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Pharmacy workforce census 2003: Main findings

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FOREWORD

The Society has for the second year running conducted a census of pharmacists on its register as part of its commissioned research and development programme. The 2003 census explores how the GB workforce has changed in the last twelve months and describes in some detail the current pharmacist workforce, where it is, what it is doing and how much.

These data when compared with the 2002 census results give a clear picture of how much our workforce is changing. Whilst on the surface the figures look healthy, on closer inspection there are indications that all is not perhaps as it appears.

This report exemplifies why the Society has invested in research of this kind and provides ample evidence as to why a routine collection of workforce data is so vital to our planning and policy development functions.

This year we have included questions relating to continuing education and internet access. The responses to which will inform our approach to continuing professional development. This report also includes interesting data about our pharmacists who are currently living and possibly working overseas.

I would like to thank Dr Karen Hassell of the University of Manchester for all her work in collecting, analysing and interpreting the now very complex data set that is our workforce. The attention to detail applied throughout gives us confidence in the results and the conclusions drawn.

Dr Gill Hawksworth
President
Royal Pharmaceutical Society of Great Britain

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1. Introduction

The first ever census of pharmacist's work patterns, commissioned by the Royal Pharmaceutical Society of Great Britain (RPSGB), was undertaken in August 2002 to provide robust and comprehensive labour market data about all registered pharmacists. A report of the main findings was published by the RPSGB in April 2003¹, and several papers focussing on specific groups of the workforce were published throughout last year.²⁻⁷ Presentations of the findings to different stakeholders were also made throughout 2003; a list of these can be found in Appendix 1.

Major developments within the profession and within the NHS are likely to have affected and will continue to affect the labour market behaviour of pharmacists as well as their attitudes. These include:

- Policy initiatives to make the NHS a better place to work
- Local Pharmaceutical Service pilots
- Growing influence of PCTs in driving forward community pharmacy initiatives
- Salary differentials between sectors
- Increasing shortages of pharmacists
- Policy initiatives to expand the role of pharmacy technicians

In light of these developments data on the workforce is essential to enable accurate forecasts to be made about supply and demand within the pharmacy labour market. Another census was commissioned in 2003: to assess the degree of labour market change that takes place over a year within pharmacy, to provide up-to-date data on employment patterns about the workforce who are employed and data about pharmacists who are not working, and to collect new data on a number of issues, including strength of desire to practice and uptake of continuing education activities.

2. The Methodology

Findings given in this report are based on two separate datasets: we start with a basic comparative analysis of all registered pharmacists on the RPSGB membership

database at two points in time: 10th August 2002 and the 8th August 2003, when details of the registered pharmacists were downloaded in preparation for the first and second pharmacist workforce surveys. This means that the basic demographic profile of registered pharmacists can be described and changes over time explored.

The second dataset consists of empirical results from the second workforce survey. These findings are from a large sample of the workforce, providing contemporary information on the labour market behaviour of pharmacists and their attitudes to pharmacy. The added value with this dataset is that some of the findings can be compared with similar data collected in 2002 so that changes in labour market activity can be assessed.

A short postal questionnaire was sent out to eligible pharmacists in September 2003. This was accompanied by an explanatory letter from the RPSGB, and a brief article was published in the Pharmaceutical Journal to encourage a high response rate. One reminder letter was sent in November to all non-respondents, and questionnaires received by the end of December 2003 were included in the analysis.

The data were coded and entered by an external data preparation company. The research team at Manchester checked and cleaned the data, which were then analysed using SPSS PC. In the interests of transparency detailed information is provided in Appendix 2 about how membership data are captured from the RPSGB in preparation for the census, and how the data are managed and cleaned once data entry is complete.

2.1 The sample for the 2003 survey

With the exception of pharmacists over the state pension age (SPA) who reported in the 2002 census that they were not actively employed, all pharmacists with a registered status on the membership database and with an address in England, Scotland or Wales (henceforth referred to as 'home' members) were surveyed (see Table 1). Thus, pre-registration pharmacists, pharmacists who are undergoing review by the Statutory Committee, and pharmacists with a registered address outside England, Scotland or Wales were excluded. Pharmacists working overseas

are the focus of a separate study, preliminary findings from which are included as an appendix (Appendix 3) to this report.

Out of 46,385 registered pharmacists in 2003 this gave a sample total of 37,986 pharmacists who were mailed the 2003 questionnaire (see Table 1 for details of inclusion and exclusion criteria).

Table 1. Description of the pharmacists included in the 2003 Workforce survey

Inclusion/exclusion criteria	Eligible number	Comment
Total number of pharmacists at 2003 extract date	46385	Grade 'F' or 'M' ; Status 'G' or 'D'
Excluded: Over SPA and not actively working at the time of the 2002 Census	- 3477	Net number over SPA in 2002 was 3723, but 246 were already retired by 2003
Excluded: Overseas on Register at the 2003 extract date	- 4922	Net number overseas in 2003 was 4926, but 4 were already excluded because they were in the above category as well
Total number surveyed for the 2003 Census	37986	

2.2 The questionnaire

The 2003 questionnaire (Appendix 4) was adapted from the 2002 census questionnaire. To measure change several questions were repeated: work situation; reasons for not working; intention to return if not currently working; current sector(s) of work, job and hours worked in job (for up to four jobs in total). For obvious reasons gender, ethnic group, School of Pharmacy attended, and date of birth were not collected again. New questions covered: post code of place of work; plans to work abroad; strength of desire to practice pharmacy; types of continuing education (CE) activity undertaken, and access to computers and the internet at home or work.

2.3 The response rate

Disappointingly, but perhaps understandably, the response rate to the 2003 census is, at 74.6%, just over 10% lower than last year's response (86%). It is nevertheless still a very high response rate for a questionnaire survey of this nature.

Despite the high response rate overall and the large number of responses being analysed, respondents do not necessarily precisely reflect the population under study. Younger pharmacists, particularly those under 29 years of age, were far less likely to return their questionnaire than older pharmacists; women had a higher response rate than men (77% and 72% respectively); and pharmacists in Scotland and Wales had a higher response rate than pharmacists with registered addresses in England (77%, 78% and 74% respectively). The response to the 2002 Workforce Census was very similar to this pattern, with non-respondents then as now more likely to be male and younger.

2.4 Outline of the report

The report is structured in the following way: a time series analysis comparing the number of registered pharmacists in 2002 and 2003 is given first. The net increase in the size of the membership and details of those who are new in 2003 and those who left the register between the two census dates are reported as part of this overall comparison.

After that the findings from the 2003 workforce survey itself are reported. A basic profile of respondents to the survey, their labour market activity, the work patterns of the pharmacists, their intentions to work abroad, strength of desire to practice pharmacy, types of CE undertaken, and access to IT and the internet at work or home, are each described.

Findings presented throughout the report are based on all home pharmacists on the Register or all respondents to the 2003 census. Tables showing basic demographic characteristics of pharmacists broken down by each of the three countries are provided in Appendix 5.

3. Analysis of Register Datasets

3.1 Growth and demographic change between 2002 and 2003

The table below briefly compares Register membership and census numbers at different stages in the process for the latest census and for the census conducted in 2002. On the 10th August 2002 there were 45,267 registered pharmacists on the Pharmaceutical Register, while by the 8th August 2003 the number had increased to 46,385.

Table 2: 2002 and 2003 workforce surveys compared

Description	Number	Inclusion/exclusion criteria
2002 registered pharmacists	45267	All pharmacists with a registered status ('R') and a grade of 'M' or 'F'
2002 Census mailing	45267	Ditto
2002 census respondents	39020	Represents a 86% response rate
2003 registered pharmacists	46385	All pharmacists with a registered status ('R') and a grade of 'M' or 'F'
2003 Census mailing	37986	Excluded 'overseas' pharmacists; and pharmacists over SPA not actively employed.
2003 census respondents	28344	Represents a 75% response rate

Just over a thousand pharmacists (1028) who were on the Register in 2002 were not on it in 2003, while over 2000 new entries (2146) were recorded by the 2003 census date. The net increase in the number of pharmacists on this years Pharmaceutical Register (1118) represents a growth of 2.4% over the 12 months between 10th August 2002 and 8th August 2003. The Register has grown by around 2% annually since 1991⁹, so this rate of growth compares favourably with previous years and continues the upward trend overall.

KEY FINDING

The net increase in the number of pharmacists on this years' Pharmaceutical Register represents a growth of 2.4% over the last 12 months.

In 2003 10.6% of all registered pharmacists had a registered address outside England, Scotland or Wales ('overseas' in the Table 3). This is marginally lower than the proportion (10.8%) classed as 'overseas' in 2002. The proportion based in

England (75.2%) has gone up by 0.1% compared with last year, while the Scotland and Wales figures remain unchanged. This would suggest that what little movement has occurred between countries has taken place from overseas into England.

Table 3: Location of registered address

	2002 (%)	2003 (%)
England	75.1	75.2
Scotland	9.2	9.2
Wales	4.9	4.9
Overseas	10.8	10.6
(n)	45,267	46,385

In 2002, where gender was known, 52.4% of all registered pharmacists were female (Table 4). This year, with no missing registration data, 52.2% of all registrants are female. When each of the three countries is examined separately, male pharmacists are under-represented in Scotland, where they constitute a much smaller 37% of the pharmacists with registered addresses there (see Appendix 5).

Table 4. Gender of registered pharmacists

	2002 (%)	2003 (%)
Male	47.6	47.8
Female	52.4	52.2
(n)	43,341*	46,385

* some missing data

As on last year's Register, the majority of pharmacists in 2003, 27%, are in the 30 and 39 age group (see table 5). While this age group accounts for the largest proportion of women (32%), the 40 to 49 age group accounts for the largest proportion of men (23%).

