HDRUK Health Data Research UK

Improving our health through data science

Using linked data to respond to the COVID-19 pandemic in Wales

Using data to support policy, services and response for Wales and the UK – making a difference for people.

20th January 2022

Ashley Akbari
On behalf of the One Wales collaboration – Population Data Science Swansea University

Swansea University Prifysgol Abertawe | Medical School Ysgol Feddygaeth

SAIL DATABANK

ADR WALES Data-driven change

Population Data Science at Swansea University

COVID-19

Overview

- Phenomenal amount of progress has been made!
- Wales has come together like never before!
- Collaborative links been further strengthened and enhanced to enable Wales Data Science response.
- This work uses data provided by patients and collected by the NHS as part of their care and support. We would also like to acknowledge all data providers who make anonymised data available for research.
- We wish to acknowledge the collaborative partnership that enabled acquisition and access to the de-identified data, which led to this output. The collaboration was led by the Swansea University Health Data Research UK team under the direction of the Welsh Government Technical Advisory Cell (TAC) and includes the following groups and organisations: the Secure Anonymised Information Linkage (SAIL) Databank, Administrative Data Research (ADR) Wales, Digital Health and Care Wales (DHCW), Public Health Wales, NHS Shared Services and Welsh Ambulance Service Trust (WAST). All research conducted has been completed under the permission and approval of the SAIL independent Information Governance Review Panel (IGRP) project number 0911.

The One Wales approach

March 2020

- The insight of the team based within Population Data Science at Swansea University was offered to assist the Welsh Government and Chief Medical Officer for Wales

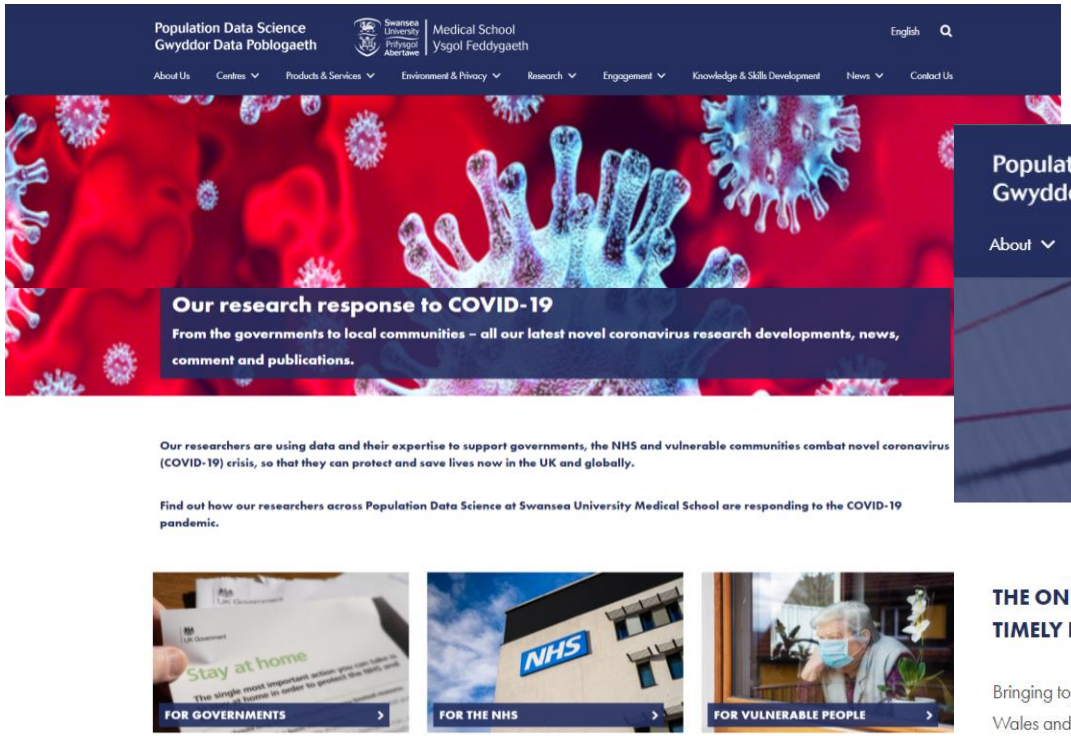
- Quickly the 'One Wales' team was assembled drawing on the necessary expertise to guide policy decision making.

- One Wales brings together colleagues from HDR UK, ADR Wales, SAIL Databank, ADP, BREATHE, Welsh Government, Public Health Wales and Digital Health and Care Wales

- All work is presented directly to the Welsh Government Technical Advisory Group (TAG) and UK Scientific Advisory Group (SAGE).

COVID-19

Updates and information



THE ONE WALES RESPONSE TO COVID-19 BRINGS TOGETHER CROSS-INSTITUTIONAL TEAMS OF EXPERTS FROM ACROSS WALES TO PROVIDE TIMELY EVIDENCE TO INFORM POLICY AND PRACTICE TO TACKLE THE EPIDEMIC AND ITS IMPACT IN THE UK.

Bringing together colleagues from within the Population Data Science group and across Wales including HDR UK, ADR Wales, SAIL Databank, ADP, BREATHE, Welsh Government, Public Health Wales and NHS Wales Informatics Service (NWIS) has resulted in an agile and responsive approach to tackling data analysis and intelligence generation based on both the constant and newly developing priorities for tackling COVID-19 in Wales.

The One Wales team will continue to work together to identify gaps in knowledge and streamline efforts to deliver vital intelligence to help policymakers understand and plan around the issue of COVID-19 in Wales and across the UK.

