

# Why prescribing data are monitored

In the first of four articles on measuring prescribing, **Helen Kendall** focuses on the provision of prescribing information within the NHS. Examples are drawn from systems used in primary care in England, but similar systems for providing information are in place in Scotland and Wales

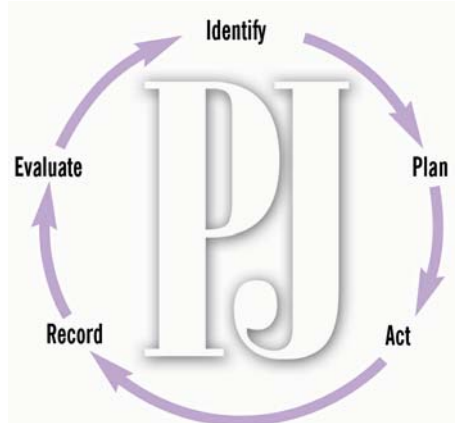
The most common therapeutic intervention carried out in the NHS is the use of medicines and at least 20 per cent of primary care trust funds are spent on purchasing medicines and medicines services. It is not surprising, therefore, that PCTs need to make sure that this money is being spent wisely and to plan their budgets carefully. To do this, PCTs rely on prescribing data. Information on what is being prescribed is also used by a wide variety of health care professionals, NHS managers, NHS data analysts, drug companies and pharmacy multiples.

## Prescribing information

After dispensing, prescription forms are sent either to the Prescription Pricing Authority (PPA) in England, to the Common Services Agency in Scotland or to Health Solutions Wales. Information is extracted from each form to give complete databases of all items dispensed in NHS primary care for each country. In England, prescribers and NHS managers receive prescribing information from the PPA in a variety of formats, which will be discussed in a later article.

Most GPs receive their prescribing data as a paper prescription cost and analysis report, known as PACT, but the PPA has been piloting the provision of data in electronic format for GPs. For organisations that need to manage or monitor prescribing, information is provided electronically. The PPA's ePACT.net system allows access to data from the previous 36 months and is set up to allow users to view data appropriate to the role of their organisation. For example, a PCT or primary care pharmacist can extract information for any of the prescribers whose prescribing costs will be attributed to its budget. This includes GPs, nurse prescribers and pharmacist supplementary prescribers. The system even provides details such as the form and strength of each product prescribed, and records what products have been prescribed through local pharmaceutical services.

In secondary care the systems for recording and providing data are more varied than in primary care. Data collection is not centralised through a single organisation, but many of the principles of measuring prescribing in primary care apply to secondary care. Prescribing by an individual or by prescribers in a specific area such as a PCT or a hospital trust can be monitored. Information from different localities can also be aggregated to cover larger geographical areas. Data at a local level tend to be richer



## Identify knowledge gaps

1. Who is involved in compiling prescribing data for use by the NHS?
2. What are prescribing indicators used for and how do you know whether specific indicators are valid?
3. How do primary care trusts use prescribing information?

Before reading on, think about how this article may help you to do your job better. The Royal Pharmaceutical Society's areas of competence for pharmacists are listed in "Plan and record," (available at: [www.rpsgb.org.uk/education](http://www.rpsgb.org.uk/education)). This article relates to "the effective and efficient application of information" (see appendix 4 of "Plan and record").

and provide more details than aggregated data because patients' entire clinical records are usually available. Because of the need to protect patient confidentiality, access to data about individual or small groups of prescribers is usually restricted and organisations such as the Department of Health, the National Institute for Clinical Excellence, the Commission for Health Improvement and the National Prescribing Centre can access all the prescribing data held by the PPA only down to PCT level.

Prescribing data are also recorded by individual prescribers as part of the patient's clinical record. Repeat prescribing is normally monitored by GPs through their practice IT systems. Data on repeat prescribing are not routinely available above practice level because there is no requirement to indicate on prescription forms whether the item is a "repeat". However, the introduction of repeat dispensing pilots provides an opportunity for the PPA to begin collating data for English PCTs on how many repeat prescriptions are issued and what types of medicines are included in the pilot.

