IPEM
Institute of Physics and Engineering in Medicine



Radiotherapy Workforce Census 2026
Headline Figures

Executive Summary

The aim of IPEM's latest Radiotherapy workforce census was to measure the current Radiotherapy workforce establishment, against the recommended establishment level according to IPEM's Radiotherapy staffing recommendations. IPEM's Workforce Intelligence Unit uses these findings to recommend actions to address workforce shortages.

From February to May 2026, IPEM invited all Heads of Radiotherapy Physics and Engineering services across the UK, including NHS and independent providers, to take part in the 2026 census. A response rate of **87%** was achieved, representing 55 out of 63 UK services. Estimates were gathered from centres that did not respond based on historical survey data. Key findings from the census include:

- An overall vacancy rate of 8% was found.
- The existing establishment, including vacancies, is just 83% of the size recommended by IPEM to provide safe and effective services.
- As of 2026, the number of trainees is insufficient to meet workforce recommendations.
- Fifty-eight percent of Radiotherapy Physics services have a formally recorded risk on their risk register, related to staffing shortages.

Overall Workforce Figures

Staff Group	*Total Establishment (Estimated)**	Filled Posts (Measured)	Vacancies (Measured)	Vacancy Rate
Clinical Scientists	*993.4*	767.6	71.3	9%
Healthcare Science Practitioners (Physics)	*691.7*	537.7	41.4	7%
Healthcare Science Practitioners (Engineering)	*360.1*	268.0	33.0	11%
Other Clinical Staff†	*89.2*	76.3	5.9	7%
Administrative Staff	*37.1*	33.3	3.8	10%
Total	***2171.4***	**1682.9**	**155.4**	**8%**

Table 1: Measured and estimated establishment levels for five staff groups; measured levels of filled and vacant posts; measured vacancy rates.

**Estimates are made with reference to data in previous workforce census responses.*

†Staff in this group include supernumerary trainees, Clinical and Scientific Computing staff, IT technicians, quality managers, and HCPC-registered Radiographers.

Staff Group	Current Establishment (Including Vacancies)	Optimal Establishment	Recommended Establishment	Trainees/ Working Towards Qualification
Clinical Scientists	838.9	998.7	1023.7	167
Healthcare Science Practitioners (Physics)	579.1	706.1	790.4	46
Healthcare Science Practitioners (Engineering)	301.0	378.8	406.8	54
Other Clinical Staff	82.2	96.4	N/A	N/A
Administrative Staff	37.1	61.5	N/A	N/A
Medical Physics Experts (MPEs)	472	595.4	664.3	172

Table 2: Measured total establishment WTE, compared with optimal and recommended establishment levels. Number of current trainees is listed for each professional group. Four centres provided either an optimal or recommended establishment level, but not both. For these, optimal and recommended establishment size was assumed to be equal.

