

# REAL Centre

# The NHS nurse supply challenge

**The Government Events NHS Workforce Event 2023:  
Recruitment, Retention and Wellbeing**

21 March 2023



**The  
Health  
Foundation**

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# Context

# Our workforce projections report, out in July, explores long-term workforce supply and demand in the NHS in England to 2030/31

- Even before COVID-19, workforce shortages were the biggest challenge facing the NHS in England. Addressing these shortages will require regular assessments of the workforce supply-demand gap.
- As nurses are the largest single staff group in the NHS and have accounted for around 40% of FTE vacancies over the past 5 years, our workforce projections report presents in-depth projections of FTE nurse supply and demand in the NHS in England up to 2030/31.
- We consider how policy choices might affect recruitment and retention under three alternative scenarios :

Current Policy	Optimistic	Pessimistic
continuation of historic trends and existing policies	further policy action leading to increased recruitment and retention	incomplete realisation of existing policies, a lack of longer term planning, and COVID-19 impact

- Our projections are not forecasts and are intended to be indicative, reflecting uncertainty in future workforce planning and the path of the COVID-19 pandemic and recovery.

# What are the wider implications for policymakers?

- Even if the government's 50k target is met, the NHS still faces a shortage of around 38,000 FTE nurses across the NHS Hospital and Community Health Service (HCHS) sector and general practice, relative to projected demand in 2023/24.
- Longer term, continuing with current policies is projected to result in a persisting NHS nurse shortfall of around 37,000 FTE by 2030/31.
- An HCHS nurse staffing shortfall is not inevitable in the medium term. But across all scenarios, there are serious concerns around nurse supply in general practice and adult social care.
- If there are sustained improvements in nurse retention and the number of newly qualified nurses joining the NHS HCHS, then our optimistic scenario suggests that there is potential for nurse supply to match increases in demand by 2030/31. But this will require a comprehensive – and fully funded – long term plan.

# Analysis

# What shifts in current policy could help close the nurse supply-demand gap?

As our optimistic scenario projects nurse supply 'catching up' with demand by the end of the decade, we present further analysis of the differences between our current policy and optimistic scenario projections.

## Potential FTE nurse supply and demand in the NHS HCHS in England, 2021/22–2030/31

Source: REAL Centre analysis based on the nurse supply model (using a range of data sources). Numbers are rounded.

	2021/22	2023/24	Projected gap, 2023/24	2030/31	Projected gap, 2030/31	CAGR to 2030/31
Demand	350,700	369,000		412,900		1.8%
Supply: Current policy scenario	306,200	318,400	- 50,600	382,600	- 30,300	2.5%
Supply: Optimistic scenario	306,200	322,800	- 46,200	457,300	44,400	4.6%

