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Editorial

Quality improvement and accountability in the treatment of tobacco dependence: the need for a national training and certification programme

Healthcare programmes, services, and practitioners in the USA and many other western countries are being held increasingly accountable for quality, safety, and cost effectiveness. Performance measurement—a first step toward assuring quality—is being integrated into all aspects of healthcare. Government agencies, large employers, and other institutions that pay for medical care are insisting on accountability, in response to the growing demand for medical services; the introduction of new, expensive technologies and pharmaceuticals; studies showing that medical practice often does not conform to evidence based guidelines; geographic variations in the utilisation of medical services; and the high incidence of serious medical errors.[1–3]

Curiously, the treatment of tobacco dependence has not been part of this picture. Evidence based guidelines for smoking cessation treatment exist,[4–7] and recommended interventions are extremely cost effective.[8] But there is little effort to ensure compliance with guidelines among programmes and providers being paid to help smokers quit.

Why quality control is needed

The need for quality control in the treatment of tobacco use and dependence is compelling for several reasons. Firstly, the number of effective treatment options is increasing, and consumers should have assurance that they are being offered assistance that is of known benefit. Secondly, some of the newly recommended first line and second line medications[6]—such as bupropion, clonidine, and nortriptyline—have more serious risk profiles than nicotine replacement products, and require careful ascertainment of contraindications, side effects, and drug interactions. Thirdly, the use of combination therapy involving more than one medication increases the complexity of treatment. Fourthly, few physicians are adequately trained to use these medications, in part because tobacco dependence treatment is not a uniform component of medical school education.[9]

A fifth reason is that more funding is being made available in the USA, the UK, New Zealand, and perhaps in a few other western countries, to pay for treatment of tobacco dependence. Some US states are allocating tobacco tax revenues or tobacco settlement monies to treatment efforts. The Minnesota settlement, for example, created a foundation—Minnesota Partnership for Action Against Tobacco—which will receive $202 million over the next decade to fund tobacco addiction treatment efforts as well as research related to tobacco use.[10] Many managed care organisations, driven in part by a tobacco measure in the "HEDIS" report card,[11] are making smoking cessation treatment a covered benefit. The Group Health Cooperative of Puget Sound spent $900 000 to treat 3000 smokers in 1997[12]—before bupropion was approved for tobacco dependence. Health Alliance Plan, a 500 000 member health maintenance organisation with which one of us (RMD) is affiliated, spent $1.2 million in 1999 on medications to treat nicotine dependence, representing 0.8% of total pharmacy costs. GlaxoWellcome reported $89 million in sales of Zyban (bupropion) for the USA in 1999, and $28 million for the rest of the world (which included only three countries).[13] Those who now pay for these treatment services and products—and those who are being asked to pay for them—want to know whether they are being administered according to evidence based guidelines.

Arizona and Massachusetts are leading the way

Two states, Arizona and Massachusetts, have taken meaningful steps toward assuring the delivery of high quality treatment for tobacco dependence. Some of the early work from those efforts is reported in two papers published in this issue of *Tobacco Control*.[14 15]

The Arizona Department of Health Services Tobacco Education and Prevention Program (AzTEPP), which is funded by state tobacco tax revenues, pays for cessation services. To assure the high quality of those services, AzTEPP has developed and implemented a statewide, community based cessation training and certification project. Certification is required for providers to receive AzTEPP funding for cessation services. Training has been based on the 1996 guideline issued by the Agency for Health Care Policy and Research (AHCPR) (now the Agency for Healthcare Research and Quality),[16] which was updated by the US Public Health Service in June 2000.[6] Three levels of certification are provided: (a) one for "basic" tobacco cessation skills for persons delivering brief interventions in the context of another service; (b) one for tobacco cessation specialists who deliver "intensive" cessation interventions and who provide instruction for basic certification; and (c) one, still under development, for tobacco treatment services managers.[14]

In their paper in this issue, Muramoto and colleagues[14] report results from the first year of programme implementation, during which 1075 participants attended certification training, 947 received basic skills certificates, and 82 received specialist certificates. Self efficacy

measures showed significant improvement (for both tiers of training) in a comparison of pre- and post-training scores, and these improvements were maintained at three months post-training. Longer term outcome studies are still in progress, but these preliminary data are encouraging.

