

**UK STATISTICS AUTHORITY**

**National Statistician's Expert User Advisory Group**

**Draft Minutes  
Monday 10 February 2025  
Via Videoconference**

**Members Present**

Professor David Hand (Chair)  
Professor Paul Allin  
Dame Kate Barker  
Helen Boaden  
Sarah Cumbers  
Professor Sir Ian Diamond  
Ed Humpherson  
Phyllis MacFarlane  
Sarah Moore  
Guy Nason

**Additional Attendees**

Professor Ronan Lyons (for item 2)  
June Bowman

**Secretariat**

Kerri Gourley  
Tom Marsh

**Apologies**

Eva Aizpurua  
Professor Paul Boyle

## **1. Minutes and matters arising**

- 1.1 Members were welcomed to the meeting. Apologies were received from Prof. Paul Boyle and Eva Aizpurua. The minutes of the meeting on 12 December were approved and actions were updated.

## **2. Discussion with User (Prof. Ronan Lyons) [NSEUAC(25)01]**

- 2.1 Prof Ronan Lyons, Clinical Professor of Public Health at Swansea University joined the meeting to reflect on his perspective as a user of statistics. The following key points were made:
- i. Ronan outlined the various research projects he had been involved in, particularly his role as the Co-Director for the SAIL Data Bank, and highlighted the official statistics relevant to his role;
  - ii. some geographical limitations to the statistics were mentioned, where releases were only for one geographical area, for example England only, without breakdowns for other individual devolved administrations;
  - iii. the Office for National Statistics (ONS) producing more modelled data down to Lower Layer Super Output Area would be advantageous as well as having more national level statistics and statistics linked to the SAIL Data Bank;
  - iv. the ONS was working to harmonise statistics across all nations of the UK, but resource limitations were a challenge; and
  - v. it was agreed that the ONS would be able to learn from SAIL's experience of acquiring data from government departments and a further conversation would take place to understand SAILs requirements on linked, national level statistics.

## **3. UK Statistics Assembly Report [NSEUAC(25)02]**

- 3.1 Prof. David Hand presented the draft UK Statistics Assembly Report, and the following key points were made:
- i. it was agreed that a breakdown of delegates by sector would be produced and included in the report and the report also recommended that the technology for online participation would need to be improved for a future Assembly;
  - ii. members discussed the extent to which the edited and anonymised notes and the Slido comments from the Assembly could be included in the report. Despite the rich content of these notes, the committee felt that the report must honour a statement in the participants' pack that the notes and comments would not be visible to other participants, but only to the 'Assembly team', and so should not be included in the report;
  - iii. how to prioritise the lists of items in the subsections of the 'conclusions and recommendations' section of the report, aligning this with the Lievesley Review was discussed, ensuring that the list was concise enough for the UK Statistics Authority to digest;
  - iv. topics included in recommendations would consider not only the weighting of opinion, but what would make the greatest long-term impact and the report should not give equal weight to all recommendations;
  - v. it would be important that the overall flavour of the discussions in the sessions was captured and reviewed by the chairs of each session where possible;
  - vi. the ONS' Spending Review submission to HM Treasury would include recommendations from the Assembly report so it would be important to reflect the Assembly's views on high-level prioritisation;

- vii. the report would set out three to four key recommendations from the National Statistician's Expert User Advisory Committee, but it was important that the UK Statistics Authority considered all recommendations in the report;
- viii. it was agreed that members of the Assembly Delivery Group would not be named within the report;
- ix. it was noted that the Assembly and the report would take account of implications for the wider nonofficial statistics system and not merely the ONS;
- x. it was also agreed that chairs' of the sessions comments would be fed into the report; and
- xi. iterations would be made to the report and would be published on the UK Statistics Authority Website after the February meeting of UK Statistics Authority Board.

#### **4. Any other business**

4.1 The next meeting was due to take place in London on 5 June 2025.

The report has been published since the meeting and can be found at:

<https://uksa.statisticsauthority.gov.uk/publication/independent-report-on-the-2025-uk-statistics-assembly/>.

