Social data and the third sector: skills, tools and evidence

Workshop 3: Telling a story with data

Patty Doran
UK Data Service, University of Manchester
patty.doran@manchester.ac.uk
@Patty_NZ

Date: 2pm, Thursday July 16th, 2020

UK Data Service

What we are covering:

- Introduction
- Presentation – telling a story with data
- Quiz
- Demonstration – finding, exploring and downloading data
- Activity – in own time, 10 mins
- Feedback from activity
- Questions and discussion

Introduction

What is the UK Data Service?

- A comprehensive resource funded by the Economic and Social Research Council (ESRC)
- A single point of access to a wide range of secondary social science data
- Support, training and guidance

UKRI Economic and Social Research Council

Workshop objectives

- Promote UKDS data and resources to third sector users.
- Increase understanding of how data can be used within a variety of organisations and settings.
- Support you to access relevant data.
- Enable you to produce evidence by enhancing data knowledge and skills.

Social Surveys and the Third Sector

- Services: Improving outcomes for marginalised groups, reducing inequalities, providing a range of support to those most in need.
- Funding: relies on demonstrating the need and the potential impact of an intervention.
- UKDS: Social survey and census data can help provide context and demonstrate where services are most needed.
- Many third sector organisations are small, often there is no dedicated research team. Often it may fall to the people delivering the services to also provide the evidence of need and impact.

Our main data types

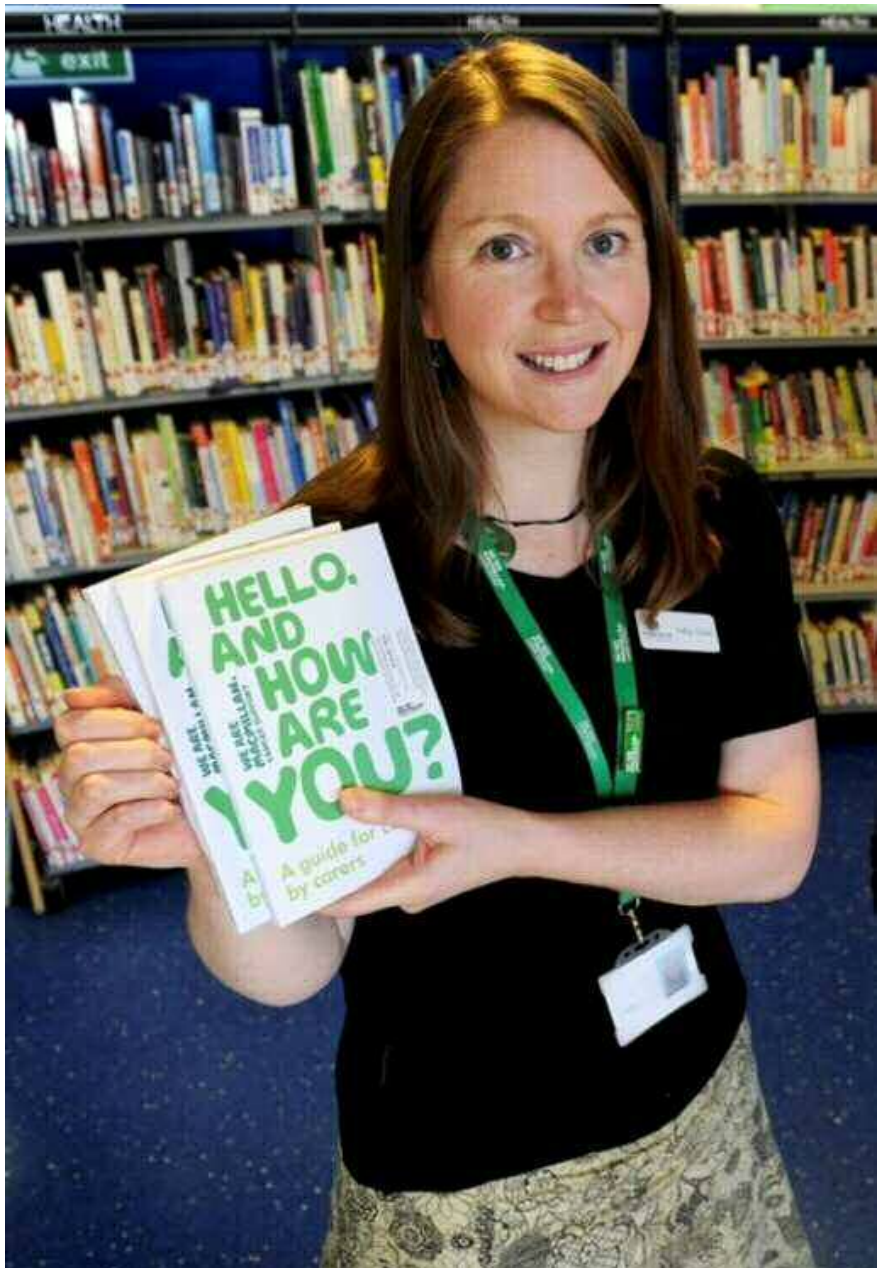
- **Aggregate Data**
  - International macrodata – country level time series data
  - Census tabular data
- **Microdata**
  - UK surveys (e.g. Labour Force Survey)
  - Census microdata
  - International comparative surveys (e.g. European Social Survey)
  - Business data
- **Other data**
  - Mixed methods data
  - Qualitative data

Telling a story with data

Why use social survey data?

- Large datasets, findings generalizable to the population
- Quantifiable evidence
- Explain a social problem
- Provides context and justify the need for services

Can be used alongside other evidence from project delivery.



Aim

To investigate the influence of emotional support on the quality of life of older cancer survivors.

Macmillan Cancer Support

- ‘Age old excuse’ campaign

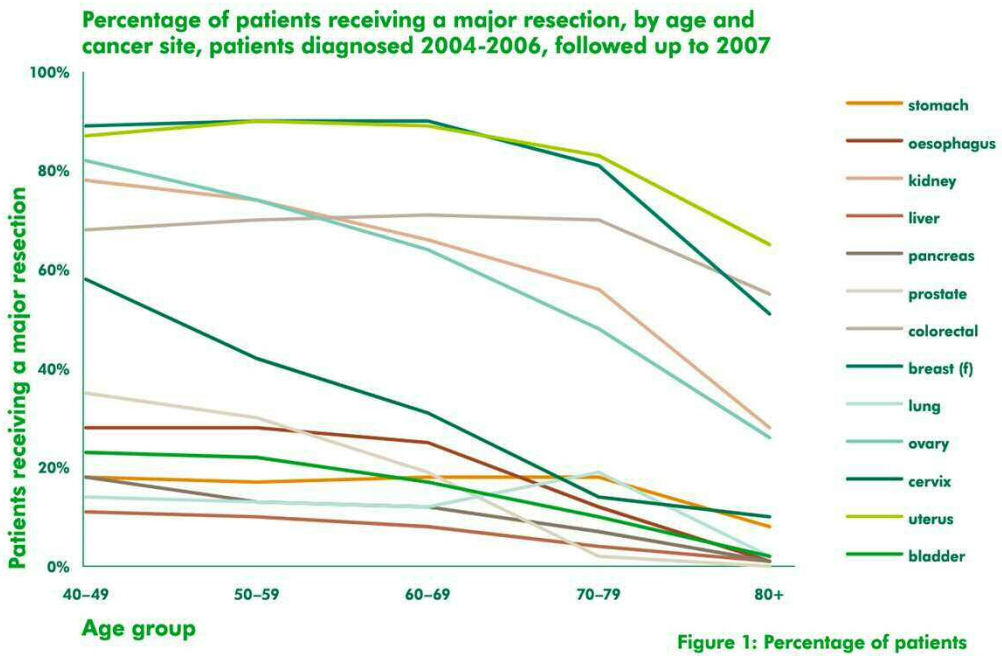


Figure 1: Percentage of patients with a record of a major resection, by age and cancer site, patients diagnosed 2004-2006, followed up to 2007[xiii]

