Allied Health Professions
Education and Workforce Report
Occupational Therapy
Foreword

I am delighted to see the publication of this Allied Health Profession (AHP) education and workforce report for occupational therapy.

This NHS Education for Scotland (NES) report uses individual level and aggregate data from multiple sources to examine trends in the demand and supply of occupational therapy services. It collates, describes and interprets the data to promote understanding of occupational therapists in pre-registration education and in the NHSScotland workforce; intelligence which may be used to support workforce planning by the government and health boards in Scotland. As occupational therapists play a significant role in other sectors such as social work, the information included here may also be of interest to other workforce planners.

This is the first version of this report. It is hoped that future work will extend the quality and range of included data, which will in turn allow further interpretation and analysis.

I am grateful for the support and co-operation of the Scottish Government (SG), the College of Occupational Therapists, the AHP Strategic Group, the AHP Directors Scotland Group, the Scottish Academic Heads Strategic Group, the AHP Federation Scotland and the occupational therapy NES professional forum. These stakeholders have offered an essential source of professional expertise, knowledge of the context surrounding the occupational therapy workforce and awareness of local and national issues and developments.

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Executive summary

Occupational therapy services are provided by Occupational Therapists (OTs) and occupational therapy assistants, who play a key role in the management of the elderly, people living with long term conditions and the treatment of mental health.

This report is the result of a programme of data development and analysis on the AHPs in Scotland by NES and it describes the education and training market and the labour market for OTs. It offers an initial look at the profession, drawing on several sources of routinely collected data at different stages along the education and employment pathway.

There are significant numbers of OTs and occupational therapy assistants employed by the Scottish local authority social work services departments and OTs also work in housing associations, industrial and commercial organisations, schools, charities and voluntary agencies. The integration of adult health and social care agenda could have a considerable impact on occupational therapy services and as data become available these will be analysed.

The demand for occupational therapists

This chapter showed that:

- occupational therapy services are commonly used to support people living with long term conditions, including dementia and the effects of stroke;

- between 2010 and 2021 Scotland’s population is projected to increase by over 5% and the number of people aged 65 and over is projected to increase by almost 25%;

- both of these factors are likely to lead to an increased demand for occupational therapy services;

- the extent to which this increased demand for occupational therapy services is translated into increased demand for OTs is a function of the objectives and constraints of NHS Boards and other potential employers.
Education and training market

This chapter showed that:

- the ratio of applicants to accepted places for undergraduate pre-registration occupational therapy education in Scotland fluctuated between four and nine between 2003 and 2011 at all three universities. It increased to eleven at Queen Margaret University (QMU) in 2012;

- the number of first-year pre-registration occupational therapy students was consistently over 200 between 2005-06 and 2008-09 and decreased to under 190 in the three subsequent years; and

- since 2005-06, 74% of first year undergraduate and 58% of postgraduate students were domiciled in Scotland. Of those, two thirds lived in areas from the two least deprived Scottish Index of Multiple Deprivation (SIMD) quintiles on application to their course, although this percentage differed substantially between universities.

Labour market

This chapter showed that

- the number of OTs registered with the Health and Care Professions Council (HCPC) increased by 50% between 2001 and 2013 to 33,456. In Scotland the number of registrants increased by about 7% over the last four years to 3,239, while the number increased in the UK as a whole by 11%;

- Information Services Division (ISD) report that the number of occupational therapy staff employed in NHSScotland on September 30th 2012 was 2,488 (headcount). By Whole Time Equivalent (WTE) they account for 22% of AHPs or about 1.5% of NHSScotland staff. The number of occupational therapy staff in post at Agenda for Change (AfC) band five in 2012 or over equated to an estimated 60% of all Scottish registrants;

- the distribution of occupational therapy staff employed in NHSScotland by AfC band between September 30th 2009 and September 30th 2012 shows evidence of a reduction in the proportion of posts at band 6, 5, 3 and 2 and small increases at band 7 and 8a and 8b;

- while the short term vacancy rate for NHSScotland occupational therapy staff increased between September 30th 2010 and September 30th 2012, the short term vacancies have not translated into an increase in long-term vacancies;
the number of OT vacancies advertised in job centres in Scotland regularly exceeded OTs claiming Job Seekers' Allowance (JSA) between 2007 and 2009, but subsequently the numbers converged. Vacancies again exceeded claimants during 2012.
Chapter 1

Introduction

This report is the result of a programme of data development and analysis on the Allied Health Professionss in Scotland by NHS Education for Scotland (NES) and it describes the education and training market and the labour market for Occupational Therapists (OTs). It offers an initial look at the profession, drawing on several sources of routinely collected data at different stages along the education and employment pathway. As several years of longitudinal data was available on pre-registration students and health sector employees, these groups comprise the main focus of this report. Other organisations collate and publish data which include occupational therapy staff working in other sectors including public and private social care services, Scottish Social Services Council (SSSC) (www.sssc.uk.com/) and third sector service providers, Scottish Council for Voluntary Organisations (SCVO) (www.scvo.org.uk/). [1]

The remainder of this chapter briefly describes the role of OTs. Chapter 2 examines some of the determinants of the demand for occupational therapy services and the extent to which they may change in the future. Chapter 3 provides an overview of the structure and finance of occupational therapy education in Scotland and examines trends in pre-registration education and training for OTs. Chapter 4 reports trends in labour market outcomes for the occupational therapy workforce including employment and vacancy data from NHSScotland. Chapter 5 reflects on the included evidence and sets out some avenues for future work.