## UK STATISTICS AUTHORITY

### NATIONAL STATISTICIAN'S EXPERT USER ADVISORY COMMITTEE

#### Agenda Monday 10 February 2025, 13:00-15:00 MS Teams

**Chair:** Prof. David Hand

**Apologies:** Paul Boyle

Timing	Agenda item	
1 13:00-13:10 (10 mins)	Welcome, previous minutes and actions	Meeting of 12.12.2024 Prof. David Hand
2 13:10-13:55 (45 mins)	Discussion with User	NSEUAC(25)01 Prof. Ronan Lyons
3 13:55-14:55 (60 mins)	Report from the UK Statistics Assembly	NSEUAC(25)02 Prof. David Hand
4 14:55-15:00 (5 mins)	Any Other Business	Prof. David Hand

**Next Meeting: Thursday 5 June 2025**

# Reflections of an academic on the utility of National Statistics for evaluation of policies and interventions

Professor Ronan Lyons OBE, FMedSci, FLSW, MAE, FFPH, MD

National Statistician's Expert User Advisory Committee, 10<sup>th</sup> February 2025



## A little about me

- Born Dublin, Ireland
- Studied medicine at Trinity College Dublin and Mercer's Hospital
- Tried a bit of surgery but didn't have the patience for repeat activities
- Various hospital jobs – enjoyed ED most
- Introduced to epidemiology in a TB Hospital
- Trained in Public Health in Ireland and Infectious Disease epidemiology in Wales
- 1992 - colleague suggested a year job in Swansea as NHS Public Health Consultant
- 1998 - published a lot and Stephen Palmer asked me to join Cardiff University
- 2005 – transferred to Swansea University Medical School to avoid driving
- 2006 – wrote GHIRN grant that led to the SAIL Databank
- 2007 – Co-Director of SAIL
- 2010-...Director, co-Director of multiple UKRI, DH and WG funded centres and programmes and international collaborations
- Never bored!

## All about Team Science



## SAIL Databank: Summary slide

- Built from the ground up as a safe, legal, social acceptable solution to data linkage and data sharing
- Underpinned by world-leading technical infrastructure (SeRP) - 28 platforms
- “No data leaves” model, keeping data under control at all times
- Highly automated, highly efficient, highly secure, completely trustworthy
- Creating unsurpassed research-ready linked data resources for both research community and public sector analytical teams
- SAIL is not limited to Welsh data but supports many UK and international projects

## Privacy by design

- 1) Data sharing agreements and secure transfer
- 2) Reliable matching process
- 3) Anonymisation and encryption
- 4) Disclosure control and risk mitigation
- 5) Data access controls and agreements
- 6) Scrutiny of data use proposals and results
- 7) External verification of compliance with IG

Safe Projects  
Safe People  
Safe Data  
Safe Settings  
Safe Outputs

The 'Five Safes': a framework for planning, designing and evaluating data access solutions (Felix Ritchie)

## Information Governance

**SAIL takes an integrated approach to Information Governance by combining:**

- Robust data protection measures built into our technological architecture
- Anonymisation of data by trusted third party
- Independent review of proposals for data utilisation by Information Governance Review Panel (IGRP)
- Strict permissions and data access arrangements



## Stakeholder & Public Engagement

### The SAIL Consumer Panel

- SAIL Databank has a long standing Consumer Panel, established in 2011
- It actively recruits and is involved in all aspects of SAIL, from bids to IGRP to dissemination and impact



Public Health Wales workshop - Feb 2019

## Individual and environmental data linkage- household, care homes, farms, schools – Richard Fry

### Do home modifications reduce care home admissions for older people? A matched control evaluation of the Care & Repair Cymru service in Wales

Joe Hollinghurst, Richard Fry, Ashley Akbari, Alan Watkins, Neil Williams, Sarah Hillcoat-Nallétamby, Ronan A Lyons, Andrew Clegg, Sarah E Rodgers

*Age and Ageing*, Volume 49, Issue 6, November 2020, Pages 1056–1061,  
<https://doi.org/10.1093/ageing/afaa158>

Published: 18 September 2020 Article history



Public Health  
Volume 189, December 2020, Pages 37–47



Original Research

### Adverse childhood experiences during childhood and academic attainment at age 7 and 11 years: an electronic birth cohort study

A. Evans, K. Hardcastle, A. Bandyopadhyay, D. Farewell, A. John, R.A. Lyons, S. Long, M.A. Bellis, S. Paranjthy



Volume 186, Issue 4  
15 August 2017

Article Contents

### Improving Mental Health Through the Regeneration of Deprived Neighborhoods: A Natural Experiment

James White, Giles Greene, Daniel Farewell, Frank Dunstan, Sarah Rodgers, Ronan A. Lyons, Ioan Humphreys, Ann John, Chris Webster, Ceri J. Phillips ...

