UK Health Security Agency

Demonstrating the value of the COVID-19 Dashboard through the Code of Practice for Statistics

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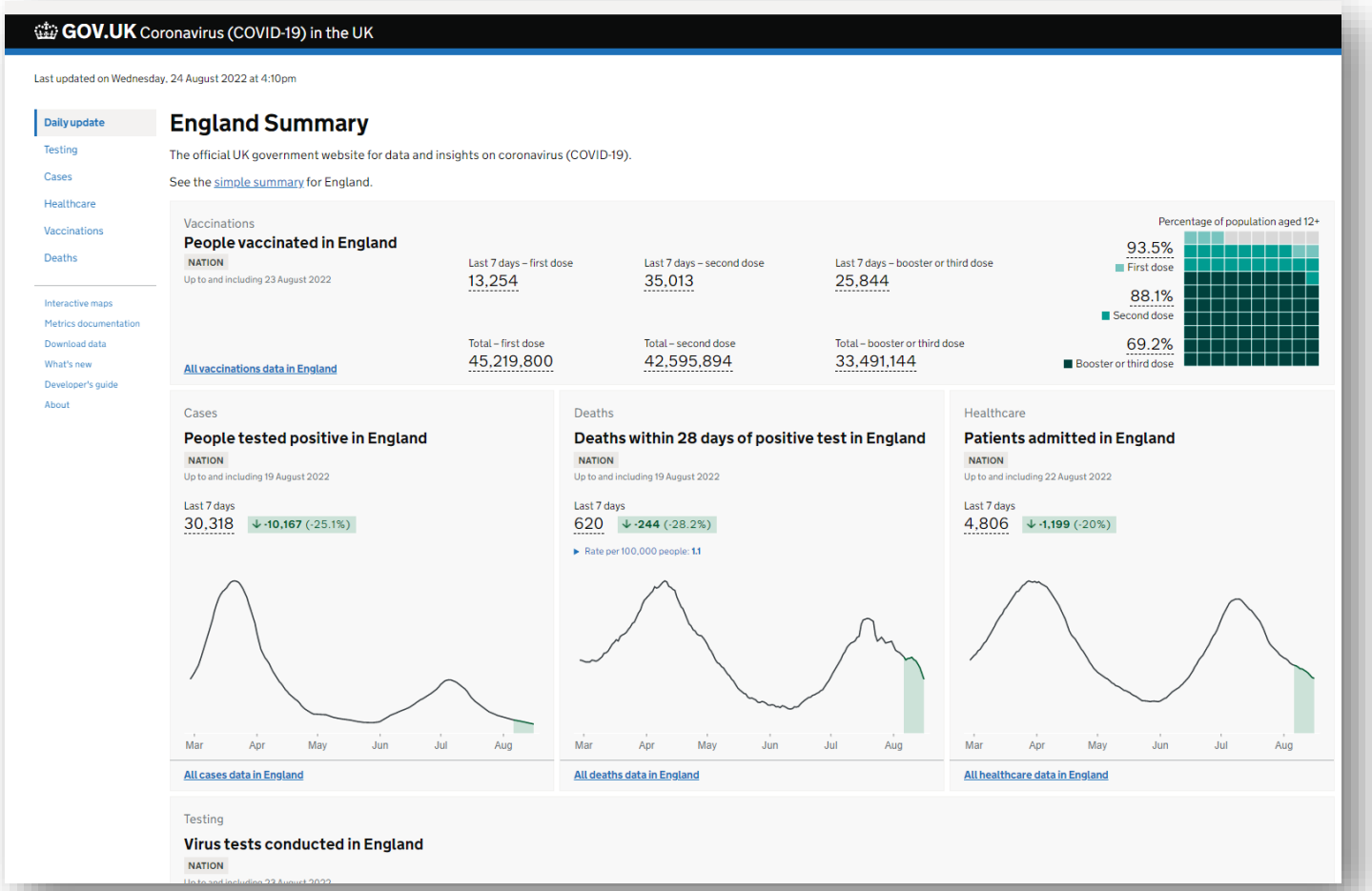
The COVID-19 Dashboard

