

REAL Centre

Analysis of the training commitments in the 2023 NHS Long Term Workforce Plan

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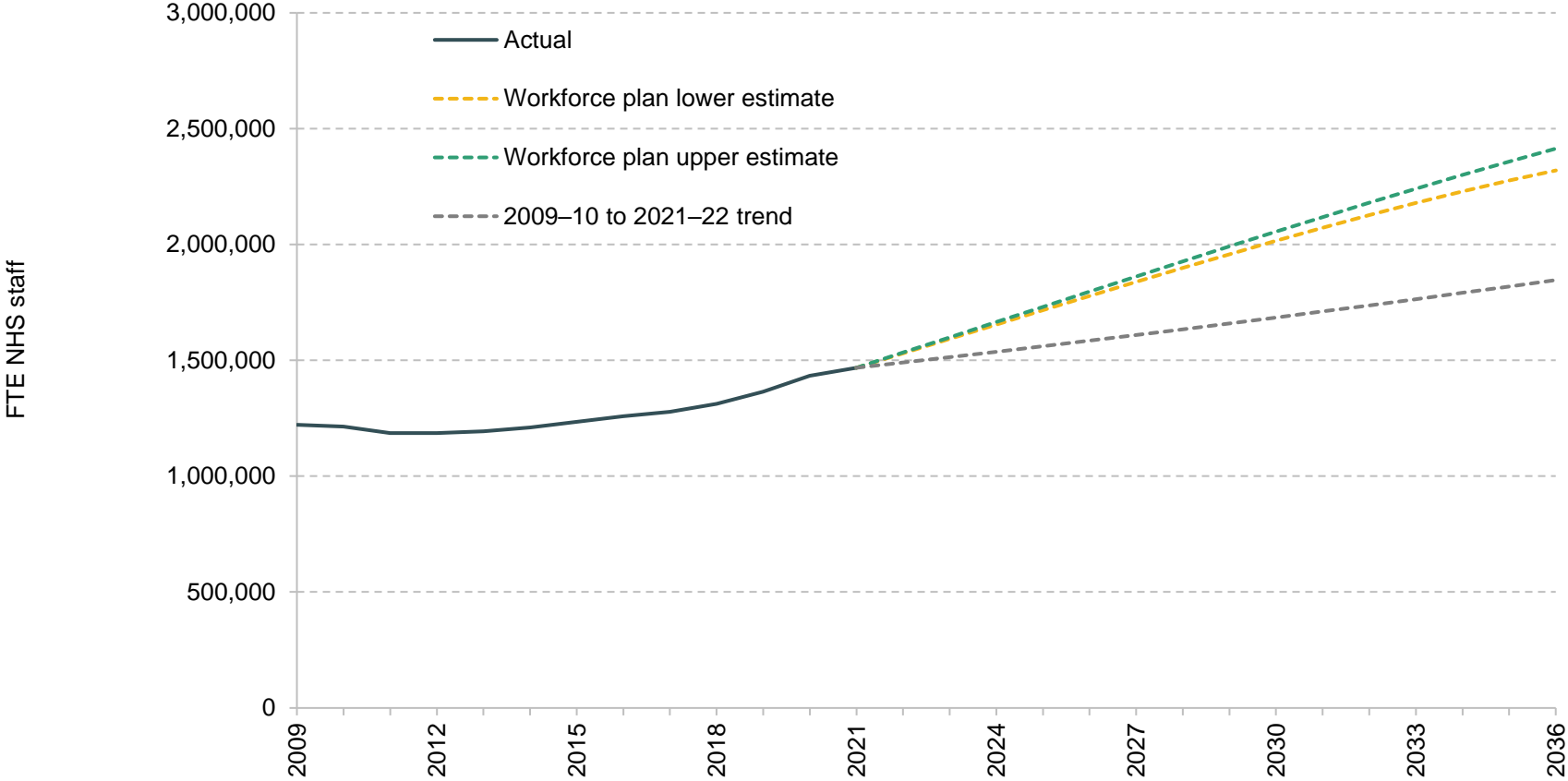
**The
Health
Foundation**

Introduction

The NHS Long Term Workforce Plan

- Workforce shortages have long been a huge challenge for the NHS
- With over 100,000 full-time equivalent vacancies in NHS trusts in England alone, staff demand continues to significantly exceed supply
- Published on 30th June 2023, the [NHS Long Term Workforce Plan](#) (LTWP) represents a major milestone for health workforce planning
- The Plan sets out important commitments to increasing the number of doctors, nurses and other staff in the NHS in England by 2036/37
- We were asked to review their modelling in February 2023.

