

Preparing patients and health professionals for the transition to chlorofluorocarbon-free inhalers: The British perspective

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The National Asthma Campaign is the independent United Kingdom charity working to conquer asthma in partnership with people with asthma and all who share their concern through a combination of research, education, and support. We are viewed by people with asthma, health professionals, National Health Service managers, and policy makers as 1 of the United Kingdom's leading authorities on asthma and, in particular, the leading independent charity in the field. Through historic precedent and current research, it was clear to us, alongside the other relevant stakeholders, that the transition to chlorofluorocarbon-free inhalers would be 1 of the biggest changes in medication ever to take place in the United Kingdom and a potential period of considerable instability. To avoid that instability and to facilitate a positive transition process, the National Asthma Campaign worked closely with the government (Department of Health), health professionals, pharmaceutical industry, and other patient and/or campaigning groups to ensure effective information dissemination; and support was available to the appropriate audiences. It is difficult to conclude at this stage how successful the strategy has been. As the transition gains in momentum and more chlorofluorocarbon-free products are released on to the market, it will become more apparent how much of a success the process has been. (*J Allergy Clin Immunol* 1999;104:S239-42.)

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The National Asthma Campaign estimates that 1 in 7 children and 1 in 25 adults in the United Kingdom currently have asthma, a total of 3.4 million people with asthma in the United Kingdom.¹ We also know that there are over 40 million metered-dose inhalers prescribed in the United Kingdom each year for those people with not only asthma but also other respiratory conditions, such as chronic obstructive pulmonary disorder and cystic fibrosis. These figures illustrate the impact of the transition to chlorofluorocarbon-free inhalers in the United Kingdom and explain why it has been referred to as the biggest change in medication ever to take place.²

Historic precedent in the United Kingdom indicates that, where patient medication has been altered or changed in other conditions, some difficulties have been

experienced in terms of compliance and the quality of care provided. One clear illustration of this was the change to U100 insulin in 1984. At the time of change, routine audits of patients with diabetes revealed that some patients had not had their treatment reviewed by their practitioner for a number of years.³ It was also found that, during the transition, there were patients who resisted the change because of the upset to their routine. Some patients with diabetes refused to change because of misinformation about the new insulin and a refusal to accept the need for the change. There are many lessons to be learned from that process. With specific relation to asthma again, there are past experiences that have acted as good indicators of potential issues. In the past, some problems have occurred in the change from branded to generically prescribed metered-dose inhalers. One Scottish study highlighted the need for patient information to be in place before any changes occurred.⁴ This study found that 20% of the patients were "very unhappy" with the changes that had taken place and that the most common cause of complaint was that patients were unhappy about the lack of communication from health professionals. The patients also felt that their general practitioner did not take their views into consideration and that they were not comfortable with the idea that change had been forced on them. Changes in medication also prompt increases in the demand for patient information and support. The introduction of montelukast in the United Kingdom, for example, produced an almost 300% increase in the amount of calls to the National Asthma Campaign help line (Fig 1).

Every effort has been made to make sure that the transition to chlorofluorocarbon-free inhalers is as seamless and trouble free as possible. As the leading representatives of people with asthma, the National Asthma Campaign set about analyzing their initial perceptions to assess where potential problems might occur and to prepare for effectively communicating the perspective of people with asthma.

As mentioned earlier, patients are naturally apprehensive about any real or perceived change to their medication. In 1997 the National Asthma Campaign surveyed 4000 of its members,⁵ and the results revealed that nearly 60% of the respondents were not even aware of the likely removal of chlorofluorocarbons from asthma inhalers by the year 2000. For a sample group that consists of people with asthma whom you might suggest were, through their membership of an educational asth-

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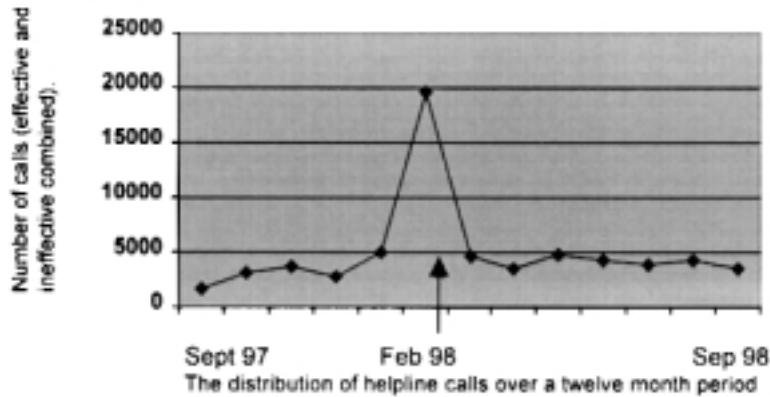


FIG 1. Montelukast is launched in the United Kingdom.

