3 SERVICES SUPPORTING PRESCRIBING POLICIES, PROCEDURES AND ANALYSES

The effective management of the prescribing process can save time, use resources more effectively and result in a more efficient service to patients. The use of medicines in the community is increasingly under scrutiny, partly to improve the quality of prescribing, and partly to ensure that spending on healthcare is efficient. Investment in professional support for prescribing will often rapidly be repaid many times over, both financially and through more efficient use of time and other resources.

The Welsh Prescribing Support Project was set up to educate, train and provide a team of pharmacists to work with GPs in a primary care setting; helping and supporting GPs to formulate and implement rational prescribing policies.

Between late 1994 and late 1996 it achieved the following:

- at least £1.2million cost reduction in prescribing in Mid-Glamorgan, due to formulary development and update work, generic targets and named-patient interventions
- primary care pharmacists were shown to be cost-effective; a £150 session resulted in average cost reductions greater than £750
- a variety of quality initiatives have been implemented, including pharmacist-run clinics for the review of specialist medication
- selected hospital and community pharmacists have been shown to:
  (a) be able to be trained for such a role
  (b) be accepted as part of GP practice teams
  (c) demonstrate a significant cost and quality impact on prescribing behaviour

From "Welsh Prescribing Support Project: An Evaluation for the Welsh Office and Bro Taf Health Authority[3]" (see appendix 2, page 85)

3.1 PRESCRIBING ANALYSIS

Key points

- Prescribing analysis by therapeutic area is an efficient way of identifying areas for modifying prescribing.
- Many prescribing support services include review of PACT data as a fundamental starting point.

To review a practice's overall medicines use by therapeutic area, can often be a more rapid way of rationalising prescribing than by review of individual patients. Agreed therapeutic switches can be implemented immediately for all new patients, and the medication of existing patients can be amended through a planned programme of change. Therapeutic switching of existing medication may be best carried out when patients normally attend for review. It is helpful to inform the local community pharmacist(s) when wholesale changes in prescribing are planned. They may be affected in a number of ways and might, for example, want to review their stockholding. In addition, community pharmacists can help support patients through changes in prescribing by re-inforcing key messages and providing support and reassurance.

PACT Data Analysis

PACT (Prescribing Analysis and CosT) is a series of reports which tells GPs what they have prescribed and how much their prescribing has cost. The data are produced by the Prescription Pricing Authority (PPA) and give information on both individual GPs' and practices' prescribing costs, comparing them with other doctors in the same HA and also nationally.

Each GP practice automatically receives quarterly Standard PACT Reports from the Prescription Pricing Authority (PPA). The more detailed PACT Catalogues have to be ordered individually.

When reviewing PACT data, it is best divided into therapeutic sections and tackled over a period of time. Some specific drug or disease areas may require early attention. The Standard Report is useful as a starting point to indicate those areas where a large proportion of the prescribing budget is being spent. To carry out a fuller review of prescribing, the PACT Catalogue is required, which gives details of each prescription dispensed. For a model framework for review of PACT data, see appendix 5.

Department of Health Projects involving review of PACT data and prescribing analysis are described in appendix 1, pages 73 to 77. Other similar initiatives are described in appendix 2, pages 92 to 94.

3.2 GENERIC PRESCRIBING

Key points

- Prescribing of generic medicines is encouraged from both educational and cost-effectiveness view points.
- The PPA provides information to HAs about each practice's potential for savings from increased generic prescribing.

There are a small number of drugs whose release characteristics mean that patients should be maintained on the same product. Examples include theophylline, and modified-release preparations of nifedipine and diltiazem. Otherwise the only therapeutic rationale for prescribing by brand name is where there is a real risk that failure to maintain an individual patient on the same product could impair their adherence or understanding of therapy, and thus be detrimental to their health.

Each year the PPA provides HAs with information about their potential savings from increased generic prescribing. This information is provided at practice level, and consists of a list of those items prescribed by a practice that could have been prescribed generically, and the savings that would have achieved by a total switch.

An example of those products likely to produce the greatest financial benefit when prescribed generically is included in appendix 5 along with a model framework for generic prescribing review. The data presented are from a small HA with already high levels of generic prescribing (70%), yet a potential saving of £126,000 per year was identified. In a small number of cases, branded generics may be cheaper than if the product is prescribed generically. This is a complicated area that a support service will be able to advise on.

3.3 FORMULARY DEVELOPMENT AND MAINTENANCE

Key points

- Formulary development aims to produce rational, evidence-based prescribing policies and to consider cost in the context of appropriate care.
- GP computer systems can often be configured to allow the chosen formulary to be presented at the point of prescribing.
- Maintaining and regularly updating a formulary is just as important as the process of developing it in the first place.