# What shifts in current policy could help close the nurse supply-demand gap?

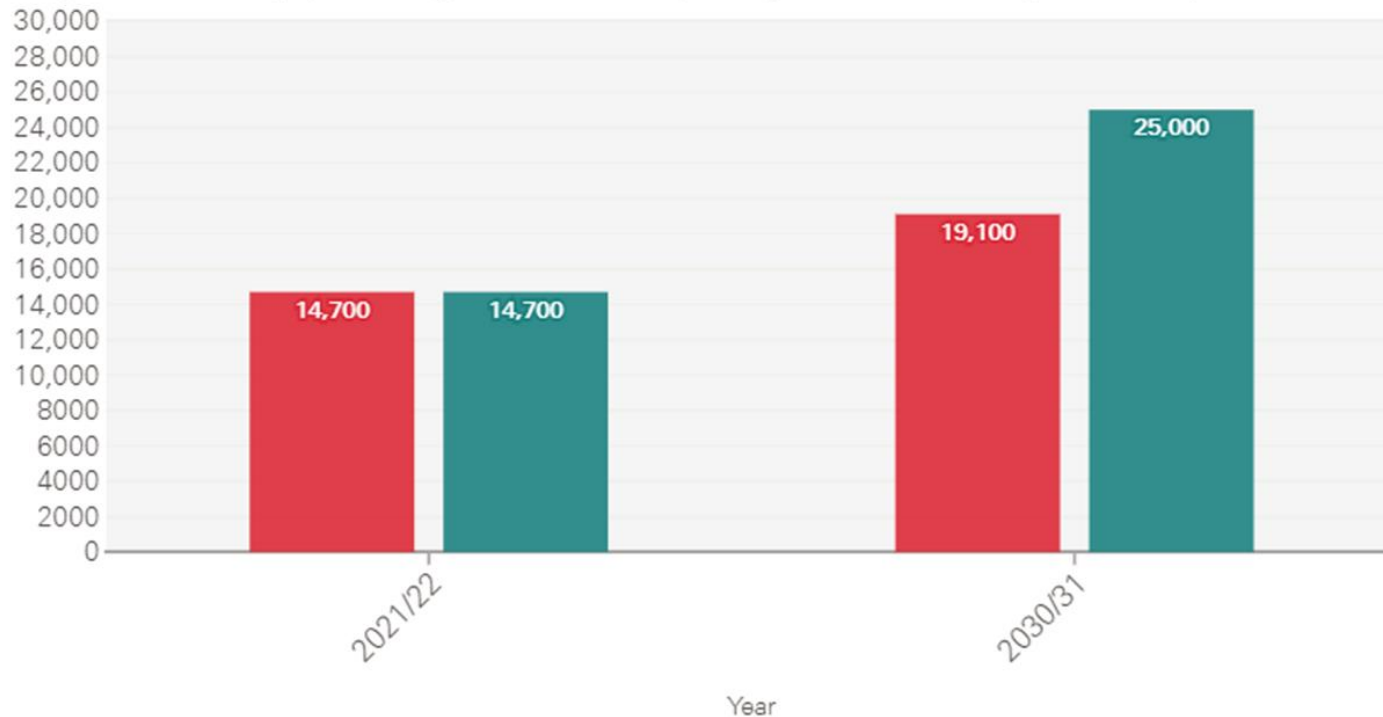
- Next, we present findings from some new analysis, building on our projections report, that explores this key workforce planning question.
- We examine the extent to which the major routes to increasing nurse supply differ between the current policy and optimistic scenarios:
  1. **Domestic training** (the number of newly qualified graduate nurses joining the HCCHS)
  2. **Nurse retention** (the number of nurses leaving the HCCHS – including those joining the non-England workforce – and the number of rejoiners)
  3. **International recruitment** (the number of internationally trained HCCHS nurse joiners)



## Optimistic scenario: Domestic supply – newly qualified nurses

■ Current policy scenario ■ Optimistic scenario

Projections: Newly qualified graduate nurses joining the NHS HCHS (headcount)



- 2024/25 – 2030/31: the annual number of students **starting UG nursing degrees** is 12 – 18% higher in the optimistic scenario than under current policy.
- 2024/25 – 2030/31: the annual number of students **leaving UG nursing degree programmes prior to completion** is around 64% lower in the optimistic scenario than under current policy.
- This does not account for 2021 and 2022 UCAS data on acceptances.
- Also, this does not account for PG courses and apprenticeships (also important routes to nurse supply, but with smaller numbers).

