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# The Economics of Prevention

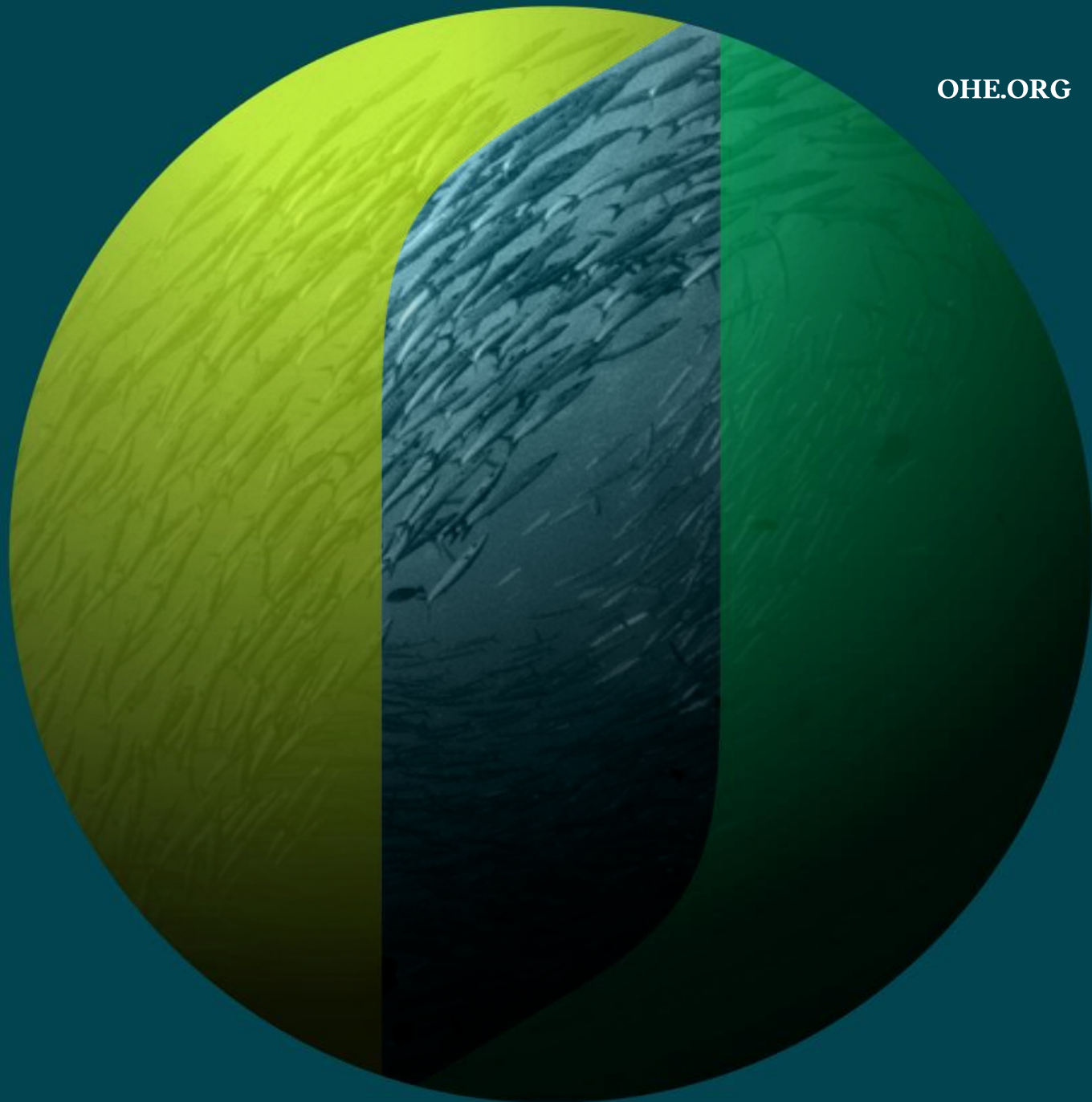
Session 3: The Value of Immunisation — Policy & Economics