1.1 Role definition

The Health and Care Professions Council (HCPC), the professional regulator in the UK, states that OTs enable people to achieve health, well being and life satisfaction through participation in their daily activities (www.hpc-uk.org). The professional body, the College of Occupational Therapists (COT) defines the occupational therapist role as offering practical support to people with physical and mental illness, disability, long term condition, or those experiencing the
effects of ageing, to do the things they need or want to do (www.cot.co.uk).

OTs work in a wide variety of settings including hospital and community care, housing associations, industrial and commercial organisations, schools, charities and voluntary agencies. Services are therefore provided by multiple sectors including health, social care and the third sector.
Chapter 2

The demand for occupational therapy services

Occupational therapy services are provided by OTs and occupational therapy assistants, who play a key role in the management of the elderly, people living with long term conditions and the treatment of mental health. [2] The Scottish population is ageing and life expectancy is increasing. [3] There are more people living longer with long term conditions, more stroke survivors, and increasing numbers of people living with dementia, all of whom may benefit from occupational therapy. [4, 5] Occupational therapy services are used in the treatment of a range of mental health conditions and demand for mental health services is predicted to continue to rise. [6, 7, 8]

2.1 Population projections

In addition to the composition of the population, a key determinant of the future demand for services is its overall size. Figure 2.1 reports the latest population projections by age group for Scotland. [9] Between 2010 and 2021 Scotland’s population is projected to increase by about 5.5% and the number of people aged 65 and over is projected to increase by almost 25%.

2.2 NHSScotland’s demand for Occupational Therapists

NHSScotland is a major employer of and key source of demand for OTs. NHS Boards’ demand for health care workers is a function of their objectives and constraints. The objectives of NHS Boards are developed against their local delivery plan, and policies such as the Quality Strategy and the Efficiency and Productivity Framework. [10, 11] The Allied Health Profession (AHP) perspective is guided by the National Delivery Plan for the Allied Health Professions in Scotland 2012-2015. [12]
Section 2.2.1 reports the planned spending on health by the Scottish Government (SG), which represents the budget constraint of NHS Boards.

### 2.2.1 Government health spending

A key determinant of the demand for health care workers is the budget available to NHS Boards. [13] The SG’s planned expenditure on selected items from their health, wellbeing and cities portfolio, following a spending review in 2011, is shown in Table 2.1. There is no mechanism to identify spending on occupational therapy services provided by different sectors.

### 2.2.2 NHS Board workforce projections

NHS Board projections in 2012 showed that Hospital, Community and Public Health Service (HCHS) employment was projected to increase by 0.09% in the 12 months to March 2013. [14] This projected increase was a function of the projected increase in the number of Personal and Social Care employees, reflecting the transfer of staff from local authorities to NHSScotland.

Excluding Personal and Social Care employees, there was projected to be a 0.68% fall in HCHS employment. For AHPs there was projected to be a 0.57% reduction between March 2012 and March 2013.
### Table 2.1: Detailed planned spending on selected items from SG’s health portfolio, 2011-12 prices

<table>
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<tr>
<td><strong>NHS &amp; Special Health Boards</strong></td>
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<tr>
<td></td>
<td>8645.10</td>
<td>8646.15</td>
<td>8673.81</td>
<td>8686.27</td>
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<tr>
<td><strong>EDUCATION &amp; TRAINING</strong></td>
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<td></td>
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<td></td>
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<tr>
<td>Workforce</td>
<td>28.30</td>
<td>30.34</td>
<td>29.54</td>
<td>28.77</td>
</tr>
<tr>
<td>Nursing</td>
<td>148.50</td>
<td>144.88</td>
<td>140.88</td>
<td>136.81</td>
</tr>
<tr>
<td><strong>PRIMARY &amp; COMMUNITY CARE SERVICES</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>General Medical Services</td>
<td>710.40</td>
<td>693.07</td>
<td>674.85</td>
<td>657.11</td>
</tr>
<tr>
<td>Pharmaceutical Services</td>
<td>185.90</td>
<td>181.37</td>
<td>176.12</td>
<td>170.47</td>
</tr>
<tr>
<td>Contractors’ Remuneration</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>General Dental Services</td>
<td>398.70</td>
<td>388.98</td>
<td>378.75</td>
<td>368.79</td>
</tr>
<tr>
<td>General Ophthalmic Services</td>
<td>93.00</td>
<td>90.73</td>
<td>88.35</td>
<td>86.02</td>
</tr>
</tbody>
</table>

### 2.3 Summary

This chapter showed that:

- occupational therapy services are commonly used to support people living with long term conditions, including dementia and the effects of stroke;

