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Covid-19 as a 'major (health) incident': Points to consider

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Purpose and Summary of Document: To summarise the current situation and to provide an evidential summary of considerations to guide Welsh Government in any decision on the declaration of a Major Incident for Health in Wales.

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This paper summarises the current situation of Covid-19 in Wales and provides an evidential summary of considerations to guide Welsh Government in any decision on the declaration of a Major Incident for Health in Wales.

In preparing this paper and before declaring a major incident two essential questions need to be answered and this paper considers each in turn.

1. Why declare a 'major incident' and why now?
2. What would we expect from making a declaration of a 'major incident'?

Question 1: Why declare a 'major incident' and why now?

To answer this question the following factors are considered in the Welsh context:

1. Current epidemiological situation
2. Characteristics of the population exposed
3. State of health system to respond

Factor 1: Current epidemiological situation – how many cases, types of cases, contacts associated with cases etc. – and how this compares with other jurisdictions (England notably)

1.1 Summary of confirmed cases in Wales as at 9am 11 March 2020

19 cases have been confirmed from 5 different health boards. All cases are younger than 65y (7 aged 44-64y, 9 aged 25-44y, 2 aged 15-24y and one ages 0-4y). Nearly half (47%) of the cases have been from Swansea Bay UHB area. Fever (68%) and cough (63%) are the most frequently reported symptoms among confirmed cases, 3 of the 19 cases have been admitted to hospital. 18 of the 19 confirmed cases have reported either travel from an affected area of Italy or contact with a confirmed case of COVID-19. Exposure history for one case is currently unclear, but there is no reported contact with confirmed cases or travel from affected areas.

This situation is constantly changing and at the time of writing (09:00 12 March 2020) has changed further. However this information has not been formally announced and is therefore not included.

1.2 Summary of contact tracing/ monitoring as at 9am 11 March 2020

109 individuals were under contact monitoring as at 9am 11 March 2020, 76 of whom were contacts of 13 Wales' resident confirmed cases. The remaining individuals were under follow up due to returning from affected countries and cruises or from being a contact of a confirmed case outside

Wales. Contact tracing is underway for the cases confirmed on 10 March 2020 and therefore these figures are expected to increase.

Of the individuals under contact monitoring:

- 63% require active (daily) monitoring,
- 20% required passive monitoring,
- 15% had completed monitoring and
- 2% were awaiting categorisation.

Of the 13 cases in Wales who have contacts under surveillance, the mean number of contacts per case was 6, but this ranged from 0 to 27. The individual with 27 contacts (7 of whom have since become confirmed cases) reported a number of health care worker contacts.

There are currently 9 contacts of confirmed cases in Wales who have gone on to become cases themselves.

The key point from 1.1 and 1.2 is that any consideration of a declaration has to be informed epidemiologically by the latest information on cases and contacts as it relates to the situation at the time of the declaration.

This gives rise to an important question: Is there clear evidence of sustained community transmission?

In objective terms the detection of a single case in an intensive (critical) care unit with no travel history or links to a confirmed case is indicative of second generation or third generation spread. This suggests community transmission but not sustained community transmission.

At 9am 11 March 2020 there was no evidence of community transmission in Wales however this situation will (has) change(d) and again any consideration of a declaration has to be informed epidemiologically by the latest information as it relates to the situation at the time of the declaration.

Factor 2: Characteristics of the population exposed (1) – demography, health status, economic status/markers of health disadvantage, single parent households, dependency (children and/or elderly caring responsibilities).

Demography

- Wales has a higher proportion of the population aged 65+ years compared to the UK; 20.8% compared to 18.3% (ONS population estimates 2018).

- Wales has a slightly higher proportion of the population aged 85+ years compared to the UK; 2.6% compared to 2.4%. (ONS population estimates 2018).
- Wales has 30,000 men aged 85+ years and 52,400 women aged 85+ years. (ONS population estimates 2018).

