

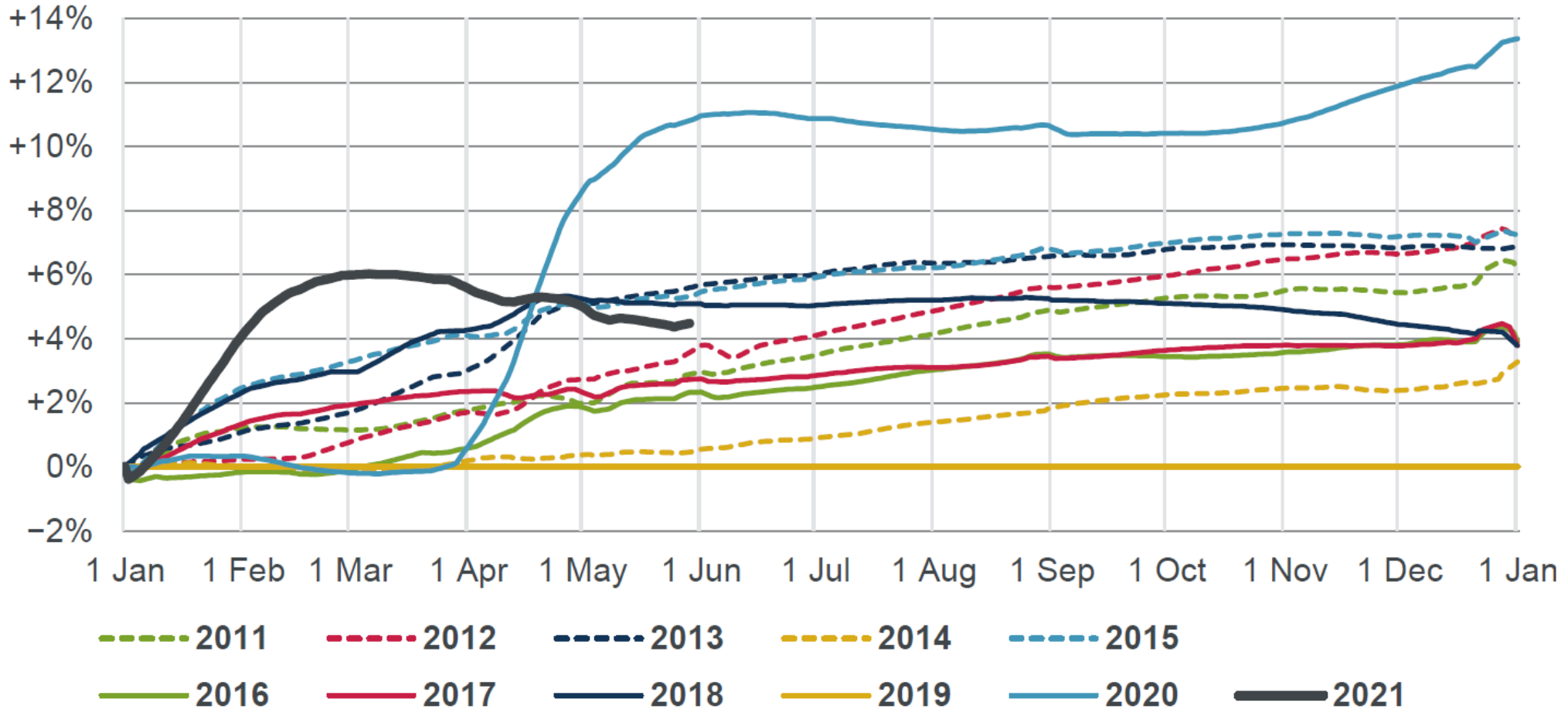


IAA MWG: UK Mortality and Longevity Update

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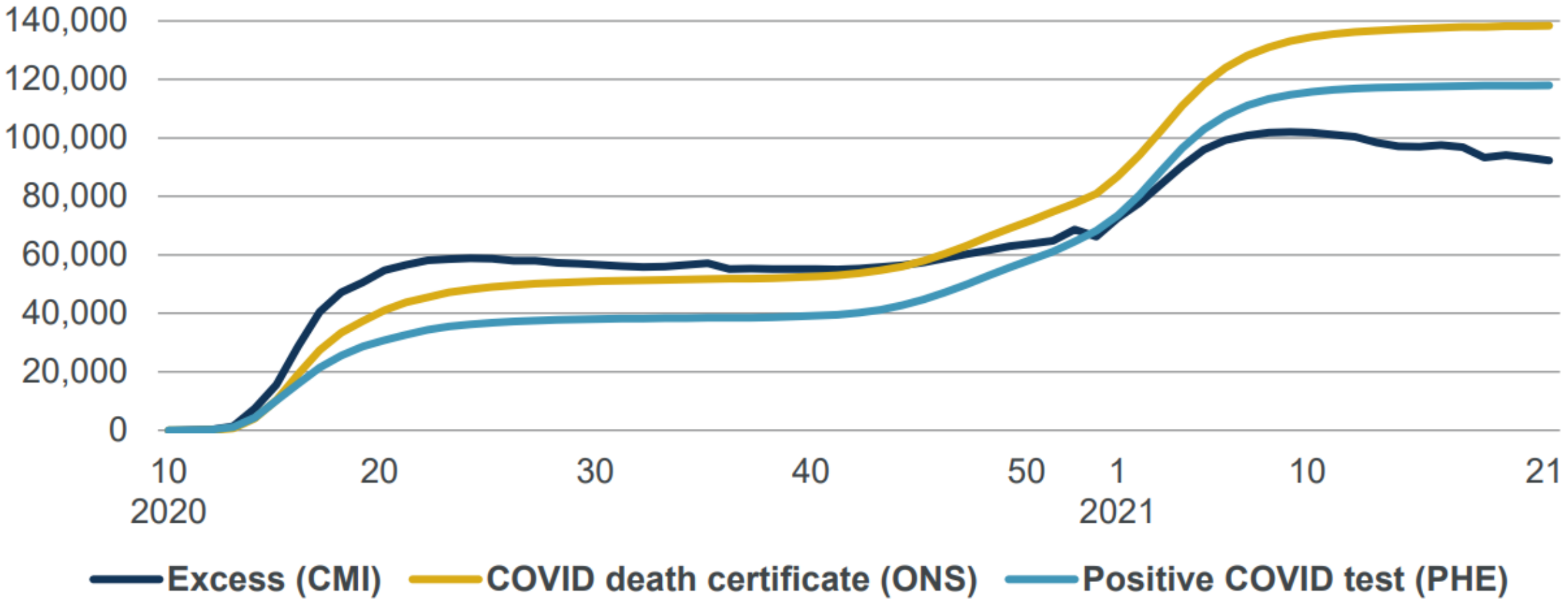
10 June 2021

England & Wales Cumulative standardised mortality compared to 2019 (to 8 June 2021)