- The official UK government website for data on COVID-19
- Data delivered at pace, previously 7 days per week
- As of 01 July 2022 updated weekly on Wednesdays at 16:00
- Changed in line with ‘Living with COVID-19’ strategy



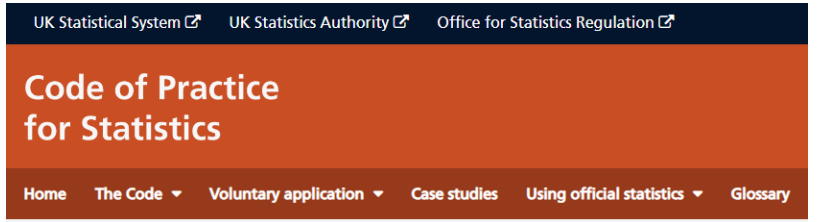
https://coronavirus.data.gov.uk/

Voluntary application of the Code

Dashboard not formally badged as Official Statistics for various reasons, such as:

- Need for speedy turnover
- Ministerial involvement in decision making

But meets many of the official statistics criteria, so we voluntarily apply the Code of Practice for Statistics.



Our statistics meet the 3 ‘pillars’ of the Code:

1. they have public **value**
2. they are high **quality**
3. they are **trustworthy**

Trustworthiness is a product of the people, systems and processes within organisations that enable and support the production of statistics and data.

Quality means that statistics fit their intended uses, are based on appropriate data and methods, and are not materially misleading.

Value means that the statistics and data are useful, easy to access, remain relevant, and support understanding of important issues.

Why voluntarily apply the Code?

Voluntary application demonstrates

- commitment to transparency
- desire to increase user trust

Our published statement of compliance helps users to understand the processes involved.

Its application not only benefits users, but also helps us as producers to demonstrate what we are doing well and identify areas for improvement.

The Value Pillar

According to this pillar, statistics should

- be useful
- be easy to access
- remain relevant
- support understanding of important issues