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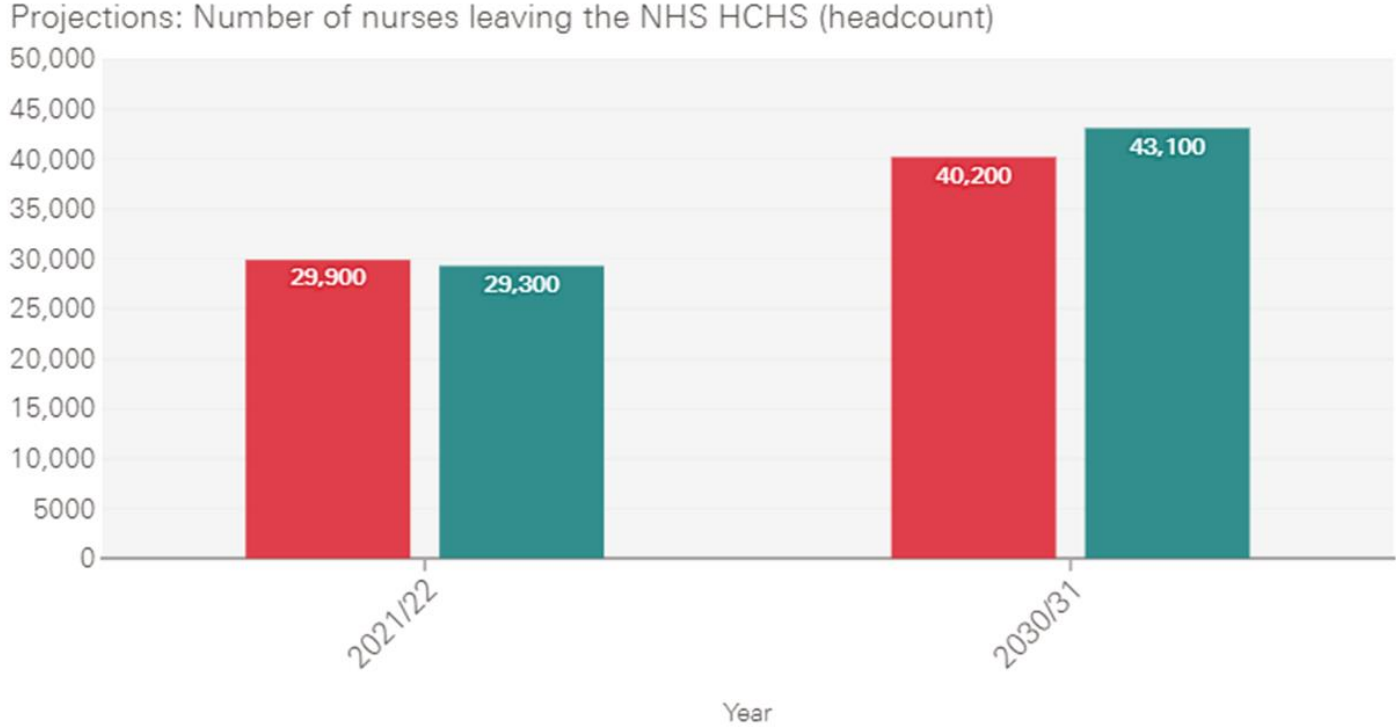
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Source: REAL Centre nurse supply model (using multiple data sources)

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# Optimistic scenario: Domestic supply – nurse retention

■ Current policy scenario   ■ Optimistic scenario



Source: REAL Centre nurse supply model (using multiple data sources)  
 The slight differences between the scenarios in 2021/22 arise because the 2021/22 estimates represent projections from the REAL Centre nurse supply model (rather than actual data).