Show more

*American Journal of Epidemiology*, Volume 186, Issue 4, 15 August 2017, Pages 473–480, <https://doi.org/10.1093/aje/kwx086>

Published: 11 July 2017 Article history

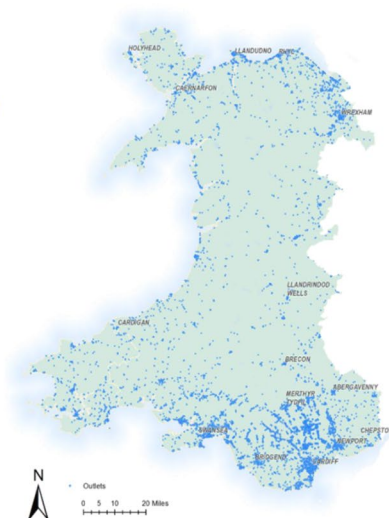




## CHALICE

- Linkage of alcohol outlet opening and closing over 7 years from 22 local authorities at household level with health and police crime data
- Natural experiment in relationship between changing exposure and outcomes
- 2.5 billion GIS density calculations
  - Modelled access by outlet type
    - 10 minute walk
    - 10 minute drive
  - Spatio-temporal interaction gravity model
    - 2.5 billion calculations

**Changes in walking distance related to admissions from alcohol related conditions, injury and violent crime**



## Counter-intuitive findings in evaluation of an air pollution intervention



Effects of an air pollution personal alert system on health service usage in a high-risk general population: a quasi-experimental study using linked data

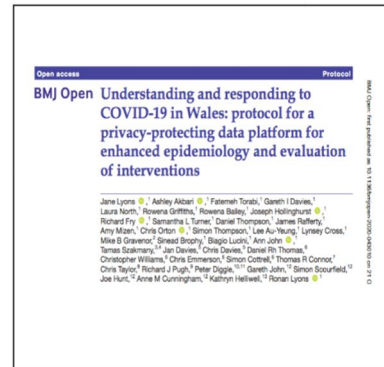
R A Lyons,<sup>1</sup> S E Rodgers,<sup>1</sup> S Thomas,<sup>2</sup> R Bailey,<sup>3</sup> H Brunt,<sup>4</sup> D Thayer,<sup>1</sup> J Bidmead,<sup>4</sup> B A Evans,<sup>1</sup> P Harold,<sup>5</sup> M Hooper,<sup>6</sup> H Snooks<sup>1</sup>

1. Environmental Health Open Access

- Evaluation of natural experiment of Govt advice
- Introduction of live air pollution alert system
- Port Talbot steel works
- Matched design: individuals with cardio-respiratory disorders who did/not take up interventions
- Difference in difference approach
- Unexpected results
  - 2x ED attendances in intervention
  - 4x emergency admissions for respiratory disorders
- Intervention cancelled

## COVI19 - total population data linkage

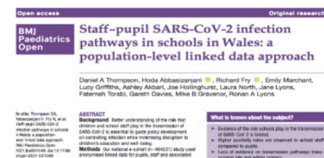
- Tracking 3.2M pop with multiple datasets in privacy protecting environment with public engagement
- Population demographic spine, including 2011 Census data and health, social care and education workforce
- Infection: antigen and antibody
- Viral subtypes
- Emergency department attendances
- Hospital outpatient and admissions
- Critical care dataset
- General practice
- All laboratory tests
- Deaths
- Longer term outcomes
- Vaccination
- Embedded trials and cohorts



