Prescribing at the hospital-general practice interface I: Hospital outpatient dispensing policies in England

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Abstract

Objective—To describe the outpatient dispensing policies of major acute hospitals in England.

Design—Postal questionnaire survey in November 1990.

Setting—All (278) major acute hospitals in England with more than 250 beds, excluding maternity, paediatric, or psychiatric hospitals; nine hospitals declined.

Participants—Hospital chief pharmacists.

Main outcome measures—Current dispensing policy and exceptions to it; when the policy was formed; and who was involved in its formation.

Results—Completed questionnaires were received from 200 (72%) of the hospitals approached. The quantities of drugs dispensed to outpatients ranged from zero in 12 hospitals to unlimited amounts in nine; nearly half (92) dispensed a 14 days' supply of drugs. The greater the restriction on outpatient dispensing, the more recently the policy had been introduced (χ^2 for trend=7·15; df=1; $p<0·01$). Permissible exceptions to the policy included the consultant's specific request (134 hospitals), difficulty in obtaining drugs in the community (102), urgent need for start of treatment (49), and certain types of patients (41) or drugs or their regimens (104). Groups who were neither represented on the hospital committee concerned with policy formation nor consulted before policy changes included regional health authorities in 122 hospitals, district health authorities in 101 hospitals, and general practitioners in 32 hospitals.

Conclusions—Outpatient dispensing policies varied considerably among the hospitals surveyed, but they seemed to be moving towards greater restrictions on the supply of drugs given to outpatients.

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Introduction

For some time general practitioners have expressed concern over the limited supply of drugs given to patients on discharge from hospital,[1] the increasing requests from their hospital colleagues to complete short courses of treatment initiated by the hospital, and the difficulty of monitoring such hospital initiated treatments as fertility drugs and chemotherapy.[2] Furthermore, because of the preferential pricing system allowed to hospitals dispensing drugs in the community can be more expensive.[3]

Recently the government introduced the general practitioner indicative drug budget scheme with the objective of placing downward pressure on expenditure on drugs,[4] particularly in those practices with the highest expenditure. At the same time pressures have been put on hospital doctors to reduce costs. The possible consequences of this situation are for hospital doctors to initiate a course of treatment but for general practitioners to write the prescription and for hospitals to introduce a policy to reduce outpatient dispensing.

Little documented information exists about the current state of hospital outpatient prescribing policies. Our aim was to learn about these policies and their impact on the work of general practitioners, hospital consultants, and community pharmacists. We report the findings of a survey of all major acute hospitals in England examining current outpatient dispensing policies, exceptions to them, when they were introduced, and who was involved in their formulation. Further papers will describe the impact of these policies on general practitioners and hospital consultants and on hospital and community pharmacists.

Methods

We identified all major acute hospitals in England with more than 250 beds from the 1990 *Hospital and Health Services Year Book*. Hospitals specialising in only maternity services or paediatric or psychiatric illnesses were excluded. In November 1990 the chief pharmacist of each hospital was sent a postal questionnaire asking for a detailed description of the current outpatient dispensing policy of the hospital, when it was formulated, and the exceptions to it.

We sent a letter at the beginning of the study to all regional and district pharmaceutical officers informing them of the study and asking them to encourage pharmacists in their area to respond. Non-responding pharmacists were telephoned to encourage a high response rate.

The data were analysed with the statistical package for the social sciences (SPSS/PC+), and the significance of the association between pairs of variables was assessed with the χ^2 test or χ^2 test for trend, as appropriate.

Results

We identified 278 acute hospitals in England and sent questionnaires to the chief pharmacist of each; 200 (72%) completed questionnaires were returned. Nine hospitals declined to participate because of pressure of work. Completed questionnaires were received from hospitals in all 14 regional health authority areas and in 156 (82%) of the 190 district health authorities in England. Regional pharmaceutical officers suggested to us that in some cases non-response to the questionnaire was due to closure of pharmacies, amalgamation of units, and staff changes.

OUTPATIENT DISPENSING POLICIES

There was considerable variation among hospitals, both within and between the regional health authority areas, in their limit on the quantities of drugs supplied to outpatients (table I). Policies ranged from no outpatient dispensing in 12 hospitals to unlimited

dispensing in nine. Nearly half of all the hospitals (91), however, dispensed a 14 day supply of drugs to outpatients.

Most hospitals made exceptions to the stated limit on dispensing for reasons including at the consultant's explicit request; if the drug was difficult to obtain in the community; or if there was an urgent need to start treatment (table I). Some hospitals made exceptions for particular types of patients, such as those with mobility problems, attending for day surgery, or receiving chemotherapy. Other exceptions included special or complicated dose regimens, hospital only drugs, and clinical trial drugs.

