

**SCOTTISH GOVERNMENT COVID-19 CMO ADVISORY GROUP**  
05 October 2020

**Item xx – Data & intelligence to support our response to Covid**

1. This paper updates the Advisory Group on action being taken to provide the necessary data to support decision making across Scotland.

**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 to support public awareness and choice.
3. To deliver this well, we have brought together a partnership of data/analytical expertise from across public bodies, Scottish Universities, and Scottish Government. The starting point is establishing the data and intelligence needs of organisations and the public. The central philosophy of our approach is based around enabling data and actionable insights to be shared much more widely, adapting existing technologies and doing things once where this can save time.
4. The network is built on principles of transparency, optimism, respect, courage, focus and humility. We bring a wide group of people together to enable collaboration and connections that wouldn't have existed beforehand. Public trust with data handling will be key. We therefore are using approaches consistent with Open Government.
5. This network has developed a process for identifying high priority issues where data, evidence and analytics can make a significant difference, and for then prioritising those issues and accelerating the delivery of that work through an agile approach to product and service development.
6. Current priority projects are
  - Interactive dashboards at local, regional and national level to support scenario modelling, cluster identification and public information. This has been developed with Public Health Scotland and is available to public bodies across Scotland. An augmented public version of the dashboard was launched on Friday 02 October<sup>1</sup>. This include early warning indicators, as well as confirmed cases and deaths, down to neighbourhood level
  - Minimising the time from test result to shared data of that result
  - Impact of Covid on health and social care inequalities
  - Geospatial and network analysis tools for local resilience partnerships
  - Standardised and georeferenced health/social care location data
  - Understanding care home vulnerability
7. There are around 40 other potential projects which span non-Covid health issues, societal and economic issues that could be used by public bodies across Scotland.

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<sup>1</sup> [https://public.tableau.com/profile/phs.covid.19#!/vizhome/COVID-19DailyDashboard\\_15960160643010/Overview](https://public.tableau.com/profile/phs.covid.19#!/vizhome/COVID-19DailyDashboard_15960160643010/Overview)

8. To support this, we have brought together data and powerful analytics in a secure trusted setting. This is allowing those leading local and national responses to ask key research questions about the nature of the spread, risks and effects of Covid on Scottish people, places and businesses. This draws together Covid related person level data and makes it accessible to public sector analysts and academics to provide answers for decision makers. We already have 25 datasets on healthcare use, testing, vital events, schools and the 2011 census, as well as a range of area and location based information. Built on top of this is an analytical workbench to allow public sector analysts and academics to work in collaborative teams on the same datasets. We have also brought together a wider data catalogue of more than 200 relevant and accessible Covid related datasets.
9. We are recruiting a network office to continue to make rapid progress in delivering priority projects, to nurture the network and communicate its work. This is the basis of a sustainable network that will continue to provide a capability to efficiently meet information needs over the next year.
10. The network is a catalyst for broader system change that will in particular support and challenge colleagues to improve the arrangements of Information Governance, public engagement and ethics. There is now a draft data ethics framework, and a proposed approach to faster IG for research.
11. The network is also collaborating with the UK Joint Biosecurity Centre on areas of mutual interest, particularly on early warning indicators such as employee absence and on methodological issues such as how decisions are taken on international travel.

#### **Conclusion and question for Group**

12. This updates Advisory Group members on how our data and analytical expertise and data itself is being drawn together to support our response to Covid.
13. A key question for the Advisory Group is whether there are issues that aren't currently prioritised where the group think having a new information product or insight would improve our collective response to the four harms caused by Covid.

