

HSRUK Conference 2018

Research + Workforce - What's next?

Anita Charlesworth

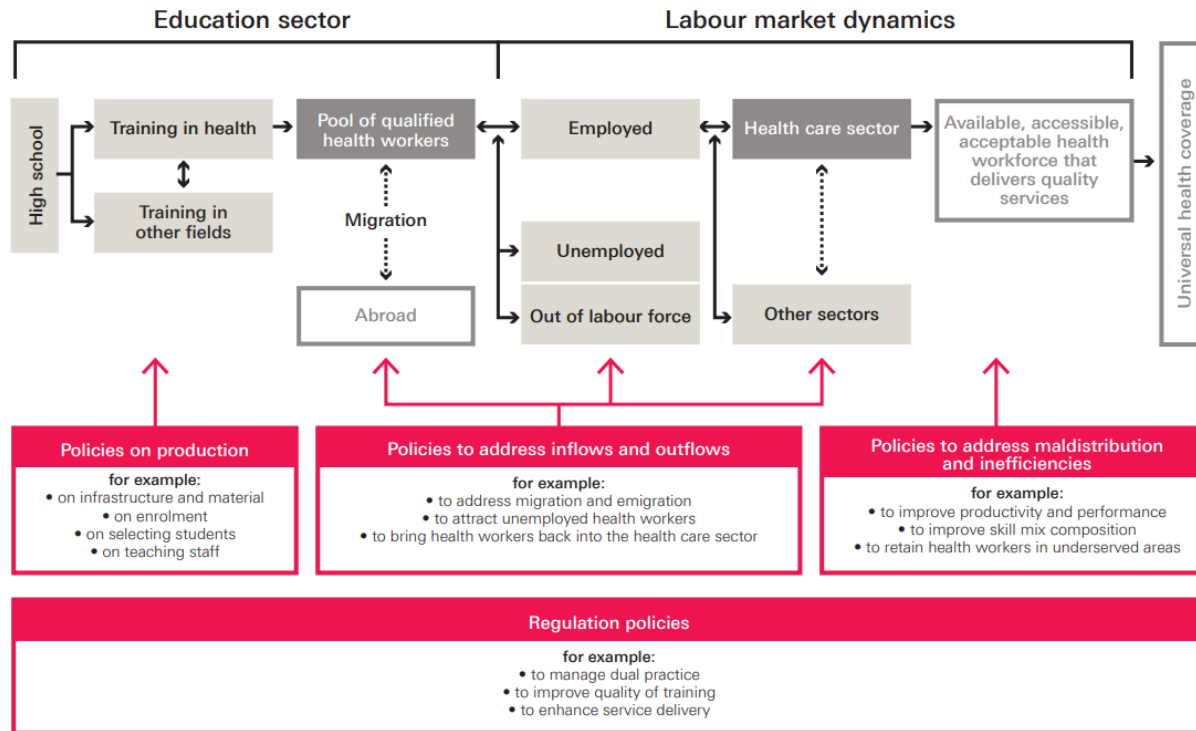
July 2018



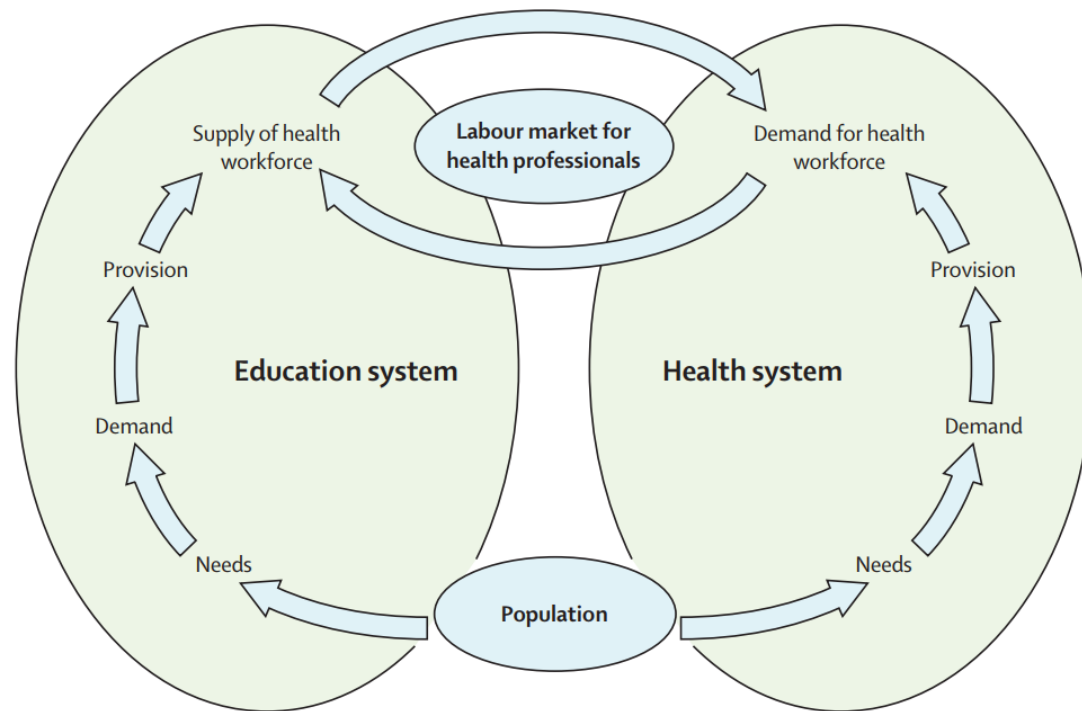
A health and care workforce strategy

- A engaged workforce, in the right numbers with the right skills and support is fundamental to an effective and sustainable system of health care.
- House of Lords' Select Committee on the Long-term Sustainability of the NHS said
- *'We are concerned by the absence of any comprehensive national long-term strategy to secure the appropriately skilled, well-trained and committed workforce that the health and care system will need over the next 10-15 years. In our view, this represents the biggest internal threat to the sustainability of the NHS'*

A Labour market framework for the health care workforce



Systems framework



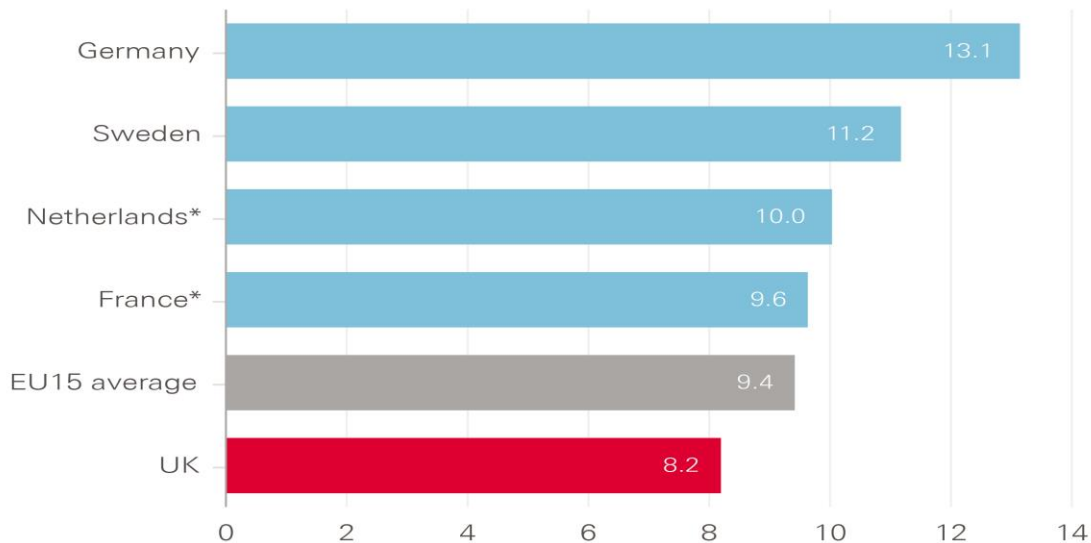
Research questions?

Demand / need

- How many staff do we need?
- What are the skill mix configurations we need?
- With are the competencies, attributes and skills that each team needs?

Nurse staffing levels

Number of nurses per 1,000 people, 2014 or nearest year

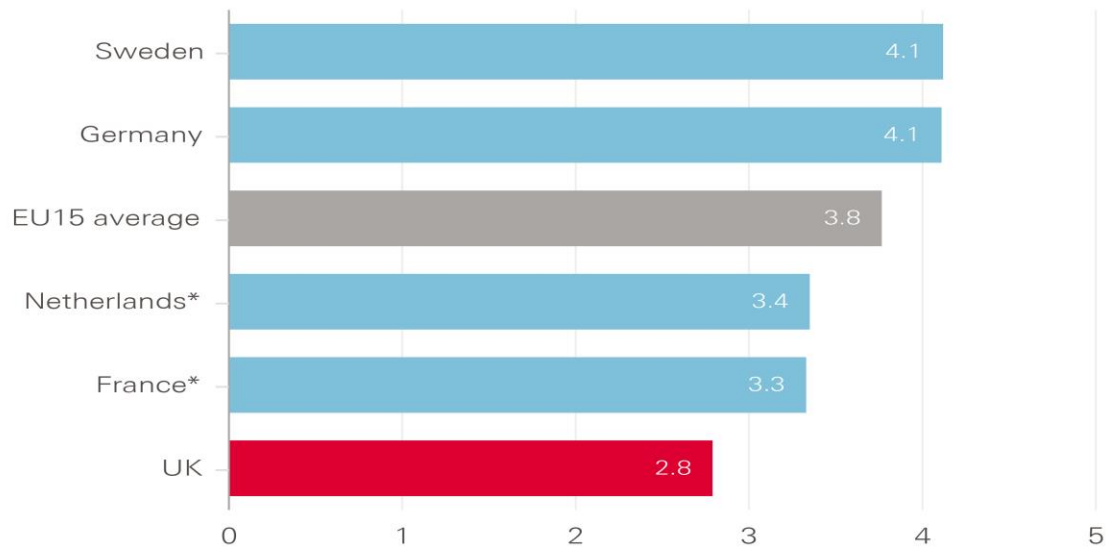


Note: **Professionally active staff. Includes practising staff plus others working in the health sector (adding another 5–10% of staff)