Principles of the ‘Value’ pillar

The five principles of the ‘Value’ pillar

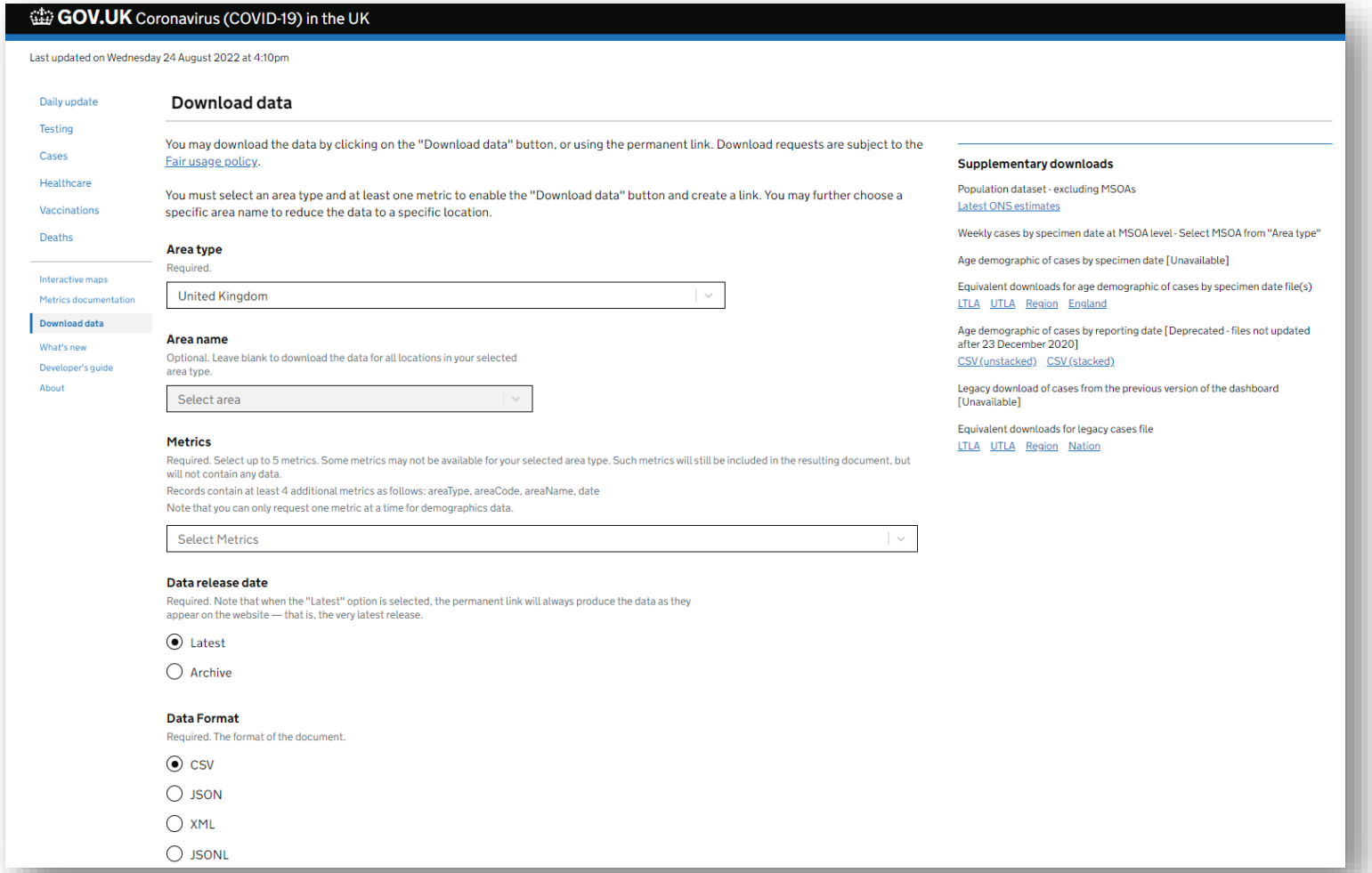
A well-used resource

The service in figures

- Daily users: 1.5 million
- Weekly users: 4 million
- Weekly page views: 80 million
- Daily hits: 40 million
- Daily downloads of data: 1.5 million
- Concurrent users at peak time: 200,000

Meeting user needs

- Making as much data available on the dashboard as possible, without compromising quality or confidentiality
- Timely
- Application Programming Interfaces (APIs) and data download options allowing people to use the data for their own purposes
- Highly popular - downloads averaging around 1.3 million per day



Accessible to all - principles

Making the dashboard accessible to as many users as possible

Simple to use, helping anyone to navigate the data and visualise trends over time and across geographic regions

One size doesn’t fit all

Accessibility is not only for people with visual impairment

Making a service accessible should not make it less useful to other users

Accessible to all - practice

Data presented in variety of ways to suit different users and help aid understanding:

- visualisations, including graphs, maps (choropleths), and arrows to indicate trends
- simple headline figures in web and PDF formats
- full data tables
- data downloads in 4 different formats (CSV, JSON, JSONL, and XML)
- multiple Application Programming Interfaces (APIs)
- supplementary downloads, such as population denominators

Data and metadata presented at the greatest level of detail possible for those who need it, and simpler overviews for users who need less detail, with explanations in plain English.