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ESWI, Brussels, June 2026





# Benefit-cost analysis adult vaccination

# 19:1 ROI

Adult vaccination programmes can return multiple times their initial investment to society, **when considering their significant benefits within and beyond the healthcare system**

Study covered influenza, PD, HZ, RSV in 10 countries

(Australia, Brazil, France, Germany, Italy, Japan, Poland, South Africa, Thailand, US)



(Chowdhury et al., HV&I 2025)

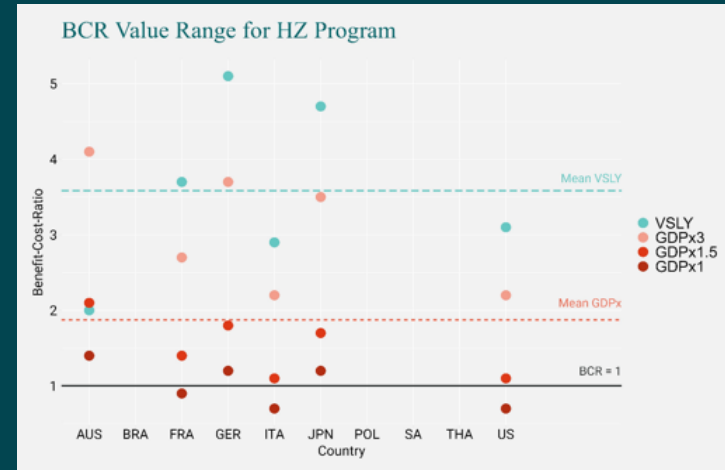
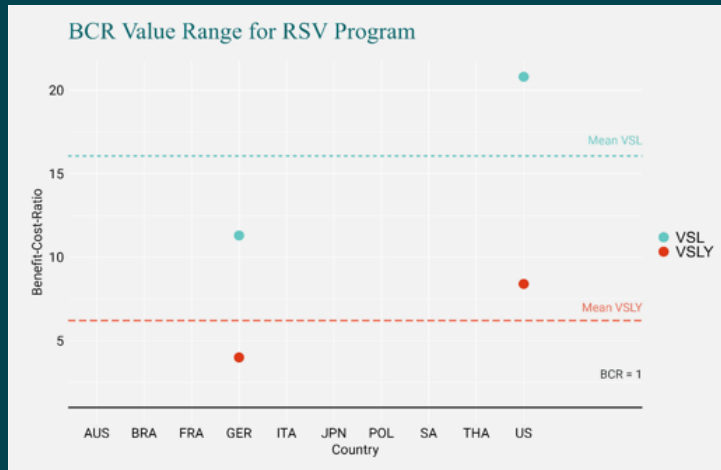
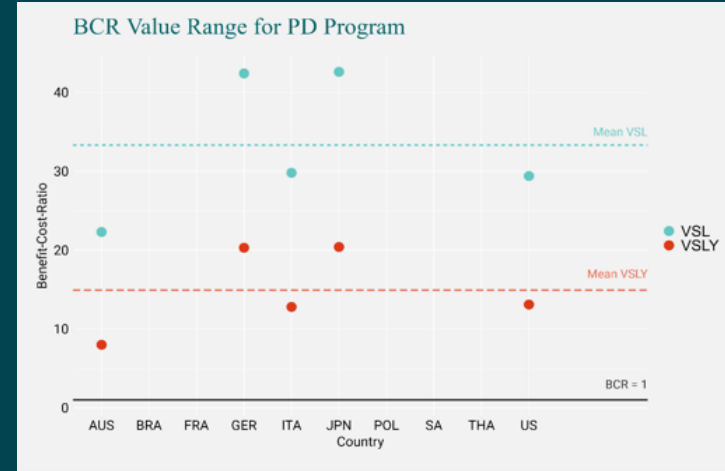
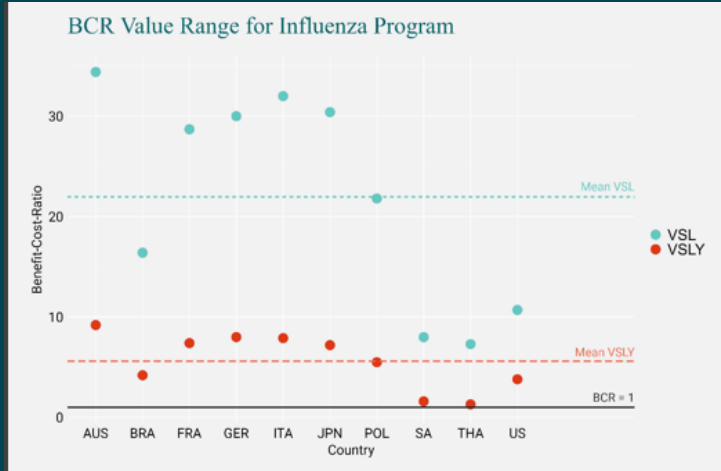
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# Is the answer always “19”, really?

