Evaluating pharmacist prescribing across the north east of England

Pharmacist prescribing has been a reality since 2003. This article, based on the results of a detailed study carried out in the north east of England, evaluates the extent of pharmacist prescribing and identifies some of the barriers to maintaining and developing such services.

Pharmacist prescribing of prescription-only medicines first became a reality in 2003, with the introduction of supplementary prescribing. Training as an independent prescriber was possible from 2006. However, while there is great potential for pharmacist prescribers to improve patient care, anecdotal evidence suggests that the uptake of training is relatively low and that there is poor utilisation of the skills of registered pharmacist prescribers. With this in mind, the North East Strategic Health Authority commissioned a study to:

- Assess how many pharmacists who have undertaken the prescribing course are practising as prescribers and to evaluate their prescribing activity
- Elicit pharmacists’ views and opinions on prescribing and perceived barriers to prescribing
- Quantify prescribing by pharmacists working in primary care
- Quantify prescribing by pharmacists working in secondary care
- Highlight exemplar areas of practice

**Methods**

Multiple methods were used to undertake this investigation.

**Questionnaires**

A questionnaire was developed, tested and then sent (by e-mail and by post) to each of the 179 pharmacists who had undertaken at least one prescribing course (i.e. supplementary, conversion or independent) at the University of Sunderland (the only provider of such courses in the north east of England) from 2003 to the first quarter of 2009. All completed questionnaires were loaded onto the ‘Survey Monkey’ software programme and analysed using MS Excel.

**Focus group**

On the questionnaire, pharmacists were asked to identify themselves if they would like to participate in a further focus group. Of those who did so, six were selected with each particular prescribing status (e.g. currently prescribing or not currently prescribing) and each setting (i.e. primary care, secondary care and community) represented by at least one pharmacist. The focus group discussions were recorded, sent to a company for transcription and then analysed for emerging themes.

**Quantifying prescribing in primary care**

Data on pharmacist prescribing from April 2008 to March 2009 for all 12 primary care organisations (PCOs) in the north east of England were extracted from Electronic Prescribing Analysis and Cost (ePACT) data (provided by the Regional Drug and Therapeutics Centre) and analysed using MS Excel. The equivalent data for nurse prescribers was also analysed, so that comparisons could be made.

**Quantifying pharmacist prescribing in secondary care**

Given the absence of ePACT data for secondary care (except for that relating to FP10HPs), an alternative data collection method was necessary. A data collection booklet was developed and tested. All pharmacists working in a secondary care setting in the north east of England who actively prescribe were identified and asked to collect data on their prescribing activity over a five-day period in February 2010.

**Exemplary practice**

Nine pharmacists (see Figure 1) were assessed to have fully used their prescribing skills were each interviewed for approximately 45 minutes. Information about, for example, how their prescribing service was set up, satisfaction with it, and future plans was discussed.

**Results**

**Questionnaire responses**

Of the 179 pharmacists who sent questionnaires, 98 responded, of which 34 had been registered as pharmacists for over 20 years. The mean time of registration as a prescriber was 3.35 years (SD 1.5 years; range one month to seven years; n=75).

Of the 93 pharmacists who stated their main place of work, 58 worked in secondary care, 27 worked in primary care and eight were based in community pharmacy.

![Figure 1: Exemplar practice](https://example.com/figure1.png)

Case studies of the prescribing practices of the following pharmacists, who were deemed to have fully used their prescribing skills, were included in the evaluation:

- **Tony Schofield**: Drug & alcohol misuse team, First Contact, South Shields
- **Richard Copeland**: Rheumatology specialist pharmacist, Northumbria Healthcare NHS Foundation Trust
- **Neil Gammack**: Clinical services manager, Gateshead NHS Foundation Trust
- **Shirley Simpson**: Pharmacist practitioner, Collingwood Surgery, North Shields
- **Paul Davies**: Crisis team, Northumberland Tyne and Wear Mental Health Trust
- **Steve Williamson**: Oncology consultant pharmacist, Northern Cancer Network
- **Laura Gardiner**: Heart failure specialist pharmacist, Sunderland Hospitals NHS Foundation Trust
- **Ewan Maule**: Emergency care pharmacist, Northumbria Healthcare NHS Foundation Trust
- **Mark Thomas**: Lead clinical pharmacist, Gateshead NHS Foundation Trust
Nearly all of the pharmacists (84 from 97 responses) had registered as prescribers; 47 as independent prescribers; and 37 as supplementary prescribers. A total of 10 of the 13 pharmacists who had never registered as prescribers had not fully completed the course (mainly because they had not yet spent the requisite 90 hours with their mentor).