Formulary management, a means of selecting and keeping up to date a preferred choice of drugs, is still extremely important in the proactive management of primary care (and secondary care) prescribing. Many GP computer systems can be configured to allow the chosen formulary to be presented at the point of prescribing. This is often more useful than the production of a paper formulary, which is unlikely to be consulted each time a prescription is generated.

Maintaining and regularly updating a formulary is just as important as the process of developing it in the first place. If computer systems are compatible, the application of a formulary across a PCG could be straightforward, should this be what practices decide to do.

In Leeds, community pharmacists visited a GP practice each month to discuss a different therapeutic topic. Once a formulary of drugs was agreed, the pharmacist contacted the prescriber each time they prescribed outside their formulary. Examples of formulary decisions included:

- rationalisation of the use of antacids, with a move towards simpler agents
- a reduction in the inappropriate use of topical NSAIDs
- greater use of amoxycillin in place of co-amoxiclav and cefaclor
- generic metered-dose inhalers to become the inhaler device of choice in asthma
- cimetidine to be the first-line H_2-antagonist

Department of Health Project – see appendix 1, page 78

Other formulary development projects have been carried out in Kensington, Chelsea and Westminster, and Lancashire (see appendix 1, pages 77 to 79).

The main aims when developing a formulary are:

- to produce rational, cost-effective and evidence-based prescribing policies
- to consider cost in the context of appropriate care
- to provide advice to help rational drug selection from the many drugs listed in the BNF
- to outline simple and appropriate treatment regimens for common conditions seen by GPs, where prescribing of a drug is thought necessary
- to remember that any formulary should not seek to cover all prescribing decisions taken in general practice
- to help achieve areas of commonality between hospital and GP prescribing

A model framework for formulary development is set out in appendix 5.

A formulary of wound management products, and stoma and incontinence appliances can greatly simplify prescribing in this area, as well as reducing costs.

In Rochdale, a district nursing team and a practice pharmacist set up a restricted formulary and treatment flow chart for use by GPs and nursing home staff. The practice pharmacist continuously monitored adherence to this formulary. In addition, workshops were held for other interested GPs and pharmacists who were considering similar initiatives. The result was a 34% reduction in prescribing costs for dressings in four practices over twelve months, with no reduction in the quality of patient care.

A similar approach was taken to the use of stoma and incontinence appliances. Liaison with continence advisers and stoma nurses, combined with the pharmacist's knowledge of the Drug Tariff, led to a 54% decrease in incontinence prescribing costs in two practices.

"Setting up incontinence and stoma protocols" Chadwick M *et al*[4]

3.4 GUIDELINES AND PROTOCOLS

Key points

- Joint guidelines on the treatment of minor ailments can be developed between GPs and local community pharmacists to ensure a common approach to treatment.
- Nationally or locally developed guidelines can be adapted for use in an individual practice.
- Some GP computer systems can be configured to incorporate treatment protocols and guidelines.

The development of practice protocols for the treatment of certain conditions is a natural progression from making simple formulary choices. Many practices, localities and HAs have already developed guidelines e.g. for *H. pylori* eradication, treatment of hypertension, angina, acne, or the use of statins. These guidelines can be adapted for use in any individual practice and some GP computer systems can be configured to incorporate them.

PRODIGY

Prodigy is a computerised decision support system for general practitioners, being designed for use within the primary care consultation. The system offers clinical advice and therapy recommendations for conditions commonly encountered in general practice.

Prodigy offers texts about the condition, the aims of treatment and the management options available. These choices are not restricted to prescribing, but include referral or investigation and the issue of patient advice leaflets. If the GP decides to prescribe for a patient, the system offers a choice of prescriptions, and checks for allergies, contraindications and interactions. It then prints the prescription and updates the patient record. The medicines recommended have been carefully chosen, but practices can personalise the choices if they wish. GPs also remain able to prescribe from the wide range of medicines available in the NHS where they consider it necessary for an individual patient.

Joint guidelines on the treatment of minor ailments such as thrush and dyspepsia can be developed between GPs and local community pharmacists. Where patients consult their community pharmacist for advice on minor ailments this has the potential to reduce GP workload. Developing joint guidelines would be useful in ensuring a common approach to treatment.

It is important that any guidelines or protocols used are evidence-based, and should be modelled on accepted national guidelines, such as those promulgated by professional bodies or expert groups. Guidelines that have been developed with input from both primary care and secondary care clinicians are more likely to be successful. Agreement across a locality about the treatment of a certain condition leads to greater harmonisation of patient care and a smoother transition between primary and secondary care.

