

How staff joined the NHS under the 50,000 nurses programme – and why they left

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The delivery of the somewhat [controversial](#) commitment to an additional 50,000 nurses working in the NHS in England was one of the more eye-catching programmes for the last government. The ambition was reached in 2023 to [much fanfare](#). What remains unclear is how exactly this target was achieved, and what lessons for policymakers can be drawn by examining the mechanisms that enabled it. That was the focus for our recent collaboration on an NIHR-funded evaluation of the so-called N50k programme.

In this blog, we draw out some of the key insights – and policy implications – from our analysis of around 31 million monthly staff HR and payroll data (Electronic Staff Records). We found that increased sickness absences and those at the top of many pay bands were linked to nurses leaving their role. Our descriptive analysis identified uneven growth in the number of nurses between nations of the UK, within England, and across different settings.

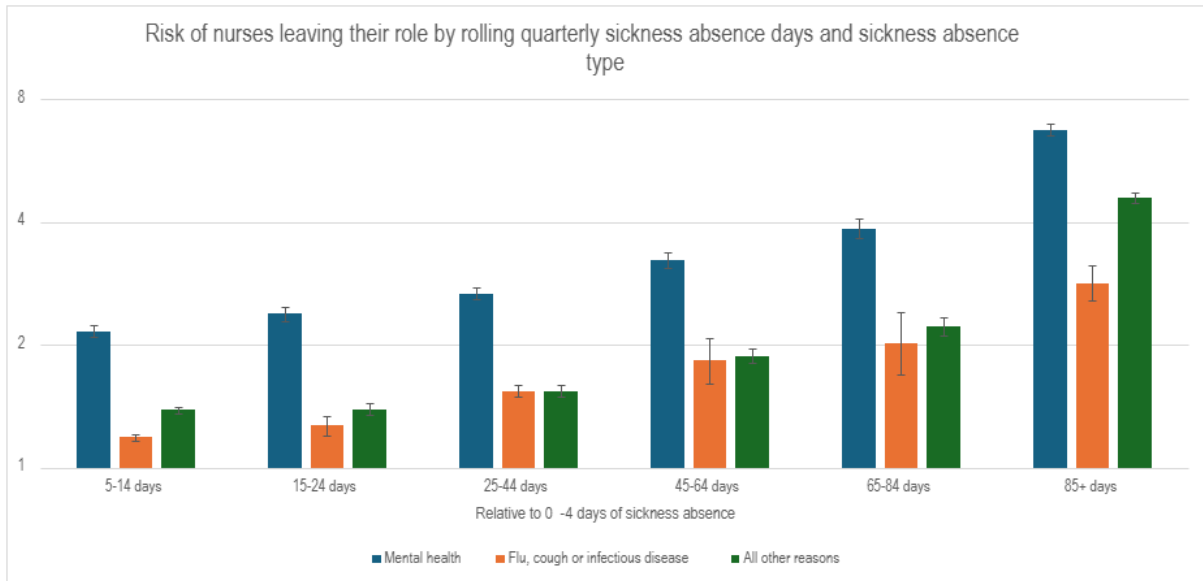
1. Many nurses move between the NHS and the private sector

More than one in seven (15.2%) nurses joining the NHS were recorded as being recruited from the private sector in the three-and-a-half years to June 2023. This represented a 10% increase in absolute terms from the comparable period prior to the introduction of the 50,000 target, but a fall as a proportion of joiners (21.2% between January 2016 and June 2019). [Previous analysis](#) using different data suggested that – in the decade to 2021/22 – of NHS nurses taking up or leaving occupations, nurses from the independent and other sectors accounted for 10% of joiners and 38% of leavers.

These findings highlight the importance of considering movements of nurses between the NHS and the private sector, and more work should be done to identify the specific push-and-pull factors across these sectors to better understand how the NHS can increase its capacity via this route and better retain nurses.

2. Sickness absence is a significant predictor of nurses leaving their role

We found not only a significant risk of leaving for all three categories of sickness absence analysed (mental health; cold, cough, flu or chest problems; and all other reasons) relative to those with no sustained absences, but also that the risk of leaving rose with increasing numbers of sick days taken (see chart). In particular, nurses with more than 84 days of mental health related sickness absence in a three-month period had over six-and-a-half times the risk of leaving their role compared with those with 0–4 days of mental health sickness absence. This also builds on previous [analysis](#) identifying a link between periods of sickness and the likelihood of leaving.