THE AGE OLD EXCUSE: THE UNDER TREATMENT OF OLDER CANCER PATIENTS

WE ARE MACMILLAN. CANCER SUPPORT

Data

Coverage and methodology

Time period:	01 September 2011 - 30 November 2011
Dates of fieldwork:	January 2012 - May 2012
Country:	England
Spatial units:	No spatial unit
Observation units:	Individuals
Observation unit location:	National
Population:	Patients in England who had received inpatient/day patient treatment for cancer during September-November 2011.
Number of units:	71,793 cases (completed questionnaires)
Method of data collection:	Postal survey Three communications were despatched to patients: initial survey, and two reminders (to non-responders only).
Time dimensions:	Repeated cross-sectional study
Sampling procedures:	No sampling (total universe)
Kind of data:	Numeric

National Cancer Patient Experience Survey, 2011-2012

Details | Documentation | Resources | Access data

Details

Title:	National Cancer Patient Experience Survey, 2011-2012
Study number (SN):	7134
Access:	These data are safeguarded
Persistent identifier (DOI):	10.5255/UKDA-SN-7134-1
Series:	National Cancer Patient Experience Survey
Principal investigator(s):	Department of Health

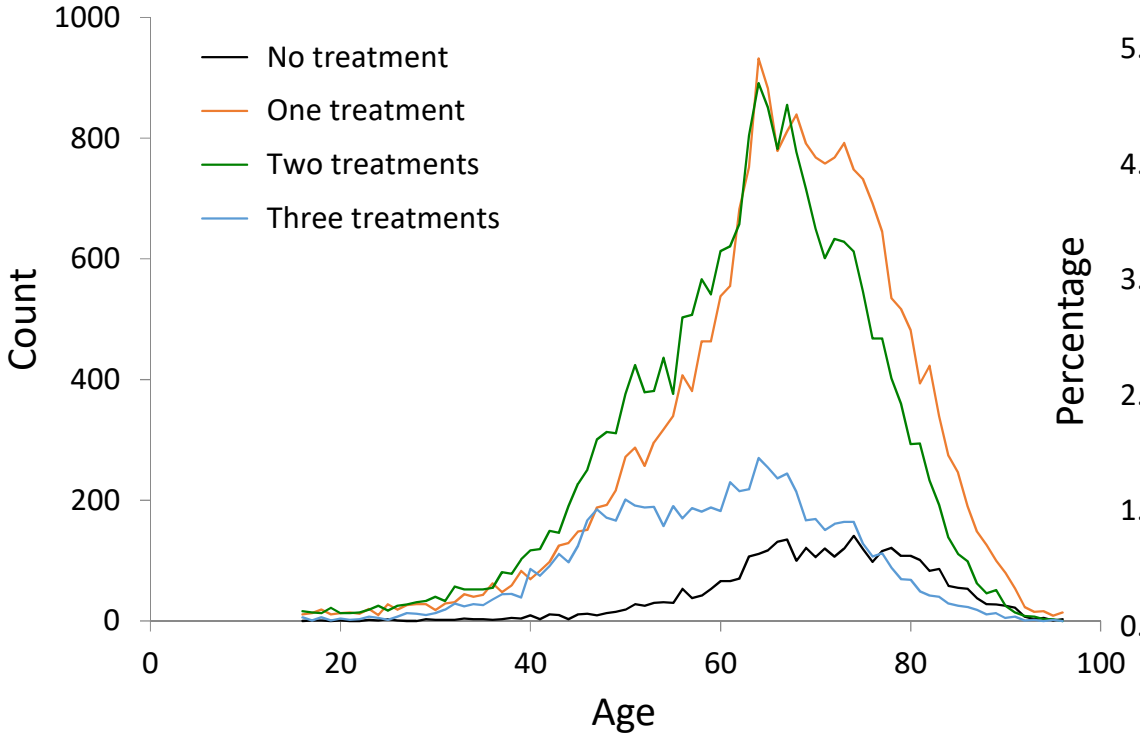
Sponsors and contributors

Citation and copyright

The citation for this study is:

Department of Health. (2012). *National Cancer Patient Experience Survey, 2011-2012*. [data collection]. UK Data Service. SN: 7134, http://doi.org/10.5255/UKDA-SN-7134-1

Findings



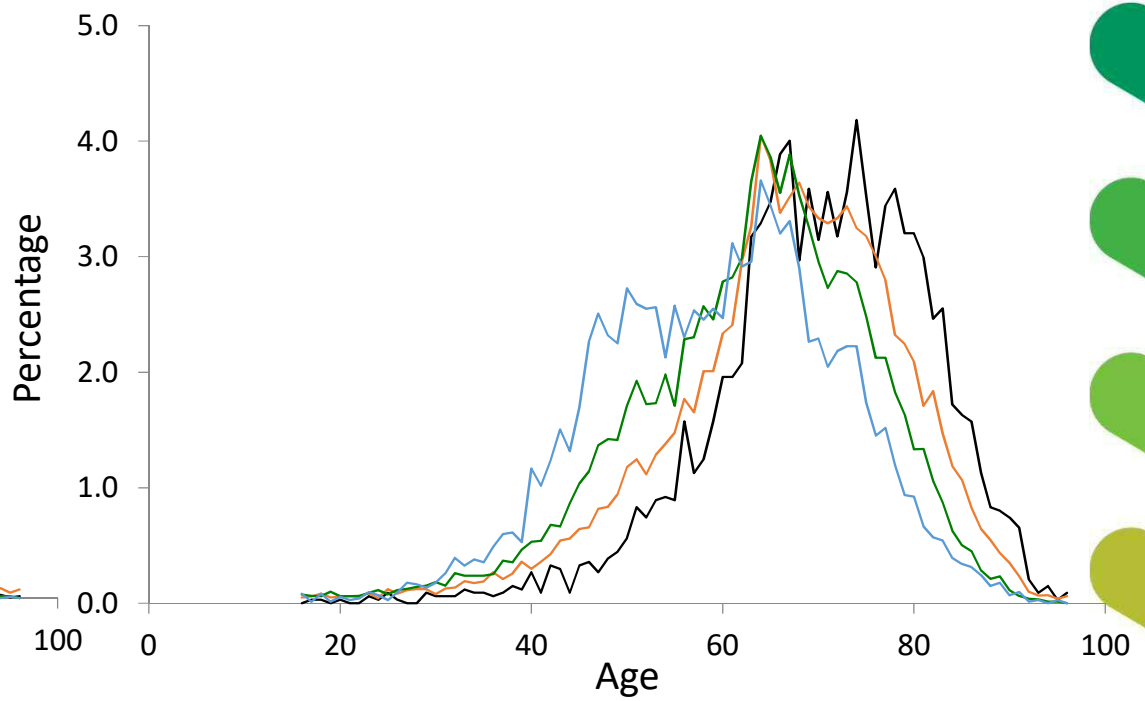


Figure: Age distribution by treatment intensity – by number of people, and by percentage of treatment catergory

