



# Life expectancy: The impact of the pandemic and medical advances

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# Life expectancy: pre-pandemic

## Estimated life expectancy at birth in 2020

	ROI	ROI		UK	UK
	Period	Cohort*		Period	Cohort*
Male	80.5	90.4		79.8	87.9
Female	84.2	92.7		83.3	90.5

*\*allowing for future mortality improvements*

[https://www.researchgate.net/publication/342105810\\_The\\_Life\\_Expectancy\\_of\\_a\\_Child\\_Born\\_in\\_Ireland\\_in\\_the\\_Twenty-First\\_Century](https://www.researchgate.net/publication/342105810_The_Life_Expectancy_of_a_Child_Born_in_Ireland_in_the_Twenty-First_Century)

<https://www.ons.gov.uk/peoplepopulationandcommunity/birthsdeathsandmarriages/lifeexpectancies/bulletins/pastandprojecteddatafromtheperiodandcohortlifetables/1981to2068>

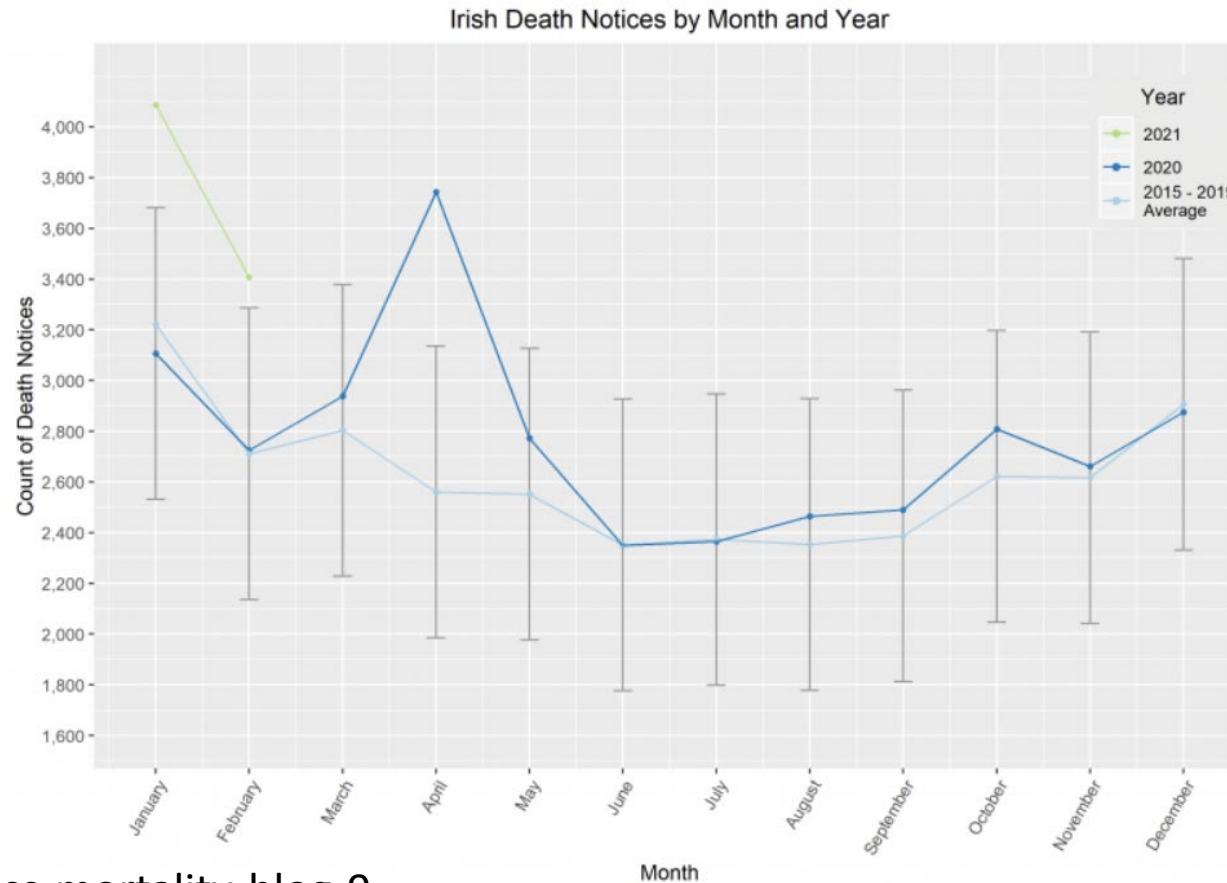
# Covid-19: Mortality impact

The Guardian, 10/12/2020:  
“Covid has 'cut life expectancy in  
England and Wales by a year'”

New York Times, 18/2/2021:  
“A Grim Measure of Covid's Toll: Life Expectancy  
Drops Sharply in U.S. American life expectancy  
fell by one year, to 77.8 years, in the first half of  
2020. It may rebound as the pandemic's end  
approaches.”