https://popdatasci.swan.ac.uk/news/one-wales/

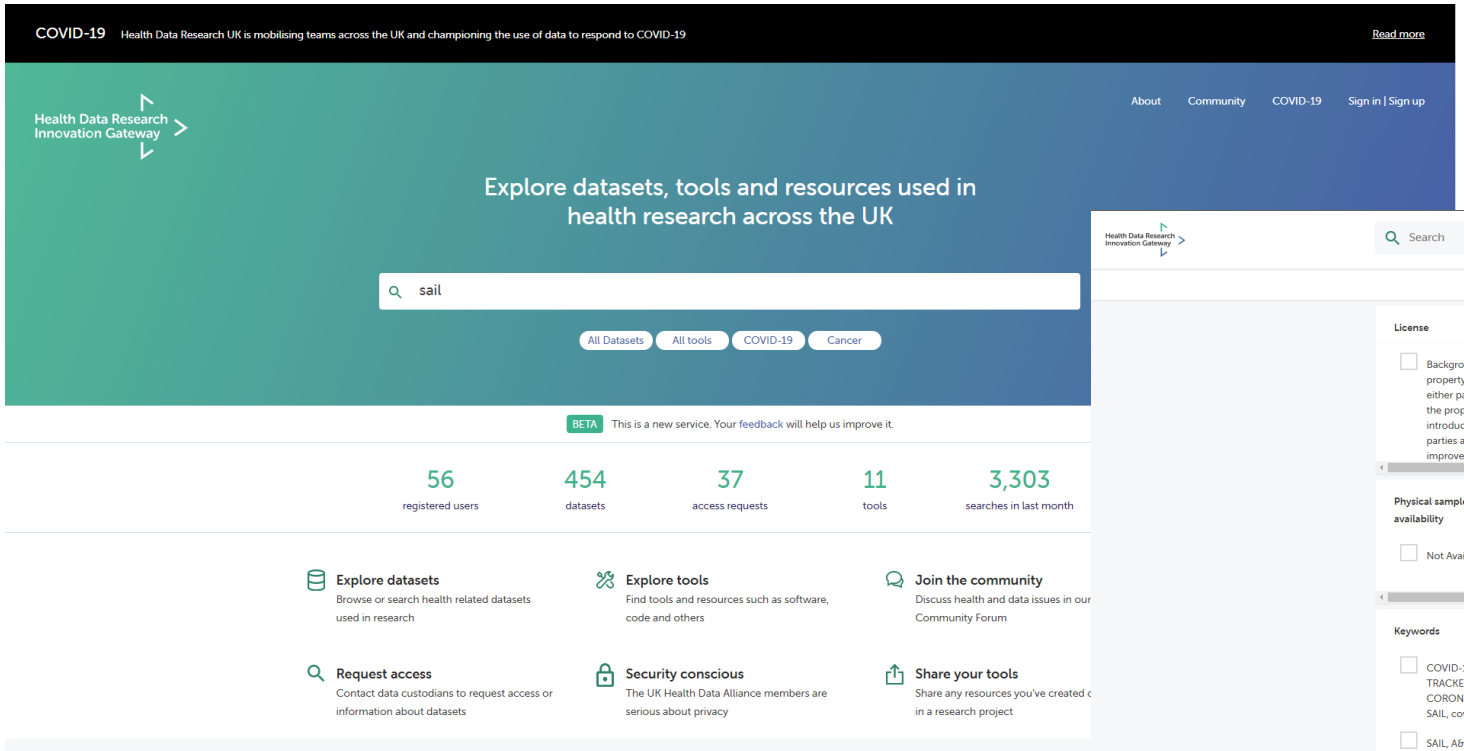
COVID-19

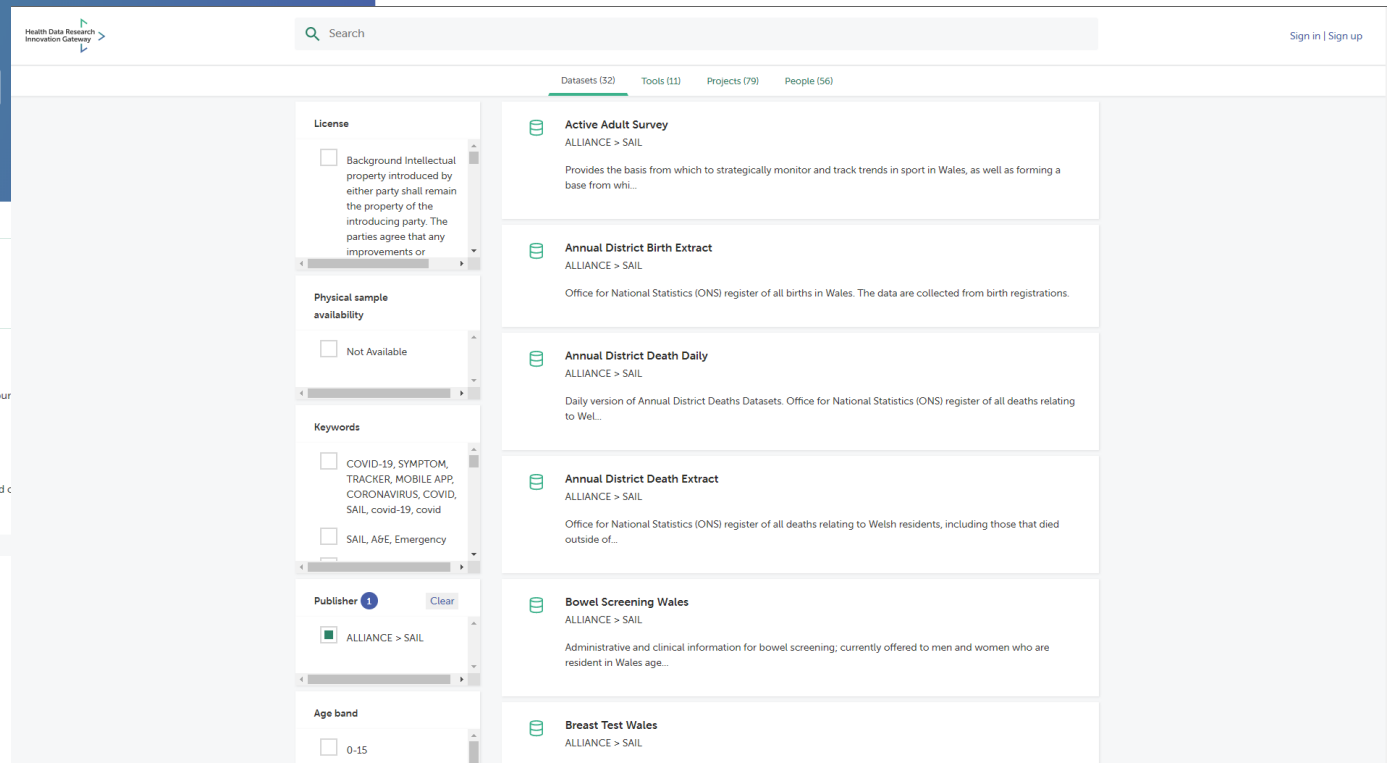
Data flows – “new things”

- Cadence has increased
  “Daily / Weekly / Monthly”
- New data has been acquired
  “30 new of 58 being used”
- More data to come
  “Driving acquisition…”
- New ways of dealing with data
  “Loading, provisioning, access”

COVID-19

Data flows - information





- https://healthdatagateway.org/

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One Wales brings together colleagues from:

HDRUK Health Data Research UK

YDG CYMRU | ADR WALES

SAIL DATABANK

Adolescent Mental Health DATA PLATFORM

BREATHE Health Data Research Hub

Llywodraeth Cymru
Welsh Government

GIG CYMRU NHS WALES | Iechyd Cyhoeddus Cymru / Public Health Wales

GIG CYMRU NHS WALES | Gwasanaeth Gwybodeg / Informatics Service

GIG CYMRU NHS WALES | Ymddiriedolaeth GIG Gwasanaethau Ambiwlans Cymru / Welsh Ambulance Services NHS Trust

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GIG CYMRU NHS WALES | Ymddiriedolaeth GIG Gwasanaethau Ambiwlans Cymru Welsh Ambulance Services NHS Trust

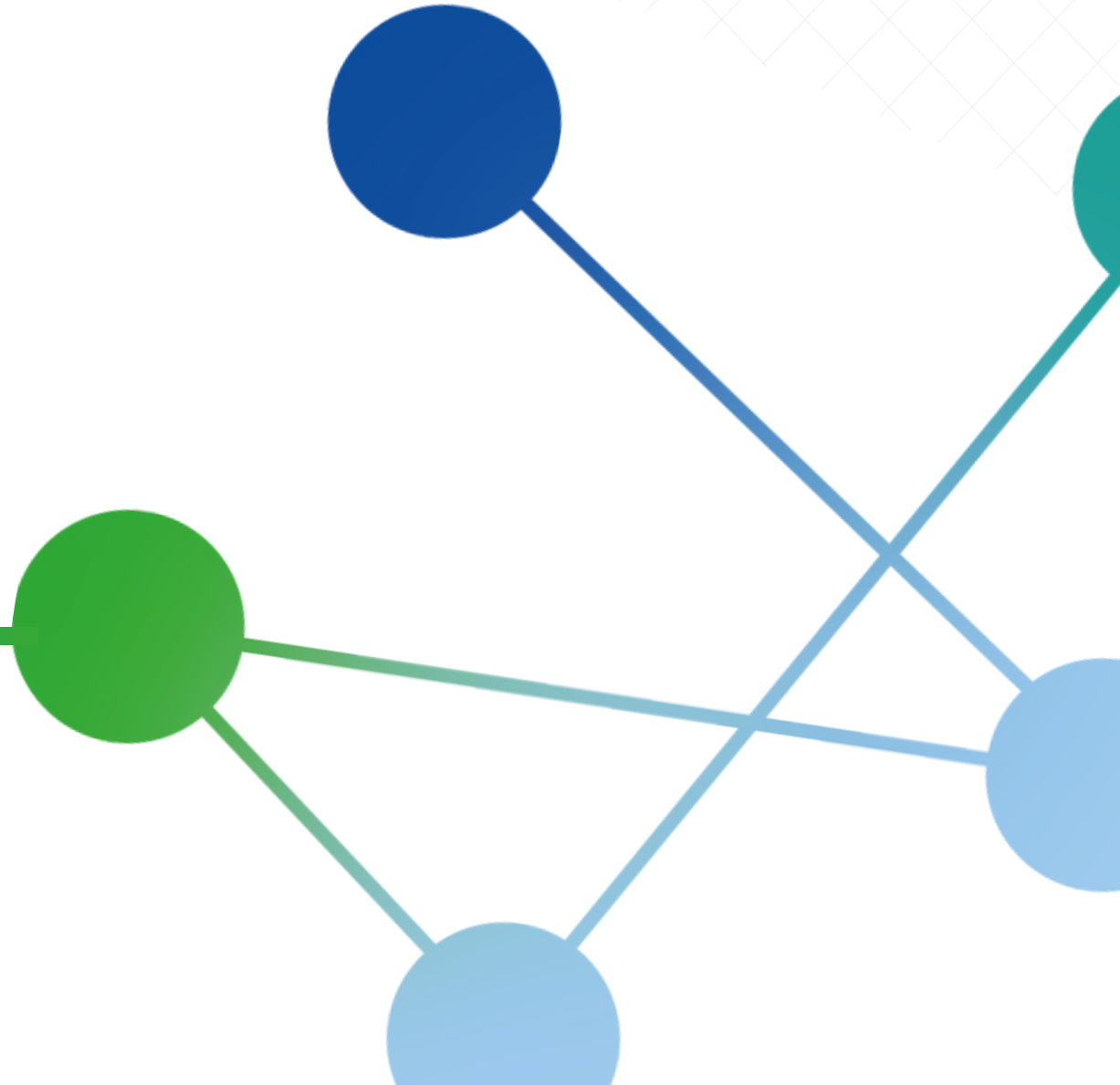
British Heart Foundation Data Science Centre