Size of the NHS workforce in England if plan is implemented and achieved in full



Source: Figure 8.2 "Implications of the NHS Workforce Plan" IFS Green Budget, Chapter 8

Context

- NHS reached out for us to review their model ahead of publication of the Long Term Workforce Plan.
- Specifically, the ask was to:
 - check the structure, approach, and set-up of model and inputs
 - review the steps taken to generate outputs
 - sense check assumptions and choices made;
 - sense check scale of impact and proposals

Why

Sought out an independent perspective, our workforce projections report highly relevant, deemed to have the 'most relevant expertise in this space'

What

Objectives were to assess the process underlying the LTWP modelling strategy against an accepted framework

How

Sharing and logging documentation, workshopping, assessment scoping, adaptive project managing, output drafting and publication

When

To be completed before prospective publication date of 24 Feb

Assessment framework




Quality: Q1: Suitable data sources
Data source suitability? Alternative data source consideration?
Transparent process of data source selection? Alternative data source consideration to identify bias/uncertainty/possible distortion?
Transparent record of changes in circumstances and context of data sources and their modelling impact? Explanation on assumptions or caveats around these changes?
Quality: Q2: Sound methods
Modelling methodology based on national or international good practice, scientific principles, or established professional consensus?
Evidence of methodology process selection? Transparency of modelling scenario and assumption selection?
Explanations of modelling methodology limitations, bias and uncertainty? Transparent log of possible risks, mitigation strategies, sensitivity analysis, the implications of model interlinkages?
Value: V3: Clarity and insight
Clear presentation of modelling results? Unambiguous language describing the results?
Appropriate comparisons of results a within the UK and internationally? Process log of comparator decisions?
Value: V4: Innovation and improvement
Unambiguous commitment to future iterations for model development and improvement?
Transparent modelling outputs regarding existing stakeholder consultation? Future plans on stakeholder engagement, including within the UK and internationally?

Fwd: Review of modelling in the LTWP



Anita Charlesworth



To  Hiba Sameen;  Nihar Shembavnekar;
 Nuha Bazeer; **+4 others**

02/02/2023

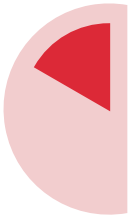
[Suggested Meetings](#)

[+ Get more add-ins](#)

Dear all

We are on.

Our approach



Planning

- Development of project brief and project plan
- Recognising capacity
- Identifying risks, their impact, likelihood and mitigation strategies
- Confirming roles and responsibilities
- Identifying the assessment framework
- Scheduling daily check-ins
- Confirming scope, outputs and deadlines



Doing

- Logging and reviewing received documentation
- Scheduling and documenting clarification workshops
- Confirming the assessment framework
- Reviewing received documentation against the framework
- Agreeing the output
- Developing and populating the matrix



Checking

- Sending drafts for comments
- Updating and addressing comments
- Requesting further documentation where required
- Ensure consistent messaging across outputs
- Gain input and sign-off from Comms

Key points

- Data underlying the model was rich and internally held
- Documentation quality varies, different components, interlinkages, some by standards some not
- Parameter and data uncertainty well documented and considered, but epistemic uncertainty (based on model selection and structure) does not seem to be considered at all
- Documentation on intervention modelling decisions is limited (maybe due sensitivity of internal communications)
- Presentation of downside risks avoid optimism bias, better reflect uncertainty of assumptions and interventions
- Commitment to ongoing process of improvement, transparency and sustainability

Our observations

- Though the publication of the LTWP was delayed until June 2023, our suggestions on sensitivity analysis were included within the updated projections
- Assumptions on projected productivity improvements over the next fifteen years may suffer from optimism bias – such productivity assumptions are not sufficiently evidenced currently
- Taking a nationwide approach would better address regional variations in need and labour demand and improve upon inequalities in access.
- Consideration of wider labour dynamics, such as how pay, terms, and conditions in the NHS compare to other sectors – will be important determiners of turnover and retention.

Training commitments

The Plan's commitments on training

- In the short term, improving staff retention and increasing international recruitment are key to boosting NHS workforce numbers
- In the long term, however, increasing the number of domestically trained staff recruited by the NHS is equally vital
- For clinical roles, **the Plan commits to major increases in the numbers taking up training in domestic** undergraduate (UG) and postgraduate (PG) courses and degree apprenticeships in England
- These commitments are backed by around £2.4bn in funding over the next 5 years
- From a workforce planning perspective, it is important to understand what these commitments mean for the health care system and the wider economy