Table 5: Age group of registered pharmacists, by census year, and by gender (2003 data)

	2002 (c%)	2003 (c%)	% difference	Male (c%)	Female (c%)
29 yrs and under	17.4	19.1	+1.7	14.4	23.2
30 to 39 years	26.8	26.7	-0.1	20.9	31.8
40 to 49 years	23.7	23.4	-0.3	22.9	23.8
50 to 59 years	14.1	13.8	-0.3	16.4	11.5
60 to 64 years	5.3	5.0	-0.3	6.8	3.3
65 to 69 years	5.0	4.8	-0.2	7.1	2.8
70 to 79 years	4.9	4.7	-0.2	6.9	2.8
80 years and above	2.8	2.6	-0.2	4.5	0.8
Total (n)	39,327*	44,570*		20,922	23,648

* some missing data

Women pharmacists are thus younger than the men, with an average age of 40 and 48 years respectively. While just over a third of men (35%) are 39 years or younger, over half (55%) of female registrants are under 39 years of age. Conversely, proportionately more men are over the state pension age (SPA) compared with women, 18.5% and 9.7% respectively. The proportion of pharmacists over state pension age has fallen since last year, when 20% of male registrants and 10.4% of female registrants were over SPA.

The main change since last year between individual age groups is with the youngest group, where there has been a growth of almost 2% (Table 5). Increasing student numbers may explain the increase in this age group. The other age groups have reduced their percentage share.

When the three countries are examined separately, Scotland has a slightly larger proportion of pharmacists in the youngest age group, while older pharmacists are over-represented in Wales (see Appendix 5).

3.2 New entries on the Register in 2003 compared with 2002

Not surprisingly the 2146 new entries in 2003 are predominantly younger female pharmacists: 62% are female, and 83% are under 29 years of age (see Tables 6 and 7 below). New entrants have an average age of 26.66 years; the males are around a year older than the females (27.67 and 26.05 respectively).

Table 6: Gender of new registrants 2003

	Frequency	Col%
Male	806	37.6
Female	1340	62.4
(n)	2146	

Table 7: Age Group of new registrants 2003

	Male	Female	All
29 yrs and under	78.3	85.2	82.6
30 to 39 years	14.9	11.5	12.8
40 to 49 years	3.5	2.5	2.9
50 to 59 years	1.8	0.5	1.0
60 to 64 years	0.5	0.2	0.3
65 to 69 years	0.9	-	0.3
70 to 79 years	0.1	-	-
80 years and above	-	-	-
(n)	799	1337	2136*

*NB. Date of birth was unknown for 10 new entrants

KEY FINDING

Over 60% of the new entries onto the Register between 2002 and 2003 are female

Over 80% have a registered address in England, with just below 6% registered overseas. The vast majority, 95%, appear to be first time registrants to the 2003 Register, having been a member for less than a year at the time the data was downloaded for analysis on the 8th August 2003 (Table 8).

Table 8: Membership of new registrants 2003

	Frequency	Col %
Up to one year	2048	95.4
Btw 2 and 5 years	17	0.8
Btw 6 and 15 years	35	1.6
16 years and over	46	2.1
(n)	2146	100%

3.3 Exits from the Register in 2003 compared with 2002

There were 1028 entries on the database in 2002 who were not on the database in 2003. Over half (55%) of these are male pharmacists (Table 9).

Table 9: Age Group and gender of leavers
(Column percentages)

	Male	Female	All
29 yrs and under	7.4	24.4	15.1
30 to 39 years	9.4	26.7	17.2
40 to 49 years	6.5	9.7	8.0
50 to 59 years	8.2	11.9	9.9
60 to 64 years	5.3	6.2	5.7
65 to 69 years	12.2	6.8	9.8
70 to 79 years	51.0	14.3	34.4
80 years and above	-	-	-
(n)	551 (55%)	454 (45%)	1005

**NB. Date of birth was unknown for 23 leavers*

The average age of the leavers was 57.12 years (66 and 46 years men and women respectively), with just under 60% over the age of 50 years. Among the men the majority (63%) of leavers have reached or are over retirement age, while 51% of the women who have left the Register are under 39 years.

When viewed in overall percentage terms, men over retirement age account for 35% of all leavers, while 23% are women under 39 years (see table 10).

Table 10: Age group and gender of leavers (2003)
(Cell total percentages)

	Male	Female	Total (c%)
29 yrs and under	4.1	11.0	15.1
30 to 39 years	5.2	12.0	17.2
40 to 49 years	3.6	4.4	8.0
50 to 59 years	4.5	5.4	9.9
60 to 64 years	2.9	2.8	5.7
65 to 69 years	6.7	3.1	9.8
70 to 79 years	28.0	6.5	34.4
Total (n)	551	454	1005

Although it is only speculation at this stage it is likely that the majority of women leavers are simply taking a career break, while the men are retiring from the profession for good. There is some evidence to support this since retirement (49%) and lapsed membership (27%) account for the change in status of the largest

proportions of pharmacists who left the register between the two census dates in 2002 and 2003 (Table 11).

Table 11: Reason for exit from Register

	Frequency	Column %
Died	5	0.5
Erased – no fee	275	26.8
Erased – retired	500	48.6
Erased – Stat Com	8	0.8
Deleted	240	23.3
Total (n)	1028	100%

KEY FINDING

Men over retirement age represented 35% of those who left the Register between the two census dates, and women under 39 years represented almost a quarter.

While the explanation for the departure from the register of these two main groups may be obvious, for the remaining 42% the reasons for their exit may be less obvious and perhaps more complex. Although loss due to complete departure from the profession appears low overall, it may nevertheless be useful to explore their reasons for leaving the Register.

Over two-thirds (68%) of the leavers have a 'home' based registered address, with well over half (56%) living in England. Interestingly though, almost a third have an overseas address, suggesting large numbers of those leaving are migrating abroad. Findings presented in Table 12 suggest that it is pharmacists in the younger age groups who are the most likely to have an overseas registered address, such that over half of all pharmacists in the three youngest age groups are overseas, compared to only 20% and 10% respectively among the 65-69 year olds and the 70-79 year olds.

	Home	Overseas	Total (col%)
29 yrs and under	46.1	53.9	15.1
30 to 39 years	45.1	54.9	17.2
40 to 49 years	46.3	53.8	8.0
50 to 59 years	64.6	35.4	9.9
60 to 64 years	71.9	28.1	5.7
65 to 69 years	79.6	20.4	9.8
70 to 79 years	90.5	9.5	34.4
Total (n)	681 (68%)	324 (32%)	1005

Based on findings from a separate study on overseas pharmacists, the reasons for departure from GB among overseas pharmacists, for readers who might be interested in this specific group, are reported in Appendix 3.

4. Findings from the Pharmacy Workforce Census 2003

Findings from the 2003 census are reported next. It is worth reiterating that the census questionnaire was not sent to pharmacists with a registered address outside England, Scotland or Wales, nor was it sent to pharmacists over the state pension age who reported in last year's survey that they were no longer working.

For this reason direct comparisons with some of the findings from the 2002 census cannot be made unless the data are adjusted to ensure like is being compared with like. For this reason certain tables in section contain adjustments where relevant. Thus for comparisons with last year's data, only responses from 'home' pharmacists in 2002 are drawn upon, and 2003 data are adjusted in certain tables to include the 3477 'inactive' pharmacists over SPA excluded in the 2003 exercise.

4.1 Demographic characteristics of respondents

While the response rate to the 2003 Census was 75%, because some registered pharmacists were excluded from this year's survey respondents overall represented

61% of the entire Register. Females, and pharmacists between 40 and 59 years, are slightly over-represented among respondents to the 2003 census (see table 13 below), so some response bias is possible in this year's survey findings.

Table 13: Gender, and age group of respondents to 2003 census compared with all registered pharmacists

	Register	Census	% difference
29 yrs and under	19.1	17.9	-1.2
30 to 39 years	26.7	27.5	+ 0.8
40 to 49 years	23.4	26.0	+2.6
50 to 59 years	13.8	16.6	+2.8
60 to 64 years	5.0	5.6	+0.6
65 to 69 years	4.8	3.7	-1.1
70 to 79 years	4.7	2.1	-2.6
80 years and above	2.6	.6	- 2.0
Male	48%	44%	-4%
Female	52%	56%	+4%
Total (n)	46,385*	28,344	

* some missing data

4.2 Economic activity

Last year 81% of home respondents reported working within pharmacy to some extent, 16% were not in active employment, and 3% worked outside the pharmacy profession altogether (see table 14 below). This year the proportion working in the profession has gone down slightly (79%), while the proportion not employed at all has increased by 3%, to 19%. Care needs to be exercised with this figure since pharmacists not working and over SPA in 2002 were excluded from the 2003 workforce census, and it may well be that despite their retired status in 2002 a proportion may have returned to the workforce between the census dates.

Table 14: Economic activity of 2002 and 2003 respondents

	2002 data (%)	2003 data (%)
Entirely in pharmacy	24817 (69.7)	21871 (68.8)
Partly in pharmacy & partly outside	2126 (6.0)	1660 (5.2)
Retired but still work in pharmacy	1922 (5.4)	1519 (4.8)
Total employed in pharmacy	(81.1%)	(78.8%)
Not in active employment	5648 (15.8)	5914* (18.6)
Work entirely outside pharmacy	1090 (3.1)	830 (2.6)
Total (n)	35603	31794

*Adjusted for SPA pharmacists not working (+3477)

KEY FINDING

The proportion of registered pharmacists who are not working at all has risen from 16% in 2002 to 19% in 2003.

Like last year, the majority (76%) of those not actively employed, are retired. This year there has been a small drop in the proportion inactive due to ill health, while 1.4% is travelling (see table 15).

