

**Pharmacy Workforce Census 2005:  
Main findings**

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## **Foreword**

The Society has undertaken two workforce censuses - the first in 2002 and a further one in 2003. Together, these studies generated a huge amount of data that have been used to inform workforce planning and policy development in our profession. As a result of this initial investment, the Society has one of the most comprehensive workforce data sets in healthcare.

The Society has been able to construct a comprehensive picture of who is working, where and for how many hours in each sector of practice – this information has provided the basis for a mature workforce planning model. It has also identified interesting and perhaps worrying trends in the data such as potentially falling participation rates, movements between sectors and an increase in portfolio working.

In order to confirm the emerging trends, participation rates and working patterns seen in 2003 the Society commissioned a third census in August 2005. The findings of the third census and an analysis of emerging trends between 2002 and 2005 are contained in this report.

I would like to take this opportunity to thank all 32,180 pharmacists for taking time out to complete and return the forms. This census has achieved the highest response rate to date for which we owe you a debt of gratitude.

This unique national survey allows us to develop further the detailed picture of our workforce which is proving invaluable to the work of Council and the staff in areas as diverse as education policy and retention fee reviews, as well as in workforce planning. We sincerely hope that you too find the information contained in this report both interesting and useful.

Dr Sue Ambler  
Head of Research and Development, RPSGB

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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 2003,<sup>1</sup> and several papers focussing on specific groups of the workforce were published throughout the following year.<sup>2-8</sup>

A second detailed census was commissioned in 2003,<sup>9</sup> so along with analysis of registration data from the Register in 2004 the profession now has regular updates on numbers of pharmacists in work and trends in employment patterns.<sup>10</sup> For a full list of presentations and publications relating to the 2003 Census and 2004 and 2005 Register analyses, see Appendix 1.

## 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 registration database at two points in time: 6<sup>th</sup> August 2004 and the 5<sup>th</sup> August 2005 when details of the registered pharmacists were downloaded. This means that the basic demographic profile of registered pharmacists can be described and changes over time noted.

The second dataset consists of empirical results from the third 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 work. Included this year were questions about job satisfaction and future intentions regarding work patterns.

A short postal questionnaire was sent out to eligible pharmacists in August 2005. This was accompanied by an explanatory letter from the RPSGB. A reminder was sent in December 2005 to improve response rate.

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 registration 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 2005 survey

All pharmacists with a registered status on the registration 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 and pharmacists with a registered address outside England, Scotland or Wales were excluded.

Out of 46,396 registered pharmacists in 2005 this gave a sample total of 42,010 pharmacists who were mailed the 2005 questionnaire (see Table 1 for details of inclusion and exclusion criteria).

<b>Table 1: Description of the pharmacists included in the 2005 Workforce survey</b>	
<b>Inclusion/exclusion criteria</b>	<b>Eligible number</b>
Total number of pharmacists at 2005 extract date	46,396
Excluded: Overseas on Register at the 2005 extract date	4,386
Total number surveyed for the 2005 Census	42,010

## **2.2 The questionnaire**

The 2005 questionnaire (Appendix 3) was adapted from the 2003 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). Gender, ethnic group, School of Pharmacy attended, and date of birth were not collected again, since these data are held on the registration database. New questions covered: extent of locum working; type of pharmacy worked in; satisfaction with current pharmacy employment and plans to change work life.

Satisfaction with current employment was measured using an amended version of the Warr-Cook-Wall job satisfaction scale, a structured form that asks a series of Likert-scale questions aimed at measuring different dimensions of job satisfaction.<sup>11</sup> An additional measurement scale was used to measure the likelihood of pharmacists making significant changes to their work life in the next two years. Both scales have been used to measure GP satisfaction and work intentions.<sup>12,13</sup> The scales were adapted for use with pharmacists in a previous study and were found to be both valid and reliable.<sup>14</sup>

## **2.3 The response rate**

The response rate to the 2005 Census was 76.6%, 2% higher than the response rate in the most recent census in 2003. 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 39 years of age, were far less likely to return their questionnaire than older pharmacists; women had a higher response rate than men (79.0% and 73.7% respectively); and pharmacists in Scotland and Wales had a higher response rate than pharmacists with registered addresses in England (79.3%, 81.0% and 76.0% respectively). The response to the 2003 Workforce Census was very similar to this pattern, with non-respondents then as now more likely to be male, younger and English.

## **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 2004 and 2005 is given first. The net change in the size of the register and details of those who are new in 2005 and those who left the register between August 2004 and August 2005 are reported as part of this overall comparison.

After that the findings from the 2005 workforce survey itself are reported. A basic profile of respondents to the survey, their labour market activity, the work patterns of the pharmacists, satisfaction with current employment in pharmacy and plans to change work life are each described. Findings presented throughout the report are based on all home pharmacists on the Register or all respondents to the 2005 census. Tables showing basic demographic characteristics of pharmacists broken down by each of the three countries are provided in Appendix 4.

### 3. Analysis of Register Datasets

#### 3.1 Growth and demographic change between 2004 and 2005

Table 2 briefly compares Register membership from 2002 to 2005. On the 6<sup>th</sup> August 2004 there were 47,578 registered pharmacists on the Pharmaceutical Register, while by the 5<sup>th</sup> August 2005 the number had fallen slightly, and for the first time, to 46,396.<sup>10</sup> In 2005, important changes were made to the Register, involving the introduction of a two-part Register, distinguishing between practising and non-practising pharmacists. Eighty-six percent (n=40,089) of the 2005 Register is made up of pharmacists on the practising Register. Of the 14% (n=6,307) who are on the non-practising Register, the majority are currently either economically inactive or employed outside pharmacy. At the time of the last census in 2003 only a small proportion (16 percent, n=1,014) of these non-practising pharmacists were recorded as being actively employed and a third (n=334) of these were working outside pharmacy.

	<b>2002</b>	<b>2003</b>	<b>2004</b>	<b>2005</b>
Male	21,912	22,152	22,396	21,193
Female	23,355	24,233	25,182	25,203
Total	45,267	46,385	47,578	46,396

#### **KEY FINDING**

**86% of the Pharmaceutical Register is made up of pharmacists who are on the practising Register. Of the 14% on the non-practising Register, only 16% were recorded as being in active employment at the time of the last census.**

Just over three and a half thousand pharmacists (3,594) who were on the Register in 2004 were not on it in 2005, while over 2,400 new entries (2,412) were recorded by the 2005 census date. The net decrease in the number of pharmacists on this year's Pharmaceutical Register (1,182) represents a decrease of 2.4% over the 12 months between 6<sup>th</sup> August 2004 and 5<sup>th</sup> August 2005. The Register has grown by around 2% annually since 1991,<sup>15</sup> so this decrease is in contrast to the previous upward trend.

The fall in the overall size of the Register is not attributed to fewer pharmacists entering the profession since the number of pharmacists joining the register in 2005 has increased in similar proportions to previous years (around six percent). The intake in 2005 is in keeping with that of recent years in terms of both overall numbers and also the respective numbers of male and female entrants.<sup>10</sup> The drop is largely attributed, instead, to the introduction of the two-part register. For a full discussion of these data see Hassell and Eden (2006).<sup>10</sup>

#### **KEY FINDING**

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

In 2005 9.5% of all registered pharmacists had a registered address outside England, Scotland or Wales ('overseas' in Table 3). This is marginally lower than the proportion (10.7%) classed as 'overseas' in 2004. The proportion based in England (76.3%) has gone up by 1.2% compared with last year. The proportion of pharmacists based in Scotland has risen by 0.1%, while the proportion based in Wales has fallen by the same amount, while the Scotland and Wales figures remain unchanged. The fall in the relative size of the overseas workforce is likely to be because a large proportion of those who left the register between 2004 and 2005 were pharmacists domiciled outside England, Scotland and Wales.

	<b>2004 (%)</b>	<b>2005 (%)</b>
England	75.1	76.3
Scotland	9.3	9.4
Wales	4.9	4.8
Overseas	10.7	9.5
(n)	47,578	46,396

In 2004, where gender was known, 52.9% of all registered pharmacists were female (Table 4). In 2005, with no missing registration data, 54.3% 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 percentage (35%) of the pharmacists with registered addresses there (see Appendix 4).

	<b>2004 (%)</b>	<b>2005 (%)</b>
Male	47.1	45.7
Female	52.9	54.3
(n)	47,578	46,396

As on last year's Register, the majority of pharmacists (26.7%) in 2005 are in the 30 and 39 age group (see Table 5). The mean age of the home membership is 43 years. While the 30 to 39 age group accounts for the largest proportion of women (30.6%), the 40 to 49 age group accounts for the largest proportion of men (22.4%).

	<b>2004 (%)</b>	<b>2005 (%)</b>	<b>% difference</b>	<b>Male (%)</b>	<b>Female (%)</b>
29 yrs and under	19.4	20.3	+0.9	15.5	24.2
30 to 39 years	26.2	26.7	+0.5	22.0	30.6
40 to 49 years	22.9	23.3	+0.4	22.4	24.1
50 to 59 years	14.2	15.0	+0.8	17.6	12.9
60 to 64 years	4.8	4.5	-0.3	6.4	2.9
65 to 69 years	5.0	4.1	-0.9	6.3	2.3
70 and above	7.6	6.1	-1.5	9.9	3.0
Total (n)	47,242*	45,344*			

\*some missing data

Women pharmacists are thus younger than the men, with an average age of 40 and 47 years respectively. While just over a third of men (37.5%) are 39 years or younger, over half (54.8%) of female registrants are under 39 years of age. Conversely, proportionately more men are over the state pension age (SPA) compared with women, 16.2% and 8.2% respectively. The proportion of pharmacists over state pension age has fallen slightly since last year, when 16.4% of male registrants and 8.5% 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 0.9% (Table 5). Increasing student numbers may explain the increase in this age group. There was also an increase of 0.8% in the 50 to 59 age groups.

