REAL Centre

Projections:

General and acute hospital beds in England (2018–2030)

May 2024 update

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REAL Centre general and acute hospital bed projections (updated May 2024)

Since 2021 the number of general and acute hospital beds in England has increased slightly, but this has been outweighed by a post-COVID-19 shock to hospital length of stay, resulting in still higher bed occupancy rates and deteriorating performance against key targets

In response to a request from BBC Newsnight, we have revisited our NHS general and acute hospital bed analysis and projections.

In this slide deck, we do two things:

- review recent trends in hospital bed numbers, length of stay, admissions and A&E performance
- review our estimate of the number of additional beds the NHS needs to deliver care.

We include the most recent data, either up to 2023/24 or 2022/23 depending on the source. We have not updated our underlying projections here. New REAL Centre demand and funding projections are expected in summer 2024.

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1 Recent trends in England

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Recent trends in England (2018/19 to 2023/24)

The number of general and acute beds has increased relative to 2018/19, following a fall in the number of available beds at the beginning of the COVID-19 pandemic.

There are more than 2,000 extra general and acute overnight beds available in the NHS in England in 2023/24 relative to 2018/19, a more than 2% increase.* This follows a dip in available beds during the pandemic as a result of infection prevention and control measures.

However, despite an increase in the number of beds, hospitals are struggling to meet performance standards. A rise in the amount of time patients stay in hospital since 2018/19 helps explain why the number of hospital admissions has remained stuck around pre-pandemic levels. In turn, high bed occupancy is one reason for poor performance against the 4-hour A&E target and ambulance handover delays.

For further Health Foundation research in these areas, please see:

- Longer hospital stays and fewer admissions: How NHS hospital care changed in England between 2019 and 2022
- Why are delayed discharges from hospital increasing? Seeing the bigger picture
- What's driving increasing length of stay in hospitals since 2019?
- Why have ambulance waiting times been getting worse?

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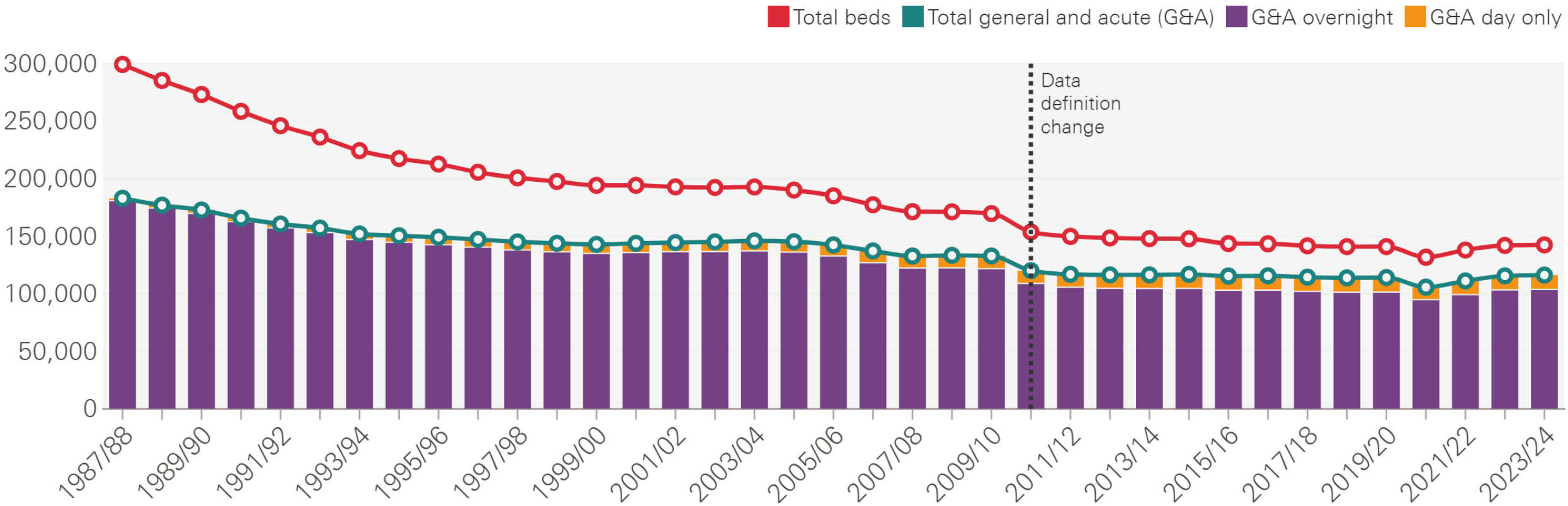
*The NHS recently committed to an increase of 5,000 hospital beds, which it reported having met. The difference with the numbers cited here is the NHS commitment applied only to 'core' beds. Our numbers include both 'core' and 'escalation' beds. Some of the NHS targeted increase was met by converting escalation beds into sustainable and fully operable core beds.