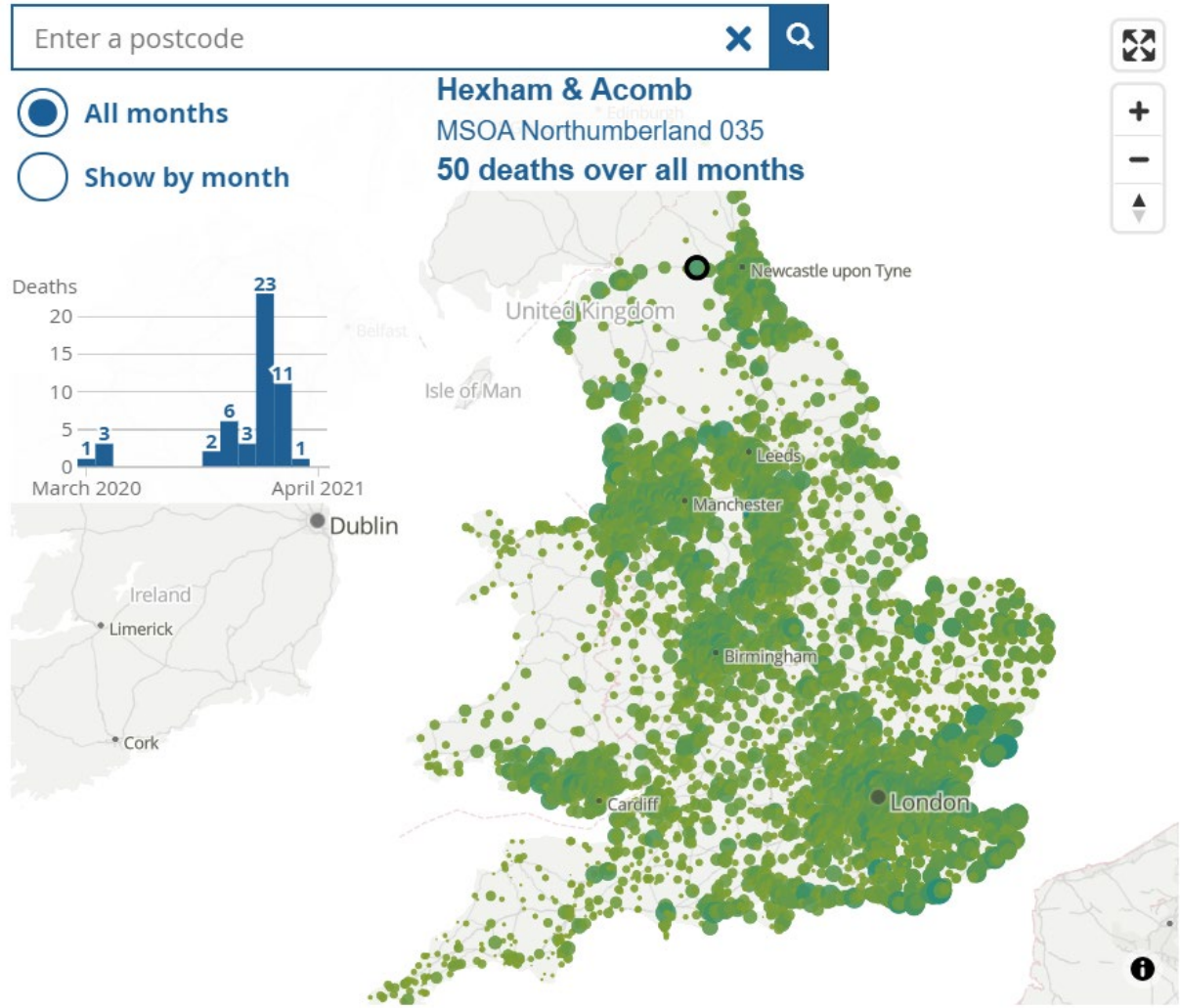
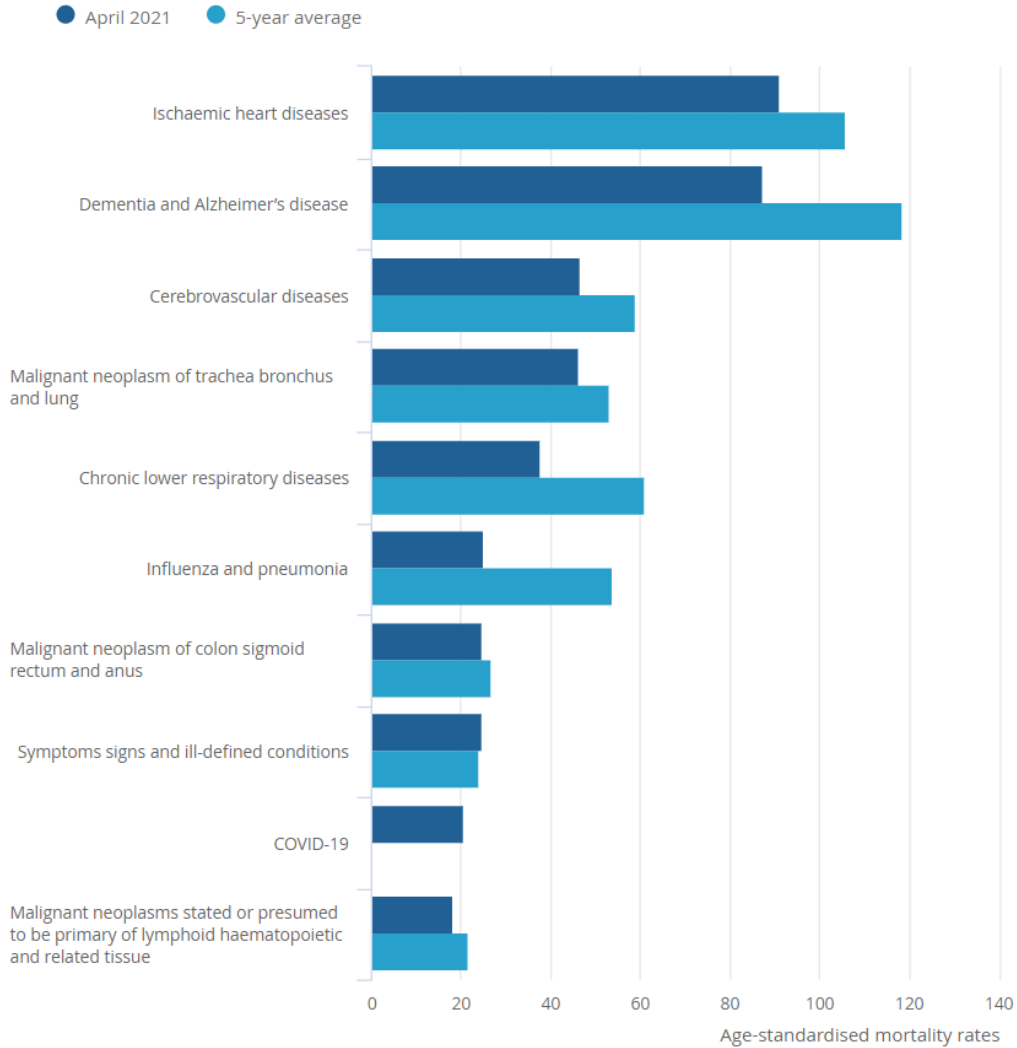
England & Wales Comparison of weekly measures of COVID-19 deaths