Table 15: Why not working for those economically inactive

	2002 data (%)	2003 data (%)
Maternity leave/looking after family	697 (12.4)	735 (12.5)
Ill health	318 (5.7)	265 (4.5)
Retired	4212 (75.1)	4481 (76.2)
FT or PT education	64 (1.1)	76 (1.3)
Travelling	-	85 (1.4)
Other reason	315 (5.6)	232 (3.9)
Total (n)	5606	5874

The data in table 16 below suggest that a greater proportion (60%) of pharmacists in 2003 (excluding the retired pharmacists) intend to return to practice compared with pharmacists at the same point in 2002 (46%).

Table 16: Intention to return to practice within 12 months

	2002 data (%)	2003 data (%)
Yes	735 (46)	769 (60)
No	621 (54)	506 (40)
Total (n)	1356*	1275*

**NB Retired pharmacists removed to enable comparison*

4.3 Sector of practice

Respondents were given the opportunity to record up to four jobs, and the hours worked in each one. As can be seen in table 17 below, community pharmacy still accounts for the employment of the largest proportion of pharmacists, with 72.5% of those actively employed within the profession working in the community sector. However, since last year the proportion working in community pharmacy has fallen by 2%, while both the primary care and hospital sectors have gained in importance as an employer of pharmacists.

Table 17: Proportion of actively employed pharmacists working in the sector

	2002 data	2003 data	% change
Hospital	20%	21.5%	+1.5%
Community	74%	72%	-2.0%
Primary Care	6%	8%	+2%
Other	10%	10%	-
Total (n)	28865	25050	

NB. A pharmacist may have a position in two separate sectors, or two different jobs in one sector, hence the column percentages exceed 100%

KEY FINDING

The proportion of employed pharmacists working in the community sector has decreased since last year, while the proportion in the hospital and primary care sectors has increased

The same trend as above is noted with jobs as the unit of analysis, instead of people (see table 18). The proportion of jobs in the primary care and hospital sectors has increased by approximately 1% each, while the proportion of jobs in the community sector, as a proportion of all jobs in total, has fallen by 2%.

Table 18: Type of post by sector

	Proportion of all posts: 2002 data	Proportion of all posts: 2003 data	% Difference
HOSPITAL (posts)			
Grade A to C	5.2%	5.1%	-0.1
Grade D to E	8.6%	9.3%	+0.7
Grade F and above	1.8%	2.3%	+0.5
Locum	1.5%	1.5%	-
Other	0.5%	0.5%	-
<i>Total</i>	17.7%	18.6%	+0.9
COMMUNITY (posts)			
Owner	10.8%	10.5%	-0.3
Manager	17.8%	17.8%	-
Relief	5.9%	6.1%	-0.2
Second	5.4%	5.3%	-0.1
Locum	23.9%	22.4%	-1.5
Non-store	1.2%	1.4%	+0.2
Other	1.8%	1.6%	-0.2
<i>Total</i>	67%	65%	-2%
PRIMARY CARE (posts)			
PCO or equivalent	3.7%	4.6%	+0.9
GP practice-based	1.8%	2.1%	+0.3
Other	0.4%	0.4%	-
<i>Total</i>	5.9%	7.1%	+1.2%
OTHER SECTOR (posts)			
Industry	4.2%	3.8%	-0.4
Wholesale	0.4%	0.4%	-
Academia	1.9%	2.2%	+0.3
National pharmacy body	0.5%	0.6%	+0.1
NHS strategic management	0.5%	0.5%	-
Other	1.8%	1.9%	+0.1
<i>Total</i>	9.3%	9.3%	-
Total number of posts (n)	33651	29294	

The fall in the proportion of jobs in the community sector appears to be almost entirely due to the fall in the proportion of people reporting working in locum positions: from 23.9% in 2002 to 22.4% in 2003. In the hospital sector the biggest increase appears to be due to a rise in the proportion of grade D to F posts and, but to a lesser extent, senior management posts. In the primary care sector the increase is largely associated with a growth in the proportion of Primary Care Organisation positions, with a smaller increase in the proportion of general-practice based posts. It is interesting to note that the proportion of people working in primary care has increased more than the proportion of jobs.

4.4 Work location

In the 2003 census pharmacists were asked to provide the postcode of their work place. The research team anticipated problems with the question, but given workforce shortages reported in certain geographical localities, the commissioning body and the researchers thought it would be useful to trial the question so issues and relationships between geography, sector and job could be explored. It is possible, using information from publicly available databases, to use post office address postcodes to identify the PCT and SHA areas in which the address is located. The research team have also been able to link the postcode of pharmacist's registered address (most often (around 90%) this is their home address) using the same method of data extraction and analysis.

Postcode data on pharmacists registered address is available for nearly all registered pharmacists from the RPSGB membership database. However, with the postcode of the work location, it has only been possible to utilise 15,568 records from the 25,880 respondents who reported they were actively employed. This was either because respondents simply did not provide the postcode, or only half of the postcode was given, and in linking to PCT area this could only be carried out on addresses within England.

There are numerous ways the postcode data can be used, and with time options will be further explored. For example, it should be possible to examine the distance people travel from home to work.

To provide a practical illustration the table below shows illustrates two things. Firstly, in column 3 we can see that 25% of actively employed pharmacists in GB are retail locums. However, this varies by SHA so that in Dorset and Somerset SHA for example, 31% of actively employed pharmacists living within its boundaries are working as a retail locum. Taunton Deane PCT within Dorset and Somerset has an even higher proportion of locums (41%).

While this is interesting, the problem is that we cannot be certain that these retail locums necessarily work in the same PCT they live in. Using the work postcode data column 4 shows the proportion of all pharmacists who are actively employed in that area who report working as a retail locum. Thus, 20.5% of all pharmacists who gave a work address within Poole PCT work as a retail locum.

The analysis demonstrates the wide variation that exists in particular areas in relation to the proportion of locums working or living in a locality, and clearly suggests that not all locums who live within a PCT area work in that PCT. For example, from other analysis we know that 52% of all pharmacists working within South Gloucester PCT do not work within its boundaries. This applies to retail locums as much if not more so – 83% of retail locums who live in South Gloucester PCT do not work in it.

Strategic Health Authorities and PCTs in South West England	Number of Pharmacies	% of actively employed pharmacists who <i>live</i> in PCT who report being a retail locum	% of pharmacists <i>working</i> in the PCT who report being a retail locum
*****GB average*****		25%	
Avon, Gloucestershire & Wiltshire SHA	383	24%	12%
South Gloucestershire PCT	40	25%	10.5%
Bath and North East Somerset PCT	35	27%	17%
Bristol North PCT	42	23%	5%
Bristol South and West PCT	43	15%	8%
North Somerset PCT	33	33%	18%
West Wiltshire PCT	17	25%	-
South Wiltshire PCT	18	15%	3%
Swindon PCT	29	24%	11%
Kennet and North Wiltshire PCT	28	27%	18%
Cheltenham and Tewkesbury PCT	30	29%	16%
Cotswold and Vale PCT	33	31%	15%
West Gloucestershire PCT	35	31%	17%
Dorset and Somerset SHA	219	31%	15%
North Dorset PCT	15	16%	17%
Bournemouth PCT	35	29%	15.5%

South and East Dorset PCT	30	35%	14%
Poole PCT	31	36%	20.5%
South and West Dorset PCT	26	35%	16%
Somerset Coast PCT	22	39%	19%
Mendip PCT	17	36%	-
Taunton Deane	18	41%	20%
South Somerset PCT	25	28%	8%
South West Peninsula SHA	301	27%	13%
West Cornwall PCT	30	21%	10%
Central Cornwall PCT	30	19%	8%
North and East Cornwall PCT	27	36%	9%
North Devon PCT	27	29%	13%
Exeter PCT	21	18%	12%
East Devon PCT	27	50%	9.5%
Mid Devon PCT	15	37%	21%
Teignbridge PCT	22	46%	10.5%
Plymouth PCT	48	23%	15%
South Hams and West Devon PCT	19	36%	14%
Torbay PCT	35	26%	19%
GRAND TOTAL	903		

4.5 Number of jobs held

Just under 14% of actively employed home pharmacists in the 2002 census held more than one job, and women were more likely than men to have two or more jobs (table 19). While the gender difference remains this year (11% of women have more than one job compared with 9% of men), the overall proportion with more than one job has fallen to 10%.

Table 19: Number of jobs, by (i) census year and (ii) gender

	Census Year		Gender (2003)	
	2002	2003	Male	Female
One job only	86.3%	89.6%	91%	88.6%
Two or more jobs	13.7%	10.4%	9%	11.4%
Total (n)	32,669	25,186	11086	14100

The proportion of working pharmacists with more than one job varies by sector of practice (Table 20), with those working in primary care far more likely (60.5%) to have two or more jobs than colleagues working in other sectors. Although this figure represents a reduction of 4.5% on last year's figure, suggesting that portfolio working in primary care has fallen, it is nevertheless still the norm for pharmacists employed in this sector to hold more than one job. It is notable that, compared with last year's figures, the proportion of people with more than one job has actually

fallen across all sectors of practice.

Table 20: Jobs held, by sector

	Community	Hospital	P Care	Other sector
One job	87.8	80.1%	39.5	60.5
Two jobs	12.2	19.9%	60.5	40.5
Total (n)	18114	5372	1902	2439

4.6 Mobility across sectors

Having data over two years allows some exploration of mobility across the main employment sectors in pharmacy (Table 21). Pharmacists who responded to the 2002 survey and reported having one job only were selected to examine what sector they worked in at the time of the 2003 survey. Only individuals who responded to both surveys and had one job only at the time of both surveys are included in this analysis, so the calculation in table 21 below is based on a *sample* of respondents rather than *all* respondents.

The figures in the matrix below demonstrate the remarkable degree of persistence shown by registered pharmacists from one year to the next, such that, for example, 96% of respondents who reported working in the hospital sector in 2002 were still working in the NHS in 2003. Similarly, 98% of pharmacists working in the community sector in 2002 were still in this sector in 2003.