No, but the odds for a positive result are very high



- Mean BCRs ranged from 5:1 to 19:1 depending on valuation method
- 95% of all programme estimates exceeded the break-even threshold of 1.0
- Mortality-focused programmes (influenza BCR 6-22; PD BCR 15—33) lead returns; even morbidity-focused HZ programmes returned BCRs of 2-4)
- The societal value of adult vaccination is no longer in dispute - but uptake and coverage gaps mean that value is being systematically forfeited

Abbreviations:

VSL = value of a statistical life

VSLY = value of a statistical life year

BCR = Benefit-Cost Ratio

El Banhawi H., et al., 2024  
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# From global average to country reality

## Three New Studies



Expert Review of Vaccines

ISSN: 1476-0584 (Print) 1744-8395 (Online) Journal homepage: [www.tandfonline.com/journals/ierv20](http://www.tandfonline.com/journals/ierv20)

### A benefit-cost analysis quantifying the broader socioeconomic value of adult respiratory vaccination programs in Japan

Claud Theakston, Matthew Napier, Simon Brassel, Kazumasa Kamei, Shuhei Ito, Jeffrey Vietri, Diana Mendes, Jingyan Yang, Tianyan Hu & Lotte Steuten

To cite this article: Claud Theakston et al. (2025) A benefit-cost analysis quantifying the broader socioeconomic value of adult respiratory vaccination programs in Japan, Expert Review of Vaccines, 24:1, 644-655, DOI: [10.1080/14760584.2025.2536093](https://doi.org/10.1080/14760584.2025.2536093)

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### The broader socio-economic value of adult respiratory disease vaccinations in the UK – results from a benefit cost analysis