REAL Centre Projections: G&A hospital beds in England (2018–2030)

Trend in NHS hospital bed supply

Bed capacity has decreased substantially over the past 30 years, but there has been a small increase since the 2018/19

Available beds over time, 1987/88 to 2023/24



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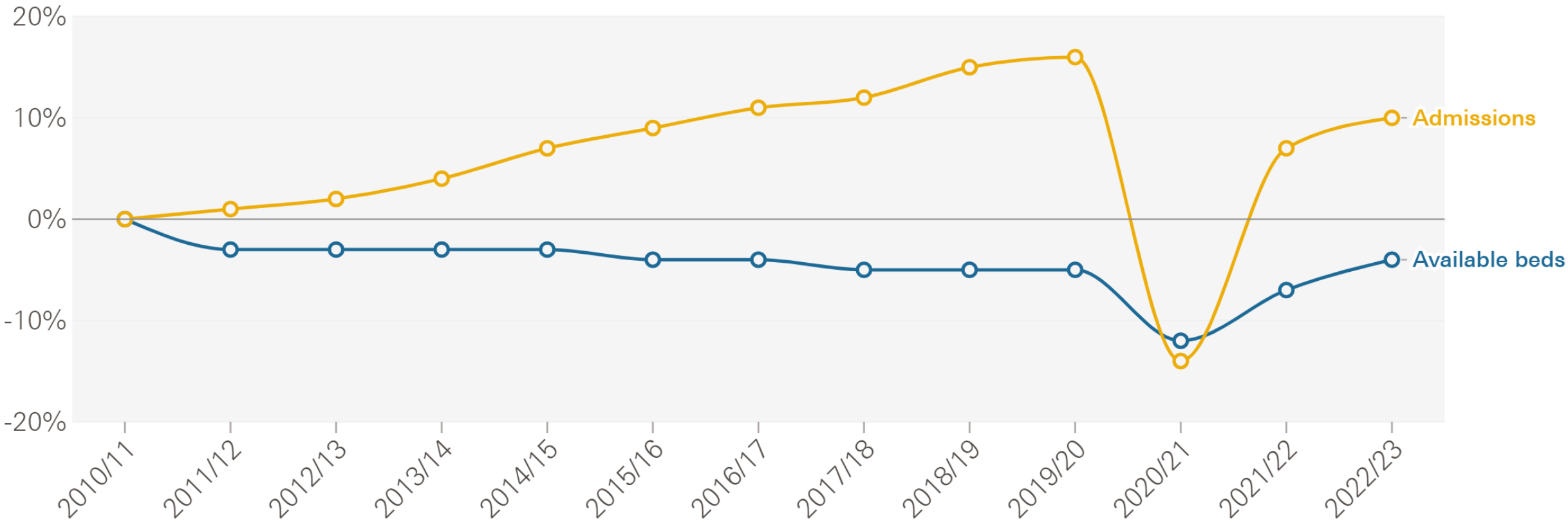
Source: NHS England, Bed availability and occupancy dataset. • After 2010/11, beds managed by a nurse or GP are excluded; therefore the series is not directly comparable. Day only beds in G&A before 2010/11 are not reported; figure shows estimates based on the proportion of day only beds in G&A in 2018/19 (99%). Average daily number of beds over the year (before 2010/11) or quarterly average are reported.

Hospital admissions and available beds

During COVID-19 there was an unprecedented dip in hospitals admissions from which the NHS has yet to fully recover; the number of beds briefly fell before increasing

Hospital admissions and available beds, % growth over time, 2010/11 to 2022/23



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Source: NHS England, Bed Availability and Occupancy. NHS Digital data for admissions. • Available beds in general and acute care.