- between 2010 and 2021 Scotland’s population is projected to increase by over 5% and the number of people aged 65 and over is projected to increase by almost 25%;

- both of these factors are likely to lead to an increased demand for occupational therapy services;

- the extent to which this increased demand for occupational therapy services is translated into increased demand for OTs is a function of the objectives and constraints of NHS Boards and other potential employers.
Chapter 3

Education and training market

3.1 Pre-registration education

Glasgow Caledonian University (GCU), Queen Margaret University (QMU) and Robert Gordon University (RGU) provide undergraduate pre-registration occupational therapy education in Scotland as a Bachelor of Science (BSc) honours degree. GCU and QMU also offer postgraduate pre-registration courses: a Master of Science (MSc) at both universities and a postgraduate diploma at QMU only.

3.1.1 Structure and funding

In Scotland places on pre-registration OT courses are not controlled by government, which means that the number of places is determined by the interaction of the supply of places by universities and the demand for places by students. The availability of practice placements is a key factor influencing the supply of places by universities. By convention, most AHPs undertake a minimum of 1,000 hours in clinical placement.

The minimum entry requirement for undergraduate courses is typically four Higher or three A-level qualifications. Students who have completed an Higher National Certificate (HNC) in occupational therapy may enter into second year of the degree course. An honours degree in a relevant subject is required for postgraduate courses.

Where eligibility criteria are met, Scottish-domiciled and European Economic Area (EEA) students are funded by the public sector through the Scottish Funding Council (SFC) who use data returns from universities each year to set benchmarked prices for different subject groups. In academic year 2013-14 the gross subject price for subject price group 3, which includes Health and Community Studies, was £8,447. This included the tuition fee of £1,820 for undergraduate courses which is paid by Students Awards Agency for Scotland (SAAS) and the remainder which is paid by SFC. Postgraduate courses are
also supported by SFC.

Students from the rest of the UK and non-EEA students do not receive support from the public sector in Scotland. Undergraduate fees for students from the rest of the UK were around £7,000 in all three universities in academic year 2013-14, and ranged from £6,510 to £8,240 for postgraduate courses. Undergraduate fees for overseas students were between £11,000 and £12,090 and postgraduate fees were £12,000 and £15,600 at GCU and QMU respectively.

In addition to several demand side subsidies that are available to all EEA students studying in Scotland, students studying on an AHP course also receive an income assessed Scottish Government Health Directorates (SGHD) bursary, a non-income assessed loan and may apply for income assessed support towards placement expenses. [15]

The above pre-registration courses are approved by the HCPC and allow graduates to register with the HCPC. Anyone using the title of occupational therapist must be registered with the HCPC.

### 3.1.2 Applications to undergraduate education

The Universities and Colleges Admissions Service (UCAS) collects data on applications and acceptances into undergraduate courses at universities. These data comprise the number of applications to courses through the main application scheme and number of accepted places via all application routes. The ratio is a proxy measure of the demand for course places in Scotland which, among other factors, may indicate the applicants’ assessment of the relative benefits of entering each profession.

Figure 3.1 illustrates the ratio of applications to accepted places for occupational therapy courses at GCU, QMU and RGU. Between 2003 and 2011 the ratio of applications to accepted places fluctuated between four and nine applications per accepted place at all three universities, while in 2012 it increased to eleven at QMU, more than twice that of RGU. Similar data for the other AHPs are shown in Figure A.1 in Appendix A.

The total number of accepted places into undergraduate occupational therapy courses in Scotland each year increased from 185 in 2003 to 215 in 2006. In 2012 it was 132, the lowest number in over a decade as shown in Table 3.1.

### 3.1.3 Students in undergraduate and postgraduate education

The Higher Education Statistics Agency (HESA) collects an annual record for each student in education and training at UK universities. Institutions submit data to HESA in September each year for the previous academic year, comprising one record for every student registered in each course.

The total number of first year pre-registration occupational therapy students and those who completed in each academic year from 2005-06 to 2011-12 is
Figure 3.1: Ratio of applications to accepted places for undergraduate occupational therapy courses in Scotland 2003-2012

Table 3.1: Total number of accepted places in undergraduate courses Scotland 2003-2012

<table>
<thead>
<tr>
<th>Year</th>
<th>Accepted places</th>
</tr>
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<tbody>
<tr>
<td>2003</td>
<td>185</td>
</tr>
<tr>
<td>2004</td>
<td>192</td>
</tr>
<tr>
<td>2005</td>
<td>210</td>
</tr>
<tr>
<td>2006</td>
<td>215</td>
</tr>
<tr>
<td>2007</td>
<td>196</td>
</tr>
<tr>
<td>2008</td>
<td>189</td>
</tr>
<tr>
<td>2009</td>
<td>181</td>
</tr>
<tr>
<td>2010</td>
<td>154</td>
</tr>
<tr>
<td>2011</td>
<td>163</td>
</tr>
<tr>
<td>2012</td>
<td>132</td>
</tr>
</tbody>
</table>
shown in Table 3.2. Note that the completion data for 2012 is not included as it was incomplete at the time of writing.