Benchmarking

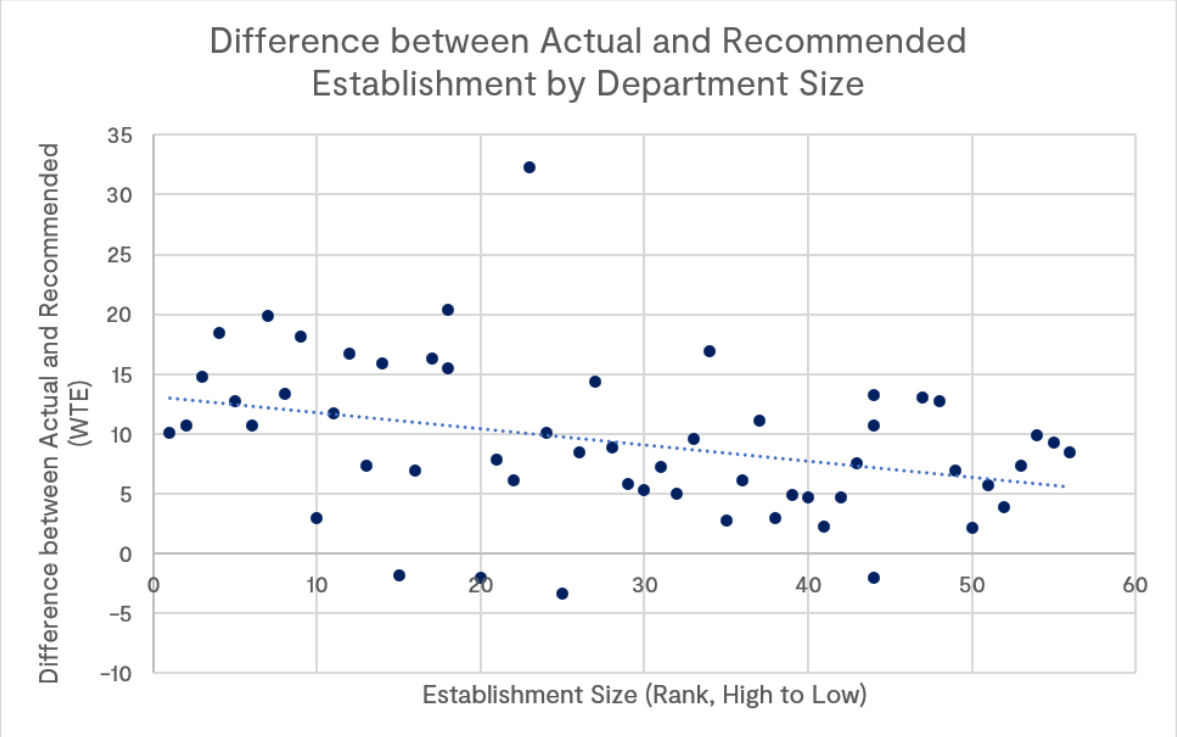


Figure 1: A scatterplot showing the relationship between respondents' relative establishment size and recommended total number of staff WTE. A lower rank indicates a larger establishment.

Risk to Services

		Likelihood Level				
	0	1	2	3	4	5
Risk Level	1	0	0	0	0	0
	2	0	1	0	0	0
	3	0	1	9	6	3
	4	0	0	5	3	1
	5	0	0	0	1	0

Figure 2: A heatmap of responses from centres who have a formally recorded risk related to Radiotherapy Physics staffing, indicating risk level and likelihood level.

Emergent themes related to formally recorded risks include:

- Increasing clinical demand, and complexity of cases, exacerbates risks related to staffing shortages.
- Shortages of Dosimetrists and Engineers were noted.
- Shortages of MPEs were noted, which may be exacerbated due to lengthy training pathways.
- There are specific risks of non-compliance with IRR and IR(ME)R requirements.
- Succession planning requirements for retirement and maternity leave can highlight limitations in service resilience.
- Centres employ a range of mitigating factors, including:
    - Reduction of services, e.g., reduced support for research and clinical trials
    - Succession planning and deputy roles
    - Delay to service developments
    - Training new staff, through apprenticeships and training programmes