Independent Age

Home » Blog » Putting older people in focus during COVID-19

Putting older people in focus during COVID-19

Thu, 30 April 2020

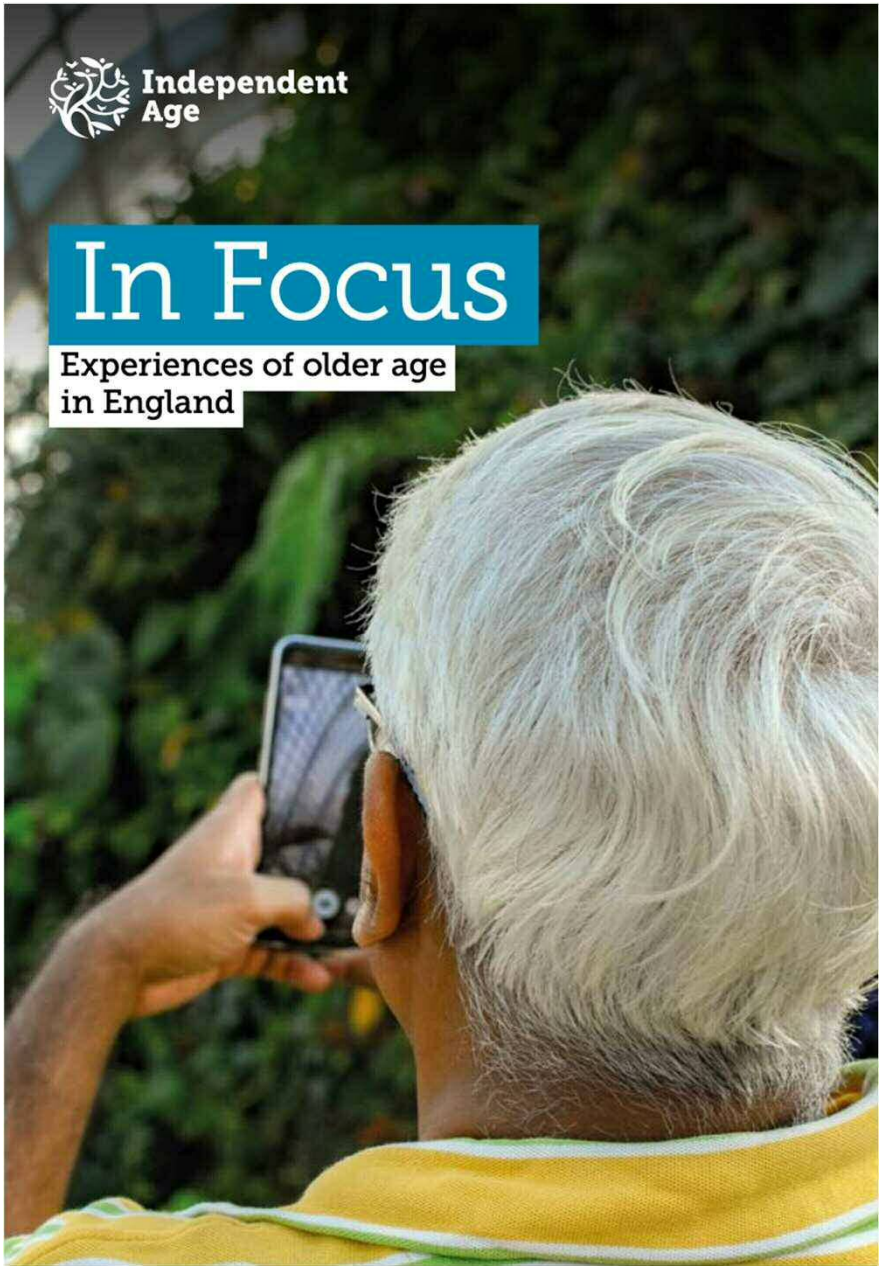
Morgan Vine

Head of Policy and Influencing

@MorganVine_

National Voices

‘This project set out to explore the reality of life for older people whose voices can be less often heard in debates about ageing, and what is important for people in this age group.’