**Table 3.2:** Number of students beginning and completing pre-registration occupational therapy courses in Scotland by academic year 2005-06 to 2011-12

<table>
<thead>
<tr>
<th></th>
<th>2005-06</th>
<th>06-07</th>
<th>07-08</th>
<th>08-09</th>
<th>09-10</th>
<th>10-11</th>
<th>11-12</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>FIRST YEAR</strong></td>
<td></td>
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<td></td>
<td></td>
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</tr>
<tr>
<td>Undergraduate</td>
<td>172</td>
<td>191</td>
<td>171</td>
<td>166</td>
<td>154</td>
<td>136</td>
<td>139</td>
</tr>
<tr>
<td>Postgraduate</td>
<td>44</td>
<td>42</td>
<td>45</td>
<td>35</td>
<td>26</td>
<td>53</td>
<td>40</td>
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<tr>
<td>Total</td>
<td>216</td>
<td>233</td>
<td>216</td>
<td>201</td>
<td>180</td>
<td>189</td>
<td>179</td>
</tr>
<tr>
<td><strong>COMPLETED</strong></td>
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<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Undergraduate</td>
<td>185</td>
<td>124</td>
<td>128</td>
<td>169</td>
<td>174</td>
<td>149</td>
<td>-</td>
</tr>
<tr>
<td>Postgraduate</td>
<td>52</td>
<td>49</td>
<td>50</td>
<td>46</td>
<td>38</td>
<td>25</td>
<td>-</td>
</tr>
<tr>
<td>Total</td>
<td>237</td>
<td>173</td>
<td>178</td>
<td>215</td>
<td>212</td>
<td>174</td>
<td>-</td>
</tr>
</tbody>
</table>

There were more than 200 first year students each academic year between 2005-06 and 2008-09, and under 190 in each of the three subsequent years. The output of students successfully completing each academic year fluctuated between around 175 and well over 200 during the six years of available data. Figure 3.2 shows the distribution of completions by university, indicating a steady fall in the number of postgraduate students completing between 2006 and 2011.

**Student demographics**

The mean age of first year undergraduate students varied between 21 and 23 between academic year 2005-06 and 2011-12 and the percentage of female students was 91-95% over the same period. The mean age of first year postgraduate students varied from 25 to 29 years, of whom 82-94% were female.

Over the same time, between 6% and 14% of undergraduate and 3-20% of postgraduate students each academic year reported having a disability. The most commonly cited categories were learning disability (including dyslexia) and unseen physical disability (including diabetes and epilepsy).

Between 1% and 5% of undergraduate students were from Black and Minority Ethnic (BME) groups, although up to 5% of records each year did not include this data. Between 8% and 15% of postgraduate students were from BME groups, and 2% of records had missing data.

From 2007-08 onwards HESA collected data on whether or not students reported having dependants at the time of their application to university. Since 2009-10 the rate of completion of this data has improved to over 90% of records each year. Since then between 5% and 10% of undergraduate students each
year reported having children or other dependants, compared to 7-17% of postgraduate students.

Figure 3.3 shows the distribution of students by country of domicile. The percentage of undergraduate students who were domiciled in Scotland on entry has varied overall from 65% to 83%, compared to between 48-64% of postgraduate students.

The Scottish Index of Multiple Deprivation (SIMD) combines a set of indicators across domains including income, employment, health, education, skills and training, housing, geographic access and crime and is available only for students who were domiciled in Scotland on application to the course. SIMD Q1 represents students from the 20% most deprived areas. Figure 3.4 shows that the distribution of students varied somewhat between 2005-06 and 2011-12, but overall about 67% of both undergraduate and postgraduate students who were domiciled in Scotland on application were from areas within the two least deprived SIMD quintiles.

The SIMD distribution differs considerably between universities with 55% of GCU’s undergraduate Scottish-domiciled population from areas in the two least deprived quintiles over the last seven years, compared to 75% at QMU and 85% at RGU. The proportion of postgraduate students from the least deprived areas at GCU and QMU was similar to their undergraduate student population: 57% and 76% respectively.

The HESA data includes students’ highest qualification on entry, however
Figure 3.3: Percentage of first year students by country of domicile and year of entry 2005-2012

Figure 3.4: Percentage of first year Scottish-domiciled students by SIMD quintile and year of entry 2005-2012
the data categorisation changed in 2010; prior to this students with an HNC or Higher National Diploma (HND) were not distinguished. Seventeen percent of students who entered year one of an undergraduate course during academic year 2005-06 had an HNC or HND. This percentage fluctuated between 5% and 20% over the subsequent four years. A small number of students entered into year two of the undergraduate programme, and among them 20-80% had the same level of qualification. In 2011, the new data collection identifies students with an HNC as a unique category, and they comprised 12% of the intake into year one of programme, there were none recorded as entering into year two.