Establishment by Region

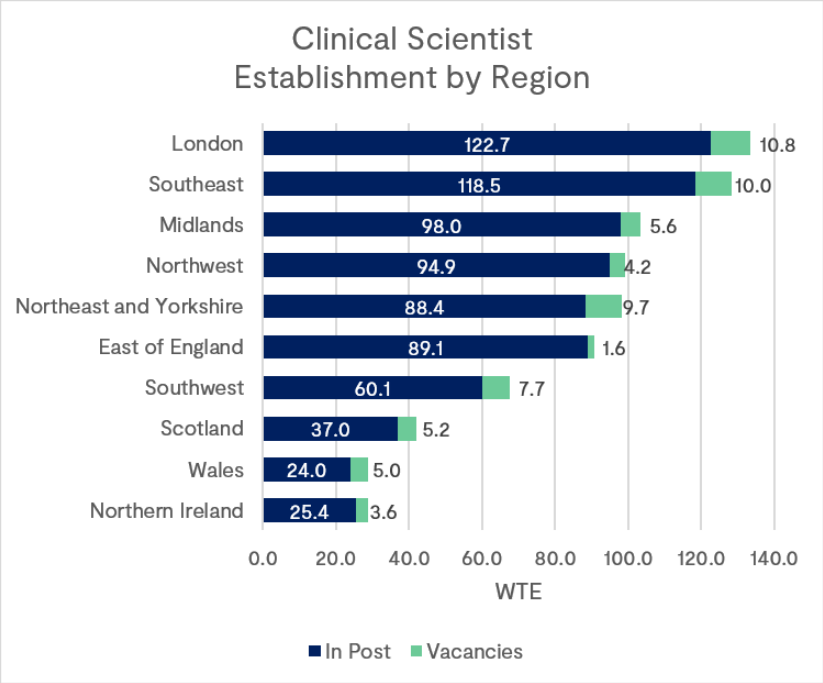


Figure 3: A bar chart showing the number of established posts for Clinical Scientists, including vacancies, for each geographic region.

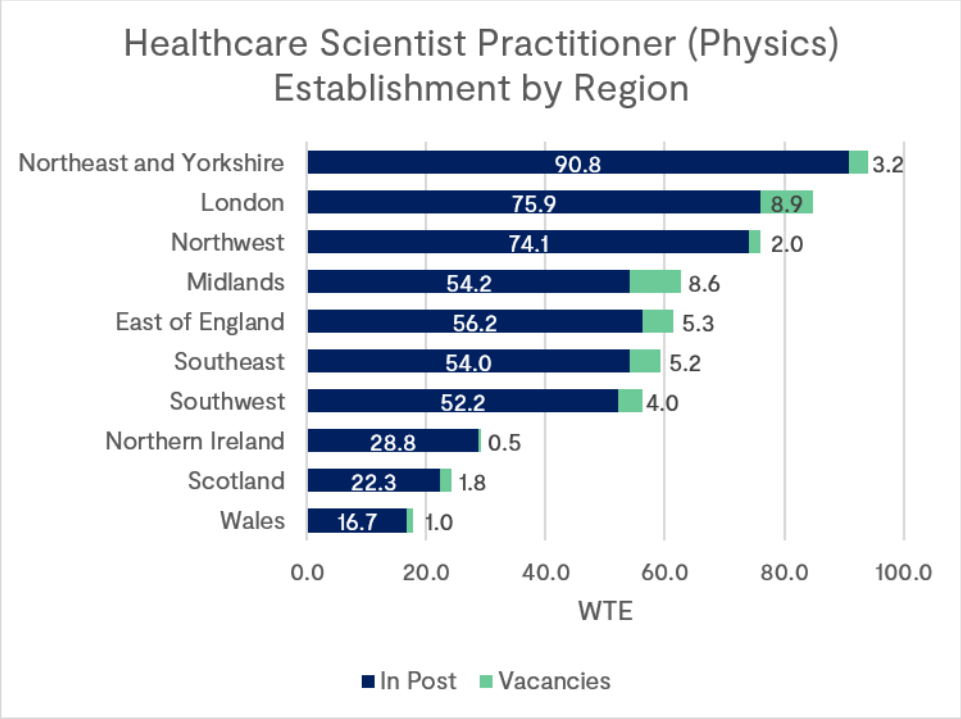


Figure 4: A bar chart showing the number of established posts for Healthcare Science Practitioners (Physics), including vacancies, for each geographic region.