When asked why they undertook the prescribing course, developing a clinical role and personal development were the most popular reasons given (cited by 83 and 77 pharmacists, respectively). Enhancing job satisfaction, satisfying a job requirement and personal development were the most common reasons given (cited by three and two pharmacists). That prescribing was not a PCO priority was among the other reasons given (cited by four pharmacists).

When respondents were asked which budget their prescribing came from, 55 of the 60 pharmacists who answered this question indicated that they prescribed from the same budget as medical prescribers (45 were hospital-based and 10 were primary care-based). Five respondents prescribed from a dedicated PCO non-medical prescribing budget.

Of the 37 pharmacists who had initially registered as a prescriber but were currently not prescribing, 24 had never actually prescribed. No defined prescribing role in their organisation was the most common reason given (cited by 13 pharmacists). Lack of local support from clinicians and no budget to prescribe from were among the other reasons given (cited by three and two pharmacists, respectively).

Thirteen pharmacists had prescribed at some point but were no longer prescribing. Change of job or employer, including reorganisation by PCOs where existing prescribing posts were no longer supported, was the most common reason given (cited by seven pharmacists). That prescribing was not a PCO priority was among the other reasons given (by four pharmacists).

**Focus group responses** Responses at the focus group session indicated that there were generally fewer barriers to pharmacist prescribing in secondary care than in primary care. For example:

"The logistics are fairly straightforward in the hospital because obviously you’re sharing notes [and] . . . access to . . . prescription pads [is not] generally a problem . . . All the trials and planning of governance are quite easy to maintain and there is a good . . . network within the hospital as well . . . so in that respect there’s not that many . . . restrictions, once people are qualified."

Similarly, the team nature of hospital working means that support from colleagues, both in terms of discussing ideas and problems, undertaking continuing professional development and covering absences, was often available.

". . . we’ve got a team of maybe nine or ten prescribers . . . We obviously work quite closely together and we have a . . . pool of people who are able to cover any clinics that we run . . . So it means when you’re away on holiday, you know you still get backup . . . And . . . for CPD, you can meet together."

In primary care, this was not the case:

"I never see a pharmacist prescriber, If I saw lots of other prescribers I could actually bounce . . . [ideas] off them"

Financial pressures, both organisational and personal (e.g. the cost of indemnity insurance) were perceived as real barriers to expanding the services offered by prescribing pharmacists. Respondents were also aware that often the choice for commissioners of services is whether to employ extra nurses or pharmacists, with nurses generally being cheaper and being viewed as having more clinical skills.

There was a general consensus among respondents that prescribing roles for pharmacists develop as a result of relationships between individual pharmacists and their medical colleagues, rather than from a clear vision of how pharmacist prescribing should be adopted within the NHS.

"I just feel there’s no strategy . . . somebody further up there should have the vision and say, ‘This is really where we want to go with this’ . . ."

Respondents all felt that there was a responsibility to continue to prove the value of pharmacist prescribing to other healthcare professionals, senior colleagues and commissioners of services. Finally, the inability to independently prescribe controlled drugs was also mentioned as a barrier to providing an efficient service.