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 4).

### 3.2 New entries on the Register in 2005 compared with 2004

Comparison of the 2004 and 2005 Registers identified 2,412 new entries, nearly 300 more new entrants than in 2004. Not surprisingly the 2,412 new entries in 2005 are predominantly younger female pharmacists: 65.3% are female, and 83.7% are under 29 years of age (see Table 6 and Table 7 below). New entrants have an average age of 26.8 years; the males are around a year older than the females (27.7 and 26.4 respectively).

	<b>Frequency</b>	<b>Col%</b>
Male	837	34.7
Female	1575	65.3
(n)	2412	

	<b>Male</b>	<b>Female</b>	<b>All</b>
29 yrs and under	78.8	83.7	82.0
30 to 39 years	13.9	12.4	12.9
40 years and over	3.7	3.9	5.1
(n)	830	1569	2339*

*\*NB. Date of birth was unknown for 73 new entrants*

Over 75% have a registered address in England, with 9.2% registered overseas. The proportion of newly registered pharmacists with an overseas address has risen by 3.2% since 2003. It is possible that some of this increase could be due to younger pharmacists taking a year out and travelling abroad. It could also be attributable in part to an increase in the number of European pharmacists applying and obtaining registration with an overseas address. The proportions of new entrants in each of the four locations (England, Scotland, Wales and overseas) mirror the location of registrants as a whole.

## KEY FINDING

Over 65% of the new entries onto the Register between 2004 and 2005 are female

### 3.3 Exits from the Register in 2005 compared with 2004

There were 3,594 entries on the Register database in 2004 who were not on the Register database in 2005. Over half (55.5%) of these are male pharmacists (Table 8). There are a number of reasons why a pharmacist might leave the Register, including death, removal by the statutory committee, non-payment of fees or a change in personal circumstances (i.e. a move abroad, family responsibilities). Alternatively, some pharmacists may decide they no longer wish to pursue a career in pharmacy.

	<b>Male</b>	<b>Female</b>	<b>All</b>
29 yrs and under	6.1	16.7	10.8
30 to 39 years	9.4	19.9	14.1
40 to 49 years	7.7	10.9	9.1
50 to 59 years	7.9	8.3	8.1
60 to 64 years	7.2	7.8	7.4
65 to 69 years	15.1	12.1	13.8
70 year and above	46.7	24.1	36.7
(n)	1855 (56%)	1490 (44%)	3345

*\*NB. Date of birth was unknown for 249 leavers*

The average age of the leavers was 58.9 years (64.7 and 52.3 years for men and women respectively), with 66% over the age of 50 years. Among the men the majority (61.8%) of leavers have reached or are over retirement age, while 36.6% of the women who have left the Register are under 39 years.

When viewed in overall percentage terms, men over retirement age account for 34.3% of all leavers, while women over retirement age account for 19.6%. Sixteen percent of leavers are women under 39 years (see Table 9).

	<b>Male</b>	<b>Female</b>	<b>Total (%)</b>
29 yrs and under	3.4	7.4	10.8
30 to 39 years	5.2	8.9	14.1
40 to 49 years	4.2	4.9	9.1
50 to 59 years	4.4	3.7	8.1
60 to 64 years	4.0	3.4	7.4
65 to 69 years	8.4	5.4	13.8
70 years and above	25.9	10.8	36.7
Total (n)	1855	1490	3345

Pharmacists over state pensionable age account for over half of the total population of leavers (53.9%) where age is known. Men make up 63.5% of those leaving who are over state pensionable age (1,106 out of 1,803). Interestingly, more than one-third of all leavers (34.7%) had registered addresses overseas; however the majority of those leaving the Register who were under state pensionable age were registered as overseas pharmacists (60.3%).

At the time of the 2003 census, 14 per cent of the leavers (n=516) were employed in a pharmacy-related occupation. Like the non-practising group of pharmacists most of the leavers who were working at the time of the 2003 census worked in the community pharmacy sector (73%) and 63% of these worked as community locums. Over half (54%) worked part-time (less than 33 hours per week) with 30% working under 10 hours a week.

**KEY FINDING**

**Men and women over retirement age represented 54% of those who left the Register between 2004 and 2005, with women under 39 years representing 16%.**

## 4. Findings from the Pharmacy Workforce Census 2005

Findings from the 2005 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.

### 4.1 Demographic characteristics of respondents

The response rate to the 2005 Census was 76.6%, which represents an increase of 2% on the response rate reported in the most recent census in 2003. The mean age of census respondents was 45 years (SD± 14.96, range: 21 to 99 years). Males, and pharmacists aged between 22 to 39 years, are slightly under-represented among respondents to the 2005 census (see Table 10 below), so some response bias is possible in this year's survey findings.

	<b>Register</b>	<b>Census</b>	<b>% difference</b>
29 yrs and under	20.3	17.3	-3.0
30 to 39 years	26.7	24.8	-1.9
40 to 49 years	23.3	23.9	+ 0.6
50 to 59 years	15.0	16.6	+ 1.6
60 to 64 years	4.5	5.2	+ 0.7
65 to 69 years	4.1	4.9	+ 0.8
70 to 79 years	4.5	5.4	+ 0.9
80 years and above	1.6	1.9	+ 0.3
Male	45.7	43.5	-2.2
Female	54.3	56.5	+2.2
Total (n)	45,344*	31,551*	

\* some missing data

### 4.2 Economic activity

The following section reports findings from the census in relation to the economic activity of respondents. This includes the current work status of respondents, reasons for economic inactivity, intention to return to practice (where applicable) and practising or non-practising status.

#### 4.2.1 Economic Activity of 2005 census respondents

In the 2003 Census 78.8% of home respondents reported working within pharmacy to some extent, 18.6% were not in active employment, and 2.6% worked outside the pharmacy profession altogether (see Table 11 below). In 2005, the proportion of pharmacists working in the profession has increased slightly (81.2%), while the proportion not employed at all has fallen by 3.9% to 14.7%. The number of pharmacists working entirely outside of pharmacy has risen 1.5% to 4.1%. Overall, 85.3% of census respondents were in active employment, whether in or outside pharmacy, at the time of the census.

<b>Table 11: Economic activity of 2003 and 2005 respondents</b>		
	<b>2003 data (%)</b>	<b>2005 data (%)</b>
Work in pharmacy	25050 (78.8)	26026 (81.2)
Not in active employment	5914 (18.6)	4722 (14.7)
Work entirely outside pharmacy	830 (2.6)	1318 (4.1)
Total (n)	31794*	32066*

*\*some missing data*

The mean age of pharmacists who were currently actively employed within pharmacy was 42 years (SD±12.36, range: 21 to 96 years), compared with 61 years (SD±17.82, range: 22 to 99 years) for pharmacists not in active employment and 46 years (SD±11.23, range 22 to 91 years) for pharmacists working entirely outside pharmacy.

#### KEY FINDING

**There has been a slight increase in the proportion of registered pharmacists who are actively employed in a pharmacy-related occupation since the last census. This may be due to the recent introduction of the two-part register, which differentiates between practising and non-practising pharmacists.**

#### 4.2.2 Economic inactivity and intention to return to practice

As in 2003, the majority (68.1%) of those not actively employed are retired. This represents a decrease of 8.1% since 2003. This is likely to be due to the introduction of the two-part register, which resulted in a proportion of older pharmacists leaving the register. This year there has been a 4.9% increase in the proportion of respondents who were on maternity leave or looking after family (see Table 12).

<b>Table 12: Why not working for those economically inactive</b>		
	<b>2003 data (%)</b>	<b>2005 data (%)</b>
Maternity leave/looking after family	735 (12.5)	811 (17.4)
Ill health	265 (4.5)	233 (5.0)
Retired	4481 (76.2)	3179 (68.1)
FT or PT education	76 (1.3)	89 (1.9)
Travelling	85 (1.4)	91 (1.9)
Other reason	232 (3.9)	264 (5.7)
Total (n)	5874	4667*

*\*some missing data*

The data in Table 13 below suggest that a greater proportion (63.1%) of pharmacists in 2005 (excluding the retired pharmacists) intend to return to practice compared with pharmacists at the same point in 2003 (60%).

	<b>2003 data (%)</b>	<b>2005 data (%)</b>
Yes	769 (60)	899 (63.1)
No	506 (40)	525 (36.9)
Total (n)	1275*	1424*

*\*NB Retired pharmacists removed to enable comparison*

#### **KEY FINDING**

**A greater proportion of pharmacists who are currently not in active employment are considering returning to practice than in the 2003 Census**

### **4.2.3 Practising status**

In 2005 changes were made to the Register, leading to the formation of a two-part Register, with a practising and non-practising section. At the time of the census in August 2005, 14% of registered pharmacists were on the non-practising Register. More than half (54.4%) of pharmacists on the non-practising register were male and more than 60% were aged over 60 years. See Table 14 for details.

Of the 42,010 pharmacists eligible to take part in the 2005 Census, 11.1% (n=4,676) were on the non-practising Register. Thus a smaller proportion of the 'home' register is non-practising compared to the register as a whole. The mean age of eligible non-practising pharmacists was 64 years (SD±15.61, range: 25 to 99 years).

In terms of pharmacists who responded to the census, 87.6% were on the practising Register and 12.4% were on the non-practising Register. The mean age of non-practising register respondents was slightly higher (66 years, SD±4.39, range: 25 to 99 years) than that of the eligible non-register population. The proportion of non-practising pharmacists aged 60 or over was higher among census respondents than in both the eligible Register and the full Register (including pharmacists with an overseas address). The response rate for pharmacists on the non-practising register was higher than that for the practising register (85.1% vs. 75.5%), suggesting that non-practising pharmacists are over-represented among census respondents. Among the respondents, males and older pharmacists are slightly over-represented among the non-practising pharmacists (see Table 14).