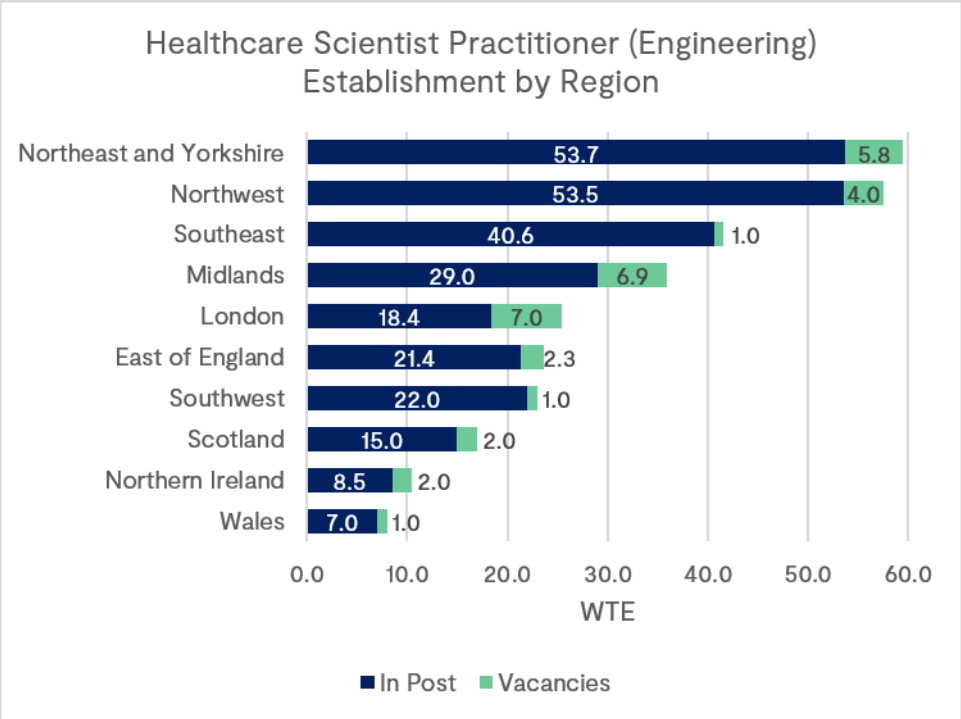


Figure 5: A bar chart showing the number of established posts for Healthcare Science Practitioners (Engineering), including vacancies, for each geographic region.

Banding Profile

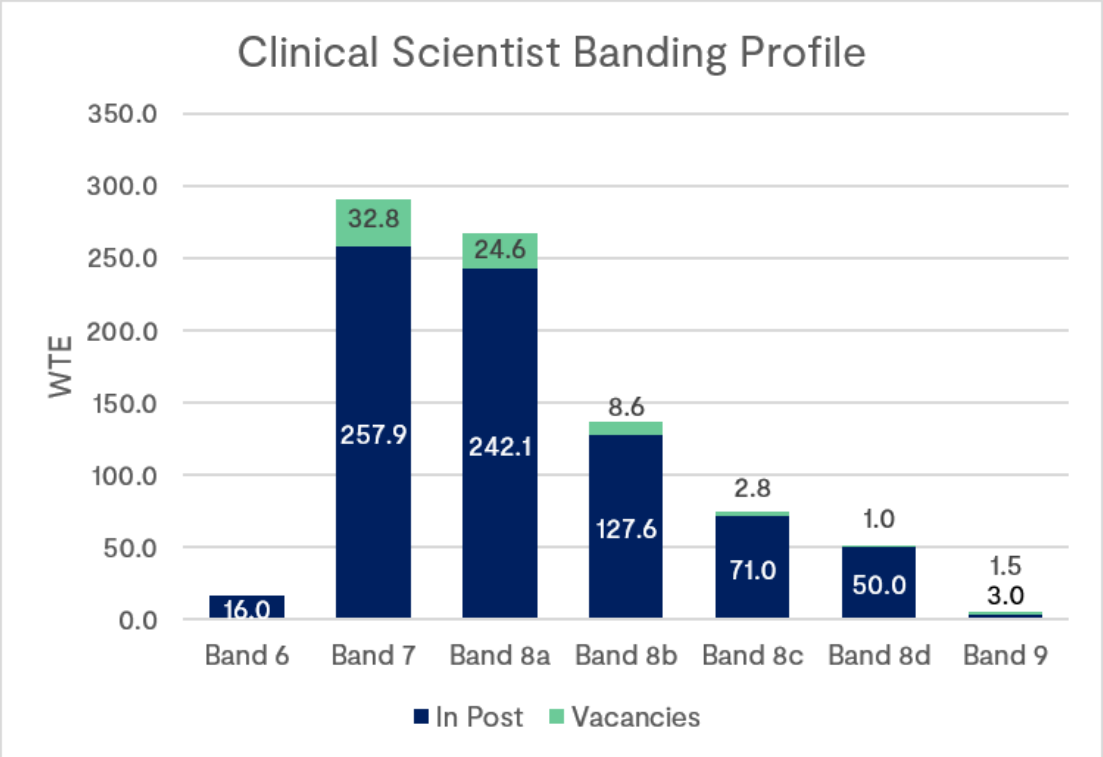


Figure 6: A bar chart showing filled and vacant Clinical Scientist posts, by AfC banding.