**[REDACTED], 02 Oct 2020**

## Annex: Candidate questions put to the Covid data and intelligence network

Product Name	Status
Product 1: PHS/NSS Ministerial Dashboard	Complete
Product 2: PHS/NSS Public facing dashboard	Complete
Product 3: Analytical Workbench (ePCC)	Complete
Product 4: Data Catalogue (SG)	Complete
Product 5: Visualisation Dashboard (PHS/NSS)	Complete
Candidate 1 - H1 & 2 - Early Warning Indication of Clusters and Monitoring In Real Time	TF4 Development
Candidate 2 - H11 - What has been the impact of COVID-19 on health and social care inequalities?	TF 3 - Question Validation Complete and Monitoring
Geospatial Tools for LRPs	Progressed Externally
Geospatial and Network Analysis Tool	Progressed Externally
Enhanced Early Warning Dashboard	Progressed Externally
Enhanced Public Facing Dashboard	Progressed Externally
Standardised and georeferenced health and social care location data	Progressed Externally
Candidate 6 - What factors contribute to care home vulnerability	Discovery Phase - Pursue
Candidate 4 - SCG Understanding Vulnerability: Community proximity to high risk individuals and high-risk settings	Discovery Phase - Pursue
Candidate 3 - Forecasting and Modelling Tool - UoE	Discovery Phase - Pursue
Candidate 5 - H8 - 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?	Discovery Phase - Pursue
Candidate 7 - NH14 - Which occupational groups are at greatest risk of developing COVID-19?	Discovery Phase - Pursue
Req 0001 - Understanding the risk between individuals with dementia and risk of Covid	Discovery Phase - Verify
Req 0003 - H12 - As we lift lockdown where do we need to support, intervene, prevent or monitor movement and transportation links of people across Scotland whilst identifying potential hot-spots for infection?	Discovery Phase - Verify
Req 0004 - NH 58 - Transport Scotland require up-to-date data around employment and household income to allow us to assess the impact of Covid-19 on the travel habits of certain groupings.	Discovery Phase - Verify
Argyll and Bute working with University of Strathclyde to model demand for telecare services	Monitoring
Renfrewshire working on standard vulnerability indicators for Local Government	Monitoring
Education: Number of teachers testing pupils, pupils self-isolating and absenteeism	Monitoring

Education: North Lanarkshire are analysing risk of transmission in and around schools, e.g., pavement widths, transport links	Monitoring
Req 0002 - SCG: Understanding mobility to support local decision-making by LRPs and the SCG	Monitoring
NH38 - Can we create a business vulnerability model to help pro-actively monitor and support impact on businesses?	Monitoring
NH36 - Using CCTV infrastructure and object detection algorithm plus cycle, pedestrian and traffic counter data to monitor/track activity in key locations.	Monitoring
Can we establish a register of patients that have been treated for Covid-19 which includes medication received / taken by individuals?	Backlog
H10 - Can we identify vulnerable people and assess whether they are receiving allocated services?	Backlog
H9 - Can we enable early identification of individuals who require mental health support and Services?	Backlog
H7 - Can we assess compliance with lockdown measures in near real-time?	Backlog
NH55 - As we lift lockdown where do we need to support, intervene, prevent or monitor movement and transportation links of people across Scotland whilst identifying potential hot spots for cross infections?	Backlog
NH47 - How do we identify what support is required and then share that data to relevant partners when someone is being discharged from Hospital after being treated for COVID?	Backlog
NH43 - How can we track (changes to) consumer behaviour, and the way we interact with services relating to leisure, sport, tourism etc.	Backlog
NH41 - Can we create a local economy model using impact, resilience and recovery indicators?	Backlog
NH40 - Can we track changes to welfare (inc. unemployment) status within each council as a result of Covid-19?	Backlog
NH39 - Can we generate a revenues and cash flow indicator for Local Authority?	Backlog
NH37 - Environmental impact. Assess the immediate environmental impact of lockdown as well as the medium and long term implications. i.e. pollution and waste indicators, traffic data, fly tipping, litter dog fouling, industrial pollution	Backlog
NH33 - What do we know about spread of Covid within households?	Backlog
NH30 - How do we map available support and services for all citizens? (Community modelling?)	Backlog
NH27 - How can we identify and support vulnerable people?	Backlog
NH24 - How do we support frontline workers with an efficient educational and childcare support that matches their children's needs?	Backlog
NH22 - How is COVID-19 impacting Local Authorities ability to deliver our services?	Backlog
NH18 - How do we decide where testing sites should be built, or where mobile testing should visit.	Backlog
NH11 - Which patients are at greatest risk of harm as a result of the disruptive effects of COVID-19 on routine NHS clinical care?	Backlog