Initiatives involving the implementation of evidence-based medicine are described in appendix 2, pages 88 and 90.

National Institute for Clinical Excellence (NICE)

There is a valuable body of work developing on national, evidence-based clinical- and cost-effectiveness guidelines. However, it is not always easy for frontline staff to find the material they need, and best practice does not always spread as rapidly as it should.

The new National Institute for Clinical Excellence will give a strong lead on clinical and cost effectiveness, drawing up new national standards and guidelines for services and treatments, and ensuring they reach all parts of the NHS. It will bring together work being undertaken by various organisations to produce and disseminate clinical guidelines, audit methodologies and information on good practice in clinical audit.

3.5 MANAGING THE REPEAT PRESCRIBING PROCESS

Key points

- Review of repeat prescribing systems aims to improve the quality of prescribing, address the increase in drug expenditure arising from inappropriate or unnecessary repeat prescribing and optimise practice systems.
- As the majority of prescriptions generated by a practice are repeats, a systematic method of review needs to be adopted; for example reviewing all repeat prescriptions as they are requested.

A repeat prescription can be defined as a prescription issued without a consultation. The management of chronic disease in the community relies on long-term medication being provided by repeat prescription.

Repeat prescriptions account for around 75% of all prescriptions and the National Audit Office identified a range of problems arising from inadequacies in present repeat prescribing systems[5]. There is, therefore, a need to improve both the management and clinical control of repeat prescribing to ensure that patients' treatment is monitored and altered according to their changing needs.

Review of Repeat Prescribing Systems in the Practice

The aims of reviewing repeat prescribing systems within a practice are to improve the quality of prescribing, to improve the patient's health, avoid unnecessary drug expenditure arising from inappropriate repeat prescribing, and to minimise inefficiencies in the processes involved.

A model framework for the review of repeat prescribing systems within a practice is set out in appendix 5.

Management of requests for non-repeat prescriptions

At St Gabriel's Medical Centre, requests for non-repeat items from patients, usually over the telephone via reception staff, were controlled by ensuring that the receptionist completed a proforma request form. The patient's notes were attached to the request, and by using these and the computer the GP on rota for the day made the decision about whether the request was appropriate or allowable. This system has enabled the following to be achieved:

- improved quality and, to some extent, cost control of the medication requested
- dangerous and inappropriate requests identified
- interventions and side effects minimised
- audit of the requests
- efficient use of practice time as some regular requests for short-term "acutes" were put on repeat, e.g. hay fever preparations

Using this approach, patient-driven requests have been better managed.

St Gabriel's Medical Centre, Prestwich, Manchester

Review of all Repeat Prescriptions

The review of repeat prescriptions is time-consuming and is sometimes neglected within a practice. This role can be undertaken in a variety of ways with systems implemented to ensure that regular review occurs. Several models have been described earlier in this document (see section 2.1).

When reviewing each repeat prescription, consideration should be given to the following:

Is it safe?
Is it effective?
Is it necessary or still required?
Will the patient take it?
Is the present formulation appropriate?
Does it provide the most cost-effective treatment available?
Are all items prescribed in equivalent quantities?
Has the patient had a clinical review within the last 15 months?

As the majority of prescriptions generated by a practice are repeat prescriptions, a systematic method of review needs to be adopted, for example:

- reviewing all repeat prescriptions as they are requested
- reviewing all prescriptions for "x or more" items
- reviewing hospital discharge letters before they are entered on the computer

There then needs to be an agreed process for discussing and implementing recommendations for change. Any process for reviewing repeat prescriptions should include regular review of all prescriptions.

Community pharmacists could be encouraged to use their patient medication records to flag up potentially inappropriate repeat prescribing. A common example is a repeat prescription for a box of hydroxocobalamin ampoules each month, which may only be required once every three months. Inappropriate prescriptions such as these can be brought to the attention of the prescriber for amendment, through formal or informal contacts with the practice.

Those professionals providing prescribing support who spend a day or more per week in a practice may be able to take the lead in the day-to-day management of the repeat prescribing process. Their role may involve:

- reviewing all repeat prescriptions as they are requested
- dealing with ad hoc queries related to prescribing
- liaison with local community and hospital pharmacies to resolve prescription queries
- counselling patients about any changes in their medication
- responding to queries from patients about their medication

Those providing some of the services outlined above may need access to patient records in order to make fully informed recommendations. However, patients have a right to confidentiality, and before information can be shared patients must have been informed in general terms of how their information might be used (see page 58).