Table 21: Pharmacists in 2002, showing what sector they worked in at the time of the 2003 survey (row%)

Sector job held in 2002	Sector job held in 2003			
	Hospital	Community	Primary Care	Other sector
Hospital	96.2	1.5	1.2	1.1
Community	1.6	97.9	0.3	0.2
Primary Care	5.2	5.6	84.0	5.2
Other sector	3.5	4.4	0.7	91.3

There is slightly greater movement across sectors for people who were working in primary care in 2002, with around 5% moving into each of the other sectors by the

2003 census date and 84% still in primary care. A larger movement out of primary care from one year to the next compared with other sectors may not be too surprising. The sector is still a relatively new area of practise, with some pharmacists perhaps deciding it's not for them after trying it out for 12 months or so. It may also be partly a function of the working conditions for pharmacists in this sector, many of whom are employed on short-term contracts⁷. Despite the higher degree of mobility indicated by these figures the primary care sector has seen an increase in the proportion of pharmacists working in it overall, suggesting that it is still attracting pharmacists from other areas of practice. Alongside the evidence of the decrease in portfolio working in the primary care sector over the year, it may well be the case that an increasing proportion of pharmacists are confining themselves to this sector rather than working across a number of different ones.

KEY FINDING

Mobility across sectors of practice appears low overall, but is highest among primary care pharmacists, 16% of whom left the primary care sector between the two census dates.

4.7 Patterns of work

Since pharmacists may hold more than one job hours worked in each of up to four jobs were summed to give total number of hours worked by each individual. These were then collapsed into two categories, showing a division between full-time and part-time employment (defined here as 33 hours and above, and 32 hours or below respectively). There is a slight increase in the proportion working part-time in 2003 compared with 'home' pharmacists in the 2002 survey, from 31% to 32.5% (Table 22). Women are still far more likely than men to work part-time (42% and 20% respectively).

Table 22: Part-time and full-time working for economically active pharmacists (column percentage)

	2002			2003		
	Male	Female	Total	Male	Female	Total
Part-time (up to 32 hours)	19	40.5	31	20.0	42.0	32.5
Full-time (33 hours and above)	81	59.5	69	80.0	58.0	67.5
Total (n)	12147	14963	27110	9898	13037	22935

KEY FINDING

Since the 2002 Census there has been an increase in part-time work patterns, with part-time pharmacists still representing a sizeable proportion (32.5%) of the actively employed workforce.

The increase in part-time working is seen across all the main sectors of pharmacy employment, but primary care has seen the largest increase of all (Table 23).

Table 23: Percentage of actively employed pharmacists who work part time (< 32 hrs) by sector and year

	2002 data	2003 data
Hospital	25%	25.5%
Community	34%	35%
Primary Care	33%	36%
Others	20%	23%
Total (n)	31%	32.5%

For economically active 'home' pharmacists in last year's survey the mean number of hours worked was 35 hours per week. This year this has fallen to a mean of 32 hours per week. The gender difference is still apparent, with women working an average of 29 hours a week, compared to 34 hours for men, a difference of 5 hours. However, the gap appears to be closing, since last year men worked 39 hours a week on average, while women worked 32 hours. The fall in average hours worked cuts across all sectors (Table 24).

Table 24: Mean number of total hours worked by sector of pharmacy employment

Sector	2002 data	2003 data
Hospital	35.24	33.46
Community	34.58	31.09
Primary Care	32.92	30.09
Other	36.79	33.52
Total (n)	34.83	31.72

4.8 Intentions to work overseas

Recent NHS policy documents have acknowledged the importance of good working conditions as important strategies for ensuring job satisfaction among staff. Pharmacy research in the past has identified low job satisfaction as being partly responsible for people choosing to leave the profession. While use of full and detailed job satisfaction scales was beyond the scope of this year's brief census questionnaire, two questions, one to give some indication of likely departure from the profession through overseas mobility, and one about the strength of desire to practice pharmacy, were included.

Only a very small proportion of registered pharmacists who returned their questionnaire thought they would temporarily (6%) or permanently (3%) work abroad in the future, while 45% were unequivocal, stating that work overseas was highly improbable for them (Table 25).

Table 25: Intention to work abroad

	frequency	%
Yes, temporarily	1617	5.9
Yes, permanently	773	2.8
No plans at present	12671	46.0
Highly unlikely	12470	45.3
(n)	27531*	100%

* some missing data

KEY FINDING

Just under a tenth of the pharmacy workforce think they may work abroad in the future

Perhaps not surprisingly, there was a strong interaction effect with age, so that pharmacists under 29 years were far more likely to have either temporary or permanent plans to work overseas, and older pharmacists were more likely to have no plans at present or be highly unlikely to work abroad.

There is evidence of variation across sector of practice, with pharmacists working in hospital pharmacy and 'other' sectors of pharmacy far more likely than colleagues

working in community or primary care stating they may go abroad (Table 26). This association however, may be due to age differences between pharmacists working in different sectors, since pharmacists working in hospital pharmacy have a younger average age compared to pharmacists working in primary care or community pharmacy (37, 40 and 42 years respectively).

Table 26: Intention to work abroad by sector

	Community	Hospital	P Care	Other
Yes, temporarily	5.4	9.8	4.5	9.2
Yes, permanently	2.7	4.0	1.6	2.9
No plans at present	45.4	49.4	48.3	54.6
Highly unlikely	46.5	36.8	45.7	33.3
(n)	17631	5282	1859	2508

4.9 Desire to practice pharmacy

Pharmacists were asked their current views about practising pharmacy on a five-point scale that reflected the strength of their desire to practise (Table 27).

A small proportion (7%) of respondents didn't answer this question because they classified themselves as not currently practising pharmacy, and 3% failed to provide a response where one might be expected. Of the remaining eligible respondents, three-fifths have either a very strong or strong desire to practice the profession for which they have trained. At the other extreme, just over 5% regret becoming a pharmacist altogether, and over a third (35%) expressed either a lukewarm or weak desire to practice pharmacy.

Table 27: Strength of desire to practice pharmacy

	frequency	c%
Very strong desire	3798	14.9
Strong desire	11502	45.2
Lukewarm desire	7054	27.7
Weak desire	1735	6.8
Regret becoming a pharmacist	1386	5.4
(n)	25475*	100%

* some missing or not relevant

KEY FINDING

60% of pharmacists have a very strong or strong desire to practice pharmacy, with 5% regretting becoming a pharmacist

Strength of desire to practice is moderated by age, such that larger proportions of younger pharmacists have, in general, a stronger desire to practice when compared with pharmacists who are approaching retirement age (Table 28). The proportion of 60 to 64 and 65 to 69 year olds who have a lukewarm or weak desire to practice pharmacy rises to highs of 38% and 41%, while almost 7% and 4% regret becoming a pharmacist altogether.

Gender, as well as age, affects the strength of desire to practice: men are more likely than women to regret becoming a pharmacist (7% and 4% respectively), and are less likely than women to have a very strong or strong desire to practice (56% and 63% respectively). This gender effect remains even when controlling for age group.

Table 28: Strength of desire to practice, by age group (col %)

	Under 29 yrs	30 to 39 yrs	40 to 49 yrs	50 to 59 yrs	60 to 64 yrs	65 to 69 yrs	70 to 79 yrs	80 yrs +
Very strong or strong desire	63.8	60.2	60.8	57.2	51.1	55.5	59.1	64.3
Lukewarm or weak desire	32.5	34.5	33.0	36.2	38.2	40.6	35.8	28.5
Regret becoming a pharmacist	3.6	5.4	6.1	6.7	6.8	4.0	5.2	7.1
Total (n)	4793	7079	6579	4032	1138	772	388	56

Strength of desire to practice pharmacy also appears to be affected by the sector of employment, with community pharmacists more likely than the norm to regret becoming a pharmacist and more likely to have a lukewarm or weak desire to practice (Table 29). Interestingly, primary care pharmacists are the group most likely to have a very strong or strong desire to practice, perhaps reflecting the more recent emergence of this NHS sector as a novel sector of practice for pharmacists.

Table 29: Strength of desire to practice by sector

	Community	Hospital	Primary Care	Other	All
Very strong or strong desire	58.4	67.9	72.1	65.7	60.1
Lukewarm or weak desire	35.6	28.6	23.7	31.0	34.5
Regret becoming a pharmacist	6.0	3.5	4.2	2.9	5.4
Total (n)	17595	5257	1863	2276	25475

4.10 Types of Continuing Education undertaken in the last 12 months

Continuing Education (CE) activity takes many different forms, but the main ones were identified on the questionnaire in a closed question format for ease of response (see table 30).

Table 30: Types of CE activity undertaken

	% stating used
Distance learning packages	52.3
Workshops	47.4
Seminars or conferences	41.7
Other	21.7
Videos or CAL packages	11.9
No CE activity at all	11.5

As can be seen in Table 30 above, distance learning is the most common form of CE, with just over half of all those who responded to this question saying they have used distance learning packages within the last 12 months. Smaller proportions of respondents reported attending workshops (47%) and seminars or conferences (42%), while only 12% had used videos or Computer Aided Learning packages. Just over a fifth reported using other forms of CE. These remained unspecified in most cases, but reading articles and journals, and attending 'in-house' learning and development courses were amongst those that were identified. A very large majority (88.5%) had undertaken at least some CE activity.

Use of different types of CE is affected by economic activity rates (Table 31). Much

smaller proportions of those who are either not actively working at all, or those employed in a non-pharmacy related occupation have utilised the different components of CE. It is interesting to note that some of those who are not actively working still undertake CE. Those who work in non-pharmacy related work clearly have a preference for conferences and seminars, while those in pharmacy related employment, possibly because of the influence of CPPE and their equivalent outside England, are more likely to utilise distance learning packages and attend workshops.