Latest data on cause of death and regional patterns



Mortality rates per 100,000 by cause in England





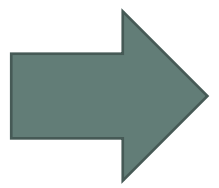
Key UK studies driving our knowledge on COVID-19

STUDY NAME	FOCUS	COHORT	DESCRIPTION
<u>REACT</u>	Current & past infections	200,000+	REACT1 – random population swabbing; REACT2 – accuracy and ease of use of antibody tests
<u>RECOVERY</u>	Treatment comparison	40,000	Series of randomised controlled trials for different treatments – currently baricitinib, dimethyl fumarate, corticosteroids
<u>ISARIC 4C</u>	Hospitals	90,000+	International study tracking COVID-19 hospital admissions in 42 countries, but with strong UK focus
<u>COVID-19 SOCIAL STUDY</u>	Health behaviours	95,000+	Longitudinal study into the psychological and social impact of the pandemic involving over 95,000 adults in the UK
<u>CHESS</u>	Hospitals	NHS England	Monitor impact of severe COVID-19 infection across England and provide real-time data to forecast burden/utilisation
<u>ODYSSEUS</u>	Activity	London	Capturing activity data to aid policy-making strategies – CCTV, traffic monitor, GPS activity, public transit usage, air quality, PoS

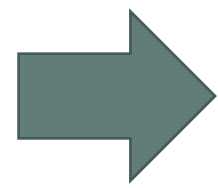
Constructing COVID-19 scenarios



Define scenarios

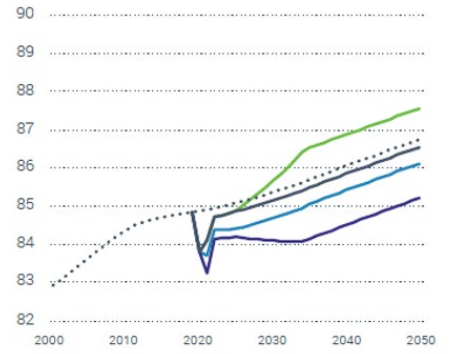
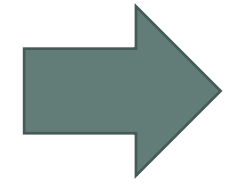


Distil available research on specific / similar events



Key mortality drivers	
	Direct short-term risk of COVID-19
	Disruption to non-COVID medical care
	Changes to health and care systems
	Global Recession