Note: This chart uses hazard ratios to understand the chance of nurses leaving their role across different levels of sickness absence, relative to those with no such absences of the same category. For instance, nurses with 5-14 days of mental health absences over a three-month period were 2.2 times more at risk of leaving their role relative to those with 0-4 days of mental health sickness over three months.

Source: Analysis of individual-level monthly Electronic Staff Record (ESR) data.

While we found that the size of the impact of sickness absence was largest among nurses who had left the NHS rather than leaving the nursing staff group, mental health sickness absence saw a heightened risk across both definitions of leavers. This suggests a need to revisit and reinforce processes around sickness absence to ensure that the NHS identifies and advises where support is needed most.

3. Nurses at the top of some pay bands are more likely to leave

Providing clear career progression opportunities has often been reported as an important factor in improving job satisfaction. Our findings show that – after adjusting for demographic and employment factors – nurses at the tops of Band 7 up to Band 8d (information on basic salaries for Bands is available at the end of this blog) were more at risk of leaving relative to those at the bottom of the same band.[†] In particular, nurses at the top of Band 7 were 25% more likely to leave their role compared to those at the bottom of Band 7. As of June 2025, 7.7% of nursing roles were in Bands 8a-d or 9 compared to 19% for scientific, therapeutic and technical staff (which includes allied health professionals such as physiotherapists and radiographers).

Promotion seems to be [uneven between professions](#), with midwives moving up their pay bands faster than nurses. Our analysis suggests that nurses potentially being left at the top of their pay bands make them more likely to choose to leave their role. The government, NHS England and staff representatives must start to address how to better

retain experienced staff – particularly for younger generations who have [greater expectations around career progression](#).

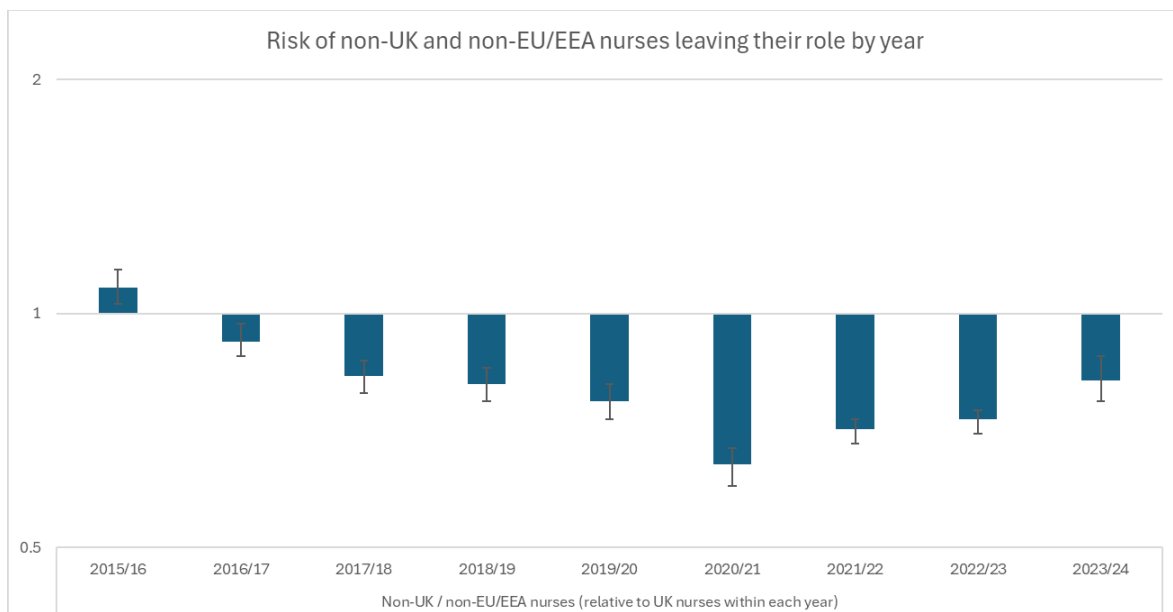
4. The nursing workforce became less experienced based on time worked within a given pay band

Despite fewer nurses at higher bands relative to other staff groups, there has still been a shift to more senior roles among nurses – but they have less experience at that level. In particular, between January 2016 and June 2023, the number of Band 5 nurses remained stable (+2%) whereas the number of Band 8-9s increased by 82.4%. However, the number of nurses with less than two years’ experience at their current banding more than doubled (+128%). More broadly, the average length of NHS experience of nurses also marginally fell, from a median of 12 years in June 2016 to 11 years in June 2023.

More staff being new to their roles may be part of the productivity problem that the NHS is experiencing – and these findings should be explored for other groups and considered alongside local or national programmes to support staff new to their role.