The Massachusetts Department of Public Health operates the Massachusetts Tobacco Control Program (MTCP) with funding from state tobacco tax revenues. MTCP has funded tobacco treatment providers since 1993. In 1997 MTCP contracted with the University of Massachusetts Medical School to develop a comprehensive statewide programme to train and certify tobacco treatment specialists. The paper by Pbert and colleagues in this issue explains the content of the programme and the extensive consultation that programme developers received from experts and practitioners during its design.[15] Support for certification was reported by all 10 tobacco treatment providers in Massachusetts who were interviewed by telephone, by the majority of 82 tobacco treatment providers in the state who completed a written survey on the subject, and by 14 of 18 national experts in the field of tobacco treatment who were interviewed.

Like the Arizona programme, the Massachusetts training is based on the 1996 AHCPR guideline. However, two key differences between the two programmes stand out. Firstly, the Massachusetts training is more extensive: basic training over two days (versus four hours in Arizona) and intensive training over eight days (versus two days in Arizona). Secondly, the Massachusetts programme has only one level of certification (for those who complete both basic and intensive training) compared to three tiers of certification in Arizona.

The need for a national certification programme

The training and certification systems developed in Arizona and Massachusetts can be viewed as successful pilot programmes. The other 48 states should be grateful to them for having invested the time, effort, and funding needed to design and test these important initiatives. Now a mechanism must be found to share the fruits of their labour with the rest of the nation, and with other countries as well.

As Pbert and colleagues point out,[15] three credentialing options exist in the USA to assure the quality of healthcare services: accreditation of programmes, certification of individual practitioners by a professional organisation, or licensure of practitioners by state government. Licensure essentially adds government imposed exclusivity to certification, restricting the field to providers who meet state standards for training and competence. It would seem prudent to begin with a voluntary approach: accreditation or certification.

In December 1998 the American College of Preventive Medicine (ACPM) and the American Society of Addiction Medicine (ASAM) convened a meeting in Washington, DC, to discuss the establishment of national standards for certification of tobacco treatment specialists. Invited to the meeting were several national experts in tobacco cessation treatment, and representatives of federal and state public health agencies, professional associations, voluntary health agencies, the health insurance sector, and the Arizona and Massachusetts training and certification programmes. Information was presented to participants on national programmes in the USA in certification (for example, for addiction counsellors, health educators, diabetes educators, fitness specialists) and accreditation (for example, for mammography facilities), and the early stage programmes in Arizona and Massachusetts. After many hours of discussion and debate, a consensus emerged in favour of a national certification programme for treatment of tobacco dependence. Accreditation of programmes, it was felt, should be considered only after an effective certification programme for individual practitioners is in place.

Concerns about a national certification programme

During discussions about certification prompted by the Arizona and Massachusetts programmes and the meeting convened by ACPM and ASAM, a few concerns have surfaced.

Would a certification programme reduce the extent to which clinicians perform the brief interventions recommended by evidence based guidelines? In other words, would physicians and others neglect their responsibility to perform brief interventions because a certified tobacco treatment specialist is available to their patients? We presume that clinicians who would neglect that responsibility would also do so if a treatment specialist is available in the absence of a certification programme. The appropriate response to this concern is to ensure that a training and certification programme includes a strong educational component targeted to all clinicians about the importance of conducting brief interventions with their patients who use tobacco. Indeed such brief intervention is necessary to identify smokers and refer them to certified specialists for follow up care.