Table 31: % who have undertaken CE activity, by type of economic activity

	Employed in pharmacy	Employed in non-pharmacy job	Not actively employed
Distance learning packages	56.6	12.4	22.3
Video or CAL packages	12.8	4.2	5.5
Attended workshops	51.6	18.0	14.6
Attended conferences/seminars	44.7	30.6	14.5
Other CE	22.5	18.9	15.6

KEY FINDING

Distance learning is the most popular form of CE, but uptake of CE activities is lowest among pharmacists who are not actively employed or who work outside the profession.

4.11 Access to the internet

A question was included in the 2003 census to ascertain the extent to which pharmacists have access to computers and the internet. As can be seen from Table 32 only a small proportion don't have any access anywhere, while larger proportions have access at home than they do at work.

Table 32: Access to PC/Mac and internet

	% with access
Access to home PC or Mac	65%
Access to work PC or Mac	47%
Access to the internet at home	80%
Access to internet at work	47%
No access at all anywhere	7.5%

KEY FINDING

80% of pharmacists have access to the internet at home

5. Summary of key findings

While key findings have been highlighted throughout the report, they are summarised below for ease of reference. The response rate overall was 75%, still an excellent response despite it being lower than the previous workforce census. Nevertheless, the findings from the 2003 pharmacy workforce census may be biased as a result of the slight under-representation of younger pharmacists and the over-representation of female pharmacists.

- The Pharmaceutical Register grew by 2.4% overall between August 2002 and August 2003. This is in line with the general trend over the last 10 years
- Over 60% of the new entrants to the Register in 2003 are female
- Departure of existing members from the register and new members joining the register in 2003 has altered the demographic profile slightly so that there are now proportionately more younger pharmacists than last year
- While the majority of those leaving the profession are males over retirement age and females under 39, there is still a sizeable proportion of pharmacists leaving the Register who do not fall into either of these demographic groupings
- Despite an increase in numbers on the Register there has been a slight decrease in the proportion of registered pharmacists who are actively employed in a pharmacy-related occupation, while the proportion not working at all has increased by 3%
- There has been a slight decrease in the proportion of actively employed pharmacists working in the community sector of the profession
- There has been a slight increase in the proportion of actively employed

pharmacists working in the hospital and primary care sectors of the profession

- Mobility across sectors between the two census years is low overall, but highest among primary care pharmacists, 16% of whom left the primary care sector between the two dates
- Since the 2002 Census there has been a slight increase in the proportion of economically active pharmacists working part-time, with part-time pharmacists still representing a sizeable proportion (32.5%) of the actively employed workforce
- 9% of pharmacists who responded to the 2003 Census stated they may either permanently or temporarily work abroad in the future
- Three-fifths of pharmacists indicate a strong or very strong desire to practice pharmacy, with female pharmacists and younger pharmacists feeling more positive about practising pharmacy than males or older pharmacists
- Distance learning is the most popular form of CE activity
- Continuing education (CE) uptake is not surprisingly lowest among registered pharmacists who are not actively employed or work outside the profession
- 80% of pharmacists have access to the internet via a PC or Mac at home

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9. Hassell K (2002) Hassell K, Fisher R, Nichols L, Shann P (2002) Contemporary workforce patterns and historical trends: the Pharmacy Labour Market over the last forty years. *The Pharmaceutical Journal*, 269: 291-296.

Appendix 1: Invited stakeholder and conference presentations arising from 2002 Census

1. Hassell K & Shann P (2002) The pharmacy labour market 1991 to 2001. British Pharmaceutical Conference, Manchester, 2002
2. Shann P, Hassell K (2003) Older pharmacists in the GB pharmacy workforce: implications for professional practice, British Pharmaceutical Conference, Harrogate, 2003
3. Pharmacy workforce census: preliminary findings. RPSGB Council, January 2003
4. Pharmacy workforce census: preliminary findings. Workforce Summit, Teddington, February 2003
5. Pharmacy workforce census: preliminary findings. St. Johns College, Cambridge. February 2003
6. The GB and Welsh pharmacy labour market. Welsh Executive, April 2003
7. The Pharmacy Workforce: does supply match demand? Primary Care 2003. NEC, Birmingham, May 2003
8. The GB and Scottish pharmacy labour market. Scottish PS, Edinburgh, June 2003
9. The new landscape of pharmacy employment: understanding the workforce is key to the Future of Pharmacy. Chemist and Druggist Award Lecture. British Pharmaceutical Conference, Harrogate, September 2003
10. Pharmacy Workforce Planning: Supply and demand. Community Pharmacy: Securing the Future conference. Pharmaceutical Journal. RPSGB, London, November 2003

Appendix 2: Data capture from the RPSGB, data entry, coding and cleaning

1. The complete membership database was downloaded on the 10th August 2003, and saved in a text delimited file format. This snapshot allows comparisons to be drawn year on year. It is thus possible, for example, to compare movement on and off the Register over time, and analyse movement within sub-groups. Variables downloaded included:
 - a. Membership number
 - b. Name
 - c. Registered address
 - d. Grade (ie, member or fellow)
 - e. Status (ie, registered, deleted, erased, etc)
 - f. Date of birth
 - g. Location flag (ie, England, Scotland, Wales, Overseas)
 - h. Date joined the register
 - i. Gender
2. Another database, in the same format, is provided alongside the full membership database, which contains only the members who have a fully registered status (ie, are eligible to practise), and are either a full member or fellow (referred to as the 'eligible to practice' database).
3. The 'eligible to practice' text file is imported into Excel, where two new variables are created: 'age' and 'years been a member'. These variables are created using the 'DATEDIF' function, with the date used for the calculation the download date (ie, 10th August 2003). The formula used is as follows: DATEDIF (A1, "2003/08/10", "y"), where A1 corresponds to the column where, for example, the date of birth data is found.

Some problems are encountered with this calculation since the date of birth variable has to be imported in a format that allows EXCEL to calculate age. It should be imported as a date variable as follows: "dd/mm/yyyy", and EXCEL must be configured so that dates in the early 1900s remain true and are not changed in the import procedure to years in the 21st century (for example, 12/12/1905 can be changed to 12/12/2005, affecting the accurate calculation of years of age).

Several other variables pertaining to the PCT where the pharmacists' registered address is located were also created at this stage. This is possible by linking the postcode of the registered address to a database obtained via the NHS which is able to specify PCT using geographical location data. We have so far only been able to do this for pharmacists with a registered address in England.

4. To preserve confidentiality of the pharmacists identifying information such as name and address is removed from the 'eligible to practice' database. However, the RPSGB membership number, unique to the individual, is maintained, since this variable is later used to link and merge the data from census respondents to certain membership data that was not collected with the survey (eg, gender, date of birth, date joined). It is also used to cross-check and verify information if data capture problems are encountered at any

stage.

5. Using ACCESS software the 2002 and 2003 'eligible to practice' databases are compared and contrasted using the unique membership number to first select new entries in 2003 (ie, not on the 2002 database), and second, to select those pharmacists who were on the 2002 database but no longer on the 2003 database. Records of pharmacists selected were then put into separate ACCESS tables and data imported into SPSS for analysis.
6. The census survey data is received as comma-delimited text files electronically from the data entry company ('TynePrep'). Once the first file has been received it is imported into SPSS, and the variables and values are labelled and coded. Each subsequent comma-delimited file is similarly coded and then merged with the first one, until all records are in one SPSS file. The data are checked and cleaned by running basic univariate and bivariate analyses to check for erroneous codes or inconsistent responses across questions. Each record has two unique identifiers: the pharmacists' own membership number, and a 'batch id' number generated by TynePrep. The membership number means that data across annual censuses and other databases can be linked to an individual, while the 'batch id' number allows the research team to check any data entry problems against the original questionnaire.
7. Once the survey response file is clean, new variables are derived as necessary, and variables from the previous year's census are merged to provide longitudinal analysis of change.

Appendix 3: Overseas Pharmacists

Preliminary findings of a separate census of GB qualified overseas pharmacists.

**Liza Nichols (Final year PhD Student, University of Manchester)
and Dr Karen Hassell**

1. Introduction

Findings from last year's Pharmacy Workforce Census⁶ and earlier examination of the membership database¹⁰ identified pharmacists' migration overseas as contributing to the current workforce shortage. Pharmacists living or working 'overseas', (categorised as anyone with a registered address outside England, Scotland or Wales), constitute 11% of the Pharmaceutical Register, a small but not insignificant proportion of the overall Register. Those identified as having qualified from Schools of Pharmacy in Great Britain (GB) represent approximately 8% of the Register, while pharmacists who qualified outside GB constitute 3%. Importantly, further analysis of the membership database revealed that pharmacists leaving GB make up a bigger proportion of the Register than do pharmacists who originally qualified abroad but now practice in GB.⁶ Evidence is just beginning to emerge however, to suggest that the gap between inflow and outflow is narrowing, such that the proportion of pharmacists who trained abroad and are now on the GB register is catching up with the group who are leaving the GB-based workforce.

While the 2002 Pharmacy Workforce Census identified the work patterns of 'overseas' pharmacists and helped identify some key differences between them and the 'home' pharmacists,⁶ it was not able to identify why these pharmacists decided to leave the GB workforce, and why in particular the GB-qualified pharmacists have left.

In view of this the School of Pharmacy at the University of Manchester, as part of its programme of research on the workforce, recruited a PhD student to develop a study on overseas pharmacists. The RPSGB helped fund the survey part of the research so that a full census of the population could be conducted, alleviating the need to include this group in the 2003 (GB) Pharmacy Workforce Census. Overseas pharmacists were thought to be so different that they merited separate study in this way, and it allowed exploration of a different set of questions and a more focussed

approach that would have been difficult within the constraints of the 2003 GB Census. See box below for list of topics included in the survey.

