

## TAG Policy modelling group – 17 September 2020 12:30 via Teams

Attendees: [Name Redacted] John Watkins, Mike Gravenor, Craiger Solomon [NR]  
[Name Redacted] Brendan Collins [Name Redacted]

Apologies:

Outstanding actions:

1. 30/07 C/F - pick up testing data that could feed into circuit breakers of line with [Name Redacted]	[NR] catch up with [NR]
2. 30/07 [NR] share data by age band form Imperial Worst case scenario. Circulate SAGE worst case scenario	[NR] to Circulate SAGE WCS
1. 06/08 - [NR] Consensus statement about what modelling data do we have and what we need, also useful for work on local data sets.	All - ongoing
2. 06/08 - [NR] to present his walk through to SPI M Policy colleagues, trade off will show how to get SAIL data to further link in, included Ronan in the invite.	Arrange meeting – tracing data
3. 27/08 [NR] to circulate Circuit Breaker work for comment	Complete
4. 27/08 Circulate link for the Armakuni model on GitHub.	[NR]
5. 27/08 [NR] JW and other colleagues to work through the details of the model at a separate meeting.	Complete
6. 27/08 Circulate JBC alert level paper for comments	Complete
7. 27/08 Circulate the Intelligence Cell presentation for comments	Complete
8. 03/09 share number of infections with [NR] to share with WAST.	[NR] MG
9. A discussion meeting around the data-hub once decided when WG will release this info. A weeks' notice required 1. The physical load of feeding the data in 2. Confirming the models are being used correctly by planners 3. Meeting between with [Name Redacted] to feed back in on how the data hub is being used. There are a number of available use cases that can be fed in and this can be dealt with in a dedicated meeting, once WG is happy for the model to be shared.	Complete
10. 10/09/20 [NR] to circulate Power Bi power-point clips	Complete
11. 10/09/20 Invite [NR] to future meetings	Complete
12. 10/09/20 [NR] to put her slides into a spreadsheet	Complete
13. 10/09/20 circulate SPIM chat	Complete
14. 10/09/20 Put doubling times in the dashboard?	Complete
15. 10/09/20 Put into TAC brief but with a caveat?	Complete

### 1. Welcome, roll call and actions from last meeting

[NR] opened and welcomed members to the meeting and walked through the outstanding actions.

11. Re models, there have been different definitions on deaths, ONS hospital, ONS and PHW deaths, therefore been difficult to measure. [NR] used suspected deaths and have calculated using the greater number of events.

14. Send data to NWIS for data hub. [NR] talked through a flow process, how is undertaking, using age assumptions to create a total occupancy model. For the provider base is using existing emergency medicine flows based on real data

15. Chat was around R value, [NR] raised further issue, the R calculation is around hospital and deaths keeping value low, case estimates are unable to do this without

splitting pillar 1 and 2, not sure why? CS to split and run the models by pulling data into same format as England. The R value does not reflect community transmission in Wales.

Warwick and PHE have started producing medium term forecasts, predictions for next 6 weeks is up to 23 hospitalisations per day. JW: to put into context, take moderate Influenza outbreaks eg yr2000, there were 250 cases p/d to the Royal Gwent Hospital alone, so felt the predictions are not overwhelming numbers.

MG felt we are a little ahead of the curve currently, however keep tracking Reasonable worst case scenarios and get the latest up to date data to fit with current and give next predictions. Noted that we are yet to notice an uptake in hospital activity.

NR as an exercise to look at cases and admissions in France and track where we are in relation, Scotland have taken a similar approach.

Meeting with Swansea Uni and Armauni 18 September, useful to have see their output data and their experiments run to validate our data. We have looked at what Armauni have done differently to the original model, lots of no use as we have systems in place which they have not, therefore do we simply use the systems we have to manage the jobs? They do have a few things that we may draw in at a later date.

**Action 1 – BC send further data sets to NR MG**

**Action 2 – Invite Name Redacted to this group**

**2. 111 As an early warning indicator – NR /PHW**

[Weekly flu bulleting -](http://www.wales.nhs.uk/sites3/page.cfm?orgid=457&pid=34338)

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Confirmed that we already use Influenza surveillance already including data from 111, GP contacts and Out of hours streams and can be used as an early warning system, data is published (see above link) Due to discuss GP practice data to start looking at community transmissions.

MG: Sail believe data is not good enough value to estimate R values, anything used as a proxy has to be consistent and accurate.

**3. AOBs  
Models:**

JW seeks clarification In respect of cases, the definition of the epi approach is to define a case by a collection of its symptoms, currently part of a symptom is to have tested positive. MG confirmed cases in the model are usually those who display symptom's, infections are pre, symptomatic and asymptomatic, however cases are those who were pre but go to display symptoms, separate to asymptomatic.

Forward projections were discussed, incorporating deaths, age related deaths, parameters, percentages of Covid including worldwide mortality rate. For the models predictions, will herd immunity come in to play. Maybe useful to think about "most likely" rather than "worst case", rethink our assumptions?

#### **Test, trace, protect indicators:**

Tracing indicators capture would be useful for modelling purposes, MG would like distribution of times, clear definition of onset of symptoms to use, [NR] has suggested any combination of the 3 signature symptoms. Noted that the Aim of TTP is to reduce secondary infection, also you need testing completed within 24/48 hours of symptoms, this was briefly discussed. Pass on any measures to BC you think needs capturing.

As part of Rowlands new project, [Name Redacted] working with SAIL to visualise dynamic network summary data to bring to this group. The internal citizen aspect was talked through.

**Action 3 - Small group meeting to work through all TTP the requirements that are on the table? Bring in PHW colleagues.**

**Action 4 - [NR] chat with [NR] on linking the Armakuni dashboard with the NWIS dashboard.**

#### **Circuit breakers (CBs)**

Relationship between admissions and occupancy, the numbers are correct. MG was asked to look at Circuit breakers and compare formally, Issue is, if you wish to compare one [NR] to another you have define a time period and count the number of deaths, to do correctly you need to define the lockdown length and when you come out of lockdown, it is linked with the circuit connector question, to compare the scenarios correctly. BC suggested look at 2 and 6 week lockdown for the purpose of scenario modelling. Noted that they are desperate for quality data on TTP. Starting point is symptoms, without difficult to know how the system is doing. Confirmed need on and off switch.

When JBC go from level 3 to level 4 use different parameters from when they go from level 4 to level 3. We could model these but note that levels set by JBC are too high. Start with ratio of 50%

[NR] Agree in principal that the Circuit connect is a % the CB, can they explore the percentages of "what If", agreed to look at 25 % and 50%.

With things moving quickly, at what point do you switch on and off?

A consideration is, do we want all the CB hit at the same time? Or one after the other?

Local thresholds approved and looking to publish shortly, we have 25 and 50 per 100k rolling and 2.5 and 5% of test positivity, these used for Caerphilly and RCT lockdowns.

Biosecurity in England are looking at increasing to manage capacity to 50 and 75 per 100k and 4% and 5.5%, how will we respond.