Led by Health Data Research UK

PHIRI
Population Health Information Research Infrastructure

HDRUK
Health Data Research UK

WP6 – Research use cases measuring the impact of COVID-19 on population health



~200+ users

~170+ questions

~65 completed

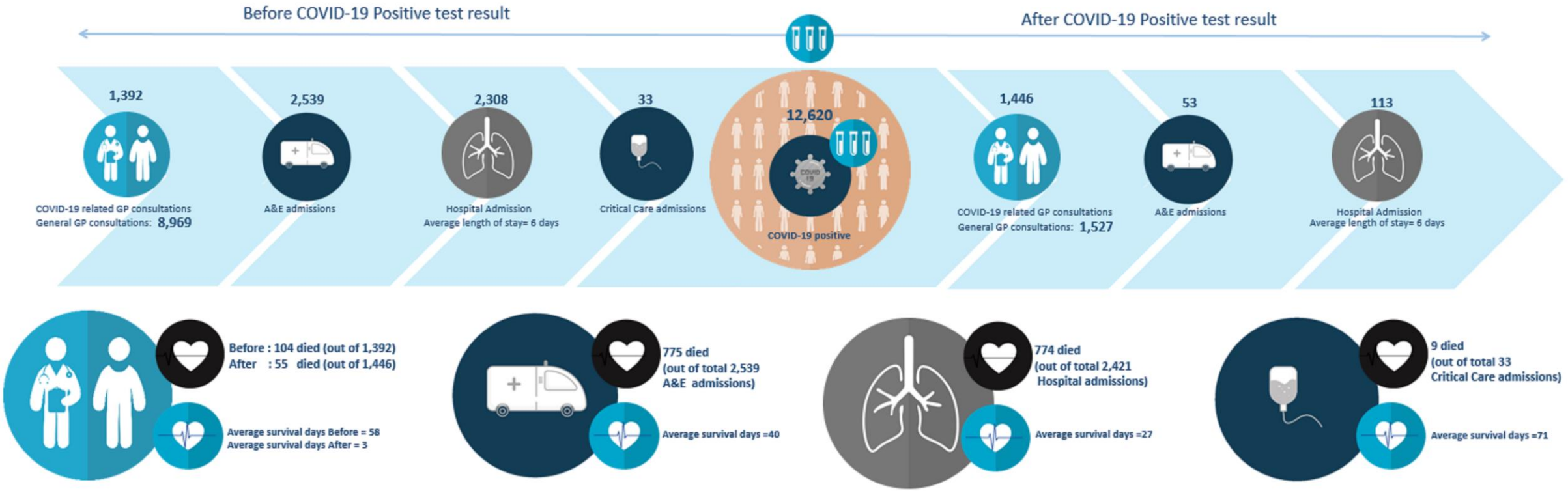
~60 in progress

~45 pending
/ getting started

Icons from Icon8

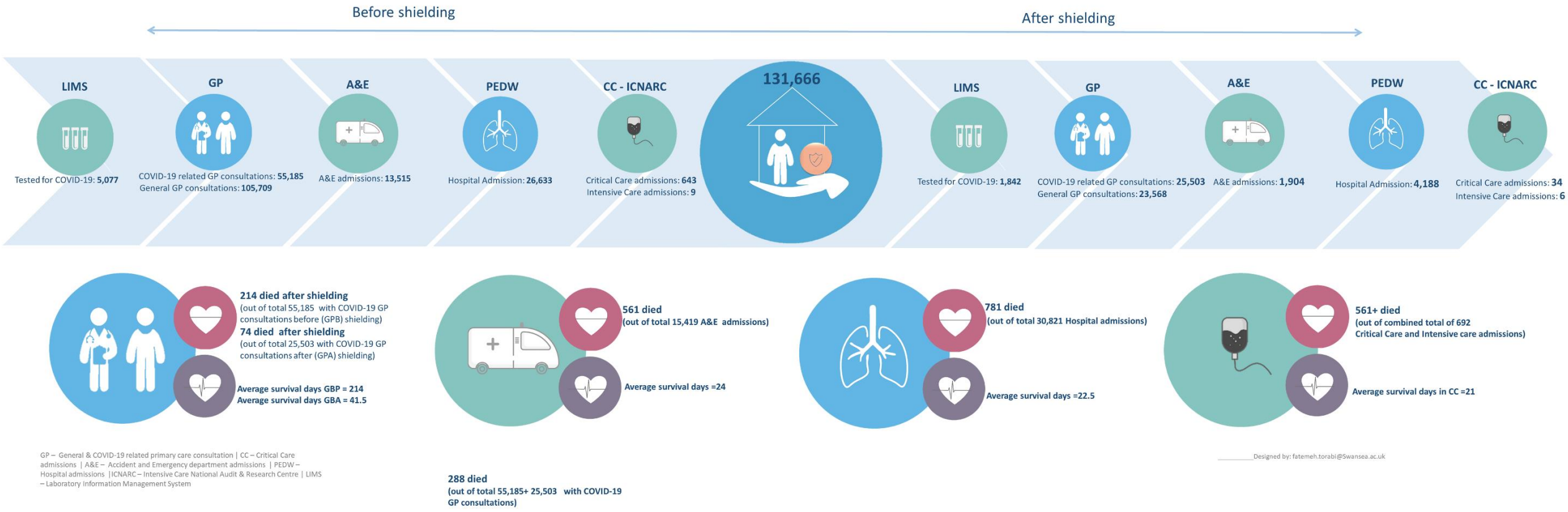
COVID-19

COVID-19 Early priority examples



COVID-19

COVID-19 Early priority examples on pre and post shielding impacts



Community Prevalence and Care Home outbreak

What is the influence of community prevalence on care home outbreaks

Two spatial models:

- Bayesian Prediction of LSOA level prevalence (ZOE and test data)
  - https://www.medrxiv.org/content/10.1101/2020.08.17.20175117v1
- Distance weighted positive test rates LSOA

Test data:

- Rate of positive test (CH tests removed) by LSOA
- Bayes based spatial prediction (CH tests removed)

Outcomes:

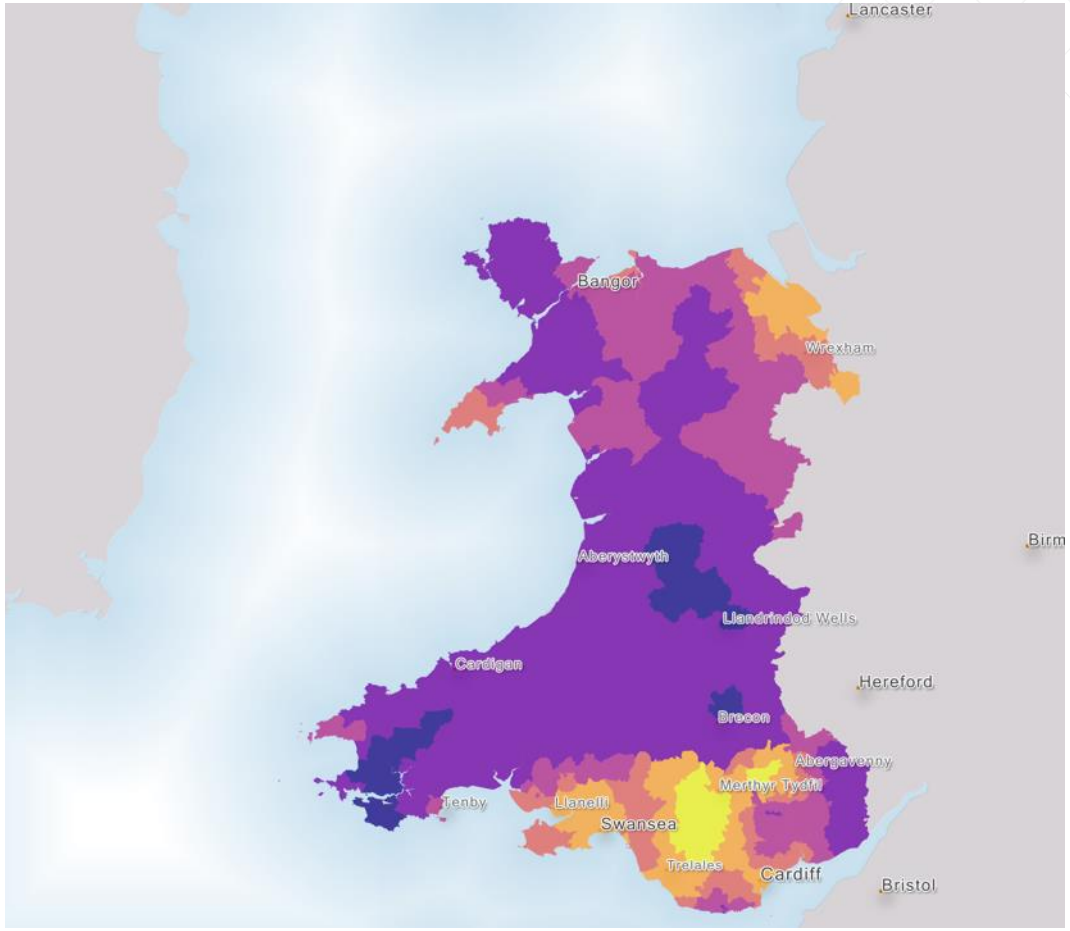
- New care home outbreak (i.e. positive test result)
  - Defined by a CH previously being 28 days clear of infection

Emerging Results:

- Suggest there is a localised association with prevalence and CH outbreak
- Urban vs Rural differences

Next steps:

- Refine the spatial model
- Model the lag
- Look at other data to see if it gives an earlier signal