3.2 Summary

This chapter showed that:

- the ratio of applicants to accepted places for undergraduate pre-registration occupational therapy education in Scotland fluctuated between four and nine between 2003 and 2011 at all three universities. It increased to eleven at QMU in 2012;

- the number of first-year pre-registration occupational therapy students was consistently over 200 between 2005-06 and 2008-09 and decreased to under 190 in the three subsequent years; and

- since 2005-06, 74% of first year undergraduate and 58% of postgraduate students were domiciled in Scotland. Of those, two thirds lived in areas from the two least deprived SIMD quintiles on application to their course, although this percentage differed substantially between universities.
Chapter 4

Labour market

4.1 Registration with the regulator

Once they have completed an accredited pre-registration course, OTs must register with the HCPC to work in the UK. Figure 4.1 shows the number of HCPC AHP registrants in the UK over the last twelve years. [16, 17] Between 2001 to 2013 the number of UK registered OTs increased from 22,197 to 33,456 an overall increase of 51%.

Freedom of Information requests published on the HCPC website indicate that the numbers of OTs in Scotland in the last four years has increased annually, from 3,018 in November 2009 to 3,239 in 2012. [18] The latest figures suggest that just under 10% of UK registrants are located in Scotland (comparing late 2012 registrations in Scotland with early 2013 UK figures). In each of the four years since 2009, 95% of registrants in Scotland were female.

Without individual level data further analysis on the demographics or retention of Scottish registrants is not possible. Negotiations have been established with HCPC to develop work in this area in the future.

4.2 Employment in NHSScotland

Workforce data for social service and voluntary sector employees is collated by organisations such as SSSC and SCVO. Information on independent OTs is not publicly available. Data published by the SG from October 2010 indicated that there were significant numbers of OTs (n=477) and occupational therapy assistants (n=181) employed by Scottish local authority social work services departments, but detailed data was not available for analysis (www.scotland.gov.uk/Publications/2011/06/24105744/0).

National labour market information, which includes all sectors, is described in Section 4.3. The remainder of this section reports on occupational therapy staff in NHSScotland.
Data on the NHSScotland workforce are collated regularly from NHS Boards and published by the Information Services Division (ISD), a division of NHS National Services Scotland (NSS) (www.isdscotland.org/Health-Topics/Workforce/). Using these aggregate data, Figure 4.2 reports the number of Whole Time Equivalent (WTE) staff in NHSScotland from 2007 to 2012 on the left, and AHPs only on the right. On September 30th 2012 AHPs accounted for 7.1% of HCHS staff (excluding staff who work within the general medical and dental service), a slight increase in proportion since 2007 (6.8%).

On September 30th 2012 occupational therapy accounted for 22% of AHPs, or about 1.5% of all staff, employed in NHSScotland. Multi-skilled AHP staff work across more than one discipline and include support workers and AHP leads, and therefore are not counted within the relevant professions. These percentages remained relatively steady between 2007 and 2012. Occupational therapy was the second largest AHP group by WTE behind physiotherapy, but was exceeded by radiography in 2012.

The number of NHS occupational therapy staff by headcount (all bands included) decreased slightly between 30th September 2007 (n=2,559) and 2012 (n=2,488). In 2012, 1,949 of the total number were in posts of band five or over, which equates to approximately 60% of the number of registered OTs in Scotland around that time, using the HCPC registration data referred to in Section 4.1.

The distribution of OT WTE staff in NHSScotland by Agenda for Change (AfC) band between 2009 and 2012 is shown in Figure 4.4. Earlier data is not
Figure 4.2: NHSScotland staff groups (left) and AHP staff (right) (WTE) 30th September 2007-2012

Figure 4.3: NHSScotland AHP staff (left) and occupational therapy staff (right) (WTE) on 30th September 2007-2012
included in this Figure due to the high proportion of posts which were not coded in a comparable way; referred to as Not Elsewhere Classified (NEC). It shows an overall decrease in the WTE at AfC bands 6, 5, 3 and 2, and small increases at higher bands, including 7 and 8a and b. Comparable data for other AHPs in NHSScotland are shown in Figure B.2 in Appendix B.

**Figure 4.4:** NHSScotland occupational therapy staff (WTE) by AfC band on 30th September 2009-2012

The percentage of occupational therapy staff at grade one to four, generally the bands at which support workers are employed, decreased slightly from just over 22% of the total WTE in 2007 to under 21% in 2012, and is shown in Figure 4.5. Comparable figures for the other AHPs are shown in Figure B.1 in Appendix B.

Figure 4.6 shows the distribution of NHSScotland occupational therapy staff of all grades (WTE), between each NHS Board relative to their share of the population. NHS Boards with a value less than one have fewer occupational therapy staff relative to its population than the other NHS Boards. Figure 4.6 shows that the employment rates of occupational therapy staff between NHS Boards ranges from 0.5 to 1.7. Figure 4.6 shows that, with the exception of a couple of the island NHS Boards, there is relatively little variation. The reported staffing levels do not take into account variation in the health needs of the population, the effect of remoteness and rurality or the provision of services which operate across different NHS Boards or integrate with other sectors. The total WTE of occupational therapy staff by Health Board is given in Table B.1 in Appendix B.
4.2.1 NHSScotland staff demographics

The age distribution of occupational therapy staff employed in NHSScotland is shown in Figure 4.7 indicating that it is relatively uniform across the age categories from 25-29 to 50-54 years. By headcount, 30% of occupational therapy staff were aged between 20 and 34 in September 2012, a decrease from 36% in 2007. For comparison Figure B.4 in Appendix B illustrates the age distribution of all AHPs since 2007.

