



The Friday Report – Issue 3

By Matt Fletcher and Nicola Oliver for

COVID-19 Actuaries Response Group – Learn. Share. Educate. Influence.

Every week, more is written on COVID-19 than any individual could possibly read. Collectively, the COVID-19 Actuaries Response Group read more about the outbreak than most, so we've decided each Friday to provide you with a curated list of the key papers and articles that we've looked at recently.

General

On 8 April, the European Centre for Disease Prevention and Control (ECDC) issued their eighth “rapid risk assessment” report on COVID-19 ([Link](#)). This is a very detailed and informative summary of all aspects of the outbreak in EU/EEA countries and the UK. They note, amongst other things, that there is currently no indication at a Europe-wide level that the peak of the epidemic has been reached.

Modelling – reports

Mortality associated with COVID-19 outbreaks in care homes: early international evidence (Comas-Herrera A and Zalakain J (12 April 2020) ([Link](#)))

There has been a lot of discussion over recent days on the number of deaths outside hospitals (see also the data section). This note looks at early-stage evidence from continental European countries, and suggests that, whilst official data is not available in many countries, data suggests that care home residents have accounted for around half of all deaths related to COVID-19.

Institute for Health Metrics and Evaluation – main updates on IHME COVID-19 predictions ([Link](#))

In our previous weekly report, we noted that the Institute for Health Metrics and Evaluation (IHME) had concluded in their first publication on 7 April that the UK will have over 66,000 deaths from COVID-19 in the first wave of the outbreak, more than Italy, France and Spain combined. Their updates on 10 April and 13 April both reduced the projections for the UK, with their 13 April prediction being around 24,000.

Clinical and Medical News

Treatments and vaccines

We are witnessing an unprecedented response to the current pandemic in the pharma and biotech industry. Several candidate vaccines are already in early clinical trial stages with potential for development within the next 12 months. In addition, many drugs that already have regulatory approval for other indications are being investigated for treating COVID-19, so-called drug repurposing. In this scenario, safety data and other studies outcomes are already available for the molecule which allows substantial acceleration of the drug development process.

Here ([link](#)) is a useful summary of COVID-19 treatments and vaccines in development.

In addition researchers in the US led by the Johns Hopkins Hospital have spearheaded the use of a ‘convalescent serum’ therapy, a potential COVID-19 treatment. This treatment involves extracting serum viral antibodies from those who have survived COVID-19 and transfusing into recipients. Read ([link](#)) about how this potentially game-changing therapy is being developed.

The effectiveness of face masks

The use of face masks by the general public has been debated – indeed, New York Gov. Andrew Cuomo on Wednesday ordered all New Yorkers to cover their faces in public when they can't maintain a proper social distance. ([Link](#))

But how effective are they? Here ([link](#)), Professor Trisha Greenhalgh and Jeremy Howard provide an overview of the different streams of evidence and conclude: keep your droplets to yourself – wear a mask.

Data

Deaths data

We noted the various sources of deaths data in Issue 2 of our Friday Report ([link](#)), and commented on how to understand the data in a recent bulletin ([link](#)).

We would draw particular attention again to the ONS weekly deaths publication ([link](#)), which indicates that, whilst 4,122 deaths registered by 3 April 2020 mentioned COVID-19 on the death certificate, there were 6,082 more deaths in the week than the five-year average, suggesting that all-cause (non-COVID-19) mortality was also very high.

CMI also published their first weekly Mortality monitor report ([link](#)) based on this data – further updates will be found here ([link](#)). Their conclusion was that there were 6,112 deaths registered by 3 April more than would have been expected (based on 2019 experience). These excess deaths were 76% higher than the number recorded as being (on death certificates) in respect of COVID-19.

Interventions data

We have recently been looking at data on the timings and impacts of non-clinical interventions across the globe and have found these two sites useful – look out for a forthcoming bulletin using this data.

ACAPS Government Measures dataset ([link](#)) sets out a long list of measures that governments have taken across the world in relation to COVID-19.

Google Community Mobility Reports ([link](#)) sets out how different countries' mobility has changed, in terms of changes to visits to places like shops and parks, compared with baseline.

And finally...

And finally, we all know about Captain Tom Moore who has raised more than £15m for the NHS by walking 100 lengths of his back garden before his 100th birthday, including a guard of honour for his final lap. All the money Moore raises will be donated to NHS Charities Together to go towards wellbeing packs and rest and recuperation centres for staff on the frontline, as well as electronic devices for patients to communicate with their families while in isolation. ([Link](#))

There's also been a variety of innovative ways that people in lockdown have kept themselves busy/healthy whilst also raising money for good causes. ([Link](#))

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