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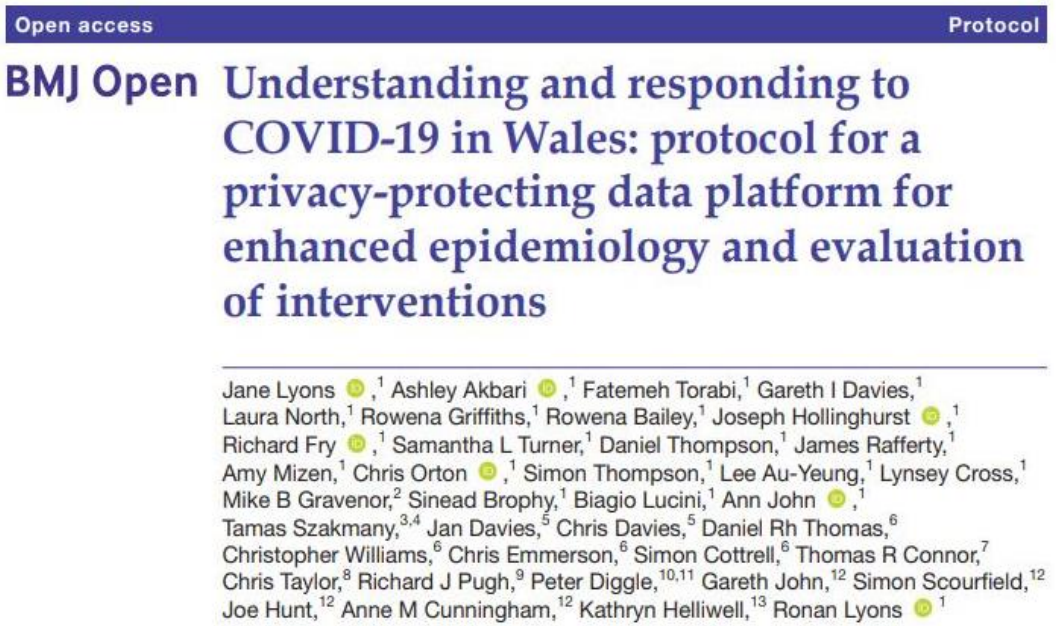
Total population data linkage

- Development and maintaining a total population e-cohort, which enables consistent denominator, demographic and harmonised reproducible research and intelligence findings.
- Wales's 3.2M population derived and composed from multiple data sources within the SAIL privacy protecting trusted research environment.
- Includes data from and linkable to a wide set of data sources for impactful policy relevant research and intelligence, available to everyone in the con-cov and cvd-covid-uk collaborations.

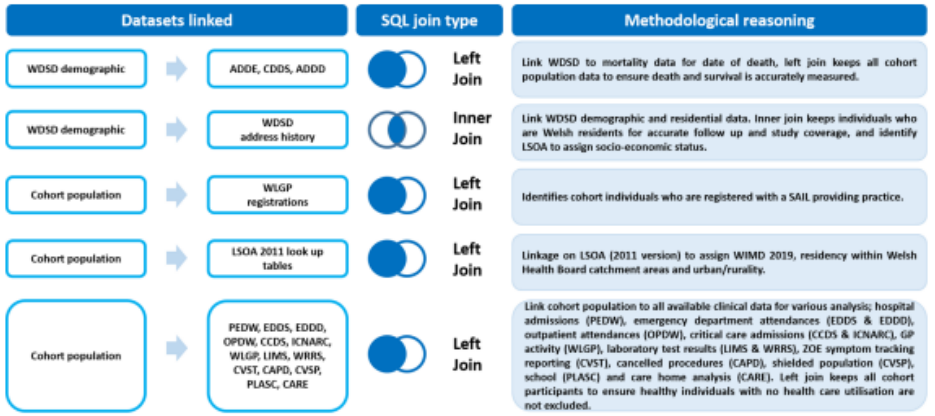


Open access Protocol

BMJ Open

Understanding and responding to COVID-19 in Wales: protocol for a privacy-protecting data platform for enhanced epidemiology and evaluation of interventions

Jane Lyons,[1] Ashley Akbari,[1] Fatemeh Torabi,[1] Gareth I Davies,[1] Laura North,[1] Rowena Griffiths,[1] Rowena Bailey,[1] Joseph Hollinghurst,[1] Richard Fry,[1] Samantha L Turner,[1] Daniel Thompson,[1] James Rafferty,[1] Amy Mizen,[1] Chris Orton,[1] Simon Thompson,[1] Lee Au-Yeung,[1] Lynsey Cross,[1] Mike B Gravenor,[2] Sinead Brophy,[1] Biagio Lucini,[1] Ann John,[1] Tamas Szakmany,[3,4] Jan Davies,[5] Chris Davies,[5] Daniel Rh Thomas,[6] Christopher Williams,[6] Chris Emmerson,[6] Simon Cottrell,[6] Thomas R Connor,[7] Chris Taylor,[8] Richard J Pugh,[9] Peter Diggle,[10,11] Gareth John,[12] Simon Scourfield,[12] Joe Hunt,[12] Anne M Cunningham,[12] Kathryn Helliwell,[13] Ronan Lyons[1]



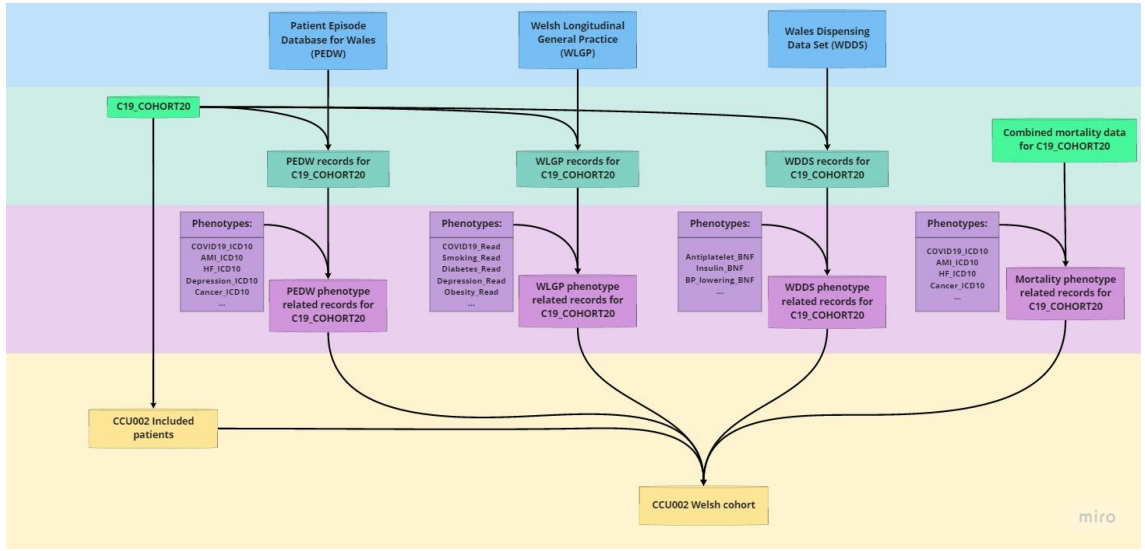
Datasets linked		SQL join type	Methodological reasoning
WDSD demographic	ADDE, CDDS, ADDD	Left Join	Link WDSD to mortality data for date of death, left join keeps all cohort population data to ensure death and survival is accurately measured.
WDSD demographic	WDSD address history	Inner Join	Link WDSD demographic and residential data. Inner join keeps individuals who are Welsh residents for accurate follow up and study coverage, and identify LSOA to assign socio-economic status.
Cohort population	WLGP registrations	Left Join	Identifies cohort individuals who are registered with a SAIL providing practice.
Cohort population	LSOA 2011 look up tables	Left Join	Linkage on LSOA (2011 version) to assign WIMD 2019, residency within Welsh Health Board catchment areas and urban/rurality.
Cohort population	PEDW, EDDS, EDDD, OPDW, CCDS, ICNARC, WLGP, LIMS, WRRS, CVST, CAPD, CVSP, PLASC, CARE	Left Join	Link cohort population to all available clinical data for various analysis; hospital admissions (PEDW), emergency department attendances (EDDS & EDDD), outpatient attendances (OPDW), critical care admissions (CCDS & ICNARC), GP activity (WLGP), laboratory test results (LIMS & WRRS), ZOE symptom tracking reporting (CVST), cancelled procedures (CAPD), shielded population (CVSP), school (PLASC) and care home analysis (CARE). Left join keeps all cohort participants to ensure healthy individuals with no health care utilisation are not excluded.