The Plan's commitments on training

Table 2: Increase required in education and training by profession

Professional group	Training intake		Plan 2031	Assessment of need		% of apprenticeships (of annual intake)		
	Baseline (2022)	2028		Modelled range*	% of current	Current	2028	2031
Medical school places**	7,500	10,000	15,000	12,000–15,000	160–200%	0%	9%	13%
GP trainee places**	4,000	5,000	6,000	5,800–6,400	145–160%	N/A	N/A	N/A
Nursing	29,860	40,000	53,858	49,225–53,858	165–180%	9%	20%	28%
Nursing associates	5,000	7,000	10,500	10,000–10,500	200–210%	30%	50%	50%
Midwifery	3,778	4,269	4,269	3,778–4,269	100–113%	<1%	5%	5%
Health visitors, district nurses, qualified school nurses	1,811	2,327	3,788	3,066–3,788	169–209%	N/A	N/A	N/A
Advanced care practitioners	3,433	5,000	6,371	6,371	186%	N/A	N/A	N/A
Allied health professionals	15,076	17,000	18,822	17,902–18,854	119–125%	6%	22%	35%
Clinical psychologists and child and adolescent psychotherapists	1,050	1,068	1,326	1,258–1,397	120–133%	N/A	N/A	N/A
Healthcare scientists	776	876	1,024	930–1,039	120–134%	0%	20%	40%
Pharmacists	3,339	4,307	4,970	4,359–5,174	131–155%	N/A	N/A	N/A
Dentists	809	1,000	1,133	995–1,133	123–140%	N/A	N/A	N/A
Dental hygienists and therapists	370	475	518	444–518	120–140%	N/A	N/A	N/A
Medical associate practitioners	1,417	1,687	1,802	1,802	127%	N/A	N/A	N/A
Approved clinicians	127	127	127	127	100%	N/A	N/A	N/A
Peer support workers	2,000	2,088	2,230	2,302	115%	N/A	N/A	N/A
Total	80,346	102,225	131,738	120,359–132,532	150–165%	7%	16%	22%

* For most professions maximum level is reached by 2030/31

** Assumes proportional increase in postgraduate training (foundation training) and specialty training including the potential to further increase GP trainee places.

Source:
NHS
LTWP

Analysis

Breaking down the Plan's commitments

- The training commitments in the Plan can be broken down into 3 major categories: UG training, PG training and degree apprenticeships
- Data from the Higher Education Statistics Agency (HESA) show that **a majority of first-year intakes in NHS clinical professions currently come from UG training**
- Exploring first-year enrolment numbers provides useful insights into how the Plan's commitments could influence the overall student mix in England and we have done this in recent analysis: <https://www.health.org.uk/publications/long-reads/how-feasible-are-the-nhs-long-term-workforce-plan-commitments-on-training>

Breaking down the Plan's commitments

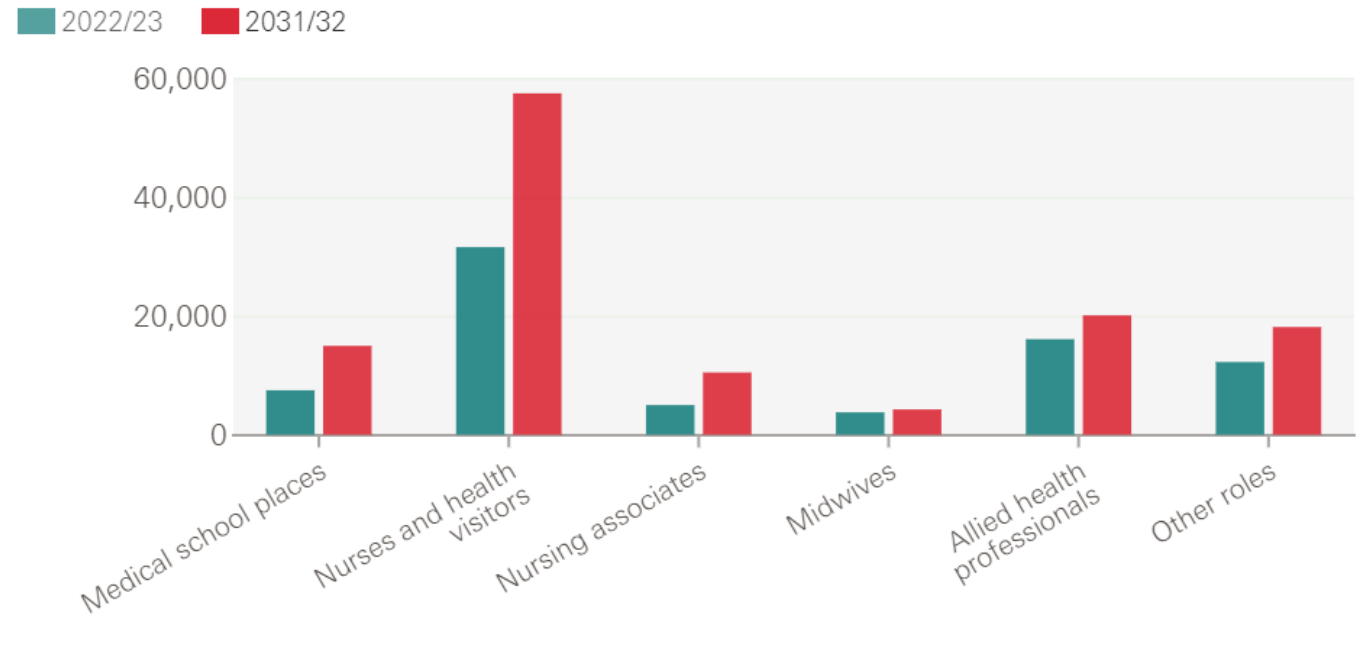
- First, note that the total number of students enrolled on first-year higher education courses (including degree apprenticeships) across all subjects in England increased from around 612,000 in 2014/15 to around 646,000 in 2019/20
 - = A pre-pandemic average annual growth rate of around 1.1% for first-year enrolments
- We assume that in the absence of major policy shifts, this will continue to hold
- Next, what happens if the Plan's proposals for boosting the numbers in training for clinical health care roles are implemented?