Determine effects of specific events on key longevity drivers



Calibrate scenarios

Best-estimate scenarios



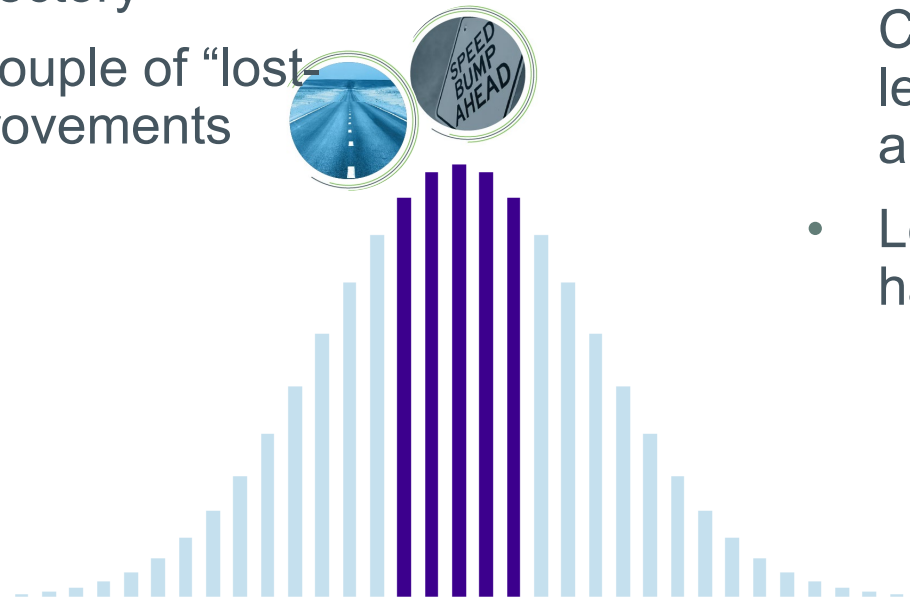
Bump in the Road

- Effective roll out of vaccine results in a swift recovery from the pandemic
- Marked increase in deaths in 2020 and 2021
- Then largely return to pre-pandemic trajectory
- ...but with a couple of “lost-years” of improvements



Long Road to Recovery

- Challenges to efficacy and take up of the vaccine result in prolonged effect of the pandemic.
- COVID related excess mortality continues through first half of 2020s
- Longer term disruption to non-COVID medical services: low levels of improvements in 2020s and 2030s
- Lower socioeconomic groups hardest hit



Tail risk scenarios



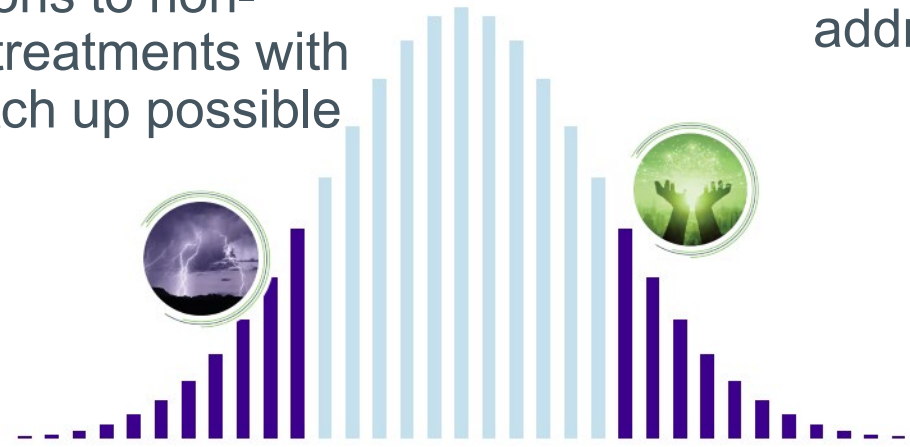
Healthcare Decline

- Initial optimism around the vaccine proves unfounded – adverse publicity limits uptake and new mutations limit effectiveness
- Persistent waves of COVID-19 mortality through 2020s
- Healthcare provisions overwhelmed by each wave
- Massive disruptions to non-COVID medical treatments with no periods of catch up possible