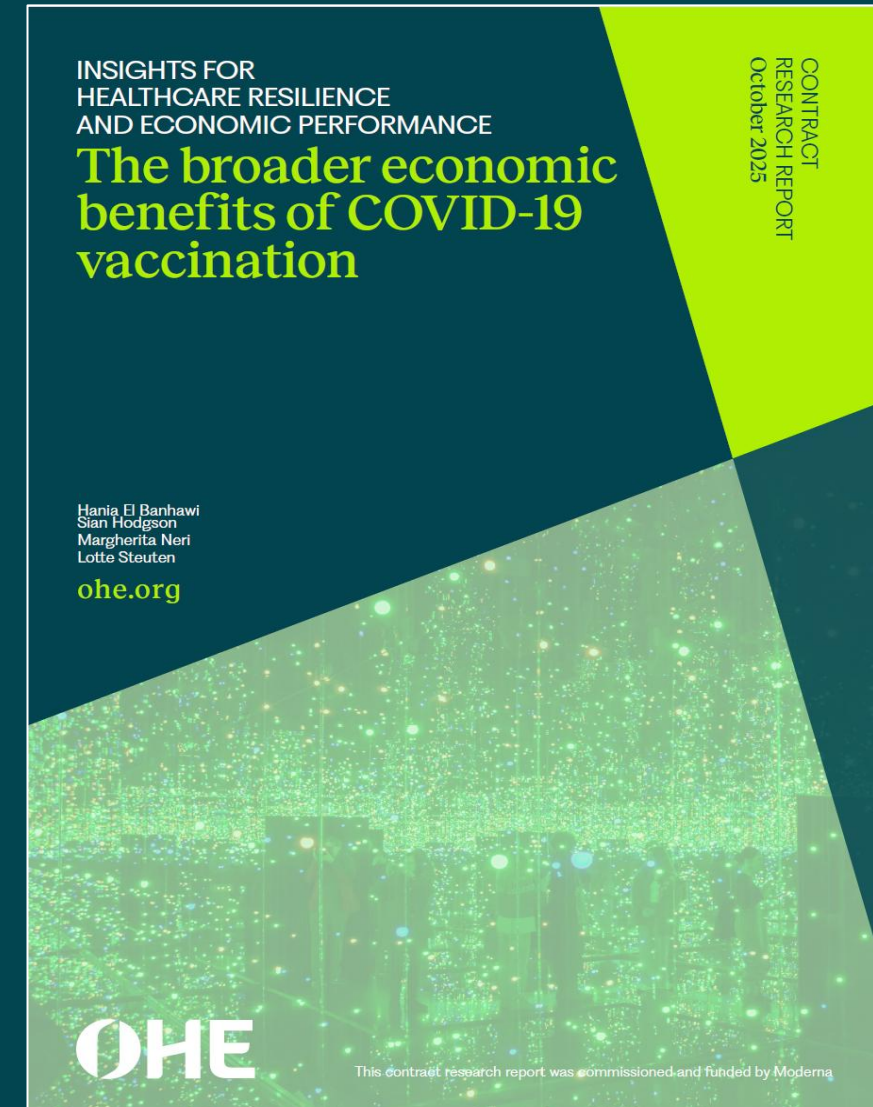
Cale Harrison, Simon Brassel, Sulayman Chowdhury, Claud Theakston, Matthew Napier, Jeffrey Vietri, Diana Mendes, Jingyan Yang, Tianyan Hu & Lotte Steuten

To cite this article: Cale Harrison et al. (2025) The broader socio-economic value of adult respiratory disease vaccinations in the UK – results from a benefit cost analysis, Expert Review of Vaccines, 24:1, 644-655, DOI: [10.1080/14760584.2025.2536093](https://doi.org/10.1080/14760584.2025.2536093)

To link to this article: <https://doi.org/10.1080/14760584.2025.2536093>

Theakston et. al., 2025  
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Harrison et. Al., 2025  
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INSIGHTS FOR  
HEALTHCARE RESILIENCE  
AND ECONOMIC PERFORMANCE

## The broader economic benefits of COVID-19 vaccination

CONTRACT  
RESEARCH REPORT  
October 2025

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Lotte Steuten

[ohe.org](http://ohe.org)

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This contract research report was commissioned and funded by Moderna

El Banhawi H., Hodgson S., Neri M., Steuten L. 2025. The broader economic benefits of COVID-19 vaccination: Insights for healthcare resilience and economic performance. OHE Contract Research Report, London: Office of Health Economics. Available at: <https://www.ohe.org/publications/the-broader-economic-benefits-of-covid-19vaccination/>  
Sponsored by Moderna.