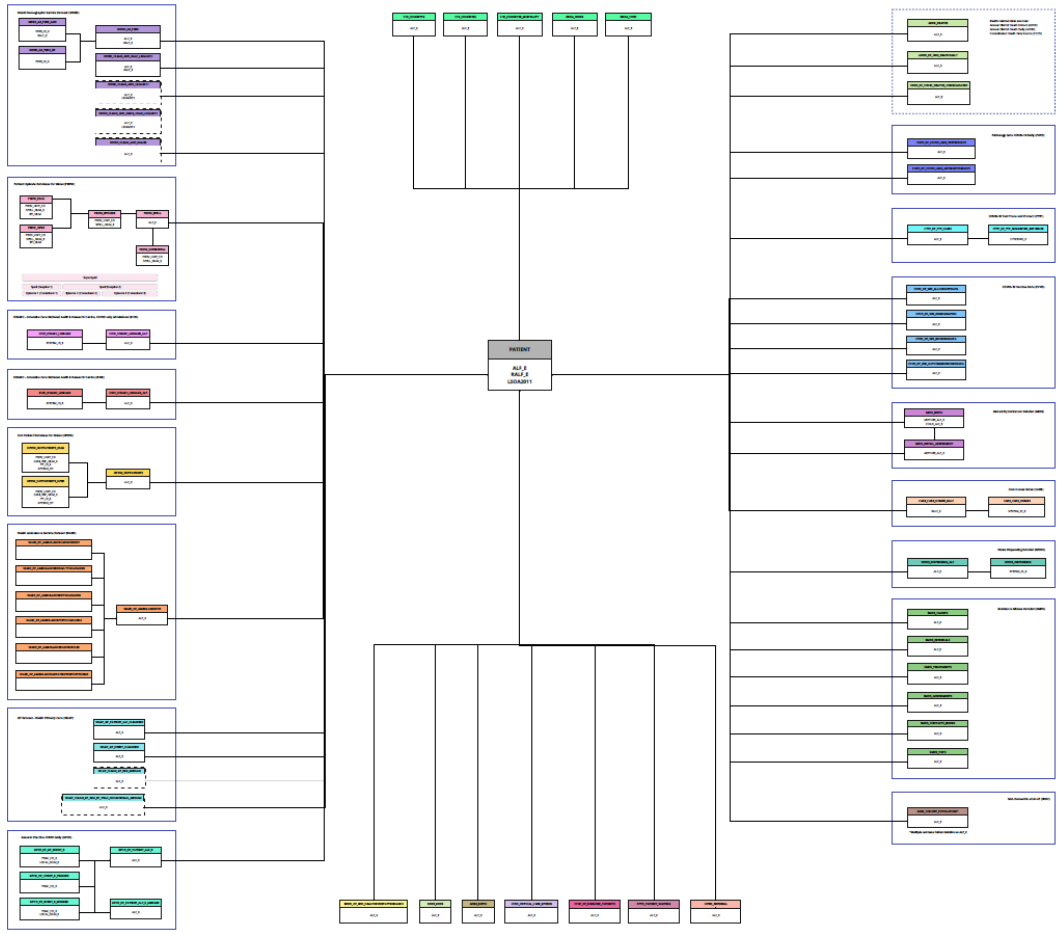
COVID-19

Reproducible research – data & code (& RRDA's (research ready data assets))

- Development of new ways of working to enable reproducibility both across changes in data over time – but sharing of code, methods, prepared data and new derived (RRDA's) within and across users and groups.

- Working across distributed users and teams – both geographically and by organisation, background, expertise and focus.





COVID-19

Understanding and the data we have - ethnicity

- Ethnicity data is collected in various health data sources and records, but poorly completed and with major quality issues / differential recording.

- Within SAIL we have developed a method using multiple linked ~20 electronic health records alone showed that 26% missing ethnicity when linked all records.

- Permission to link ONS Census 2011 results, which contains ~35% missing ethnicity.

- Ethnicity spine results in <~5% missing

- Further work currently in progress to ascertain whether a modal, weighted, latest or composite method(s) is most appropriate.

- New ethnicity spine containing these 1 or more methods will be available to the COVID-19 projects and users soon along with associated publications.

- Longer term plan to share the ethnicity spine with all SAIL projects as a standalone data source.

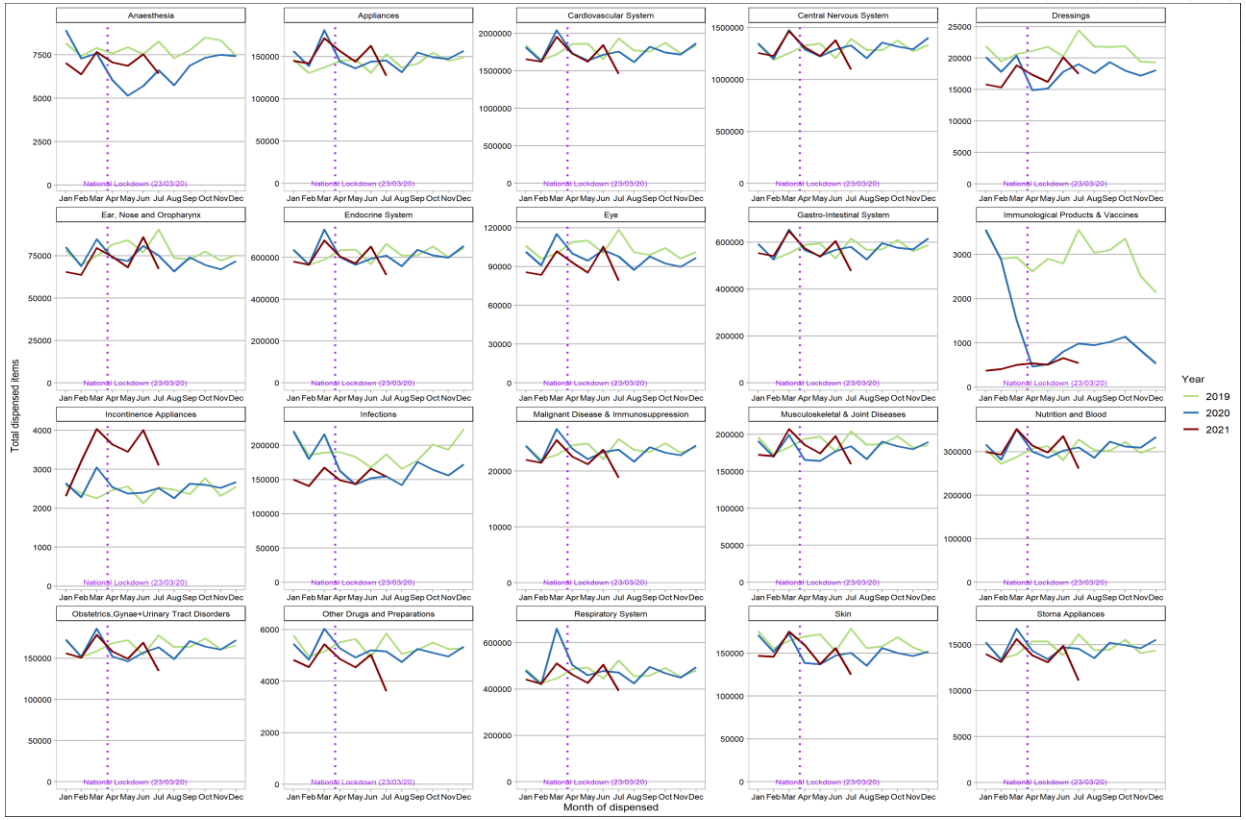
COVID-19

Medicines prescribing and dispensing

Evaluating the effect of COVID-19 on dispensing patterns: a national cohort analysis

Fatemeh Torabi, Ashley Akbari, Laura North, Daniel Harris, Gareth Davies, Mike Gravenor, Rowena Griffiths, Jane Lyons, Neil Jenkins, Andrew Morris, Julian Halcox, Ronan A. Lyons

doi: https://doi.org/10.1101/2021.02.15.21251552



To efficiently evaluate the impact of COVID-19 on dispensing patterns of medications. For this we:

1. measured the general impact of the COVID-19 pandemic on dispensing patterns;
2. created an enhanced national research-ready data asset (RRDA) of all primary care dispensing records for the entire population of Wales for use in research and intelligence; and
3. We provide a monitoring platform of real-time trends: https://www.wdds.ml

Summary of our findings: Reconfiguration of routine clinical services during COVID-19 led to substantial changes in community pharmacy drug dispensing

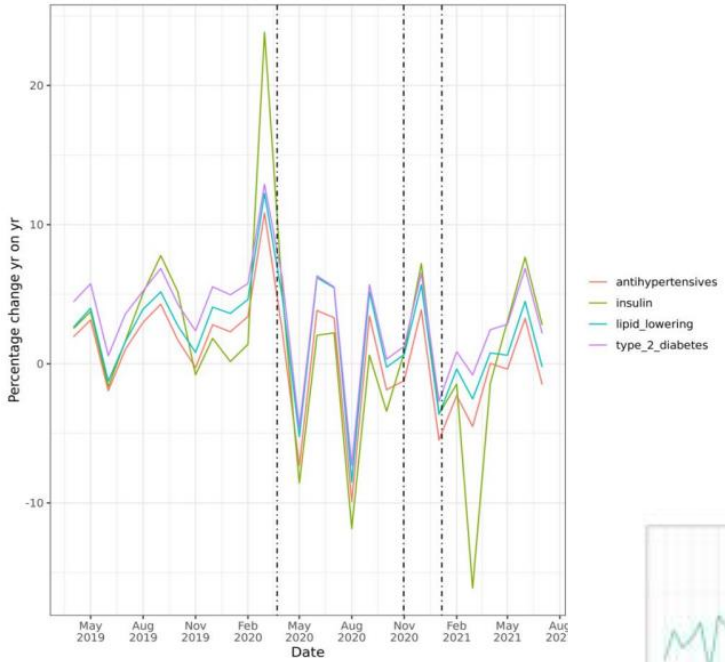
COVID-19

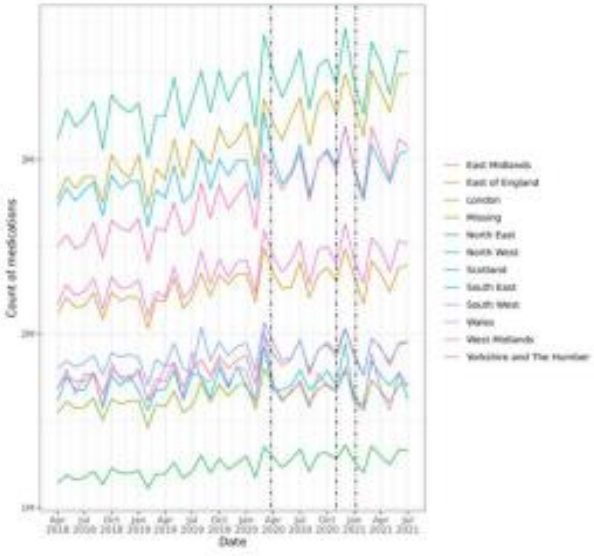
Medicines prescribing and dispensing

The adverse impact of COVID-19 pandemic on cardiovascular disease prevention and management in England, Scotland and Wales: A population-scale analysis of trends in medication data