<table>
<thead>
<tr>
<th>BNF category</th>
<th>Total no. of items prescribed</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cardiovascular system</td>
<td>2,100</td>
</tr>
<tr>
<td>Central nervous system</td>
<td>739</td>
</tr>
<tr>
<td>Gastrointestinal system</td>
<td>412</td>
</tr>
<tr>
<td>Endocrine system</td>
<td>326</td>
</tr>
<tr>
<td>Respiratory system</td>
<td>296</td>
</tr>
<tr>
<td>Nutrition and blood</td>
<td>179</td>
</tr>
<tr>
<td>Musculoskeletal and joint diseases</td>
<td>120</td>
</tr>
<tr>
<td>Infections</td>
<td>101</td>
</tr>
<tr>
<td>Appliances</td>
<td>76</td>
</tr>
<tr>
<td>Eye</td>
<td>60</td>
</tr>
<tr>
<td>Skin</td>
<td>60</td>
</tr>
<tr>
<td>Obstetrics, gynaecology and urinary tract disorders</td>
<td>33</td>
</tr>
<tr>
<td>Ear, nose and oropharynx</td>
<td>18</td>
</tr>
<tr>
<td>Malignant diseases and immunosuppression</td>
<td>15</td>
</tr>
<tr>
<td>Dressings</td>
<td>14</td>
</tr>
<tr>
<td>Other drugs and preparations</td>
<td>7</td>
</tr>
<tr>
<td>Stoma appliances</td>
<td>5</td>
</tr>
<tr>
<td>Incontinence appliances</td>
<td>2</td>
</tr>
<tr>
<td>Immunological products and vaccines</td>
<td>0</td>
</tr>
<tr>
<td>Anaesthesia</td>
<td>0</td>
</tr>
</tbody>
</table>

Table 1: Pharmacist prescribing by British National Formulary category

An accompanying Commentary article can be found on p150.
Quantifying pharmacist prescribing in primary care

In the financial year 2008–09, pharmacists prescribed 4,563 items, costing £38,864 across all 12 PCOs in the north east of England. In the same period, across the same PCOs, nurses prescribed 985,000 items costing £9.9 million.

There were differences in the extent of pharmacist prescribing between the 12 PCOs, with Northumberland Care Trust, Gateshead PCT and North Tyneside PCT together accounting for 82% of items and 86% of costs.

Analysis by British National Formulary category showed that pharmacists prescribed from all categories apart from section 14 (immunological products) and section 15 (anaesthesia). The number of items prescribed by pharmacists from the various BNF categories are shown in Table 1 (p148).

Quantifying prescribing in secondary care

Of the 11 secondary care trusts in the north east of England, 10 participated in the project, of which eight employed prescribing pharmacists. Prescribing pharmacists account for slightly less than 10% of all hospital pharmacists in the north east. To date, 40% of prescribing pharmacists have returned their data collection booklets.

These results are still being analysed, but early figures indicate that pharmacists are prescribing across a range of secondary care settings, including outpatient clinics, specialist wards and on consultant ward rounds. Pharmacists prescribed a wide range of medicines covering most BNF chapters but the number of items prescribed was small.

Exemplar practice

A case study of one of the nine ‘exemplar practice’ pharmacists is shown in Figure 2.

Discussion

Pharmacist prescribing appears to be reasonably established in secondary care. Secondary care pharmacists accounted for more than 62% of those pharmacists who had undertaken one or more prescribing courses and almost 10% of hospital pharmacists were prescribers. Easy access to medical records and prescription pads make the logistics of providing the service fairly straightforward. That pharmacists in this setting often have close working relationships with medical staff is also invaluable, given that pharmacist prescribing roles seem to develop on an opportunistic basis rather than from a strategic plan. Even so, early results to quantify prescribing indicate that the total number of items prescribed is small.

Pharmacist prescribing in primary care is minimal, accounting for less than 1% of all items prescribed in this setting in the north east of England. However, there is at least some prescribing activity in three quarters of the 12 PCTs in the north east of England. This appears to be similar to the situation in England as a whole. A report on non-medical prescribing from the Regional Drug and Therapeutics Centre showed that a total of 592 pharmacists were prescribing in 107 of the 152 PCTs in England. Our study and the RDTC report both show that primary care pharmacists prescribe a wide variety of medicines across all chapters of the BNF.

Lack of a clear strategy at organisational level is a major barrier to pharmacist prescribing. Trusts and PCOs need to develop prescribing roles, underpinned by policies and procedures. While the hard work and innovative approaches from individuals who have fully used their prescribing skills to deliver patient care are to be applauded, prescribing roles that are not embedded in an organisation are rarely sustainable.

Conclusion

This study seems to support the anecdotal evidence that the skills of pharmacist prescribers are not being fully utilised, particularly in primary care. Some pharmacists, despite undertaking a prescribing course, have never used their qualification. On a positive note, the case studies showed that pharmacists have the ability to set up and run innovative, patient focused services. Regionally there are a number of examples of good practice but no uniform prescribing role currently exists.

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