Admissions x Time in hospital = Hospital bed days

Since the pandemic, an increase in length of stay has seen bed days recovery even while activity (FCEs) has not

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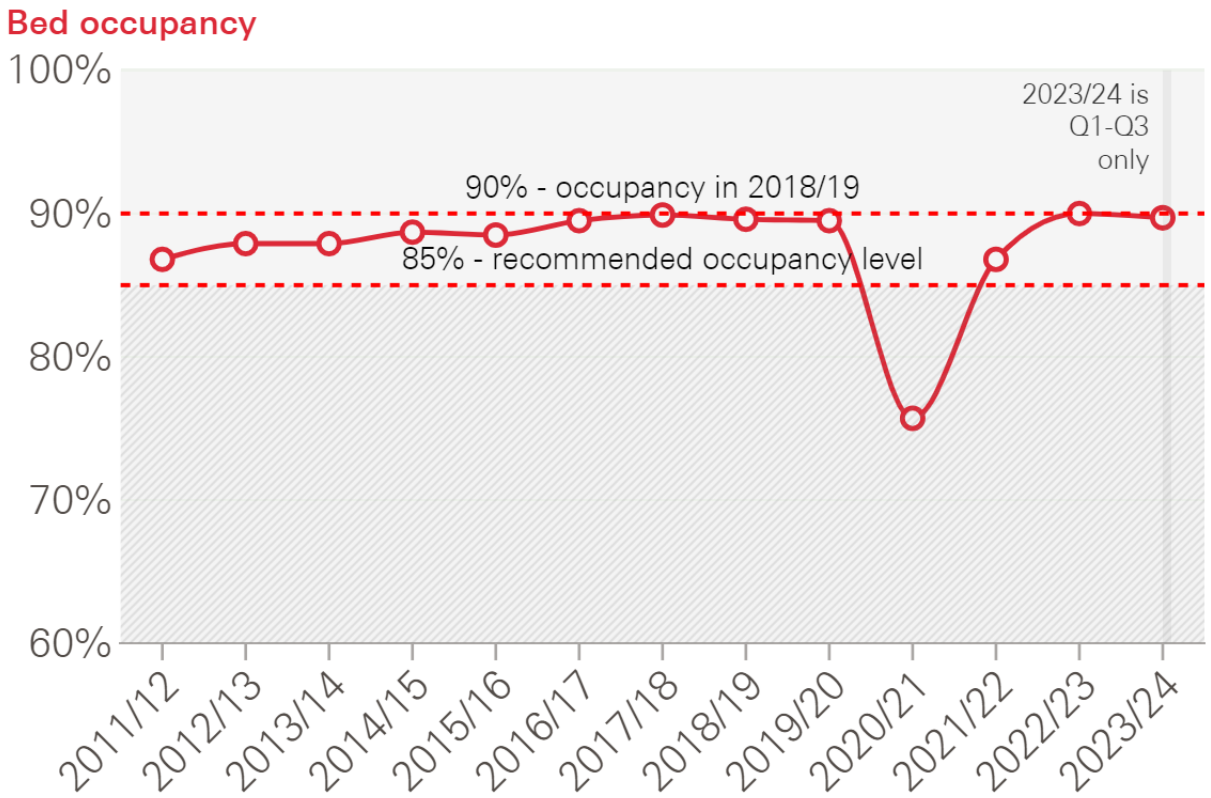
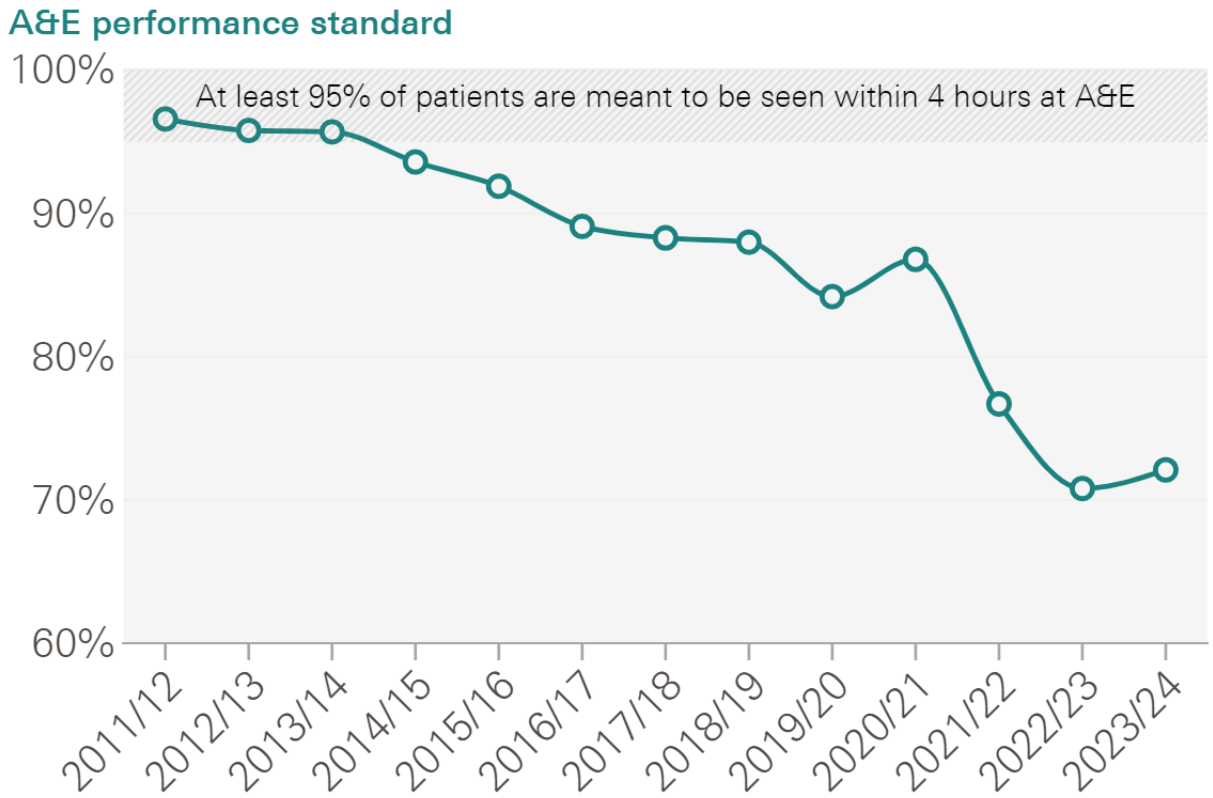
Source: NHS Digital • FCEs (finished consultant episodes) constitute an episode of hospital care