	<b>All pharmacists (%)</b>	<b>Eligible for census (%)</b>	<b>Census Respondents (%)</b>
Aged 60 years and over	60.0	70.7	75.4
Male	54.4	56.1	56.8
Female	43.6	43.9	43.2
Total (n)	6,307	4,676	3,977

Respondents' registration status was cross-tabulated with their self-reported work situation. The results, shown in Table 15, indicate that the majority (92.3%) of respondents on the practising register were currently working as a pharmacist. A high proportion (87.3%) of respondents on the non-practising register were not currently in active employment at the time of the census. Thirty-four individuals on the non-practising register reported working as a pharmacist at the time of census.

One possible explanation for this is that these pharmacists may have rejoined the practising register in the period after the census data was downloaded and therefore their registration status was incorrect at the time of analysis.

<b>Work status at time of census</b>	<b>Practising Register n (%)</b>	<b>Non-Practising Register n (%)</b>
Working as a pharmacist	25992 (92.3)	34 (0.9)
Not in active employment	1300 (4.6)	3422 (87.3)
Working outside pharmacy	856 (3.0)	462 (11.8)
Total (n)	28148*	3918*

*\*some missing values*

### **4.3 Patterns of work**

Only respondents who indicated that they were currently working in pharmacy provided information on their working patterns. In this section therefore, subgroup analysis compares the population of interest with all pharmacists actively employed within pharmacy, unless otherwise stated.

#### **4.3.1 Employment status**

Respondents who were actively employed in pharmacy were asked to report whether they were employed or self-employed. More than two-thirds of respondents (67.5%) reported that they were an employee. As shown in Table 16, more than one in five actively employed pharmacists (21.6%) was a self-employed locum. Nine percent of pharmacists were self-employed pharmacy owners.

	<b>n (%)</b>
An employee	16887 (67.5)
Self-employed locum	5407 (21.6)
Self-employed pharmacy owner	2363 (9.4)
Self-employed consultant	222 (0.9)
Other self-employed	147 (0.6)
Total	25026*

*\*some missing values*

#### **4.3.2 Sector of practice**

Respondents were given the opportunity to record up to four jobs, and the hours worked in each one. For the purposes of this census, the 'other' sector category includes pharmacy and non-pharmacy related posts which fall outside the five main categories. As can be seen in Table 17 below, community pharmacy still accounts for the employment of the largest proportion of pharmacists, with 70.1% of those actively employed within the pharmacy profession working in the community sector. However, since 2003 the proportion working in community pharmacy has fallen by just under 2%. The proportion of pharmacists working in community fell by a similar percentage figure in 2003, suggesting a fairly consistent trend, which is worthy of

note. Since 2003 the primary care, hospital, academic and 'other' sectors showed small increases in numbers employed.

	<b>2003 data (%)</b>	<b>2005 data (%)</b>	<b>% change</b>
Community	72.0	70.1	-1.9
Hospital	21.5	21.7	+0.2
Primary Care	8.0	8.2	+0.2
Industry	3.9	3.5	-0.4
Academia	2.2	2.4	+0.2
Other	3.8	5.3	+1.5
Total (n)	25050	26026	

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

The age and gender of pharmacists working in each sector was analysed. Pharmacists who worked in one sector only were included in the analysis. The results indicate that a higher proportion of young pharmacists work in the hospital sector, with almost a third (29.9%) of hospital pharmacists in the under 29 age group (See Table 18). The proportion of younger pharmacists in primary care, industry, academia and the 'other' sector is small (<10%), suggesting that fewer pharmacists start their careers in these sectors. The high proportion of pharmacists in their 30s and 40s in the primary care sector suggests that this is a sector which pharmacists move into after gaining experience elsewhere. Male pharmacists are under-represented in the hospital and primary care sectors (23.7% vs. 21.3% respectively), when compared with all actively employed pharmacists.

Pharmacists working in the hospital sector were on average younger (37 years; range: 22 to 71) than those in community (43 years; range 21 to 96), primary care (41 years, range: 23 to 76), industry (44 years, range: 23 to 96), academia (43 years: 23 to 88) and 'other' sectors (45 years range: 22 to 84 years). This is unsurprising given that 60.9% of pharmacists in the hospital sector are aged 39 years or under.

	<b>Community</b>	<b>Hospital</b>	<b>Primary care</b>	<b>Industry</b>	<b>Academia</b>	<b>Other</b>	<b>All†</b>
29 years & under	19.1	29.9	9.1	5.4	5.5	6.0	20.1
30 to 39 years	24.0	31.0	41.1	31.3	24.1	23.5	26.6
40 to 49 years	26.0	22.4	34.2	33.2	29.5	33.3	26.4
50 to 59 years	18.8	14.7	13.5	22.9	25.5	23.5	17.9
60 to 64 years	5.5	1.6	1.3	3.4	8.6	7.8	4.4
65 to 69 years	3.7	0.5	0.4	2.3	5.0	3.6	2.7
70 years & above	2.8	0.0	0.4	1.4	1.8	2.3	2.0
Male	48.6	23.7	21.3	55.0	42.4	44.9	42.1
Female	51.4	76.3	78.7	45.0	57.6	55.1	57.9
Total (n)	15,462	4,578	978	734	220	562	26,026*

\* some missing values

**KEY FINDING**

**The proportion of employed pharmacists working in the community sector has decreased by 2% since last year and continues a trend first noted in the 2003 Census.**

**4.3.3 Number of jobs held**

The proportion of home pharmacists actively employed in pharmacy who held more than one job increased by 6.6% in 2005, with 17% of respondents holding more than one job, compared with 10.4% in 2003. Women were more likely than men to have two or more jobs (Table 19), although the proportion of pharmacists holding more than one job has risen in both genders since the last census.

<b>Table 19: Number of jobs, by (i) census year and (ii) gender</b>				
	<b>Census Year</b>		<b>Gender (2005)</b>	
	<b>2003</b>	<b>2005</b>	<b>Male</b>	<b>Female</b>
One job only	89.6%	83.0%	83.3%	82.8%
Two or more jobs	10.4%	17.0%	16.7%	17.2%
Total (n)	25,186	25,542*	10,729	14,813

*\*some missing values*

The proportion of working pharmacists with more than one job varies by sector of practice (see Table 20), with those working in the academic, primary care and 'other' sectors far more likely to have two or more jobs than colleagues working in community, hospital or industry. Although the figure for primary care represents a reduction of 4.3% 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. The proportion of pharmacists with two or more jobs in the community sector increased by 8.4% between 2003 and 2005. The proportion of pharmacists holding two or more jobs has also risen in the industry, academia and 'other' sectors since the last census.

<b>Table 20: Number of jobs held, by sector</b>		
	<b>Percentage holding two or more jobs</b>	
	<b>Census year 2003 (%)</b>	<b>Census year 2005 (%)</b>
Community	12.2	20.6
Hospital	19.9	18.9
Primary Care	60.5	56.2
Industry	16.5	23.5
Academia	63.3	76.1
Other	45.8	68.7

**KEY FINDING**

**The proportion of pharmacists who hold more than one job has increased by 6.6% in 2005, with the increase cutting across the genders. The number holding two or more jobs in the community sector has also risen by 8.4% since the last census.**

#### 4.3.4 Multi-sector working

More than 1 in 10 (11.5%) of actively employed pharmacists (n=2,943) work in more than one sector. The majority (92.3%) of multi-sector workers reported working within two sectors. Those pharmacists actively employed in three sectors accounted for 7.6% (n=225) of actively employed pharmacists and only 3 pharmacists (0.1%) reported working in four sectors. Female pharmacists were more likely than men (11.7% vs. 10.2%) to work in two or more sectors.

Almost a third of pharmacists who worked in two or more sectors (29.3%) combined work in community pharmacy with work in other sectors (for example, industry or academia). A slightly smaller percentage of pharmacists combined work in community pharmacy with primary care (27.0%) and community pharmacy with work in the hospital sector (22.4%).

#### KEY FINDING

**More than one in ten pharmacists (11.5%) work in more than one sector of pharmacy.**

#### 4.3.5 Mobility across sectors

Having data over several years allows some exploration of mobility across the main employment sectors in pharmacy (Table 21). Pharmacists who responded to the 2003 survey and reported having one job only were selected to examine what sector they worked in at the time of the 2005 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, 98.1% of respondents who reported working in the community pharmacy sector in 2003 were still working in this sector in 2005. Similarly, 93.0% of pharmacists working in the hospital sector in 2003 were still working in the NHS in 2005. However, this represents a slight increase in mobility since the last census, when 96.2% of hospital pharmacists were in the same sector.

The greatest mobility is in the 'other' sector, with almost a third of pharmacists (31.5%) working in this sector moving elsewhere, predominantly to industry and primary care.

In the primary care sector mobility has fallen since the 2003 census, when approximately 16% of pharmacists had moved out of this sector.<sup>9</sup> This suggests growing stability within the last two years in the primary care sector.<sup>16</sup>

**Table 21: Pharmacists in 2003, showing what sector they worked in at the time of the 2005 survey (row%)**

Sector job held in 2003	Sector job held in 2005					
	Community	Hospital	Primary Care	Industry	Academia	Other
Community	98.1	1.0	0.4	0.2	0.0	0.3
Hospital	2.2	93.0	2.7	0.4	0.1	1.5
Primary Care	2.3	2.1	90.6	0.4	0.2	4.4
Industry	2.0	1.0	0.8	93.3	0.6	2.2
Academia	0.0	1.1	0.0	2.2	91.3	5.4
Other	2.6	3.9	5.7	7.5	1.8	78.5

**KEY FINDING**

**Mobility across sectors of practice appears low overall. Mobility has fallen in the Primary care sector since 2003, suggesting a growing stability in this sector.**

**4.3.6 Number of posts**

When jobs are used as the unit of analysis, instead of people (see Table 22), the proportion of jobs in the main sectors has changed very little since the last census. The proportion of jobs in community pharmacy has fallen by less than 1%, while the proportion of jobs in other sectors (including industry and academia) has risen by a similar proportion. The proportion of jobs in the primary care and hospital sectors has remained stable.

