

Cardiology

Table 1.1 outlines the current number and ratio of consultant cardiologists 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 Cardiology Consultant Posts (Private and Public) 2014-2024

* Accounting for population growth and an unchanged ratio of consultants

2014		2024*		Research informed range of specialists per head of population to 2024 **	
N	Ratio per 100,000 pop	N	Ratio per 100,000 pop	N	Ratio per 100,000 pop
76 (65 WTE)	1.6	82 (70 WTE)	1.6	70 - 383 (60 - 330 WTE)	1.4 - 7.7

** 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: 70,000 consultant cardiologists 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 1.4 consultants per 100,000 of the population. Using CSO population projections (CSO, 2011), we estimate the recommended ratio to equate to 66 consultant cardiologists today and approximately 71 consultant cardiologists in 2024 approximately. Using a WTE rate of .86, this would equate to 57 and 61 whole-time equivalent (WTE) consultants in 2014 and 2024 respectively.
Royal College of Physicians of Ireland (RCPI), Faculty of Medicine	<p>The final report of the Joint Working Group to review consultant cardiology requirements in Ireland (2004) recommends a consultant cardiology ratio of 1 per 48,000 population. This equates to 20.8 per million or approximately 100 cardiologists at the present population. This recommendation was re-iterated in “Changing Cardiovascular Health”, the National Cardiovascular Health Policy 2010-2019. In addition it was recommended that decisions on the appropriate level of consultant cardiology staff “should take into consideration any effective developments in medical technology and good practice in this and related areas since 2004”. The number of consultant cardiologists in practice in the HSE was 56 in 2011 giving a density per million of 12 (population of Ireland 4.59 million, CSO April 2013). This does not take into account the number of cardiologists working solely in the private hospitals. There is little information about numbers of cardiologists across other European countries. However a limited survey was conducted by the European Cardiac Society in 2000 and updated in 2007. Across EU countries, the mean number of cardiologists per million was 43 in 2000 increasing to 57 in 2007. There is an enormous difference in consultant cardiologist densities across countries. However there has been a significant <i>increase</i> in the densities in each country. Ireland continues to have one of the lowest densities amongst countries surveyed.</p> <p>It is extremely difficult to accurately predict the number of cardiologists that will be required even in the short term. It is impossible to match trainee numbers to government capacity to appoint consultants. However it is apparent that despite improvements in the number of consultant cardiologists appointed over the past 10 years, there remains a shortfall in the number needed. An increase in the number of training positions by 10 to 34 posts is recommended and 10 locations which could</p>

	provide adequate training amongst the centres already available have been identified. It would also be possible to upgrade existing clinical registrar positions to SpR positions in these institutions. Assuming that hospitals were approved by the RCPI for the new posts (or upgrading of existing registrar posts to SpR posts) these positions could be available for interviews in 2015.
National Cardiovascular Health Policy 2010 – 2019 (DoH, 2010)	The final report of the Joint Working Group to review consultant cardiology requirements in 2004 recommended a consultant cardiology ratio of 1 per 48,000 population or 2.1 per 100,000 population approximately, giving a total complement of 81 posts at that time. In 2008, there were 56 established consultant posts, not including those working in the private system. In tandem, there are specialist needs in paediatric, congenital heart disease, hypertension, preventive cardiology and rehabilitation, heart failure and peripheral arterial disease. Numbers of cardiac surgeons in post or approved are deemed adequate to meet current cardiac surgical demand (as at 2010).
United Kingdom – Royal College of Physicians (2013)	The National Health Service (NHS) electronic staff records identified 1,200 consultant cardiologists across the United Kingdom in 2010 (Office for National Statistics estimated population of 62.3 million). Approximately 12% of consultants and 21% of trainees are female. The British Cardiovascular Society estimate that the United Kingdom requires a continuing increase in numbers of consultant cardiologists (including at least 3 paediatric cardiologists) per million population to provide comprehensive cardiac services. For a population of 250,000 no less than a 1:6 on-call ratio should be aimed for, with more sub-specialists required for secondary, tertiary and community cardiac care.
England – Centre for Workforce Intelligence	The most recent data from the National Health Service Information Centre for Health and Social Care census (NHS IC, 2011) records a headcount of 893 (862 whole-time equivalent) consultants in cardiology employed in England on 30 September 2010. This equates to approximately 1.7 consultants per 100,000 of the population. The Centre for Workforce Intelligence acknowledges the potential for errors in coding of the medical workforce and state that the census figures may not capture all consultant cardiologists, thereby underestimating the size of the workforce. The supply of consultants is forecast to increase to 1,574 whole-time equivalent by 2020 (approximately 1,635 headcount which equates to approximately 2.9 per 100,000 of the projected population in 2020), an average increase of 5.9 per cent annually. However, this does not reach the Royal College of Physicians (2008) recommendation of 2,590 – 4,127 consultants for England (4.9 - 7.7 per 100,000 of the population in 2013).
Australia	The Australian Institute of Health and Welfare (2014) estimate that there were 915 specialists working in cardiology in 2012 (whereby cardiology was their main specialism). This equates to a ratio of 4 per 100,000 of the population for 2012 (the population of Australia in 2012 was 22.68 million).

Notes:

- Cardiology: 58 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
- Cardiology: 18 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 1.1.2 does not necessarily represent the views of HSE-NDTP