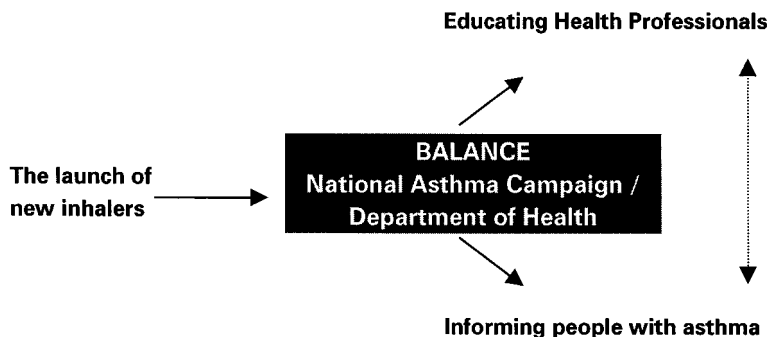


FIG 2. The National Asthma Campaign as a mediator.

TABLE I. The message for people with asthma

The new inhalers have been stringently tested and are just as safe and effective as current inhalers.
The new inhalers will contain the same medication, although they may look, feel, and taste differently.
The bulk of environmental damage has been caused by chlorofluorocarbon use in refrigeration and air conditioning, not inhalers, so people with asthma should not feel guilty.
Chlorofluorocarbon inhalers have not harmed anyone's lungs.
The National Asthma Campaign exists to support informed choices for people with asthma.

ma charity, better informed than average, this is a large number of unaware people. The need for a large-scale dissemination of patient educational material was therefore recognized. For those people who were aware of the transition, the survey asked where they had received their information. Health professionals were not actually the principal source of information for a large proportion of the respondents. In fact 48% of the respondents regarded the National Asthma Campaign as the source of information, and 42% of the respondents considered the media their source. Only 5% of the respondents had heard about the transition from their general practitioner; only 4% of the respondents had heard about the transition from their practice nurse; 4% of the respondents had heard about the transition from a pharmacist, and only 3% of the respondents had heard about the transition from a hospital doctor. Did this mean there were educational needs for health professionals as well? The

National Asthma Campaign also conducted a survey of health professionals.

Although it became clear that further information and education were needed, the survey also highlighted what some of the main areas of concern might be. Of the respondents among the National Asthma Campaign membership, little concern was actually raised about the look of the inhaler, with only 19% of the respondents suggesting this would be a problem. However, some concern was raised among respondents about any change in the sensation of the inhaler (59% were concerned, and 7% stated they would be greatly concerned). Likewise, there was considerable concern over a possible change in the taste of the inhaled medication, with 59% of the respondents showing concern and 9% of the respondents stating that they were greatly concerned. So, with non-compliance already being an established problem in asthma treatment,⁶ the different shapes, weight, aerosol

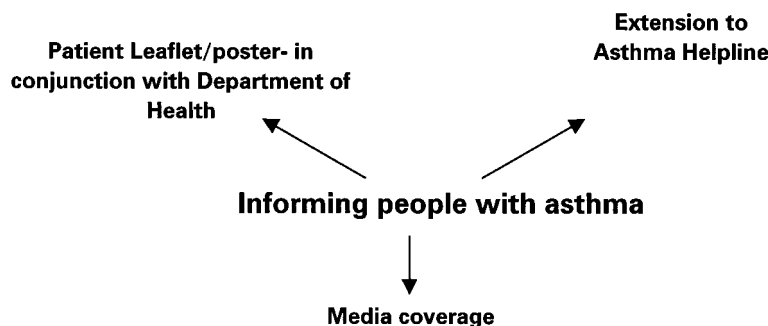


FIG 3. Communicating with people with asthma.

TABLE II. The messages for health professionals

The transition provides a chance to re-examine medication levels, management plans, and inhaler suitability and techniques.
As a team, health professionals should plan their strategy for dealing with their patients.
Time should be allowed to discuss the different characteristics of the new inhalers.
Older patients or those patients with limited dexterity may need help in adjusting to the new inhalers.

delivery, and oropharyngeal impact characteristics of the new chlorofluorocarbon-free inhalers, in addition to their distinctive taste, pose as potential causes for further disruption to asthma management.

Concern over the changes in the medication has also come from health professionals. The National Asthma Campaign survey of practice nurses⁵ showed that 92% were aware of the likely removal of chlorofluorocarbons by the year 2000 but cited the following concerns about the potential changes in the characteristics of the new chlorofluorocarbon-free inhaler: 62% of respondents were concerned about the efficacy of the new inhalers compared with existing treatments; 60% of respondents stated concern about the safety of the propellant, and 50% of the respondents were concerned about whether the new inhalers would be harder for patients to use than existing therapies.