<b>Table 22: Type of post by sector</b>			
	<b>Proportion of all posts: 2003 data (%)</b>	<b>Proportion of all posts: 2005 data (%)</b>	<b>% Difference</b>
<b>COMMUNITY (posts)</b>			
Owner	10.5	9.0	-1.5
Manager	17.8	17.2	-0.6
Relief	6.1	5.6	-0.5
Second	5.3	5.2	-0.1
Locum	22.4	24.2	+1.8
Non-store	1.4	1.2	-0.2
Other	1.6	1.5	-0.1
<i>Total</i>	<b>65.0</b>	<b>64.4</b>	<b>-0.6</b>
<b>HOSPITAL (posts)</b> <i>Total</i>	<b>18.6</b>	<b>18.6</b>	-
<b>PRIMARY CARE (posts)</b> <i>Total</i>	<b>7.1</b>	<b>7.1</b>	-
<b>OTHER SECTOR (posts)</b>			
Industry	3.8	3.0	-0.8
Academia	2.2	2.1	-0.1
Other	3.3	4.8	+1.5
<i>Total</i>	<b>9.3</b>	<b>9.9</b>	<b>+0.6</b>
<b>Total number of posts (n)</b>	<b>29,294</b>	<b>30,753</b>	

#### 4.3.7 Total Hours worked and Whole Time Equivalent

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. For economically active 'home' pharmacists in 2003, the mean number of hours worked in all sectors was 32 hours per week. In 2005, this figure rose to 35 hours (range: 1 to 91 hours).

The gender difference in working hours is still apparent, with women working an average of 32 hours a week (range: 1 to 90), compared to 39 hours for men (range: 1 to 91), a difference of 7 hours. This gap appears to be increasing, as in 2003 survey men worked 34 hours a week on average, while women worked 29 hours. The increase in average hours worked cuts across all sectors, with the exception of academia and the 'other' sector (Table 23).

<b>Sector</b>	<b>2003 data</b>	<b>2005 data</b>
Community	31.09	35.32
Hospital	33.46	34.96
Primary Care	30.09	34.86
Industry	37.78	38.27
Academia	38.67	38.17
Other	37.04	36.66
Total	31.72	35.09

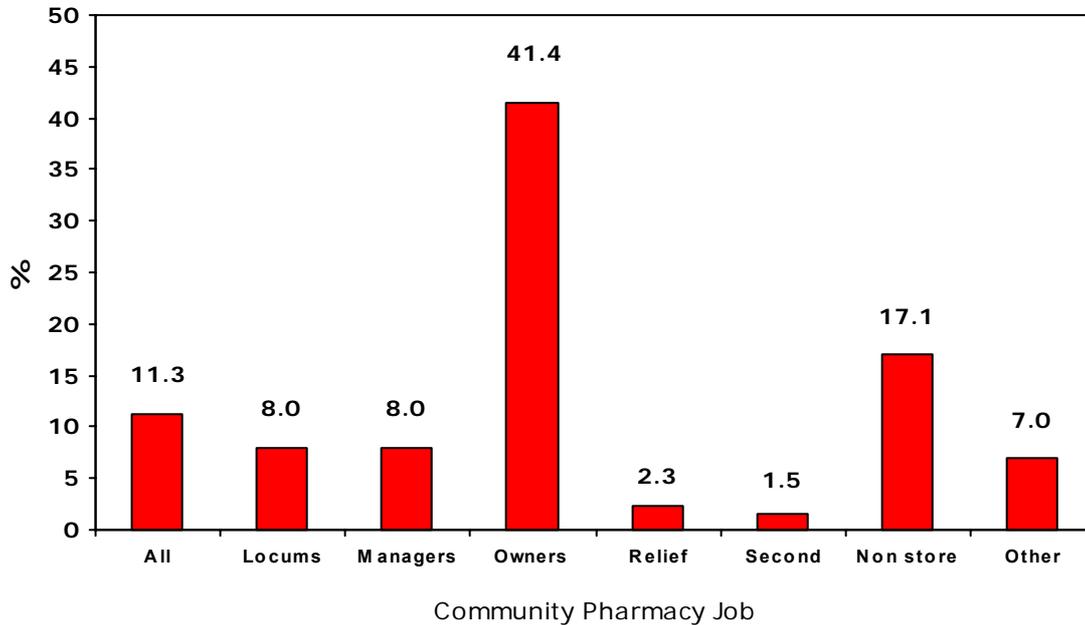
The total hours worked were collapsed into the following categories: (i) works 16 hours or less, (ii) 17 to 32 hours, (iii) 33 to 48 hours, and (iv) 49 hours or above. The results indicate that the majority of actively employed pharmacists (59.0%) worked between 33 and 48 hours per week, with 9.2% working in excess of 49 hours. This is in excess of the 48 hours a week recommended in the European Union Working Time Directive. 31.8% of the actively employed pharmacists worked for 32 hours a week or less. See section 4.3.8 for an exploration of part-time working.

Men were more than five times more likely than women to work in excess of 48 hours (17.6% vs. 3.1%) and long working hours were most common in the academic, industry and 'other' sectors (see Table 24 for details).

	<b>% working ≥ 49 hours</b>
Community	11.3
Hospital	2.6
Primary Care	5.9
Industry	13.1
Academia	17.3
Other	15.1
Male	17.6
Female	3.1
Total	9.2

When working hours are explored according to community pharmacy job (see Fig. 1), this indicates that community pharmacy owners are significantly more likely to work longer hours than pharmacists in any other community job.

**Fig. 1 Percentage of community pharmacists working more than 48 hours by job**



Whole Time Equivalent (WTEs) were calculated by dividing the number of hours worked by 33 hours. The mean Whole Time Equivalent (WTE) for all actively employed pharmacists was 1.06 (SD±0.38; range 0.3 to 2.76). The WTE was higher for male pharmacists (1.19, range: 0.3 to 2.76) than for female pharmacists (0.98, range: 0.3 to 2.73). WTEs were higher for pharmacists working in the industrial, academic and other sectors (see Table 25).

**Table 25: Mean Whole Time Equivalent (WTE) by sector of pharmacy**

Sector	Mean WTE	Std. Dev	Range
Community	1.07	0.405	0.03 to 2.76
Hospital	1.06	0.281	0.03 to 2.67
Primary Care	1.05	0.309	0.12 to 2.76
Industry	1.16	0.329	0.06 to 2.55
Academia	1.16	0.391	0.03 to 2.42
Other	1.11	0.410	0.03 to 2.76
Total	1.06	0.377	0.03 to 2.76

**KEY FINDING**

**Pharmacists reported working longer hours than in the previous census, with a mean of 35 hours per week, a rise of 3 hours.**

#### 4.3.8 Part-time working

The total number of hours worked was collapsed into two categories, to identify the 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 fall in the proportion working part-time in 2005 compared with 'home' pharmacists in the 2003 survey, from 32.5% to 31.8% (Table 26). Women are still far more likely than men to work part-time (41.0% and 18.9% respectively).

<b>Table 26: Part-time and full-time working for economically active pharmacists</b>						
<b>(column percentage)</b>						
	<b>2003</b>			<b>2005</b>		
	<b>Male</b>	<b>Female</b>	<b>Total</b>	<b>Male</b>	<b>Female</b>	<b>Total</b>
Part-time (up to 32 hours)	20.0	42.0	32.5	18.9	41.0	31.8
Full-time (33 hours and above)	80.0	58.0	67.5	81.1	59.0	68.2
Total (n)	9898	13037	22935	10265	14373	24638