Bed occupancy and A&E performance

Since 2022/23, bed occupancy has been very high but there has been an even sharper deterioration in performance against the 4-hour target

Trend, 2011/12 to 2023/24





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Source: NHS England, Bed Availability and Occupancy. • Yearly average for occupancy rates for overnight and day only general and acute care beds; Note, 2023/24 is Q1-Q3 only. Guidance from the National Audit Office recommends a 85% bed occupancy level while NICE recommends planning capacity to minimise the risk of exceeding 90% occupancy levels

2 REAL Centre beds projections

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REAL Centre G&A beds projections

We have updated our estimates of the number of additional beds needed by 2030/31. This now stands at between 21,000 and 37,000 beds by 2030/31.

Following an increase in the number of available NHS general and acute beds, fewer additional beds would now be needed by 2030/31 to meet our projection of what is required. This now ranges from 21,000 to 37,000 extra beds under our central scenarios.

Indicatively, such an increase could cost anywhere from £18bn to over £30bn. But these estimates are very rough and likely conservative. For instance, there could be additional construction sector inflation if the NHS were to attempt to deliver this number of hospitals, especially given the limited number of providers operating in this sector.

Delivery on this scale looks increasingly difficult to achieve given the timescales and operational challenges. Meanwhile, a recent increase in the time patients spend in hospital is putting further pressure on the health service, with high bed occupancy negatively impacting patient care.

Accordingly, a) improving flow and reducing the time patients spend in hospital, b) evaluating and investing in substitutes for hospital beds (eg virtual wards, avoiding unnecessary admissions) and c) adding additional bed capacity, are all likely to be priorities for the NHS over the next 5-10 years.

