

Background

Rising cancer incidence, an ageing population and wider pressures on the NHS place increasing demands on the cancer workforce. Despite this workforce being central to the delivery of timely diagnosis, treatment, and care, there is no routinely published data describing its size and characteristics; the absence of which, limits the ability to understand workforce capacity, trends over time, and how new models of care, with a greater focus on prevention and movement of care into the community, will function.

The Electronic Staff Record (ESR) is the national NHS payroll system and represents the most comprehensive source of workforce data in England. Although primarily designed for administrative purposes, the ESR contains structured identifiers that can be used to map workforce composition. Previously, Macmillan Cancer Support used these data to develop a framework of the cancer workforce. This project expands the framework to additionally classify staff occupation codes included in the cancer workforce, and using this new framework, explore how its size and characteristics have changed over time.

Results

Applying Macmillan's framework to England's ESR data, the cancer workforce comprised approximately 51,000 full-time equivalent (FTE) staff in 2025 (57,000 individuals), compared with 34,000 (37,000 individuals) in 2015.

It is predominantly made up of five staff groups: Nursing and Midwifery (15,000 FTE), Medical and Dental (10,000 FTE), Administrative and Clerical (9,600 FTE), Additional Clinical Services (5,800 FTE) and Allied Health Professionals (5,600 FTE). The largest increase since 2015 has been among specialist nurse practitioners, medical consultants and clinical administrative roles.

As of 2025, the number of distinct job roles within the cancer workforce now sits at 169, having increased by over a third (35%) since 2015. This increase includes the introduction of 52 new job roles to the cancer workforce since 2015, such as 'Nurse - advanced practitioner' and 'Trainee advanced practitioner'.

Demographically, the cancer workforce is 78% female and is comparable in age to the wider NHS workforce². At the point of the last census (2021), comparing those of white ethnicity to all other ethnic groups combined, the cancer workforce had a slightly greater proportion of people from an ethnically diverse background (23%) than the working-age population of England (20%)³. Since 2021 this figure has since risen from 23% to 30% in September 2025.

Where the cancer workforce diverges most from the wider NHS workforce is by proportion of staff in specialist roles, and thus, high pay bands. This gap is especially pronounced among nurses (41% at Band 7 or higher, versus 25% of NHS nurses²), reflecting the clinical nurse specialist and advanced-practitioner roles characteristic of cancer care.

Both cancer incidence and the rate of growth in the cancer workforce have accelerated in recent years. During the period 2019 to 2025, the cancer workforce grew by an average of 5% yearly, compared to 3.4% in the 10-year prior period (2009-2019). Cancer incidence across England rose by 2.3%⁴ yearly from 2019 to 2025, compared to 1.8% yearly from 2009 to 2019.

Limitations

The ESR does not cover staff in primary care, so GPs and practice staff are not included. The ESR is primarily an administrative pay system and does not always capture the full clinical context of staff roles. While this consultation-led approach provides a robust framework of the workforce, further work is required to develop a consensus definition agreed with by the NHS.

Implications

The cancer workforce has grown at an accelerating rate since 2019, outpacing the rise in cancer incidence. This growth may in part reflect a reduction in historic workforce shortages, but it also speaks to the pressures of an ageing population with multiple comorbidities and increasingly complex care needs. At the same time, advances in screening, cancer care and treatment are improving survival but adding to patient complexity, bringing with them new ways of working, evolving care pathways, and an expanding range of specialist roles.

With nurses and AHPs working predominantly across registered, enhanced and advanced level of practice concentrated, the ACCEND programme is crucial in providing standardised career and education pathways and the tools to upskill and succession plan, securing clear routes from registration through to advanced and consultant-level practice. To support the growing and changing cancer workforce, Macmillan has expanded its professionals offer.

To continue to support and advocate for the cancer workforce effectively, cancer-specific ESR data must be routinely published in the public domain.