Doctor staffing levels

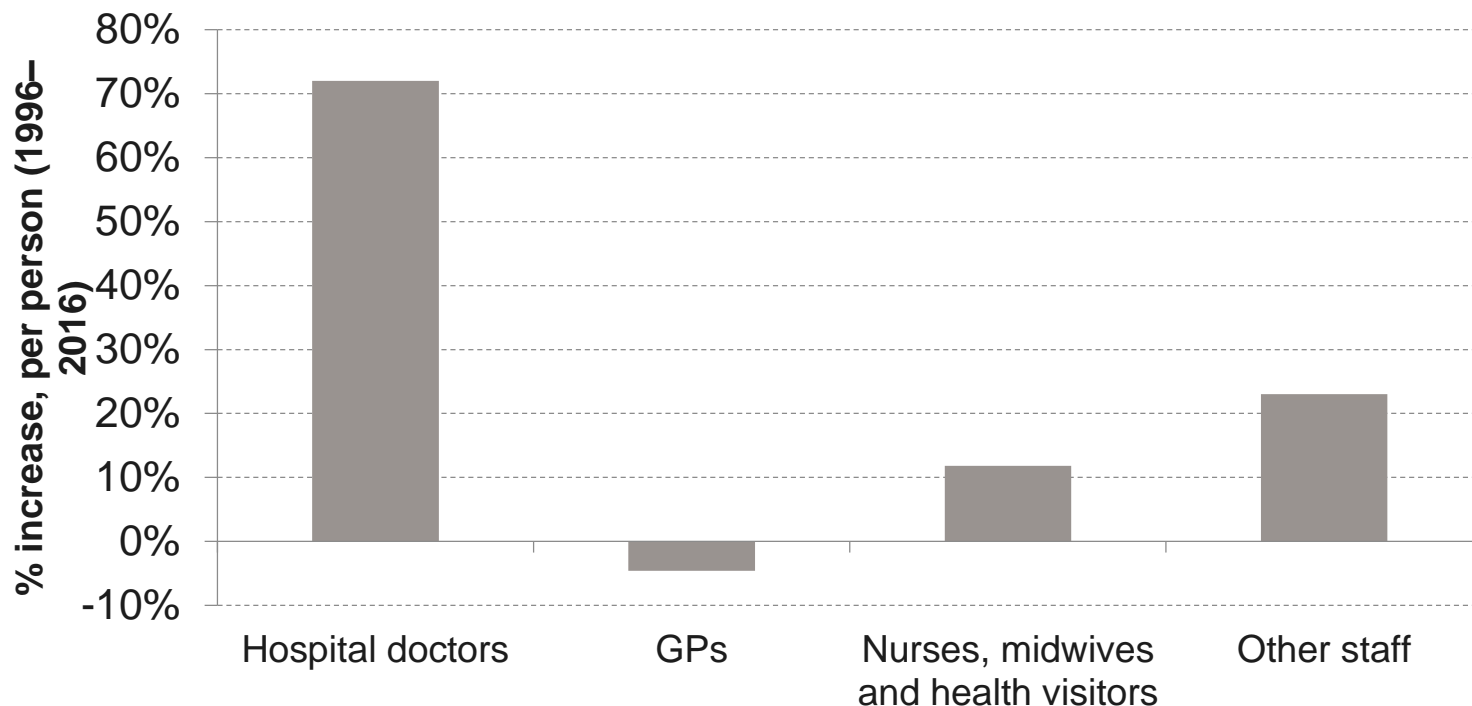
Number of doctors per 1,000 people, 2014 or nearest year



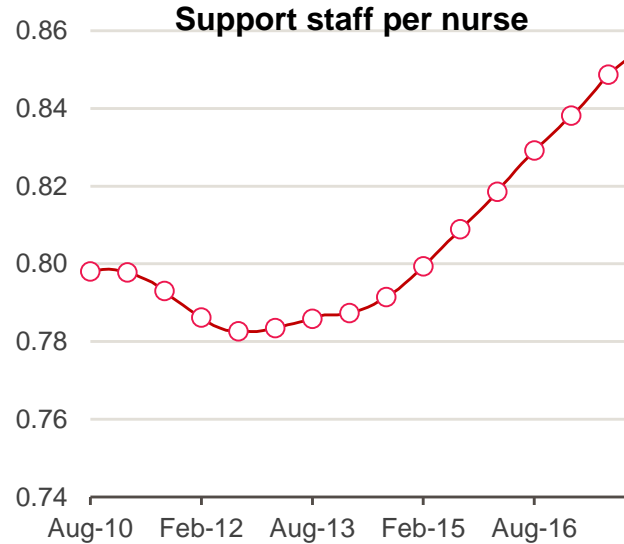
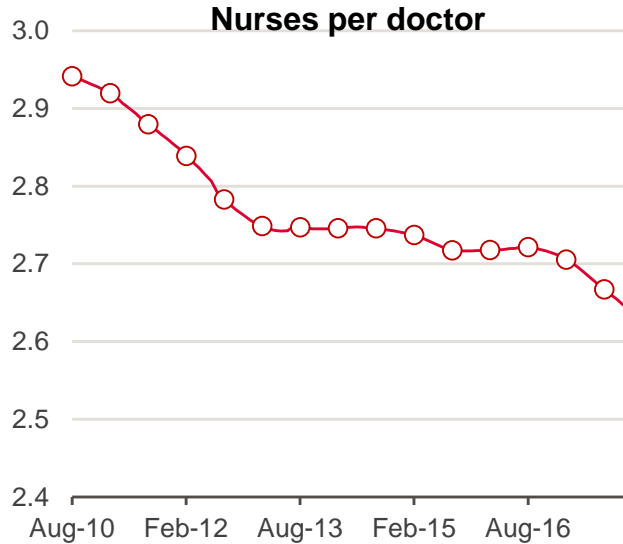
Note: *Professionally active staff. Includes practising staff plus others working in the health sector (adding another 5–10% of staff)



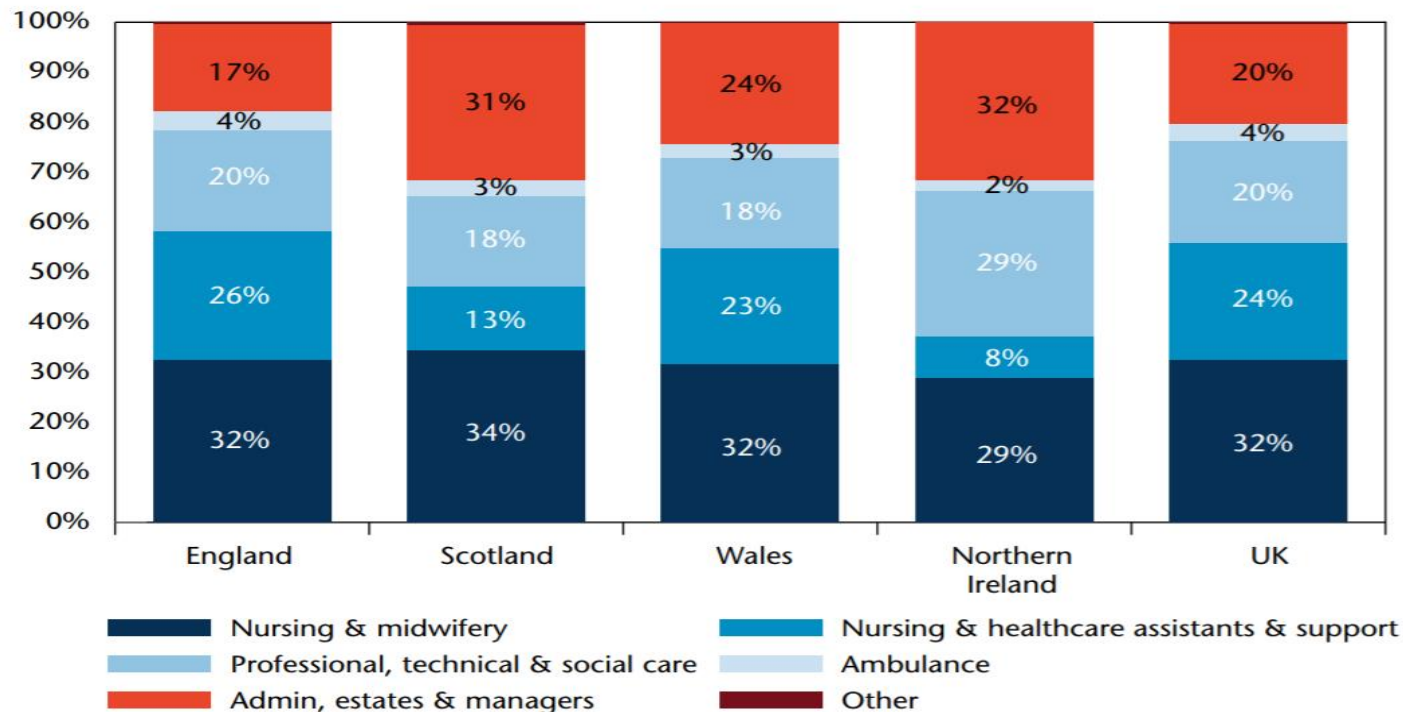
Composition of NHS workforce has changed a lot over past 20 years – was this what we wanted, what is the evidence base for this skill mix?