Even with a certification programme in place, all clinicians would still be asked to perform the five "A's" recommended by the US Public Health Service: **A**sk every patient about tobacco use; **A**dvise every tobacco user to quit; **A**ssess each tobacco user's willingness to make a quit attempt; **A**ssist patients willing to make a quit attempt with counselling and pharmacotherapy; and **A**rrange for follow up.[6] With a training and certification programme, the added value is the improved quality of follow up care (the fifth "A"), which is particularly important for increasing cessation and decreasing relapse. Moreover, a certification programme might confer a certificate on clinicians who demonstrate competency in performing these brief interventions (as does the Arizona programme), which might actually increase the use of brief interventions by many clinicians.

Primary care providers are expected to manage hypertension, but hypertension specialists are generally available to them for the treatment of patients whose hypertension is unusually difficult or complicated. We would expect primary care providers to have a similar relationship with tobacco treatment specialists.

Would a certification programme reduce access of patients to tobacco treatment specialists? This concern is based on the reasonable premise that ultimately certification might be required for these clinicians to obtain referrals from managed care organisations, employers, and others. There are at least two ways in which a certification programme might reduce the number of available cessation specialists.

Firstly some practising specialists might not be able to pass the certification examination. There are two possible responses to this situation. Some specialists—for example, those who have practised in the field for a certain number of years—could be certified through a "grandfathering" clause without passing the examination. The Massachusetts programme has rejected that approach.[15] Another response, which we would favour, would be to provide special assistance through the training programme to help these individuals pass the exam. Of course some non-competent clinicians may never be able to pass the exam, but one of the purposes of a certification programme is to allow healthcare payors and patients to distinguish between clinicians with and without documented competence.

Another way in which a certification programme might reduce the number of available tobacco treatment specialists is if there are geographic or financial barriers to obtaining training and certification, especially for those practising in isolated rural areas. We believe these barriers can be overcome in the design and implementation of a training and certification programme through web-based training and exams, and through reduced fees or waivers of fees for participants with limited financial means.

Although it is possible that a training and certification programme might result in a decrease in the number of tobacco treatment specialists, it is also possible that such a programme would actually *increase* the number of specialists. That effect could occur because the programme would expand training opportunities, would enhance the esteem of the occupation, and would encourage healthcare payors and employers to pay for smoking cessation services.

We would acknowledge that a training and certification programme is probably neither practical nor desirable for countries with an immature tobacco control programme. Typically in such countries, public awareness of the dangers of smoking is low, few smokers are motivated to attempt to quit, most clinicians do not practise the brief interventions supported by evidence based guidelines, and more intensive treatments (including pharmacotherapy) are not available to most smokers. Thus, a goal to move smoking cessation efforts to a higher, evidence based level would not be feasible because those efforts are almost nonexistent in the first place.

How can one design a certification programme without the existence of a well defined and well supported treatment delivery infrastructure? If we were to wait for the ideal treatment infrastructure before pursuing a certification programme, it might never be developed. Other, reasonably successful certification programmes have been implemented without having in place a well defined and well supported service infrastructure (for example, the National Commission for Health Educator Credentialing's programme for recognising "certified health education specialists"). Moreover, as noted above, substantial increases in funding for the treatment of tobacco use and dependence are now being provided by some states, managed care organisations, and others, which are strengthening the infrastructure. Finally, as we point out above, a certification programme might help build the infrastructure further by encouraging healthcare payors and employers to pay for smoking cessation services.

Will a training and certification programme actually improve the quality of care? Pbert and colleagues[15] reported that in their review of the literature, they found no data showing that certification programmes improve the quality of care. Nevertheless, they argue, studies do show that training providers in smoking cessation improves treatment skills, which in turn improves patient outcomes.

One response to this concern would be to conduct a study comparing the quality of smoking cessation treatment in Arizona and Massachusetts with the quality of treatment provided in states without comparable programmes in training and certification. However, one would need to wait several years to allow the two statewide programmes to mature and expand sufficiently before such a study would be appropriate. We believe there are compelling reasons to move forward now in developing a national training and certification programme.