TABLE I—*Outpatient dispensing policies in 200 acute hospitals in England*

Dispensing policy	No
Limit on quantity of drugs dispensed	
No limit	9
28 Days' supply	37
14 Days' supply	91
7 Days' supply	33
No dispensing	12
Exceptions to policy (elicited)	
Consultant request	134
Difficult to obtain drug in community	102
Urgent need for drugs to start treatment	49
Exceptions to above policy (volunteered)	
Certain types of patients (with mobility problems, attending for day surgery, or receiving chemotherapy)	41
Special dose regimen	40
Hospital only drugs	33
Cytotoxic drugs	20
Trial drugs	11

Eighty eight hospitals asked general practitioners to prescribe drugs which were costly, or rarely used in general practice, or both, such as fertility treatments (urofollitrophin, menotrophin); synthetic growth hormones; drugs for renal failure (fluid for continuous ambulatory peritoneal dialysis and erythropoietin); and zidovudine for treating AIDS. General practitioners were asked to prescribe growth hormone by 48 hospitals, erythropoietin by 38, fluid for continuous ambulatory peritoneal dialysis by 29, menotrophin by 27, urofollitrophin by 26, and zidovudine by 19.

Nearly all hospitals (195) made it their policy to substitute generic for branded drugs whenever possible.

Most (164) hospitals said that they had a drug formulary: in 73 hospitals this was routinely circulated to general practitioners and in 82 hospitals it was made available to general practitioners only on request. The remaining hospitals did not state their policy.

DEVELOPMENT OF POLICIES

The existing outpatient dispensing policy was introduced within the past five years in 98 hospitals, between five and nine years previously in 26 hospitals, and more than 10 years previously in 30 hospitals. There was a significant association between the limit imposed on outpatient dispensing and the year in which the present policy was introduced (table II). The greater the restriction on outpatient dispensing, the more recently the policy had been introduced.

TABLE II—*Limits on outpatient dispensing by year of introduction of policy*

Outpatient drug supply (days)	No of hospitals*	No (%) hospitals with policy introduced: 0-2 Years ago	3-4 Years ago	≥5 Years ago
1-13	42	24 (57)	7 (17)	11 (26)
14	77	29 (38)	22 (29)	26 (34)
≥15	35	11 (31)	5 (14)	19 (54)

*Complete information available for 154 hospitals.
Association between drug supply and year of introduction: χ^2 for trend = 7·15, df = 1, $p<0·01$.

POLICY FORMATION

The procedure for policy review was described as "ongoing" by 90 hospitals whereas 36 hospitals said that they had no review procedure. Policy review committees generally comprised representatives from the clinical staff, pharmacy staff, nursing staff, and hospital administration and general practitioners (table III). When a group was not represented on the committee it was generally consulted before the policy was constituted. Some groups were neither represented on the committee nor consulted about the introduction of policy changes. These included the regional health authority in 122 hospitals, district health authority in 101, hospital administration in 37, nursing staff in 33, and general practitioners in 32 hospitals.

TABLE III—*Groups included in formulating or reviewing outpatient dispensing policies in 200 acute hospitals in England. Figures are numbers of staff*

	Represented on policy committee	Not represented on policy committee but consulted
Clinical staff	134	61
Pharmacy staff	129	39
Nursing staff	101	8
General practitioners	96	27
Hospital administration	61	55
District health authority	16	15
Regional health authority	3	1
Other	15	15

Discussion

The findings show that there was considerable variation in both the outpatient dispensing policies and their methods of formulation in major acute hospitals in England. Regional health authorities did not seem to have influenced policy formation. This was not surprising as neither regional nor district health authorities were represented on policy committees of most of the hospitals nor were they consulted about proposed changes in outpatient dispensing policy. If hospitals were setting policies to meet local needs such variations could be seen as beneficial. However, general practitioners were not involved in the policy formation process in 16% of the hospitals. The differences may reflect the fact that administrators in some hospitals have been strongly motivated to cut drug costs. We do not know what effect the introduction of hospital trusts from April 1991 may have on the variation in dispensing policies.

From November 1990 hospitals seemed to be moving towards more restrictive policies regarding the quantities of drugs dispensed to outpatients. Our findings showed that the more limited the supply, the more recently the policy had been introduced. This study was restricted to acute hospitals with over 250 beds and so may not reflect the practice of smaller or specialist hospitals.