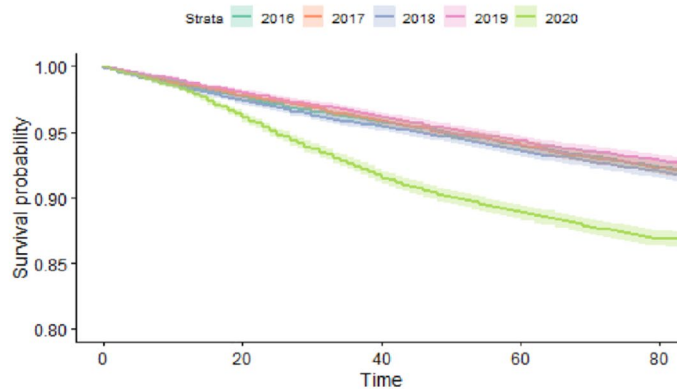
## School/Housing/Staff infection paper:



Odd ratios for exposure variable (within last 14 days)	M2 – Staff Outcomes (Odds Ratios per exposure count)	M3 – Pupil Outcomes
Count of cases within own household	39.9*** (35.01 – 45.38)	9.4*** (8.94 – 9.88)
Count of staff member cases within the linked school	0.92* (0.85 – 1.00)	0.97 (0.91 – 1.01)
Count of pupil cases within the linked school (non-year for M3)	0.98 (0.93 – 1.02)	0.92*** (0.89 – 0.94)
Count of pupil cases in the linked school within the same year group	-	1.12*** (1.08 – 1.15)
Count of cases in staff member's homes linked to the school.	1.09** (1.02 – 1.17)	1.17*** (1.12 – 1.22)
Count of cases in pupils' homes linked to the school.	1.04* (1.01 – 1.07)	1.08*** (1.06 – 1.10)
Signif. codes: 0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1		



## Care Home residents were badly affected early on



Hollinghurst J, Lyons J, Fry R, Akbari A, Gravenor M, Watkins A, Verity F, Lyons RA. 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. MedRxiv 2020.07.03.20145839. doi: <https://doi.org/10.1101/2020.07.03.20145839>.

## Desirable Health Indicator (DHI) using linked data

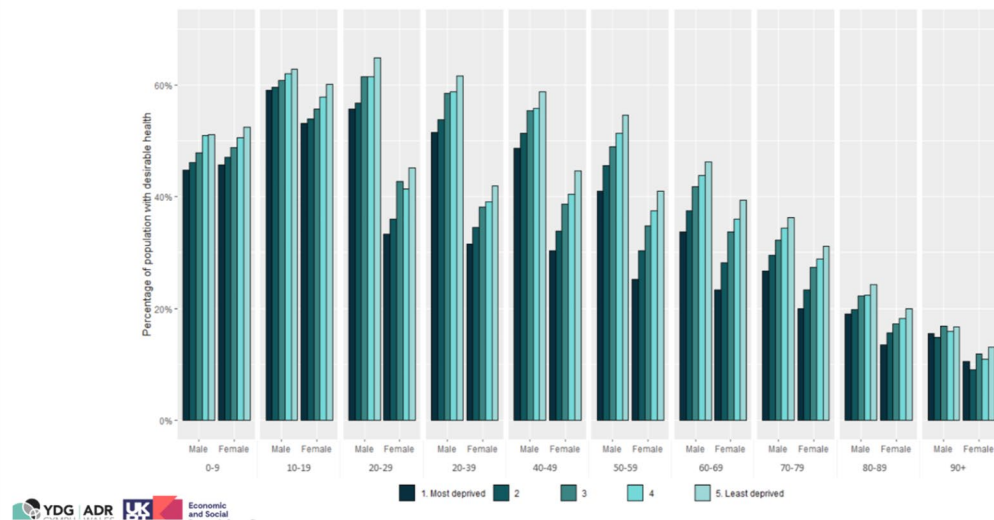
- Healthcare research faces challenges in developing metrics that resonate with the general public or policymakers.
- The DHI was created to address this gap, centred around New Year's wishes for survival and non-occurrence of undesired events in the following year for the population of Wales, UK.