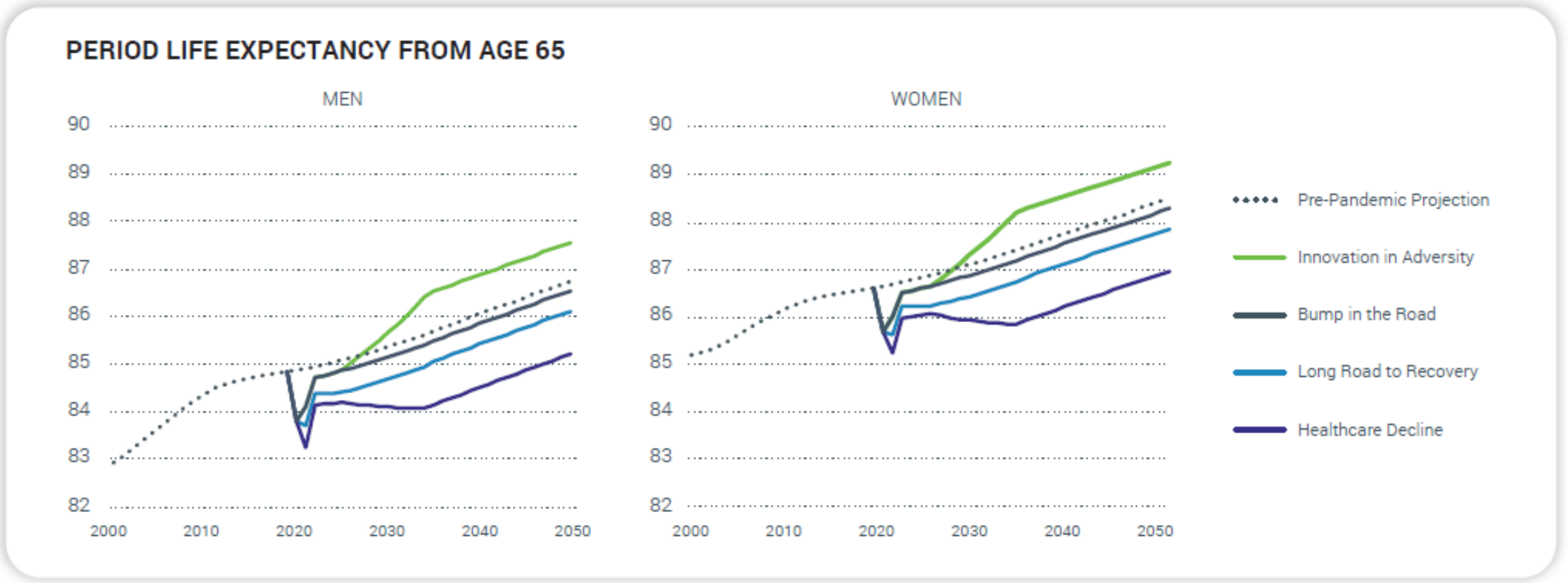


Innovation in Adversity

- Effective roll out of vaccine results in a swift recovery from the pandemic
- ‘V-shaped’ economic recovery allowing catch-up in lost years of improvements
- Lessons learned act as catalyst for longer term improvements – directly from medical advances and indirectly from efforts to address health inequality



Future life expectancy under different scenarios



The Patient Experience Library started with this thought: if clinical research databases are feasible, why not a patient experience research database?

A patient-centred NHS should take patient experience evidence just as seriously. That's why we created the Patient Experience Library as the national evidence base and archive for patient experience.

Monday June 7th 2021

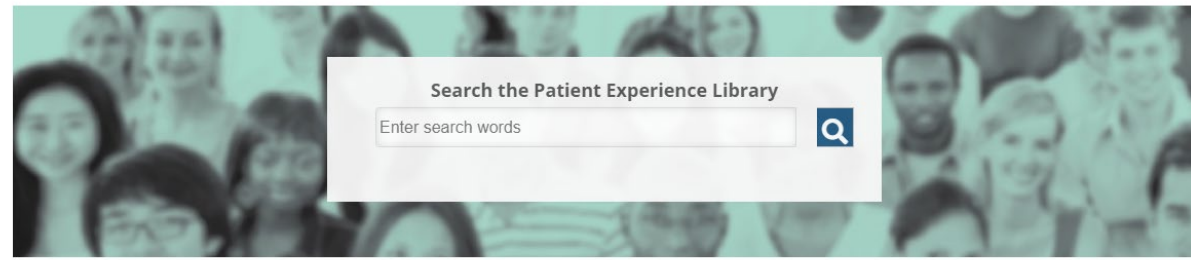
Bringing waiting list data into the light



One of the biggest challenges facing the NHS after the Covid crisis is waiting lists. See "improving waiting times for routine operations" as the top priority. So why is waiting list data so hard to find, and to make sense of? The data is, of course, published, on the nhs.uk website. But it is buried in incomprehensible abbreviations. As so often with NHS reporting, the door is open for improvement.

