

Formulary revision: eliciting the opinions of users

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SUMMARY

Background. Few peer-reviewed reports have been published that document the extent and type of use of published formularies in general practice. As publishers of the Practice Formulary of the Royal College of General Practitioners, the Northern Ireland Faculty Board commissioned a large-scale survey to quantify these issues, for the purpose of improving the revision process.

Aim. The aim of the survey was to investigate the extent to which general practitioners in Northern Ireland use the Practice Formulary and the ways in which they use it, and to elicit their opinions on ways in which it could be improved.

Results. A total of 371 completed questionnaires were received (response rate of 38%), 49 respondents (13%) stating that they had not received the formulary. Out of the 322 respondents who had received it, 84% used the formulary occasionally, and 41% either had or were producing their own practice formulary (32% of these had used the RCGP formulary in its production). Almost all respondents (90%) considered a formulary useful in general practice. The presentation and layout was approved by 273 respondents (85%) and 259 (80%) agreed strongly with the drug selection. The formulary was used as a source of drugs information by 191 respondents (59%) and as a teaching aid by 103 (32%). A total of 65 criticisms or suggestions for improving the next edition were received. Revision is now under way and 18 of the original respondents have volunteered to be members of the revision committee. No judgement was made about the non-respondents.

Conclusion. The largest survey yet conducted of published formulary use in one region elicited the extent of use, type of use, criticisms and suggestions for improvement. These suggestions are being used as a guide to revision of the next edition.

Keywords: formulary users; survey opinions; formulary revision.

Introduction

PUBLISHED formularies for general practice are mostly produced by committees comprising general practitioners and specialist advisers. The current edition of the *Royal College of General Practitioners Practice Formulary* is produced by the Northern Ireland Faculty¹ and is the exemplar used in the college formulary production folder.² The 1993 revision committee included two information pharmacists, one clinical pharmacologist

and three general practitioners in its membership. Seven specialist advisers contributed expertise to their particular section. A great deal of unpaid time and effort goes into the production of such formularies, yet their effectiveness and appropriateness has not been adequately established. Previous studies have shown how effective formularies are in a small number of volunteer practices,³⁻⁵ but no large-scale surveys of the extent of formulary use have apparently been undertaken. Asking the question 'Do you use a formulary?' may not of itself reveal what is actually happening: McCarthy *et al* studied the relationship between the numbers of partners in a practice and the number of different drugs prescribed by the practice, but were unable to demonstrate any difference in the range (number of different drug names) of drugs prescribed in the 20% of practices who stated that they were using a formulary.⁶ The reported range was far in excess of the number of drugs in the formulary.

Before undertaking further revision and costly printing, the college faculty board wished to discover how many doctors in Northern Ireland were using the formulary, and what (if any) changes they suggested, on the principle that formularies ought to reflect the wishes and needs of the users. The survey reported here was undertaken to elicit the opinions of every general practitioner in Northern Ireland on the usefulness of the formulary.

Method

A copy of the current edition of the *Practice Formulary* was posted to all 983 general practitioner principals in Northern Ireland in November 1993, followed by a two-page questionnaire with stamped, addressed envelope in April 1994. The questionnaire comprised 12 questions, and anonymity was assured. Preliminary analysis was done manually, including the two open-ended questions: 'What improvements do you suggest in the next edition?' and 'Which additional drugs would you wish to be included, with reasons for their inclusion?' The remaining data were entered into a microcomputer for sorting.

Results

A total of 371 general practitioner principals completed questionnaires were received (a response rate of 38%), of whom 322 (33%) stated that they had received a copy of the formulary. Out of these, 288 (89%) considered a formulary useful in general practice: 88 (27%) consulted the formulary once a week or more; 86 (27%) at least once a month; 96 (30%) less than once a month; and 52 (16%) rarely consulted the formulary. In addition to its primary use as a prescribing menu, the formulary was used as a source of drug information by 191 (59%) and as a teaching aid by 103 (32%). Out of the 133 respondents (41%) who either had, or were in the course of producing, their own practice formulary, 103 (32%) had used the RCGP formulary in its production.

The presentation and layout was approved by 273 respondents (85%) and 259 (80%) agreed strongly with the drug selection. Out of the 28 respondents (9%) who suggested additional drugs for inclusion, most requested a wider selection of contraceptives, antibiotics, NSAIDs and ACE-inhibitors (see Table 1). Most of the respondents (257, 80%) had no suggestions for improving the next edition. Out of the remaining 20%, the most common sug-

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Table 1. Suggested drug changes for the next edition.

Value label	Frequency	Percentage
No comment	293	91.0
More contraceptive drugs	9	2.8
More ACE-inhibitors	6	1.9
More antibiotics	4	1.2
More NSAIDS	2	0.6
Other	8	2.5

gestions were: 'improve presentation' (5%); 'add an index' (4%); 'add cost data' (3%); and 'give more advice on practical prescribing' (2%). These comments are summarized in Table 2.

Eighteen respondents (5.6%) volunteered to become members of the next formulary revision committee.

Discussion

The response rate of 38% probably mainly reflects doctors interested in formulary use. Approximately one-quarter of all Northern Irish general practitioners are involved in undergraduate or postgraduate teaching, and may have contributed disproportionately to this survey. This probability is supported by the finding that 32% of respondents were using the formulary as a teaching aid. That fact alone must give great encouragement to the formulary committee. The unavoidable process of self-selection probably affected the finding that 89% of respondents considered a formulary useful in general practice: many of the non-responders might have answered this question negatively.