The need for increased training to improve practice is well accepted and non-controversial. The concept of certification—as a tool to standardise practice and recognise competent practitioners[15]—seems eminently appropriate to us as well. Even without "proof" that certification improves outcomes, certification is a means to make the treatment of tobacco use and dependence *accountable*, in the same way as the rest of the healthcare sector is being held accountable for the quality of service and the competence of providers.

The key question, in our opinion, is not *whether* a national training and certification programme should be developed, but what *kind* of programme should be developed. Pbert and colleagues[15] and others have raised many important questions about how a certification programme should be structured and operated. For example, how many tiers of certification should be provided? Who should be responsible for determining the core competencies for certification? How often should recertification be required? How should a national programme interact with well developed state programmes such as those in Arizona and Massachusetts? These questions should be addressed as a national programme is being designed and implemented. Answers to them are not needed before making a decision to develop a national programme. Differences between the Arizona and Massachusetts programmes will help inform discussions on how best to structure a programme at the national level.

Next steps

Two things are needed to move forward in developing a national programme in training and certification. Firstly, leaders in the field of tobacco control, and more specifically experts in the area of treating tobacco dependence, need to embrace the concept. Secondly, funding needs to be obtained to support development and early implementation of the programme. Possible funding sources include government agencies, foundations, employer groups, consortia of managed care organisations, the health insurance industry, voluntary health agencies, and pharmaceutical companies. The expectation is that a national programme would become self funding through training and certification fees once it is accepted by the field and by healthcare providers and payors.

Accountability in healthcare is here to stay. Using the "google.com" search engine, a web search using the keywords "accountability" and "health" returned 364 000 items. The tobacco control community cannot expect the treatment of tobacco dependence to be accepted as mainstream medical care (with commensurate privileges and payment policies) unless it is willing to accept the same sort of accountability that is being demanded of every other sector in the healthcare system.

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1 Chassin MR, Galvin RW. The urgent need to improve health care quality. Institute of Medicine National Roundtable on Health Care Quality. *JAMA* 1998;**280**:1000–5.
2 Center for the Evaluative Clinical Sciences, Dartmouth Medical School. *The Dartmouth atlas of health care 1999.* Chicago: American Hospital Association, 1999.

3 Committee on Quality of Health Care in America, Institute of Medicine. *To err is human: building a safer health system*. Washington, DC: National Academy Press, 1999.
4 Raw M, McNeill A, West R. Smoking cessation guidelines for health professionals: a guide to effective smoking cessation interventions for the health care system. *Thorax* 1998;**53**:S1–19.
5 Lancaster T, Stead L, Silagy C, Sowden A, for the Cochrane Tobacco Addiction Review Group. Effectiveness of interventions to help people stop smoking: findings from the Cochrane Library. *BMJ* 2000;**321**:355–8.
6 Fiore MC, Bailey MC, Cohen SJ, Dorfman SF, Goldstein MG, Gritz ER, et al. *Treating tobacco use and dependence. Clinical practice guideline*. Rockville, Maryland: US Public Health Service, 2000. (AHRQ Publication No 00–0032.) www.surgeongeneral.gov/tobacco/default.htm (accessed 9 October 2000).
7 The Tobacco Use and Dependence Clinical Practice Guideline Panel, staff, and consortium representatives. A clinical practice guideline for treating tobacco use and dependence: A US Public Health Service report. *JAMA* 2000;**283**:3244–54.
8 Cromwell J. Bartosch WJ, Fiore MC, Hasselblad V, Baker T. Cost-effectiveness of the clinical practice recommendations in the AHCPR guideline for smoking cessation. *JAMA* 1997;**278**:1759–66.
9 Ferry LH, Grissino LM, Runfola PS. Tobacco dependence curricula in US undergraduate medical education. *JAMA* 1999;**282**:825–9.
10 Campaign for Tobacco-Free Kids. State tobacco settlement. http://tobaccofreekids.org/reports/settlements/ (accessed 5 October 2000)
11 Davis RM. An overview of tobacco measures. *Tobacco Control* 1998; 7(suppl):S36–40.
12 Nudelman P. Keynote address: "One sure way to break the cycle." *Tobacco Control* 1998;7(suppl):S4–7.
13 GlaxoWellcome. Financial information as of December 31, 1999. www.glaxowellcome.com/financial.htm (accessed 5 October 2000)
14 Muramoto ML, Connolly T, Strayer LJ, *et al*. Tobacco cessation skills certification in Arizona: application of a state wide, community based model for diffusion of evidence based practice guidelines. *Tobacco Control* 2000; **9**:408–414.
15 Pbert L, Ockene JK, Ewy BM, Leicher ES, Warner D. Development of a state wide tobacco treatment specialist training programme for Massachusetts. *Tobacco Control* 2000;**9**:372–81.
16 Fiore M, Bailey W, Cohen S, et al. *Smoking cessation: Clinical practice guideline No. 18*. Rockville, Maryland: US Department of Health and Human Services, Agency for Health Care Policy and Research, April 1996. (AHCPR Report No. 96–0692.)