We examined only the stated policy. It was not possible in a study of this size to monitor the adherence to dispensing policy. Though hospitals may vary in the rigour with which they enforce policies, it is reasonable to assume that the net impact conforms with the stated policies. The response rate of 72% is reasonable, but the response may have varied with the type of outpatient dispensing policy. Such bias would reduce the accuracy of our estimates of prevalence but would not alter the relation observed between the types of policy and the year of introduction. It is therefore likely that the trend towards more restricted outpatient dispensing that we observed is genuine.

This trend may have far reaching effects on health service budgets. The net cost to the NHS may be

higher as a consequence as community pharmacists, unlike their hospital based colleagues, cannot usually buy in bulk when they are only rarely dispensing certain drugs. Nor do they have the preferential pricing advantage offered to their hospital colleagues. The motivation to shift prescribing costs from hospitals to general practice would be reduced if the relevant health authorities—that is, the district health authorities and the family health services authorities held a common drug budget or if virement between drug and other budgets in hospitals was disallowed.

There are also possible adverse implications for patient care. General practitioners may lack the knowledge and, in some cases, the technical resources needed to monitor the dosage, side effects, and response of patients to specialist hospital drug regimens. They do not have access to the skill of the ward pharmacist, a service available to the hospital doctor. Patients may find it difficult to arrange at short notice for their general practitioner to continue their hospital initiated drug treatments. In addition, they may find that they have to pay for two prescriptions when one is sufficient.

There are also possible advantages. The savings made by hospitals in their drug budgets could be used to increase the numbers of patients treated and the range of services offered. Transferring prescribing responsibility to general practitioners may reduce the confusion which can arise from having two prescribers (that is, the general practitioner and the consultant) for one patient and should help to clarify which doctor bears the clinical responsibility. Patients may prefer to obtain their prescription from the community pharmacist for reasons of accessibility, the convenience, hours of opening, and availability of non-pharmaceutical products.

The current trend towards more restrictive outpatient dispensing may have both beneficial and negative effects on the quality of outpatient care. In subsequent papers we examine the opinions of general practitioners, hospital consultants, and hospital and community pharmacists about the implications of current hospital outpatient dispensing policies.

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Prescribing at the hospital-general practice interface. II: Impact of hospital outpatient dispensing policies in England on general practitioners and hospital consultants

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Abstract

***Objective*—To assess the impact on general practitioners and hospital consultants of hospital outpatient dispensing policies in England.**

***Design*—Postal questionnaire and telephone interview survey of general practitioners and hospital consultants in January 1991.**

***Setting*—94 selected major acute hospitals in England.**

***Participants*—20 general practitioners in the vicinity of each of 94 selected hospitals and eight consultants from each, selected by chief pharmacists.**

***Main outcome measures*—Proportions of general practitioners unable to assume responsibility for specialist drugs and of consultants wishing to retain responsibility; association between dispensing restrictions and the frequency of general practitioners being asked to prescribe hospital initiated treatments.**

***Results*—Completed questionnaires were obtained from 1207 (64%) of 1887 general practitioners and 457 (63%) of 729 consultants. 570 (46%) general practitioners felt unable to take responsibility for certain treatments, principally because of difficulty in detecting side effects (367, 30%), uncertainty about explaining treatment to patients (332, 28%), and difficulty monitoring dosage (294, 24%). Among consultants 328 (72%) wished to retain responsibility, principally because of specialist need for monitoring (93, 20%), urgent need to commence treatment (64, 14%), and specialist need to initiate or stabilise treatment (63, 14%). The more restricted the drug supply to outpatients, the more frequently consultants asked general practitioners to prescribe ($p<0.01$) and complete a short course of treatment initiated by the hospital ($p<0.001$).**

***Conclusions*—Restrictive hospital outpatient dispensing shifts clinical responsibility on to general practitioners. Hospital doctors should be able to retain responsibility for prescribing when the general practitioner is unfamiliar with the drug or there is a specialist need to initiate, stabilise, or monitor treatment.**

Introduction

The two level health care system in Britain relies on general practitioners referring patients to hospital based specialists who advise on appropriate treatment and, when necessary, undertake treatment. The decision as to which doctor is best able to assume clinical responsibility, and therefore responsibility for prescribing, should be negotiated between the individuals concerned. Recently, however, concern has been expressed that prescribing at the hospital-general practice interface may have become governed by considerations of cost and available resources rather than professional considerations.[1-4]

Cash limited hospitals can save funds by shifting outpatient prescribing costs on to general practitioners. The concern expressed by general practitioners is likely to be increased now that there are indicative prescribing allowances in general practice and even tighter controls on hospital budgets through contracts.[5,6] In an accompanying paper we suggested that the supply of drugs given to outpatients was being further restricted.[7] The impact on patient care may be

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