Number of FTE nurses, doctors, and support staff – 12 month rolling average

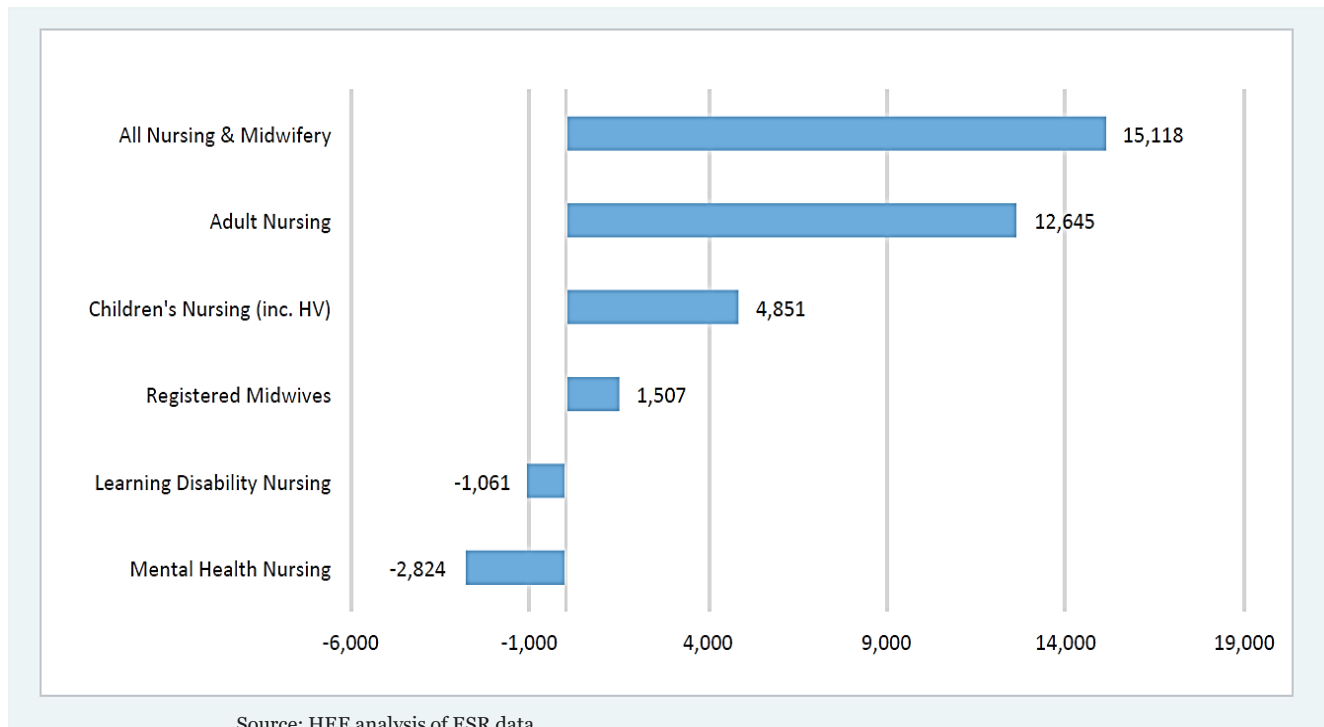


NHS AfC full-time equivalent workforce by broad staff group and by United Kingdom country, September 2017



Source: NHS Digital workforce statistics; Welsh Government (StatsWales); Information Services Division Scotland; and Department of Health, Northern Ireland

Growth/Reduction in NHS Employed Nursing and Midwifery by specialist area 2012 to 2017



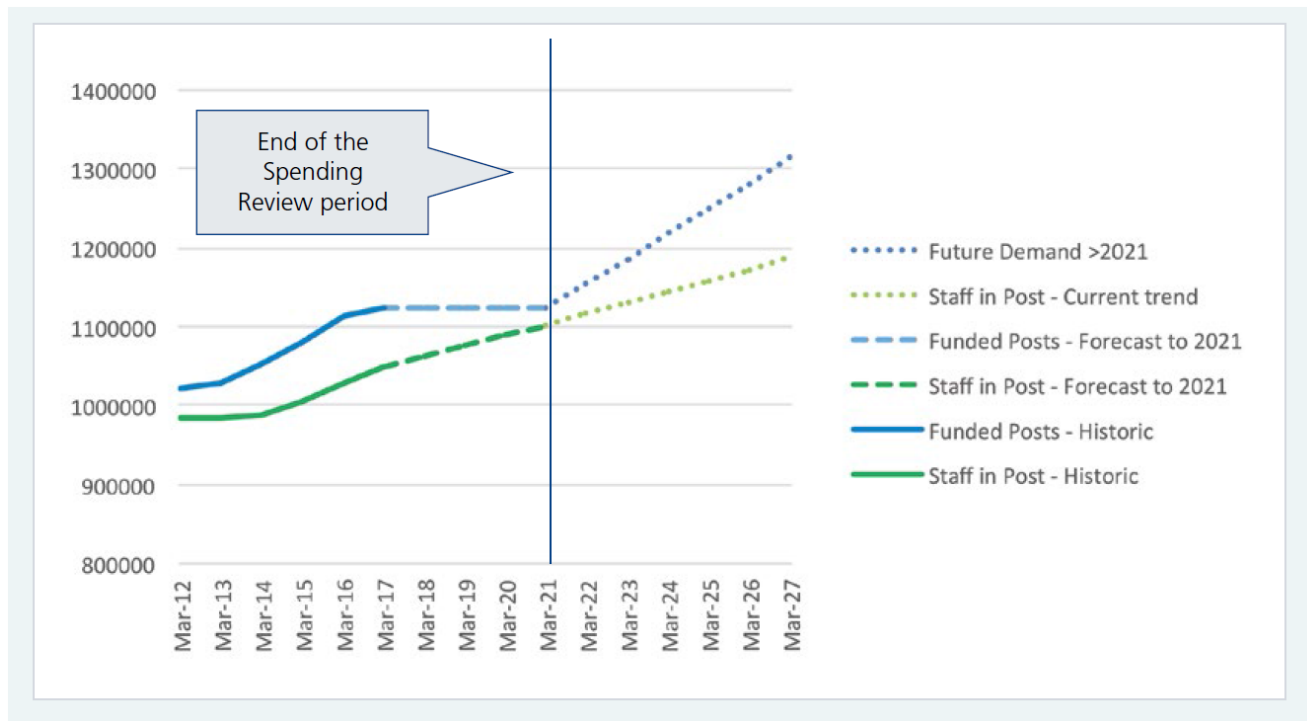
Growth in selected NHS staff groups in England in the modernised scenario (FTE)

	2018-19	2023-24	2028-29	2033-34	Annual growth	Extra FTEs, 2018-19 to 2033-34	% change
Hospital and Community Health Services total, including:	1,069,400	1,248,500	1,459,600	1,708,600	3.2%	639,200	60%
Professionally qualified clinical staff, including:	577,000	673,200	786,300	919,700	3.2%	342,700	59%
HCHS doctors	112,000	130,100	151,200	175,900	3.1%	63,900	57%
Nurses and health visitors	283,500	331,200	387,500	454,200	3.2%	170,700	60%
Support to clinical staff	320,300	374,400	438,200	513,800	3.2%	193,500	60%
NHS infrastructure support	167,500	195,700	228,900	268,000	3.2%	100,400	60%
Primary care total, including:	127,700	133,700	140,100	146,700	0.9%	19,000	15%
GPs	35,600	37,300	39,000	40,900	0.9%	5,300	15%
Nurses in GP practices	16,000	16,800	17,600	18,400	0.9%	2,400	15%

Note: Columns do not sum to totals as only selected staff groups are shown.

Source: Health Foundation Analysis based on NHS Digital Electronic Staff Record data, and Healthcare Workforce Statistics, September 2017.

Future Demand for Staff – Beyond 2021/22

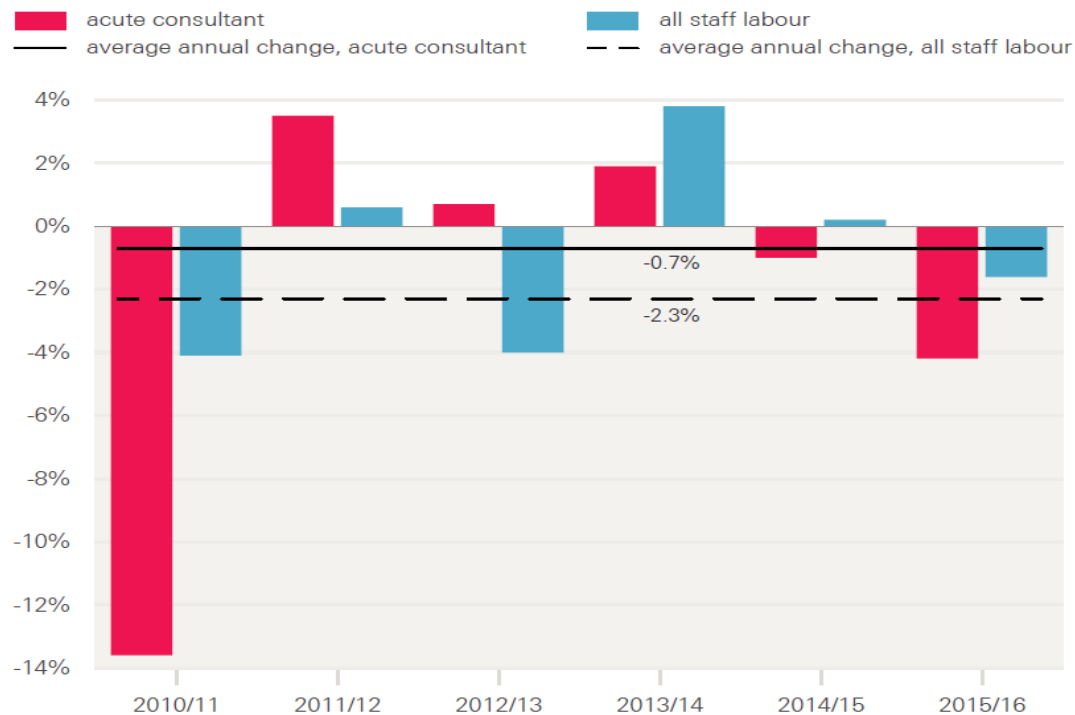


Source: HEE draft health care and workforce strategy for England to 2027

Research question

Ensuring that the NHS and social care system make the best use of the talents and skills of the people they employ

Annual change in consultant and all staff labour productivity in 150 NHS hospitals, 2009/10–2015/16 (%)



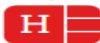
Source: Health Foundation analysis.

What makes for a productive consultant?

There are eight factors that affect how productive a hospital's consultants are, according to modelling work by the Health Foundation. It examined data on consultants' activity across 150 acute trusts (including teaching and specialist hospitals). The activity measured included emergency, inpatient, and outpatient care.