In general practice, it is only occasionally necessary to refer to any prescribing document, so it was encouraging to find that over a quarter of all respondents consulted the formulary once a week or more. Beyond its use as a prescribing menu, an important finding was the high level of use of the formulary as a source of drug information. This vindicates the decision of the formulary committee to include prescribing notes in most sections — a time-consuming task. The other extensive use of the formulary as a teaching aid is also an important finding, as is the similar percentage of respondents who had used it in developing their own practice formulary. It is arguable that these two findings alone are sufficient justification for publication of a further edition.

The decision was made when constructing the questionnaire to keep the survey anonymous. Previous research has shown that a declaration by one partner that a practice 'used a formulary' could not be substantiated by a survey of the range of drugs they prescribed.⁶ Doubtless, the respondent was a formulary user, but that did not mean that the other practice members were. It could be difficult to achieve agreement over formulary use in partnerships. The responses received were frank and honest, but no statement on use of formularies in partnerships can be made from the responses: that must await a follow-up study, after distribution of the next edition.

Previous similar surveys have received approximately 65–70% response rates: the 38% return in this study probably reflects a generally low priority of formularies in general practice. In the nature of general practice, doctors become accustomed to a range of drugs, some of which they have 'inherited' from their mentors and predecessors, others reflecting common use in the partnership and (to a substantial extent for new drugs) the preferences of the local hospital consultants. Doctors continue to use medicines which they find to be effective, safe and relatively free from side-effects. Once a doctor feels secure with a range of 200–300

different drugs, it is both practically and emotionally stressful to make changes. One of the subtle stresses of adopting a formulary is the admission that a previous drug selection was less effective. Patients tend to be unhappy about changes in long-term medication for other than purely clinical reasons, and unwilling partners can cause considerable friction within an otherwise happy practice.⁷ In spite of these factors, we now know that at least 270 doctors in Northern Ireland consult the practice formulary. Assuming that 13% of doctors failed to receive (or to register having received) a formulary, this is 270 out of 855 formulary recipients; i.e. 32% of those doctors who receive it use it.

The results suggest that there is little demand for the presentation of the formulary to change. It is difficult to envisage a change which would make the document any clearer than it already is. Pictograms could be added but might offend many doctors and pharmacists by reducing a scientific document to the level of a comic. Some users might like this change, but on balance, there seems little need to change. It was encouraging to see the convergence into relatively few groups of many of the suggested improvements (Table 2) and the formulary committee are using these in the current revision.

The fact that almost 60% of respondents occasionally use the practice formulary as a source of drug information makes its regular revision very important, and places even greater emphasis on the need for accurate and balanced recommendations from the specialists advising the formulary committee. While the general practitioners of the Northern Ireland Faculty are anxious that the next edition should be produced by the general practitioners themselves, the expert referees who have contributed so greatly to previous editions will continue to be needed.

The problem of the unreliability of asking doctors whether their practice used a formulary⁶ (they implemented a formulary as the exclusive drug list), was circumvented by asking 'Do you think a formulary is useful in general practice?' and 'Does your practice have its own formulary?' The remarkable proportion of respondents who use a practice formulary for most of their prescriptions is probably the minimum proportion, since almost 90% of respondents considered a formulary useful; it is encouraging that 32% of respondents had used the RCGP practice formulary in constructing their own.

Non-responders

The non-responders constitute a major problem in the survey. Are we to assume that non-responders are probably uninterested in formularies, and do not use them, or do a proportion of non-responders use formularies, but were too busy to complete the questionnaire? We cannot tell.

Application of survey results in producing the next edition

Production of the next edition is under way. The 18 volunteer respondents have been invited to take part in the deliberations of the formulary committee and will constitute a majority on the committee. The new edition will inevitably reflect their influence. The following changes are being considered:

- The presentation and layout is to be improved.
- Within the constraints of scientific and economic rationality, the committee is considering which drugs to delete, which new drugs to add and whether a greater selection of drugs should be offered in any given section.
- As in previous editions, the prescribing notes will be revised to include guidance on use of newer drugs (e.g. SSRIs), areas of therapeutic controversy (e.g. ACE-inhibitors) and changes in therapeutic emphasis (e.g. treatment of heart failure).

Table 2. Suggestions for improving the next edition.

Value label	Frequency	Percentage
No comment	257	79.8
Improve presentation	16	5.0
Add an index	14	4.3
Add cost data	11	3.4
More advice on practical prescribing	7	2.2
Augment it (more detail required)	5	1.6
Condense it (less detail required)	3	0.9
Keep it up to date	3	0.9
Computerize it	2	0.6
Produce summary cards	2	0.6
Encourage hospitals to cooperate	2	0.6

All deletions and additions, and the reasons for these changes, will be listed at the back of the formulary. In the 1994 reprint of the third edition, an index was added, which will be extended. Given the frequent changes in drug pricing in the UK, it may not be wise to enter cost data in a formulary with an expected life of 2 years. The present formulary indicates, with an asterisk, whenever a generic equivalent is available at a substantial cost differential.

The formulary committee is addressing the demand for a greater selection of contraceptives, antibiotics, NSAIDs and the ACE-inhibitors. There is good evidence of much unjustified use of the last three of these therapeutic groups.⁸ Finally, with greater general practitioner representation on hospital drug and therapeutics committees, it may be possible to ensure that hospital doctors are made more aware of the formulary drug list, and are encouraged to prescribe from it. At present, only hospitals in the Belfast area include the RCGP Practice Formulary drugs in their hospital formulary.⁹

Conclusions

This survey has shown that 13% of general practitioners in Northern Ireland were unaware of having received the formulary, but that of those who are aware of it, 84% used it occasionally, 41% had or were producing their own formulary, and almost 90% considered a formulary useful in general practice. The general presentation and drug selection was approved by most respondents, almost 60% using the formulary as a source of drug information. It is also used as a teaching aid by a substantial number of general practitioners. The suggestions received for improvements are being incorporated and the 18 respondents who volunteered are contributing to the revision of the next edition.

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