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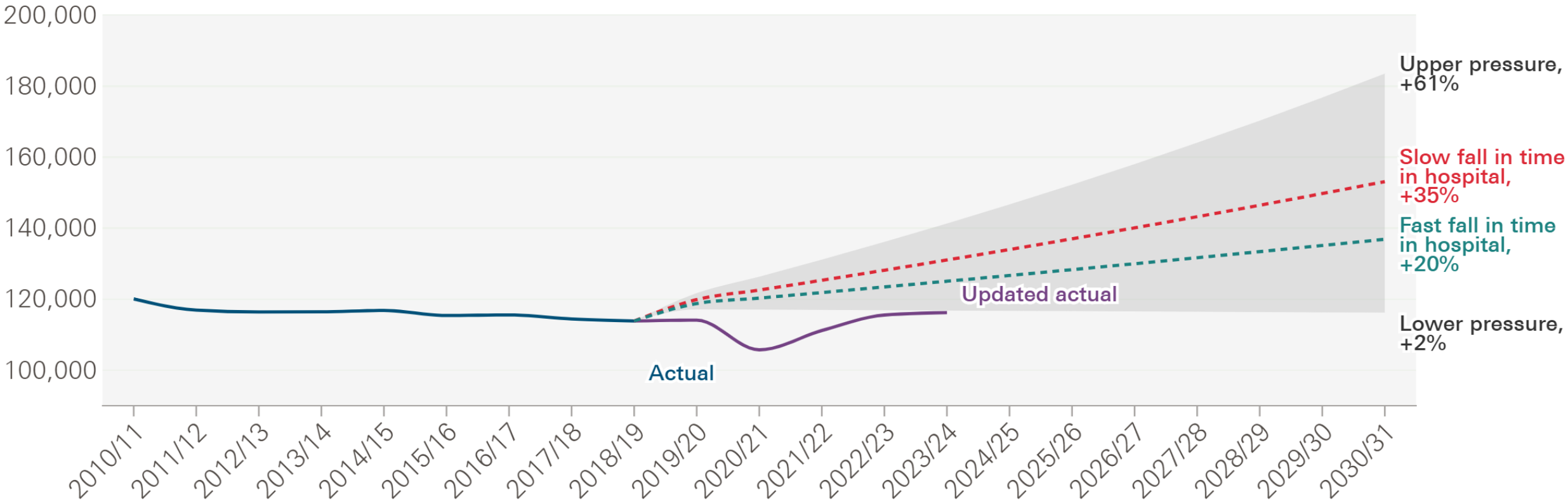
Actual and projected G&A bed supply

There has been a moderate increase in hospital beds (after some were rendered unavailable during COVID-19), but short of what our projections state could be needed

General and acute hospitals beds, actual and projected



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Source: REAL Centre's calculations based on HES data, NHS England data for historical beds. • When projecting the number of beds we hold bed occupancy constant at 87% - this is the annual average rate the last time the A&E 4-hour target was met.

Projected extra G&A beds by 2030/31

Updating our estimates for the increase in beds, REAL Centre projections show the number of general and acute hospital beds would need to increase by 21,000–37,000 under our central scenarios

Extra general and acute beds, relative to 2023/24

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Source: REAL Centre's calculations based on HES data. • All values are rounded to the nearest thousand

Indicative cost of additional G&A beds

We estimate the cost of the additional beds needed to keep up with demand could be between £18bn and over £30bn by 2030/31

	Fast fall in time in hospital	Slow fall in time in hospital
Number of beds	21,000	37,000
Average size of hospital (beds)	609	609
Number of hospitals	33	61
Cost per hospital	£450m	£450m
Total cost	£15bn	£27bn
Total cost (203/24 prices)	£18bn	£33bn

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Source: REAL Centre calculations based cost estimates from existing hospital building programmes (Health Infrastructure Plan). • Average size of hospital is based on median number of general & acute overnight and day only beds in NHS hospitals

Implications

Our projections indicate that a significant increase in the number of general and acute beds would be needed to deliver 2018/19 rates of care going forward. How could the NHS respond?

- **Increase bed supply** – Our central projections suggest 21,000–37,000 additional general and acute beds would be needed over the next decade.
- **Do things faster** – Continued reductions in the time spent in hospital can help alleviate the upward pressure on beds. Our central projections allow for a continued fall but at a slower rate; if the NHS can deliver even faster improvements then it will be able to meet demand with fewer beds.
- **Do things differently** – Our projections are based on the 2018/19 model of care, but the NHS may look to do things differently. For instance, by expanding potential substitutes for hospital beds, such as virtual wards or nursing home beds.
- **Do less** – As above, our projections are based on a given rate of care, but the NHS may want to do less. This could be by better meeting patient need, for instance investing in primary care, improving care coordination and increasing prevention to reduce unnecessary hospital admissions. It could also mean simply delivering less of some services, either explicitly by changing thresholds or implicitly by reducing supply.

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Authors

Stephen Rocks
stephen.rocks@health.org.uk

Laurie Rachet-Jacquet
laurie.rachetjacquet@health.org.uk

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