Health status

- Wales has a higher proportion of Census respondents reporting their health to be NOT good or very good compared to England; 22.2% compared to 18.6%.
- Wales has a higher proportion of Census respondents reporting having a limiting long-term illness compared to England; 22.7% compared to 17.9%.
- Wales has a higher proportion of patients on a number of QoF registers including asthma, COPD, diabetes, coronary heart disease and stroke compared to the UK as a whole; asthma (7.07% v's 6.10%) COPD (2.35% v's .95%), diabetes (6.13% v's 5.59%), coronary heart disease (3.63% v's 3.14%) and stroke (2.12% v's 1.80%).

Economic status

- Wales has a lower proportion of people in employment compared to the UK as a whole; 74.4% compared to 76.5%. (LFS)
- Wales has a higher proportion of people on short and long-term sickness absence compared to the UK as a whole; 1.9% and 28.7% compared to 1.8% and 23.6%. (APS)
- Wales has a higher proportion of people in Wales employed in service or sales roles compared to the UK as a whole; 18.6% compared to 16.3%. (APS)

Single parent families

- Wales has a higher proportion of lone parent families compared to the UK as a whole; 16.8% compared to 16.2%. (LFS)

Dependency

- Wales has a higher proportion of the adult population that provide care compared to England; 12.1% compared to 10.2% (Census).

This gives rise to an important question: Is the Welsh population more vulnerable than comparator populations that would necessitate earlier/different interventions?

Objectively the demographic characteristics of the Welsh population and specifically the age profile of the population over 65/75, health and economic status, and dependency responsibilities are such that Wales may experience disproportionate levels of impact from Covid-19.

Characteristics of population exposed (2) – the active workforce employed in public service and specifically health and social care workers.

- Wales has 434,900 individuals employed in the public sector; of these 89,600 are employed in administrative, defence or social security roles, 124,000 are employed in education and 221,300 are employed in health and social care.
- Wales has a higher proportion of all employed persons working in the public sector compared to UK; 29.9% compared to 24.3% overall, 6.17% compared to 3.80% for administrative roles, 8.54% compared to 8.32% for education and 15.24% compared to 12.17% for health and social care.

This gives rise to an important question: Is the Welsh public sector more vulnerable than comparator economies from the impacts of the virus?

In objective terms the Welsh labour market has a higher proportion of public service workers in all sectors. Loss of staff due to Covid-19 will therefore have a significant impact on the delivery/maintenance of public services in Wales.

Factor 3: State of the health system in Wales to respond to Covid-19

A confidential 'reasonable worst case' (RWC) analysis has been prepared and shared with the NHS in Wales.

Under the RWC analysis modelling based on evidence from other affected areas and some planning assumptions for pandemic influenza has been undertaken to estimate the timing, effectiveness of interventions and numbers affected.

The predictions for the population of Wales are for over 1.5 million symptomatic cases (peak prevalence 1 million) with 200,000 requiring hospital admission (50,000 peak occupancy). An estimated 18,000 will require mechanical ventilation at some point (peak occupancy 4,500), with 25,000 predicted deaths.

Older people and those with comorbidities have higher estimated hospitalisation and mortality proportions, so the estimates for Wales referred to above may be higher than the above under the RWC scenario.

Behavioural interventions are planned, including home isolation and household quarantine, and cocooning of vulnerable people. Under these interventions, testing will shift from community to hospital, where identification and early isolation of cases will be important. The combined effect of the implementation of these three interventions (home isolation and household quarantine, and cocooning of vulnerable people) could mitigate the RWC scenario by as much as two-thirds and therefore flatten the curve. However this will still leave a large number of individuals with no protection and it is possible that a second wave will follow later in the year.

Nevertheless, and quite apart from any consider of a major incident declaration, given the demography and health status of the population of Wales, Public Health Wales strongly advocates early implementation of these three behavioural interventions and specifically commends urgent attention directed at the elderly population cared for in residential and nursing homes in Wales.

The response from Public Health Wales will similarly change from assessment and advice on community and imported cases, to supporting general advice on isolation and resumption of more specialist advice on outbreak detection, prevention and management. Surveillance for monitoring, short-term prediction and impact estimation will be important, as will the application of surveillance and field epidemiology in hospitals. Overall, the current increased demand on health protection staff will continue but will shift to more usual specialist work, but with greatly increased demand. Public Health Wales will prepare further advice on this point.