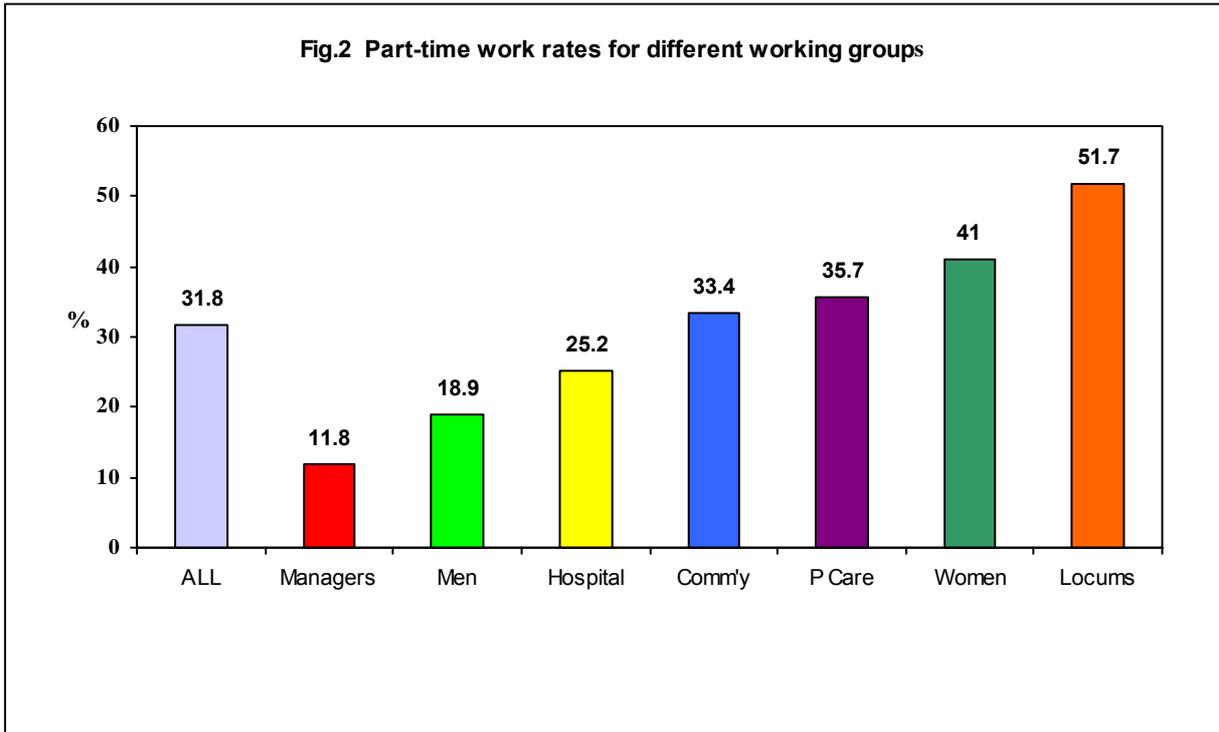
#### **KEY FINDING**

**Since the 2003 Census there has been a slight fall in part-time work patterns. Part-time pharmacists still represent a sizeable proportion (31.8%) of the actively employed workforce.**

The decrease in part-time working is seen across all the main sectors of pharmacy employment, with the exception of academia, where part-time working has increased (Table 27). It should be noted that the figures above are quoted for total hours worked. However, some pharmacists may work part-time in one sector but longer when other sectors are taken into consideration.

<b>Table 27: Percentage of actively employed pharmacists who work part time (≤ 32 hrs) by sector and year (%)</b>		
	<b>2003 data</b>	<b>2005 data</b>
Community	35.0	33.4
Hospital	25.5	25.2
Primary Care	36.0	35.7
Industry	24.5	19.3
Academia	26.1	26.9
Other	34.8	30.3
Total	32.5	31.8

Fig. 2 shows part-time working rates for different groups of pharmacists. This indicates that part-time working patterns are more prevalent for female pharmacists, for locums and for pharmacists in the community and primary care sectors.



#### 4.3.9 Locum working

Any actively employed pharmacist who reported a locum status for one of up to four jobs was categorised as working as a locum. In the 2005 survey, 6,760 respondents reported that they worked as a locum. Locum pharmacists therefore represent 26.0% of all respondents actively employed in pharmacy and 37.1% of all census respondents who worked in community pharmacy. More locum pharmacists were female than male (52.3% vs. 47.7%). The mean age of locum pharmacists was 45 years (range: 22 to 96 years), compared with 42 years for all respondents actively employed in pharmacy. Respondents in the under 49 age groups were under-represented in the locum pharmacist group (See Table 28). More than a third (37.7%) of locum pharmacists were aged 50 or over.

The mean total hours worked by locums was 30 hours (range: 1 to 90 hours) per week compared with the mean of 35 hours for all respondents actively employed in pharmacy. Locum pharmacists were more likely than all actively employed pharmacists to work part-time (51.7% vs. 31.8%).

	<b>Locum Pharmacists</b>	<b>Respondents actively employed in pharmacy</b>
29 yrs and under	18.0	20.1
30 to 39 years	22.4	26.6
40 to 49 years	22.0	26.4
50 to 59 years	18.2	17.9
60 to 64 years	7.7	4.4
65 to 69 years	6.4	2.7
70 to 79 years	4.9	1.8
80 years and above	0.5	0.2
Total (n)	6578*	25600*

*\*some missing values*

Locum pharmacists reported the number of pharmacies they worked in per month. A third (33.0%) of locums worked in only one pharmacy and a further 26.2% worked in two pharmacies per month. A quarter of the locum pharmacists (25.3%) worked in four or more pharmacies. See Table 29 for details.

	<b>2005 data %</b>
One pharmacy	33.0
Two pharmacies	26.2
Three pharmacies	15.5
Four or more pharmacies	27.5
Total (n)	5322*

*\*some missing values*

#### **KEY FINDING**

**Locum pharmacists represent more than a quarter of the active pharmacist population and more than a third of all community pharmacists.**

#### **4.3.10 Type of community pharmacy worked in**

Pharmacists who reported working in community pharmacy, whether as a main job or as a locum, were asked to report the type of pharmacy they worked in. Respondents could provide more than one response, so the percentage figures add up to more than 100%.

When the responses from all actively employed community pharmacists are reported, they indicate that more than half (54.2%) work in a multiple pharmacy (See Table 30). Nearly one-third (29.4%) of community pharmacists reported working in an independent pharmacy. Similar proportions of community pharmacists reported working in medium sized pharmacies and small pharmacy chains (12.9% & 13.9%).

<b>Table 30: Type of pharmacy worked in by locum status</b>			
	<b>Non-locum pharmacists (%)</b>	<b>Locum pharmacists (%)</b>	<b>All community pharmacists (%)</b>
Independent	21.4	43.1	29.4
small chain	8.6	22.8	13.9
Medium	7.4	22.3	12.9
Large multiple	52.8	56.5	54.2

When the responses were compared for locum pharmacists and non-locum community pharmacists some interesting differences emerged. Locum pharmacists were more likely to report working in all types of pharmacy than non-locums. In particular, locum pharmacists were twice as likely to work in an independent pharmacy as non-locum pharmacists. This is an interesting finding, as it suggests that independent pharmacies may be finding it the most difficult to get permanent employees. The majority of community pharmacists who do not hold a locum position work mainly in large multiple pharmacies.

#### **4.4 Job Satisfaction and Plans to change work life**

A slightly amended version of the Warr-Cook-Wall job satisfaction scale<sup>11</sup> used with GPs was used to measure job satisfaction. All 10 items were used, wording unchanged, and a new item about 'patient contact' was added. Each item is rated on a seven-point scale from 1 (extremely dissatisfied) to 7 (extremely satisfied). While one item measures overall job satisfaction, other items measure satisfaction with particular aspects of work, including: 'physical working conditions', 'hours of work', 'remuneration' and 'freedom to choose your own method of working'. For the satisfaction scale items, means and standard deviations were calculated. A high score indicated high satisfaction.

An additional measurement scale was used to measure the likelihood of pharmacists making significant changes to their work life in the next two years. For the future life plans items, a response of 4 or 5 (quite likely or highly likely) was regarded as showing intention of changing work patterns or leaving the profession entirely.<sup>12</sup>

##### **4.4.1 Work satisfaction**

The overall picture suggests that actively employed pharmacists in general derive high levels of job satisfaction (a mean of 4.81 on the 'overall job satisfaction' item), and higher levels than those reported by GPs.<sup>13,12</sup> The item with the lowest mean score (4.22) is remuneration, whilst pharmacists derive the highest satisfaction in rank order from their colleagues, the amount of responsibility they are given, and patient contact.

<b>Item</b>	<b>Rank order</b>	<b>Mean</b>	<b>Std. Dev</b>
Physical working conditions	9	4.64	1.446
Freedom to choose your own methods of working	4	4.86	1.485
Colleagues and fellow workers	1	5.34	1.236
Recognition you get for good work	10	4.28	1.590
Amount of responsibility you are given	2	5.11	1.390
Remuneration	11	4.22	1.577
Opportunity to use abilities	8	4.72	1.467
Hours of work	7	4.73	1.592
Amount of variety in job	6	4.74	1.533
Patient contact	3	5.08	1.381
Satisfaction with main job	5	4.81	1.306

*\*some missing values*

Sub-group analysis reveals that female pharmacists score a consistently higher mean on all the individual work satisfaction items, as well as on overall job satisfaction (Table 32) than male pharmacists, with the exception of physical working conditions. The differences between male and female pharmacists were significant for all of the items, with the exception of 'responsibility'.

Interestingly, 'colleagues' were ranked first for both men and women, and 'recognition for good work' and 'remuneration' were ranked last. Patient contact and the amount of responsibility given were both ranked highly by male and female pharmacists.

	<b>Male (n=10,953) †</b>		<b>Female (n=15,073) †</b>	
	<b>Mean</b>	<b>Std. Dev</b>	<b>Mean</b>	<b>Std. Dev</b>
Physical working conditions*	4.67	1.486	4.61	1.416
Freedom to choose your own methods of working*	4.82	1.589	4.89	1.403
Colleagues and fellow workers*	5.26	1.279	5.40	1.199
Recognition you get for good work*	4.22	1.662	4.32	1.534
Amount of responsibility you are given	5.10	1.481	5.12	1.320
Remuneration*	4.14	1.654	4.27	1.517
Opportunity to use abilities*	4.60	1.537	4.81	1.407
Hours of work*	4.45	1.668	4.93	1.503
Amount of variety in job*	4.57	1.622	4.85	1.454
Patient contact*	5.02	1.416	5.13	1.353
Satisfaction with main job*	4.69	1.404	4.90	1.223

*† some missing values*

*\* significant at < 0.05 (Anova)*

Analysis by age group suggests differences between younger and older pharmacists in satisfaction, with these differences reaching statistical significance for all eleven items (see Table 33). Older pharmacists (aged  $\geq 60$  years) were more likely to report higher satisfaction than younger pharmacists for all eleven items.