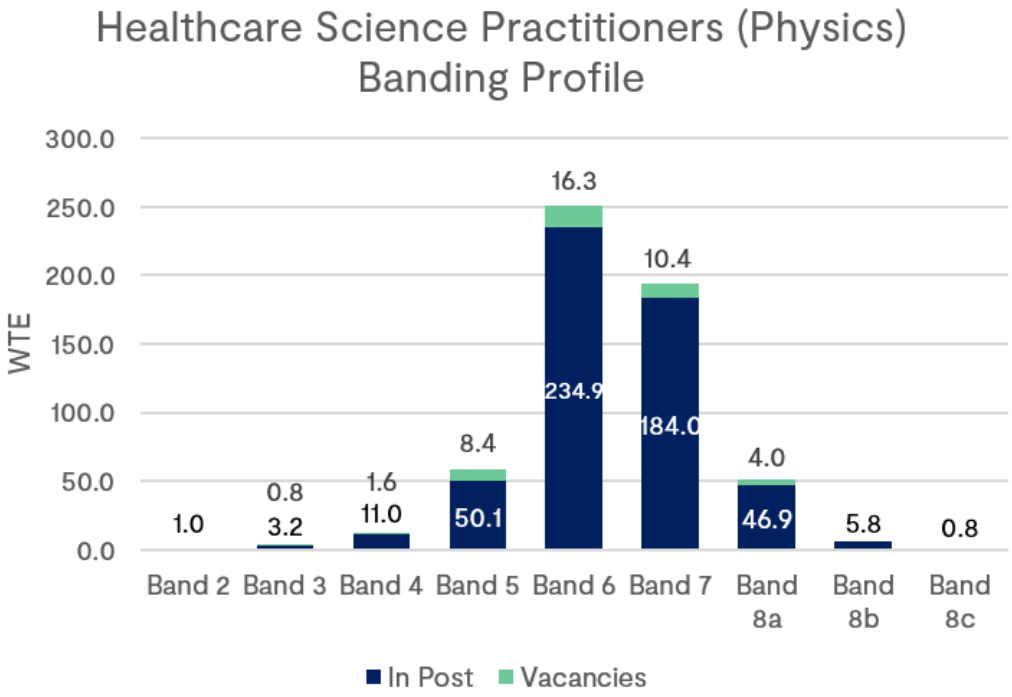


Figure 7: A bar chart showing filled and vacant Healthcare Science Practitioner (Physics) posts, by AfC banding.

