Building effective strategies to decrease tobacco use in a health maintenance organisation: Group Health Cooperative of Puget Sound

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Introduction

The experience of Group Health Cooperative of Puget Sound (GHC) in the development and implementation of strategies to decrease tobacco use is an encouraging story. The conclusion to this story is that implementation of the major recommendations of the Agency for Health Care Policy and Research’s (AHCPR’s) evidence-based smoking cessation guideline can be done. The accomplishments described in this paper have occurred over the past 12 to 15 years. It is important to note that managed care organisations who are beginning this work now have a lot of advantages compared with when we started in the 1980s.

Group Health Cooperative (GHC) is a group model, not-for-profit health maintenance organisation (HMO). It was a staff model HMO until January 1998. GHC serves over 450 000 enrollees who receive their care at approximately 25 different medical centres in the Puget Sound [Seattle, Washington] area. Our primary care practice panel sizes are about 2000, and there are approximately 200 primary care practices. The population that receives their care at GHC is demographically representative of the population in the region. A key feature of GHC is the extensive automated clinical systems, including automated enrolment systems which allow one to identify population-based samples of enrollees, automated appointment systems, automated data on the use of laboratory and radiography facilities and automated pharmacy systems. To date, however, there is no automated registry or clinical information system that routinely tracks the smoking status of enrollees.

Building effective strategies

To begin at the end, figure 1 summarises data on the smoking prevalence for GHC and for Washington state from 1985 to 1994.1 As evidenced in the graph, for the state as a whole and for GHC, smoking prevalence has declined. Of note, however, is that the rate of decline is greater among GHC enrollees. How could this happen?

I will address this question by covering the following topics: (a) levels and principles of smoking cessation interventions within an HMO; (b) key building blocks of GHC’s efforts, including smoking cessation interventions, practice guidelines and tobacco services benefits; and (c) current challenges and future directions.

Levels and principles of smoking cessation interventions in an HMO

Effective smoking cessation strategies involve multiple levels in an HMO. Three key levels are illustrated in figure 2. Starting at the right side of the illustration is the level most often considered, interventions that are directed specifically towards individuals to help them quit smoking—for example, classes, written materials, outreach telephone counselling. What occurs at the primary care practice level is also crucial. Provider behaviours include assessing smoking status, giving advice to quit smoking, reinforcing quit attempts, and so forth. Provider behaviour can be guided by practice guidelines and automated systems can help track smoking status in patient panels. A third level of intervention centres on the healthcare organisation itself. As illustrated in the figure, the healthcare organisation can have an impact on tobacco use and smoking cessation through its benefit policies, such as coverage for smoking cessation services, and through its allocation of resources (for example, providing the resources to develop automated systems and centralised programmes). The organisation can extend its reach into the population at large through its involvement in community-based activities, such as media campaigns, and in legislative activities. These levels are not mutually exclusive, as indicated by the double-headed arrows; there can be a lot of reciprocity among the three levels.

There are several principles at each of these levels which have guided our efforts at GHC. At the individual level, to provide interventions that are appropriate for the general population and not just for highly motivated or self-selected individuals, the interventions should address different levels of motivation or readiness to change. Particularly for individuals who are not ready to take specific actions, it is important to ensure that motivational messages emphasise positive results and avoid...
high-threat communications. Quitting smoking obviously necessitates providing specific behavioural skills, meaningful support, and because it is unlikely that “one size fits all”, having opportunities for patients to tailor the interventions to meet their specific needs. Finally, a managed care organization wants to be sure to provide consistent and repeated follow up, that is, avoid one-shot interventions.

For interventions at the practice level, it is important to use guidelines for systematic and consistent practice. The guidelines should provide defined roles for all practice team members. Once these roles have been defined, relevant training needs to be provided. The practice team needs information and tracking systems that allow for population-based management and practice-level feedback. There should be proactive plans in place for system maintenance and state of the art supportive materials.

At the organisational level it is important that there be consensus among key divisions of the delivery system about the importance of targeting tobacco use. Shared consensus can logically lead to the next two principles, which are coordinated planning and implementation of activities across divisions. Planning and implementation are not free; there needs to be shared allocation of resources. Finally, at the organisational level, broad “citizen” involvement should be encouraged, if not required—this includes all levels of providers, patients, and administrators as well as researchers or those with special expertise in smoking cessation.

**BUILDING BLOCKS**

**Cessation interventions**

The building blocks of our efforts at GHC involved all three levels of intervention. Our very early efforts emphasised identifying effective smoking cessation strategies. In the early to mid-1980s, the state of the art in smoking cessation interventions was considerably different than it is today. Most available interventions were intensive, group programmes that had limited potential to reach large portions of the smokers in a defined population. Overall, the interventions fell primarily on the clinical end of a clinical-to-public-health intervention continuum. Thus, we wanted to move towards a more public health model in which interventions could be delivered in a less intensive format to a larger proportion of the population.

