Nephrology

Table 1.1 outlines the current number and ratio of consultant nephrologists per 100,000 of the population in Ireland. Included in this table are the projected numbers of specialists per 100,000 of the population in 2024, should the current ratio remain static at the 2014 level. Table 1.1 also includes the research informed range of specialists per head of population as per expert stakeholder perspectives, the Hanly (2003) recommendations and the ratios in place, projected and/or recommended in comparable healthcare jurisdictions.

Table 1.1 Nephrology Consultant Posts (Private and Public) 2014-2024

<table>
<thead>
<tr>
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<th>2014</th>
<th>2024*</th>
<th>Research informed range of specialists per head of population to 2024 **</th>
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</thead>
<tbody>
<tr>
<td>N</td>
<td>Ratio per 100,000 pop</td>
<td>N</td>
<td>Ratio per 100,000 pop</td>
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<tr>
<td>30 (26 WTE)</td>
<td>.6</td>
<td>31 (27 WTE)</td>
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* Accounting for population growth and an unchanged ratio of consultants
** The recommendation is based on information in Table 1.2 and represents a range from the lowest to the highest ratio considered

Table 1.2

| Hanly (2003) | Hanly (2003) recommended a ratio of 1: 65,000 consultant nephrologists per head of population to achieve a consultant-provided service and to comply with the European Working Time Directive (EWTD) in 2013. This represents approximately 1.5 consultants per 100,000 of the population. Using CSO population projections (CSO, 2011), we estimate the recommended ratio to equate to 71 consultant nephrologists today and approximately 77 consultant nephrologists in 2024 approximately. Using a WTE rate of .86, this would equate to 61 and 66 whole-time equivalent (WTE) consultants in 2014 and 2024 respectively. |
| Royal College of Physicians of Ireland, Faculty of Medicine | The Royal College of Physicians of Ireland estimate that there are 20.3 whole-time equivalent (WTE) nephrologists working in the public sector in Ireland. This figure is observed on the ground, and takes into account the time spent on General Internal Medicine (GIM). Based on the guideline of the British Renal Association, there should be one consultant nephrologist (WTE) per 100 End Stage Kidney Disease (ESKD) patients. This represents 1 nephrologist per 50 transplant or dialysis patients. Overall, there are 7.4 nephrologists per million population in the United Kingdom, while in Ireland there are 4.6 per million population. In the UK there are approximately 1.1 nephrologists per 100 ESKD patients. In Ireland, there are approximately 3,500 patients with ESKD, which equates to 0.6 WTE consultants per 100 patients. To reach the UK figure for nephrologists per ESKD patients, there must be an increase in consultant numbers of approximately 20 over the next 10 years (assuming continued participation in acute medicine and/or general internal medicine). The current training number of 12 reflects a limited number of training centres since the inception of the programme. Many training centres do not have an opportunity to train an SpR due to this shortfall, and in fact, the specialty currently rotates training posts between centres to ensure fairness to trainers. Following inspections of training sites, the specialty has invariably recommended an increase in training posts due to current oversubscription and the lack of difficulty in filling posts to date. There is sufficient training capacity to accommodate 20 SpRs clinically and this could increase with any expansion in consultant posts. |
| Clinical Programme | In Ireland, there are approximately 4.88 consultant nephrologists (WTE) per million population, .6 consultant (WTE) per 1,000 Chronic Kidney Disease (CKD) patients, .57 consultant (WTE) per 100 End-Stage Kidney Disease (ESKD) patients, and 1.22 consultant (WTE) per 100 Long-term Dialysis patients. The number of consultant adult nephrologists needed per million of the population (based on current age-spread and |
ESKD rates) is 9.88 WTE per million population (a total of 44.3 WTEs). In planning for consultant resource management over the next 5-10 years, the following is proposed to 2020-25:

- Accommodating growth in ESKD patients of c.144 patients per annum
- Achieving a ratio of 1 consultant nephrologist (WTE) per 100 ESKD patients
- Participating in GIM/AUMT to an average of 25% of sessions in 50% of units
- Expanding the number of those holding academic contracts (contributing c.2.0 WTEs in total to nephrology services) to 10 by 2025

By 2020 this would require the recruitment of 21.8 additional consultant nephrologists (WTE) which, depending on post configuration means a steady increment of 3-4 per annum. By 2025 this would require the recruitment of 30 additional consultants (WTE) which, depending on post configuration means a steady increment of 2-3 per annum. No more than 5-10 retirements are anticipated before 2025.

### Centre for Workforce Intelligence (2011)

The Royal College of Physicians (RCP, 2008) recommend the ratio to be one whole-time equivalent (WTE) renal consultant (with commitment to General Internal Medicine (GIM) or another specialty) per 75 Renal Replacement Therapy (RRT) patients, or one dedicated WTE renal consultant for every 100 RRT patients. The most recent data from the National Health Service Information Centre census (NHS IC, 2011) records 454 WTE (488 headcount) consultants employed in England as of September 2010 (0.93 per 100,000). The most recent data available from the Renal Association’s (RA) UK Renal Registry (RA, 2009a) shows that there were 39,476 patients on RRT in England on 31 December 2008. This would equate to a need for 395 WTE renal consultants. The Joint Specialty Committee (JSC) Workforce Group’s paper detailing workforce demand for nephrology over the next five to ten years (JSC, 2008) predicts that the number of patients on RRT will increase to 66,848 in the whole of the UK by 2015. If it is assumed that the proportion of RRT patients in England compared to that in the UK remains constant, there will be an estimated 55,500 patients in England. At a ratio of one WTE consultant per 100 RRT patients, this means an estimated demand for 555 WTE renal consultants will arise in England in 2015. Centre for Workforce Intelligence supply forecasts indicate that supply will reach 555 WTE before 2015 and will increase to around 857 WTE by 2020 (approximately 860 headcount, representing a ratio of 1.5 per 100,000), an average increase of 7.3 per cent annually. The consultant supply is most likely to meet the level of estimated demand within the foreseeable future, and would thereafter result in a risk of oversupply.

### Australia

The Australian Institute of Health and Welfare (2014) estimate that there were 348 specialists working in nephrology in 2012 (whereby nephrology was their main specialism). This equates to a ratio of 1.5 per 100,000 of the population for 2012 (the population of Australia in 2012 was 22.68 million).

### Notes:

- Nephrology (documented as Consultant Nephrology and General Physician): 28 specialists were employed in the public sector (excluding specified purpose contract employees and those on career breaks). Source: HSE Workforce Planning, Analysis, & Informatics Unit, Dec 2013
- Nephrology: 2 specialists were estimated to be employed in the private sector. Source: Medical Directory; Google and hospital websites
- WTE rate used herein is .86. Source: HSE Workforce Planning, Analysis, & Informatics Unit, Dec 2013
- Population 2014 is projected to be 4,626,423 using the M2F2 scenario CSO (2011)
- Population 2024 is projected to be 4,979,921 using the M2F2 scenario CSO (2011)
- Information in Table 1.2 does not necessarily represent the views of HSE-NDTP