<b>Table 33: Work Satisfaction item means by Age group (Std.Dev)</b>			
	<b>39 years and under (n=11,956) †</b>	<b>40 to 59 years (n=11,336) †</b>	<b>60 years plus (n=2308) †</b>
Physical working conditions*	4.60 (1.431)	4.65 (1.461)	4.78 (1.444)
Freedom to choose your own methods of working*	4.84 (1.420)	4.87 (1.526)	4.96 (1.579)
Colleagues and fellow workers*	5.31 (1.232)	5.32 (1.239)	5.61 (1.208)
Recognition you get for good work*	4.22 (1.565)	4.28 (1.590)	4.58 (1.669)
Amount of responsibility you are given*	5.06 (1.333)	5.13 (1.444)	5.32 (1.389)
Remuneration*	4.17 (1.520)	4.21 (1.624)	4.50 (1.615)
Opportunity to use abilities*	4.64 (1.470)	4.75 (1.455)	4.96 (1.462)
Hours of work*	4.76 (1.525)	4.60 (1.646)	5.22 (1.563)
Amount of variety in job*	4.62 (1.564)	4.83 (1.495)	4.90 (1.513)
Patient contact*	5.06 (1.368)	5.07 (1.391)	5.32 (1.363)
Satisfaction with main job*	4.79 (1.245)	4.77 (1.345)	5.11 (1.369)

† some missing values

\* significant at  $< 0.05$  (Anova)

Hours of work appear to have a significant impact on pharmacists' levels of work satisfaction (see Table 34). Pharmacists working part-time reported higher levels of satisfaction with colleagues, recognition for good work, remuneration, hours of work and overall job satisfaction. Pharmacists working full-time reported greater satisfaction with physical working conditions, freedom to choose own method of working, satisfaction with responsibility and amount of variety with job.

	<b>Part-time (n=7,836)<sup>†</sup></b>		<b>Full-time (n=16,802)<sup>†</sup></b>	
	<b>Mean</b>	<b>Std. Dev</b>	<b>Mean</b>	<b>Std. Dev</b>
Physical working conditions*	4.60	1.411	4.66	1.456
Freedom to choose your own methods of working*	4.81	1.451	4.89	1.490
Colleagues and fellow workers*	5.41	1.208	5.32	1.241
Recognition you get for good work*	4.31	1.560	4.27	1.599
Amount of responsibility you are given*	5.07	1.329	5.14	1.405
Remuneration*	4.26	1.521	4.20	1.594
Opportunity to use abilities	4.72	1.422	4.73	1.477
Hours of work*	5.39	1.411	4.44	1.577
Amount of variety in job	4.72	1.490	4.74	1.547
Patient contact	5.10	1.358	5.08	1.389
Satisfaction with main job*	4.86	1.304	4.79	1.296

<sup>†</sup> some missing values

\* significant at < 0.05 (Anova)

Work satisfaction was also compared for pharmacists working in different sectors (see Table 35). Only satisfaction scores for pharmacists with one job were reported, as the ANOVA statistic can only be calculated for groups that are mutually exclusive. The results indicated that pharmacists working in industry had the highest overall satisfaction with their main job, with a score of 5.46. Community pharmacists reported the lowest overall satisfaction with their job, with a score of 4.64. Community pharmacists consistently reported the lowest satisfaction scores for all eleven items, with the exception of 'Patient contact'. Only hospital pharmacists scored higher than community pharmacists for this item.

Pharmacists working in industry were most satisfied with their physical working conditions, the recognition they received for their work and remuneration. Academic pharmacists reported the highest satisfaction scores for freedom to choose own methods of working, opportunities to use their abilities and amount of variety in the job. Primary care pharmacists reported the highest levels of satisfaction with their hours of work. Pharmacists working in the 'other' sector were most satisfied with their colleagues and with the amount of responsibility they were given. The differences between the groups were statistically significant for all eleven items.

	<b>Community (n=14,451) †</b>	<b>Hospital (n=4,568) †</b>	<b>Primary care (n=925) †</b>	<b>Industry (n=690) †</b>	<b>Academia (n=147) †</b>	<b>Other sectors (n=430) †</b>
Physical working conditions*	4.51 (1.481)	4.67 (1.324)	5.16 (1.212)	5.59 (1.205)	5.03 (1.297)	5.24 (1.340)
Freedom to choose your own methods of working*	4.68 (1.527)	4.94 (1.282)	5.73 (1.127)	5.56 (1.216)	5.91 (1.086)	5.68 (1.253)
Colleagues and fellow workers*	5.27 (1.271)	5.39 (1.067)	5.71 (1.067)	5.59 (1.117)	5.50 (1.263)	5.78 (1.103)
Recognition you get for good work*	4.11 (1.614)	4.39 (1.457)	4.95 (1.356)	5.19 (1.388)	4.92 (1.605)	5.02 (1.457)
Amount of responsibility you are given*	4.98 (1.452)	5.22 (1.201)	5.58 (1.154)	5.70 (1.163)	5.66 (1.094)	5.71 (1.213)
Remuneration*	4.11 (1.607)	4.28 (1.463)	4.75 (1.421)	5.21 (1.277)	4.20 (1.630)	4.97 (1.467)
Opportunity to use abilities*	4.50 (1.461)	5.03 (1.306)	5.43 (1.240)	5.42 (1.286)	5.76 (1.159)	5.46 (1.361)
Hours of work*	4.53 (1.647)	5.00 (1.406)	5.49 (1.379)	4.97 (1.476)	4.73 (1.627)	5.31 (1.455)
Amount of variety in job*	4.40 (1.539)	5.20 (1.271)	5.62 (1.153)	5.55 (1.199)	5.89 (1.181)	5.43 (1.462)
Patient contact*	5.13 (1.317)	5.33 (1.259)	4.39 (1.536)	4.05 (1.866)	3.99 (1.949)	4.20 (1.821)
Satisfaction with main job*	4.64 (1.346)	5.00 (1.108)	5.32 (1.105)	5.46 (1.125)	5.35 (1.178)	5.44 (1.145)

† some missing values

\* significant at < 0.05 (Anova)

Satisfaction scores were compared for community pharmacists working in different roles. Again, only those pharmacists with one job were included in this comparison. Community pharmacy owners appeared to be highly satisfied with their situation, reporting the highest mean scores for nine of the eleven items. The only items for which owners did not report the highest score were 'remuneration' and 'hours of work'. Locum pharmacists reported the lowest satisfaction among the groups on four items: 'physical working conditions', 'colleagues and fellow workers', 'amount of variety in job' and 'patient contact'. This might reflect the fact that locums often move from pharmacy to pharmacy in their work, so do not get to know their colleagues or patients well.

Relief pharmacists also reported low levels of satisfaction with a number of the items, including 'freedom to choose own methods of working', 'recognition for good work', 'remuneration' and 'opportunity to use abilities'. Relief pharmacists also reported the lowest overall satisfaction with their main job. Second pharmacists reported the lowest satisfaction score for the amount of responsibility they were given.

<b>Table 36: Work Satisfaction items by Community pharmacy post (Mean <math>\pm</math>SD)</b>					
	<b>Pharmacy Owner (n=2,362)</b>	<b>Manager (n=4,878)</b>	<b>Locum (n=4,089)</b>	<b>Relief (n=1,323)</b>	<b>Second (n=1,218)</b>
Physical working conditions*	5.22 (1.493)	4.42 (1.469)	4.28 (1.428)	4.30 (1.337)	4.52 (1.392)
Freedom to choose your methods working*	5.22 (1.741)	4.61 (1.465)	4.69 (1.481)	4.22 (1.338)	4.29 (1.352)
Colleagues and fellow workers*	5.41 (1.341)	5.24 (1.261)	5.18 (1.292)	5.23 (1.169)	5.34 (1.208)
Recognition you get for good work*	4.42 (1.765)	4.09 (1.387)	4.04 (1.662)	3.87 (1.498)	4.02 (1.506)
Amount of responsibility you are given*	5.27 (1.724)	4.98 (1.433)	4.90 (1.387)	4.83 (1.248)	4.77 (1.305)
Remuneration*	3.94 (1.911)	4.13 (1.537)	4.19 (1.575)	3.99 (1.443)	4.06 (1.491)
Opportunity to use abilities*	4.69 (1.539)	4.54 (1.411)	4.38 (1.495)	4.30 (1.413)	4.45 (1.362)
Hours of work*	3.99 (1.809)	4.36 (1.574)	4.81 (1.613)	4.72 (1.556)	5.14 (1.401)
Amount of variety in job*	4.85 (1.527)	4.39 (1.486)	4.18 (1.589)	4.20 (1.486)	4.37 (1.400)
Patient contact*	5.52 (1.298)	5.13 (1.261)	4.96 (1.354)	5.04 (1.285)	5.18 (1.238)
Satisfaction with main job*	4.81 (1.489)	4.61 (1.272)	4.58 (1.412)	4.56 (1.233)	4.66 (1.218)

#### **4.4.2 Intentions to change work life**

We included four items about possible changes pharmacists might make over the next two years to their work life. These included: leaving their current sector; reducing work hours; leaving direct patient care; or leaving the profession altogether (Table 37).

<b>Item</b>	<b>No likelihood</b>	<b>Little likelihood</b>	<b>Some Likelihood</b>	<b>High Likelihood</b>	<b>Very high likelihood</b>
Leaving current sector over the next two years	51.1	21.2	14.0	6.4	7.3
Reducing work hours over the next two years	39.4	19.3	17.4	10.9	13.0
Leaving direct patient care over the next two years	58.2	21.6	11.6	4.1	4.4
Leaving the profession altogether over the next two years	64.3	15.0	9.5	4.7	6.5

<sup>†</sup>some missing values

A response of 'high likelihood' or 'very high likelihood' to the work plan items was combined to indicate whether a respondent was 'highly likely' to change work plans. More than one in ten (13.7%) of actively employed pharmacists think it highly likely that within the next two years they will quit the sector in which they currently work; smaller proportions think it quite or highly likely they will quit the profession or direct patient care (11.2% and 8.5% respectively). Almost a quarter (23.9%) of actively employed pharmacists reported that they were highly likely to reduce their work hours in the next two years.