In 1985, with funding from the National Cancer Institute (NCI), GHC participated in a randomised trial of minimal smoking cessation interventions. The results from this study showed significantly improved smoking cessation rates among participants who received a self-help booklet along with outreach telephone counselling calls. GHC adopted this programme and developed the capacity, through its Center for Health Promotion, to deliver the programme in group session and self-help or individual format. This was not a covered service. Enrollees were charged $85.00 for the programme. At about the same time (the late 1980s) nicotine gum came on the market and GHC did carry that in the formulary, but it was not a covered medication.

**Practice guidelines**

Concurrent with GHC’s smoking cessation research efforts, work was progressing on the practice and organisation front. GHC has had a long-standing committee on prevention and in the late 1980s a subcommittee on tobacco was formed. In 1991 this subcommittee released a report on decreasing tobacco use at GHC during the 1990s. Among the recommendations of this report were that GHC: (a) identify, track and treat tobacco use with the same vigour as other diseases; (b) advocate for coverage of proven tobacco services (behavioural and pharmacological); (c) develop educational programmes for staff at all levels; and (d) form a standing tobacco use steering committee.

This steering committee developed an evidence-based smoking cessation guideline that was formally adopted in 1994. It took about a year from the final draft of the guideline for it to be endorsed by the appropriate committees and ready for dissemination. This guideline builds on the NCI 4-A model, is remarkably similar to the AHCPR guideline, and it is available in written and computerised forms. The guideline was adopted with implementation tools including training and ongoing consultation, patient questionnaires, education materials, chart stickers and vital sign stamps, patient flow sheets and chart audit protocols and materials. Staffing support for guideline implementation, which occurs through the Center for Health Promotion, includes full-time employee (FTE) support for a physician, health educators, and an implementation coordinator. The implementation coordinator is on the “front line” with primary care clinics and assesses their readiness to implement the guideline, arranges appropriate education and training and follow up for all staff, works with local process owners to ensure that the clinics feel ownership for the guideline, and facilitates progress tracking through chart audits and feedback reports.

Figure 3 illustrates data that have been summarised from chart audits. The figure shows the proportion of audited charts with documentation of tobacco use status in 1994, 1995, and 1996. GHC’s goals (set by the tobacco steering committee) are shown for
1996 and for 2000. We have made significant progress since introduction of the guideline in 1994, and by 1996 we are reaching our goal of 90% documentation. We also track provider intervention with identified smokers. Our 1996 goal was for 50% of smokers’ charts to have documentation of provider advice, assistance or follow up; the year 2000 goal is 80% of charts. In 1996 actual documentation of provider advice and assistance was approximately 30% (up from about 15% in 1994), so we are making progress, but have not yet met our goal.

**Tobacco services benefit**

Having effective interventions that can be widely disseminated at the individual level, and having trained providers who are encouraging smokers to quit, will likely have greater impact if enrollees have access to tobacco services without significant financial barriers. In 1992, the Cooperative Benefits Committee (CBC) approved a tobacco services benefit to go into effect in 1993. The components of the benefit were: (a) enrollees could access the “Free & Clear” behavioural programme with a 50% co-payment; (b) nicotine replacement (gum or patch) would be fully covered (excluding regular pharmacy co-payments) for smokers who were participating in the “Free & Clear” programme; (c) nicotine replacement was not covered (enrollees paid full price out of pocket) if the enrollee was not participating in “Free & Clear”. After this benefit was implemented there was a 10-fold increase in the use of the “Free & Clear” programme. There was some evidence that the co-payment for the behavioural programme might be a barrier to participation as nearly a third (30%) of smokers who initially registered for the programme failed to pay their co-payment and so did not participate. With funding from the Robert Wood Johnson Foundation, GHC evaluated this standard benefit against three different benefits. One option had the co-payments “flipped” so that there was no co-payment for the behavioural programme and a 50% co-payment for nicotine replacement. A second option had 50% co-payments on the behavioural and nicotine replacement treatments. The final option had full coverage (no co-payments on the behavioural or nicotine replacement treatments). We found the highest rate of benefit use among enrollees who had full coverage and no significant reduction in quit rates among users of the smoking cessation benefit with full coverage. Even with full coverage, the annual rate of use of the benefit among smokers was about 11%.

**CURRENT CHALLENGES AND FUTURE DIRECTIONS**

We are working to increase the reach of our tobacco cessation services. This includes recent approval of full coverage for tobacco services by GHC’s benefits committee and efforts to streamline the referral and registration process for the “Free & Clear” programme. We are also trying to improve delivery and documentation of cessation interventions during visits by providing clinic-level chart audit feedback and continuing practice-based training and support. Efforts on the horizon include making sure that tobacco use status is fully supported in automated clinical information systems that are under development and expanding diffusion of the practice guideline into specialty care. These efforts include linking the tobacco guideline with chronic disease initiatives, and development of a hospital guideline with automatic cessation support for hospitalised smokers.