Caroline E Dale, Rohan Takhar, Ray Carragher, Fatemeh Torabi, Michalis Katsoulis, Stephen Duffield, Seamus Kent, Tanja Mueller, Amanj Kurdi, Stuart McTaggart, Hoda Abbasizanjani, Sam Hollings, Andrew Scourfield, Ronan Lyons, Rowena Griffiths, Jane Lyons, Gareth Davies, Dan Harris, Alex Handy, Mehrdad Alizadeh Mizani, Chris Tomlinson, Mark Ashworth, Spiros Denaxas, Amitava Banerjee, Jonathan Sterne, Kate Lovibond, Paul Brown, Ian Bullard, Rouven Priedon, Mamas A Mamas, Ann Slee, Paula Lorgelly, Munir Pirmohamed, Kamlesh Khunti, Naveed Sattar, Andrew Morris, Cathie Sudlow, Ashley Akbari, Marion Bennie, Reecha Sofat

doi: https://doi.org/10.1101/2021.12.31.21268587





Summary of our findings: Management of key CVD risk factors as proxied by incident use of CVD medicines has not returned to pre-pandemic levels in the UK. Novel methods to identify and treat individuals who have missed treatment are urgently required to avoid large numbers of additional future CVD events, further adding indirect cost of the COVID-19 pandemic.

COVID-19

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Impact on people in care and resident in care homes (Rapid publication exemplars)

Intensity of COVID-19 in care homes following Hospital Discharge in the early stages of the UK epidemic

Joe Hollinghurst, Laura North, Chris Emmerson, Ashley Akbari, Fatemeh Torabi, Ronan A Lyons, Alan G Hawkes, Ed Bennett, Mike B Gravenor, Richard Fry

doi: https://doi.org/10.1101/2021.03.18.21253443

COVID-19 Infection Risk amongst 14,104 Vaccinated Care Home Residents: A national observational longitudinal cohort study in Wales, United Kingdom, December 2020 to March 2021

Joe Hollinghurst, Laura North, Malorie Perry, Ashley Akbari, Mike B Gravenor, Ronan A Lyons, Richard Fry

doi: https://doi.org/10.1101/2021.03.19.21253940

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 1st September 2020 and 1st May 2021

Joe Hollinghurst, Robyn Hollinghurst, Laura North, Amy Mizen, Ashley Akbari, Sara Long, Ronan A Lyons, Rich Fry

doi: https://doi.org/10.1101/2021.09.30.21264338

COVID-19

Impact on people in care and resident in care homes

Age and Ageing

Issues Subject ▾ More Content ▾ Submit ▾ Purchase Advertise ▾ About ▾ All Age and Ageing

Volume 51, Issue 1
January 2022
(In Progress)

COVID-19 infection risk amongst 14,104 vaccinated care home residents: a national observational longitudinal cohort study in Wales, UK, December 2020–March 2021

Joe Hollinghurst ✉, Laura North, Malorie Perry, Ashley Akbari, Mike B Gravenor, Ronan A Lyons, Richard Fry

Age and Ageing, Volume 51, Issue 1, January 2022, afab223,
https://doi.org/10.1093/ageing/afab223
Published: 17 November 2021 **Article history** ▾

Key points and findings:

- Increased risk of infection after 21 days was associated with frailty.
- Most (90%) positive PCR tests occurred within 28 days of vaccination.
- Extra precautions to reduce transmission risk should be taken within 28 days of vaccination.

Age and Ageing

Issues Subject ▾ More Content ▾ Submit ▾ Purchase Advertise ▾ About ▾ All Age and Ageing

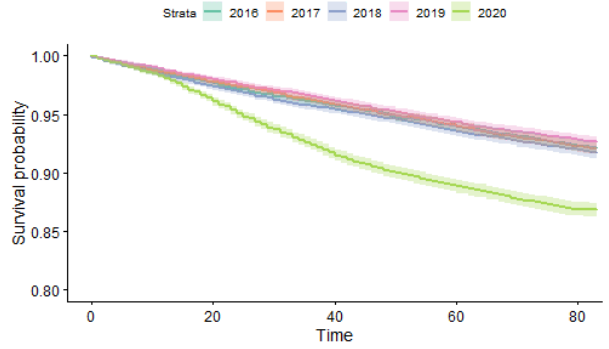
Volume 50, Issue 1
January 2021

Article Contents

The impact of COVID-19 on adjusted mortality risk in care homes for older adults in Wales, UK: a retrospective population-based cohort study for mortality in 2016–2020

Joe Hollinghurst ✉, Jane Lyons, Richard Fry, Ashley Akbari, Mike Gravenor, Alan Watkins, Fiona Verity, Ronan A Lyons

Age and Ageing, Volume 50, Issue 1, January 2021, Pages 25–31,
https://doi.org/10.1093/ageing/afaa207
Published: 19 September 2020 **Article history** ▾



Key points and findings:

- Routinely collected data can be used for rapid up-to-date analysis of mortality.
- Older people in care homes are vulnerable to the outbreaks of infectious disease.
- Increased mortality risk in care homes during the COVID-19 pandemic (2020) compared with previous years (2016–2019)

COVID-19

Vaccination programme and outcome evaluation

National Core Study – Data and Connectivity: COVID-19 Vaccines Pharmacovigilance (DaC-VaP)

- DaCVaP is a UK wide collaboration involving all of the nations and accessing data from across the UK in independent trusted research environments and platforms.
- Evaluating the uptake, safety and effectiveness of COVID-19 vaccinations.
- A team of researchers, public health analysts, public members and others work together to respond to policy relevant questions.
- Separate and pooled meta-analyses.

COVID-19

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Vaccination programme and outcome evaluation

THE LANCET

ARTICLES | VOLUME 397, ISSUE 10285, P1646-1657, MAY 01, 2021

Interim findings from first-dose mass COVID-19 vaccination roll-out and COVID-19 hospital admissions in Scotland: a national prospective cohort study

Eleftheria Vasileiou, PhD * • Prof Colin R Simpson, PhD * • Ting Shi, PhD * • Steven Kerr, PhD * • Utkarsh Agrawal, PhD • Ashley Akbari, MSc • et al. Show all authors • Show footnotes

Open Access • Published: April 23, 2021 • DOI: https://doi.org/10.1016/S0140-6736(21)00677-2 •

nature medicine

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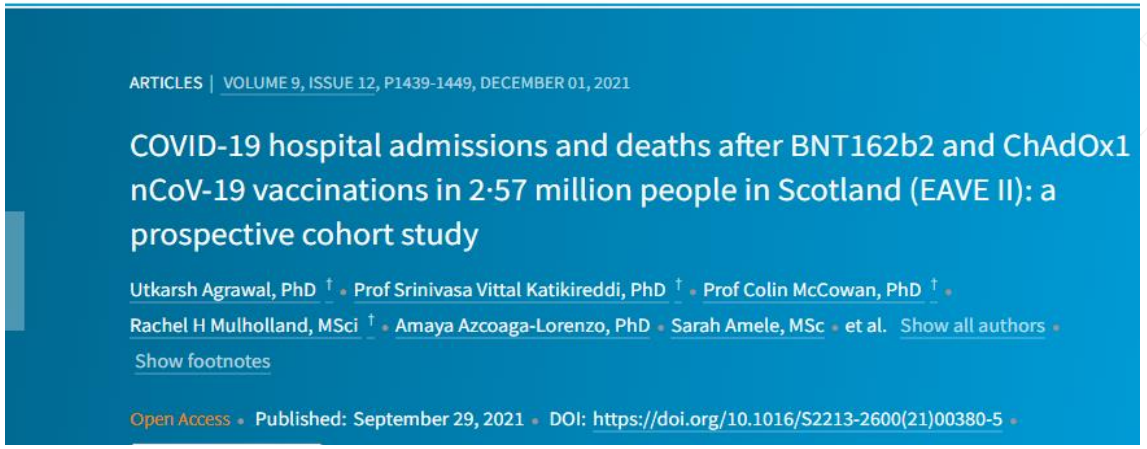
nature > nature medicine > articles > article

Article | Open Access | Published: 09 June 2021

First-dose ChAdOx1 and BNT162b2 COVID-19 vaccines and thrombocytopenic, thromboembolic and hemorrhagic events in Scotland