Community pharmacists use their patient medication records to monitor drug usage. Most use their systems for stock control and some use them to carry out audits. Anonymised prescribing data can also be extracted from patient medication records and sold to companies specialising in market intelligence.

With the increasing variety of professionals who care for patients, access to shared clinical records held in electronic format is becoming more important and the development of an integrated care record is one of the key aims of the national IT programme for the NHS in England. This integrated record will support prescribing and dispensing in both primary and secondary care but, in the meantime, separate records continue to be held by GP practices, hospital trusts and pharmacies.

## Why monitor prescribing data?

The main reason for collecting and analysing prescribing data is to support medicines management services and clinical governance. The data can be used to measure quality of care and to identify areas for improvement.

Clinical medicines management services involve assessment, monitoring and review of prescribing for individual patients. Assessing whether a drug is prescribed appropriately usually requires access to the patients' clinical records and, in practice, it can be difficult to review all prescriptions from a GP practice regularly because of time constraints. Nevertheless, extracting relevant information from clinical records is becoming easier with the increasing use of computerised records containing coded clinical data. The quality and outcomes framework, which forms part of the new general medical services contract, requires practices to create disease registers and to code information about patients in a structured format.

Although summarised prescribing data, such as PACT, do not contain any clinical information they can identify variations in prescribing, and data are often an essential source for assessing whether NHS policies are being implemented effectively. The national service frameworks and guidance from NICE identify specific areas of prescribing to audit so that adherence with standards and recommendations can be monitored. Audits are also often directed at areas where variation in prescribing could indicate variable quality of care. For example, a practice with a high prescribing rate of proton pump inhibitors could be correctly targeting patients who require treatment but, conversely, this could also indicate that there

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are patients being prescribed proton pump inhibitors inappropriately.

Another area where prescribing data can be useful is in the monitoring of drugs that are subject to abuse. Monitoring the use of Controlled Drugs has received greater prominence since the case of Harold Shipman. Variations between GP practices and individual prescribers can be identified by PCTs using the ePACT.net system. Reasons for such variations then need to be followed up with the practices, usually by the prescribing adviser. Prescribing data can also be of assistance in detecting fraud. For example, an unusual pattern of prescribing an expensive drug (eg, growth hormone) might lead to further investigation of whether the drug has been prescribed for genuine patients.

### Prescribing indicators

Prescribing data are used to help benchmark the performance of prescribers and NHS organisations, such as PCTs. The Commission for Health Improvement has taken responsibility for producing and publishing performance ratings for PCTs in England. Performance against targets for 2002/2003 was published for each PCT in July 2003. Four of the indicators used to rate PCTs are based on PPA prescribing data:

- Prescribing of atypical antipsychotics
- Prescribing of antibacterial drugs
- Prescribing rates for drugs acting on benzodiazepine receptors
- Generic prescribing

The prescribing of atypical antipsychotics has been selected because it is a performance measure identified in the National Service Framework for Mental Health. Atypical antipsychotics should be considered for treatment in certain conditions and if 54.6 per cent, or higher, of the antipsychotics prescribed are atypicals, this indicates an above average performance. The other three indicators have been selected as measures of good practice. For example, pharmacists will know that benzodiazepine prescribing should be kept to a minimum and the indicator should, therefore, reflect a fall in prescribing of this group of drugs over time.

A wide variety of different prescribing indicators is in use in primary care but these all need to measure performance consistently and fairly, otherwise they will not be accepted by prescribers or the organisations under assessment. Some of these indicators

have either been developed or have been reviewed by expert groups to ensure that they are valid. These indicators are made available to PCTs and strategic health authorities as part of the Prescribing Toolkit (an on-line reporting system that enables users to compare their prescribing performance with others in the NHS) provided by the PPA.