Breaking down the plan's commitments

- Based on current trends, this would mean that students training to be NHS clinical professionals would make up around **1 in 6** of all first-year students in 2031/32, up from **1 in 9** in 2022/23.

If implemented, the NHS Long Term Workforce Plan commitments will see a substantial increase in the number of first-year higher education nursing student enrolments in England by 2031/32

Training intakes (undergraduate, postgraduate and apprentices) in clinical health care professions in England, 2022/23–2031/32*

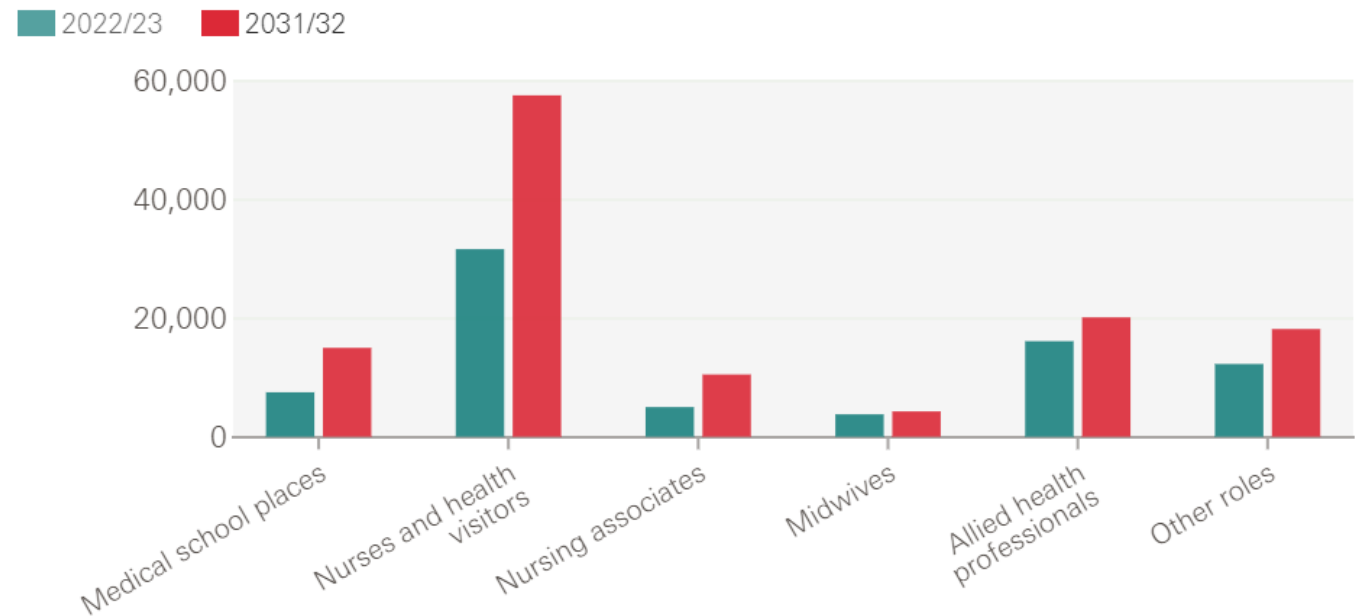


Breaking down the plan's commitments

- Nursing and midwifery would account for around two-thirds (65%) of the roughly 49,000 increase in intakes in this period (intakes to nursing and midwifery would rise by c. 32,000)
- Big increases are also proposed for medical school places (doubling from 7,500 to 15,000) and midwifery intakes – across all areas, the proportion of degree apprenticeships would rise
- An increased role for degree level of apprenticeships. Rising from 8% of registered nurse intake in 2022/23 to 28% in 2032/33. For nurse associates, a planned increase from 30% to 50%.

If implemented, the NHS Long Term Workforce Plan commitments will see a substantial increase in the number of first-year higher education nursing student enrolments in England by 2031/32

Training intakes (undergraduate, postgraduate and apprentices) in clinical health care professions in England, 2022/23–2031/32*



Feasibility

System capacity

- Do universities and the NHS have the capacity to 'ramp up' the provision of education and training to significantly higher numbers of students? This would require
 - A) Efficient allocation and use of the promised £2.4bn in funding over the next 5 years
 - B) Close collaboration between universities and other stakeholders (including ICS?) on placements – eg how to ensure effective supervision and better integrate placements into service design
- The commitment to degree apprenticeships accounting for a much larger share of overall training intakes by 2032/33 is untested and needs further planning.
- Council of Deans said: *“The Council has been involved at every stage of this plan’s development, engaging at the highest level to ensure our members’ voices were heard and our sector’s challenges were addressed. We are clear on the opportunities that the plan presents.”*