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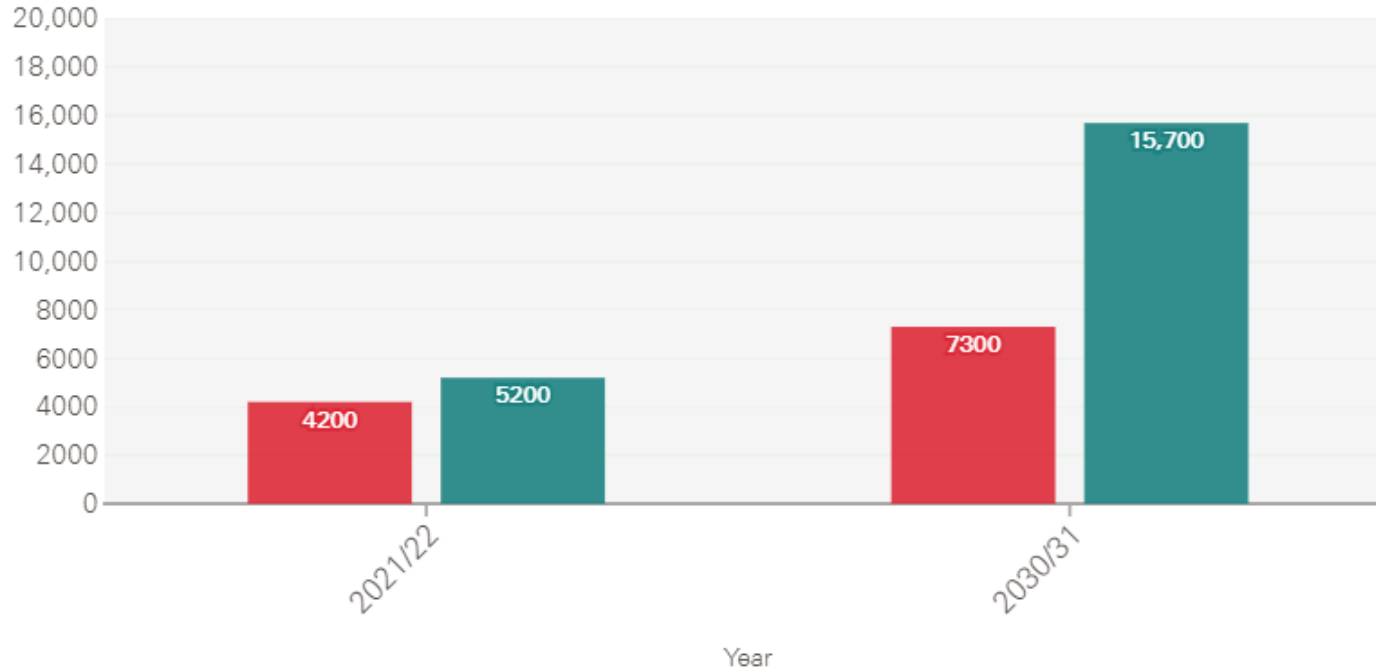
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- 2022/31 – 2030/31: The nurse leaver rate (nurse leavers as a proportion of overall headcount) steadily declines in the optimistic scenario relative to current policy
- The nurse leaver rate is projected to be lower in the optimistic scenario than under current policy, although the absolute number of leavers is slightly higher (reflecting higher headcount)
- The number of nurses rejoining the HCHS (after having left) is also consistently higher in the optimistic scenario
- While retaining more experienced staff will always be vital, lowering leaver rates for younger nurses also calls for a greater policy focus

## Optimistic scenario: International nurse recruitment

■ Current policy scenario ■ Optimistic scenario

Projections: International nurse joiners\*, NHS HCHS



Source: REAL Centre nurse supply model (using multiple data sources)  
The slight differences between the scenarios in 2021/22 arise because the 2021/22 estimates represent projections from the REAL Centre nurse supply model (rather than actual data). \*This refers to the number of nurses trained outside the UK joining the NHS HCHS in England.