Box 1 : Topics included in the Overseas Pharmacist Census (OPC)

- Type and extent of work
- Reasons for movement
- Future intentions
- Incentive to return to GB
- Why remain on the GB Register
- Views on CPD
- Attitudes towards a non-practising Register
- When Left GB
- Why left GB
- Requirements for registration abroad
- Nationality

This annexe to the main Census 2003 report presents findings from an analysis of data that was obtained from the membership database as well as a brief overview of some of the main findings from the Overseas Pharmacist Census (OPC), for which data analysis is still underway. A copy of the questionnaire used in the study can be provided on request from the author. Full details about the whole study, including details about the methodology, will be published in due course.

For the purpose of the OPC the population group was identified (all GB-qualified pharmacists living overseas) and postal addresses extracted from the Register in June 2003. The survey was administered in August 2003, with a reminder and web version sent to non-respondents in October 2003. The final cut off for respondents was December 31st 2003. The final response rate was 54.5% (n=1941).

2. Overview of findings from data stored on the Pharmaceutical Register

2.1 General characteristics of all GB-qualified pharmacists domiciled overseas

In June 2003 when the population of interest for this study was identified, just over three and a half thousand (3562) GB-qualified pharmacists lived or worked abroad.

This represented approximately 8% of the GB Pharmaceutical Register (n = 45, 110).

In comparison to their proportion on the Register as a whole, men are slightly over-represented among the overseas group of pharmacists, 48% and 51% respectively (Table 1). The GB-qualified overseas pharmacists, compared with all pharmacists on the Register, are also more likely to be younger, and as a consequence a higher proportion of GB-qualified pharmacists overseas are of working age (in total 94%) in comparison to the Register as a whole (85%).

Table 1. Age group of all membership, and GB-trained overseas pharmacists (June 2003 data)

	Register		Overseas pharmacists	
	Frequency	Percent	Frequency	Percent
Under 29	7400	17.1	472	14.5
30-39	11808	27.3	1097	33.6
40-49	10375	24.0	1002	30.7
50-59	6090	14.1	408	12.5
60-64	2205	5.1	107	3.3
65-69	2148	5.0	73	2.2
70+	3232	7.5	105	3.2
Total	43258	100.0	3264	100.0
Missing	1852		298	
total	45110		3562	
Men	48%			51%
Female	52%			49%

2.2 Country of destination of GB-qualified overseas pharmacists

The top destination country is the USA, with 14% of all GB-qualified overseas pharmacists currently working/living there (Table 2). This is closely followed by Australia (12%), then Ireland, Canada and Hong Kong (all accounting for approximately 11%) and then the UK/ British Isles (Northern Ireland, Channel Islands, Isle of Man) with 9% of everyone classed as overseas (i.e. outside GB). These six destinations account for 68% of all GB-qualified pharmacists registered as living overseas.

Table 2: Destination of GB-trained pharmacists leaving GB

	Frequency	Percent	Valid Percent	Cumulative Percent
USA	501	14.1	14.1	14.1
Australia	429	12.0	12.0	26.1
Ireland	399	11.2	11.2	37.3
Canada	389	10.9	10.9	48.2
Hong Kong	379	10.6	10.6	58.9
UK (NI, CI, IOM)	329	9.2	9.2	68.1
Malaysia	153	4.3	4.3	72.4
New Zealand	132	3.7	3.7	76.1
Kenya	109	3.1	3.1	79.2
Israel	59	1.7	1.7	80.8
France	59	1.7	1.7	82.5
South Africa	55	1.5	1.5	84.0
Singapore	54	1.5	1.5	85.5
Germany	44	1.2	1.2	86.8
Switzerland	43	1.2	1.2	88.0
Mauritius	34	1.0	1.0	88.9
Spain	32	.9	.9	89.8
Greece	25	.7	.7	90.5
Brunei Darussalam	21	.6	.6	91.1
Bermuda	21	.6	.6	91.7
Netherlands	19	.5	.5	92.3
Belgium	17	.5	.5	92.7
Nigeria	15	.4	.4	93.1
United Arab Emirates	15	.4	.4	93.6
Gibraltar	13	.4	.4	93.9
India	13	.4	.4	94.3
Zimbabwe	12	.3	.3	94.6
Norway	11	.3	.3	94.9
<i>All other countries</i>	<i>180</i>	<i>5.1</i>	<i>5.1</i>	<i>100.0</i>
Total	3562	100.0	100.0	

3. Overview of findings from the Overseas Pharmacists Census

3.1 General Characteristics of Respondents

The gender distribution of respondents was even, with approximately 50% men and 50% women (Table 3), and thus is very close to the GB-qualified overseas population as a whole. In relation to age group, a smaller proportion of younger pharmacists (aged under 29) are represented, while representative proportions of those aged 30-39 and 40-49 responded. Those aged 50+ had a slightly inflated response rate when compared to the whole population, 24% and 21% respectively (Table 3).

Table 3: Age group of respondents compared with all GB-trained overseas pharmacists

	All GB-trained O/Seas pharmacists		Respondents to OPC	
	Frequency	Column Percent	Frequency	Column Percent
Under 29	472	14.5	210	11.9
30-39	1097	33.6	584	33.2
40-49	1002	30.7	540	30.7
50-59	408	12.5	236	13.4
60-64	107	3.3	71	4.0
65-69	73	2.2	53	3.0
70+	105	3.2	67	3.8
Total	3264	100.0	1761	100.0
Missing	298		180	-
Total	3562		1941	-
			210	11.9
Male		51%		50%
Female		49%		50%

The same destinations emerge as the six most common destinations for respondents (i.e. Australia, USA, Canada, Ireland, UK (non-GB) and Hong Kong). These destinations account for almost 67% of all respondents' destinations in comparison to 68% of the population group (Table 4). This suggests that respondents are fairly representative of the population with respect to this factor. Table 4 below shows the distribution of countries for respondents compared to everyone in the group. Pharmacists in Australia and New Zealand are slightly over-represented, whereas pharmacists in Hong Kong and Malaysia are under-represented compared to their proportion in the population group as a whole.

Table 4: Country of destination of respondents compared with all GB-trained overseas pharmacists

Percent	All in group	Respondents	Difference
USA	14.1	14.2	+ 0.1
Australia	12.0	14.3	+ 2.3
Ireland	11.2	10.4	- 0.8
Canada	10.9	11.2	+0.3
Hong Kong	10.6	7.9	- 2.7
UK	9.2	8.8	- 0.4
Malaysia	4.3	3.1	- 1.2
New Zealand	3.7	5.2	+1.5
Kenya	3.1	2.5	- 0.6
Israel	1.7	1.7	Same
France	1.7	2.0	+ 0.3
South Africa	1.5	1.8	+ 0.3
Singapore	1.5	1.5	Same
Germany	1.2	1.6	+ 0.4
Switzerland	1.2	1.8	+ 0.6
Mauritius	1.0	0.9	- 0.1
Spain	0.9	1.2	+ 0.3
<i>All other countries</i>	<i>10.2</i>	<i>9.1</i>	<i>- 1.1</i>
	100% (3562)	100% (1941)	

As would be expected a high proportion of GB-qualified pharmacists who are domiciled overseas are GB nationals (67%). Represented among the other 33% are pharmacists originally from Hong Kong, Ireland, Malaysia, Kenya and Northern Ireland. A distinction between pharmacists who are GB-nationals or non-GB nationals is drawn later on in the analysis, since the two groups are, understandably, very different in relation to both their reasons for leaving GB and their future intentions towards practising pharmacy.

3.2 Work status

Regarding work status, 81% of respondents are working. The following table (5) shows the proportion of those working in each area of pharmacy employment or non-pharmacy. [The way the question was structured allowed a pharmacist to have more than one job, so the table percentage adds up to more than 100%].

Table 5: Proportion of respondents who reported working in the sector

	Frequency	Valid Percent
Community	808	50.9
Hospital	324	20.4
Primary Care	27	1.7
Industry	227	14.3
Marketing	55	3.5
Academia	72	4.5
Other pharmacy	123	7.7
Non pharmacy	154	9.7

Approximately 51% of pharmacists said they worked in community pharmacy (of which 24% had their own pharmacy business and 76% were employed), 20% worked in hospital and 14% in industry. This compares to 72%, 21.5% and 4% respectively of actively employed pharmacists in GB. This highlights a key difference between GB-based and overseas domiciled GB-trained pharmacists, with a significantly greater proportion of the latter working in industry, and much fewer working in the community sector.

For each work type, most were working full-time hours (i.e. work over 32 hours per week), with the exception of those working in 'primary care' (Table 6). There is however, considerable variation across sectors, with the proportion working part-time lowest (11.5%) in marketing, and highest (54%) in primary care.

Table 6: Work sector by work extent

	Part-Time (row %)	Full-Time (row %)
Community	20.8 (203)	79.2 (582)
Hospital	23.2 (74)	76.8 (245)
Primary Care	53.9 (14)	46.1 (12)
Industry	11.8 (26)	88.2 (194)
Marketing	11.5 (12)	88.5 (40)
Academia	34.3 (24)	65.7 (46)
Other pharmacy	23.8 (24)	76.2 (77)
Non pharmacy	34.7 (51)	65.3 (96)

For those not working, 52.5% were retired, 43.8% selected the 'other' option, 2.5% were students and 1.1% reported being in non-paid work. For those who selected the 'other' option, responses such as: raising a family, unable to work due to visa

problems and ill health, were the most commonly cited ones.

3.3 Reasons for Movement Overseas

From a list of twenty-six options (informed by a previous qualitative stage), pharmacists were asked what reason was the most important influence on their decision to move overseas. Pharmacists were also asked to identify the second and third most important reasons.

The most important reason affecting their decision to move overseas was 'returning home' and for a 'better lifestyle', with equal proportions (15% each) of respondents selecting each reason (Table 7). Approximately 14% of respondents stated 'career opportunity' was their most important reason, and a further 13% said it was due to their partner's job.