### Aim

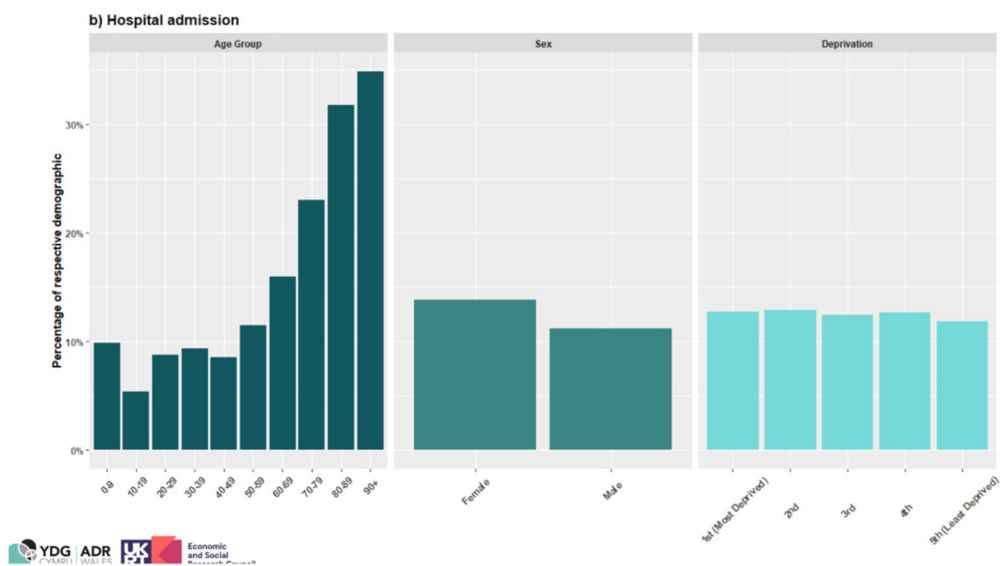
To create an annual, parsimonious, reproducible, temporally flexible, population-wide indicator which calculates the proportion of the population that survive and do not use the healthcare service for activities people would wish to avoid.

Not admitted, no ED attendance, not prescribed drugs for infection, mental health or pain

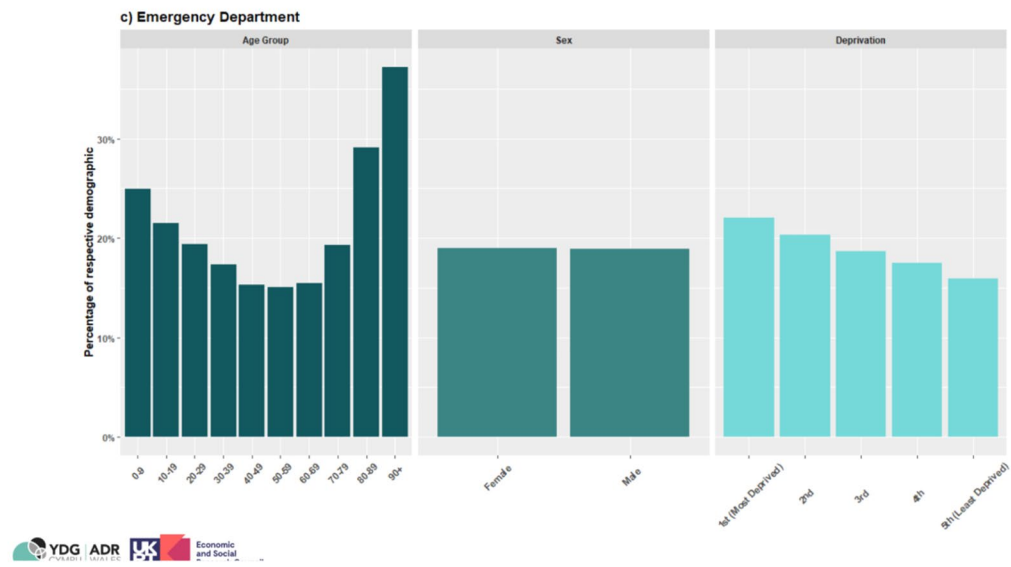
## Desirable health by age group, sex and deprivation quintiles, 2022



