Nicotine replacement therapy for a healthier nation

Liam Smeeth and Godfrey Fowler

BMJ 1998;317;1266-1267

reimbursement of computer costs will have to compete with all the other calls on a primary care group's unified budget. Unfortunately many of the primary care groups that contain relatively small numbers of fundholders, and as a result have less advanced computer systems, are in inner city areas, where clinical and social needs are disproportionately high and where primary care groups will have particular difficulty in funding new infrastructure.

Without remedial action the fundholding scheme will leave a legacy of inequity in general practice computing that will disadvantage not only the non-fundholding practices themselves but also their patients and their primary care groups.[2 3] Unless ministers do something about this inequity before April they will themselves become party to it, in sharp contrast to their declared intention to promote equity for both patients and practices.[4]

The government has recently announced that £40m will be available for connecting practices to the NHS network, together with a further £20m to support the information needs of primary care groups.[5] Use of these resources should reflect the the inequity and needs described above, while fundholders should be encouraged to use current budgets to upgrade their systems before April in preparation for membership of a primary care group. At the same time the development of support systems for primary care groups should be a top priority for the new NHS Information Authority. If the government's policies for developing the NHS are to succeed then primary care groups need appropriate information systems, and they need them now.

Andrew Willis *General practitioner (and former chair, National Association of Commissioning GPs)*

Northampton NN3 3DA (a.willis@virgin.net)

1 NHS Executive. *Information for health: an information strategy for a modern NHS 1998-2005*. Leeds: NHSE, 1998.
2 National Association of Commissioning GPs. *Restoring the vision: making health the incentive*. Nottingham: NACGP, 1997.
3 Willis A. *The inequity of computer reimbursements between GP fundholders and non-fundholders: a problem for primary care groups*. Nottingham: NHS PCG Alliance, 1998.
4 Secretary of State for Health. *The new NHS*. London: Stationery Office, 1997. (Cm3807.)
5 NHS Executive. *Information for health*. Leeds: NHSE, 1998 (HSC 1998/168).

Nicotine replacement therapy for a healthier nation

Nictotine replacement is cost effective and should be prescribable on the NHS

The aims of the British government's health policy are to improve the health of the population as a whole and to reduce health inequalities.[1] Specific reductions in mortality in four areas (cardiovascular disease, cancer, accidents, and mental health) are set as targets. In the search for specific action to meet these targets helping people to stop smoking would seem to be an obvious candidate.

The World Health Organisation has identified smoking as the single most important preventable cause of death in Europe.[2] Cigarette smoking is a major cause of morbidity and mortality in two of the government's target areas: cardiovascular disease and cancer.[1] Evidence continues to accrue of a contributory role for smoking in a range of other diseases, such as fractures of the hip due to reduced bone mineral density. The adverse health effects of smoking are not restricted to the smoker. Passive smoking causes lung cancer, ischaemic heart disease, sudden infant death syndrome, and middle ear disease and respiratory illness in children.[3]

Smoking increases socioeconomic health inequalities in two ways. Higher rates of smoking among those with the lowest incomes mean that the burden of disease due to smoking is highest in these groups.[4] In 1991 adults in three quarters of the families receiving income support smoked, and one seventh of their disposable income was spent on cigarettes.[4] By exacerbating the poverty of those on the lowest incomes, the health effects of smoking go way beyond the direct effects of tobacco fumes.[5]

Stopping smoking is difficult. Although the effect of giving advice in encouraging cessation is small, if widely undertaken such advice would lead to considerable public health gains.[6] The use of nicotine replacement therapy produces much higher rates of stopping. A systematic review of 47 trials including over 23 000 patients showed that nicotine replacement therapy doubled smoking cessation rates when compared to placebo, with follow up periods of 6-12 months.[7] The effect was consistent across a range of settings, from specialised clinics to brief interventions in primary care. The effectiveness of the different preparations (transdermal nicotine patch, nicotine gum, intranasal nicotine spray, and inhaled nicotine) is broadly similar, although there have only been a few small trials of the nasal spray and inhaled preparations, none of which were in primary care. Few health interventions have such overwhelming evidence of effectiveness. Yet nicotine replacement therapy is not available on prescription in the NHS.

News p 1271

Cost is clearly one possible barrier to making nicotine replacement therapy prescribable. When making comparisons with other interventions it is important to remember that smoking cessation therapy is an episodic, not a lifelong, treatment. Therefore, despite a large number needed to treat to prevent one death, when benefits are expressed as cost per life year saved nicotine replacement therapy is cost effective compared with other interventions.[8 9] Smoking cessation after one week of therapy is a good predictor of sustained cessation and could be used as a means of limiting the continuation of the intervention to those patients most likely to be helped.[10] Costs to the health service must be balanced against costs to the individuals who are currently denied access to a highly effective health intervention.

So long as nicotine replacement therapy is not available on prescription its high retail price will remain prohibitive to many, particularly to people on

BMJ 1998;317:1266–7

the lowest incomes. If it were prescribable the current exemption categories from prescription charges would effectively target nicotine replacement therapy at the most socioeconomically disadvantaged groups.

Helping people to stop smoking is not a panacea. Socioeconomic differentials in health are due to many factors, of which smoking is only one.[11] After stopping smoking the risks of different diseases fall at different rates. Ex-smokers remain at greater risk for some diseases than people who have never smoked, even many years after stopping.[12] Reducing the numbers of people who take up smoking in the first place thus remains the most important aim of health policy on tobacco. Nevertheless, making nicotine replacement therapy available on prescription would be an effective way of working towards the aims of *Our Healthier Nation*.