Table 7: Reasons for moving overseas: Proportion giving it as most, second, and third most important reason

	1	2	3	4
Most important reason	Returning home 15.0% N=262	Better lifestyle 14.8% N=257	Career opportunity 13.9% N=242	Partner's job 13.2% N=229
Second most important reason	Better lifestyle 20.6% N=330	Career progression 8.4% N=134	Better weather 8.0% N=129	Better pay 7.2% N=116
Third most important reason	Better lifestyle 14.4% N=220	Better weather 10.4% N=160	Better pay 8.6% N=132	Prefer culture 6.8% N=104

Better lifestyle was listed as second and third most important reasons by 21% and 14% of respondents respectively. 'Better weather' and 'better pay' start to emerge as important reasons further down the ranking.

Importantly, the ranking and importance of these reasons is mediated by type of overseas pharmacist, such that GB-nationals and non-GB nationals vary, unsurprisingly, in relation to their main reasons for leaving Great Britain in the first place. The main reason given for movement overseas by GB nationals (excluding NI) was 'lifestyle' (19% of respondents), 'partner's job' (17%), 'career opportunity' (16%), and 'partner's nationality' (10%). The second and third most important reason given was 'lifestyle', followed by 'weather', 'pay', and 'overseas experience'.

Not surprisingly perhaps, non-GB nationals (including NI) gave 'returning home' (39% of respondents) as the most important reason, followed by 'career opportunity' (10%), 'other' (8%) and 'pay' / 'lifestyle (both with 6%). 'Lifestyle', 'returning home', 'pay', and 'career opportunity' emerge as popular second most important reasons, and while these factors also emerge as the third most important reason, 'prefer culture' and 'high cost of living in GB' start to emerge at this stage.

3.3.1 Individual Reasons

Taking each reason individually, respondents were asked whether they thought a particular reason was: (1) 'not important at all', (2) 'not very important', (3) 'no influence at all' (neutral), (4) 'important' or (5) 'very important'. For analysis these options were collapsed and a variable created with two options: 'not important' and 'important' (Table 8).

A high proportion of respondents felt that non-work related 'pull' factors, such as a 'better lifestyle' (87% of respondents), and 'better weather' (71% of respondents) were important reasons for leaving GB. Also, work related reasons, such as 'career opportunity' in the overseas destination, and 'dissatisfaction with pharmacy in GB' were important reasons encouraging departure for 68.5% and 62.5% respectively. So, while 'pull' factors emerge overall as the top reasons for leaving GB, 'dissatisfaction with pharmacy in the GB', emerges as one 'push' factor also influencing departure for a large proportion of respondents.

Table 8: Importance of individual reason for leaving

Reason Number		% stating it as an important reason	Number
13	Better lifestyle	86.8	1342
14	Better weather	70.9	975
1	Career opportunity	68.5	938
15	Prefer culture	63.2	756
5	Dissatisfaction with GB pharmacy	62.5	840
19	English speaking	61.5	832
2	Career progression	60.9	767
4	Better pay	57.5	759
18	Recognition of qualification	55.9	788
3	Challenging work	53.6	596
23	High cost of living in GB	44.4	583
21	Overseas experience	42.6	573
22	Travel	40.8	530
12	Partner's job	39.3	568
16	Returning home	34.8	515
11	Partner's nationality	27.0	377

10	Workload in GB	26.5	262
20	Travel base	21.1	264
25	No relatives in GB	20.0	273
9	Uncertainties with NHS in GB	16.8	201
7	Pharmacy not challenging in GB	15.5	177
24	Friends leaving	15.3	205
6	Dissatisfaction with PharmSoc	13.0	156
8	Problems with last job in GB	10.7	145
17	Family pharmacy/ business	10.1	144
26	Personal (e.g. relationship break-up)	9.1	124
27	Other	97.2	278

When analysing reasons individually by nationality some differences are noted between GB nationals and non-GB nationals. These are shown in table 9 below:

The main issue of interest here is that a higher proportion of the non-GB nationals said dissatisfaction with pharmacy in GB was an important reason (72% compared with 57.5% of GB nationals) for their migration.

Table 9. Importance of individual reason for leaving by NATIONALITY TYPE

NON-GB NATIONALS (include NI)		GB NATIONALS	
Returning home	82.3	Better lifestyle	89.6
Better lifestyle	81.3	Better weather	75.9
Career opportunity	73.7	English speaking destination	65.7
Dissatisfaction with pharmacy in GB	71.7	Career opportunity	65.4
Prefer culture	71.7	Prefer culture	59.0
Better pay	70.2	Dissatisfaction with pharmacy in GB	57.5
Career progression	69.9	Career progression	56.1
Recognition of qualification	64.9	Work more challenging	52.1
Better weather	60.7	Recognition of qualification	51.6

3.4 Future Intentions

This question investigated the future intentions of respondents (again informed by a previous qualitative stage). The structure of the question allowed respondents to select as many options as they wanted. Almost 54% of respondents have no intention of returning to GB and saw their move overseas as a permanent one. Just over 14% in total said nothing would encourage them to return to GB to work in pharmacy, whereas 23% said they would consider this as an option. See table 10 below.

From a workforce planning perspective it is interesting to note the statistical differences that emerge between the two main 'nationality types' (indicated by * in table 10). Perhaps worryingly, a large and much greater proportion (57%) of the GB nationals compared with the non-GB nationals working overseas stated they would stay abroad permanently. GB-nationals are also more likely than non-GB nationals to want to return to GB eventually (15% and 11% respectively). Almost 11% of the GB nationals would consider returning to GB but would not want to work in pharmacy practice, compared with just 4% of the non-GB nationals.

Table 10: Future Intentions

	% of total sample who said YES	No	GB nationals	Non GB nationals
Stay permanently *	53.8	1035	57.3	46.6
Depends on personal circumstances	38.0	731	37.4	39.2
Stay long term (2 years plus)	27.7	533	28.9	25.1
Consider return and work in PP	22.6	435	23.3	21.0
Nothing would encourage a return to GB and work in PP	14.3	275	16.3	10.0
Eventually want to return to GB *	13.8	266	15.4	10.6
Consider different country but not GB	11.2	216	11.0	11.5
Stay as base	10.8	208	10.0	12.6
Other *	10.9	209	12.5	7.9
Consider return BUT not work in PP*	8.6	166	10.7	4.3
Unsure	7.1	136	6.9	7.3
Stay short term (less than 2 years)	4.6	89	4.6	4.6

* significant at 5% level

3.5 Why remain on the Register?

This part of the analysis is based on the respondents who are of working age only (i.e. 92% of all respondents), since this group is likely to have the biggest impact on workforce planning and any considerations given to how overseas pharmacists might be persuaded to return to GB. Having knowledge about the reasons for remaining on the Register may be helpful in designing 'recruitment' strategies should they be required.

The main reasons given for remaining on the register were: firstly, to keep options open, just in case they needed to work in GB again at some point or to locum whilst on holiday (54% of respondents). Secondly, to receive journals (32%), and thirdly, to

keep updated on pharmacy issues for interest or education reasons (31%) – see table 11 for full list. Other reasons (given by 50 or more respondents) included:

- maintaining a link with RPSGB
- it is a legal requirement for registering or remaining registered in current destination
- being proud of achievement and membership
- worked hard for qualification
- it is easier/cheaper than re-registering at a later date
- sentimental reasons
- qualification recognised/respected worldwide – credibility/prestige
- personal professional status
- reciprocity of qualification
- career options in other countries

Table 11: Why remain on the GB Register

Reason Number	REASON WHY REMAINS ON REGISTER	N	%
1	Security; in case; can work in GB if needed	874	54.0
3	Journals	524	32.4
2	Keep updated on issues, education, interest	506	31.3
8	Maintain link/ ties; keep in touch	139	8.6
5	Legal requirement for current registered	112	6.9
11	Proud of achievement; membership; professional qualification	85	5.3
4	Worked hard for qualification	77	4.8
15	Easier/ cheaper to be registered than resit exams	68	4.2
7	Sentimental/ Nostalgia (first qualification, history)	64	4.0
10	Recognised/respected qualification; credibility; prestige	63	3.9
9	Professional status (letters after name)	57	3.5
6	Reciprocity/ international recognition of qualification	51	3.2
16	Career options (other countries)	51	3.2
14	Useful for work purposes; enhances credibility; cv	41	2.5
27	Maintain professional registration' qualification; certificate.	36	2.2
21	Unsure will remain on Register (especially as PJ available online)	28	1.7
30	Don't want to give it up.	19	1.2
32	POSITIVE re society and GB pharmacy	18	1.1
17	Am qualified person; consider self as practicing pharmacist (industry/ academia)	16	1.0
13	Loyalty/ Respect	14	0.9
28	Trained in GB.	14	0.9
31	Fee too high.	14	0.9
19	British; Roots; Origin	12	0.7
12	Fee paid by employer	10	0.6

25	NEGATIVE comments re society and GB pharmacy	10	0.6
26	Habit	10	0.6
20	Cheapest way to get Journals	9	0.6
24	Access to RPSGB services (library, dining etc)	9	0.6
18	My professional body	8	0.5
22	Industrial Pharmacist Group	8	0.5
23	Sense of belonging	6	0.4
29	Tax expense (fee).	3	0.2

3.6 Continuing Professional Development (CPD)

Questions on CPD were included because of the topical nature of CPD at the time of the survey. Anecdotal reports in the pharmacy press indicated that feelings ran high about the need for and the nature of CPD for pharmacists not currently practising in this country. Some reports even suggested that pharmacists might not renew their membership if CPD became compulsory or was not considered relevant to practice in their current setting. Several hypothetical closed questions (see table 12) were asked regarding participation in CPD and the linked issue about being on a 'non-practicing' Register. Perhaps contrary to popular belief the majority of overseas pharmacists (66%) would complete CPD to stay on an 'active' Register. Opinion about a non-practicing Register was more divided, however.