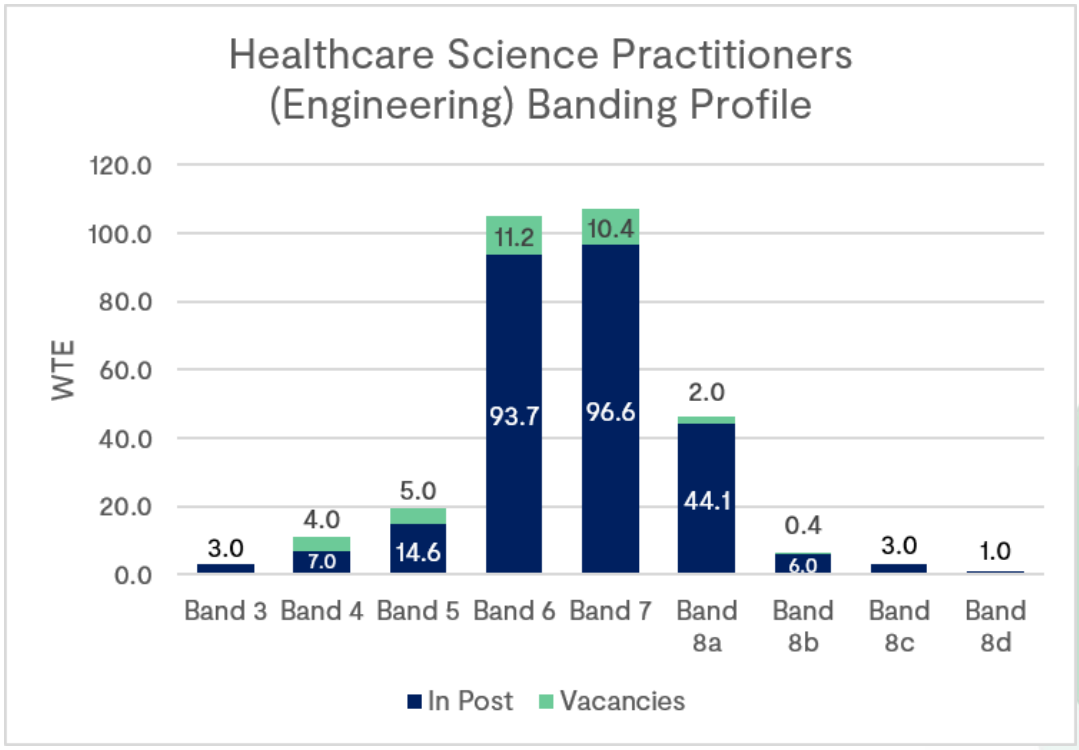


Figure 8: A bar chart showing filled and vacant Healthcare Science Practitioner (Engineering) posts, by AfC banding.