Mixed methods

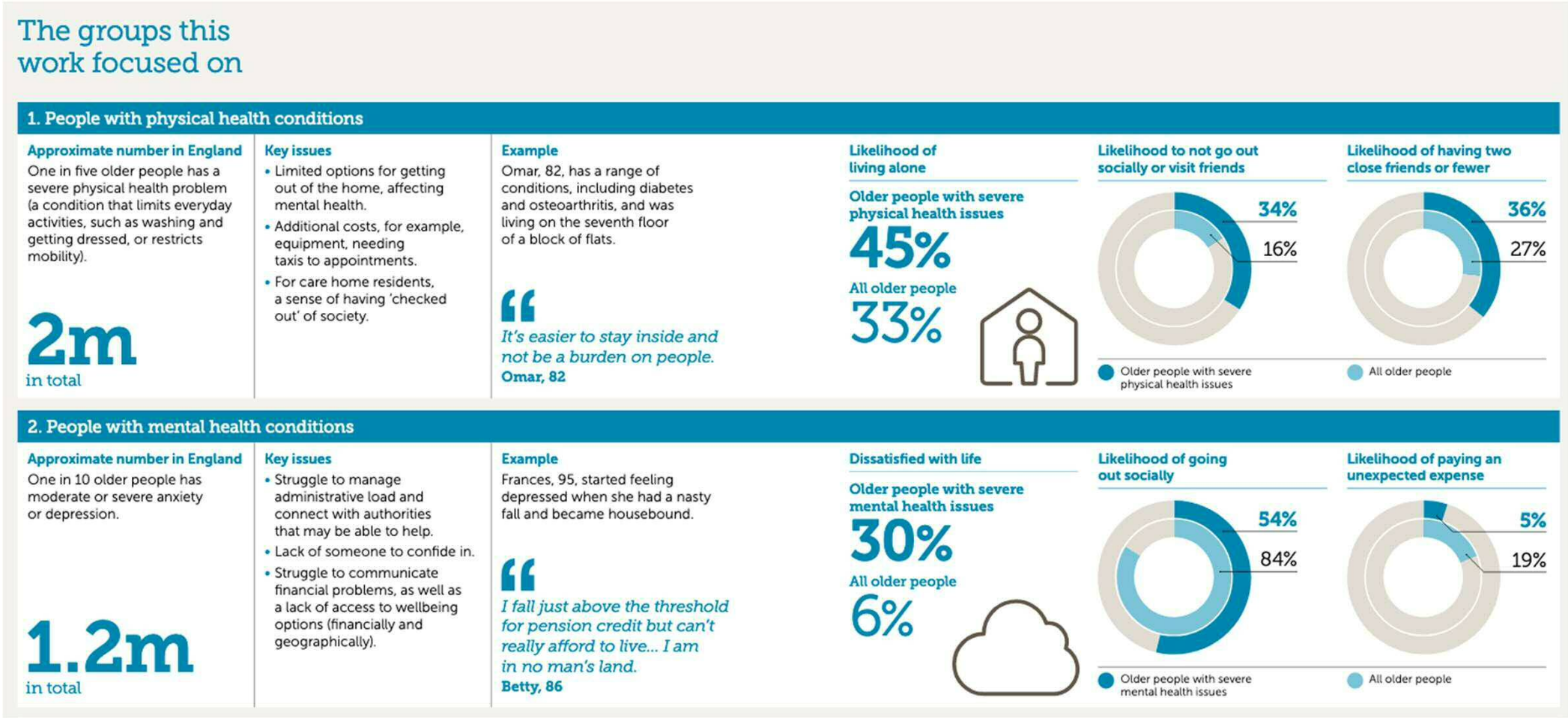
Data

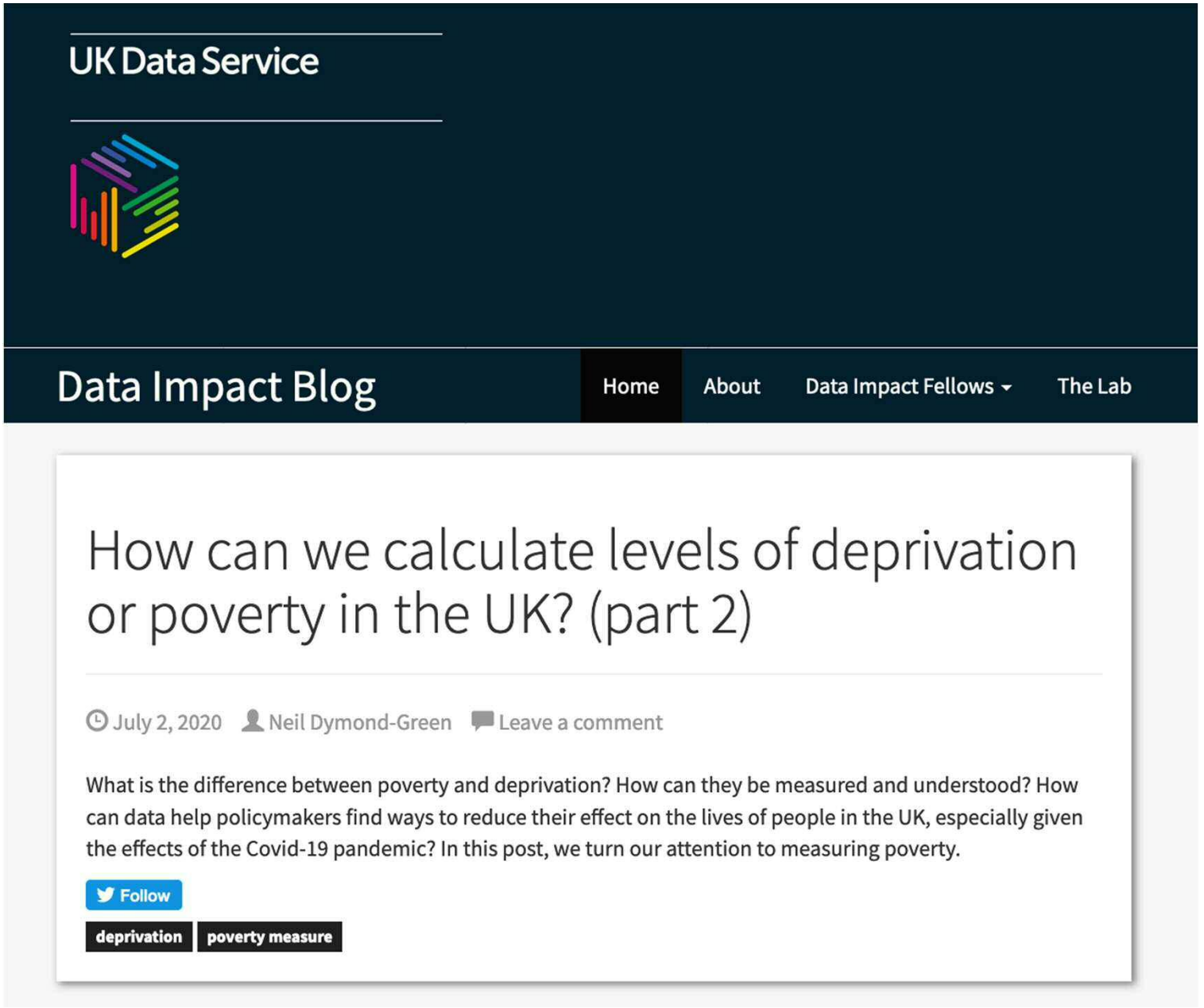
Studies
Series
beta.ukdataservice.ac.uk/datacatalogue/series/series?id=2000053
Copy series link

Home / Data catalogue / Series / Series
Understanding Society
Abstract
FAQ's
Resources
Access data
Abstract
The Understanding Society study, or the United Kingdom Household Longitudinal Study (UKHLS), which began in 2009, is conducted by the Institute for Social and Economic Research (ISER), at the University of Essex. As a multi-topic household survey, the purpose of Understanding Society is to understand social and economic change in Britain at the household and individual levels. It is anticipated that over time the study will permit examination of short- and long-term effects of social and economic change, including policy interventions, on the general wellbeing of the UK population. The Understanding Society study is a successor to the British Household Panel Survey (BHPS). The BHPS sample forms part of Understanding Society from Wave 2 onwards.