Of the 15 different factors that the foundation considered, the eight shown below had a statistically significant impact on the measure of productivity it used (at a 95% confidence level):

1% more of workforce are nurses



Higher impact

> 0.20%

1% higher NHS wages



Medium impact

0.05–0.20%

1% fewer DTOCs



Lower impact

< 0.05%

Input to Health Foundation model

Resulting increase in consultant productivity

Skill mix

1 Percentage of nurses

Hospitals with a higher proportion of nurses within their total workforce had more productive consultants.

1% more of workforce are nurses



2 Percentage of support staff

Hospitals with a higher number of support staff within their total workforce also had more productive consultants, although the impact was smaller.

1% more of workforce are support staff



Regional variation

3 Higher wages

Hospitals in areas where the NHS wage is higher than the regional average had higher consultant productivity.

1% higher NHS wages



4 Urban location

Hospitals in more urban areas had higher consultant productivity. This may be due to a larger throughput of people needing services.

1 point on 5-point scale



Hospital Characteristics

5 Greater specialisation

More specialised hospitals had more productive consultants. This is measured using a specialisation index, which compares the proportions of case types in a hospital with the national average.

1% more specialisation



7 More private finance

A very small increase in productivity is seen in hospitals that have a higher proportion of their total cost accounted by PFIs (private finance initiatives). Greater capital investment may be associated with greater efficiency.

1% more of total cost is PFI



6 Not in a teaching hospital

Teaching is not included in the measure of consultant productivity used, so consultants in teaching hospitals appear to be less "productive".

No teaching vs teaching hospital



8 Fewer delayed transfers

Consultants working in hospitals with a lower number of DTOCs (delayed transfer of care) are slightly more productive.

1% fewer DTOCs



* Most of these factors will be subject to diminishing returns. For example, taken to an extreme, as the proportion of nurses approached 100%, the number of consultants would be vanishingly small, and productivity would begin to decrease. Further analysis would be required to determine the thresholds for improvements.

Research questions

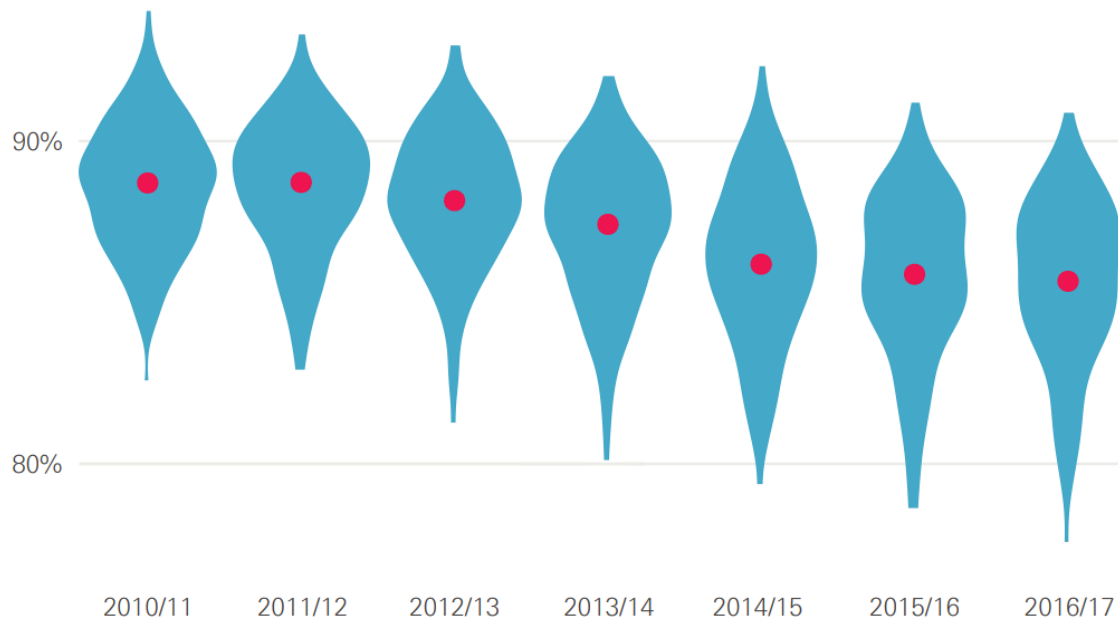
- How can the health and care system secure the supply of the right number of people in the right mix with the right skills?

NHS Provider vacancies, England, 2017/18

		2017/18 Q1	2017/18 Q2	2017/18 Q3
Nursing	Vacancy Rate	10.9%	11.2%	10.3%
	WTE Vacancies	38,180	39,004	35,835
Medical	Vacancy Rate	9.1%	8.3%	7.9%
	WTE Vacancies	10,848	10,097	9,676
Other Staff	Vacancy Rate	7.9%	7.5%	7.5%
	WTE Vacancies	53,535	51,058	51,942
Total Workforce	Vacancy Rate	9.0%	8.7%	8.4%
	WTE Vacancies	102,563	100,159	97,453

Source: NHS Improvement

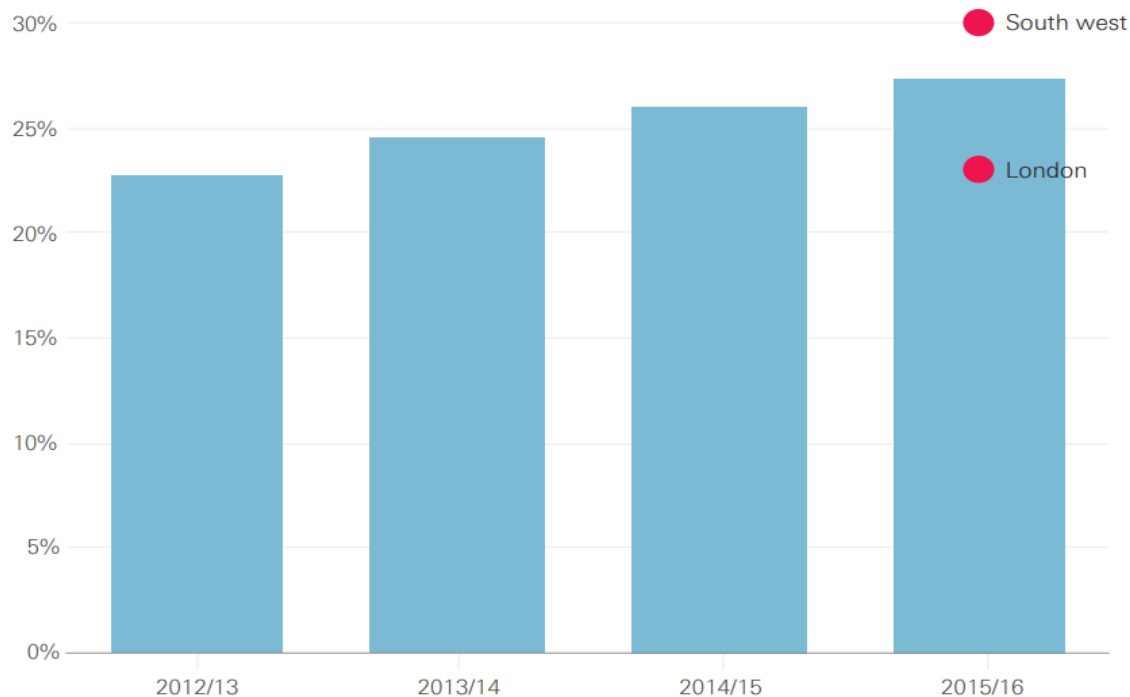
Change in workforce stability of trusts in England, 2010/11–2016/17



Note: Width indicates number of trusts, dots indicate median. Data from 210 trusts; a small number of outliers removed from graphic. Doctors in training excluded.

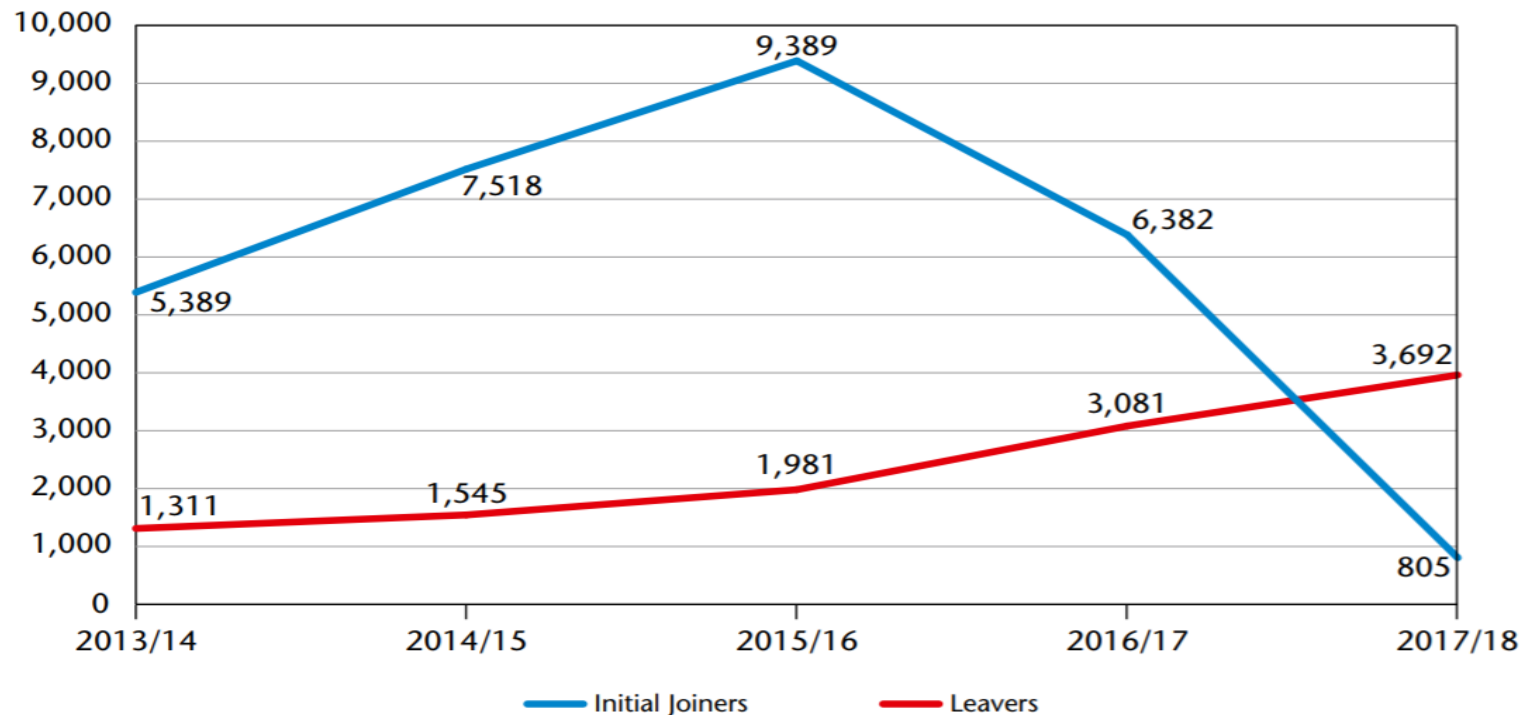
Source: NHS Digital, Provisional NHS HCHS monthly workforce statistics, bespoke extract.