Legally compliant

Commissioned an **accessibility audit** in July 2020 and provide a full accessibility statement on the dashboard

Continually seek to improve functionality and make sure we comply with the Web Content Accessibility Guidelines version 2.1 AA standard

Non-compliances are listed for transparency, and, where possible, explain how we will fix these or why we don’t comply

User centred

We aim to provide the most reliable statistics and ensure the best user experience possible. User feedback helps us develop and improve the dashboard. We collect this via:

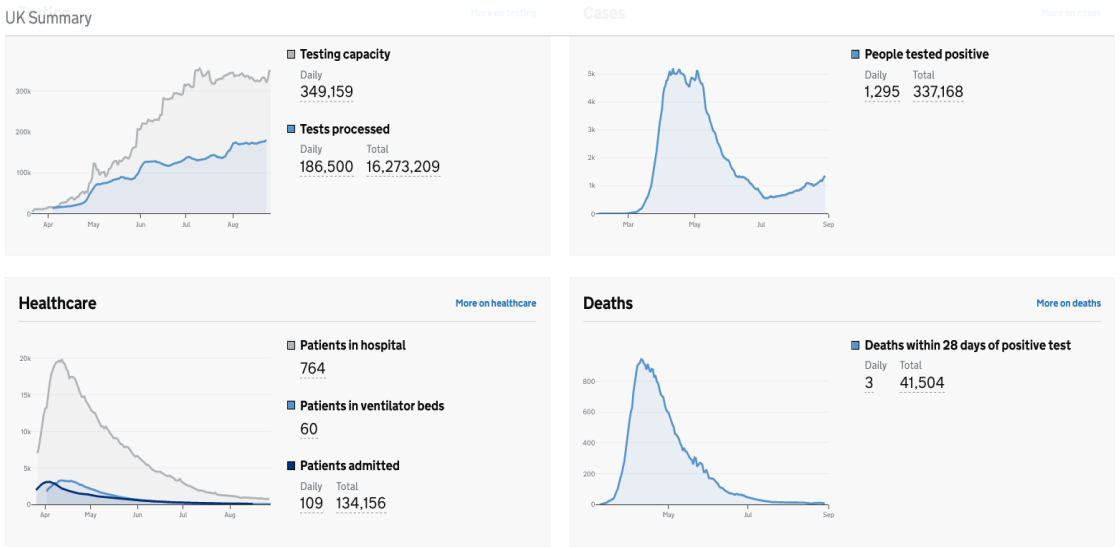
- individual research sessions, with over 100 conducted to date
- emails to our feedback mailbox, which is monitored daily and receives many hundreds of email each week (around 25,000 analysed over the pandemic)
- a programme of regular user surveys. The latest had over 38,000 responses.
- analytics, for example, to find out which parts of the site are most popular

- Feedback helps us to improve data presentation to make sure it is easy to understand and meets the needs of different users.