Findings

https://www.independentage.org/in-focus



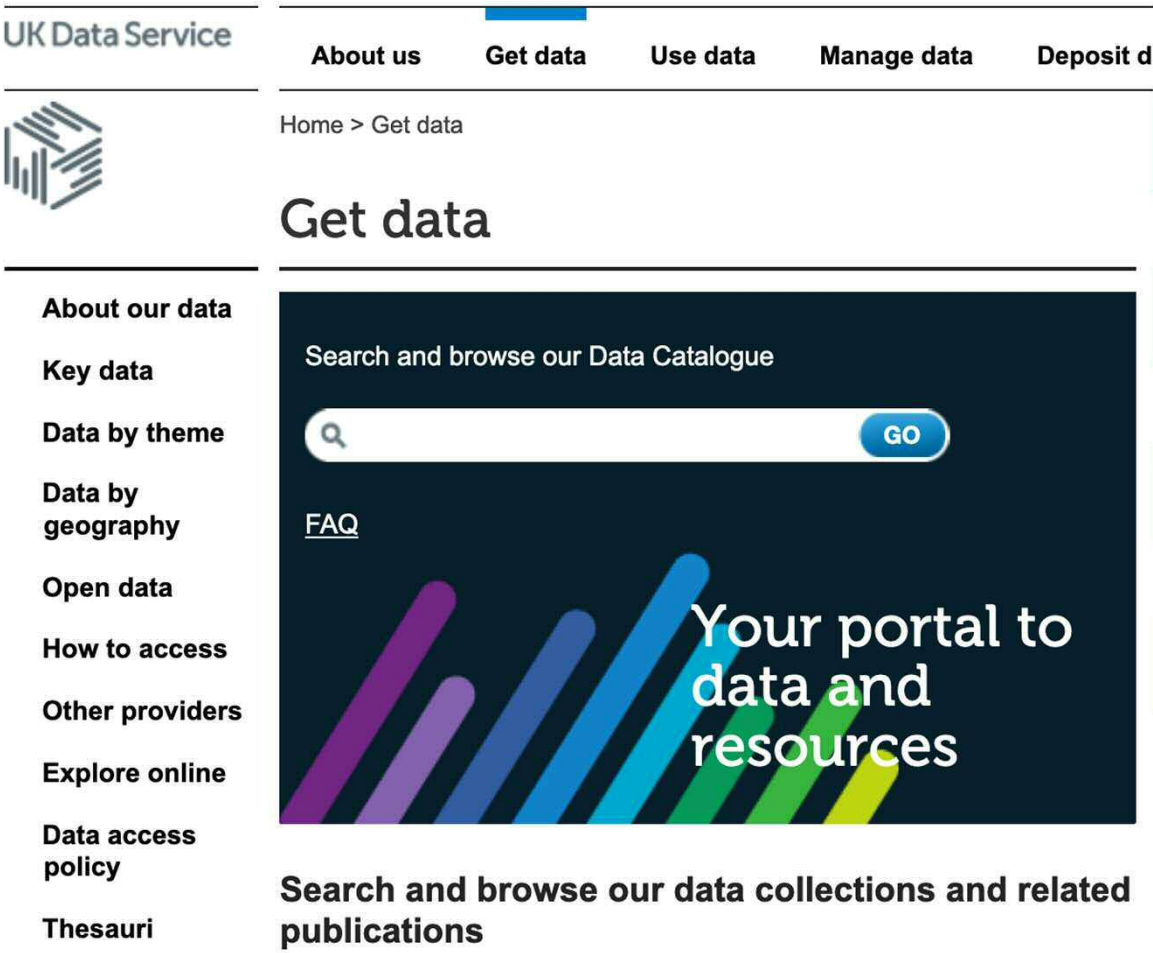


http://blog.ukdataservice.ac.uk/

Finding data

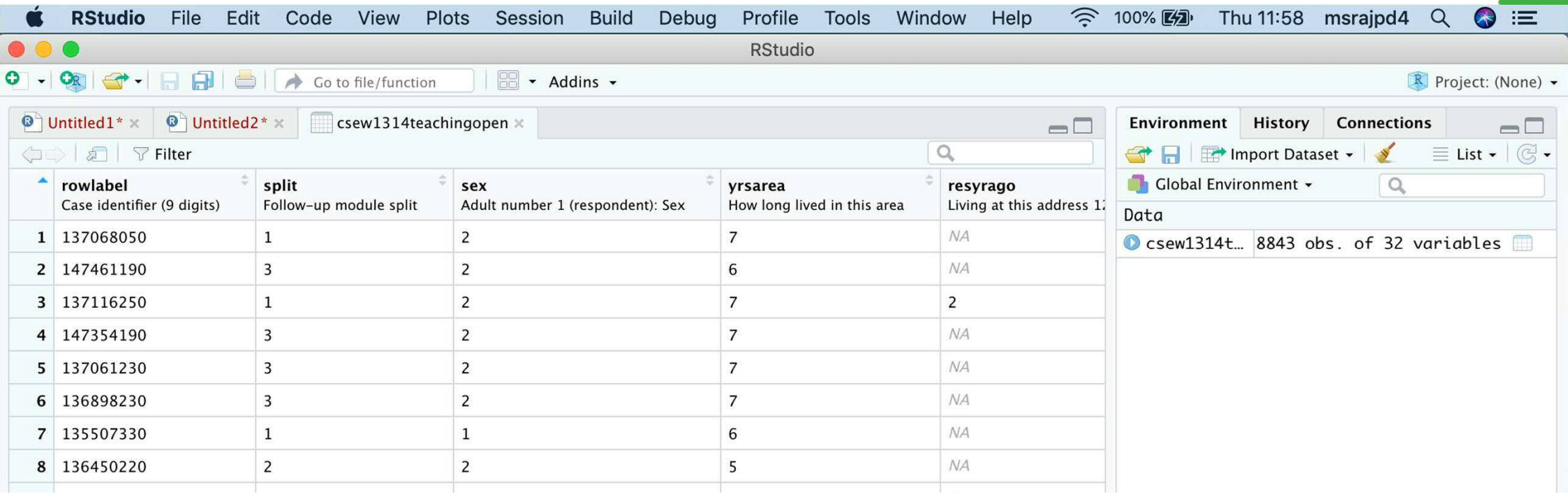
Ways to find data

- Search the catalogue
  - Will search the title of the datasets, keywords and abstract.
  - Broad connections to topics.
- Key data and theme pages
  - Browse our most popular datasets, by data type.
  - Browse specifically for data on particular themes.
- Variable and Question Bank
  - Search for specific questions.



Open up and look at the data

- Exploring via Nesstar
- Registering and downloading data



	rowlabel Case identifier (9 digits)	split Follow-up module split	sex Adult number 1 (respondent): Sex	yrsarea How long lived in this area	resyrago Living at this address 1
1	137068050	1	2	7	NA
2	147461190	3	2	6	NA
3	137116250	1	2	7	2
4	147354190	3	2	7	NA
5	137061230	3	2	7	NA
6	136898230	3	2	7	NA
7	135507330	1	1	6	NA
8	136450220	2	2	5	NA

Making sense of your data

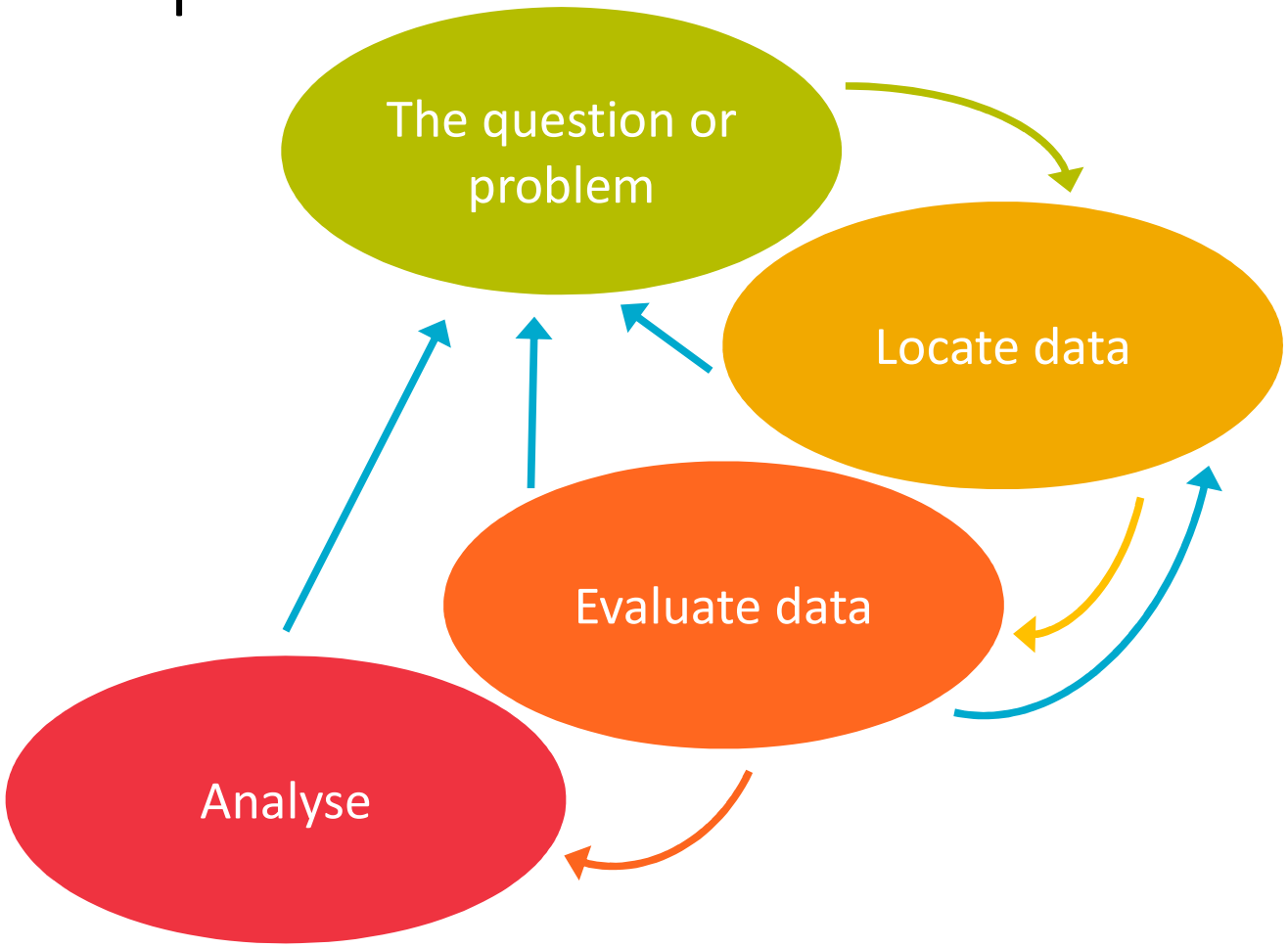
To understand data and it's suitability for your research you must understand…

- what information was collected
- from whom
- when and where
- any changes to the raw data before being archived

Use documentation

- user guides
- questionnaires
- interview schedules

Research plan



Quiz

Finding data demonstration

Activity

UKDS Online Workshops: Social data and the third sector: skills, tools and evidence

Workshop 3. Telling a story with data

Activity

Tasks:

1) **Search for a survey variable to help explain a problem**
2) **Explore the descriptive statistics of the variable online**
3) **Find the catalogue page for a survey**

Activity: Telling a story with data

Scenario: You are working for an environmental charity and are seeking funding to carry out awareness raising work to help change behaviours that increase CO_2 omissions. You are looking for some statistics to help support your funding bid.

What do people think about climate change? What attitudes potentially need to change?

This activity will start with the Variable and Question Bank, and then explore the survey data more with Nesstar and the UK Data Service catalogue

The **Variable and Question Bank** is a search engine that lets you browse variables and questions from survey datasets held by the UK Data Service. https://discover.ukdataservice.ac.uk//variables

Nesstar is an online tool provided by the UK Data Service for exploring and accessing a wide variety of datasets. http://nesstar.ukdataservice.ac.uk/webview/

Tab
Q
W
E
R
T
Y
U
Caps Lock
A
S
D
F
G
H
Shift
Z
X
C
V
B
N
Ctrl
Alt

Work through the handout

- Follow the handout instructions
- You can post questions in the chat box in GoTo Webinar
- Work through the exercise in your own time
- Answer the questions at the end
- We will **come back together at 3pm** to discuss the activity and any other questions

Activity questions

First, did you complete the activity?