The first set of indicators included in the Prescribing Toolkit was based on the Audit Commission report 'A prescription for improvement — towards more rational prescribing in general practice'.<sup>1</sup> A second set was developed by a prescribing indicators group established by the NHS Executive in 1997. Review of these indicators and the development of further prescribing-related quality indicators using data derived from GP practice computer systems are now tasks of the Prescribing Indicator National Group (PING), established in 2001. According to PING, for a prescribing indicator to be valid and technically feasible it should be based on scientific evidence supplemented by expert opinion. It must represent areas where change is largely within the control of the clinician and areas of practice that are regarded as important by clinicians and consistent with national health policy initiatives. The indicator should also be based on clinical data that:

- Should be recorded by clinicians as part of the process of clinical care
- Should be electronically recorded in clinical records using current clinical terminologies and codes
- Can be extracted in a timely manner
- Are sensitive to changes in quality of care
- Can be easily checked for validity and reliability

### Financial planning

Individual prescribing budgets are set for each practice within the PCT. The method used to allocate the budgets is chosen by the PCT but most use the historic spend by the practice combined with an element based on some form of weighted capitation formula to take differences in practice populations into account.

The NHS Plan has set out national priorities and key targets that need to be taken into account by PCTs. In the priority areas of cancer, heart disease, mental health and older people, improving services and outcomes is likely to result in increased drug use. PCTs are also required to fund the implementation of guidance from NICE. Consequently, data on volume and cost of prescribing in these areas are useful in assessing what current resources are required and where expenditure is likely to increase in the next three years. It is also important to plan for entry of new drugs on to the market if the PCT budget is not to be overspent. Here, Drug and Therapeutics Committees can play a major role in managing the uptake of new drugs and resolving issues around the impact of secondary care prescribing on primary care.

### Action: practice points

Reading is only one way to undertake CPD and the Society will expect to see various approaches in a pharmacist's CPD portfolio.

1. Find out from your local GP practices whether they already extract prescribing data from their clinical records and talk to them about how they are using this information.
2. Look at an example of an audit using prescribing data such as the Dosage Instructions Audit (available at: [www.rpsgb.org.uk](http://www.rpsgb.org.uk)) and consider carrying out an audit using your patient medication records.
3. Read the Department of Health's guidance on primary care prescribing and budget setting (see Reference 2) and discuss with your local PCT pharmacists how they have used this.

### Evaluate

For your work to be presented as CPD, you need to evaluate your reading and any other activities. Answer the following three questions: What have you learnt? How has it added value to your practice? (Have you applied this learning or had any feedback?) What will you do now and how will this be achieved?

The DoH provides guidance to PCTs (through the Prescribing Support Unit NHSnet website) on the anticipated growth in the national drugs bill for the current financial year. Projected expenditure is also provided to PCTs and practices in reports (Prescribing Monitoring Document) from the PPA. This helps them to identify whether they will be on target with their prescribing budgets. Any overspend on prescribing has to be funded from the unified allocation the PCT has received. The DoH has provided guidance to PCTs on primary care prescribing and budget setting as part of the PCT capacity planning process.<sup>2</sup>

The Prescribing Support Unit, an analytical unit funded by the DoH, has developed a budget setting tool for PCTs that uses prescribing data from the ePACT.net system. Practices may have higher than expected prescribing costs because of shared care arrangements where a GP has agreed to take responsibility for prescribing a drug initiated in secondary care. Costs of drugs prescribed through this type of agreement can be measured and allocated separately to the practice budget. Similarly the cost of drugs provided through out-of-hours service providers can now be identified and monitored separately from the practice budget.

### References

1. Audit Commission. A prescription for improvement — towards more rational prescribing in general practice. London: HMSO; 1994.
2. Primary care prescribing and budget setting 2003/4 – 2005/6. Department of Health. 2003. Available at [www.doh.gov.uk/prescribingbudgets/index.htm](http://www.doh.gov.uk/prescribingbudgets/index.htm) (accessed 20 December 2003).

### Topics in this series

Further articles in this series on measuring prescribing will look at:

- The units used to measure and compare prescribing
- The systems and reports available for presenting and analysing prescribing data in England
- How to analyse PACT data