C. R. Simpson, T. Shi, E. Vasileiou, S. V. Katikireddi, S. Kerr, E. Moore, C. McCowan, U. Agrawal, S. A. Shah, L. D. Ritchie, J. Murray, J. Pan, D. T. Bradley, S. J. Stock, R. Wood, A. Chuter, J. Beggs, H. R. Stagg, M. Joy, R. S. M. Tsang, S. de Lusignan, R. Hobbs, R. A. Lyons, F. Torabi, S. Bedston, M. O'Leary, A. Akbari, J. McMenamin, C. Robertson & A. Sheikh — Show fewer authors

THE LANCET
Respiratory Medicine



ARTICLES | VOLUME 9, ISSUE 12, P1439-1449, DECEMBER 01, 2021

COVID-19 hospital admissions and deaths after BNT162b2 and ChAdOx1 nCoV-19 vaccinations in 2·57 million people in Scotland (EAVE II): a prospective cohort study

Utkarsh Agrawal, PhD † • Prof Srinivasa Vittal Katikireddi, PhD † • Prof Colin McCowan, PhD † • Rachel H Mulholland, MSci † • Amaya Azcoaga-Lorenzo, PhD • Sarah Amele, MSc • et al. Show all authors • Show footnotes

Open Access • Published: September 29, 2021 • DOI: https://doi.org/10.1016/S2213-2600(21)00380-5 •

ELSEVIER

Public Health

Volume 203, February 2022, Pages 110-115

Original Research

Investigating the association between COVID-19 vaccination and care home outbreak frequency and duration

D.T. Bradley [a, b], S. Murphy [b], P. McWilliams [c], S. Arnold [a], S. Lavery [a], J. Murphy [a], S. de Lusignan [d], R. Hobbs [e], R.S.M. Tsang [d], A. Akbari [f], F. Torabi [g], J. Beggs [h], A. Chuter [h], T. Shi [i], E. Vasileiou [i], C. Robertson [j, k], A. Sheikh [i, h], H. Reid [a], D. O'Reilly [b]

COVID-19

Vaccination programme and outcome evaluation

Contents lists available at ScienceDirect

Vaccine

journal homepage: www.elsevier.com/locate/vaccine

Inequalities in coverage of COVID-19 vaccination: A population register based cross-sectional study in Wales, UK

Malorie Perry [a,b,*], Ashley Akbari [b], Simon Cottrell [a], Michael B. Gravenor [b], Richard Roberts [a], Ronan A. Lyons [b], Stuart Bedston [b], Fatemah Torabi [b], Lucy Griffiths [b]

Key points and findings:

- First study to examine equality in coverage of COVID-19 vaccination across Wales.
- Overall vaccination coverage for COVID-19 vaccination is high.
- Vaccination coverage is lower in more deprived areas and among ethnic minority groups.
- First vaccine study to use census linkage providing high data coverage on ethnic group.
- Closing the vaccination equity gap before further waves of infection should be a priority.

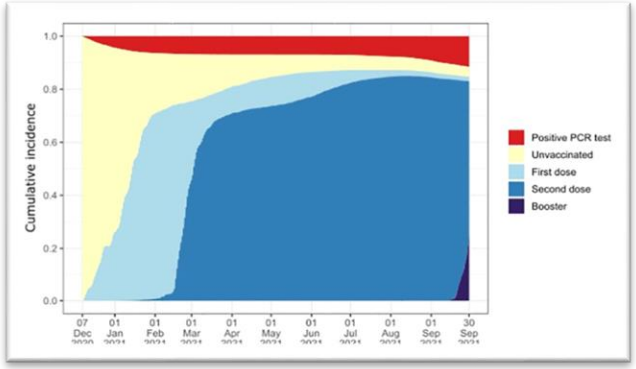
Contents lists available at ScienceDirect

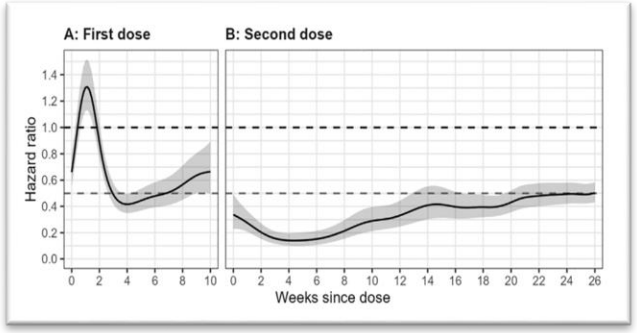
Vaccine

journal homepage: www.elsevier.com/locate/vaccine

COVID-19 vaccine uptake, effectiveness, and waning in 82,959 health care workers: A national prospective cohort study in Wales

Stuart Bedston [a,1,*], Ashley Akbari [a,1], Christopher I. Jarvis [b], Emily Lowthian [a], Fatemeh Torabi [a], Laura North [a], Jane Lyons [a], Malorie Perry [c], Lucy J. Griffiths [a], Rhiannon K. Owen [a], Jillian Beggs [d], Antony Chuter [d], Declan T. Bradley [e], Simon de Lusignan [f], Richard Fry [a], F.D. Richard Hobbs [g], Joe Hollinghurst [a], Srinivasa Vittal Katikireddi [g], Siobhán Murphy [e], Dermot O'Reily [e], Chris Robertson [h], Ting Shi [i], Ruby S.M. Tsang [f], Aziz Sheikh [j,2], Ronan A. Lyons [a,2]





Key points and findings:

- 90% vaccine uptake by 30 Sept 2021, but uptake in more deprived areas was lower.
- BNT162b2 was 85% effective after 2 weeks from second dose and 52% from 22 weeks.
- Equitable effectiveness of BNT162b2 after second dose.

COVID-19

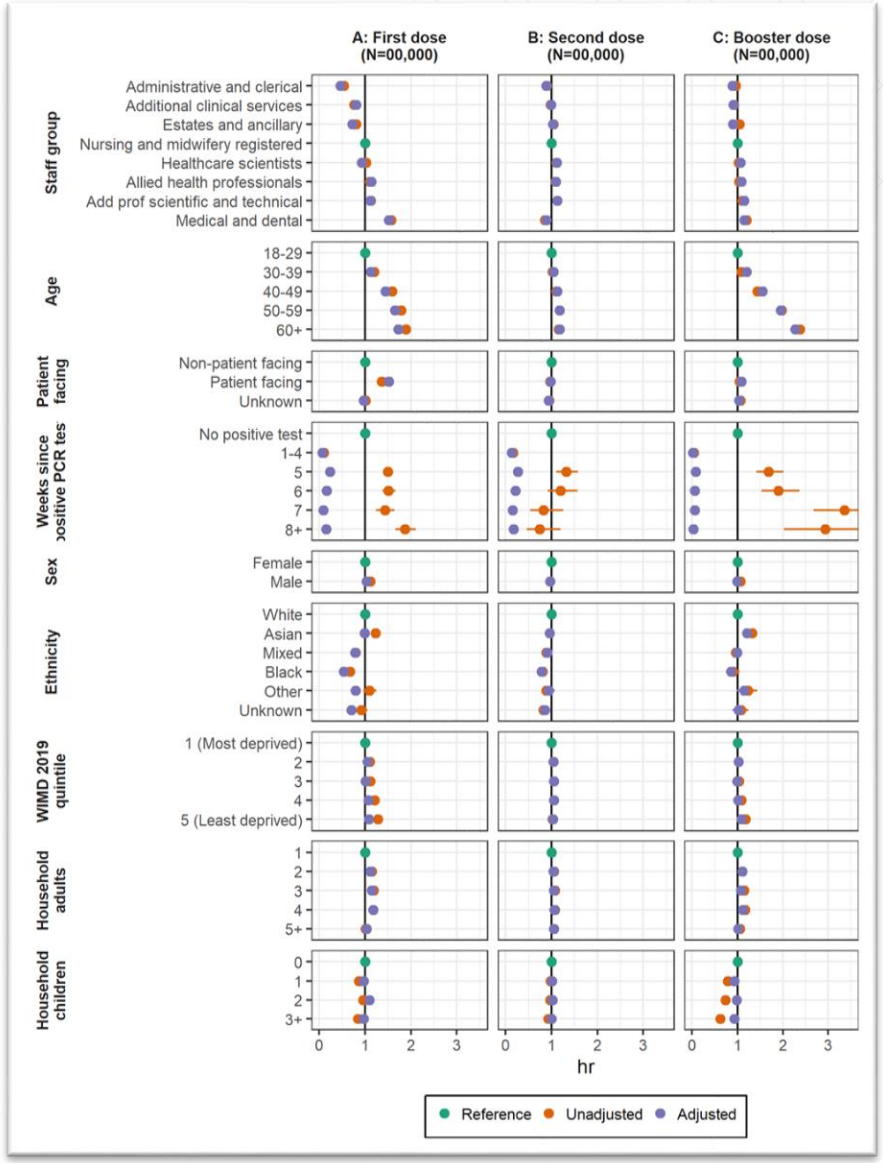
Vaccination programme and outcome evaluation

Currently being looked at…

Uptake of COVID-19 Booster Doses by Health Care Workers

This is work in progress but we have found that:

- Association with staff role has diminished from first dose to booster.
- Association with age has increased.