The vast majority of occupational therapy staff in NHSScotland are female, over 92% since 2007, a higher percentage than AHP staff overall (89%) and NHSScotland workforce (excluding general dental and medical practitioners) (79%). In September 2012, 48% of occupational therapy staff worked part-time, compared to 43% of all AHPs in NHSScotland.

4.2.2 NHSScotland vacancy rates

ISD publish national statistics on AHP vacancies in NHSScotland as reported to them by NHS Boards. The vacancy rate is defined as the number of WTE vacancies divided by the WTE establishment and is reported as a percentage. Information on absences and posts frozen or subject to review is not published.

Figure 4.8 reports the trend in vacancy rates on 30th September 2007 to 2012 for occupational therapy staff in AfC bands one to four. The rate for short term vacancies of less than three months in AfC bands one to four was consis-
Figure 4.6: Share of occupational therapy staff (WTE) relative to population by NHS Board on 30th September 2012

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Figure 4.7: NHSScotland occupational therapy staff (WTE) by age on September 30th 2007-2012

![Pie chart showing NHSScotland occupational therapy staff (WTE) by age on September 30th 2007-2012](image)

Source: ISD Scotland

Short-term vacancies of less than three months decreased from over 4% in 2007 to about 1% in 2010 and have subsequently increased, returning towards 4%. They have also consistently exceeded the rate of longer term vacancies.

4.3 National labour market

Most jobs for OTs in Scotland are unlikely to be advertised in job centres and are more commonly advertised on the Scotland’s Health On the Web (SHOW) website, professional publications and in local newspapers. However, those data are not available for analysis. NOMIS is a web-based database of labour market statistics run by the University of Durham on behalf of the Office of National Statistics (ONS) and contains official labour market statistics for the UK with location and profession specific data. The NOMIS data therefore represent a nationally standardised source of labour market information including public, private and third sector posts. There are Standard Occupational Classifications (SOCs) for several AHPs including OTs. NOMIS routinely publishes the number of vacancies notified to employment service job centres by region and SOC. They also publish the number of Job Seekers’ Allowance (JSA) claimants...
Figure 4.8: Vacancy rates for NHSScotland occupational therapy posts at AfC bands 1 to 4 on September 30th 2007-2012

Figure 4.9: Vacancy rates for NHSScotland occupational therapy posts at AfC bands 5 to 9 on September 30th 2007-2012
by the SOC of the sought occupation by region of the UK.

Figure 4.10 reports the number of vacancies and JSA claimants for selected SOCs in Scotland between May 1st 2006 and November 1st 2012.

Between 2007 and 2009, there were more OT vacancies than OT JSA claimants. Since September 2010, in common with the NHSScotland vacancies reported in section 4.2, the number of OT vacancies increased relative to the number of JSA claimants.

**Figure 4.10:** Job centre vacancy and claimants counts for OTs in Scotland 2006-2012

### 4.4 Summary

This chapter showed that

- the number of OTs registered with the HCPC increased by 50% between 2001 and 2013 to 33,456. In Scotland the number of registrants increased by about 7% over the last four years to 3,239, while the number increased in the UK as a whole by 11%;

- ISD report that the number of occupational therapy staff employed in NHSScotland on September 30th 2012 was 2,488 (headcount). By WTE they account for 22% of AHPs or about 1.5% of NHSScotland staff. The number of occupational therapy staff in post at AfC band five in 2012 or over equated to an estimated 60% of all Scottish registrants;
• the distribution of occupational therapy staff employed in NHSScotland by AfC band between September 30th 2009 and September 30th 2012 shows evidence of a reduction in the proportion of posts at band 6, 5, 3 and 2 and small increases at band 7 and 8a and 8b;

• while the short term vacancy rate for NHSScotland occupational therapy staff increased between September 30th 2010 and September 30th 2012, the short term vacancies have not translated into an increase in long-term vacancies;

• the number of OT vacancies advertised in job centres in Scotland regularly exceeded OTs claiming JSA between 2007 and 2009, but subsequently the numbers converged. Vacancies again exceeded claimants during 2012.
Chapter 5

Conclusion

5.1 Reflections on the available evidence

This initial examination of longitudinal data on the education and labour markets for occupational therapy in Scotland has revealed a number of trends in supply and demand.

The intake to pre-registration education has decreased from over 200 per year between 2005-06 to 2008-09 to around 190 in the three most recent years. The demand for places on undergraduate courses has remained relatively high at between four and nine applications per place across universities with a high of around ten in 2012, coinciding with the total number of places decreasing to its lowest of the last decade. Most students are female, white and in their early twenties. The domicile of students has implications for the income of universities and may also relate to the rate of retention of students within Scotland’s workforce. Scottish-domiciled students have consistently comprised over two thirds of those entering undergraduate and around half of those entering postgraduate courses.