Liam Smeeth *General practitioner*

Department of Primary Care and Population Sciences, Royal Free Hospital and University College London Medical Schools, London NW3 2PF (l.smeeth@ucl.ac.uk)

Godfrey Fowler *Emeritus professor of general practice*

Division of Public Health and Primary Care, Institute of Health Sciences, University of Oxford, Oxford OX3 7LF (godfrey.fowler@balliol.ox.ac.uk)

GF has chaired an expert panel on smoking cessation, calling for a more effective UK policy on smoking cessation and the use of nicotine replacement, which was supported by Novartis.

1 *Our healthier nation: a contract for health.* London: Stationery Office, 1998.
2 Asvall JE. The WHO wants governments to encourage people to stop smoking. *BMJ* 1997;314:1688.
3 Scientific Committee on Tobacco and Health. *Report.* London: Stationery Office, 1998.
4 Marsh A, McKay S. *Poor smokers.* London: Policy Studies Institute, 1994.
5 Lynch JW, Kaplan GA, Shema SJ. Cumulative impact of sustained economic hardship on physical, cognitive, psychological, and social functioning. *N Engl J Med* 1997;337:1889-95.
6 Silagy C, Ketteridge S. Physician advice for smoking cessation. In: *Cochrane Library.* Oxford: Update Software, 1998; issue 2. Updated quarterly.
7 Silagy C, Mant D, Fowler G, Lancaster T. Nicotine replacement therapy for smoking cessation. In: *Cochrane Library.* Oxford: Update Software, 1998; issue 2. Updated quarterly.
8 NHS Centre for Reviews and Dissemination. Smoking cessation: what the health service can do. *Effectiveness Matters* 1998;3:1.
9 NHS Centre for Reviews and Dissemination. Cholesterol and coronary heart disease: screening and treatment. *Effective Health Care* 1998;4.
10 Yudkin PL, Jones L, Lancaster T, Fowler GH. Which smokers are helped to give up smoking using transdermal nicotine patches? Results from a randomized, double-blind, placebo-controlled trial. *Br J Gen Pract* 1996;46:145-8.
11 Davey Smith G. Down at heart—the meaning and implications of social inequalities in cardiovascular disease. *J Royal Coll Physicians* 1997;31:414-24.
12 Ben-Shlomo B, Davey Smith G, Shipley MJ, Marmot MG. What determines mortality risk in male former cigarette smokers? *Am J Public Health* 1994;84:1235-42.

Time for organisational development in healthcare organisations

Improving quality for patients means changing the organisation

A copy of the *Quality in Health Care* supplement appears on www.bmj.com and www.qualityhealthcare.com

conference

www.bmjpg.com

The supplement to *Quality in Health Care* complements a conference on 10 November 1998 in London. Inquiries to Jane Lewis (0171 383 6605, JLewis@bma.org.uk)

The discussion on quality of care has come a long way: from the efforts and research of visionaries such as Ernest Codman and Avedis Donabedian in the 1970s to the introduction of quality management and continuous quality improvement; from assessing quality from the perspective of a single profession to a more integrated and process oriented view; from control to improvement. Most of this development has been driven by pioneers with an outstanding vision, such as Don Berwick, who felt that we could do better for our patients and must improve. However, numerous publications, countless conferences, and broad discussions have not yet produced sufficient improvements of actual quality. This week the journal *Quality in Health Care* adds to this debate with a supplement on *Organisational Change: The Key to Quality Improvement* that reviews current thinking (and achievements) in the NHS in particular and health care in general (see www.bmj.com or www.qualityhealthcare.com). It provides yet another sign that what has been achieved cannot yet satisfy patients, payers, and professionals. So why is it so hard to get real improvement and change?

Over the past century health care has also come a long way—from the doctor in a solo practice, a generalist able to master all the relevant medical knowledge and apply it to the treatment of his patients, to the network of highly specialised consultants, who depend on each other for complementary expertise; from the asylum, where the interaction of nurses and doctors could guarantee optimal treatment, to today's hospital, where personnel clustered in over a thousand job categories have to run a highly complex and interactive system.[1] As different as inpatient and outpatient settings are, both have one aspect in common: the mere size and complexity have made it impossible for any single individual to control and guide the operation, and no single profession can claim to be able to guarantee high quality care. As the British Nobel Prize winning economist Ronald Coase has taught us, organisations develop because, with increasing scope and size of an operation, transaction costs defined as the costs of obtaining additional resources and information, increase to a point where it is worth while creating formal organisations.[2] Health care has, under increasing cost pressure, finally come to realise an important implication of Coase's theory: if care is to be of higher quality and lower cost the key to improvement lies in better organisational structures and processes The *Quality in Health Care* supplement collects together a series of valuable papers that aim to help our understanding of what it means for health care to organise for high quality performance.

As Leatherman, Sutherland, and Buchan point out, much of the success of quality improvement efforts will depend on clarifying roles and responsibilities and on the availability of data, appropriate incentives, and performance indicators.[3 4] One of their main lessons is that quality will improve only if healthcare systems demand and support it. However, this is, as other

BMJ 1998;317:1267–8