There was clearly the potential for a period of considerable instability. Nonetheless, the outlook adopted by the National Asthma Campaign was a positive one. In preparation for the transition, there was a unique opportunity to bring together all the relevant stakeholders in asthma care. This came to fruition through the Chlorofluorocarbon Transition Steering Group established in 1997 by the Royal Pharmaceutical Society.

The membership of the steering group consisted of the following:

- Health professionals: British Medical Association, Royal College of Nursing, National Asthma and Respiratory Training Centre.
- Community pharmacists: Royal Pharmaceutical Society.
- Pharmaceutical industry: International Pharmaceutical Aerosol Consortium.
- Patient/campaigning groups: National Asthma Campaign, British Lung Foundation.
- Government: Department of Health and Department of the Environment.

In representing the patient perspective, the National

Asthma Campaign's priorities for the transition were patient safety and acceptability. In addition, it was felt essential that no manufacturer should be able to dictate the transition process and gain commercial advantage and that health professionals should have enough information and advice to enable them to plan ahead and manage their patients' asthma effectively. Although the National Asthma Campaign cannot dictate to the pharmaceutical industry, it is well positioned as a mediator, offering balanced and independent advice to go alongside the inevitable publicity that follows the launch of new products (Fig 2).

People with asthma would have some concerns about the transition, the National Asthma Campaign survey proved this. The survey also highlighted that the lay media would be a key communication resource for informing people with asthma; so that this medium would be used effectively, the National Asthma Campaign devised specific messages for dissemination (Table I).

There was a three-way approach to communicating with people with asthma (Fig 3). The National Asthma Campaign worked with the Department of Health to produce an information leaflet that is available through local general practice surgeries and the asthma help line.

In addition to the leaflet, the National Asthma Campaign saw an urgent need for an interactive information and support service to complement other information sources. The Asthma Help line is a National Asthma Campaign service and is staffed by asthma nurse specialists. From October 1998, with finance from the Department of Health and the pharmaceutical industry, the help line was extended to accommodate a chlorofluorocarbon-generated increase in demand. In the first week of the help line extension, the number of chlorofluorocarbon-related calls equaled 3% of the total. It is unclear whether this low percentage figure is a result of patient contentment and satisfaction or a slow transition that has

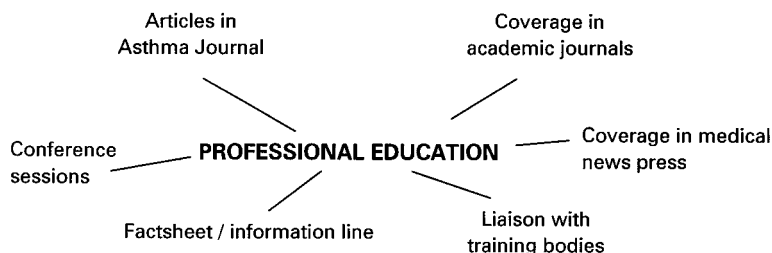


FIG 4. Communication with health professionals.

yet to gain momentum. The cause is likely to be the latter, and the demand on the help line will continue to be monitored as more chlorofluorocarbon-free products are launched.

The survey of health professionals highlighted their respective need for information; consequently, a strategy for information dissemination was devised. The key messages are listed in Table II.

In terms of professional education there were 6 approaches to information dissemination (Fig 4). Professional members of the National Asthma Campaign receive the *Asthma Journal* quarterly. The chlorofluorocarbon-free transition has also been covered by papers in academic journals (such as *European Respiratory Journal*, *British Medical Journal*, and *Respiratory Medicine* and in the news medical press (for example in *Pulse* and *Practice Nurse* magazine). The training of health professionals was also highlighted as a resource for information dissemination, and the National Asthma Campaign collaborated with the National Asthma and Respiratory Training Centre and the Royal College of Nursing to ensure that nurses were well informed of the transition through their training. The transition has also been the subject of professional education meetings and featured in the program of the third National Conference on Asthma Education and Management. As an additional resource for health professionals, the National Asthma Campaign produced an information fact sheet that covers all of the relevant issues.

The effectiveness of such information dissemination to both people with asthma and health professionals will only be tangible when the transition process gains greater momentum and progress. At this stage, the UK transition strategy is currently being finalized by the Department of Environment, Transport, and Regions; the National Asthma Campaign took part in the preceding consultation period. Work will now continue at a local level to influence primary care decisions and to help inform the development of local transition strategies. There will also be parliamentary activity to monitor the government's action and assess the progress of the UK transition strategy. All this activity will sit alongside the continuing and possibly growing need for more independent information and education.

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