## II. Smoking cessation in the hospital setting—a new opportunity for managed care

## Introduction

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Managed care organisations provide a key channel for delivering smoking cessation interventions to populations. This effort has largely focused on outpatient settings, usually primary care practices. Far less attention has been paid to settings that deliver more acute medical care, despite the opportunities that these present for changing behaviour. Illness, especially a tobacco related illness, boosts a smoker's motivation to quit smoking, presumably by increasing a smoker's perceived vulnerability to the health hazards of tobacco use. Illness also brings smokers to the health care setting, where providers have an opportunity to encourage cessation. A hospital stay provides a special incentive for initiating cessation now that the Joint Commission on Accreditation of Healthcare Organizations requires US hospitals to have policies which prohibit smoking. A hospitalised smoker must abstain temporarily from tobacco use and is accessible to multiple caretakers who could provide smoking cessation assistance. Smoking interventions delivered in hospitals and other sites treating patients with chronic medical illness might be particularly effective.

The value of this idea has been demonstrated over the past decade. Observational studies have shown that a hospital stay can trigger smoking cessation even in the absence of intervention, especially in patients with cardiovascular and pulmonary disease or in patients having surgery.<sup>1-5</sup> Subsequent work has attempted to enhance this effect with smoking interventions that begin in the hospital and continue after discharge. The three papers in this section are examples of these efforts.<sup>6-8</sup>

Programs designed for patients recovering from myocardial infarction have produced the best results. These programs have doubled the smoking cessation rate of post-myocardial infarction patients. Cessation rates as high as 60-70% at one year have been reported in carefully controlled randomised clinical trials.9 10 The impressive findings from research studies can be maintained when the model program is implemented in new, "real world" clinical settings, such as a managed care organisation, as one paper in this section reports.6 The other two papers in this series focus on a broader target population-all hospitalised smokers, regardless of diagnosis.7 8 Counselling programs for this group have also boosted smoking cessation rates after hospital discharge when compared with usual care, but the rates achieved are substantially lower than

for cardiac populations.<sup>11-15</sup> Clearly, stronger interventions are needed.

Effective programs already share these common elements: systematic identification of smokers at (or shortly after) admission; a bedside counselling session by a nurse or specially trained counsellor, often supplemented by written or audiovisual material; physician advice to stop smoking; and continued contact, usually by telephone, for at least three months after discharge. Programs have not systematically incorporated drugs such as nicotine replacement or bupropion that boost smoking cessation rates in ambulatory settings. The high prevalence of nicotine withdrawal in hospitalised smokers provides a strong rationale for drug treatment,<sup>7</sup> but adding drugs will raise further questions. Are drugs, such as nicotine replacement, safe for acutely ill patients, especially those with cardiac disease? Should the drugs be offered to all smokers for symptom relief, regardless of whether they plan to quit after discharge; or should they be limited to those attempting cessation? Will the drugs add to the effectiveness of counselling or will they replace it? Studies are already in progress to answer these questions.

In the meantime, managed care organisations need not wait to take action. Since 1996, the Agency for Health Care Policy and Research's evidence based smoking cessation clinical guidelines have clearly endorsed the concept of hospital based smoking intervention.16 Hospital based programs should be especially attractive to managed care because they are more cost effective than smoking programs for outpatients.<sup>17 18</sup> Hospital based programs achieve higher cessation rates than outpatient programs, reducing the cost per quit. Furthermore, the cost incurred in treating smoking is offset more rapidly by reductions in the cost of medical care for patients with chronic medical disease than for ambulatory patients.

The challenge for managed care is to find ways to implement the elements of model intervention programs into existing health care delivery systems.<sup>8</sup> Information systems may need to be adapted to permit routine identification of patients' smoking status on admission. Identifying staff with time and expertise for smoking intervention may be difficult, and supporting new staff to provide the smoking counselling, both in the hospital and after discharge, can be a challenge. As hospital stays shorten, a greater emphasis will be placed

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