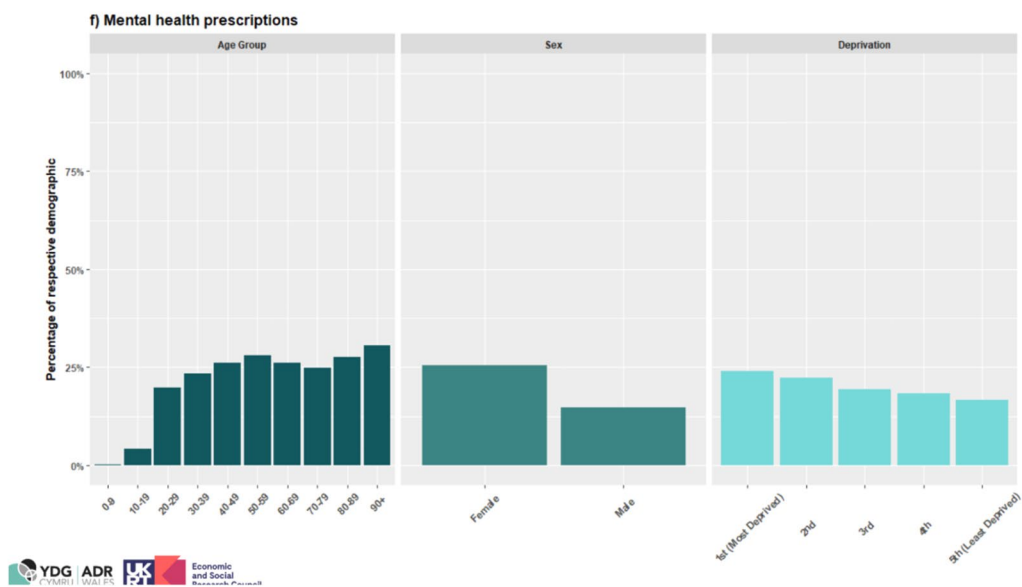
## Sub indicator presence by age group, sex and deprivation quintiles, 2022