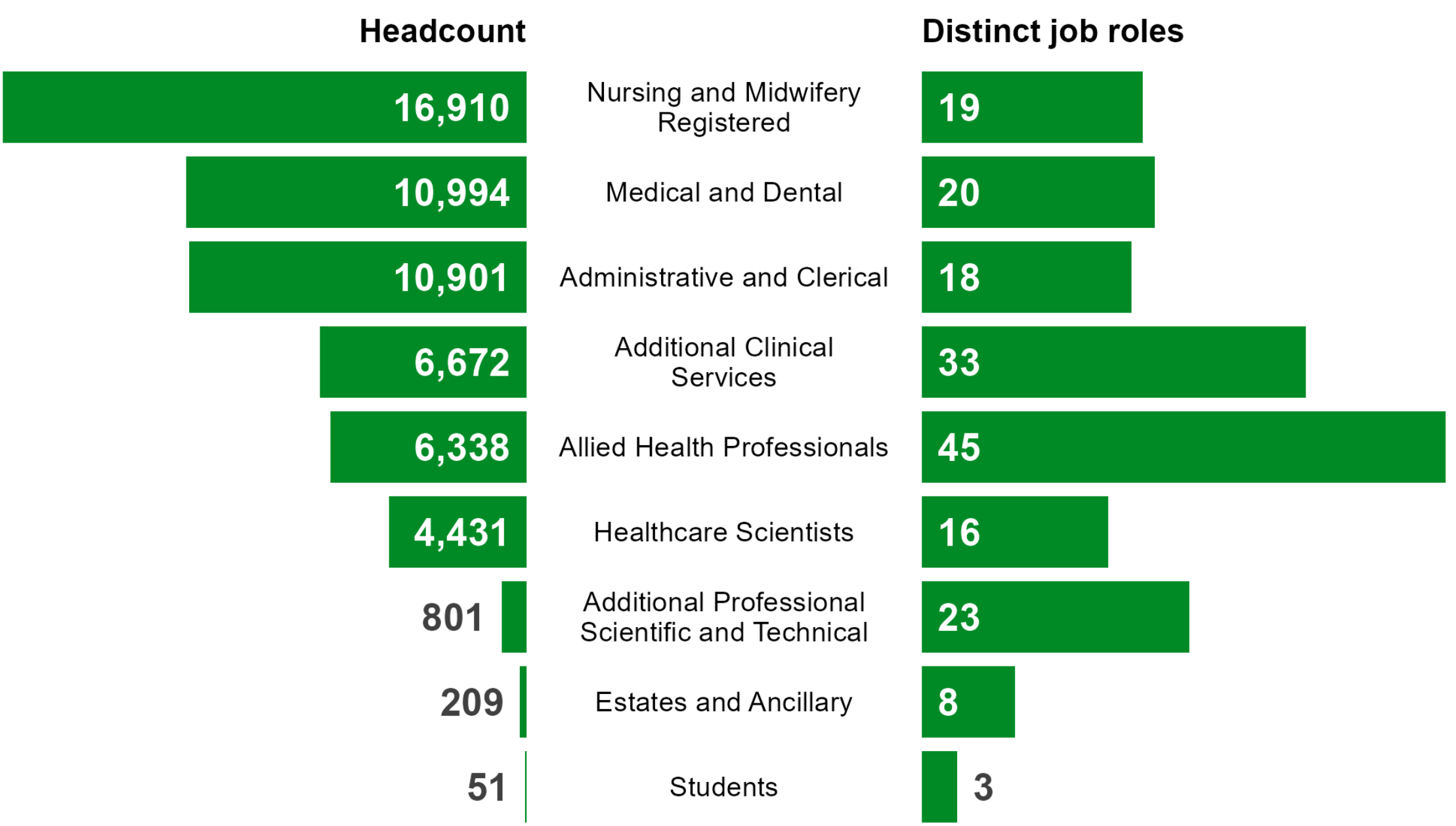
Methodology

Macmillan undertook an internal consultation with its Centre of Clinical Expertise to identify ESR staff occupation codes and tertiary area of work codes which represent staff that spend the majority of their time directly or indirectly supporting people affected by cancer.

Using this framework, NHS England's workforce analysis team provided a bespoke ESR dataset covering the period 2009 to 2025¹. Descriptive analyses were conducted to examine workforce size and composition over time, including staff FTE and headcount by region, job role, pay band, age, gender, and nationality.

Further analysis compared the relationship between changes in the size of the cancer workforce and cancer incidence across England.

Cancer workforce headcount and number of distinct job roles by staff group



¹Macmillan defined Cancer Workforce provided by NHS England. Available from: <https://digital.nhs.uk/supplementary-information/2026/specified-hchs-staff-in-post--turnover-data-packs-sep-09-to-sep-25>; ²NHS Workforce Statistics - September 2025 - NHS England Digital. Available from: <https://digital.nhs.uk/data-and-information/publications/statistical/nhs-workforce-statistics/september-2025>; ³Age, ethnic group and national identity - Office for National Statistics. ⁴Available from: <https://www.ons.gov.uk/datasets/create/filter-outputs/d70ba019-369f-4ad7-963f-9ffe457fab9f#get-data>; Rapid Cancer Registration Data dashboards – NDRS. Available from: <https://digital.nhs.uk/ndrs/data/data-outputs/cancer-data-hub/rapid-cancer-registration-data-dashboards>.