

# AUDITING THE USE OF NSAIDs in primary care

*Auditing the use of  
non-steroidal  
anti-inflammatory drugs helped one general practice to identify savings*

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**A** large number of non-steroidal anti-inflammatory drugs (NSAIDs) is available in many formulations. It has been stated that prescribers should restrict prescribing to a small number of NSAIDs,<sup>1</sup> taking into account the Committee on Safety of Medicines' recommendations on side effects.<sup>2</sup> This is because limiting the number of drugs prescribed allows prescribers to become familiar with the properties of those drugs. However, it is sometimes necessary to prescribe outside this range for a small number of patients.

Some short-acting NSAIDs have been formulated in modified-release systems. In most patients, these confer little advantage in terms of efficacy and tolerability and they are usually more expensive than conventional forms. Modified-release NSAID preparations have been highlighted as an area of unnecessary prescribing in NHS performance indicators.<sup>3</sup> Such preparations should only be considered when compliance is a problem, or for use in patients for whom early morning stiffness is troublesome and for whom a modified-release evening dose could provide benefit.

NSAIDs are potentially dangerous drugs that vary in their ability to cause serious GI toxicity. They are renally toxic, and can cause congestive cardiac failure in patients predisposed to this condition. It is, therefore, important that non-drug measures and

simple analgesia are tried, where appropriate, before NSAIDs are prescribed, and that risk factors for toxicity are considered before a prescription is issued. We have produced guidelines for the PCT for the use of NSAIDs in the elderly since undertaking this audit. Additional guidance is also available in the British National Formulary. A recent MeReC bulletin<sup>4</sup> suggested that all modified-release preparations should be prescribed by brand name to minimise confusion. For example, a considerable number of "branded-generic" preparations of modified-release diclofenac are available at widely varying prices.

We undertook an audit in primary care that aimed to review NSAID prescribing in one general practice in South Manchester. We paid particular attention to the range of NSAIDs prescribed, and to the number of patients receiving repeat prescriptions for

modified-release preparations.

## Method

**T**he audit was carried out at a four-partner practice in South Manchester, where NSAID prescribing appeared to be high compared with the rest of the primary care trust (PCT). Prescribing Analysis and Cost (PACT) data were analysed to discover the range of NSAIDs prescribed at the practice. This range was compared with the South Manchester University Hospitals NHS trust formulary, which contained only three NSAIDs.

The surgery's clinical system database was then used to identify all patients who were receiving repeat prescriptions for a modified-release preparation of an NSAID. All relevant drug names were searched individually, and

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**Figure 1:** Data collection form for patients taking modified-release preparations of an NSAID

Patient details	Modified-release analgesic used	Indication	Any previous treatment (and reason for stopping)	GI problems? If yes, details.	Possible reason for modified-release preparation

this generated a list of patients who had received such a drug at some point while registered with the practice. The list included patients who had received acute prescriptions.

A data collection form was devised which was piloted on five patients. Relevant modifications were then made and the form was finalised (Figure 1). Each patient's records were scrutinised and the data collection form was filled in. Paper and computer medical records were both used, because the practice was not completely computerised at the time. Patients were excluded from the audit if they had:

- not received repeat prescriptions for a modified-release preparation
- not collected a prescription in the past six months

The data were collated and analysed and a summary of the findings was produced, which included recommendations for change. This was given to the PCT pharmacist and used as the basis for discussion with the practice partners.

### Results

Recommendations have been made that four NSAIDs should account for 75 per cent of total NSAID prescribing. We discovered from the PACT data for the practice that 17 out of the 23 NSAIDs on the market were being prescribed. Ibuprofen and diclofenac accounted for 67 per cent of all NSAID prescribing, with the suggested four drugs (ibuprofen, diclofenac, naproxen and indomethacin) accounting for 81 per cent of prescriptions. About 65 per cent of prescriptions for modified-release

preparations of NSAIDs were written generically. The recommended target for all drugs is 72 per cent, and the current PCT average is 75 per cent. Of the 718 prescriptions written for NSAIDs, 177 were for a modified-release preparation.

The 32 patients receiving repeat prescriptions for modified-release preparations were identified and the reason for the prescription investigated. We also documented information about any gastrointestinal (GI) problems that a patient might have reported. Of the 32 patients identified, nine had received no other NSAID preparation before the current therapy was started. Poor compliance with medication was noted for only three patients and, in two cases, the modified-release preparation had been recommended by a hospital consultant. Otherwise, no justification for the preparation chosen was found. We decided that changing the prescriptions of the 32 patients to a conventional formulation could give rise to savings with no detrimental effect to efficacy. A table was prepared to show the practice partners the cost differences of the various preparations. It demonstrated that by switching patients from a modified-release preparation to a generic version of an ordinary release preparation, the practice could save between £600 and £900 per patient per year.

### Discussion

The results of the audit in this practice suggest that modified-release preparations of NSAIDs are often prescribed inappropriately. Although the GPs in this practice manage to keep the majority of their

prescribing to a limited number of NSAIDs, a wide variety of drugs is used overall. A practice formulary could help to prevent this. Although the overall generic prescribing rate for the practice is high, increasing the amount of generic prescribing of NSAIDs would cut costs. One limitation of our study was that the practice was not fully computerised and it was necessary to refer to hand-written notes and not all of the information required had been documented. It was assumed that if something was not noted, it was not an issue for that particular patient.

### References:

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