Science Daily, 11/11/2020 “A new study finds that  
Spain's annual life expectancy at birth dropped by 0.9  
years between 2019 and the annual period up until  
July 2020 due to the COVID-19 pandemic”

# Ireland: Covid-19 mortality

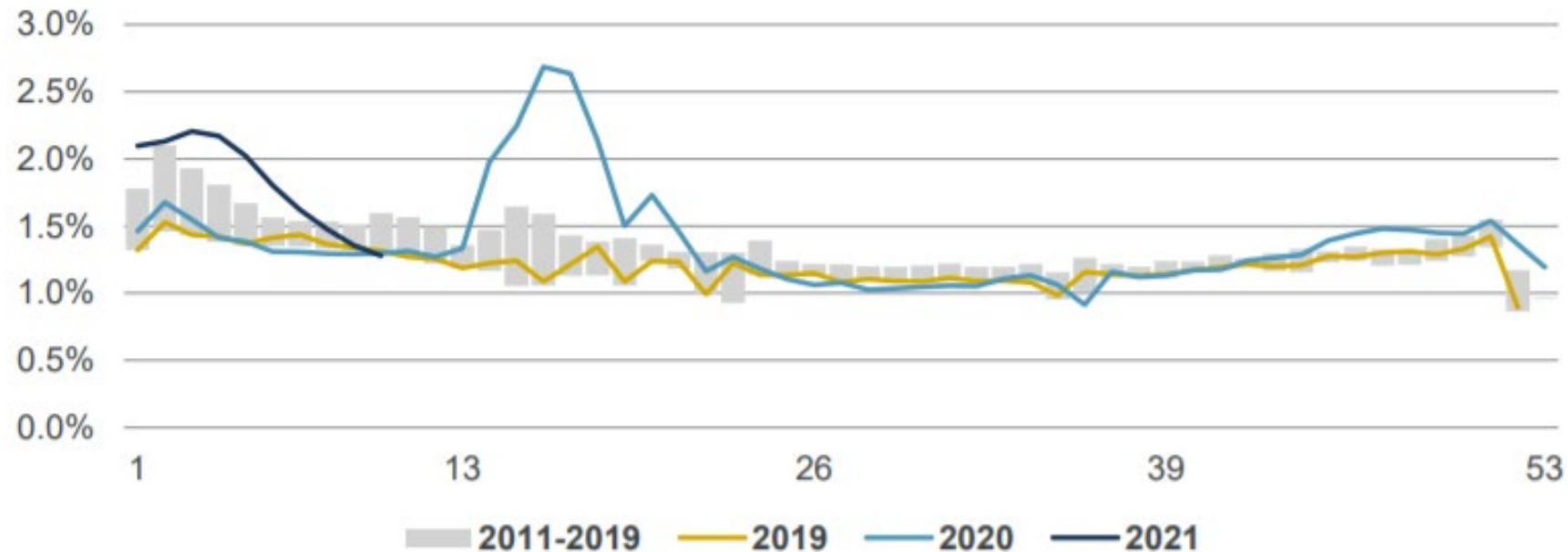


<https://web.actuaries.ie/excess-mortality-blog-9>

Data from RIP.ie as at 1 March 2021