# UK: High Returns Across a Range of Scenarios

## Current programme performance is good

First-year BCR: 5:1 (VSLY) to 19:1 (VSL);  
Lifetime NBs: £36bn – £200bn

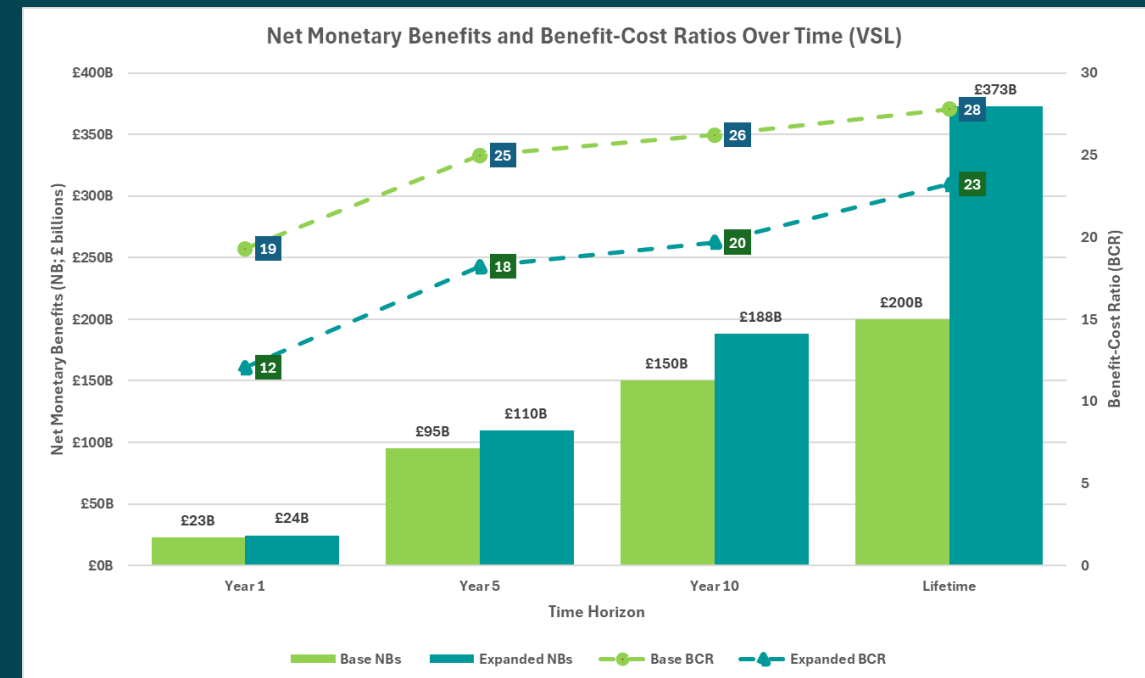
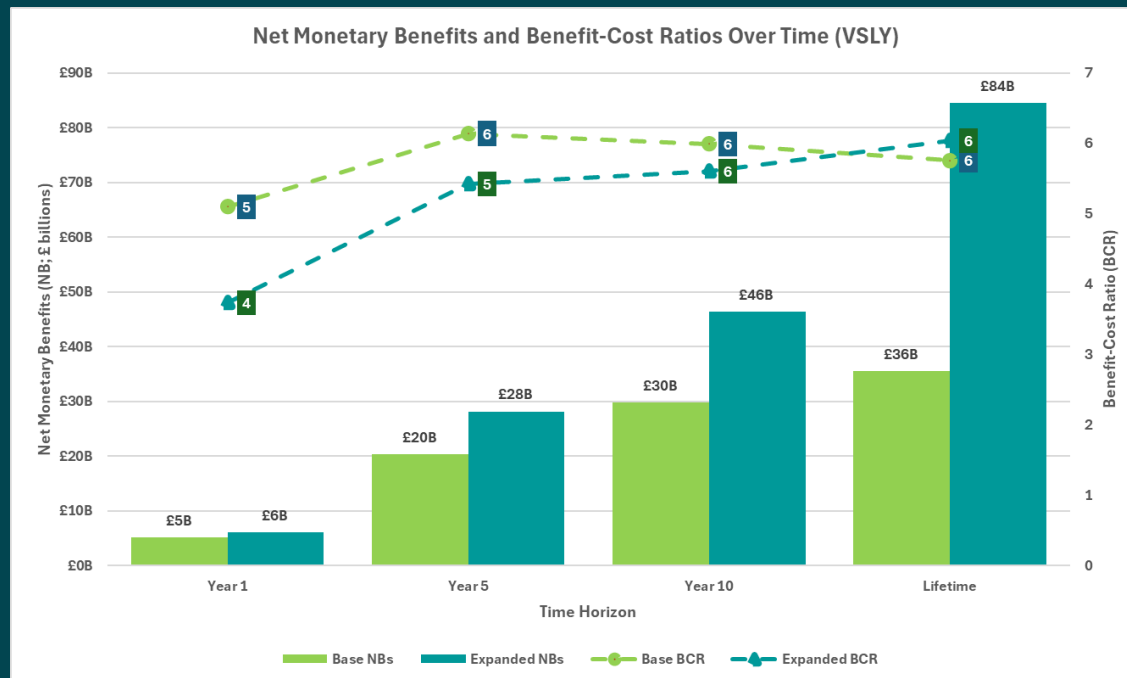
In Year 1, >40,000 hospitalisations prevented, >250,000 bed-days freed and rising to >980,000 bed-days by Year 5  
Also, ~140,000 GP visits prevented in Year 1; >500,000 by Year 5