The Patient Experience Library

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Get the news

Keep up to speed with the latest and best evidence on patient experience and patient/public involvement.



Featured report

Bringing waiting list data into the light
This week's featured report



Get the data

Get a **patient's eye view** of services via the [Surveys and Feedback tool](#) and the [Healthwatch Maps](#)



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5-year research programme commissioned in 2016 to develop new methods for assessing basis risk and evaluating longevity improvement

PROGRAMME OBJECTIVES:

- identification and quantification of the key factors affecting mortality/longevity such as lifestyle choices, medical conditions and/or interventions
- modelling of temporal changes in the factors affecting morbidity and mortality
- evaluation of plausible scenarios in insured mortality trends due to particular medical advances or lifestyle - changes
- tools to forecast longevity risk of uptake of health behaviours and/or interventions.



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Actuarial
Research Centre
Institute and Faculty
of Actuaries

Use of Primary Health Care Records Data in Actuarial Research

PI Elena Kulinskaya (UEA)
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Team: Ilyas Bakbergenuly, Padma Chutoo,
Nurunnahar Akter, Njabulo Ncube

The 'Use of Big Health and Actuarial Data for understanding Longevity and Morbidity Risks' research programme is being funded by the Actuarial Research Centre.

9/03/21

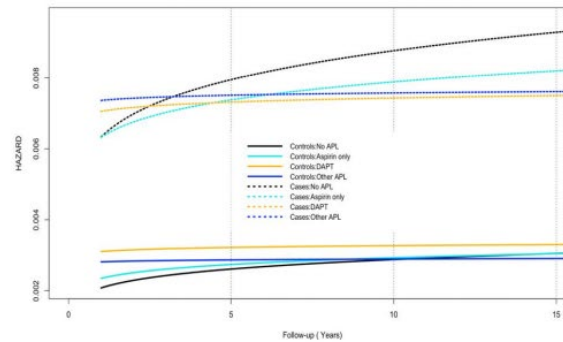
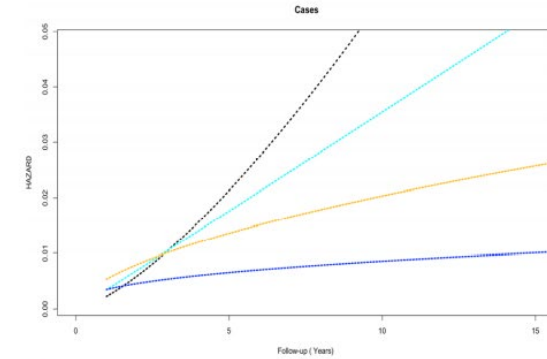
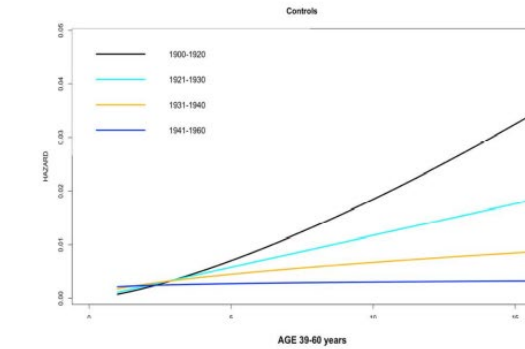
www.actuaries.org.uk/arc

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Findings: Survival after TIA



- High burden of cardio-vascular comorbidities is more prevalent among TIA patients than their matched controls.
- The overall risk of death remains high for 10 to 15 years after a TIA event.
- Aspirin provides long-term marginal survival benefits to TIA patients.

- UK groups involved in modelling/impact assessment of COVID-19
 - [Health Data Research UK](#)
 - [MRC Biostatistics Unit, University of Cambridge](#)
 - [Evidence-Based Medicine DataLab, University of Oxford](#)
 - [Electronic Health Records \(EHR\) Research Group, London School of Hygiene and Tropical Medicine](#)
 - [MRC Centre for Global Infectious Disease Analysis, Imperial College London](#)
 - [Usher Institute: Edinburgh Medical School - Molecular, Genetic and Population Health Sciences](#)
 - [The Alan Turing Institute](#)
- Key actuarial research groups
 - [Actuarial Research Centre](#)
 - [Continuous Mortality Investigation](#)
 - [COVID-19 Actuaries Response Group](#)
 - [IFoA COVID-19 Action Taskforce](#)