The number of registered OTs in Scotland has increased slightly over the last four years at a similar rate to the UK as a whole. In late 2012 around 60% of all registered OTs in Scotland were estimated to work in the NHS; little data was available on those working in other sectors. The size of the NHSScotland occupational therapy workforce has fallen slightly in the last few years (similar to the AHP workforce overall) and there is some evidence of a relatively greater loss of posts at grade six and below. NHS and national vacancy information suggest that in recent years, the rate of long term vacancies has stayed low with a recent increase in short term vacancies at bands one to four.

It is beyond the scope of this report to comment on the extent to which the current occupational therapy workforce in Scotland meets the needs of the Scottish population. However, if the assumption is made that at least the same level of service will be required in future, the predicted changes in the population’s demographics and overall size suggest that there may be an increased
demand for occupational therapy services.

5.2 Avenues for future work

The avenues for future work arising from this report reflect limitations in both data and analysis.

There are several data sources that could be explored in more detail, including new information and more detailed examination of currently included data. NES will continue to negotiate with partners and stakeholders to collaborate and share access to data where appropriate. For example, the HCPC data provides a consistent source of information on registered AHPs at a UK level but is not currently available for Scotland at the individual level. Although NHS OTs appear to comprise the majority of OTs registrants in Scotland longitudinal data from other organisations, including those who hold data for the social services and third sector would enhance future work. Some of that data is currently published in aggregate form, but detailed information would be required for any analysis of integrated services. Occupational therapy services are provided by teams of registered OTs and occupational therapy support workers, therefore data on the education and labour markets and the activity of support workers would be valuable.

ISD national statistics provides a rich source of information on registered OTs and support staff employed in NHSScotland. This report examined aggregate data on the number of occupational therapy staff at several points in time, which provides a sense of the capacity to deliver occupational therapy services. The next stage of analysis would be to examine the size and determinants of the flows of staff between points in time using anonymised individual-level data. This is important because the number of OTs in the future is a function of the current number of OTs and net inflow of OTs. There are other NHSScotland datasets which could provide useful information including activity data for provision and use of occupational therapy services, waiting times data and information on integrated and multi-professional services.
Appendix A

Additional education data

The ratio of applications to accepted places on undergraduate AHP courses at universities in Scotland is shown in Figure A.1.

Figure A.1: Ratio of applications to accepted places for undergraduate AHP courses in Scotland 2003-2012

source: UCAS
Appendix B

Additional NHSScotland workforce data

The percentage of staff at grade one to four, generally the bands at which support workers are employed for each AHP staff group is shown in Figure B.1.

Figure B.1: Percentage of AHP staff at bands 1-4 and 5-9 on 30th September 2007-2012

Figure B.2 shows the distribution of all AHP staff by AfC band.

Figure B.3 shows the distribution of the six largest AHP groups in NHS-Scotland by AfC band. There was some variation in the distribution by AfC band between professions, but the majority were on or above AfC band five.

The total WTE of OT staff in NHSScotland in September 2012 used to pro-
Figure B.2: Percent of NHSScotland AHP staff (WTE) by AfC band 30th September 2007-2012

Figure B.3: NHSScotland AHP staff as a proportion of WTE by AfC band on 30th September 2012
duce the map in Figure 4.6 are shown in Table B.1.

**Table B.1**: NHSScotland occupational therapy staff (total WTE) by health board on 30th September 2012

<table>
<thead>
<tr>
<th>Health Board</th>
<th>Total WTE</th>
</tr>
</thead>
<tbody>
<tr>
<td>NHS Borders</td>
<td>35.7</td>
</tr>
<tr>
<td>NHS Fife</td>
<td>138.8</td>
</tr>
<tr>
<td>NHS Lothian</td>
<td>307.2</td>
</tr>
<tr>
<td>NHS Highland</td>
<td>109.5</td>
</tr>
<tr>
<td>NHS Grampian</td>
<td>195.3</td>
</tr>
<tr>
<td>NHS Orkney</td>
<td>11.6</td>
</tr>
<tr>
<td>NHS Tayside</td>
<td>183.4</td>
</tr>
<tr>
<td>NHS Western Isles</td>
<td>17.2</td>
</tr>
<tr>
<td>NHS Shetland</td>
<td>4.0</td>
</tr>
<tr>
<td>NHS Ayrshire &amp; Arran</td>
<td>135.6</td>
</tr>
<tr>
<td>NHS Greater Glasgow &amp; Clyde</td>
<td>532.1</td>
</tr>
<tr>
<td>NHS Lanarkshire</td>
<td>209.8</td>
</tr>
<tr>
<td>NHS Forth Valley</td>
<td>99.9</td>
</tr>
<tr>
<td>NHS Dumfries &amp; Galloway</td>
<td>55.5</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>2,035.4</strong></td>
</tr>
</tbody>
</table>

Figure B.4 shows the distribution of AHP staff by age group within each profession in NHSScotland in September 2012.