### Sub indicator presence by age group, sex and deprivation quintiles, 2022

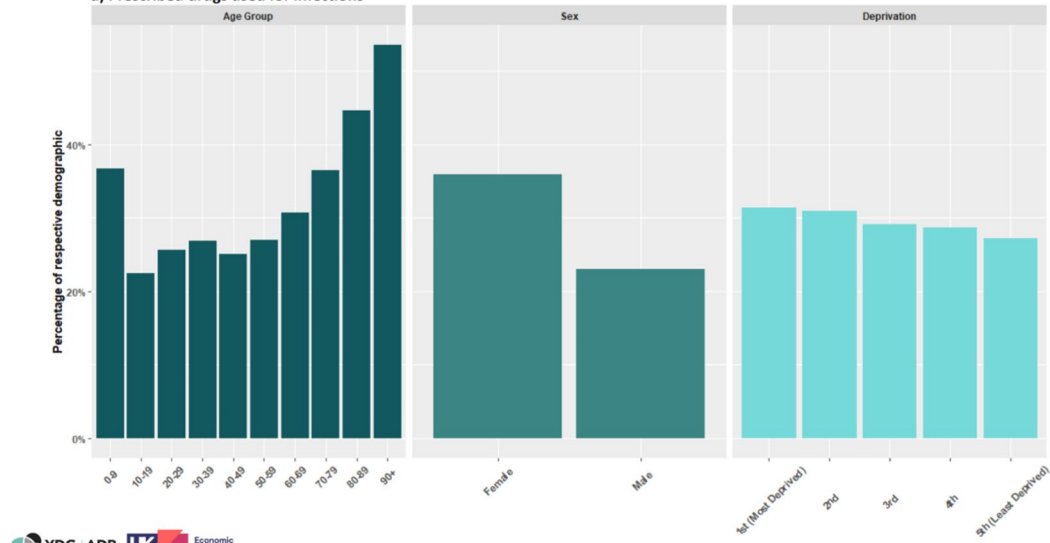


### Sub indicator presence by age group, sex and deprivation quintiles, 2022



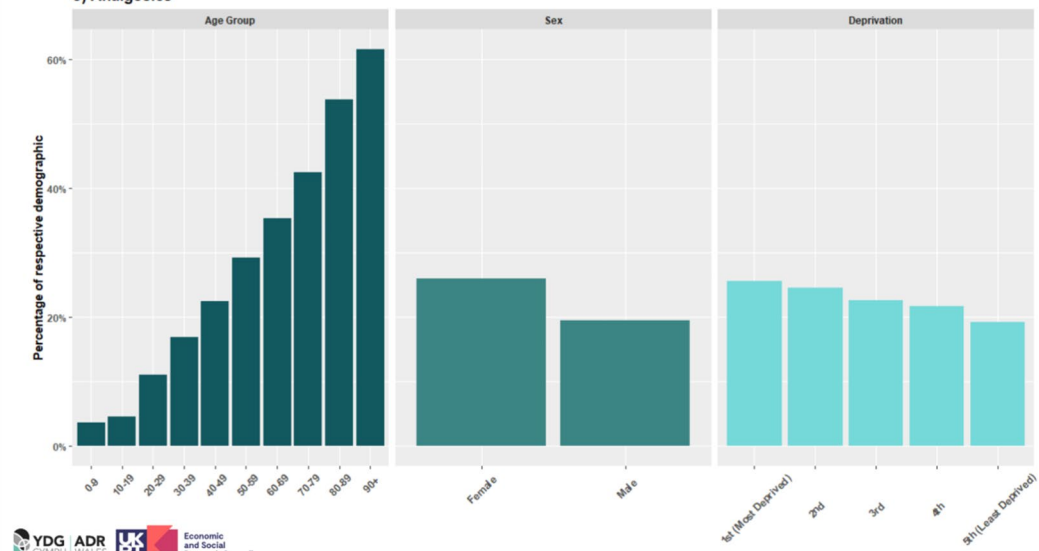
## Sub indicator presence by age group, sex and deprivation quintiles, 2022

d) Prescribed drugs used for infections



## Sub indicator presence by age group, sex and deprivation quintiles, 2022

e) Analgesics



## National Statistics

- 600 releases of them a year!
- Highlighted the one's I tend to use
- the UK's National Accounts (such as gross domestic product (GDP), national income and expenditure)
- the UK Balance of Payments
- **population, demography and migration statistics**
- government output and activity
- business output and activity
- prices statistics (such as consumer prices and producer prices)
- **the labour market (such as employment, unemployment and earnings)**
- **vital events statistics (such as births, marriages and deaths)**
- **social statistics (for example, about neighbourhoods and families)**
- **economic, societal and personal well-being**
- Am more interested in the 70 or so that go down to more local levels

## Most interesting National Statistics to me!

### Economy – employment, pay and income

Average income per person after taxes and direct benefits  
Modelled unemployment rate

### Housing

Net additions to housing stock – not the actual housing stock

### Education and skills – really helpful and have these individually linked in SAIL

School absences  
Early learning  
Achievement at different stages  
Number in further learning aged 19  
No qualifications

### Health and Wellbeing

Cigarette smoking prevalence – UK  
Self-reported wellbeing (UK): Anxiety, Life Satisfaction, Worthwhile, Happiness



## Some geographical limitations

Some indicators are only for England or bits of the UK

Healthy weight/obesity at reception age/age 6 and adults

### Disease and Preventable Mortality

Cancer Diagnoses (England only)

Preventable circulatory mortality (England, NI, Scotland)

Life Expectancy (England and Wales) by sex

### Local data

**“Because of small sample sizes and large confidence intervals, estimates for local authorities should not be ranked against each other. Estimates are intended for local authorities to compare over time and with other local authorities of a similar population size and structure”**



## My wish list

- I deal with lots of local and small area interventions, so
  - Would like modelled data down to LSOA level – plenty of predictors around, synthetic data....
- More national statistics linked data into the SAIL databank or national statistics from SAIL
  - Supported by Chief Statistician, Welsh Government/ADRUK
  - DWP/HMRC/VoA to go with success with MoJ and Police Data
- More insightful national statistics using linked rather than stand alone data
  - Should NS focus more on answering the why and not just the what?
- Since 'national' seems to sometimes mean England why are there no Wales only/first national statistics?
  - Especially where the data are better





## Report from the UK Statistics Assembly

[The final report was published after the meeting and can be found:  
[Independent report on the 2025 UK Statistics Assembly – UK Statistics Authority](#)]