REAL Centre

Beyond COVID-19: underlying pressures on health care funding in England

Festival of Science, November 2021

Stephen Rocks

Underlying pressures on health care funding

The rise and rise of health care spending

Health spending more than doubled (+103%) between 2000/01 and 2018/19, rising by 4% a year.

Health spending (current and capital) in England and NHS England revenue budget (£bn, 2021/22 prices)

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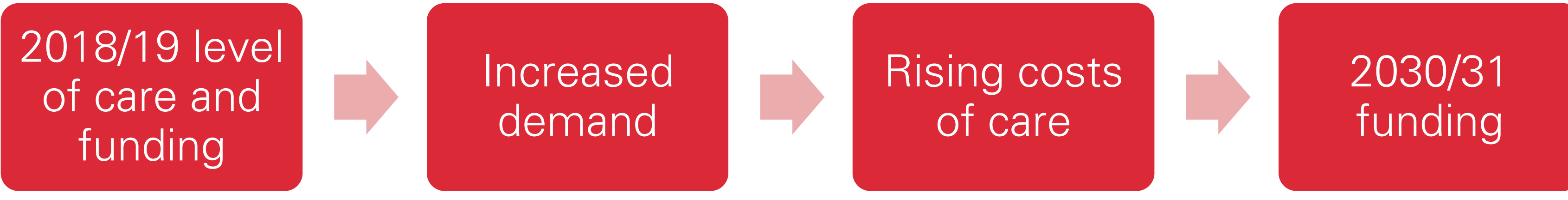
Source: Public Expenditure Statistical Analyses; REAL Centre calculations

Health care spending in 2030/31 – higher still

- Health care spending typically rises over time - about 3.7% a year since 1950s
- REAL Centre projections suggest more funding would be needed just to deliver the same **rate of care** in 2030/31 as in 2018/19. Why?
- Reasons include:

  - **Increased demand**: Growing and ageing population, with greater morbidity and number of deaths
  - **Rising costs:** Costs of care (wages & drugs) rising faster than productivity



Increasing demand

A growing and ageing population

By 2030 there is projected to be 3.2 million more people in England (0.5% growth per year). Almost 90% of this increase is among those aged 60+ (+2.9 million, 1.8% growth per year).

Female Male

2018

60+ 7.1m 6.1m
40-59 7.4m 7.3m
20-39 7.4m 7.5m
0-19 6.5m 6.8m

10m 8m 6m 4m 2m 0m 2m 4m 6m 8m

2030

60+ 8.7m 7.7m
40-59 7.4m 7.3m
20-39 7.1m 7.5m
0-19 6.5m 6.9m

10m 8m 6m 4m 2m 0m 2m 4m 6m 8m

Source: ONS principal population projections

Increasing demand

Health care spend increases with age (or does it?)

Health care spend per person generally rises with age. Age may be a red herring, though, with spend depending more on morbidity and proximity to death.

Average cost (£), 2018/19

Male Female

£6000
£5000
£4000
£3000
£2000
£1000

0 1-4 5-9 10-14 15-19 20-24 25-29 30-34 35-39 40-44 45-49 50-54 55-59 60-64 65-69 70-74 75-79 80-84 85+