COVID-19

Impact on children and young people and schools

Population birth outcomes in 2020 and experiences of expectant mothers during the COVID-19 pandemic: a 'Born in Wales' mixed methods study using routine data

Hope Jones, Mike Seaborne, Laura Cowley, David Odd, Shantini Paranjothy, Ashley Akbari, Sinead Brophy

doi: https://doi.org/10.1101/2021.08.23.21262209

COVID-19 mitigation measures in primary schools and association with infection and school staff wellbeing: an observational survey linked with routine data in Wales, UK

Emily Marchant, Lucy Griffiths, Tom Crick, Richard Fry, Joe Hollinghurst, Michaela James, Laura Cowley, Hoda Abbasizanjani, Fatemeh Torabi, Dan Thompson, Jonathan Kennedy, Ashley Akbari, Michael Gravenor, Ronan A Lyons, Sinead Brophy

doi: https://doi.org/10.1101/2021.08.20.21262349

Key points and findings:

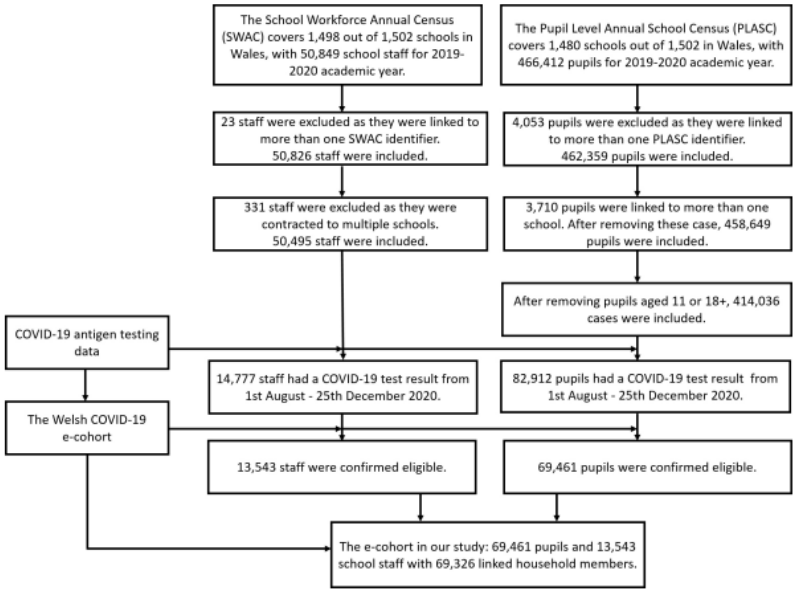
- A national level study of transmission between pupils and staff in a school environment during the SARS-CoV-2 pandemic.
- Schools opening September–December 2020 was not associated with an increased subsequent risk of testing positive in staff.
- Pupils were found to be at increased risk of testing positive, following cases appearing within their own year group.

Open access Original research

BMJ Paediatrics Open

Staff–pupil SARS-CoV-2 infection pathways in schools in Wales: a population-level linked data approach

Daniel A Thompson, Hoda Abbasizanjani, Richard Fry, Emily Marchant, Lucy Griffiths, Ashley Akbari, Joe Hollinghurst, Laura North, Jane Lyons, Fatemeh Torabi, Gareth Davies, Mike B Gravenor, Ronan A Lyons



COVID-19

HDRUK
Health Data Research UK

Cardiovascular disease (CVD) & phenotypes – BHF Data Science consortium

Association of COVID-19 vaccines ChAdOx1 and BNT162b2 with major venous, arterial, or thrombocytopenic events: whole population cohort study in 46 million adults in England

CVD-COVID-UK consortium, Writing committee, William N Whiteley, Samantha Ip, Jennifer A Cooper, Thomas Bolton, Spencer Keene, Venexia Walker, Rachel Denholm, Ashley Akbari, Efosa Omigie, Sam Hollings, Emanuele Di Angelantonio, Spiros Denaxas, Angela Wood, Jonathan A C Sterne, Cathie Sudlow

doi: https://doi.org/10.1101/2021.08.18.21262222

Association of COVID-19 with arterial and venous vascular diseases: a population-wide cohort study of 48 million adults in England and Wales

Rochelle Knight, Venexia Walker, Samantha Ip, Jennifer A Cooper, Thomas Bolton, Spencer Keene, Rachel Denholm, Ashley Akbari, Hoda Abbasizanjani, Fatemeh Torabi, Efosa Omigie, Sam Hollings, Teri-Louise North, Renin Toms, Emanuele Di Angelantonio, Spiros Denaxas, Johan H Thygesen, Christopher Tomlinson, Ben Bray, Craig J Smith, Mark Barber, George Davey Smith, Nishi Chaturvedi, Cathie Sudlow, William N Whiteley, Angela Wood, Jonathan A C Sterne, for the CVD-COVID-UK/COVID-IMPACT consortium and the Longitudinal Health and Wellbeing COVID-19 National

doi: https://doi.org/10.1101/2021.11.22.21266512

Understanding COVID-19 trajectories from a nationwide linked electronic health record cohort of 56 million people: phenotypes, severity, waves & vaccination

Johan H Thygesen, Christopher Tomlinson, Sam Hollings, Mehrdad Mizani, Alex Handy, Ashley Akbari, Amitava Banerjee, Jennifer Cooper, Alvina Lai, Ken Li, Bilal Mateen, Naveed Sattar, Reecha Sofat, Ana Torralbo, Honghan Wu, Angela Wood, Jonathan A C Sterne, Christina Pagel, William Whiteley, Cathie Sudlow, Harry Hemingway, Spiros Denaxas

doi: https://doi.org/10.1101/2021.11.08.21265312

RESEARCH: SPECIAL PAPER

OPEN ACCESS

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FAST TRACK

Linked electronic health records for research on a nationwide cohort of more than 54 million people in England: data resource

Angela Wood,[1,2,3,4,5] Rachel Denholm,[6,7,8] Sam Hollings,[9] Jennifer Cooper,[6,7,8] Samantha Ip,[1] Venexia Walker,[6,10,11] Spiros Denaxas,[5,12,13,14] Ashley Akbari,[15] Amitava Banerjee,[16,13,17] William Whiteley,[18,19] Alvina Lai,[13] Jonathan Sterne,[6,7,8] Cathie Sudlow,[18,20,21] on behalf of the CVD-COVID-UK consortium

COVID-19

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Social workers, PROMS, Epilepsy, Surgery… *and more to come…*

International Journal of Population Data Science

IJPDS International Journal of Population Data Science

Swansea University Prifysgol Abertawe

Journal Website: www.ijpds.org

Establishing the impact of COVID-19 on the health outcomes of domiciliary care workers in Wales using routine data: a protocol for the OSCAR study

Fiona Lugg-Widger[1*], Rebecca Cannings-John[1], Ashley Akbari[2,3], Lucy Brookes-Howell[1], Kerenza Hood[1], Ann John[2,3,6], Hywel Jones[4], Hayley Prout[1], Simon Schoenbuchner[1], Daniel Thomas[5], and Michael Robling[1,6]

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RESEARCH ARTICLE

Cohort profile: The UK COVID-19 Public Experiences (COPE) prospective longitudinal mixed-methods study of health and well-being during the SARSCoV2 coronavirus pandemic

Rhiannon Phillips, Khadijeh Taiyari, Anna Torrens-Burton, Rebecca Cannings-John, Denitza Williams, Sarah Peddle, Susan Campbell, Kathryn Hughes, David Gillespie, Paul Sellars, Bethan Pell, Pauline Ashfield-Watt, Ashley Akbari, Catherine Heidi Seage, Nick Perham, Natalie Joseph-Williams, Emily Harrop, James Blaxland, Fiona Wood, Wouter Poortinga, Karin Wahl-Jorgensen, Delyth H. James, Diane Crone, Emma Thomas-Jones, Britt Hallingberg [view less]

Published: October 13, 2021 • https://doi.org/10.1371/journal.pone.0258484

seizure
European Journal of Epilepsy
The Official Journal of epilepsy action

SHORT COMMUNICATION | VOLUME 94, P39-42, JANUARY 01, 2022

Epilepsy mortality in Wales during COVID-19

Helen Daniels • Arron S Lacey • David Mikadze • Ashley Akbari • Beata Fonferko-Shadrach • Joe Hollinghurst • Ronan A Lyons • Mark I Rees • Inder MS Sawhney • Robert H Powell • Michael P Kerr • W Owen Pickrell • Show less

Open Access • Published: November 27, 2021 • DOI: https://doi.org/10.1016/j.seizure.2021.11.017 •

BJA
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CLINICAL INVESTIGATION | VOLUME 127, ISSUE 2, P205-214, AUGUST 01, 2021

Mortality after surgery with SARS-CoV-2 infection in England: a population-wide epidemiological study

T.E.F. Abbott † • A.J. Fowler † • T.D. Dobbs • J. Gibson • T. Shahid • P. Dias • A. Akbari • I.S. Whitaker • R.M. Pearse • Show less • Show footnotes

Published: June 10, 2021 • DOI: https://doi.org/10.1016/j.bja.2021.05.018

If your interested in finding out more information, please feel free to contact the team.

Ashley Akbari
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(@AshleyAkbari)

Thank you for listening!

We would like to acknowledge all data providers who enable SAIL to make anonymised data available for research.

#datasaveslives

Improving our health through data science

Understanding Patient Data

This work uses data provided by patients and collected by the NHS as part of their care and support.

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