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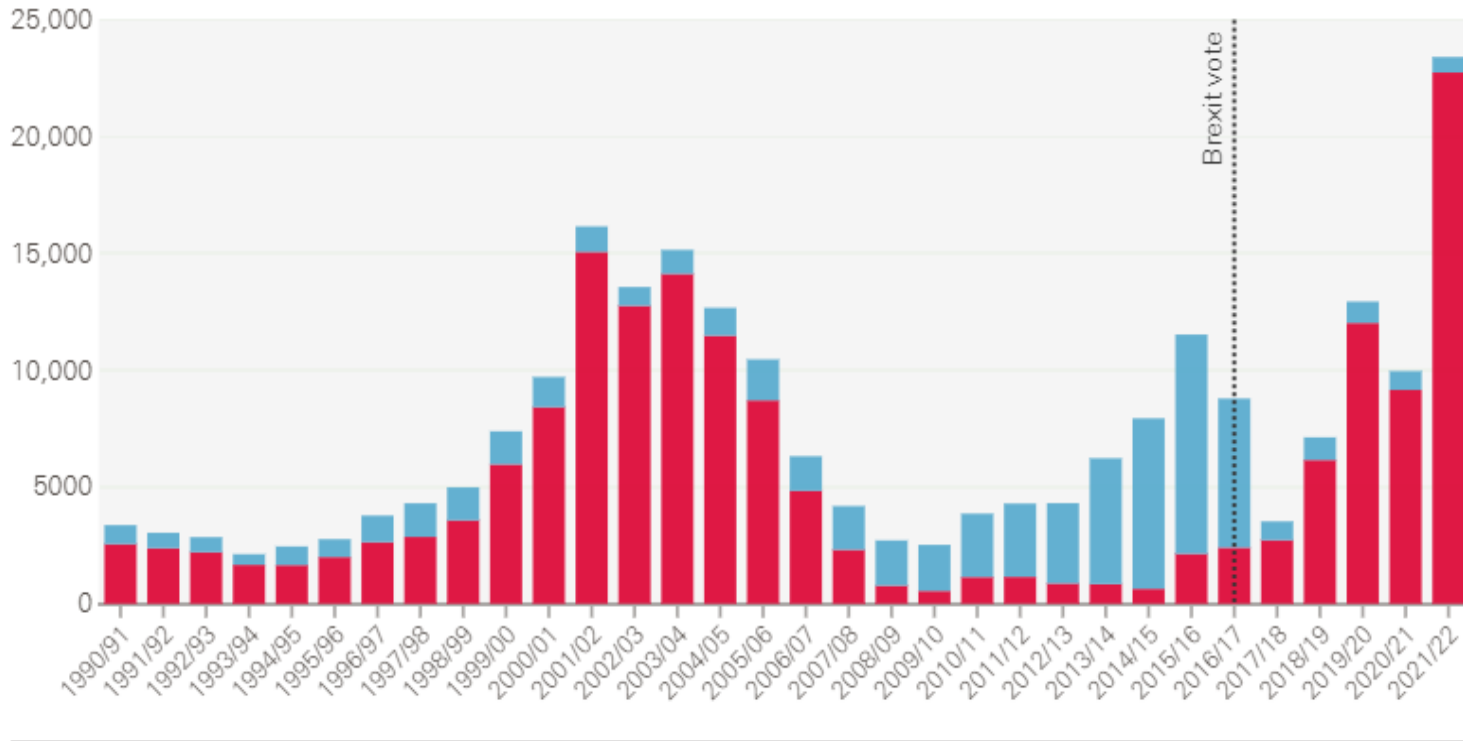
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- Nursing and Midwifery Council (NMC) data point to **strong recent and ongoing increases in international nurse recruitment** in the UK.
- Projected international nurse joiner numbers are around 115% higher in 2030/31 in the optimistic scenario relative to current policy.
- However, even within the NHS HCHS, international nurse recruitment is no silver bullet to the nurse shortage challenge.
- International recruitment has historically been concentrated in acute trusts and is unlikely to substantially boost supply in community nursing.

# The NHS has seen rapid increases in international nurse recruitment in recent years

Annual number of new NMC registrants from non-EEA and EEA countries, 1990/91–2021/22

■ Non-EEA ■ EU/EEA



- Active international recruitment has a long term history as a periodic policy response in the NHS.
- Since 2017/18, there has been an increasing trend in international nurse recruitment, with the proportion of nurses trained outside the UK and newly registering with the NMC reaching a two-decade high in 2021/22.
- The UK's heavy reliance on international nurse recruitment is also visible in OECD data, which show that the UK's proportion of foreign trained nurses (around 15%) is more than double the OECD average.