5. Nurses from outside the UK or Europe are increasingly leaving the NHS

Over the majority of the study period, nurses with a non-UK or non-European nationality had a lower risk of leaving compared to nurses from the UK (see chart). This risk lowered each year from 2016/17 to 2020/21, after which it started to rise again (albeit still below the levels seen among UK nurses). While the UK has benefitted from a surge in overseas recruitment of nurses, there is a [worry](#) that the UK has increasingly become a ‘stepping-stone’ country for them, looking to progress further in their careers in other anglophone destinations.



Note: This chart uses hazard ratios to understand the risk of nurses leaving their role among non-UK and non-European nurses relative to UK nurses within a given year. For example, non-

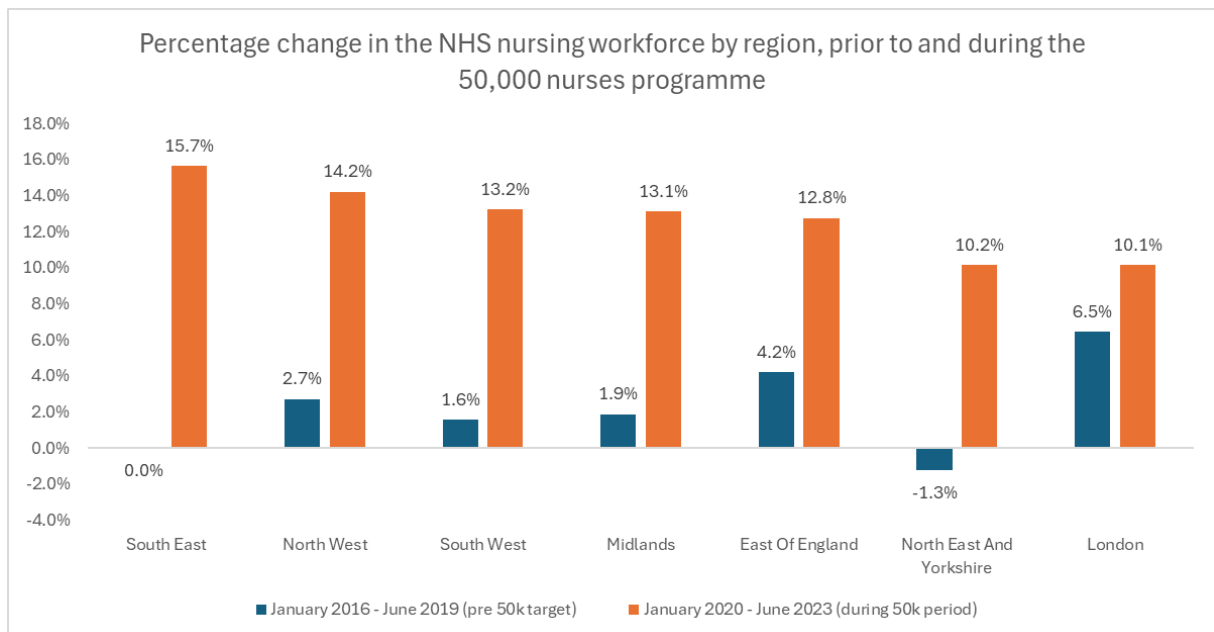
UK and non-European nurses had about one-third lower rate (0.64) of leaving their role compared with UK nurses in 2020/21.

Source: Analysis of individual-level monthly Electronic Staff Record (ESR) data.

Given overseas nurses account for three in 10 (30%, as of June 2025) of the NHS nursing workforce in England, it is vital that their experience and motivations are well understood and factored into employment and retention programmes. This evidence should also be reflected in immigration policies, including decisions on visas and access to indefinite leave to remain.

6. Some settings and areas have disproportionately failed to benefit from the increase in nurses

Regions within England show differences in the growth of the NHS nursing workforce over time. The South East of England saw the highest relative increase during the 50,000 nurses programme (15.7%, equivalent to a 7,145 net increase), following a period of no net growth to its workforce (see chart). In contrast, the number of nurses in the North East and Yorkshire fell by 1.3% prior to the introduction of the 50,000 target and had one of the smallest relative increases (10.2%, or 5,894 nurses) when the target was in place.