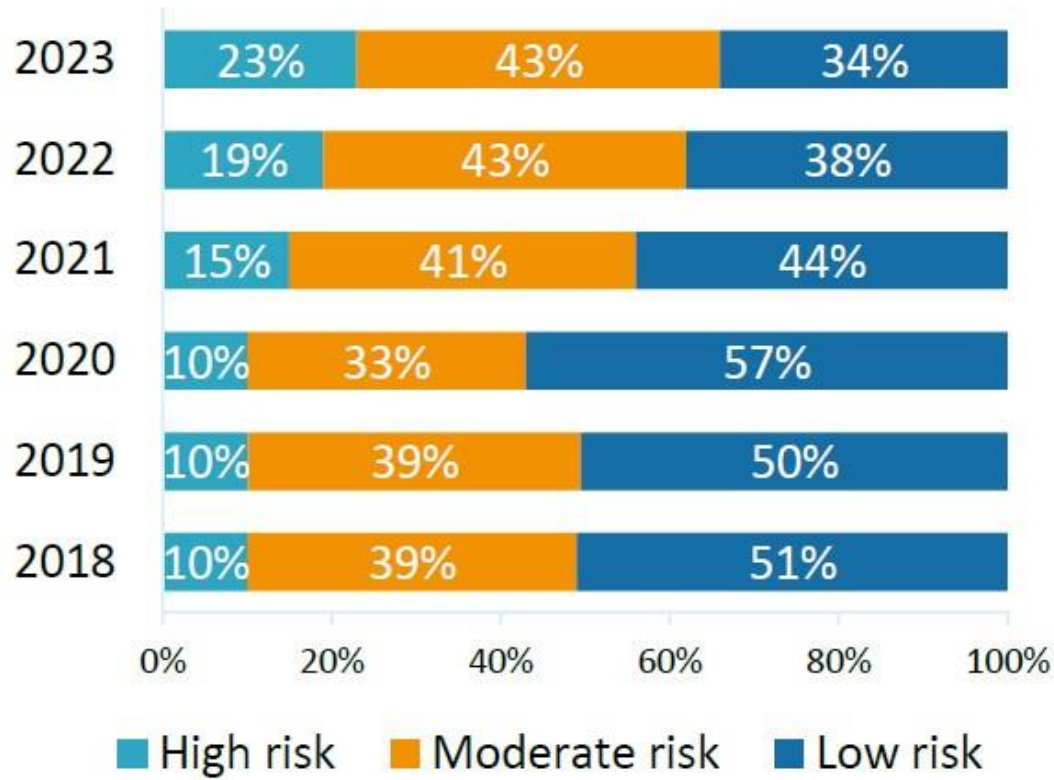
The educator workforce

Delivering the promised training will require substantial increases in the recruitment and retention of trainers/ supervisors/ academics, even assuming

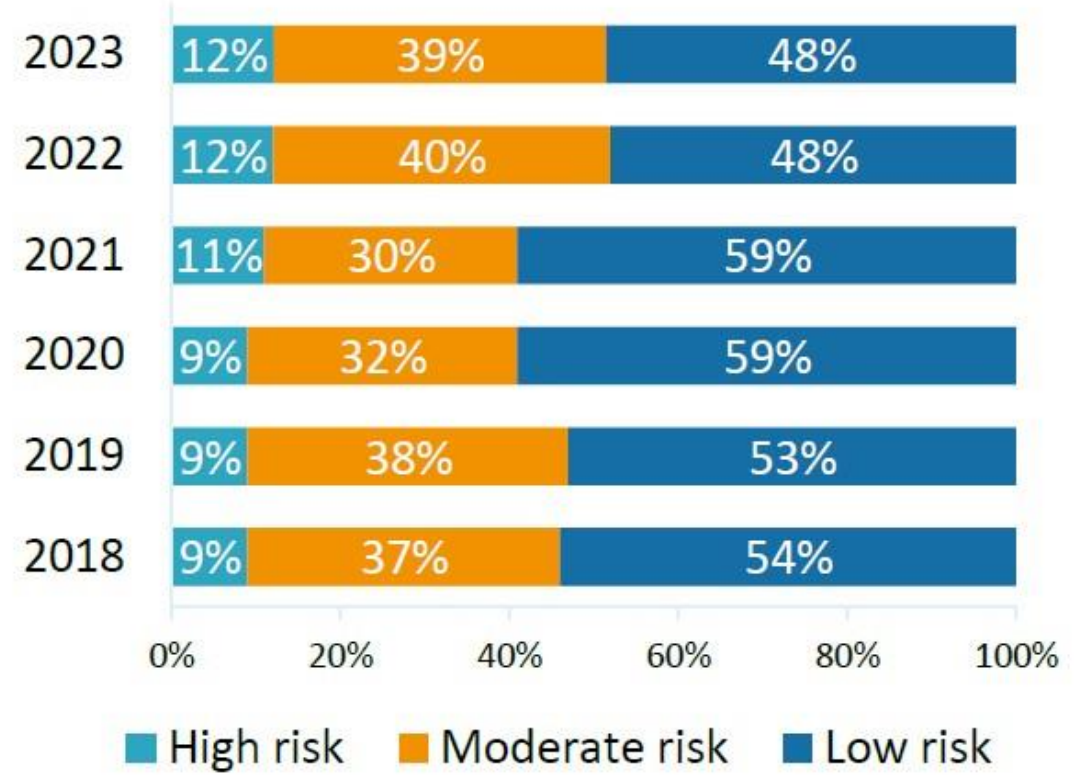
- A) Substantial increases in the use of simulation-based learning techniques
- B) Effective implementation of the recently set out Educator Workforce Strategy
- This will apply throughout training. For medics, similar issues will arise for Foundation Training and beyond.
- Debate about whether it would be possible to reduce contact hours for nursing. Currently much higher than in other countries.