Addendum

After our editorial was submitted for publication, we received information about a training and certification programme being operated by the Geisinger Health Plan, a large managed care organisation in Pennsylvania. Along with the statewide programmes in Arizona and Massachusetts, this programme is another example of how various institutions are responding independently to the need for having trained and certified tobacco treatment specialists. It provides further justification for developing a national standardised approach to address this need.

An abstract about the Geisinger programme appears below. It has been accepted for presentation at the fourth annual "Addressing Tobacco in Managed Care" conference, to be held in Nashville, Tennessee on 11–13 February 2001.

Integrating tobacco cessation into disease management programmes using specially trained nurse educators

Geisinger Health Plan (GHP) is the largest rural health maintenance organisation (HMO) in the country, serving 280 000 "covered lives" in 41 of the 67 counties in Pennsylvania. GHP is part of the Geisinger Health System, which consists of two hospitals, one alcohol and drug rehabilitation centre, and a large group model HMO.

The Geisinger Health Plan Tobacco Cessation/Tobacco Prevention Program (TCTP) has been in existence since 1990. The programme began when GHP "purchased" nurse time from Geisinger Health System's medical group practices. These nurses provided on-site tobacco cessation counselling, and this approach allowed GHP to directly reach its membership at the primary care office and to provide much needed practitioner support in addressing tobacco use.

This model proved to be so effective that, today, GHP funds 30 nurses who coordinate all disease management programmes, including tobacco cessation. These nurses are strategically located in primary care offices across our 41 county service area. We specially train the nurses in tobacco cessation and prevention, as well as other disease management programmes. This approach allows us to provide tobacco cessation counselling as a major component of all of our disease management programmes. Assessing tobacco dependence and arranging intervention are incorporated as a component of all of our clinical and disease management education pathways.

An internally developed certification programme is in place to train the nurse educators in tobacco cessation treatment. The training curriculum, covered in eight hours, consists of a complete overview of the programme; nicotine as an addictive drug; treatment of tobacco dependence, including pharmacological intervention; how to counsel outpatients, inpatients, adolescents, and pregnant women (using the addiction model and Prochaska and DiClemente's readiness-to-change model); relapse prevention; group counselling; nutrition; exercise; and stress management.

After training, the participants are asked to complete a 50 question, take home examination that assesses their understanding of tobacco cessation and counselling. The participants are also required to spend 4–8 hours observing a certified counsellor. An annual recertification programme is offered to maintain and improve the skills of this group of nurse educators.

Both the certification and recertification have been opened up to include colleagues across the country who requested our assistance in developing their own tobacco cessation programmes. We have trained more than 130 counsellors outside our institution from such places as the Department of Critical Care, Medical College of Pennsylvania; University Health Care Center in New York; and Harper Hospital in Detroit.

Since the inception of the cessation programme, we have counselled more than 4000 members of the health plan. We measure the one year quit rate for those enrolled in the TCTP programme via telephonic self report. The response rate is 71%. Our one year quit rate is 33.4%.

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