## Expanded programme performance is better

Adding at-risk groups alongside age-based recommendations is expected to increase lifetime NBs

- by ~138% under VSLY (£36bn → £84bn) and
- by ~86% under VSL (£200bn → £373bn)

A near-doubling or better of total societal value over time





The UK spent only 0.16% of GDP on immunisation in 2022...

...yet societal value in year 1 of just 4 adult respiratory programmes equals 0.2-0.9% of UK GDP

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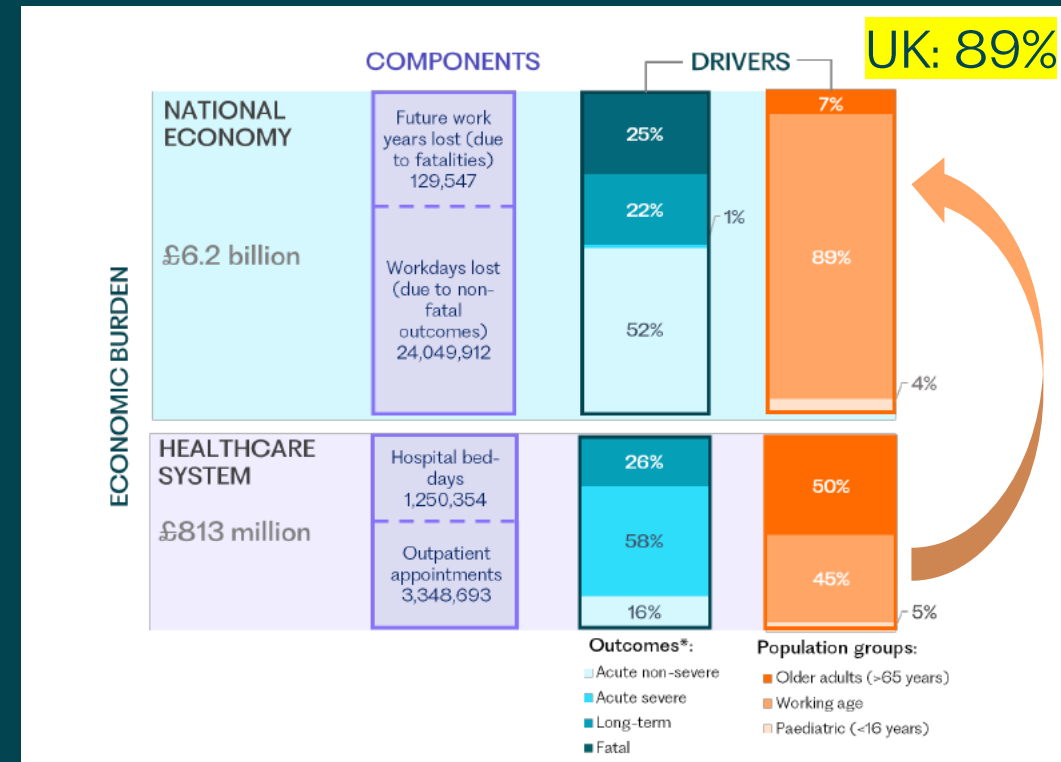
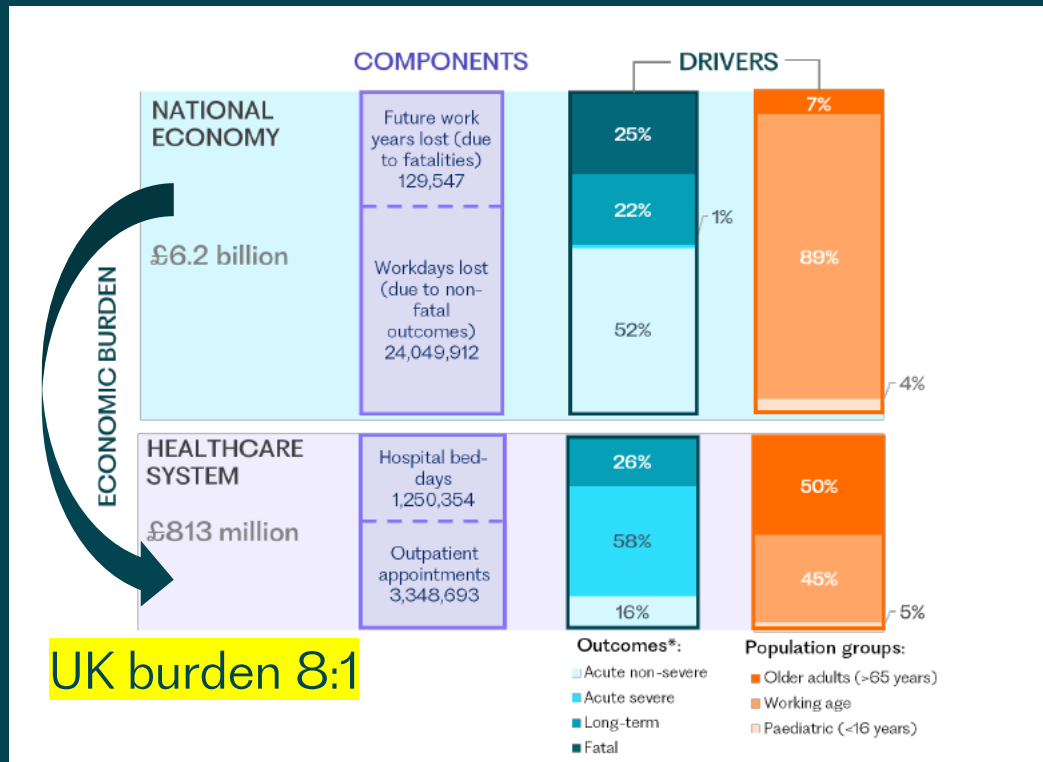
## The expansion barrier in the UK