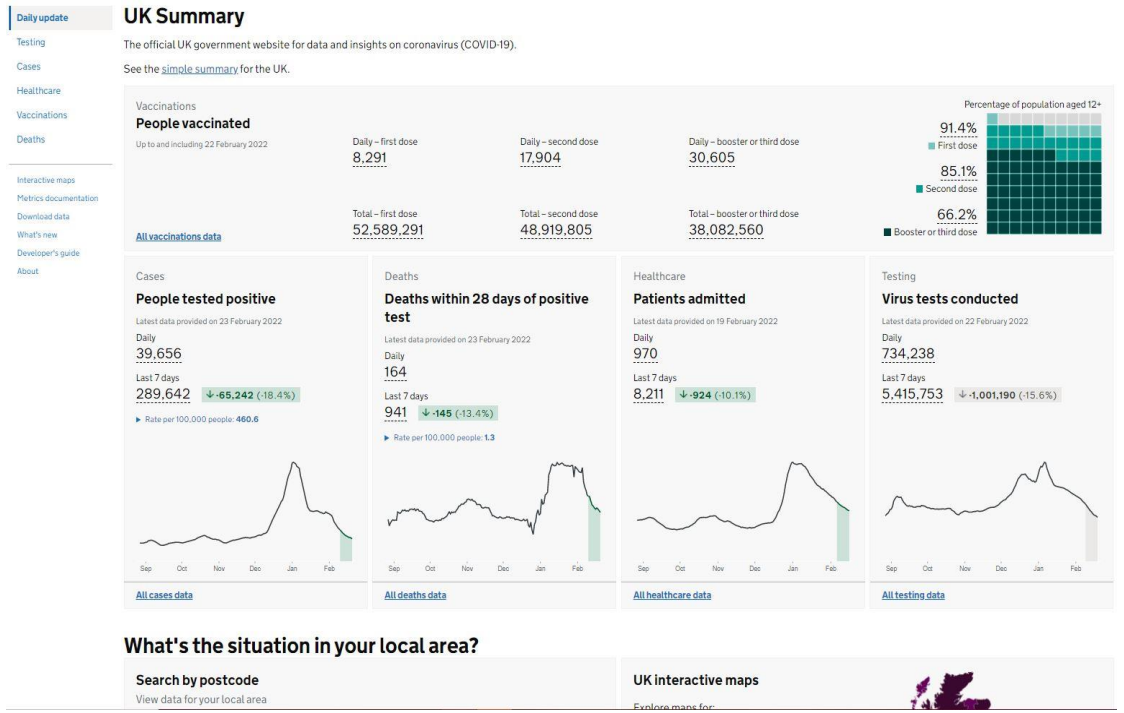
An evolving resource

Constantly reassessing our data and design in response to shifting requirements.

Aug 2020: Tests prominent, no postcode search for local data, figures for whole pandemic, no indication of direction of trend.



Feb 2022: Vaccinations prominent, postcode search for local data added, tests moved down the page, trends added: shown with figures, arrows and colour



Open and transparent

- We are open and transparent about dashboard developments and any issues that occur. You can find details on the latest updates, changes and data issues on the ‘What’s new’ pages. Some of the more recent additions to the dashboard are:
    - virus tests (all virus tests and lab-based virus tests) by specimen date added for England plus regions and local authorities
    - age breakdowns and local data added for booster or 3rd dose vaccinations
    - new metrics documentation page listing all current and historical metrics (searchable by name, category, type or availability by area type)
- We strive to make our work ‘low burden, high benefit’. Use existing datasets and add value to collections stood up for COVID (for example, hospital data) by reusing the data and presenting it to the public. We use leading edge technology and reproducible analytical pipelines from numerous data sources.

Open data – advantages and disadvantages

Advantages

- Helps people understand government decisions
- Accessible to millions
- Justifies decisions
- Improves trust
- We can’t do it all
- *Rapid identification of mistakes*
- *Ever growing demand for data*

Disadvantages

- Room for misinterpretation
- Pressure to publish as soon as possible
- Limited time for QA
- No room for delays
- *Rapid identification of mistakes*
- *Ever growing demand for data*

Award Winning!

Winners

- Award for Statistical Excellence in Trustworthiness, Quality and Value 2022
- OutcomeDataIQ award in the "Data for society" category
- PHEnomenal Awards Team award for 'communication’

Shortlisted

- Campion 2022
- Campion 2021

Nominations

- Best use of Data and Technology Award - Innovative category of the 2022 Civil Service Awards

Future direction…

- As the Dashboard evolves - continue to ensure we apply the Code of Practice
- New ‘Enduring Team’ in place
- Continued programme of developments and improvements
  - Variants
  - Autumn boosters
- Build on lessons learned

Acknowledgements

Thanks to the many people and organisations that have contributed to the service

Current and former members of the Coronavirus dashboard team

UKHSA / Public Health England / NHS Test and Trace

NHS England

NHS Arden & GEM Commissioning Support Unit

Department of Health and Social Care

National statistics organisations

Devolved administrations

Palantir

Microsoft and Microsoft Azure support team, especially the Customer Success Unit (CSU) and the Citus team

Thank you

Questions?