# UK – excess mortality

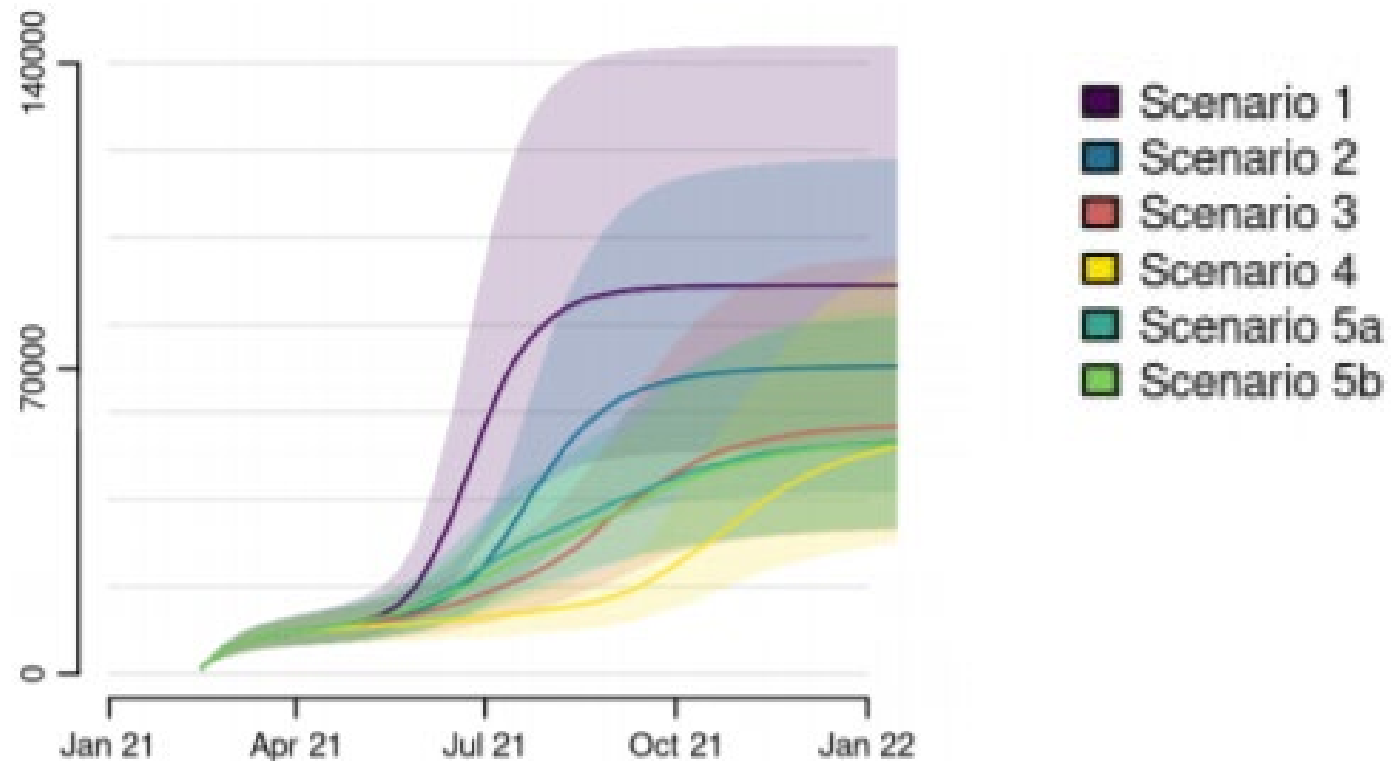
## Weekly standardised mortality rates in England & Wales



<https://www.actuaries.org.uk/system/files/field/document/Mortality-summary-pandemic-monitor-Week-10-2021-v01-2021-03-23.pdf>

# Unlocking road map scenarios for England

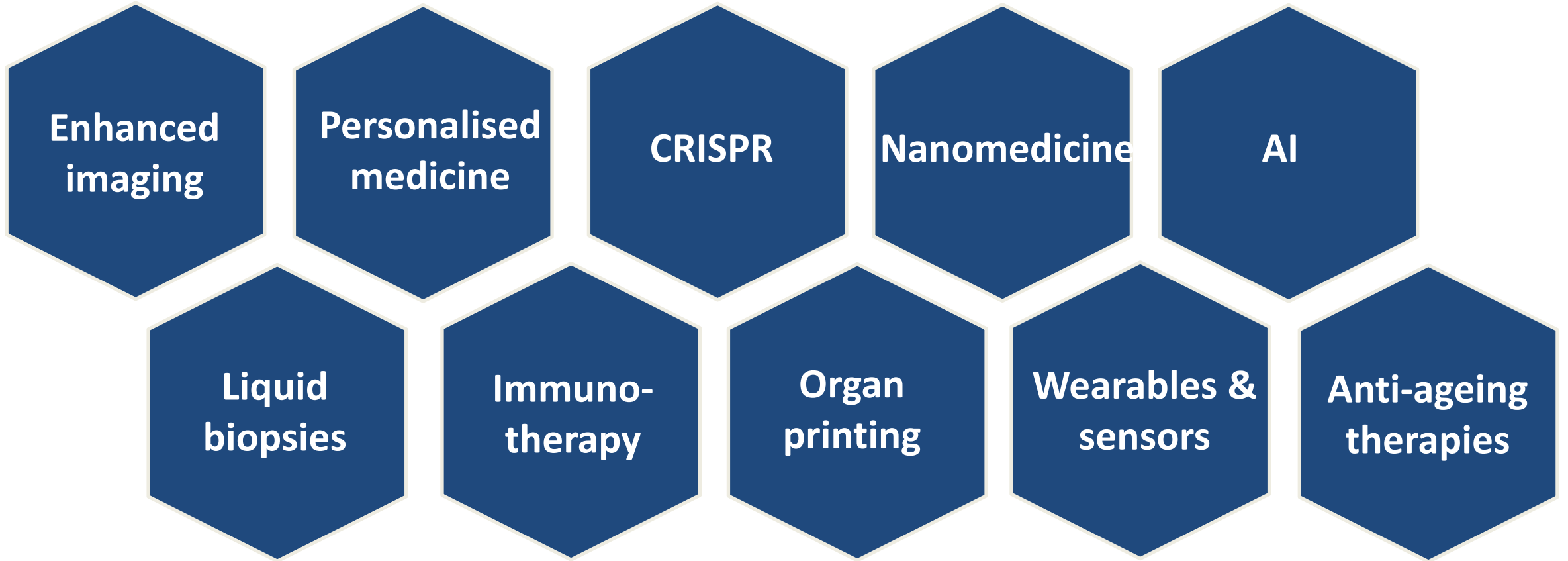
Projections from Imperial College Covid-19 Response Team, Feb 2021