The fact that 1 in 10 pharmacists are considering leaving the profession could be regarded as a cause for concern, although it should be noted that some pharmacists may be considering leaving as they are reaching state pension age. In addition, intent to leave the profession may not necessarily translate into action. It is perhaps worrying that more than 1 in 5 pharmacists are highly likely to reduce their work hours. With supply of pharmacists already problematic, the effect of pharmacists reducing their hours could have a further dramatic affect on workforce supply.

Male pharmacists were more likely than female pharmacists to report a high likelihood of leaving the sector (15.0% vs. 12.8%,  $X^2=23.154$ ,  $p<0.01$ ), of reducing hours (26.1% vs. 22.4%,  $X^2=42.748$ ,  $p<0.01$ ), of leaving patient care (11.3% vs. 6.7%,  $X^2=133.634$ ,  $p<0.01$ ) and of leaving the profession within the next two years (14.4% vs. 8.9%,  $X^2=165.308$ ,  $p<0.01$ )

Analysis of plans to change work life by age groups indicates that those in the over 60 age group were most likely to make changes to the way they worked. See Table 38 for details. Pharmacists aged 39 and under and those in the 60 plus age groups were significantly more likely to report a strong likelihood of changing sector in the next two years ( $X^2=270.666$ ,  $p<0.01$ ). Pharmacists aged 60 or older were significantly more likely to report reducing their hours ( $X^2=550.402$ ,  $p<0.01$ ), to leave patient care in the next two years ( $X^2=330.167$ ,  $p<0.01$ ) and to leave the profession in the next two years ( $X^2=2,237.394$ ,  $p<0.01$ ).

	<b>High likelihood of leaving sector (%)</b>	<b>High likelihood of reducing hours (%)</b>	<b>High likelihood of leaving patient care (%)</b>	<b>High likelihood of leaving profession (%)</b>
39 years and under (n=11,956) <sup>†</sup>	15.5	21.8	7.1	6.4
40 to 59 years (n=11,336) <sup>†</sup>	10.2	22.2	8.4	10.3
60 years and above (n=2,308) <sup>†</sup>	24.9	48.1	24.5	45.6
All pharmacists (26,026) <sup>†</sup>	13.7	23.9	8.5	11.2

<sup>†</sup>some missing values

A comparison of pharmacists' likelihood of change by sector (see Table 39), indicates that pharmacists working in the community sector, academic and other sectors were significantly more likely to be planning to change sector within two years ( $X^2=28.068$ ,  $p=0.01$ ). Community pharmacists were significantly more likely to reduce their hours than pharmacists working in other sectors ( $X^2=220.534$ ,  $p<0.01$ ). Pharmacists in industry, academia and the other sector category were all significantly more likely to report planning to leave patient care ( $X^2=251.140$ ,  $p<0.01$ ). It should be noted that many pharmacists in these sectors may have limited patient contact in their current roles. Pharmacists working in community were significantly more likely to report that they had a high likelihood of leaving the profession within two years ( $X^2=194.945$ ,  $p<0.01$ ). This compares with 2003 census data on 'desire to practise' which indicated that smaller proportions of community pharmacists cited a 'strong' or 'very strong' desire to practice pharmacy than pharmacists in other sectors.<sup>9</sup>

	<b>High likelihood of leaving sector (%)</b>	<b>High likelihood of reducing hours (%)</b>	<b>High likelihood of leaving patient care (%)</b>	<b>High likelihood of leaving profession (%)</b>
Community Pharmacy (n=14,451) <sup>†</sup>	14.0	26.5	7.9	13.3
Hospital (n=4,568) <sup>†</sup>	12.1	17.0	5.7	5.9
Primary Care (n=925) <sup>†</sup>	12.8	19.4	9.5	5.6
Industry (n=690) <sup>†</sup>	7.9	13.3	26.6	10.5
Academia (n=147) <sup>†</sup>	14.9	13.7	23.8	10.2
Other (n=430) <sup>†</sup>	14.7	17.4	25.9	11.3

<sup>†</sup>some missing values

A higher proportion of locum pharmacists reported a strong likelihood of leaving the sector in which they were working than pharmacists in other community pharmacy posts ( $X^2=88.090$ ,  $p<0.01$ ). See Table 40 for details. Both pharmacy owners and locums were significantly more likely to report wanting to reduce their hours ( $X^2=157.934$ ,  $p<0.01$ ). Locums were also significantly more likely to leave patient care ( $X^2=112.441$ ,  $p<0.01$ ) and to be likely to leave the profession altogether ( $X^2=483.753$ ,  $p<0.01$ ).

	<b>High likelihood of leaving sector (%)</b>	<b>High likelihood of reducing hours (%)</b>	<b>High likelihood of leaving patient care (%)</b>	<b>High likelihood of leaving profession (%)</b>
Owner (n=2,362) <sup>†</sup>	13.7	32.4	9.4	13.1
Manager (n=4,878) <sup>†</sup>	11.6	23.4	5.9	7.6
Locum (n=4,089) <sup>†</sup>	18.9	32.3	11.6	23.9
Relief (n=1,323) <sup>†</sup>	12.5	21.4	4.3	9.5
Second (n=1,218)	13.1	19.9	5.4	8.7

<sup>†</sup>some missing values

#### **4.4.3 Summary of work satisfaction and plans to change work life**

The pharmacists report high levels of work satisfaction and higher levels than have been reported by GPs in the published literature.<sup>12;13</sup> Pharmacists report the highest satisfaction from working with colleagues, and from the amount of responsibility they are given. The lowest satisfaction was with remuneration. The evidence from the life changes section of the questionnaire indicates that approximately one in ten pharmacists are considering leaving the profession within the next two years and just over one in five is considering reducing their hours. This may have an impact on future workforce planning. Pharmacists most likely to report a change in working patterns were older (>60 years), male, working in community pharmacy or working as locums.

#### **KEY FINDING**

**Pharmacists report high levels of work satisfaction. One in ten pharmacists were considering leaving the profession within the next two years and more than one in five was considering reducing their hours.**

## 5. Key findings

While key findings have been highlighted throughout the report, they are summarised below for ease of reference. The response rate overall was 76.6%, an excellent response and a slight increase on the 2003 Census. Nevertheless, the findings from the 2005 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 decreased by 2.4% overall between August 2004 and August 2005. This is in contrast to the general trend over the last 15 years or more.
- 86% of the Pharmaceutical Register is made up of pharmacists who are on the practising Register. Of the 14% on the non-practising Register, only 16% were recorded as being in active employment at the time of the last census.
- Over 65.3% of the new entrants to the Register in 2005 are female.
- Over half (55.5%) of pharmacists who left the Register are male and 34.7% had an address overseas.
- While the majority (70.2%) of those leaving the profession are males and females over retirement age and females under 39, there is still a sizeable (29.8%) proportion of pharmacists leaving the Register who do not fall into either of these demographic groupings.
- There has been a slight increase in the proportion of registered pharmacists who are actively employed in a pharmacy-related occupation, while the proportion working outside pharmacy has also increased.
- A greater proportion of pharmacists who are currently not in active employment are considering returning to practice than in the 2003 Census.
- Community pharmacy still accounts for the employment of the largest proportion of pharmacists (70.1%), although the proportion working in this sector has fallen by 2% since 2003. The majority (54.2%) work for multiple pharmacies.
- 17% of actively employed pharmacists held more than one job, an increase of 6.6% since the last census.
- More than one in ten pharmacists (11.5%) work in more than one sector of pharmacy.
- Mobility across sectors of practice appears low overall. Mobility has fallen in the Primary care sector since 2003, suggesting a growing stability in this sector.
- Pharmacists reported working longer hours than in the previous census, with a mean of 35 hours per week, a rise of 3 hours. The gender gap in working hours appears to be increasing, with male pharmacists working on average 7 hours a week more than females.

- There has been a slight fall in the numbers of actively employed pharmacists working part-time, but these pharmacists still represent a significant proportion (31.8%) of the working population. Part-time working was most prevalent in the Primary Care sector (35.7%)
- Locum pharmacists represent more than a quarter of the active pharmacy population and more than a third of all community pharmacists. Locums are more likely to be female, older, work shorter hours than other pharmacists and to work in an independent pharmacy.
- Pharmacists showed high levels of overall satisfaction with their main job; higher than that of GPs. Pharmacists derive the most satisfaction from their colleagues, the amount of responsibility they are given and patient contact.
- Pharmacists derive the least satisfaction from the remuneration and recognition they receive.
- Female pharmacists score consistently higher on all the satisfaction items than their male counterparts, with the exception of physical working conditions. Older pharmacists (>60) are more likely to report higher overall satisfaction with their main job than younger pharmacists.
- Pharmacists in industry reported the highest levels of overall satisfaction with their main job. Pharmacists working in primary care reported higher satisfaction than those working in either hospital or community pharmacy. Pharmacists in the Community pharmacy sector reported the lowest levels of satisfaction with their main job.
- More than one in ten pharmacists (13.7%) are considering leaving the sector in which they currently work within the next two years.
- A similar proportion (11.2%) are considering quitting the profession altogether. Almost a quarter of pharmacists (23.9%) were considering reducing their hours in the next two years, which could have an impact on workforce supply.
- The pharmacists most likely to report a change in working patterns were older (>60 years), male, working in community pharmacy or working as a locum.