Rate of staff leaving jobs in social care in England, 2012/13–2015/16



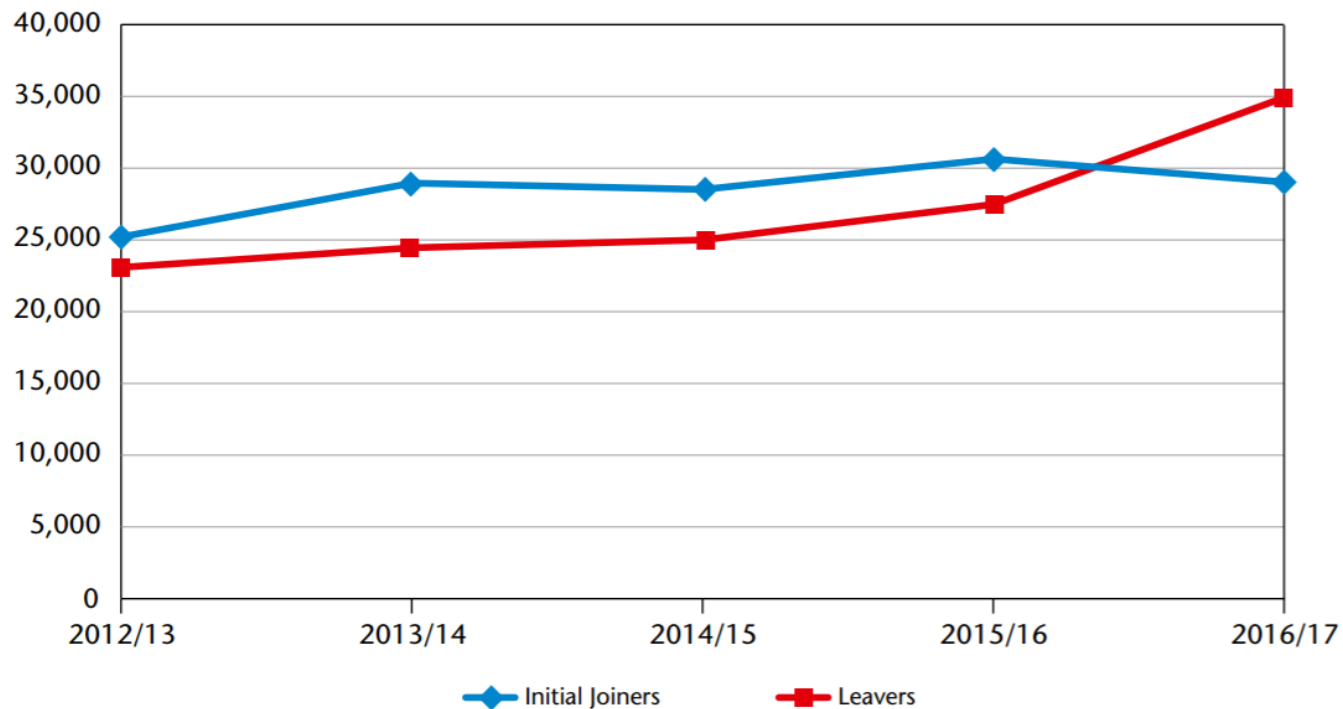
Source: Skills for Care, *The state of the adult social care sector and workforce in England, 2016*.

Nurses and midwives from the EEA joining and leaving the NMC register, UK, 2013-2018



Source: *The NMC Register, March 2018*

Overall numbers joining and leaving the NMC register, UK, 2012-2017



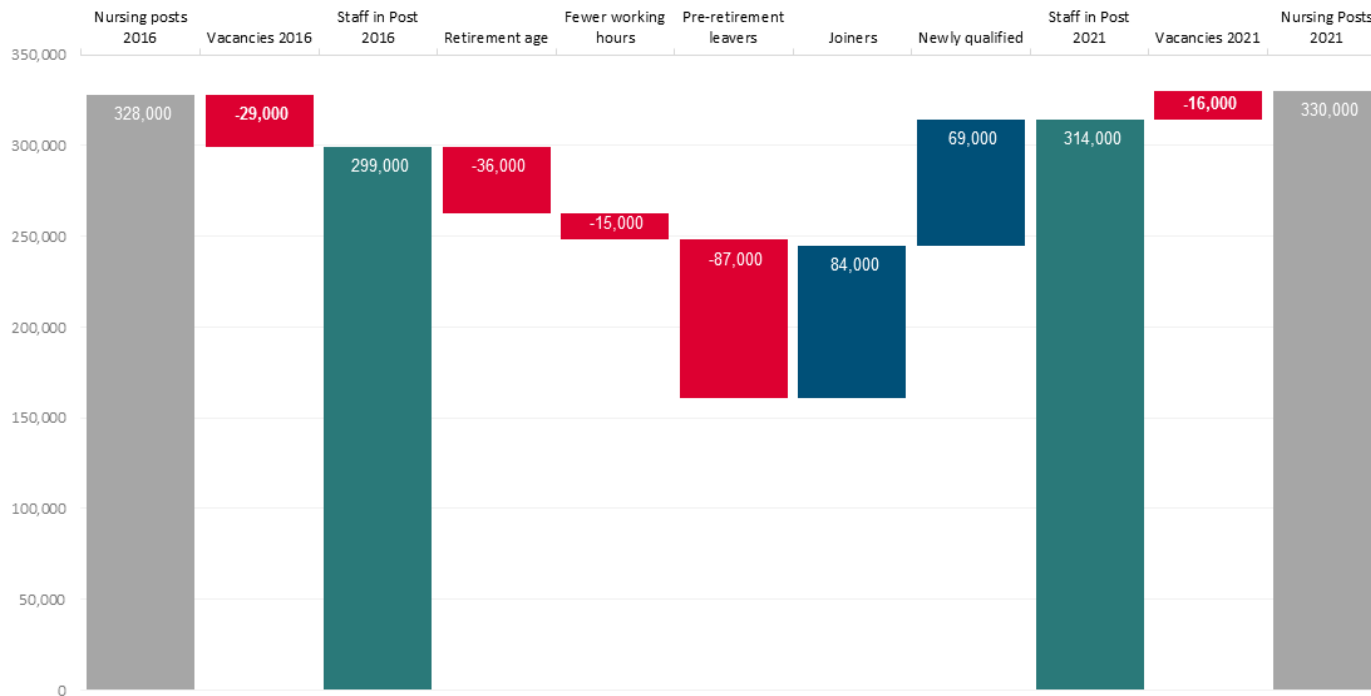
Source: The NMC register 2012/13 – 2016/17

Health Education England vacancy rates, 2014 to 2017

Vacancy rate	2014	2015	2016	2017
Adult Nursing	4.2%	10.0%	10.9%	10.2%
Children's Nursing	4.3%	7.3%	10.0%	10.6%
Learning Disability Nursing	11.7%	17.0%	13.7%	15.7%
Mental Health Nursing	22.4%	11.7%	14.0%	15.3%
Midwives	4.5%	5.3%	5.0%	4.4%
Clinical Psychology	9.2%	10.8%	14.4%	11.5%
Diagnostic Radiography	4.5%	5.9%	6.9%	9.7%
Dietetics	4.0%	4.4%	3.5%	1.3%
Occupational Therapy	5.6%	6.3%	7.8%	
Operating Department Practice	4.1%	4.8%	3.3%	0.9%
Paramedics	3.9%	5.4%	7.4%	
Physiotherapy	5.2%	6.7%	7.5%	
Podiatry	4.1%	7.9%	4.8%	
Speech and Language Therapy	5.0%	6.3%	4.0%	1.7%
Therapeutic Radiography	4.7%	5.0%	1.8%	
Total	6.6%	9.0%	10.0%	

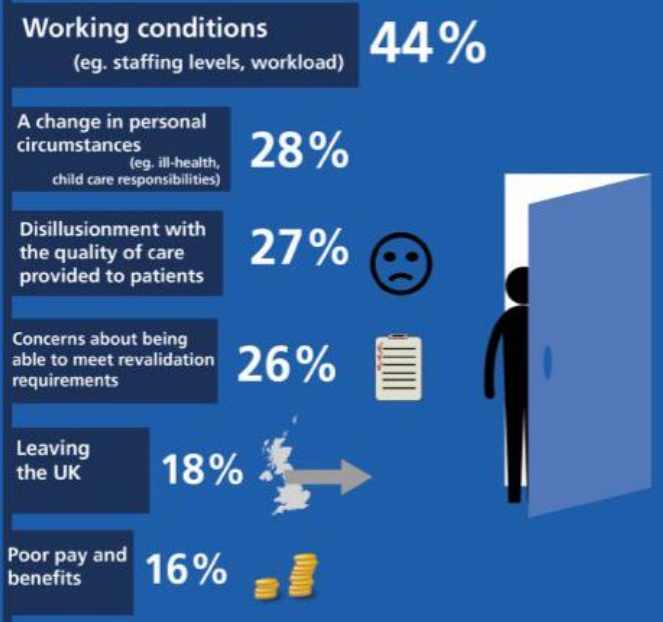
Source: HEE analysis of NHS Electronic Staff Record data and provider expressed demand

Nursing supply and demand 2016-2021



Source: NHS Health Education England

Why do nurses leave the profession, other than retirement?