# Post-pandemic

- Long Covid
- Mental health
- Missed cancer diagnoses
- Backlogs in service provision
- Telemedicine
- Behavioural changes
- The future for the flu? *(see e.g. article in Nature, Dec 2020)*

# Medical advances





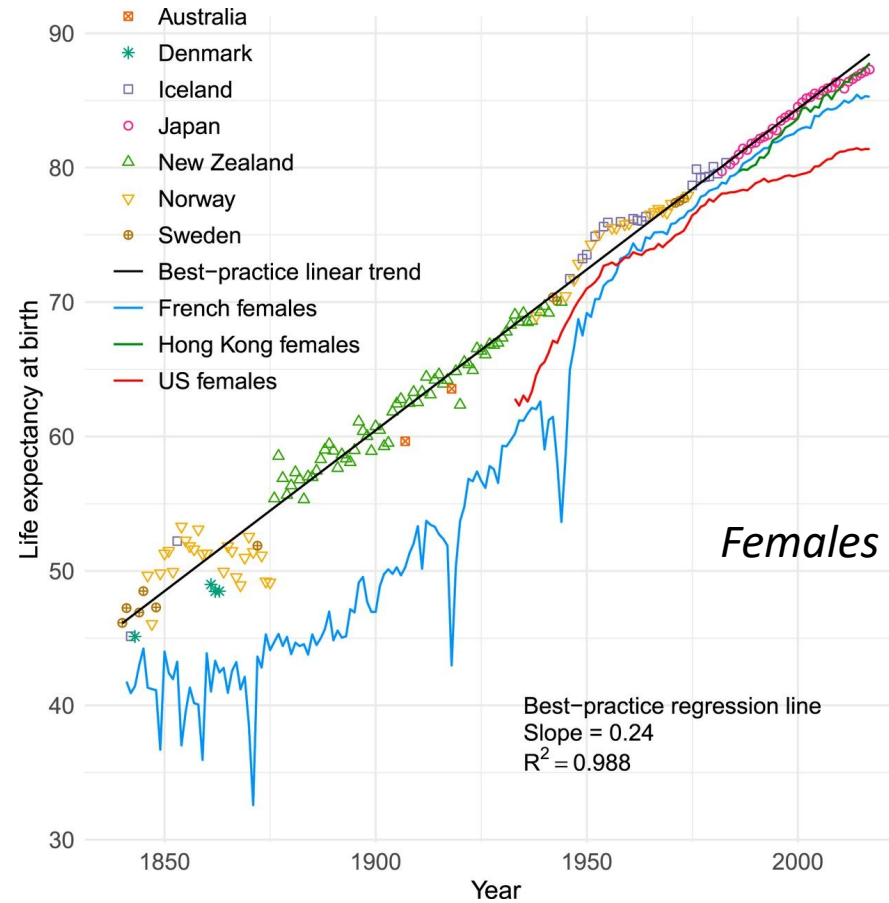
# Medicines

- Antimicrobial resistance
- Polypharmacy
- Opioids

# Environmental and social factors

- Economic environment
- Climate change
- Air pollution
- Diet
- Exercise
- Tech use
- Social (in)equality & cohesion
- Future pandemics

# “Best practice” life expectancy



**Vaupel et al, 2021:  
Demographic perspectives  
on the rise of longevity**

<https://www.pnas.org/content/118/9/e2019536118.short>



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representing pension savers