Innovation and Service Development

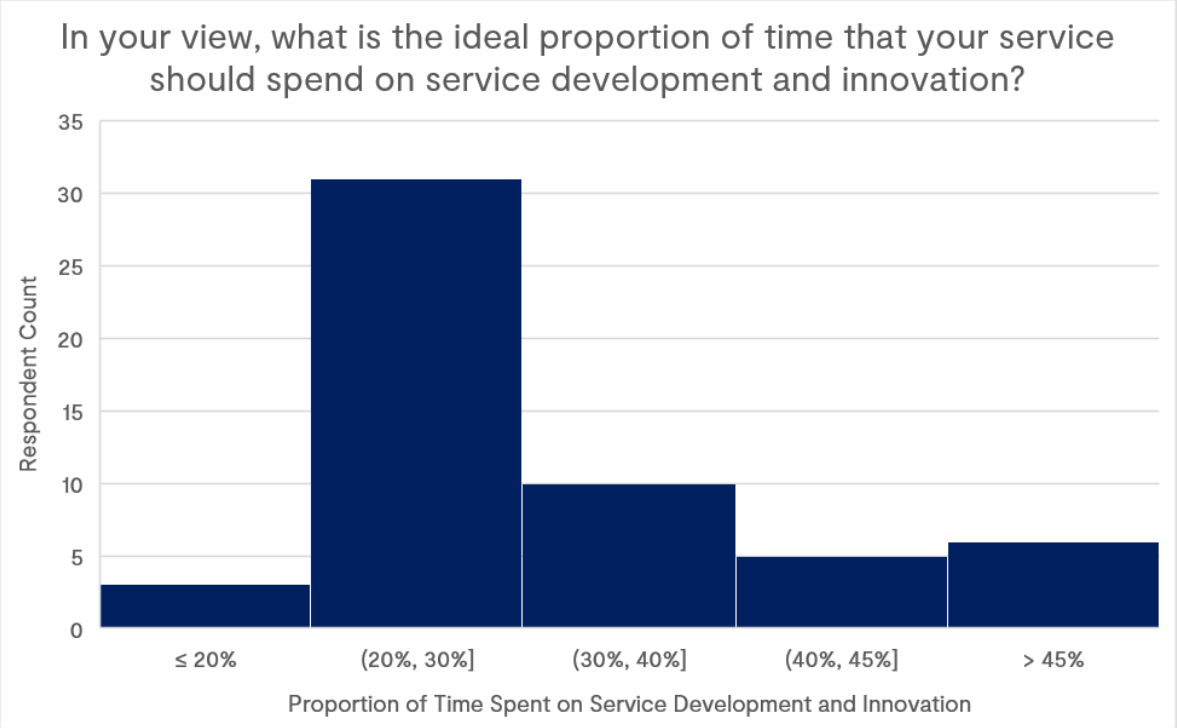


Figure 9: A histogram showing individual centres' responses to the question, "In your view, what is the ideal proportion of time that your service should spend on service development and innovation?"

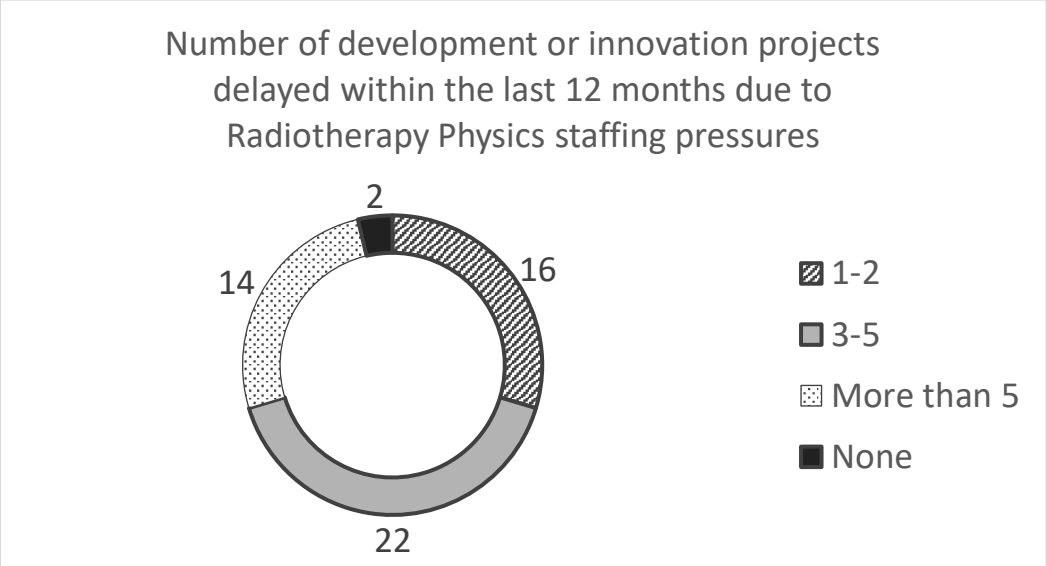


Figure 10: A donut chart showing responses to a question regarding the number of development or innovation projects delayed within the last 12 months due to Radiotherapy Physics staffing pressures.