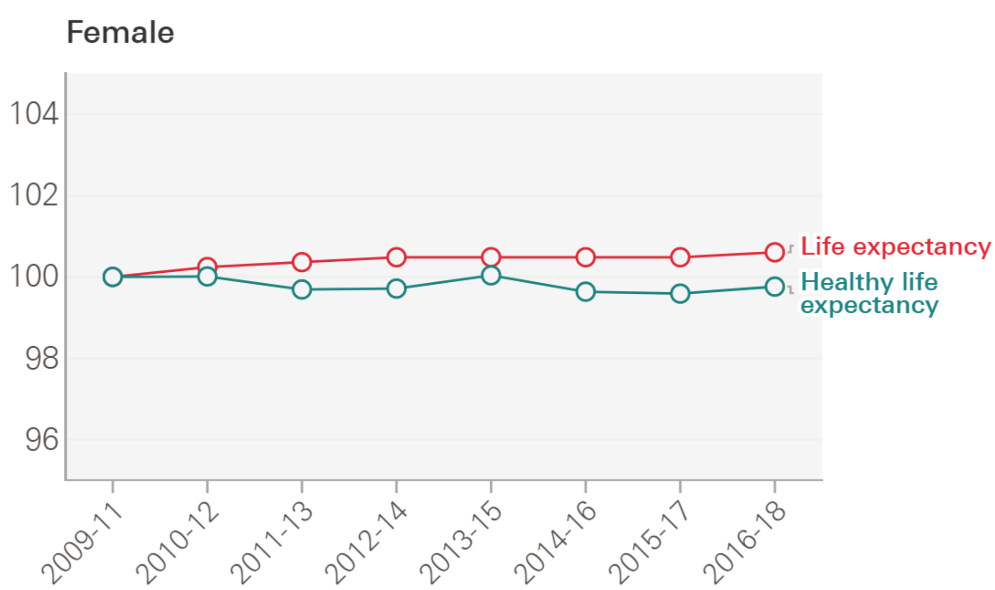
Source: REAL Centre analysis

Increasing demand

Living longer, but in worse health?

Gains in life expectancy are not being matched by gains in healthy life expectancy.

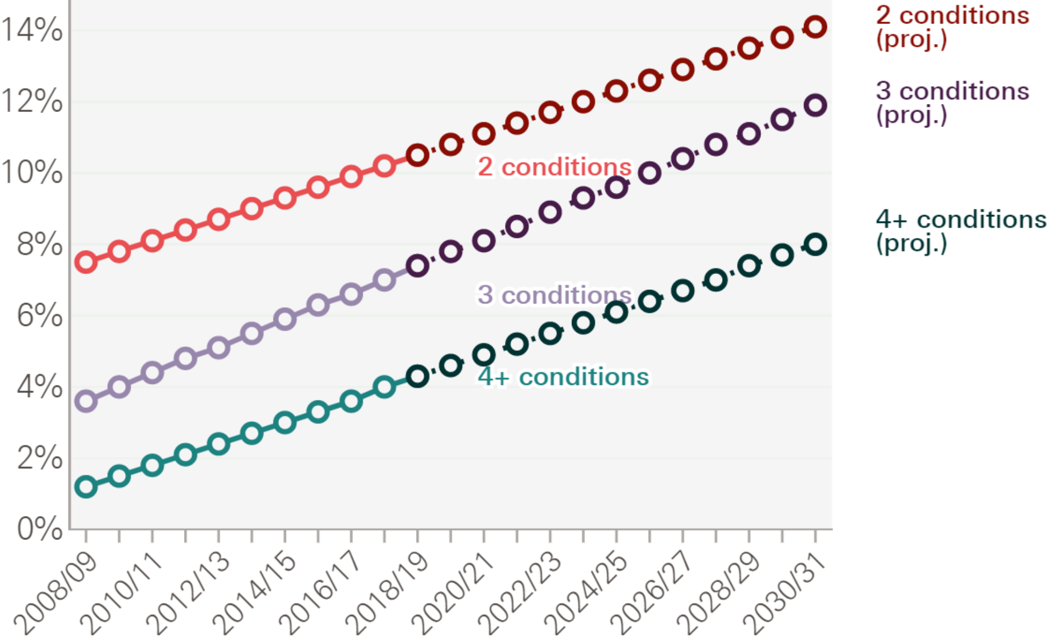
Index, 2009-11=100



Rising morbidity

Morbidity and especially multi-morbidity has been increasing over time. We project this to continue.