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## **Appendix 1: Publications, invited stakeholder and conference presentations arising from 2003 Census and 2004 and 2005 Register Analysis**

### **Publications and Reports**

Hassell K. (2004) Briefing paper: Pharmacist's workforce characteristics in Leicestershire, Northamptonshire and Rutland SHA. ISBN: 1-905616-11-2

Hassell K. (2004) Briefing paper: Pharmacist's workforce characteristics in NEYNL WDC. Based on the data from the pharmacy workforce census 2003. ISBN: 1-905616-12-0

Hassell K (2004) 2004 Register Analysis. Report for the RPSGB) ISBN: 1-905616-10-4.

Mullen R, Hassell K, Noyce PR (2005). Primary care pharmacist workforce mobility: why do pharmacists want to work in primary care and how do these reasons differ for community and hospital pharmacists. *International Journal of Pharmacy Practice*. 13: 281-288.

Hassell K, Eden M (2006) Workforce update: joiners, leavers and practising and non-practising pharmacists on the 2005 Register. *The Pharmaceutical Journal*:276:40-42.

### **Invited stakeholder and Conference Presentations**

#### **2004**

The Pharmacy labour Market: key issues and challenges. At: Pharmacy: A Profession Fit for Purpose. Institute of Directors, London. May 2004

Workforce Capacity in The Pharmacy Labour Market. RPSGB Council, RPSGB, London. October 2004

Pharmacy: The National Context. At: Essex Workforce Development Confederation Conference: The Pharmacy Time Bomb in Essex. Stock Brook Manor, Stock, Essex. November 2004

#### **2005**

The Pharmacy Workforce: a national and local overview. At: 'The Pharmacy Workforce: Delivering the Change'. North and East Yorkshire and North Lincolnshire Workforce Development Confederation Conference. The York Moat House, York, 8<sup>th</sup> February 2005

A profile of the GB and Welsh pharmacy workforce: headline facts. Welsh Executive, Cardiff, April 2005.

The Community Pharmacy Workforce: Who Are They? Pharmacy Practice Research Trust: Implementing the new contractual framework for community pharmacy: emerging workforce trends. BMA, Tavistock Square, London. May 2005.

Community Pharmacy: New World, New Opportunities. AAH Pharmaceuticals Annual Convention, Sintra, Portugal. May 2005  
Workforce Challenges and Skill Mix. British Pharmaceutical Conference, Manchester, September 2005

**2006**

Workforce planning: local and national needs analysis. Yorkshire & Humber SHA  
National Meeting, Leeds. June 2006

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

1. The complete registration database was downloaded on the 5<sup>th</sup> August 2005, 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 (i.e., member or fellow)
  - e. Status (i.e., registered, deleted, erased, etc)
  - f. Date of birth
  - g. Location flag (i.e., England, Scotland, Wales, Overseas)
  - h. Date joined the register
  - i. Gender
2. Another database, in the same format, is provided alongside the full registration database, which contains only the members who have a fully registered status (i.e., are eligible to practise), and are either a full member or fellow (referred to as the 'eligible to practise' database).
3. The 'eligible to practise' 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 (i.e., 5<sup>th</sup> August 2005). The formula used is as follows: DATEDIF (A1, "2005/08/05", "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 21<sup>st</sup> 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 practise' database. However, the RPSGB registration number, unique to the individual, is maintained, since this variable is later used to link and merge the data from census respondents to certain registration data that was not collected with the survey (e.g., 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 2004 and 2005 'eligible to practise' databases are compared and contrasted using the unique registration number to first select new entries in 2005 (i.e., not on the 2004 database), and second, to select those

pharmacists who were on the 2004 database but no longer on the 2005 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 registration number, and a 'batch id' number generated by TynePrep. The registration 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: Pharmacy Workforce Census 2005 Questionnaire



Royal  
Pharmaceutical  
Society  
of Great Britain

### Pharmacy Workforce Census - 2005

**1. PERSONAL DETAILS:** Please check that the registration number given below is correct. If not please provide the correct one in the box provided:

This registration number: \_\_\_\_\_ is correct. Please amend → if incorrect:

**2. CURRENT WORK SITUATION:** Which of the following applies to you (Tick one box only).

- a. Currently working as a pharmacist  *1 Go to question 3*  
 b. Currently not in active employment  *2 Go to question 4*  
 c. Currently work, but not as a pharmacist  *3 Go to question 5*

**3. Are you self-employed or an employee?**

- a. An employee  *1 Go to question 6*  
 b. Self-employed locum  *2 Go to question 6*  
 c. Self-employed pharmacy owner  *3 Go to question 6*  
 d. Self-employed consultant  *4 Go to question 6*  
 e. Other self-employed  *5 Go to question 6*

**4. If you are not working at present please indicate the reason why: (tick one box).**

- a. On maternity leave or engaged in child rearing  *1 Go to question 5*  
 b. Not working due to ill health  *2 Go to question 5*  
 c. Retired and not working  *3 Go to question 5*  
 d. In full-time or part-time education  *4 Go to question 5*  
 e. Travelling  *5 Go to question 5*  
 f. Not working due to other reason  *6 Go to question 5*

**5. If you are not currently working in any of the sectors listed in Q6 below, do you intend to return to work as a practising pharmacist within the next 12 months?**

- Yes  *1 (thank you for completing the questionnaire)*  
 No  *2 (thank you for completing the questionnaire)*

**6. SECTOR OF PRACTICE:** Please circle the number that most closely corresponds to your current main job and any others you have. Please also write in the number of hours per week that you usually work in each job.

	JOB 1		JOB 2		JOB 3		JOB 4	
	Circle a number	Average weekly hours						
Community Pharmacy:								
Owner	1		1		1		1	
Manager	2		2		2		2	
Locum	3	25	3		3		3	
Relief	4		4		4		4	
Second	5		5		5		5	
Non-store based	6		6		6		6	
Other	7		7		7		7	
Hospital	8		8		8		8	
Primary care organisation	9		9	10	9		9	
Industry	10		10		10		10	
Academia	11		11		11		11	
Other pharmacy	12		12		12		12	
Other non-pharmacy	13		13		13		13	

7. If you are a locum working in community pharmacy, how many pharmacies do you work in on average over a month? 5

8. If you ticked one (or more) of the above categories within Community Pharmacy please indicate in which of the following organisations you hold your position(s). (Tick one or more if relevant).

- <sub>1</sub> Independent pharmacy                      <sub>3</sub> Medium sized multiple (5-25 stores)  
<sub>2</sub> Small chain (2-4 stores)                      <sub>4</sub> Large multiple (Over 25 stores)

9. **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 jobs identified above:

A. Job 1: WA12 8BT      B. Job 2: SK209JW                      C: Job 3:                      D. Job 4

10. **ABOUT POSSIBLE CHANGES IN YOUR WORKLIFE:** Over the next two years, what is the likelihood that you will:

Please circle the appropriate number for each item: 1 = no likelihood and 5 = high likelihood					
Leave your current sector	1	2	3	4	5
Reduce your work hours	1	2	3	4	5
Leave direct patient care	1	2	3	4	5
Leave the profession altogether	1	2	3	4	5

11. **WORK SATISFACTION:** Please indicate how satisfied or dissatisfied you are with each of the various aspects of your job identified below:

Please circle a response on the scale: 1 = extreme dissatisfaction and 7 = extreme satisfaction							
Physical working conditions	1	2	3	4	5	6	7
Freedom to choose your own method of working	1	2	3	4	5	6	7
Your colleagues and fellow workers	1	2	3	4	5	6	7
Recognition you get for good work	1	2	3	4	5	6	7
Amount of responsibility you are given	1	2	3	4	5	6	7
Your remuneration	1	2	3	4	5	6	7
Opportunity to use your abilities	1	2	3	4	5	6	7
Your hours of work	1	2	3	4	5	6	7
Amount of variety in your job	1	2	3	4	5	6	7
Patient contact	1	2	3	4	5	6	7
Taking <i>everything</i> into consideration, how satisfied are you with your main job?	1	2	3	4	5	6	7

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 4: Demographic data on registered pharmacists, by country of registered address**

<b>Table 1: Age Group of registrants in England, by gender</b>			
	<b>Male</b>	<b>Female</b>	<b>All</b>
29 years and under	15.8	24.1	20.3
30 to 39 years	22.0	30.5	26.6
40 to 49 years	21.9	24.0	23.0
50 to 59 years	17.6	13.1	15.2
60 to 64 years	6.4	2.8	4.5
65 to 69 years	6.3	2.4	4.2
70 to 79 years	7.0	2.4	4.5
80 yrs and over	2.9	0.6	1.7
(n)	15,961 (46%)	18,667 (54%)	34,628*

\*some missing values

<b>Table 2: Age Group of registrants in Scotland, by gender</b>			
	<b>Male</b>	<b>Female</b>	<b>All</b>
29 years and under	17.5	26.8	23.6
30 to 39 years	19.3	28.4	25.2
40 to 49 years	20.4	23.9	22.7
50 to 59 years	19.0	12.5	14.8
60 to 64 years	7.1	3.3	4.6
65 to 69 years	5.1	2.3	3.3
70 to 79 years	8.4	2.4	4.5
80 yrs and over	3.2	0.4	1.4
(n)	1,486 (34.6%)	2,805 (65.4%)	4,291*

\*some missing values

<b>Table 3: Age Group of registrants in Wales, by gender</b>			
	<b>Male</b>	<b>Female</b>	<b>All</b>
29 years and under	15.7	25.8	21.1
30 to 39 years	18.0	26.3	22.4
40 to 49 years	23.0	21.8	22.4
50 to 59 years	16.8	14.7	15.7
60 to 64 years	6.3	3.9	5.0
65 to 69 years	7.6	3.2	5.3
70 to 79 years	8.0	3.6	5.7
80 yrs and over	4.6	.7	2.5
(n)	1,043 (47%)	1,179 (53%)	2,222*

\*some missing values