

SCOTTISH GOVERNMENT COVID-19 CMO ADVISORY GROUP
09th July 2020

Item 4 – Data & intelligence to support local outbreak management

1. This paper updates the Advisory Group on action being taken to provide the necessary data to support decision making on local outbreak management.

Scottish Covid Data and Intelligence Network

2. An important strand of an effective pandemic response is data to inform decisions at national, local, and sectoral levels, and support public awareness and choice as part of a responsive system of community surveillance.
3. To deliver this well, we have brought together a partnership of data/analytical expertise from across Local Authorities, NHS Scotland, Scottish Universities, and Scottish Government. The starting point is establishing the data and intelligence needs of organisations. Our approach will adapt existing technologies, enabling data and actionable insights to be shared much more widely.
4. This network will develop four priority services
 - Access to data and powerful analytics in a secure trusted setting. This will allow those leading local and national response to ask key research questions about the nature of spread, risks and effects of Covid on Scottish people, places and businesses. This will draw together Covid related person level data and make accessible to public sector analysts and academics to provide answers for decision makers. We already have 20 datasets on healthcare use, testing, symptoms tracker, vital events, schools and the 2011 census, and will also be joined by a range of location based information. **This service was launched on 28th May.** Challenges are likely to come under the four phases of: response; recovery; reset and rebuild and have themes around place, people, work and public services. – see suggested questions in Annex A. We are working through a process of prioritising the challenges and ensuring a rapid turnaround for analysis.
 - A management information system from Test and Protect system, to ensure the flow of data about individual cases to local Health Protection and contract tracing teams. **This system went live in late June.** This brings together data from local lab systems across Scotland together with the national covid testing data set Lighthouse into the national communicable diseases data set ECOSS. There are some challenges in bringing this data together, for example the Scottish lab test data takes over a day to be uploaded, and the Lighthouse data takes 36-48 hours. There is also slightly different information available on people from the three different testing systems. This combined data can be accessed by local NHS and public health teams, though this needs to happen through a manual download. PHS are working with NHS Boards to avoid double counting people who have tested positives more than once whilst ensuring no one is missed.

- Interactive dashboards at local, regional and national level to support scenario modelling and cluster identification to trigger further investigation and action. This has been developed with Public Health Scotland, and is available to public bodies across Scotland. **An initial version of this was launched on Monday 06th July.** This include data on calls to NHS24 for respiratory conditions available for intermediate zone geographies (that cover an average of 4,000 people). Positive tests will follow next Monday, and soon after will information on transport use, and the symptom tracker. Annex B gives a couple of examples of products that flow nationally and locally from this.
 - An interactive map for the public that helps people make informed choices about their day to day activities. If this works, it will forecast the relative risk of Covid over the coming week for local areas of Scotland. Scottish Government are considering how best to communicate risks of local Covid in context of socio-demographic (sex, age, ethnicity etc) and situational risks (e.g. occupation/public transport etc). The development team is establishing how local this can be to retain accuracy and protect privacy. **This is expected to be in place later this month.**
5. Public trust with data handling will be key. We therefore are using approaches consistent with Open Government, whilst tackling Information Governance challenges that can make data sharing too slow.
 6. There are some datasets that could be beneficial that are being developed by the UK Joint Biosecurity Centre and could cover Scotland (for example early warning indicators on web searches or social media comments on Covid symptoms). We're exploring with officials whether we could secure access to that data.
 7. A Target Operating Model is being developed for the service as the basis of a sustainable network that will continue to provide a capability to efficiently meet information needs over the next year.

Conclusion

8. This updates Advisory Group members on how data flows to local Public Health and Resilience teams.
9. Following the conversation on risk at last week's Advisory Group, it would be helpful if we could get a couple of Advisory Group members to help guide the public presentation of local Covid risks in the context of other Covid risks.

[Redacted] 08 July 2020

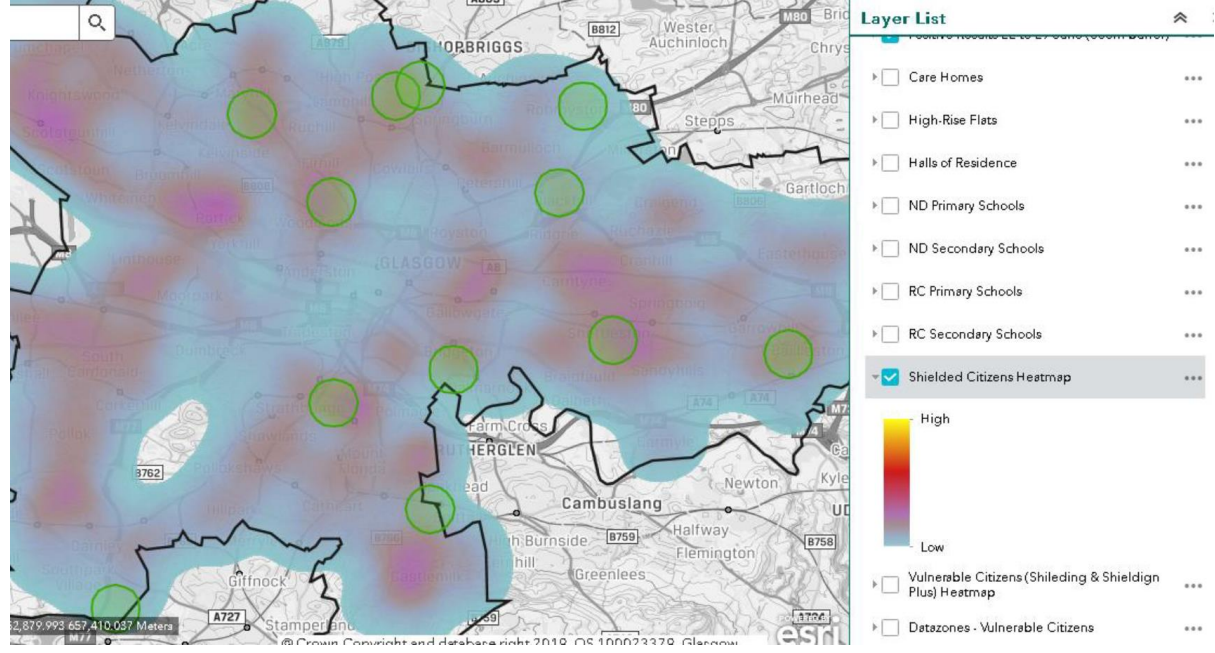
Annex A

Priority challenge questions

- What is the risk of COVID-19 infection across Scotland today/over the coming week and how does this vary across different parts of the country?
- Where are there clusters/outbreaks of COVID-19 across Scotland today?
- Which patients are at highest risk of hospitalisation, critical care admission, requiring mechanical ventilation and dying from COVID-19 i.e. those who potentially need to be shielded?
- Who is at greatest risk of harm as a result of the disruptive effects of COVID-19 on routine NHS and social care?
- What has been the impact of COVID-19 on health and social care inequalities?
- How can we identify and support shielded people?
- Can we create a business vulnerability model to help pro-actively monitor and support impact on businesses?
- What capacity and capability do we have to build in our Public Transport provision and Car Parking infrastructure to support economic regeneration whilst also mitigating risks of cross infection?

Annex B – presentation of information on cases and early warning indicators

(a) Glasgow City Council – overlay of cases and shielded citizens



(b) PHS – NHS24 calls for respiratory conditions