Figure 8: Trainees and trainers – Calculated risk of burnout 2018 – 2023

Trainees



Trainers



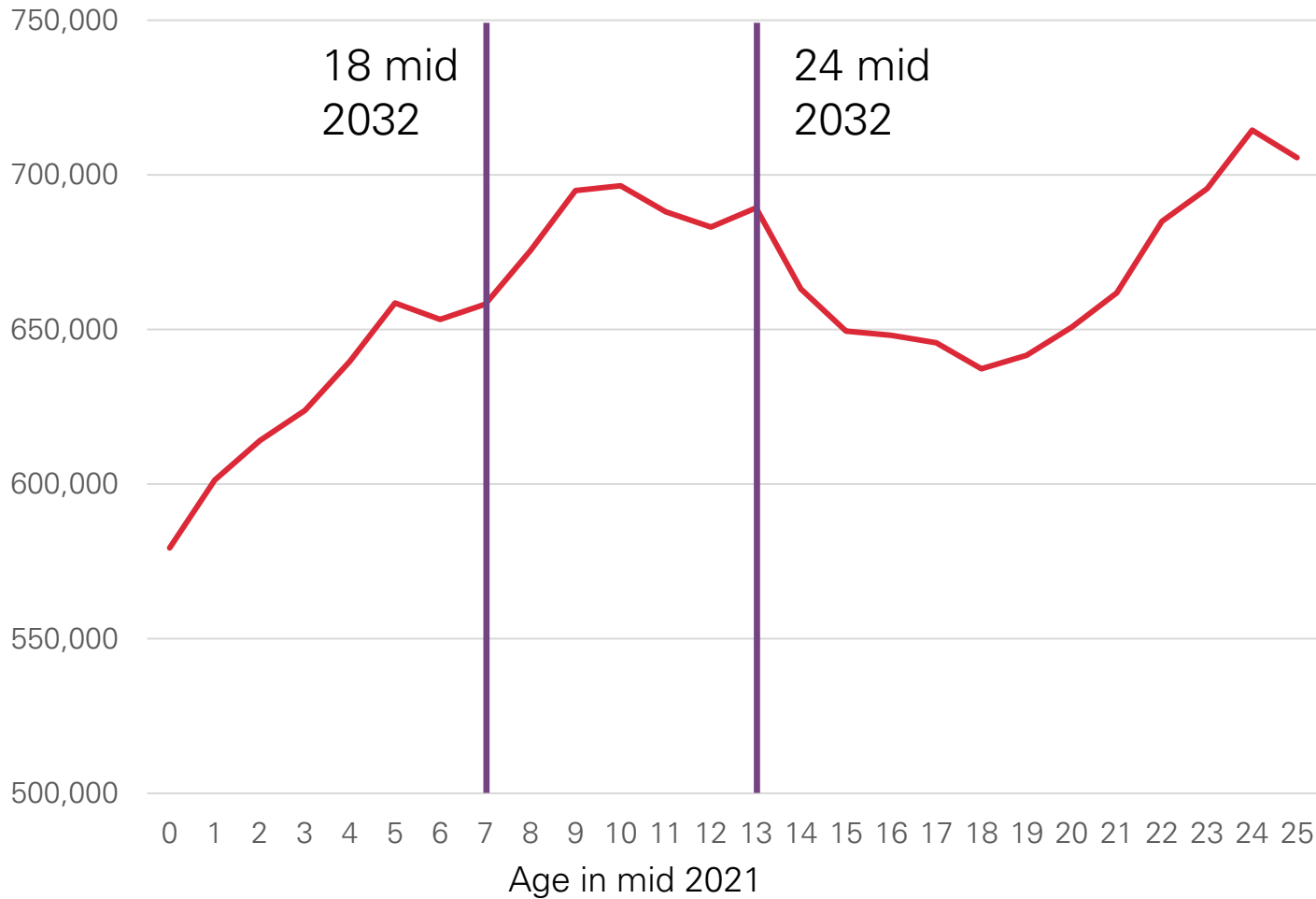
Source: GMC National Training Survey, 2023 Results

- Keeping an eye on burnout will be important

Applicant supply

- Here, the LTWP appears to be fortuitously '**well timed**' in terms of projected growth in the population aged 18 – 24 – the majority of UG enrolments in medicine and allied subjects
- Between 2023/24 and 2032/33, the number of those aged 18 – 24 in England is projected to grow from around **4.4 million** to nearly **5 million** as the relatively large birth cohorts of the mid-2000s and mid-2010s reach adulthood. (approx. 140k more born in 2012 than 2002)

