

# Why we need to compare medicines use in hospitals

Medicines spend in secondary care is likely to be scrutinised increasingly in the future. Ron Pate and Ray Fitzpatrick explain the need for a national data set and hospital prescribing indicators.

**A**s clinical pharmacists, we are aware that there are also good clinical, governance and financial reasons for better medicines management and increased scrutiny of the use of medicines in secondary care.

## Clinical and governance risks

Medicines represent a significant clinical risk, with 10,000 patients each year suffering adverse events to medicines.<sup>6</sup> This is not surprising since 2.5 million medicines are prescribed every day in the community and in hospitals.<sup>6</sup> In secondary care, 97% of all hospital patients receive medicines, and 82% take four or more medicines throughout their stay.<sup>4</sup> It is estimated that 7,000 doses of medicines are administered every day in an average acute hospital.<sup>4</sup>

In 2007, figures from the National Patient Safety Agency showed that almost 60,000 medication-related incidents had been reported over an 18 month period, making medication-related incidents the second most reported incident after slips, trips and falls.<sup>7</sup>

In his first report into the use of cancer drugs approved by the National Institute for Health and Clinical Excellence, Professor Mike Richards, National Cancer Director, reported considerable variation in the use of new cancer medicines.<sup>8</sup> While uptake and variation in use of cancer drugs has improved since then, significant variations remain.<sup>9</sup> Variation in drug use could be a clinical risk to patients as well as a clinical governance issue.

## Financial risks

Over the past five years the NHS has been collecting information on hospital costs down to specialty level. These costs are called 'reference costs' and are used to identify specialties and trusts where

## Background

Much attention has been paid to monitoring and benchmarking GP prescribing, but little attention has been paid to monitoring and benchmarking prescribing in hospitals. This is because the majority of NHS expenditure on medicines is in primary care<sup>1</sup> (see Figure 1, p180). However, in the past few years the rise in medicines expenditure in hospitals has exceeded the rise in medicines expenditure in primary care.<sup>2,3</sup>

The need to benchmark hospital prescribing was recognised by the Healthcare Commission in its national report on medicines management in acute and specialist trusts, which called for the development of hospital prescribing indicators.<sup>4</sup> This was taken further in a letter to strategic health authority chief executives, in which proposals were invited for additional prescribing indicators for 2007/08, including those for secondary care.<sup>5</sup>

treatments are more expensive than the NHS average. Reference cost information has also been used to inform the national tariff under the new NHS funding system, payment by results.<sup>10</sup> Furthermore, as NHS hospitals move to become foundation trusts, where robust financial management is a prerequisite, clarity about all the costs contributing to patient care has become necessary. This has led to the development of service line reporting.<sup>11</sup> Good financial management has become even more important since the 2009 budget report announced that the Department of Health in England will be required to make efficiency savings of £2.3bn in 2010/11. Treasury forecasts issued with the budget also suggest that the NHS is set for low or zero real growth in funding after 2011.<sup>12</sup> Attention to all aspects of NHS expenditure is therefore likely to increase. This is particularly relevant to hospital prescribing, since in 2007 the rise in hospital expenditure on medicines outstripped the growth in primary care by 12% to 2.1%, respectively.<sup>3</sup>

Moreover, it is estimated that 16–20% of primary care prescribing is initiated in hospital and a further 40% could also be strongly influenced by hospital

prescribing.<sup>13</sup> Therefore, it is increasingly important that trusts not only have detailed information on prescribing patterns within the hospital, but are also confident that medicines use is in line with regional and national benchmarks.

It is not unreasonable to assume that a focus on secondary care medicines use, similar to that used as a performance comparator in primary care, is likely to be introduced.

## The primary care approach

All prescriptions dispensed by community pharmacies in England are processed through the central prescription pricing division of the NHS Business Services Authority. This provides prescription statistics in the form of 'Practice detailed prescribing information' (PDPI), previously known as 'Prescribing analysis and cost' data (PACT). This information has been used for many years to influence prescribing in primary care.<sup>14</sup>

PDPI data is used for setting primary care drug budgets, comparing primary care prescribing and providing information to heads of medicines management and prescribing advisers to identify primary care prescribing support needs.

## Comparing hospital spend

Detailed information on medicines use has been available in most hospitals for a number of years, and is used to help promote safe, rational and cost-effective prescribing within hospitals.<sup>15</sup> Indeed, using such data at ward and directorate level was recommended in the Audit Commission's review of hospital medicines management in 2001.<sup>16</sup> However, there remains no NHS database that is routinely used to compare hospital medicines use and therefore individual trust's performance. Even if there was such an NHS national data set, the confounding problems of variation in size and complexity of individual trusts would make meaningful comparison of data sets challenging.<sup>17</sup>

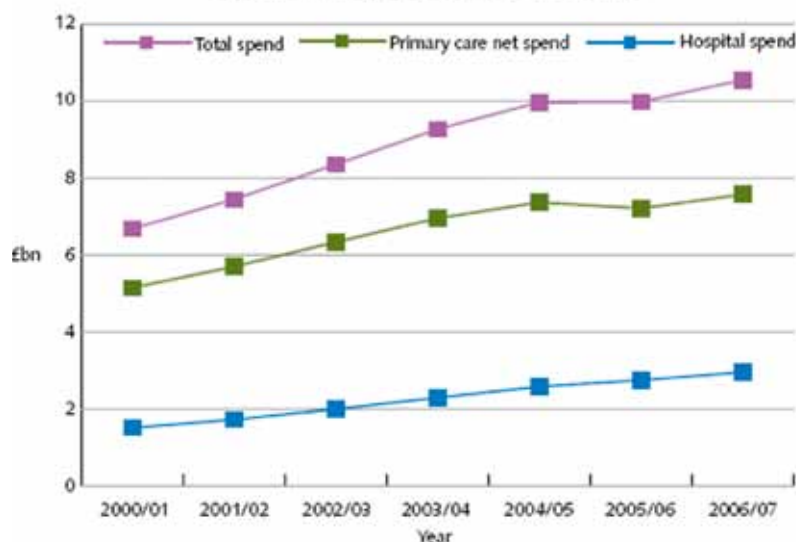
There is now a pressing need to develop some way of comparing medicines use in secondary care, not only because of the clinical and financial risks described above, but because the rise in medicines expenditure in hospitals has exceeded the rise in primary care.<sup>2,3</sup> Although hospitals can compare medicines use within a trust and can carry out trend analysis for directorate medicines budget management, there is no national NHS data set against which hospitals can compare themselves, to determine if their medicines use is in line with national (or strategic health authority) norms. Similarly, although hospitals can compare their overall costs for particular procedures to national averages, there is no way of comparing medicines use within those treatments, within or outside of the tariff.

Hospital managers and commissioners need to be assured that patients are receiving the most cost-effective treatment regimens and that patients are not being under-treated or resources wasted. Furthermore, with the advent of practice based commissioning, primary care trusts will also want reassurance that treatments in hospital are not adversely influencing prescribing in primary care, and that NICE guidance is being implemented appropriately.

## Summary

As a result of the important role medicines play in modern healthcare, and the significant clinical and financial risks associated with them, there is a need for

Figure 1: Growth in the NHS drugs bill since 2000<sup>1</sup>



prescribing indicators to compare different healthcare providers. In primary care such a system has existed for many years, in the form of PACT data. Although detailed information on medicines use exists within individual hospitals, there is no national data set to allow comparison of secondary care providers.

An article in the next issue of *The British Journal of Clinical Pharmacy* will describe a method for comparing medicines use between hospitals.

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