Demographic Data

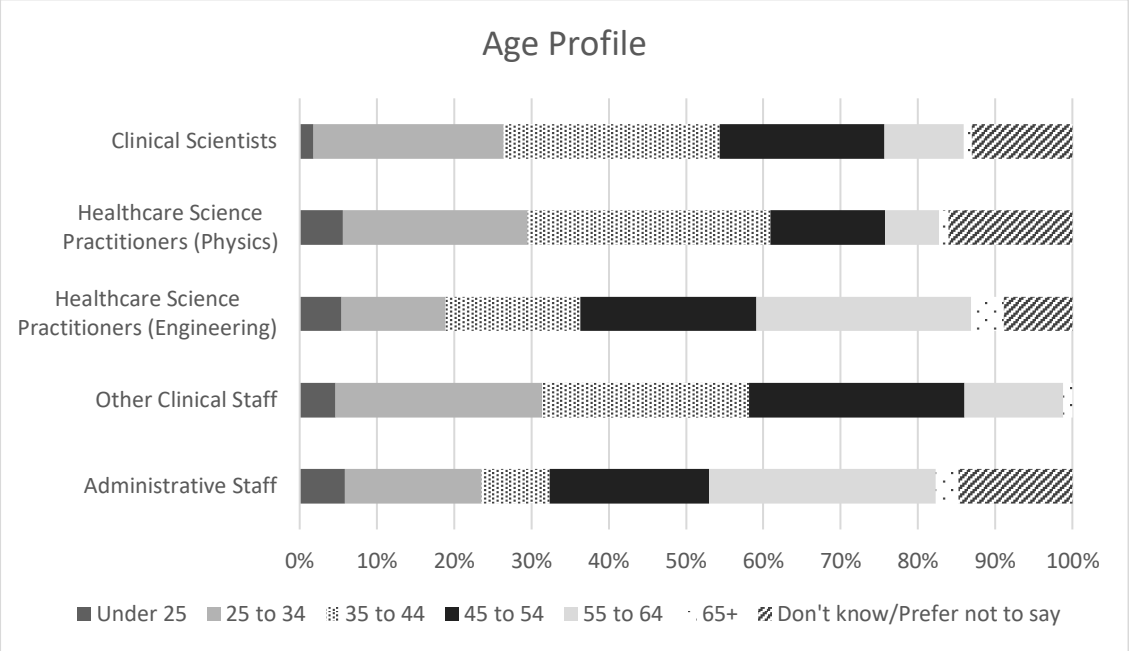


Figure 11: A percentage stacked bar chart showing the age profile of the five professional groups which were surveyed.

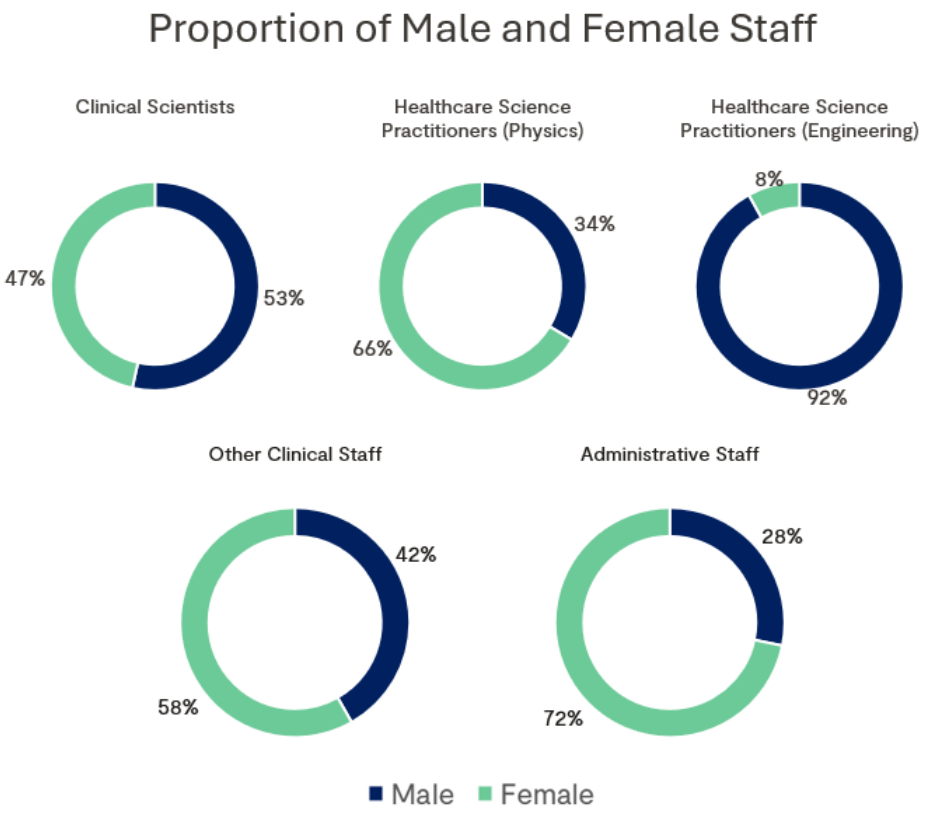


Figure 12: A series of donut charts showing the proportion of male and female staff in the UK's Radiotherapy Physics workforce