Nurses who left the profession but then decided to return:

Top reason for initially leaving:

Lack of flexibility

Other reasons:

Ongoing education and training opportunities

Pay

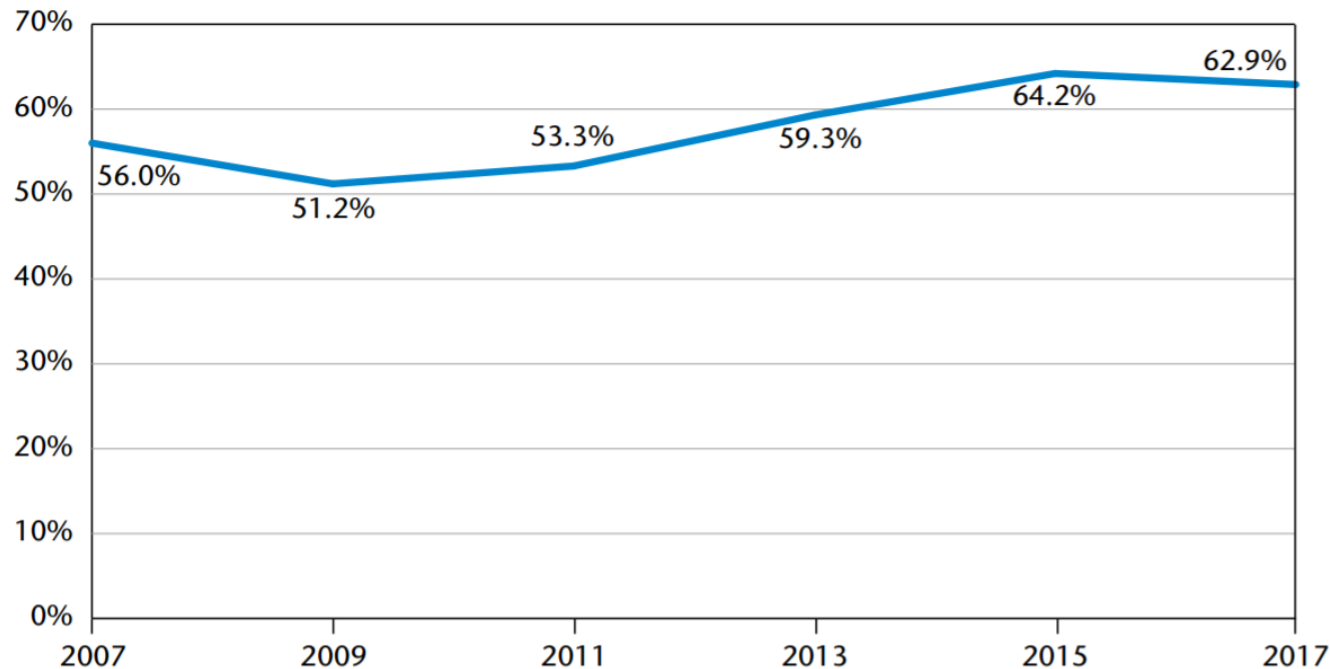
Pressure of work



Source: The NMC survey of people who had left the register between June 2016 and May 2017. Total number of respondent: 4,544. Of these, 2,240 did not cite retirement as a reason for leaving. For this group, these are the top reasons for leaving.

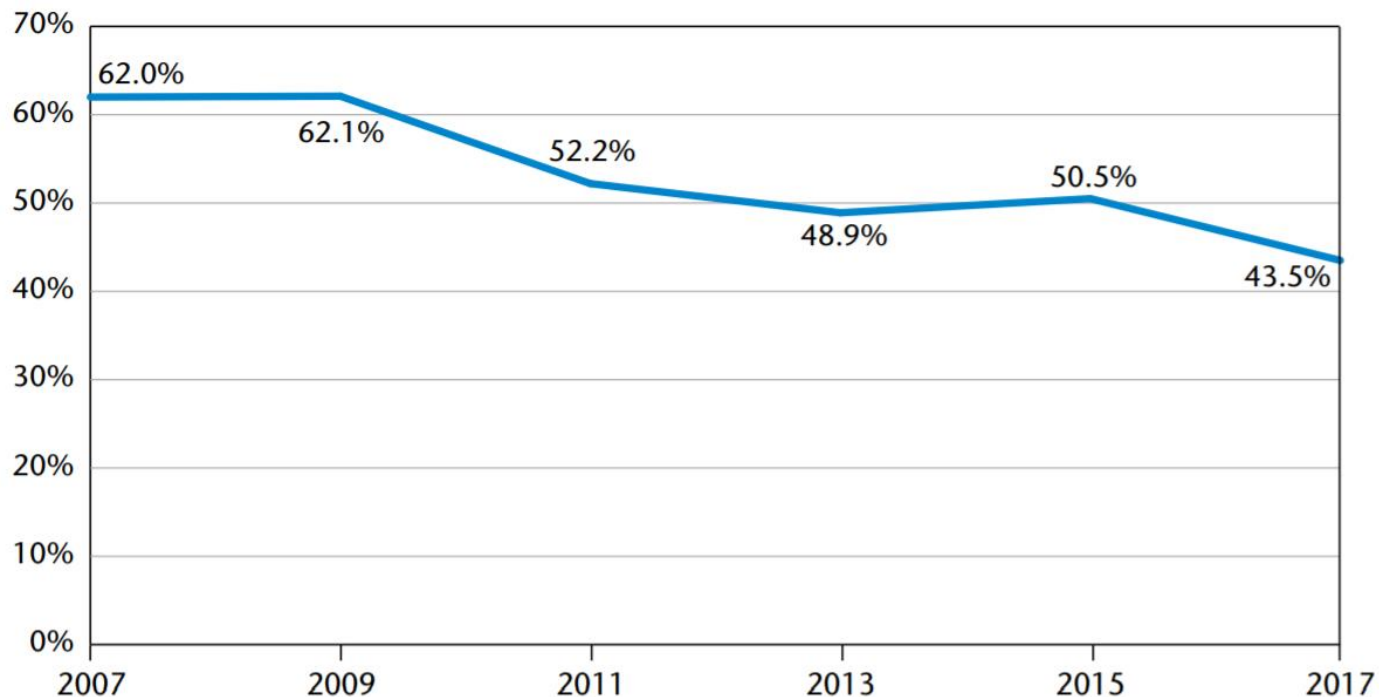
Source: Health Education England – oral evidence

RCN 2017 Employment Survey – I feel I am under too much pressure at work



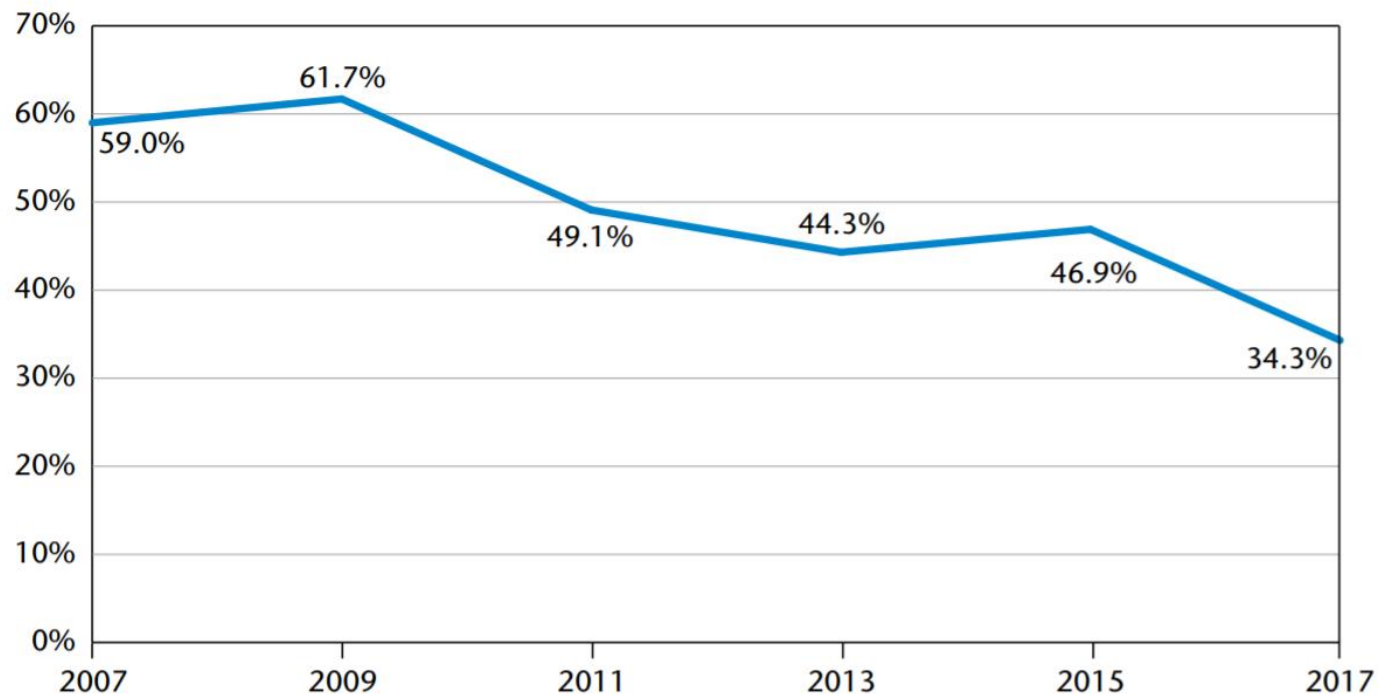
Source: IES/ERL/RCN, RCN Evidence

RCN 2017 Employment Survey – I am satisfied with the choice I have over the length of shifts I work