Question 2: What would we expect from making a declaration of a 'major incident'?

A major incident is defined under the Civil Contingencies Act [2004] (CCA) as

'*An event or situation, with a range of serious consequences, which requires special arrangements to be implemented by one or more emergency responder agencies'. Under this Act, for a major incident to be declared it has to meet this agreed definition.*

The NHS Wales Emergency Planning Core Guidance Defined a major incident as:

"Any occurrence that presents a serious threat to the health of the community, disruption to the service or causes, or is likely to cause, such numbers or types of casualties as to require special arrangements to be implemented by hospitals, ambulance trusts or primary care organisations'.

Declaration of a major incident in Wales would lead to the establishment of the Emergency Committee (Wales) and the establishment of 4 Strategic Coordinating Groups (SCGs) across Wales.

At the time of writing all LRFs have started to form SCGs and Public Health Wales has attended or will attend all meetings arranged during the week commencing 9 March 2020. Welsh Government stood up the Emergency Coordination Centre for Wales (ECCW) as of 11 March 2020

Public Health Wales will also wish to influence the establishment of a strategic public health led group to provide consistent communication and influence public health actions across Wales.

Benefits of Declaring a Major Incident in the response to COVID-19

1. A recurring theme of lessons identified in multi-agency debriefs is that Major Incidents are not declared soon enough. Timely/early declaration would apply previous lessons.

2. Using established response structures such as SCG and LRF plans is the tried, tested and exercised process of responding to emergencies under the Civil Contingencies Act [2004].The response structures that support SCG decision making, are also made available. Examples include Tactical Coordinating Group, Multi-Agency Media Cell, Mass Fatalities Coordinating Group, Logistical Preparedness Group and Recovery Coordinating Group. All these supporting structures and groups can benefit the response to COVID-19.

3. Formal decision logs of actions would be kept, which would assist any future inquiry into the handling of the situation

4. SCG's would be able to make multi-agency decisions and use partnership networks on key areas such as 'Communications' and 'Mutual Aid' in a more effective manner than existing arrangements.

   Specific areas could include (in no particular order):

   a. *Food, medicine and utilities supply*
   b. *Access to, and delivery of, specialist medical care*
   c. *Domiciliary care and care of the vulnerable*
   d. *Transport infrastructure*
   e. *Waste management services*
   f. *Emergency response services*
   g. *Closures of specific schools and events*
   h. *Consistent and effective use of PPE across agencies*
   i. *Managing public anxiety e.g. addressing any panic buying*
   j. *Addressing any public order issues*

k. Ensuring multi-agency consistency of communication/messaging on health, welfare, prevention and delay of the spread of COVID-19

5. SCGs can communicate clear messages on existing, and any future, powers and legislation to enact and maintain intervention measures put in place.

6. SCGs can provide mutual aid between one another to maintain life-saving and life preserving work.

7. SCGs can help all agencies to examine the sustainability and resilience of their staffing structures. Agencies may need to train more personnel to be able to perform key roles in the emergency structures established in response to COVID-19.

8. SCGs can help assess the suitability and resilience of mutual aid agreements amongst Category 1 and 2 responders including the military, voluntary and private sector to respond to COVID-19.

9. The SCG will direct planning and operations beyond the immediate response to manage the recovery process

Set against this there are costs and consequences of setting up the above support infrastructure, which will require resource capacity (e.g. for increased reporting) and may deflect or impact on the undertaking of necessary actions. It is assumed that the necessity to declare a major incident overrides these consideration.

Concluding comments

Wales (as part of the UK) is confronted by a pandemic (the first declared by the WHO in over a decade). The known characteristics of Covid-19 and the known characteristics of the population of Wales suggest that the impact in Wales could be significant. Considerable preparatory work has occurred in Wales in the 'containment' phase but as we approach the 'delay' phase this will need to be expanded and accelerated. Consideration of the declaration of a Major Incident for Health in Wales will need to be part of the ongoing response. This paper provides an evidential summary of the key considerations to guide any decision on the declaration of a Major Incident for Health in Wales.