1. How many respondents in the BSA Survey 2016 replied to variable CCBELIEV with the answer: I don't believe that climate change is taking place?
2. What percentage of respondents in the British Social Attitudes Survey 2016 replied to variable CCBELIEV with the answer: I don't believe that climate change is taking place?
3. What do people think about climate change? What attitudes potentially need to change?
4. What is the main data collection method for the British Social Attitudes Survey, 2016?

CCBELIEV : Which of these comes closest to your view about climate change

Add to My Variables

Question Text: Which of the following statements comes closest to your view? I don't believe that climate change is taking place, I believe that climate change is taking place but not as a resul...

View all instances of this variable

British Social Attitudes Survey, 2016

— Close responses...

1	I don't believe that climate change is taking place	150
2	I believe that climate change is taking place but not as a r	314
3	I believe that climate change is taking place and is, at lea	2452
8	Don't Know	24
9	Refusal	2
-2	Schedule not applicable	0
-1	Item not applicable	0

Variable CCBELIEV: Which of these comes closest to your view about climate change

LITERAL QUESTION

Which of the following statements comes closest to your view? I don't believe that climate change is taking place, I believe that climate change is taking place but not as a result of human actions, I believe that climate change is taking place and is, at least partly, a result of human actions.

Values	Categories	N	
1	I don't believe that climate change is taking place	150	5.1%
2	I believe that climate change is taking place but not as a r	314	10.7%
3	I believe that climate change is taking place and is, at lea	2452	83.3%
8	Don't Know	24	0.8%
9	Refusal	2	0.1%
-2	Schedule not applicable	0	
-1	Item not applicable	0	

Variable CCAPLANE: I am willing to reduce the amount I travel by plane to help reduce the impact of climate change

LITERAL QUESTION

(To what extent do you agree/disagree with the following statement...) I am willing to reduce the amount I travel by plane?

Values	Categories	N	
1	Agree strongly	126	4.3%
2	Agree	450	15.3%
3	Neither agree nor disagree	482	16.4%
4	Disagree	835	28.4%
5	Disagree strongly	204	6.9%
6	(SPONTANEOUS: I do this already)	178	6.1%
7	(SPONTANEOUS: I never fly)	664	22.6%
8	Don't Know	2	0.1%
9	Refusal	1	0.0%
-2	Schedule not applicable	0	
-1	Item not applicable	0	

Coverage and methodology

Dates of fieldwork:	July 2016 - November 2016
Country:	Great Britain
Spatial units:	Regions Countries
Observation units:	Individuals
Observation unit location:	National
Population:	Adults (18 and over) living in private households in Great Britain (excluding the 'crofting counties' north of the Caledonian Canal).
Number of units:	2,942 cases
Method of data collection:	Face-to-face interview Self-administered questionnaire The interview is conducted by Computer-Assisted Personal Interviewing (CAPI).
Time dimensions:	Repeated cross-sectional study The BSA survey is conducted annually.

Discussion

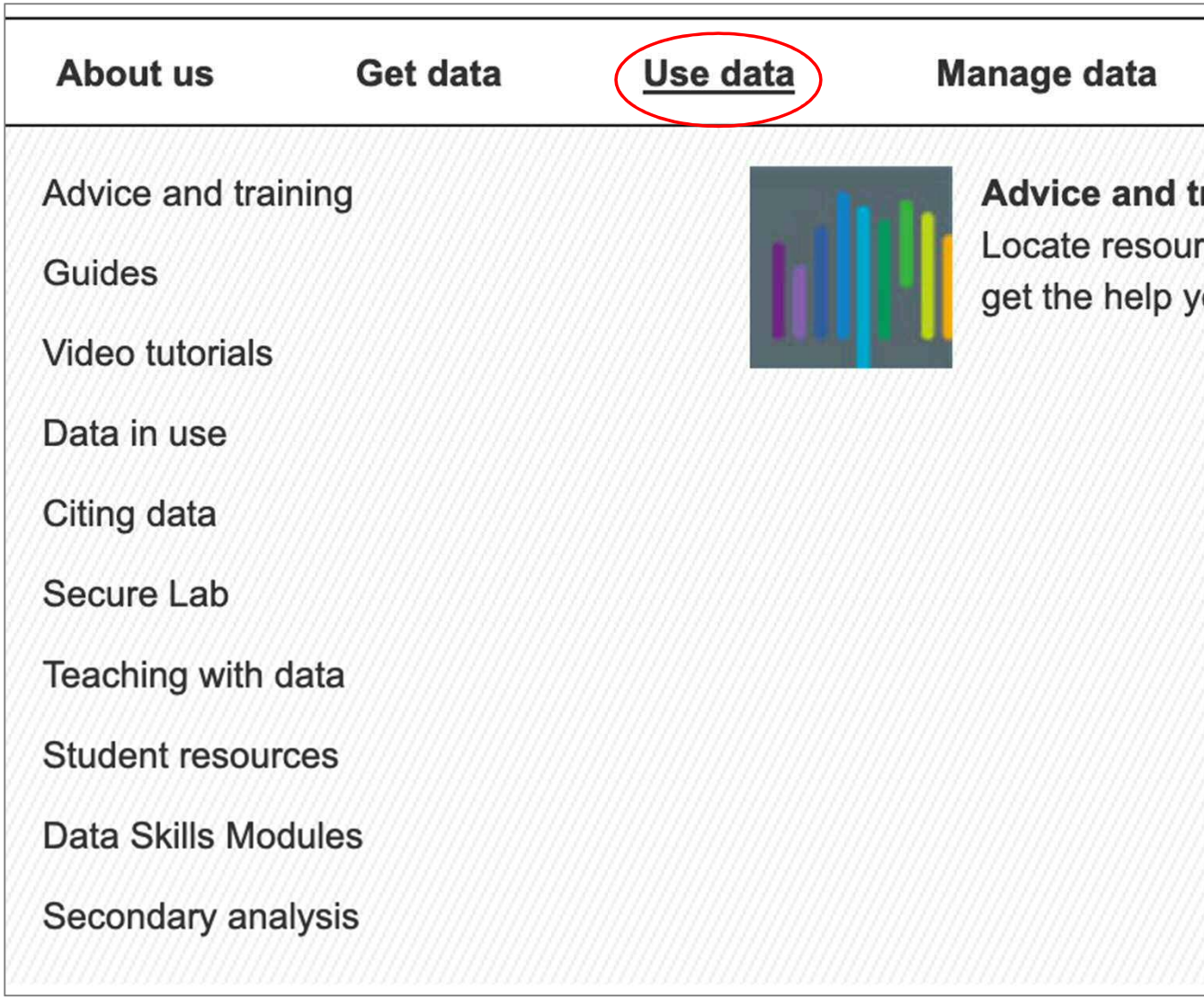
What next?

