

# MANAGING YOUR MEDICINES — A PHARMACY SERVICE IN NORTHERN IRELAND

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*The establishment of pharmacy-based medicines management services moved closer recently with the announcement of 26 pilot sites across England. There have been parallel developments in Northern Ireland, where a medication review service is being provided for targeted patients under a new elective contract.*

The need to provide support for targeted patients in taking their medicines is now widely acknowledged. The perceived benefits of such support include optimisation of treatment, minimisation of adverse events and a reduction in wastage. Health departments in the United Kingdom have indicated that the management of patients' medication is seen as an important part of the community pharmacist's future role.<sup>1, 2, 3</sup> The challenge for the profession is to translate this strategic vision into practical and sustainable models which can be incorporated into contractual and working arrangements.

An opportunity to take up this challenge was provided in Northern Ireland in late 1999 with the announcement from the Department of Health, Social Services and Public Safety of new and recurring funding for a medicines management initiative. The four health and social services boards were asked to develop a common service in consultation with local pharmaceutical organisations and other interested bodies. The precise nature of this service was not defined, but in subsequent discussions it was agreed that the main aims should be to:

- 1 Educate patients in order to improve knowledge and understanding of the medication being taken
- 1 Ensure that both prescription and non-prescription medicines are used appropriately
- 1 Promote liaison with other members of the primary health care team, to resolve identified problems and improve care

It was also agreed that the service should:

- 1 Be available for targeted patients in all localities, subject to funding limits
- 1 Be open to all pharmaceutical contractors who satisfy the entry requirements
- 1 Be practical for community pharmacists to operate in their normal work place
- 1 Be seen to improve patient care through the use of documentation which provides evidence of the care problems identified, the interventions made and the perceived benefits
- 1 Provide a mechanism to enhance co-operation and communication between pharmacists and GPs.

It was decided that the service should be modelled on an earlier domiciliary pharmaceutical care project which had been carried out by a team from the school of pharmacy at Queen's University, Belfast, on behalf of two of the boards and the Northern Ireland Pharmaceutical Contractors Committee.<sup>4</sup> This project demonstrated beneficial outcomes from medication reviews carried out by community pharmacists for elderly at-risk patients in their own homes. The new service would differ in being primarily pharmacy based and in having more comprehensive documentation to facilitate the transfer of information and evaluation of outcomes. There would also be a focus on patients with cardiovascular diseases.

## INTRODUCTION OF THE SCHEME

The modified documentation was produced by the board directors of pharmaceutical services during the first part of 2000, in consultation with the former facilitator of the domiciliary project, Anita McKenna. The financial arrangements for the new service were also agreed at this time with the Pharmaceutical Contractors Committee.

Community pharmacists in each of the four health board areas were then invited to participate in the scheme, the main entry requirements being attendance at training evenings and completion of a designated distance learning course. The target was to have 20 per cent of pharmacies (over 100 sites) actively providing the service. It was calculated that this level of participation would allow each pharmacist to carry out detailed reviews on about 20 patients each year within the available funding.

The service was launched by the boards over the winter period. The recruitment target for community pharmacists has since been exceeded, although only a minority of

contractors have actually commenced patient reviews. These "early adopters" have however shown a high level of commitment and have been positive about the service, both in terms of the improvements in patient care and the professional rewards.

## SERVICE PROTOCOL

The stages in the provision of this service can be summarised as follows:

**Patient recruitment** Eligible patients (those on cardiovascular drugs or more than five medicines and with other risk factors) are identified by the pharmacist or through a GP referral.

**Pre-visit preparation** A preliminary medication list is compiled from pharmacy PMRs and GP records if available.

**First medication review** This is carried out in the pharmacy or the patient's own home by prior appointment. It consists of a structured interview based on a detailed questionnaire. In total, 39 care issues are assessed across nine main categories on the basis of the patient's responses to the questions, inspection of the medicines brought in and other observations or information.

**Identification of problems** Each care aspect is assessed as presenting no problems, minor problems or major problems. Identified problems are highlighted on a summary sheet and detailed on a care action plan. The medication list is also updated.

**Action by pharmacist/GP** Issues or problems which can be remedied by the pharmacist are addressed; any requiring action by the GP are highlighted on the report which is sent to the practice.

**Second medication review** This is undertaken within three months. The care issues identified previously are reassessed, documented and a further report sent to the GP. The medication list is updated again if appropriate.

**Follow-up action** This may involve further telephone calls or monitoring by the pharmacist or GP as appropriate.

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**Submission of claim to the board** The claim form gives details of the assessments carried out, using a unique reference number for each patient.

#### DOCUMENTATION

Comprehensive documentation is provided for the review process, including distinctive green patient folders carrying the logo of the service. The key documents for the process are the interview questionnaire, the care issues summary and the action plan sheets. Explanatory leaflets, consent forms, appointment cards, medication proformas and reporting sheets are also supplied. Each form has a reference number which is shown on a flowchart. The documentation is designed to ensure that the process is fully recorded, that the patient/carer/GP is kept informed, that outcomes are assessed and that information can be collated for subsequent auditing or research.