Figure B.5 reports the trend in vacancy rates on September 30th 2012 for AfC bands one to four. One extreme value of 100% vacancy rate for orthoptists on September 30th 2007 was removed to allow the scale for all graphs to better illustrate the data. It represented a vacancy of one WTE for an establishment of one WTE. In general the rate for vacancies in AfC bands one to four: was less than five percent; was greater for short-term rather than long-term vacancies; and increased for short-term vacancies since 2010.

Figure B.6 reports the trend in vacancy rates on September 30th for AHP posts at AfC bands five to nine.

Figure B.7 reports the number of vacancies and JSA claimants for selected professional AHPs with defined SOCs between May 1st 2006 and November 1st 2012.
**Figure B.4:** Percent of NHSScotland AHP staff (WTE) by age on September 30th 2007-2012

Source: ISD Scotland

**Figure B.5:** Vacancy rates for NHSScotland AHP posts at AfC bands one to four 30th September 2007-2012

Source: ISD Scotland
Figure B.6: Vacancy rates for NHSScotland AHP posts at AfC bands five to nine
30th September 2007-2012

Figure B.7: Number of Job Centre vacancy and claimant counts for selected AHP
groups in Scotland 2006-2012

Source: ISD Scotland

Source: NOMIS
Appendix C

UK Border Agency shortage occupation list

There are several health and social care professions on the current UK Border Agency (UKBA) shortage occupation list. An occupation is on the shortage occupation list if there are not enough resident workers to fill the available jobs in that particular occupation.

Highly skilled migrants from outside the EEA who want to work in the UK must apply for visas through the Tier 2 immigration route [19]. Migrant workers can only enter the UK under Tier 2 if the job is on the shortage occupation list or no suitable resident workers apply after advertising the job in the UK for four weeks.

The current shortage occupation list for the UK valid from 6th April 2013 includes the following professions in health and social care. Items in bold text apply to Scotland only.

- **Medical radiographers (SOC 2217)**
  - HCPC-registered diagnostic radiographer
  - HCPC-registered therapeutic radiographer
  - sonographer

- **Nurses (SOC 2231)**
  - specialist nurse working in neonatal intensive care units

- **Medical and dental technicians (SOC 3218)**
  - nuclear medicine technologist
  - radiotherapy technologist

- **Medical practitioners (SOC 2211)**
- consultants in emergency medicine, haematology, old age psychiatry
- non-consultant, non-training, medical staff posts in anaesthesics, general medicine specialities delivering acute care services (intensive care medicine, general internal medicine (acute), emergency medicine (including specialist doctors working in accident and emergency), rehabilitation medicine and psychiatry
- ST3, ST4, ST5 and ST6 trainees in paediatrics or anaesthetics
- Staff Grade and Associate Specialist (SAS) staff doctors in paediatrics or anaesthetics
- consultants in paediatrics or anaesthetics
- non-consultant, non-training doctors in the specialty obstetrics and gynaecology

- Social workers (SOC 2442)
  - social worker working in children and family services
- Biological scientists and biochemists (SOC 2112)
  - clinical neurophysiologist
- Physical scientists (SOC 2113)
  - nuclear medicine scientist
  - radiotherapy physicist
  - staff working in diagnostics radiology (including magnetic resonance imaging)
Glossary

**AfC**  Agenda for Change

**AHP**  Allied Health Profession

**Allied Health Professions**  refers to a wide range of health care professions and includes Art Therapists, Dietitians, Drama Therapists, Music Therapists, Occupational Therapists, Orthoptists, Paramedics, Physiotherapists, Prosthetists and Orthotists, Podiatrists, Diagnostic Radiographers, Therapeutic Radiographers and Speech and Language Therapists

**BME**  Black and Minority Ethnic

**BSc**  Bachelor of Science

**COT**  College of Occupational Therapists

**EEA**  European Economic Area

**GCU**  Glasgow Caledonian University

**HCHS**  Hospital, Community and Public Health Service

**HCPC**  Health and Care Professions Council

**HESA**  Higher Education Statistics Agency

**HNC**  Higher National Certificate

**HND**  Higher National Diploma

**ISD**  Information Services Division

**JSA**  Job Seekers’ Allowance

**MSc**  Master of Science
NEC Not Elsewhere Classified
NES NHS Education for Scotland
NSS NHS National Services Scotland
ONS Office of National Statistics
OT Occupational Therapist
QMU Queen Margaret University
RGU Robert Gordon University
SAAS Students Awards Agency for Scotland
SAS Staff Grade and Associate Specialist
SCVO Scottish Council for Voluntary Organisations
SFC Scottish Funding Council
SG Scottish Government
SGHD Scottish Government Health Directorates
SHOW Scotland’s Health On the Web
SIMD Scottish Index of Multiple Deprivation
SOC Standard Occupational Classification
SSSC Scottish Social Services Council
UCAS Universities and Colleges Admissions Service
UKBA UK Border Agency
WTE Whole Time Equivalent
References