ONS mid-year population estimates 2021



- Implies smaller impact of increased clinical training places on intakes for other courses and “marginal applicants”
- Beyond 2032/33, the number aged 18 – 24 is projected to fall, which could mean it is increasingly difficult to sustain increases in the proportion taking up health care training

Source: ONS Population estimates for the UK, England, Wales, Scotland and Northern Ireland: mid-2021

Applicant supply II

- Implicit assumptions around continuing increases in applications and acceptances to training in health care professions require regular monitoring – the recent fall in applications and acceptances to UG nursing degrees is a concern.
- In 2022, there were a total of 56,000 applicants for nursing degrees. This is very close to the 54,000 in the 2031 plan.

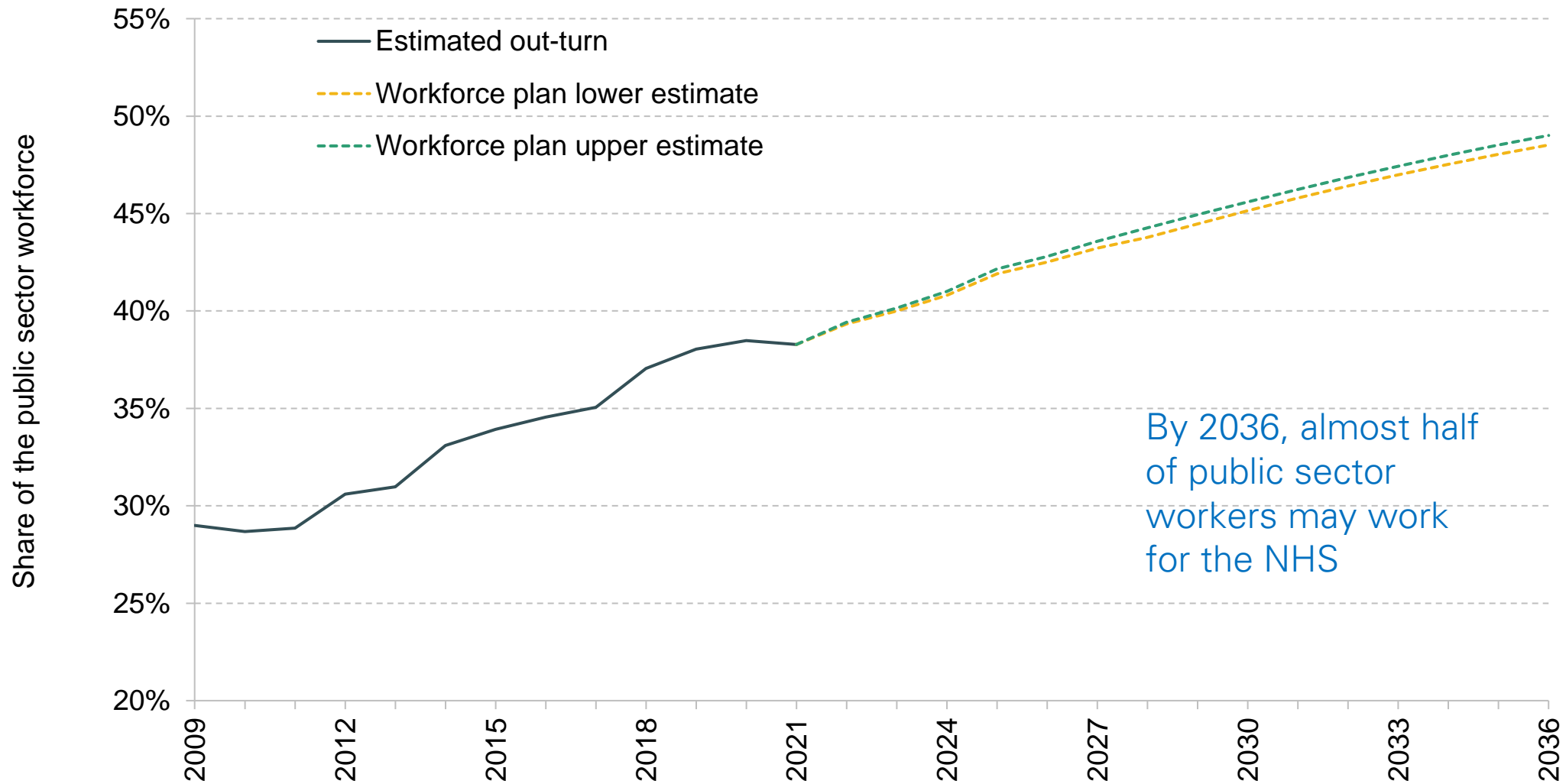
Wider implications - funding

- The funding announced in the LTWP just covered training, not the subsequent costs of employing a larger workforce.
- Warner & Zaranko (2023) estimate that LTWP implies the workforce plan implies annual NHS budget increases of around 3.6% per year in real terms (or 70% in total by 2036–37).
- Capital investment will also need to grow:
- Achieving the highly ambitious assumed productivity growth will require ‘a sustained increase in capital investment in the ageing NHS estate ... [and] investment in digital infrastructure throughout the NHS’ (NHS England, 2023, page 109).