- The JCVI/NICE supply-side threshold (£25-35k/QALY) systematically undervalues programmes whose primary benefit is mortality risk reduction in older populations
- Green Book VSLY of £60,000 is the societal comparator, reflecting demand-side WTP; not NHS budget constraints
- A strong economic case exists for cross-departmental funding conversations (Treasury + DHSC), not just NHS budget decisions

## Example: COVID-19 and the economy

A Cost-of-Illness study in UK, Japan, Australia and the Netherlands shows that on average, 78% of the total COVID-19 economic burden falls on national economies not healthcare budgets

Working-age adults (18-64) drive 82-93% of the national economy burden across all four countries despite being the group least likely to be hospitalised.



## The Economics of Prevention

# Evidence-based recommendations

*Vaccination evidence is a strong example of what broader socio-economic value looks like in practice. HEOR can provide the frameworks to capture it routinely.*

**1** **Broaden valuation frameworks:**  
Move HTA toward more societal relevant and productivity-inclusive analysis

**2** **Measure paid AND unpaid value:**  
Modelling can capture value caregiving, household, and voluntary contributions — not just labour market productivity

**3** **Engage finance ministries & employers:**  
Healthcare is a cross-sectoral economic investment; funding decisions should reflect that

**4** **Make asymmetric omission visible:**  
Not measuring a benefit is a choice with consequences — these should be as explicit as inclusion

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## References

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