## Unlocking data, improving lives

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Talking Methods seminar, 06 December 2022



## Plan for today

- Driving change in public service using data
- Connecting data around person, place or business
- What can your role be?



## **Strategic Context**

October 2020









**SCOTTISH BUDGET:** 

Scotland's

**AI Strategy** 

2021-22

A **Scotland** where everybody **thrives** 

Public Health Scotland's strategic plan 2020-23





FAIRER SCOTLAND
ACTION PLAN
FAIRER FOR ALL
ENDING CHILD POVERTY
YOUNG PEOPLE'S LIFE CHANCES
FAIRER WORKING LIVES
THRIVING THIRD AGE



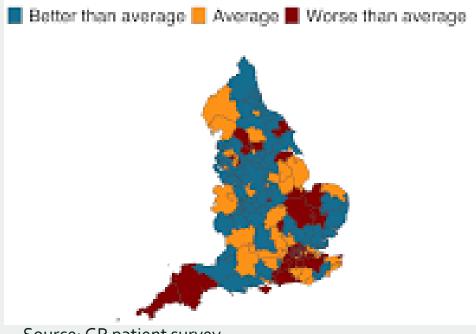
Research Data Scotland

### Access to GPs





#### Access to GPs within 48 hours

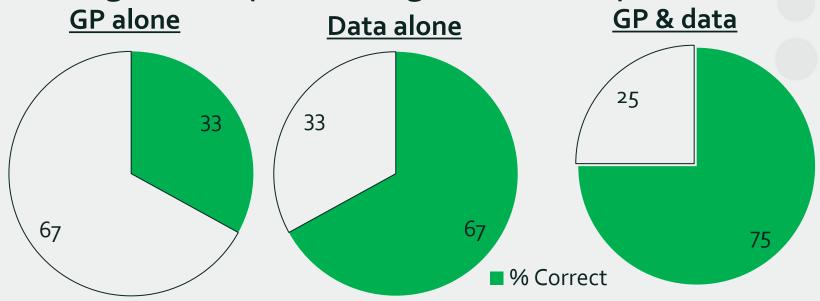


Source: GP patient survey



## High intensity hospital users

How good at predicting future hospital use?



Impacts – Higher quality, longer lives

- + net saving £100million,
- + identify new groups



### Covid data



SCOTLAND'S NATIONAL NEWSPAPER SINCE 1817

What it is really like to work for Donald Trump

Sport: Scots miss out on second night of triumph

'Absurd lack of transparency' in Scotland's Covid planning

5th November

Covid in Scotland: Nicola Sturgeon warns against complacency as R number drops

By PA news wire



19th November

## Coronavirus Scotland: How did we end up back in lockdown? Just follow the numbers



ANALYSIS

7 day positive cases in Scotland based on people tested between 3 May 2021 and 9 May 2021

7 day positive cases 7 day positive rate per 100,000 population 7 day test positivity rate
1,391 25.5 1.2%

Clicking on the area you are interested in on the map below will display a box with 7 day figures and population count for that neighbourhood.

day positive rate per 100,000 population

0 1 to 49 50 to 99 100 to 199 200 to 399 400+





#### Local Authorities in Scotland

Moray Glasgow City Clackmannanshire Midlothian East Renfrewshire East Ayrshire South Lanarkshire North Ayrshire Fast Dunbartonshir West Lothian Aberdeen City City of Edinbural Dundee City Renfrewshire South Avrshire West Dunbartonshire Perth & Kinross Angus

Aberdeenshire

Highland

Dumfries & Galloway

East Lothian





# Data linkage enabling change: Health and homelessness

Saving time, money and lives

Preventive intervention being trialled in NHS Scotland

Prediction using linked data

Prediction using linked data

Linking data across boundaries

Barriers for homeless people to accessing healthcare

Organising our own data

400,000 homeless in last 20 years



## How data helps public finances

£20 bn to Scottish economy

£1bn savings for public sector

High pay jobs in data science



## Opportunities and problems

#### Scotland's USP

- Our data
- Academic expertise
- Relevant areas: space/fintech/health
- Quickly assemble academic, public and private sectors
- Scale good for testing approaches,

#### Our challenges

- Takes too long
- Data to organise
- Make data visible
- Commercial model
- No one knows



## Research Data Scotland

Our <u>vision</u> is to promote and advance health and social wellbeing in Scotland by enabling access to public sector data about people, places and businesses,

## and

creating the conditions for collaborative datadriven research and innovation in the <u>public good</u>.



## Working with the public

We are committed to embedding public engagement as a vital part of the research we enable.

The public is broadly supportive of the use of data for research as long as three core conditions are met:

**Public** interest

Privacy & Security

Transparency & Trust



## Organisational priority

1.Faster and more efficient data access

2.Expand range of users

3.Develop new services

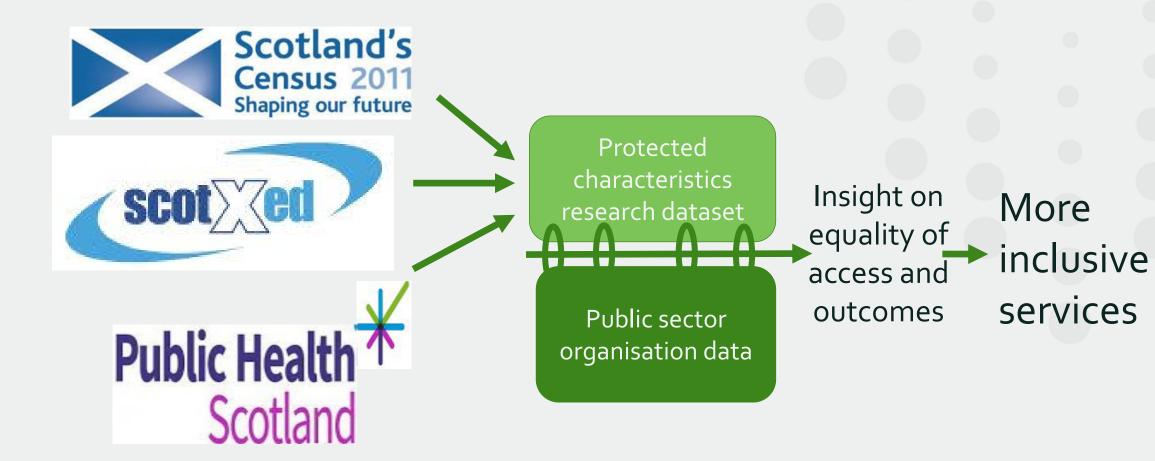
reate new research Widen data assets

Enhance public value

Demonstrate trustworthiness



## Better data on equalities





## Where data-driven innovation works best

- Repetitive tasks
- Preventing uneven outcomes
- Complex problems
- Empowering others



# Principles for data driven innovation: Discovery phase

Before starting, make sure you know:

- Your clear problem statement and aim
- What you are doing is ethical public support?
- What causes the problem and what would need to change
- Partners will work with you on this (if necessary)
- What data you need
- You can get the necessary data together
- How you would use this data
- That you are able to measure the effects



# Principles for data driven innovation: Alpha phase

- Developing the information product
  - Bringing the data together
  - Checking its quality
  - Analytics!
- Testing the info product does it deliver what you'd hoped?
- Developing the business change
  - Process mapping
  - Training
  - System redesign
- Testing the business change



## Conclusions

- Collaboration
- Communications
- Connecting data

Questions?