Females 85+ with a hospital admission w/ multiple conditions (%)



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Source: REAL Centre analysis

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Source: REAL Centre calculations from HES

Increasing demand

Activity will need to increase to meet demand

Annual average growth (%) by service area, projected and historical average

Area	Actual historical (2009/10–2018/19)	Projected growth (2018/19–2030/31)	Difference (percentage points)	Projected growth
Non-elective	1.8%	2.6%	0.7	
Elective	2.4%	2.3%	-0.1	
Community care	-0.9%	2.2%	3.1	
Social care***	-0.6%	1.9%	2.4	
Outpatient	4.1%	1.4%	-2.6	
Primary Care	0.9%	1.4%	0.5	
Community prescribing	2.3%	1.3%	-1	
A&E	1.6%	1.0%	-0.6	
Secondary mental health**	0.8%	0.7%	-0.1	
IAPT*	16.6%	0.2%	-16.4	
Maternity (births)	-0.4%	-0.3%	0.1	

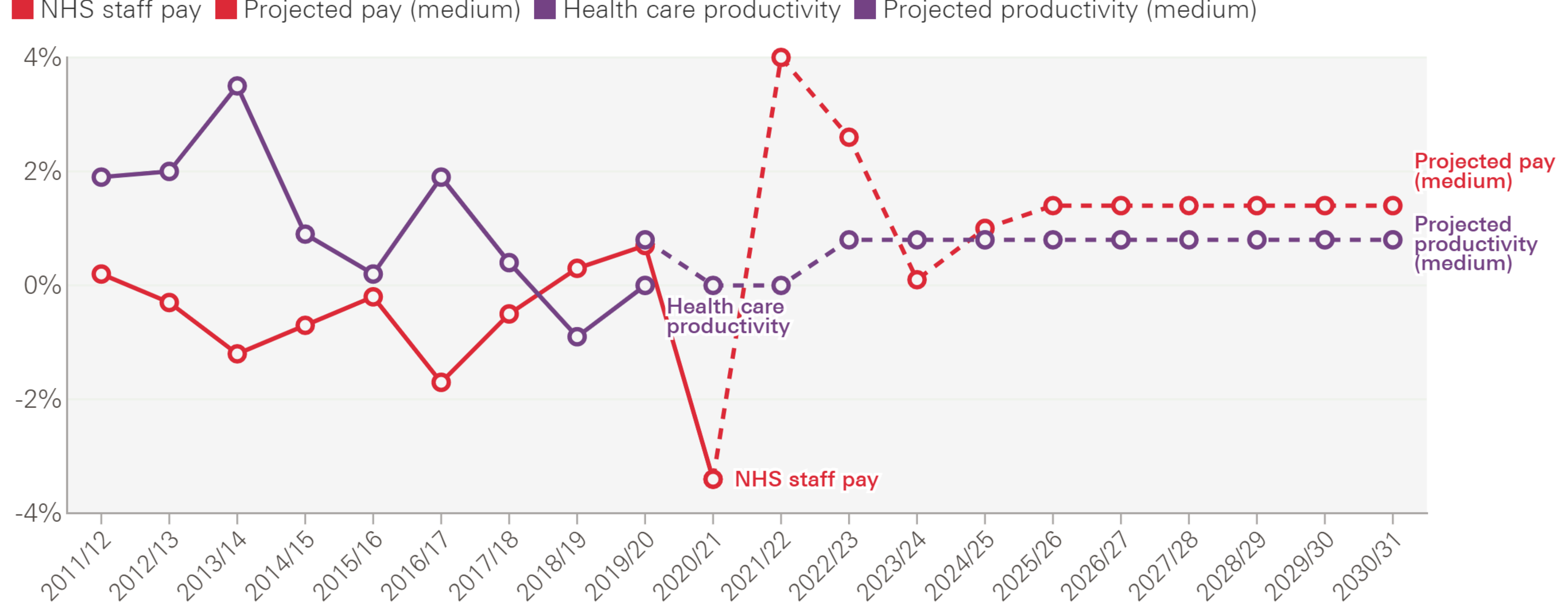
Source: REAL Centre calculations. The difference may not exactly match due to rounding of numbers. • *2012/13–2018/19; **2011/12–2018/19; ***2015/16–2018/19

Rising costs of care

Costs will rise if pay grows faster than productivity

Following a decade of pay restraint, we assume pay keeps up with all-economy earnings. Productivity growth averaged 0.8% over the past two decades; this provides our central projection.