UKDS and the Third Sector

- We want to support data use
- Networks to link in to?
  - Consulted with Greater Manchester Third Sector Research Network https://www.gmcvo.org.uk/Greater-Manchester-Third-Sector-Research-Network
  - Advertised via Voluntary Sector Studies Network (VSSN)
  - Planning on attending 'Times like these' Conference
- FAQ from workshops to be produced
- Workshops and handouts will remain available
- Can create further resources

Online resources

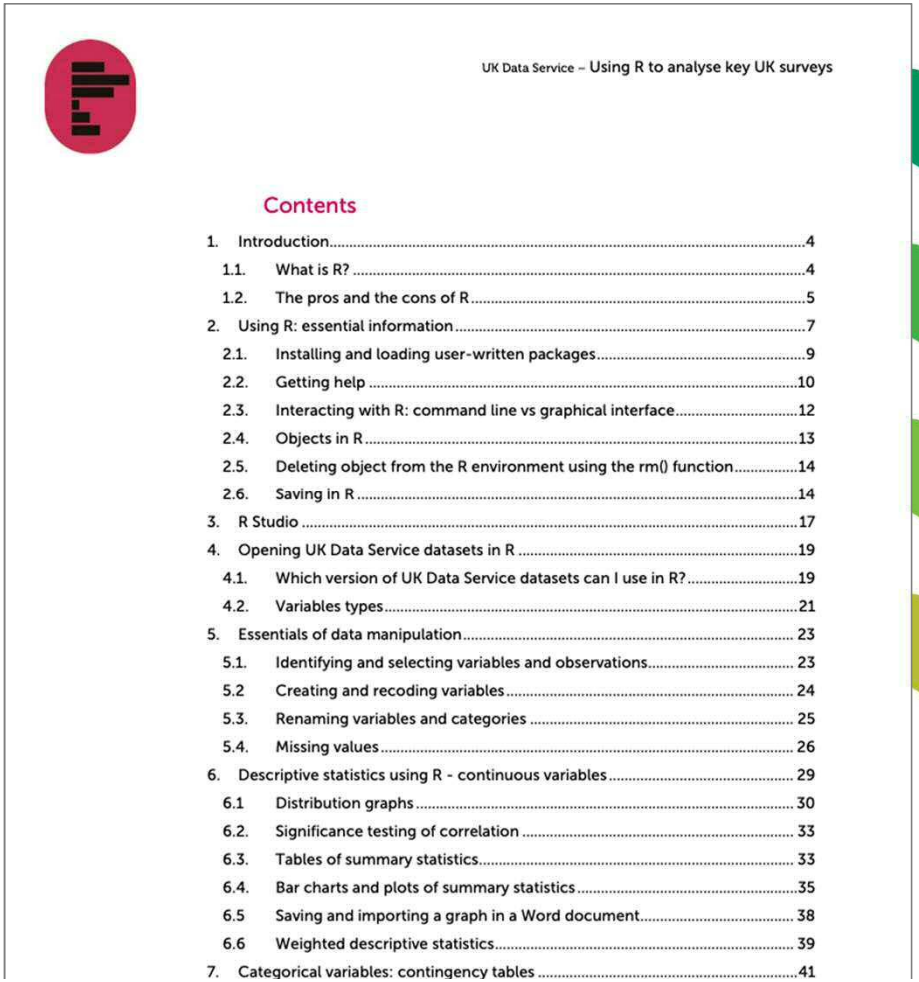
- Guides
- Videos
- Webinars
- Data Skills Modules



Methods and Software Guides

For example:

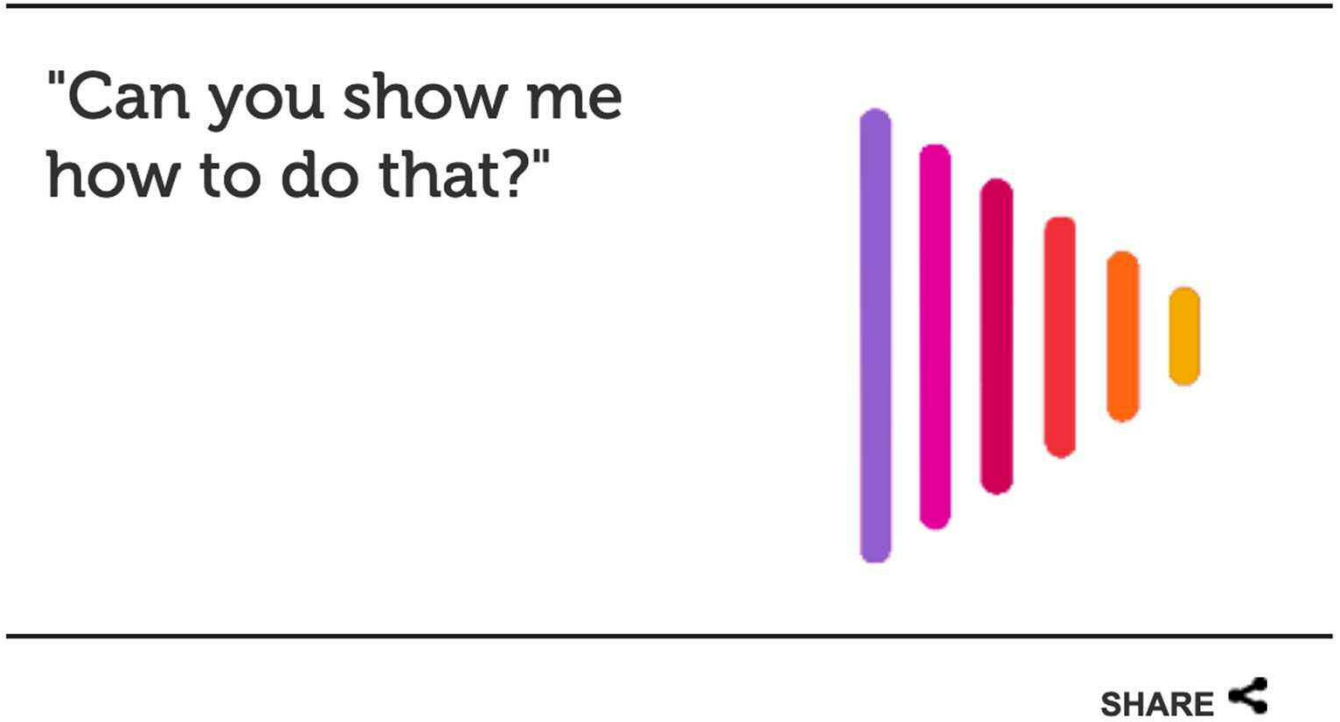
- Software guides
  - What is Stata?
  - What is SPSS 20 for Windows?
  - Using R to analyse key UK surveys
- Survey data
  - What is weighting?
  - What is complex sample design?
  - What are hierarchical files?



Contents

1. Introduction....4
1.1. What is R?....4
1.2. The pros and the cons of R....5
2. Using R: essential information....7
2.1. Installing and loading user-written packages....9
2.2. Getting help....10
2.3. Interacting with R: command line vs graphical interface....12
2.4. Objects in R....13
2.5. Deleting object from the R environment using the rm() function....14
2.6. Saving in R....14
3. R Studio....17
4. Opening UK Data Service datasets in R....19
4.1. Which version of UK Data Service datasets can I use in R?....19
4.2. Variables types....21
5. Essentials of data manipulation....23
5.1. Identifying and selecting variables and observations....23
5.2 Creating and recoding variables....24
5.3. Renaming variables and categories....25
5.4. Missing values....26
6. Descriptive statistics using R - continuous variables....29
6.1 Distribution graphs....30
6.2. Significance testing of correlation....33
6.3. Tables of summary statistics....33
6.4. Bar charts and plots of summary statistics....35
6.5 Saving and importing a graph in a Word document....38
6.6 Weighted descriptive statistics....39
7. Categorical variables: contingency tables....41

Videos



YouTube: https://www.youtube.com/user/UKDATASERVICE

Webinars

https://ukdataservice.ac.uk/news-and-events/events

Showing 1 to 10 of 18 entries 1 2

Online workshops: Social data and the third sector: evidence, skills and tools
02 - 16 Jul 2020
Online