Source: IES/ERL/RCN, RCN Evidence

RCN 2017 Employment Survey – I feel able to balance my home and work lives





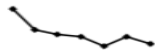

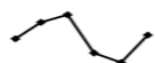
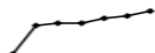
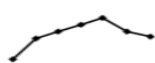
Source: IES/ERL/RCN, RCN Evidence

Selected job satisfaction results from the national NHS Staff Survey, AfC staff, England, 2011 to 2017

Measure	2011	2012	2013	2014	2015	2016	2017	Trend ¹
Engagement and job satisfaction								
I look forward to going to work	49.9	51.7	52.1	51.6	57.1	57.9	56.9	
I am enthusiastic about my job	65.1	67.3	68.1	67.7	73.3	73.8	73.1	
Time passes quickly when I am working	73.3	74.2	74.3	73.8	76.8	76.6	75.8	
The recognition I get for good work	45.8	48.7	49.4	49.9	51.8	53.0	52.8	
The support I get from my immediate manager	63.5	65.4	66.0	66.1	67.2	68.3	68.8	
The support I get from my work colleagues	76.4	78.4	78.3	78.4	80.8	81.5	81.3	
The amount of responsibility I am given	70.5	73.4	73.1	72.8	73.3	73.8	73.1	
The opportunities I have to use my skills	65.5	69.9	69.6	69.6	69.9	70.6	69.9	
The extent to which my organisation values my work	33.3	40.0	40.4	40.8	41.1	43.1	42.9	
My level of pay	38.7	37.4	35.8	30.9	34.6	35.2	29.4	
Percentage of staff appraised in the last 12 months	80.6	83.2	83.8	83.5	85.4	86.5	86.4	
Percentage of staff experiencing harassment, bullying or abuse from patients, relatives or the public in last 12 months ²		29.5	28.9	28.2	28.0	27.5	27.5	

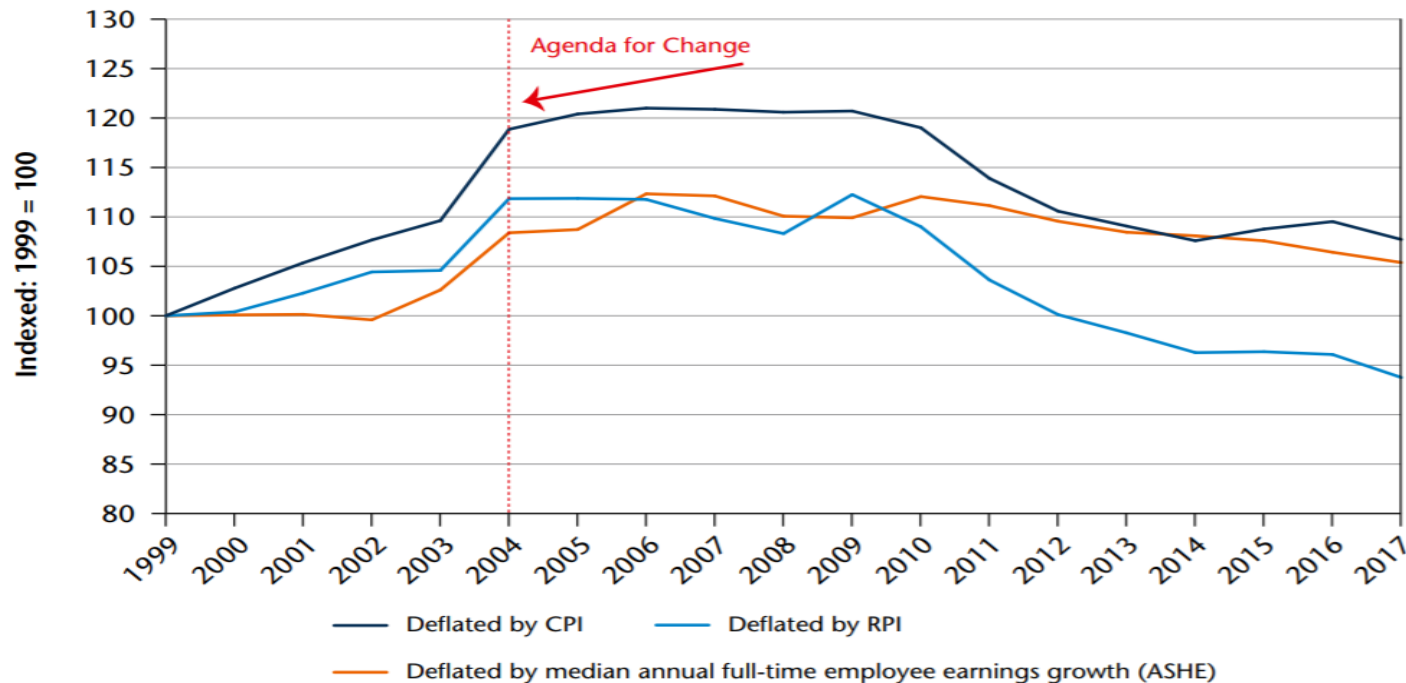
Source: National NHS Staff Survey (England)

Selected working pressures results from the national NHS Staff Survey, AfC staff, England, 2011 to 2017

Measure	2011	2012	2013	2014	2015	2016	2017	Trend ¹
Workload								
I am unable to meet all the conflicting demands on my time at work ^{2,3}	41.9	43.2	44.3	44.7				
I am able to meet all the conflicting demands on my time at work ⁴					42.9	45.1	45.0	
I have adequate materials, supplies and equipment to do my work	58.9	56.5	55.8	55.7	54.6	55.5	54.7	
There are enough staff at this organisation for me to do my job properly	30.2	30.1	29.2	28.6	29.9	31.4	31.2	
During the last 12 months have you felt unwell as a result of work related stress ²		38.6	39.6	40.0	37.8	37.2	38.7	
Percentage of staff working PAID hours over and above their contracted hours ²	25.4	30.0	30.2	30.2	31.1	31.5	32.2	
Percentage of staff working UNPAID hours over and above their contracted hours ²	53.1	56.1	57.0	58.1	59.0	57.1	56.4	

Source: National NHS Staff Survey (England)

Nurse starting pay point69 deflated by average earnings and inflation, England, 1999-2017

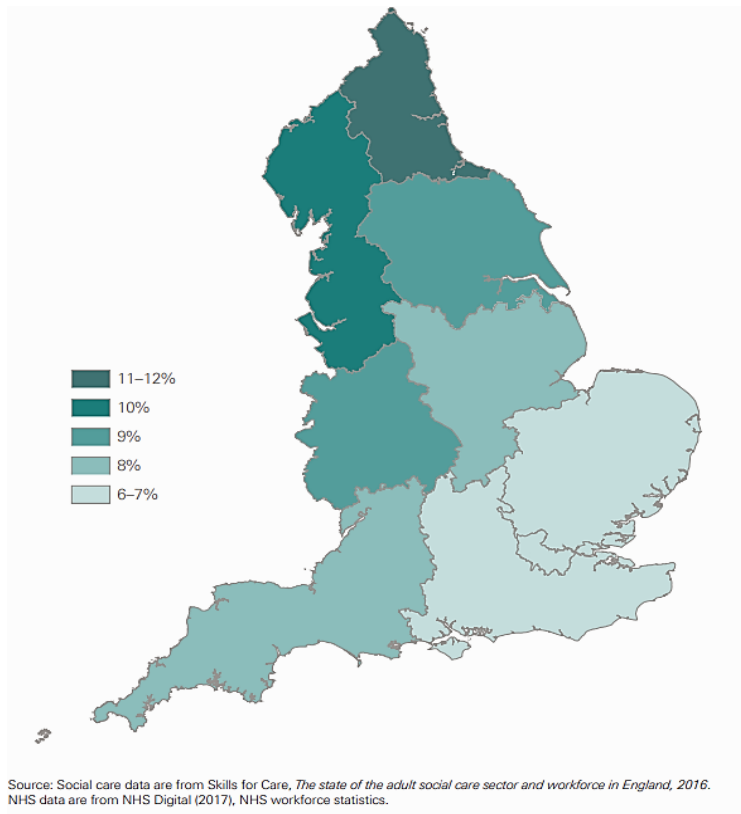


Source: OME analysis of ONS data (Annual Survey of Hours and Earnings, CPI (D7G7) April each year, RPI (CZBH) April each year)

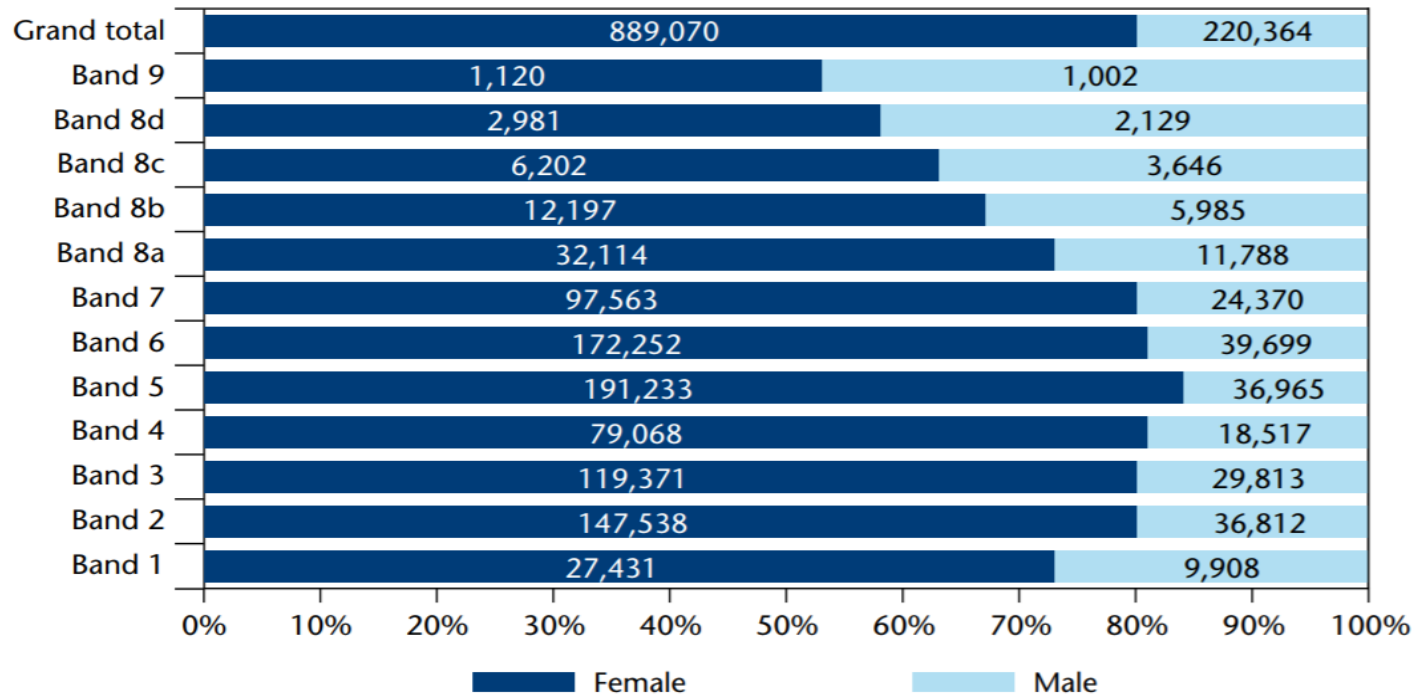
Research questions

- What role can the health and care system play in the local and national economy and how do we maximise the beneficial impact?
- How can the NHS and care system be a better employer that provides opportunity to all?