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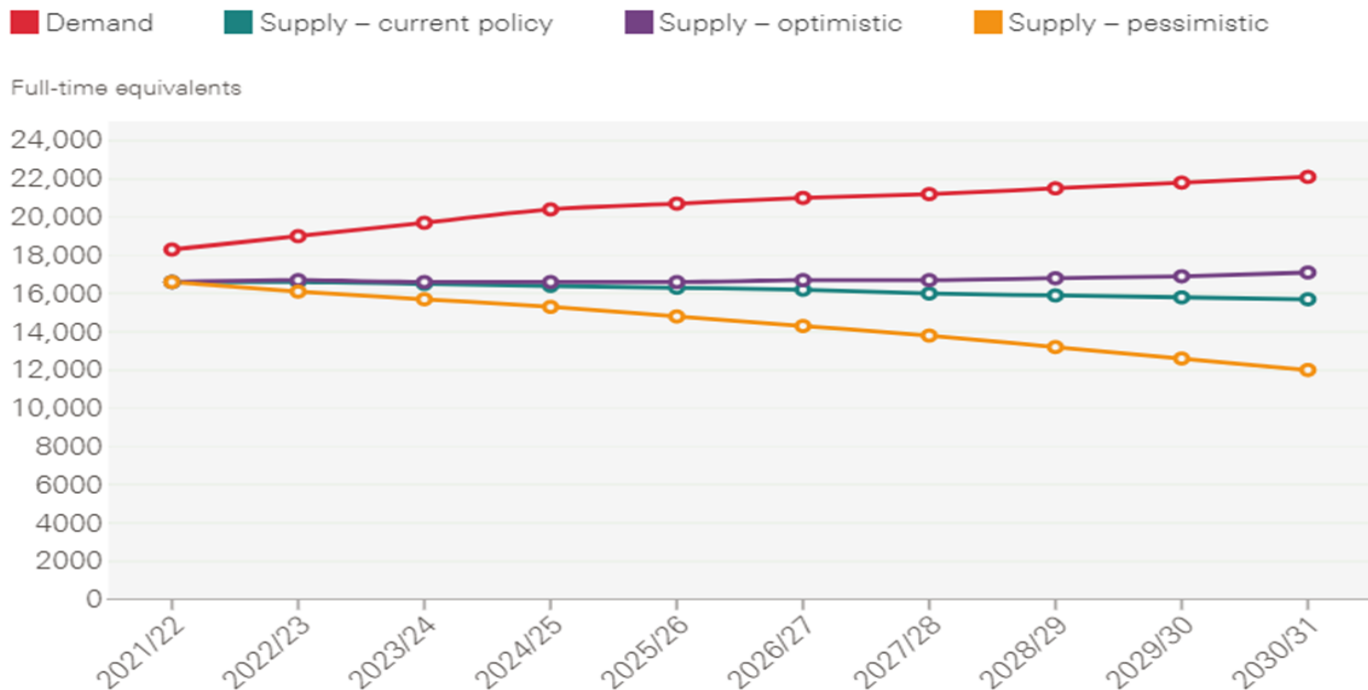
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Source: NMC/UKCC data, REAL Centre analysis  
EEA = European Economic Area

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# In all scenarios, we project a shortage of nurses in general practice and adult social care to 2030/31

Demand and supply projections for FTE nurses in general practice in England, 2021/22 – 2030/31



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Source: Authors' analysis based on NHS Digital general practice workforce data and the REAL Centre nurse supply model (numbers are rounded).

Note: 2021/22 nurse supply data are for March 2022 (source: NHS Digital).

- Our analysis paints a concerning picture of the sustainability of nurse supply in general practice and adult social care over the coming decade.
- In the 'current policy' scenario, the number of FTE nurses in general practice is projected to decline by around 0.4% a year over the decade to 2030/31.
- Even in the optimistic scenario, we project only a slow increase in nurse supply in general practice from around 16,200 in 2021/22 to just over 17,000 by 2030/31.