Real pay (%), adjusted using the GDP deflator; ONS health care productivity



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Source: OBR, ONS • Productivity is non-quality adjusted

Rising costs of care

- If unit costs grow then **funding growth** will exceed activity growth
- Again, funding growth high for both elective and non-elective care
- But this is only one scenario, pressures could be different.

Funding growth exceeds activity

If costs growth exceeds productivity, funding will have to grow faster than activity

Annual average growth (%) by service area

Area	2018/19–2030/31	Projected growth
Non-elective	4.3%	
Social care	3.3%	
Elective	3.2%	
Community care	2.4%	
Outpatient	2.1%	
A&E	1.9%	
Primary care	1.5%	
Community prescriptions	1.1%	
Secondary mental health	0.9%	
IAPT	0.4%	
Maternity	0.3%	

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Source: REAL Centre calculations.

Drivers of increased funding

Acute care costs with different pay and productivity

Combination of pay and productivity is crucial: with high pay and low productivity, acute care costs are more than £7bn higher in 2030/31.

Low pay, high productivity growth | Medium | High pay, low productivity growth

£70bn
£65bn
£60bn
£55bn
£50bn
£45bn
£40bn

2018/19 2019/20 2020/21 2021/22 2022/23 2023/24 2024/25 2025/26 2026/27 2027/28 2028/29 2029/30 2030/31

High pay, low productivity growth

Medium

Low pay, high productivity growth

Source: REAL Centre analysis

Drivers of increased funding

Contribution of key drivers to 2030/31 acute funding

Morbidity emerges as the biggest factor in increased acute care costs by 2030/31.

65bn
60bn
55bn
50bn
45bn
40bn
35bn
30bn

Acute care in 2018/19
Population only
Pay, prices & productivity
Chronic conditions
Acute care in 2030/31

Source: REAL Centre calculations

Implications

- Up to nearly **half a million** more staff could be needed
- **Productivity gains** can help, but still likely to need significant **workforce growth**
- Comes on top of **existing recruitment challenges** eg 10.3% vacancy rate in June 2021 for registered nurses (NHS Digital)

Implications: It's the workforce

Demand growth suggests a significantly larger health care workforce will be needed in 2030/31.

Full time equivalents (FTEs)

Area	2018/19	2024/25	Extra FTE	2030/31	Extra FTE
Health care	1,225,000	1,500,000	275,000	1,713,000	488,000
Of which:					
Doctors	147,000	180,000	34,000	205,000	59,000
Nurses	306,000	375,000	69,000	429,000	122,000

Source: REAL Centre calculations.

Conclusions

- There are significant **underlying pressures** on NHS. Just to meet **underlying pressures**, NHS England budget would need to grow by ~2.8% a year
- Somewhat against policy ambitions, much of this pressure is on **hospital care**
- **Morbidity** and combination of **price/productivity** growth are crucial
- **Workforce** will be a major constraint on activity
- What can be done to **reduce long term pressures** on health care?
    - Increase thresholds for elective care - eg hips
    - Limit pay increases – but may be false economy
    - Reduce unwarranted care – eg emergency admissions
    - Promote healthy ageing – aim for compression of morbidity
    - Improve treatment for those with multiple long term conditions – eg integrated care
    - Increase productivity – eg reduce length of stay

Thank you for listening

Key publications:

Health and social care funding projections 2021 (REAL Centre)

Contact us: stephen.rocks@health.org.uk