Questionnaire

UK COVID-19 Inquiry: Module 2 - Rule 9 Request to Dr Richard Fry - Reference: M2/SAGE/01/RF

Please provide the following information:

 A brief overview of your qualifications, career history, professional expertise and major publications.

Academic qualifications: BSc, MSc, PhD

I am an expert in privacy protecting geospatial data linkages and part of a team of data scientists who work with routinely collected administrative health data covering the population of Wales, UK. I am geographer by training with a BSc in Geography and an MSc in Geographic Information Systems. My PhD in GIS and Computer Science focussed on building models of the built environment to better predict ice formation on road networks. My post-doctoral roles have focussed on applying quantitative geospatial modelling methods to social and medical sciences to better understand the wider determinants of health and wellbeing. Since January 2012 I have worked at Swansea University Medical School where I have developed privacy protecting address level data linkage methods for the Secure Anonymised Information Linkage (SAIL) Databank including the use of an encrypted Unique Property Reference Number (UPRN) known as Residential Anonymised Linking Field (RALF). The RALF allows the linkage of address level environmental characteristics and the grouping of people into discrete address level households or communal establishments for research purposes in Wales. This has included working with colleagues on research on the evaluation of interventions at home to delay admission to care homes and latterly the impacts of COVID on care home residents.

A list of my publications can be seen here: https://orcid.org/0000-0002-7968-6679

2. A list of the groups (i.e. SAGE and/or any of its sub-groups) in which you have been a participant, and the relevant time periods.

SAGE Social Care Working Group, May 2020 – present.

- 3. An overview of your involvement with those groups between January 2020 and February 2022, including:
 - a. When and how you came to be a participant;

Key staff from SAIL were invited to present on the 20th May 2020 to talk about the linked data available in Wales. I was subsequently invited to join as a participant of the SAGE SCWG to contribute emerging data linkage research in Wales.

b. The number of meetings you attended, and your contributions to those meetings;

I attended most meetings during between May 20^{th} 2020 and 1^{st} May 2021 (approx. 44 based on outlook calendar entries) where meetings were at least weekly.

Official records for meeting attendance from May 21 and April 2022 puts my attendance at 17 reflecting the drop to a fortnightly meeting.

At these meetings I contributed findings from emerging research using the SAIL databank on Welsh care homes, data linkage expertise and presented trends in care home infections in Wales as part of UK round up.

c. Your role in providing research, information and advice.

My role was to present research findings from Wales which used the SAIL Databank, a mature data linkage platform, to advise on data linkage issues, and to complete the UK picture in terms of trends using official stats published by Welsh Government and Public Health Wales.

4. A summary of any documents to which you contributed for the purpose of advising SAGE and/or its related subgroups on the Covid-19 pandemic. Please include links to those documents where possible.

My main contribution to the outputs from the SCWG was to co-author the Hospital Discharge Paper to include research conducted from Wales:

https://www.gov.uk/government/publications/the-association-between-the-discharge-of-patients-from-hospitals-and-covid-in-care-homes

I contributed to all consensus statements and documents published by the SCWG as part of the peer review process within the SCWG.

I shared and presented findings from research conducted using SAIL including:

COVID-19 infection risk amongst 14,104 vaccinated care home residents: a national observational longitudinal cohort study in Wales, UK, December 2020-March 2021: https://doi.org/10.1093/ageing/afab223

Intensity of COVID-19 in care homes following hospital discharge in the early stages of the UK epidemic: https://doi.org/10.1093/ageing/afac072

COVID-19 risk factors amongst 14,786 care home residents: an observational longitudinal analysis including daily community positive test rates of COVID-19, hospital stays and vaccination status in Wales (UK) between 1 September 2020 and 1 May 2021: https://doi.org/10.1093/ageing/afac084

The Impact of COVID-19 on Adjusted Mortality Risk in Care Homes for Older Adults in Wales, United Kingdom: A retrospective population-based cohort study for mortality in 2016–2020: https://doi.org/10.1093/ageing/afaa207

5. A summary of any articles you have written, interviews and/or evidence you have given regarding the work of the above-mentioned groups and/or the UK's response to the Covid-19 pandemic. Please include links to those documents where possible.

None

- 6. Your views as to whether the work of the above-mentioned groups in responding to the Covid-19 pandemic (or the UK's response more generally) succeeded in its aims. This may include, but is not limited to, your views on:
 - a. The composition of the groups and/or their diversity of expertise;
 - b. The way in which the groups were commissioned to work on the relevant issues;
 - c. The resources and support that were available;
 - d. The advice given and/or recommendations that were made;
 - e. The extent to which the groups worked effectively together;
 - f. The extent to which applicable structures and policies were utilised and/or complied with and their effectiveness.

I am not able to comment on whether the SCWG succeeded in its aims as this is something the chairs are best placed to assess.

In my view the composition of the SCWG was balanced with a range of expertise and experience from the civil service, public health organisations, academic and care home representatives. The meetings were conducted very professionally, superbly managed by the chairs and secretariat. All viewpoints were welcomed thus allowing a range of opinions to be heard in an open and friendly way allowing for recommendations to be made based on the best available evidence at the time.

The work presented from SAIL at the SAGE SCWG was support by the MRC Grant: Controlling COVID19 through enhanced population surveillance and intervention (Con-COV): a platform approach: MR/V028367/1

7. Your views as to any lessons that can be learned from the UK's response to the Covid-19 pandemic, in particular relating to the work of the above-mentioned groups. Please describe any changes that have already been made, and set out any recommendations for further changes that you think the Inquiry should consider making.

As someone who researches using linked data it is clear, that although a powerful research tool, some key data gaps exist in relation to adult social care including capturing temporary discharge events, staff and visitor logs for care home settings and important information on the characteristics of care home settings. There are different challenges for making data available for research versus using linked data in operational settings, but agreeing on a standardised linked data platform and minimum dataset would better place all nations to respond to future infectious disease events.

8. A brief description of documentation relating to these matters that you hold (including soft copy material held electronically). Please retain all such material. I am not asking for you to provide us with this material at this stage, but I may request that you do so in due course.

I have copies of PowerPoint presentations made summarising research conducted using SAIL. These PowerPoint presentations cover work detailed in peer reviewed articles outlined previously.

Trends data were extracted from the following sources:

https://gov.wales/notifications-care-inspectorate-wales-related-covid-19-adult-care-homes

https://public.tableau.com/app/profile/public.health.wales.health.protection/viz/RapidCOVID-19virology-Public/Headlinesummary