Wider implications - workforce

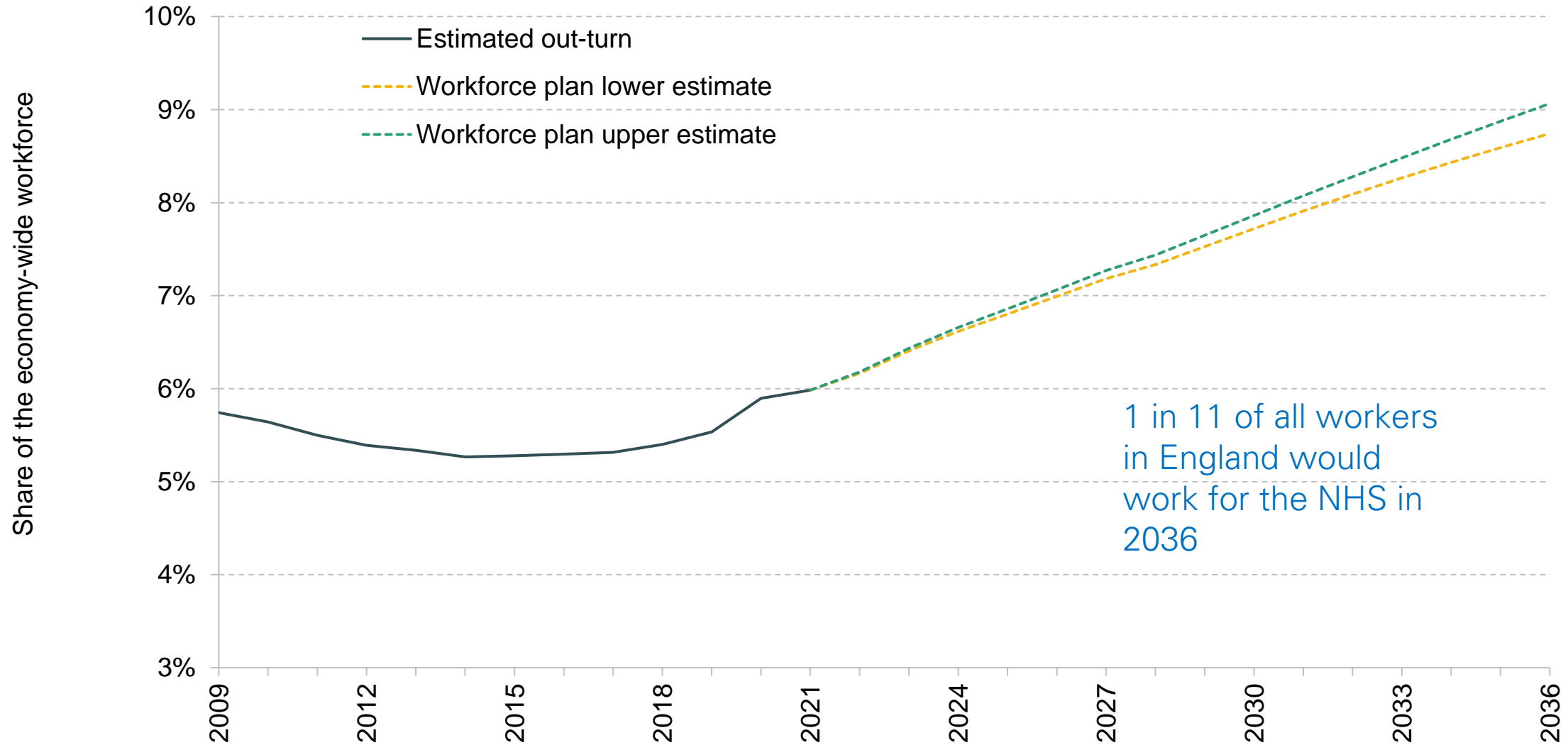
- Public sector workforce
- Overall economy

Estimated NHS England workforce as a share of the public sector workforce in England if plan is achieved



Source: Figure 8.3 "Implications of the NHS Workforce Plan" IFS Green Budget, Chapter 8

Estimated NHS England workforce as a share of the economy-wide workforce in England if plan is achieved



Source: Figure 8.4 "Implications of the NHS Workforce Plan" IFS Green Budget, Chapter 8

Conclusions

- The Long-Term Workforce Plan has been rightly welcomed, but it is a starting point that must be supported with other work if it is to be successful.
 - More information on the how
 - A funded plan for workforce enablers (especially capital and technology), which is crucial to achieving productivity.
- Expanding domestic training will require both sufficient capacity and a willing pool of suitable applicants.
- In the near term, a sustained focus on improving staff retention and investing in capital and the NHS estate is hugely important – arguably this has an impact on the overall image of the NHS and how attractive it appears to those on the brink of higher education!