3.6 MANAGEMENT OF THE PRESCRIBING COMPUTER

Key points

- Problems with GP computer systems include too many choices, no clear methodology about the choice of generic names and delays before new drugs appear on drug dictionaries.
- Customisation of the main drug database to select a preferred subset of preparations can greatly simplify prescribing, reduce the chance of errors and allow easy selection of the most cost-effective product.
- Regular review of the Drug Tariff, MIMS and the BNF for price changes, new products and products coming off patent can help ensure that the practice's prescribing represents the best value for money. Often the practice computer can be used to implement these changes.
- Where GPs agree, certain changes, in particular to patients' repeat medication, can be made directly onto the computer. This can save time in the practice and reduce the scope for errors.

Software Customisation

The majority of GP practices are computerised and use their computers for prescribing. Commercial computer systems supply a drug dictionary containing all preparations that are available. Customisation of the main drug database to select a preferred subset of preparations can greatly simplify prescribing, reduce the chance of errors and allow easy selection of the most cost-effective product.

Examples of problems with GP computer systems

- There are too many choices e.g. in one drug dictionary there are 36 different hypromellose eye drops and 150 hydrocortisone preparations.
- There is no clear methodology about the choice of generic names on software databases e.g. Co-codamol 8/500 tablets may be listed under "co-codamol 8/500", "codeine phos 8mg/paracetamol 500mg", or "paracetamol 500mg/codeine phos 8mg". The result is that the GP may opt to use the brand name instead.
- New drugs do not appear on drug dictionaries immediately, and often such prescriptions initially have to be written by hand.

Software customisation offers the chance to:

- reduce the chance of data input error – more of a problem in larger practices where staff rotate between tasks
- ensure the most cost-effective preparations are used e.g. oxytetracycline caps vs. tabs
- simplify the ordering of appliances e.g. leg bags
- put the practice formulary on the computer
- facilitate local adoption of national guidelines
- facilitate the management of inevitable local variability e.g. antibiotic resistance

Customisation of the drug dictionary can be done by housekeeping of current records and by setting up a short pick list to eliminate unnecessary choice for the user. Items that are difficult to find can be given short mnemonics to facilitate rapid entry into the system.

The use of one single customised version per practice ensures that all practice staff adhere to the practice formulary. The pick list can be modified to exclude those items not to be prescribed and to include those that the practice has decided to use. In this way, the computer system is supporting practice policy. The ease with which this can be done, and the ability to retain any changes following a standard update to the main drug dictionary, will depend on the computer system used.

Entering and checking items on the pick lists may be used as a starting point for prescribing support within a practice. Work can then extend to implementation and development of a practice formulary. This work can be carried out by a pharmacist, or by another member of the team with support and guidance from the pharmacist. However, full benefit does inevitably require full participation and a time commitment by the GPs into the decision-making process.[6]

Continual Review of "Best Value for Money"

It is unlikely that any GP has the time to keep up-to-date with the latest changes in drug prices and which products offer best value for money. Regular review of the Drug Tariff, MIMS and the BNF for price changes, new products and products coming off patent can help ensure that the practice's prescribing represents the best value for money.

Often the practice computer can be used to implement these changes. For example:

- prescribe simvastatin 20mg rather than 2 x 10mg (saving = £87 per patient per year)
- prescribe the contraceptive pill by number of months required, or total quantity required e.g. 6 x 21. Prescribing "6 OP" could result in a six-month supply or an 18-month supply (many contraceptive pills are only available in 84-day packs)
- similarly, avoid prescribing dressings using "OP"; rather prescribe the number of dressings required
- prescribe refills for metered-dose inhalers and Diskhalers on repeat prescriptions

Implementation of Agreed Prescribing Changes

If the GPs agree, certain changes, in particular to patients' repeat medication, can be made directly onto the computer. GPs of course remain liable for the prescriptions they sign, but by allowing another responsible health care professional to make changes directly onto the computer this can save time in the practice and reduce the scope for errors. For example:

- updating a patient's repeat prescription following discharge from hospital. This is an area that often gets overlooked, resulting in patients reverting back to the medication they were on before admission
- therapeutic switches carried out
- alignment of quantities prescribed to eliminate inequivalent quantities on a prescription e.g. co-amilofruse one daily (mitte 30) and Adalat Retard 20mg twice daily (mitte 100). Each month, 40 Adalat Retard tablets remain and are duplicated as the patient runs out of co-amilofruse and re-orders their whole repeat prescription, ultimately to be wasted.
- simplifying the ordering of incontinence products by selecting one or two products in each category, and devising a simple key word which brings the correct item onto the screen, e.g. "night bag". This brings up the chosen product with full prescribing details, rather than practice staff having to select an item from several screens of information.