The Association of Directors of Public Health

Explainer: Data

Introduction

ADPH has developed this explainer to support members, stakeholders, the media and the public in understanding the fundamental role of data in preventing and managing COVID-19 outbreaks. It follows on from the explainer ADPH recently published on Local Outbreak Plans.

The explainer outlines why data matters, reflects on the challenges and concerns Directors of Public Health (DsPH) have had, and sets out the principles that should underpin improvements in the future, as well as some specific asks.

Key messages

- **Data is a fundamental tool for protecting lives and keeping people safe from COVID-19** – DsPH need timely access to high quality data to prevent and manage local outbreaks.

- **Sharing local data with DsPH should be the default setting** – proactive data sharing around contact tracing, outbreak management, and ongoing surveillance should have been a priority from day one for both the National Testing Strategy and the NHS Test and Trace Service.

- **Things are getting better** – the data capture and quality has continued to improve, enabling a greater level of detail to be passed to local authorities.

- **But there is more to do** – ADPH is continuing to work collaboratively with partners to improve data sharing and flows. We are calling on the Government and national agencies to focus on five principles: sharing local data with DsPH should be the default setting; providing consistent assess; providing quality; ensuring timely access; improving usability.

Why is data so important?

Data is the starting point for public health activity. Our decisions are determined by the degree of timely, reliable data available. The information system is a core part of any public health activity – including our response to an epidemic. The purpose is to transform data into information and then into intelligence which can lead to our evidence-based decisions for action. We need data for surveillance, i.e. assessing and monitoring changes in the level of infection in an area; and we need data to then actively prevent or manage any clusters or outbreaks that may occur.

It is vital that DsPH have access to timely and robust data, including data related to testing, the number of cases, data on contact tracing undertaken (linked to the cases), and local clusters or outbreaks in places such as schools, hospitals and care homes, hospital use and deaths. The integration of both national and local data and intelligence is essential for scenario planning, rapidly responding to outbreaks and informing and supporting more effective targeting of interventions to prevent and manage outbreaks.

The story so far

- On 5th March 2020, a statutory instrument was made into law adding COVID-19 to the list of notifiable diseases and SARS-COV-2 to the list of notifiable causative agents. As such, there is a legal requirement for laboratories and clinicians to report all cases of COVID-19 to the 'proper office'. (http://www.legislation.gov.uk/uksi/2010/659/introduction/made)

- NHS and PHE labs (Pillar 1)[1] routinely do this and there is a near daily feed for this activity. However, with Pillar 2 testing[2], the process has been less smooth. Whilst recent improvements have been made, there are still considerable gaps in the completeness and quality of reporting of Pillar 2 lab testing.

- National bodies have been slow to provide local authorities with data – this has caused significant problems. During the containment phase, for example, DsPH were struggling to get information on the positive cases in their area. This often meant DsPH were learning about cases via the media and left on the backfoot when responding to requests for advice from settings such as care homes and schools.

- In general, data and intelligence sharing from PHE to local authorities has worked better when existing systems and processes have been used. Where new arrangements have been established - for example, with testing and contact tracing – data flows have been more problematic.

- While testing data for Pillar 1 was made available to local authorities from a relatively early stage, this was not the case for Pillar 2 data. Without Pillar 2 testing data - which includes swab testing of the wider community - it is not possible to get a full picture of the infection.

- With limited and unreliable access to data, DsPH have often had to rely on relationships with local organisations like care homes and businesses, as well as PHE and local NHS colleagues to get hold of information. In the case of care home testing, DsPH have had to establish lines of communications with the care homes to obtain results from them, rather than receiving them directly from PHE. This has been both resource intensive and time consuming – and can introduce error.

- Throughout the response to COVID-19, ADPH and DsPH have been calling for high quality, consistent and timely access to data, including testing data. With the launch of Local Outbreak Plans at the end of June, we again highlighted how crucial data was if they were to be implemented effectively.

These major shortcomings in data sharing are a symptom of an undervalued local public health system. The response to the pandemic and the limited engagement with DsPH in the early stages

---

[1] **Pillar 1:** swab testing for those with a clinical need, and health and care workers by Public Health England (PHE) labs or NHS hospitals

[2] **Pillar 2:** swab testing for the wider population, as set out in government guidance and run in conjunction with Randox and Deloitte.

reflects the historic lack of understanding of the importance of public health, and the role of DsPH in creating and protecting healthy populations and places.

Asks for the future - 'Data Manifesto'

ADPH is calling on the Government and national agencies to focus on five principles:

- **Sharing local data with DsPH should be the default setting** – local data should be available in full, including at a postcode level, to all DsPH.
- **Providing consistent access** – every region and local authority should have access to the same data sets.
- **Providing quality** – data sets should be clean and complete.
- **Ensuring timely access** – data sharing must be swift, including in real-time where possible.
- **Making data usable** – the format of data should be simple to enable swift analysis and action at a local level.

ADPH values the progress being made and the hard work of our PHE colleagues. We are committed to working collaboratively with PHE, the NHS Test and Trace Service, and the Department of Health and Social Care to improve data sharing across the system. To support DsPH in preventing and managing local outbreaks, ADPH has set out the following asks:

- Access to COVIZ – to enhance surveillance and enable live management of incidents and the integration of testing data with local context and soft intelligence.
- Daily access to Patient Identifiable Data for Pillar 1 and Pillar 2 testing.
- Access to Patient Identifiable Data for both Positive and Negative test requests and results.
- Routine recording of ethnicity, workplace and postcodes in Pillar 1 and 2 testing data.
- Access to detailed information about contact tracing activity relating to the index case and contacts.
- A single, shared case and contact tracing and management system, capable of adaptive approaches to linkage recognition.
- Use of an identifier for testing related to particular settings of interest
- Access to wider early warning syndromic surveillance indicators – for example, information on school, workplace and care home staff absence rates, GP respiratory/anosmia consultations and call rates to 111 and 119.

We believe opportunities exist to deliver:

- Improvements in data quality around Pillar 1 and Pillar 2 testing
- Improvements in data quality around Contact Tracing.
- Reductions in the time lag on national test and trace dashboard.

Further reading:

- ADPH/LGA/PHE/Solace/FPH/UK Chief Environmental Health Officers - Guiding Principles for Effective Management of COVID-19 at a Local Level
- ADPH - Statement of Principles – COVID-19: Contact Tracing
- ADPH – Explainer: Local Outbreaks Plans