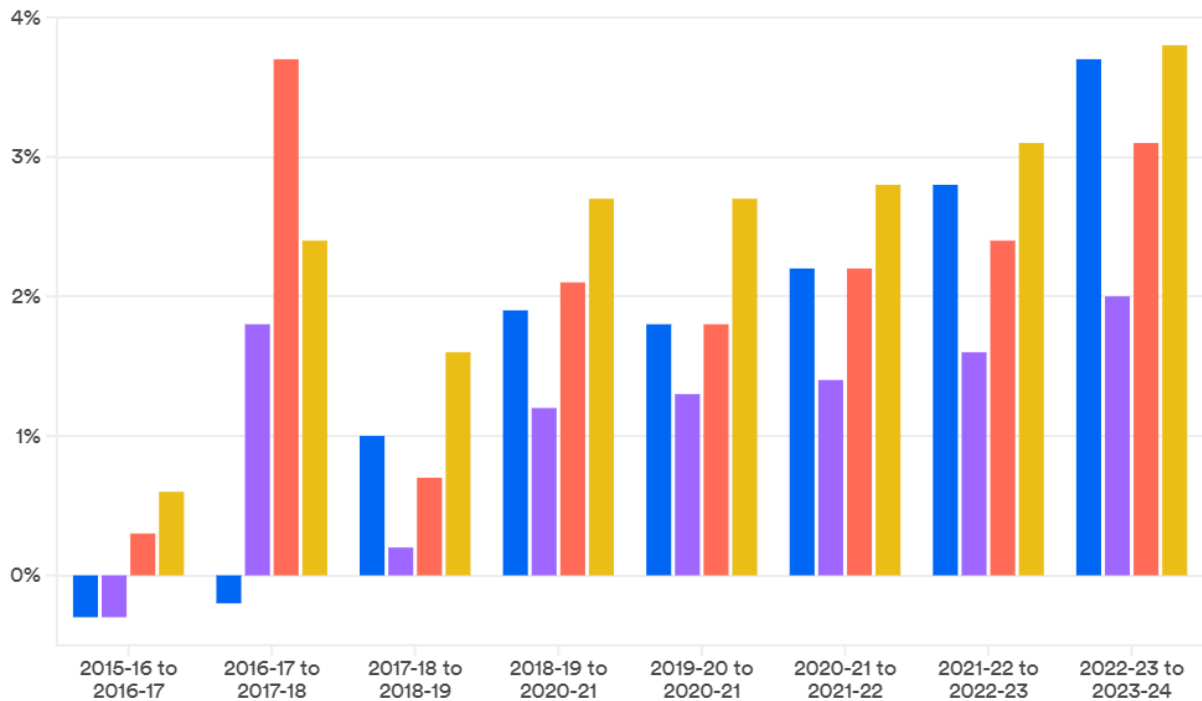


Separate comparisons of the number of nurses on the register by UK nation also throw up differences (see chart below). While overall changes to England's nursing stock was particularly high (an 11% increase between 2019/20 and 2023/24, broadly around the time the 50,000 nurses commitment was underway), the number of nurses per head of population in England still lags behind its UK counterparts (993 per 100,000 in England relative to 1,195 in Wales, 1,269 in Scotland, and 1,403 in Northern Ireland).

Annual change in number of nurses on the register by UK nation

■ England ■ Scotland ■ Wales ■ Northern Ireland

Percentage change



ni

The nature of the international nurse market also affected the degree to which certain settings could benefit, given overseas recruits were instrumental in achieving the headline 50,000 nurses target. Comparing the overall number of joiners between 2016-19 and 2020-23 showed, for example, that nurses entering mental health or care trusts increased by roughly a third (37% and 33% respectively), yet some acute settings saw the number of joiners increase by up to 81%. That said, these trends are also affected by the patterns of domestic training, with the UK consistently training around three times as many adult nursing students as mental health nurses.

Long-term workforce planning for the NHS should account for settings where international recruitment is less likely to be able to fill staffing gaps, ensuring that there remains a sufficient supply of staff across all services that the NHS offers.

Lessons learned?

Given we are expecting a new, refreshed workforce plan for the NHS, it is vital that lessons of previous programmes to ramp up nurse numbers are understood and acted upon. We identified a number of important associations with nurse retention, including a significantly higher risk of nurses leaving among those at the top of some Agenda for Change pay grades (Bands 7-8d), as well as nurses with increasing days of sickness

absence – particularly for mental health reasons. These findings also highlight the value of exploiting the richness of routinely collected administrative data, and the exercise we carried out for nurses can be replicated for other staff groups too.

Certainly, conducting these analyses reiterates the necessity of future policies being grounded in a robust evidence base. Without a comprehensive understanding of the array of factors that can affect the risk of higher rates of leaving, the opportunity to target interventions appropriately will be missed.

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†For an explanation of Agenda for Change pay bands, see [here](#). Newly qualified nurses start NHS employment at Band 5, with potential to progress to a Band 9.