#### OUTCOME MONITORING

Each of the 39 care points addressed in the interview questionnaire relates directly to an assessment box on the summary sheet. The summary sheets therefore provide concise outcomes information both for the GP and for the board. The nine main assessment categories are listed in the Panel, together with examples of the types of issue considered under each heading. A simple scoring system can also be used to illustrate graphically the changes in care issues between the first and second medication review. A bar-chart can be produced by scoring two points for a major problem, one point for a minor problem and zero for no problems. This graphical summary can be used both for an individual patient or for a chosen population of patients (by calculating the mean score for each care category). Figure 1 shows how this method of presentation can be used to illustrate outcomes.

#### OVERCOMING THE BARRIERS

It is felt that this scheme has considerable potential as a model for future practice development, but there are some significant barriers to be overcome before it is widely established. The main barriers identified locally are similar to those which have been documented for comparable pharmacy innovations elsewhere. These include:

- 1 lack of time/staffing difficulties
- 1 physical and organisational limitations
- 1 paperwork required
- 1 low motivation/apathy
- 1 lack of confidence
- 1 interprofessional problems

The boards are working with local pharmaceutical organisations and individual contractors to reduce these barriers.

#### POSITIVE ASPECTS OF THE SCHEME

Participants have found this service to be professionally interesting and rewarding.

## Care categories and issues assessed at interview

1. Supply of prescriptions and medicines (four care issues), eg, problems obtaining medicines
2. Patient knowledge of medication (four care issues), eg, poor knowledge of dosage/frequency
3. Medication regimen (eight care issues), eg, inappropriate formulation for the patient
4. Storage and disposal (four care issues), eg, inappropriate storage conditions
5. Adverse drug effects (two care issues), eg, possible drug-drug interaction
6. Over-the-counter medicines (two care issues), eg, inappropriate use of OTCs
7. Medicines concordance or compliance (seven care issues), eg, problems reading or understanding labels
8. Disease management (four care issues), eg, poor understanding of condition
9. Health promotion (four care issues), eg, smoker

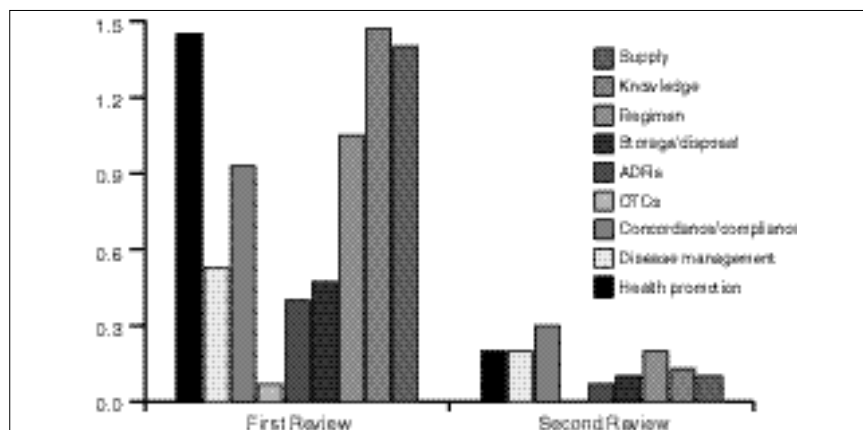


Figure 1. Graphical illustration of care issues identified at the first and second reviews. (The example shows mean scores for a series of 30 patients.)

They appreciate that the data collected will help to demonstrate the benefits of their interventions to patients and funding bodies. They also value the opportunity to work more closely with professional colleagues on care issues.

The flowchart provided with the documentation has been useful in helping the pharmacists work through the steps in the review. The standardised procedures and forms have been found, with practice, to facilitate the process.

The other attractive element for many community pharmacists is the fact that the provision of this service is through an ongoing elective contract and not a pilot. This enables some forward planning to be done, including the employment of locums or part-time staff to free up time where necessary.

#### THE FUTURE

The criteria for patient inclusion will be widened as the scheme develops to include other medical conditions such as diabetes. This will need to be accompanied by further training to build knowledge and confidence amongst participating pharmacists. A detailed evaluation of the outcomes from this scheme is planned when sufficient data are available. A more sophisticated scoring system for the care issues may be developed as part of this evaluation, using weightings to reflect the clinical significance of each intervention category. There is also potential to streamline the interview and data col-

lection process by producing an on-screen version of the questionnaire.

This is therefore only the start of the process, both in terms of developing the methodology and establishing a new role for community pharmacists within the primary health care team. It is anticipated that the service will evolve in response to other innovations, such as electronic information transfer and repeat dispensing, to consolidate the medicines management role. Individual community pharmacists will make a vital contribution to achieving the resulting benefits for the profession and for patients.

#### REFERENCES

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