Table 12. CPD

Questions	YES	
Would complete CPD to stay on active Register	66.1%	N=1178
Would consider a non-practicing Register.	50.9%	N=892
Did not understand term CPD	2.8%	N=53

The closed questions evoked some comments and queries from respondents (as listed below):

- Concerns regarding CPD if remove self from the register and wants to return later. How easy it would be to return to the practising Register and what the CPD would entail
- Is CPD a requirement for overseas-qualified pharmacists?
- The need for recognition of CPD completed overseas by RPSGB
- Access to online CPD
- Unsure what CPD meant (n=53 – almost 3% of respondents)

3.7 When left GB

The years that have seen the highest outflow from GB are between the nineties and 2002 (when this survey was conducted). In fact, approximately 65% left GB during this time. The highest outflow for individual years is 2002 (n=125, 6.5% of all respondents) and 2001 (n=122, 6.4%).

Table 13: Decade left GB

Decade	Number	Percent
1960s	19	1.2
1970s	158	9.9
1980s	386	24.2
1990s	671	42.1
2000s	359	22.5

4. Summary and discussion

Overseas pharmacists are more likely to be male, and older, when compared to the Register as whole. Nationality is clearly relevant since 33% are actually overseas nationals, even though they qualified in GB. A large proportion of overseas pharmacists are working (81%), and most are working in some pharmacy related field (with community being the most common work type). While only 10% are working outside of pharmacy, this is more than three times the proportion working outside the profession on the Register as a whole (2.6%). GB-trained pharmacists domiciled overseas are also far more likely to working in industry compared to GB-based pharmacists. More respondents are working full-time than part-time, with the exception of primary care (albeit very small numbers).

Reasons given for migration are varied, including a mix of work and non-work related push/pull factors. Pull factors include, returning home, lifestyle, weather and career opportunities. An important push factor, relevant to workforce planning, is 'dissatisfaction with pharmacy in GB'. These reasons differed when the analysis was controlled by nationality. For non-GB nationals, returning home was the most important reason while lifestyle was the most important reason for GB nationals.

Over half of the respondents said they intended staying permanently overseas

(54%). Common reasons for staying on the register included, keeping options open, to receive the journals, and to keep updated on pharmacy issues. Two thirds of respondents said they would complete CPD to remain on the Register, whereas just over half said they would consider a non-practicing Register. Many had concerns regarding CPD, such as what would be involved in remaining or re-registering, and how easy this would be (for eg, would there be access to online CPD?).

Two key implications emerging so far from this preliminary analysis are worth drawing attention to: firstly, a relatively large proportion of respondents (a third) are overseas nationals who have returned home after qualifying in Great Britain. These pharmacists are unlikely to return to practice in GB, and as such will have little, if no influence, on GB labour supply. Workforce planners need to be cognisant of this. Secondly, two thirds of respondents reported dissatisfaction with pharmacy in GB as an important reason influencing their decision to move overseas. This may mean that strategies to attract them back to GB-based practice may need to focus on addressing these concerns.

Appendix 4: Pharmacy Workforce Census 2003 Questionnaire

Pharmacy Workforce Census - 2003

1. PERSONAL DETAILS: Please check that the registration number given below is correct.

If not please provide the correct one in the box provided:

1a. This registration number: _____ is correct. Please amend if incorrect:

2a. CURRENT WORK SITUATION: Indicate which of the following applies. (Tick one box).

- | | |
|---|---|
| a. Work entirely within pharmacy | <input type="checkbox"/> ₁ Go to Q3a |
| b. Work partly in pharmacy and partly outside of pharmacy | <input type="checkbox"/> ₂ Go to Q3a |
| c. Retired but still work in pharmacy in some capacity | <input type="checkbox"/> ₃ Go to Q3a |
| d. Not in active employment | <input type="checkbox"/> ₄ Go to Q2b |
| e. Work entirely outside of pharmacy | <input type="checkbox"/> ₅ Go to Q2c |

2b. If you are not working at present please indicate the reason why: (Tick one box).

- | | |
|---|---|
| a. On maternity leave or engaged in child rearing | <input type="checkbox"/> ₁ Go to Q2c |
| b. Not working due to ill health | <input type="checkbox"/> ₂ Go to Q2c |
| c. Retired and not working | <input type="checkbox"/> ₃ Go to Q2c |
| d. In full-time or part-time education | <input type="checkbox"/> ₄ Go to Q2c |
| e. Travelling | <input type="checkbox"/> ₅ Go to Q2c |
| f. Not working due to other reason | <input type="checkbox"/> ₆ Go to Q2c |

2c. If you are not currently working in any of the sectors listed in 3a below, do you intend to return to work as a practising pharmacist within the next 12 months?

- ₁ Yes (Go to Q4)
₂ No (Go to Q4)

3a. AREA OF PRACTICE: Within the relevant sector(s) please tick the box that most closely corresponds to the job(s) you hold in that sector. Please also write in the column marked 'hours' the usual number of hours per week that you work. (Tick as many as required).

A. HOSPITAL/SECONDARY CARE:

	Tick	Hours:
Grade A-C	<input type="checkbox"/> ₁	
Grade D-E	<input type="checkbox"/> ₂	
Grade F and above	<input type="checkbox"/> ₃	
Locum	<input type="checkbox"/> ₄	
Other (please specify)	<input type="checkbox"/> ₅	

C. OTHER PHARMACY:

	Tick	Hours:
Industry	<input type="checkbox"/> ₁₃	
Wholesale	<input type="checkbox"/> ₁₄	
Academia	<input type="checkbox"/> ₁₅	
National pharmacy body	<input type="checkbox"/> ₁₆	
NHS Strategic Management and support	<input type="checkbox"/> ₁₇	
Other (please specify)	<input type="checkbox"/> ₁₈	

B. COMMUNITY/RETAIL:

	Tick	Hours:
Proprietor/Owner	<input type="checkbox"/> ₆	
Manager	<input type="checkbox"/> ₇	
Relief pharmacist	<input type="checkbox"/> ₈	
Second pharmacist	<input type="checkbox"/> ₉	
Locum	<input type="checkbox"/> ₁₀	
Non-store based pharmacist	<input type="checkbox"/> ₁₁	
Other (please specify)	<input type="checkbox"/> ₁₂	

D. PRIMARY CARE (PC):

	Tick	Hours:
Prim. Care org. (eg, PCT, LHCC)	<input type="checkbox"/> ₁₉	
Practice based	<input type="checkbox"/> ₂₀	
Other (please specify)	<input type="checkbox"/> ₂₁	

3b. LOCATION OF PRACTICE: To help ascertain where workforce shortages are located would you please provide the post-code of your place of work. If you work in more than one location please provide, if possible, the post-code for all locations.

- A. Hospital: _____ C. Other Pharmacy: _____
B. Community: _____ D. Primary Care: _____
E. I'm a locum, it varies.

4. Do you have any plans to work overseas, in any of the areas of practice listed in question 3a, either temporarily or permanently, in the future?

- ₁ Yes, temporarily
₂ Yes, permanently
₃ No plans at present
₄ Highly unlikely

5. Which of the following statements reflects your current view about practising pharmacy (in any of the sectors listed in question 3a)?

- ₁ Very strong desire to practise pharmacy
₂ Strong desire to practise pharmacy
₃ Lukewarm desire to practise pharmacy
₄ Weak desire to practise pharmacy
₅ Regret becoming a pharmacist
₆ Not a practising pharmacist at present

6. CONTINUING EDUCATION (CE): What types of CE activity have you undertaken in the last 12 months (tick as many as apply):

- Distance learning packages
 Videos or CAL packages
 Workshops
 Seminars or conferences
 Other (please specify)
 None

7. COMPUTER AND INTERNET ACCESS: Do you have access to these at home or work? (Tick as many as apply):

- PC/Mac at home
 PC/Mac at work
 Internet at home
 Internet at work
 No access to either anywhere

Thank you for taking the time to complete this census. All of the data collected in this census form will be held in compliance with the Data Protection Act 1998, and will be processed in accordance with the rights of the data subjects under this Act.

Appendix 5: Demographic data on registered pharmacists, by country of registered address.

Table 1: Age Group of registrants in England, by gender

	Male	Female	All
29 yrs and under	14.9	23.2	19.2
30 to 39 years	20.7	31.7	26.5
40 to 49 years	22.4	23.6	23.0
50 to 59 years	16.5	11.6	13.9
60 to 64 years	6.5	3.3	4.9
65 to 69 years	7.2	2.8	4.9
70 to 79 years	6.9	2.9	4.8
80 years and above	4.7	0.9	2.7
(n)	16,119 (48%)	17,667 (52%)	33,786

Table 2: Age Group of registrants in Scotland, by gender

	Male	Female	All
29 yrs and under	17.4	25.3	22.4
30 to 39 years	17.5	30.1	25.5
40 to 49 years	19.8	22.7	21.6
50 to 59 years	18.1	11.6	14.0
60 to 64 years	7.7	3.6	5.1
65 to 69 years	7.4	3.5	4.9
70 to 79 years	8.0	2.1	4.3
80 years and above	4.1	1.0	2.2
(n)	1533 (37%)	2628 (63%)	4161

Table 3: Age Group of registrants in Wales, by gender

	Male	Female	All
29 yrs and under	13.4	24.0	18.7
30 to 39 years	18.0	26.3	22.2
40 to 49 years	22.4	23.1	22.8
50 to 59 years	13.6	12.9	13.3
60 to 64 years	8.6	4.1	6.3
65 to 69 years	8.5	4.1	6.3
70 to 79 years	8.6	4.8	6.7
80 years and above	6.9	0.7	3.8
(n)	1096 (50%)	1114 (50%)	2210