# Discussion

# What do our findings imply for workforce planning?

1. Addressing longstanding workforce shortages in the NHS requires comprehensive long-term planning and acknowledgement that improvement will take many years.
2. 'Top down' targets are unlikely to be effective in isolation for addressing workforce supply-demand shortfalls. Policymakers should account for geographic and sectoral variation in workforce supply and demand.
3. Policies need to be fully costed and funded to be implemented effectively.
4. Joined-up policymaking needs to be underpinned by substantive research on the drivers of workforce supply and demand as well as rigorous projections analysis.
5. Substantial gaps in the accessible data landscape for the NHS workforce should be acknowledged and mitigated.

# Our analysis highlights the relevance of a comprehensive approach

- In the short term to 2023/24, improved nurse retention and increased international recruitment levels are the key differentiators between the current policy and optimistic projections.
- Beyond 2024/25, sustained increases in the number of newly qualified nurses joining the HCHS are also vital if current policy is to 'close the gap' with the optimistic scenario.
- It is worth emphasising that we have only published projections at the national level (all England).
  - There will be significant variation in future nurse supply-demand gaps across regions and local areas.
  - These gaps will also differ across work areas or branches (eg nurse supply and demand in community nursing and mental health are likely to undergo differential rates of change to acute nursing).
- Even in the optimistic scenario, we project a sustained shortfall of general practice nurses and adult social care nurses to 2030/31. This points to grave concerns around nurse supply in both sectors.



# Appendix

# Assumptions for nurse supply scenarios: I

Variable	Current Policy	Optimistic		Pessimistic	
Students starting undergraduate nursing degrees	Remains <b>unchanged</b> relative to 2020/21 (Trend: increased from around 23,000 in 2019/20 to nearly 29,000 in 2020/21 and 29,200 in 2021/22)	Increases by 1,050 a year from 2021/22 to 2024/25 and is constant thereafter		Declines by 1,050 a year from 2021/22 to 2024/25 and is constant thereafter	
Nursing student attrition rate	Remains <b>unchanged</b> relative to 2020/21 (Note: Lack of publicly available data: Nursing Standard FOI data suggests a nurse student attrition rate of around 25% between 2017/18 and 2019/20, with a possible increase in 2020/21, but this is likely to be overstated)	2021/22	Increases by 5 percentage points	2021/22	Increases by 5 percentage points
		2022/23	Unchanged	2022/23	Unchanged
		2023/24	Falls by 10 percentage points and remains constant thereafter	2023/24	Falls by 2 percentage points and remains constant thereafter
International nurse recruitment	Increases by 1,050 a year from 2021/22 to 2024/25 and thereafter remains unchanged (Trend: Rapid increases in the number of nurses trained outside the UK newly registering the with the NMC between the year to September 2017 (around 4,000) and September 2021 (around 18,200))	Increases by 2,100 a year from 2021/22 to 2024/25 and thereafter increases by 700 a year		Increases by 1,050 a year in 2021/22 and 2022/23 and thereafter falls by 700 a year	

Note: These assumptions were informed by and validated through stakeholder engagement

# Assumptions for nurse supply scenarios: II

Variable		Current Policy	Optimistic	Pessimistic
Nurse leaver rates	<i>Pre-retirement age</i>	Remains unchanged relative to 2020/21 (Trend: As a proportion of the overall FTE HCHS nurse workforce, declined from 8.2% to 7.1% between 2019/20 and 2020/21)	Decreases by 0.25 percentage points a year	Increases by 0.25 percentage points a year
	<i>Retirement age</i>	Remains unchanged relative to 2020/21 (Trend: Around 2% of the overall FTE HCHS nurse workforce in 2019/20 and 2020/21)	Decreases by 0.1 percentage points a year	Increases by 0.1 percentage points a year
Nurse FTE-to-headcount ratio		Remains unchanged relative to 2020/21 (Trend: Virtually unchanged at around 0.90 for HCHS nurses and health visitors between December 2016 and December 2021)	Remains unchanged relative to 2020/21	Decreases by 0.01 every year

Note: These assumptions were informed by and validated through stakeholder engagement