had at least one counselling visit with our nurse, 4% had used nicotine replacement therapy (gum in those days), and 12% had both counselling visits and nicotine replacement. We are confident about this information because we had also conducted a random chart audit of 374 adult patient visits and found that 96.8% of the charts had tobacco use chart labels and 98% of the labelled users had a smoke card with an entry for that date.

With this personal knowledge that a very effective cessation program was feasible over a prolonged time period without interfering with office efficiency, we conducted a non-randomised, non-volunteer trial comparing all 10 primary care medical groups in a geographic intervention area to all eight from a geographically separate control area.<sup>37</sup> We provided the intervention clinics with information about our Nokomis Clinic experience and

Table 3 Duration of quit ( $n = 162$ )

Duration of quit (months)	Number (%)
< 1	22 (13.6)
1-3	35 (21.6)
3-6	24 (14.8)
6-9	10 (6.2)
9-12	15 (9.3)
> 12	56 (34.6)
Total	162

offered training and consulting help if they desired. Surveys of patients from these medical groups showed that even without requiring formal medical group volunteer participation, patients from the intervention groups were more likely to report a whole series of tobacco cessation actions during their office visits than were patients from control medical groups. Pre-intervention, there was no difference between intervention and control groups in these actions. Thus, the model and its dissemination were apparently acceptable and feasible for typical medical practices to replicate. Finally, other clinics have set up similar systems, and in a published evaluation of one of these experiences, Pine reports success similar to that at Nokomis.<sup>38</sup>

## Conclusion

Although the components of the solution to the problem of inadequate clinician action on tobacco cessation reported here have not all been demonstrated scientifically in one place, it is a very promising story. I have focused on the description of an office system and on external incentives and facilitation for clinics to develop, implement, and maintain such a system. However, it is not adequate for medical groups or clinics to want to create a system and to know what the desired system is like—they must also have the internal leadership and change management abilities that will allow them to implement it. Those qualities are turning out to be the critical missing link for implementation of any guideline. If we truly want to see clinician adherence to the evidence based recommendations on tobacco cessation, we shall have to find ways to develop organisational readiness as well as to provide incentives, facilitation, and examples of the necessary office tobacco cessation system.

The tobacco cessation system concepts and experiences described here have derived from many years of working together in this field with Thomas E Kottke and Milo L Brekke, who have continually inspired and complemented the work of the author. The information and ideas about HMO incentives and facilitation have similarly come from working closely together over many years with many people at HealthPartners, ICSI, and Blue Cross Blue Shield of Minnesota. Finally, I am always grateful to Marty Campbell, who greatly magnifies my efforts with her constant facilitation of publications, presentations, communications, schedules, and records.

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## Questions and answers

**Q:** Why do you use incentives for groups instead of individual physicians?

**A:** I was not part of that decision, so I cannot speak to the issues that were considered. From my point of view, however, emphasis should be put on the group or clinic site. Most of the changes that are going to be beneficial are going to be those which are organisationally sponsored and put in place within the system. It is very difficult for an individual physician to enact organisational change. Thus, incentives for groups will be more effective.

**Q:** Most of the large health organisations are losing substantial amounts of money, thus incentives may be one of the first things which are eliminated. Do you think that is the case?

**A:** We are part of one of the groups busily losing money right now, though incentives are still in place. Whether that will continue is another question, but cessation is something our organisation values and we are committed to it.

**Q:** Dr Hollis demonstrated that there is a correlation between advising patients to quit and their satisfaction. I have a colleague who hypothesises that a physician in an HMO setting is more apt to be aggressive in counselling patients not to smoke than someone who is in an arrangement who might fear losing a certain number of patients who have requested some type of intervention. What is your opinion on disincentives?

**A:** Some personnel are afraid to ask patients about smoking because they think it will have a negative impact. In our practice, we surveyed the patients and our results were identical to those of Dr Hollis. I think physicians in staff model clinics, as well as other models, are worried about scaring away patients; so perhaps there is not a large difference between the two models. I am convinced, after many years of experience, that with rare exceptions, counselling is not a detriment. If anything, it is a positive program for attracting patients and convincing them that you are interested in their total wellbeing.