Family finance surveys user conference 2020
08 Jul 2020
Online, 09.45 - 15.15

Webinar: Energy data for research
13 Jul 2020
Online, 15.00 - 16.00 BST

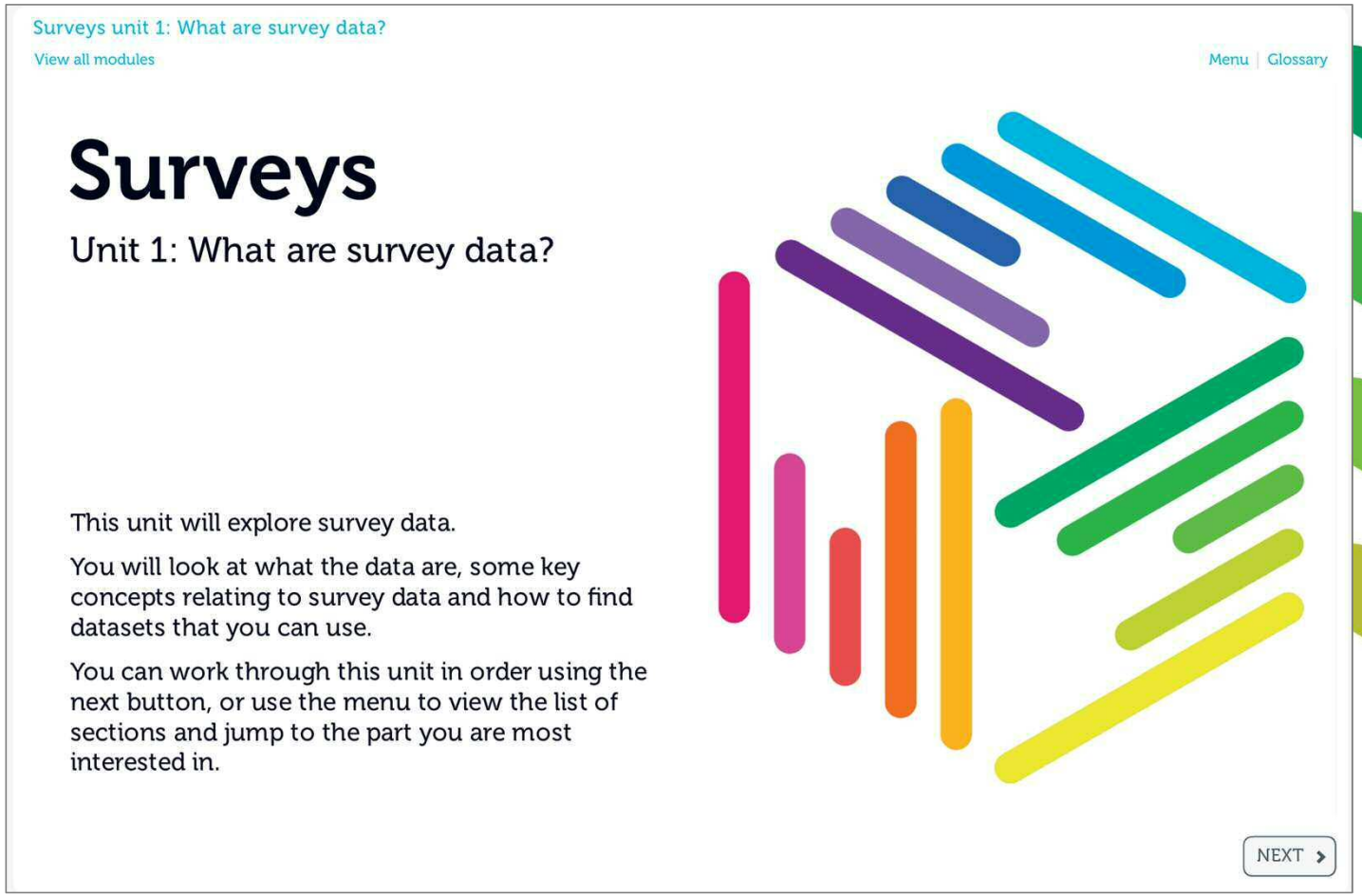
Introduction to Big Data for the Social Sciences - Presented by UK Data Service
20 - 24 Jul 2020
Online

Webinar: Key data: UK and cross-national surveys
08 Oct 2020
Online, 15.00 - 16.00 BST

Data Skills Modules

- Survey data
- Aggregate data
- Longitudinal data
- Glossary

https://www.ukdataservice.ac.uk/use-data/data-skills-modules.aspx



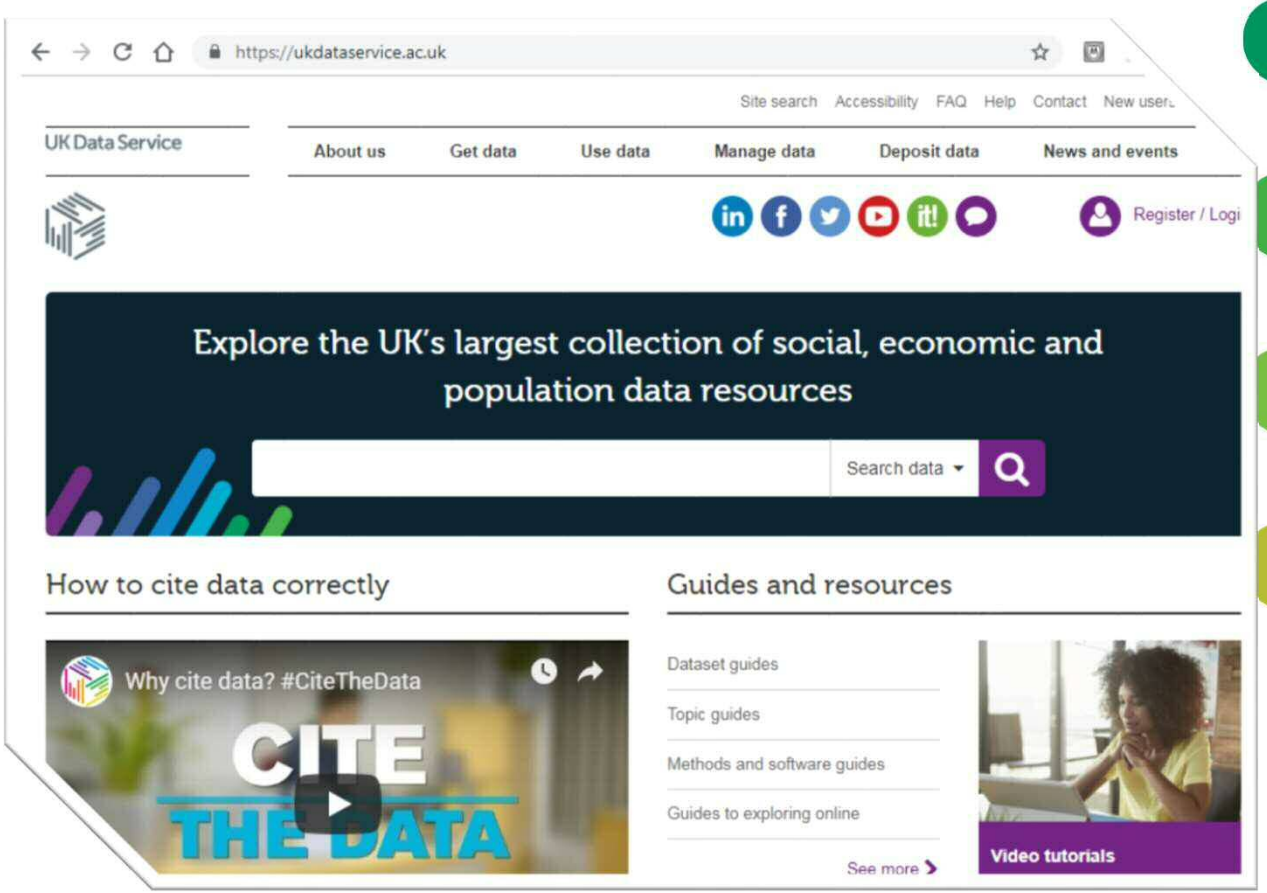
Thank you

web: https://ukdataservice.ac.uk/ YouTube: https://www.youtube.com/user/UKDATASERVICE

email: help@ukdataservice.ac.uk

twitter: @UKDataService

Visit the
UK Data Service



UK Data Service