Health and social care workers as a percentage of the total workforce, 2015/16



Staff in Agenda for Change pay bands by gender in England, headcount, November 2017



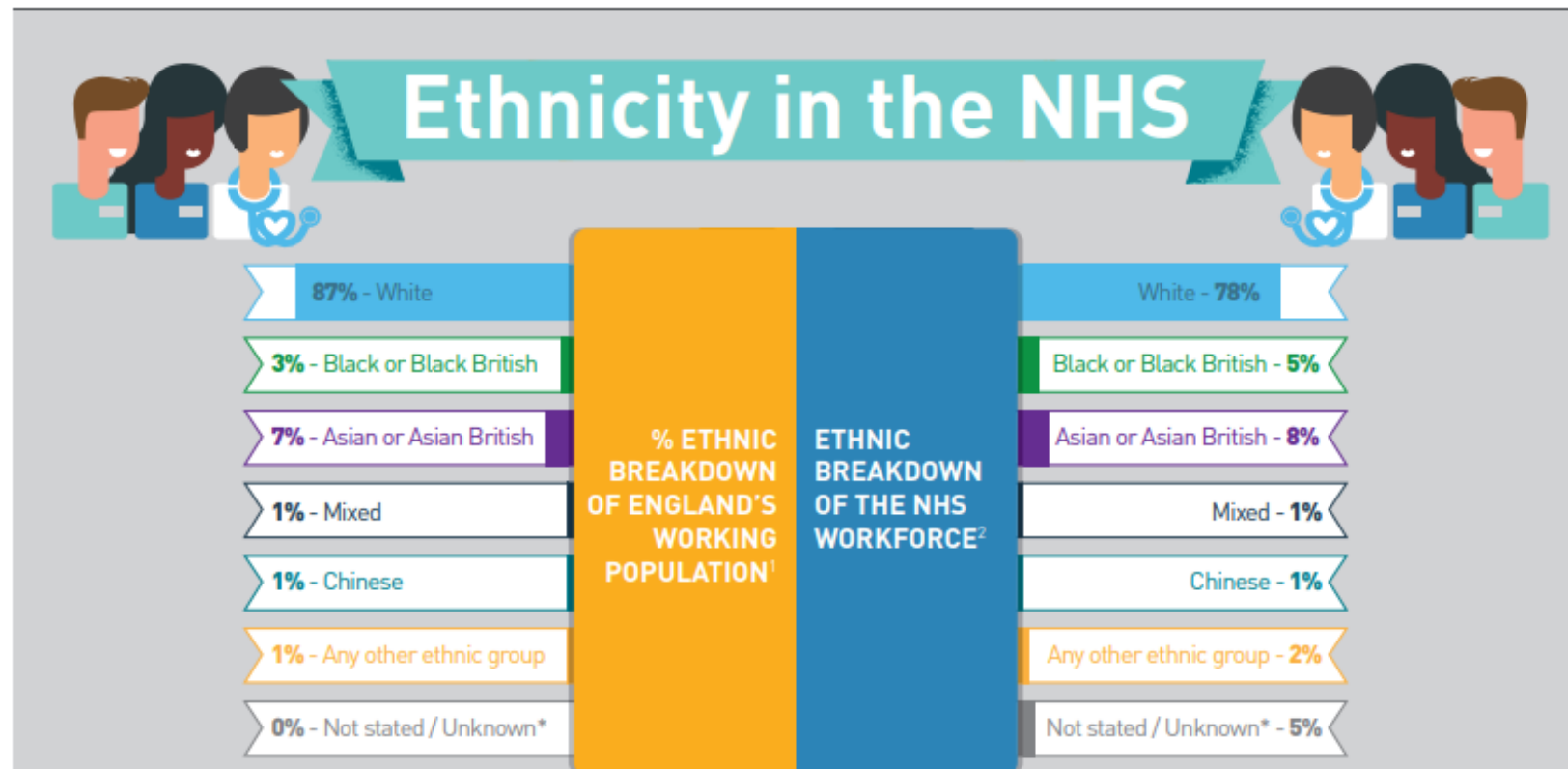
Source: NHS Digital workforce statistics

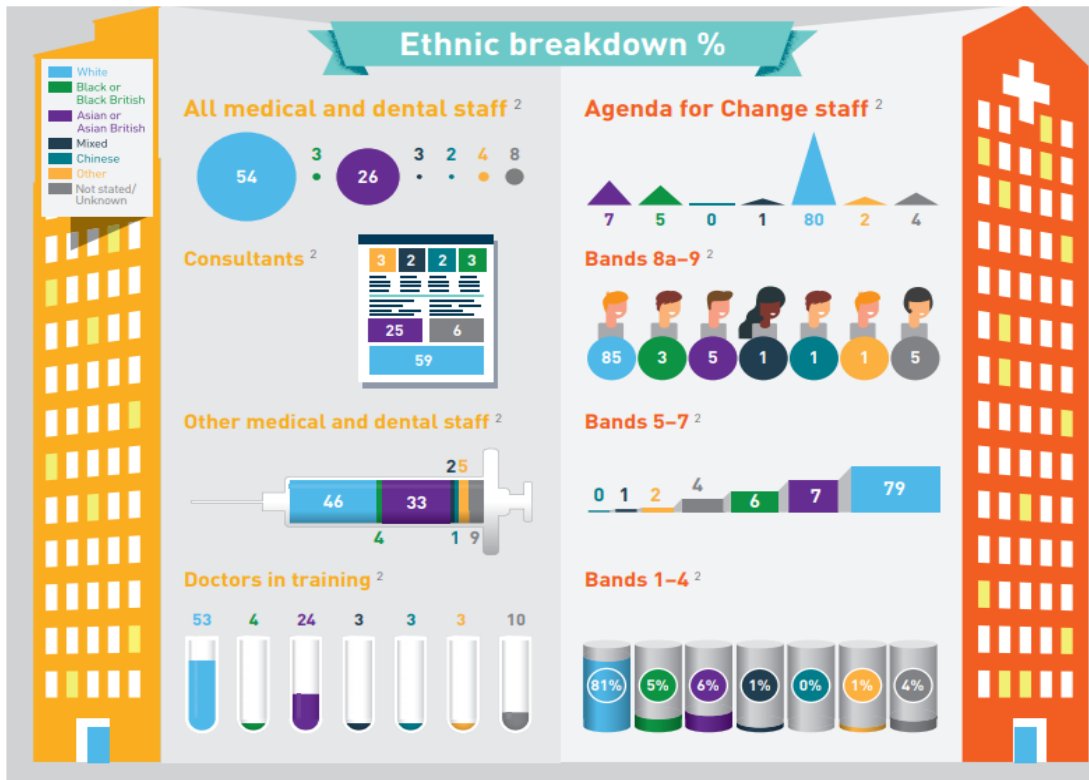
Note: The horizontal axis displays the percentage of females within each pay band.

Mean annual basic pay per FTE by gender, England, 2017

	Mean Annual Basic Pay £ per FTE ^[1]		
	Male	Female	Gap
All staff	37,470	28,702	23%
Medical staff	67,788	57,569	15%
AfC staff	28,156	26,941	4%
<i>Clinical staff</i>			
Nurses & health visitors	31,582	31,387	1%
Midwives	33,613	33,085	2%
Ambulance staff	27,886	26,807	4%
Scientific, therapeutic & technical staff	36,027	34,811	3%
<i>Support to clinical staff:</i>			
Support to doctors, nurses & midwives	18,645	18,913	-1%
Support to ambulance staff	19,644	20,200	-3%
Support to ST&T staff	19,963	19,996	0%
<i>NHS infrastructure support:</i>			
Central functions	28,004	24,889	11%
Hotel, property & estates	19,436	16,949	13%
Senior managers	83,354	73,717	12%
Managers	49,337	46,620	6%

Source: NHS Digital, Provisional NHS Staff Earnings Estimates





Source:

1. England population in employment aged 16+, Office for National Statistics - Annual Population Survey, 12 months to September 2016. These figures have been adjusted using the 2011 UK Census population to use the same categories as the NHS workforce data to aid comparison.

2. NHS Digital, Hospital and Community Health Services (HCHS) workforce statistics: Equality and Diversity in NHS Trusts and CCGs in England, September 2016 - Experimental Statistics. Ethnicity - Source Data. NHS Digital, Hospital and Community Health Services (HCHS) workforce statistics: Ethnicity by grade in NHS Support Organisations and Central Bodies in England, September 2016, headcount. Ethnicity by grade

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Percentage of people on a zero hours contract (April -June 2017)



- A-E Production including Agriculture
- F Construction
- G Wholesale and Retail
- I Accommodation and Food
- J-M Information, Finance, Professional
- N Admin and support services
- O Public admin
- P Education
- Q Health and Social work
- R,S+H Transport, Arts, Other services

Thank you

