Llywodraeth Cymru
Welsh Government

ATISN 14458

18 November 2020

Dear

ATISN 14458 – Technical Items Used by TAC

Thank you for your request to the Welsh Government for information under the Freedom of Information Act (2000) received on 20 October. You requested the following information regarding the release of all technical coding and data used to underpin the Technical Advisory Cell's most recent (19th October release) projections around the course of Covid-19 epidemic in Wales in differing suppression scenarios, specifically:

1. *All statistical analysis coding (R, SAS, or similar) used to model infection, hospitalisation and death rates due to Covid-19*
2. *All data used to train these models, where applicable*
3. *A copy of the data and modelling quality reports used when ascertaining the suitability of the analysis presented by TAC, for example:*
4. *Analysis of sampling errors and biases*
5. *Analysis of false case positivity rate used when estimating base case of infections*
6. *Analyses related to the statistical significance of models trained for use in forming TAC recommendations to the Welsh Government.*

Our Response

Regarding Question 1: Welsh Government do not hold the Wales specific models as these are held by academic groups. The models we have commissioned are based on the London School of Hygiene and Tropical Medicine models and the Oxford BDI models which are available in github repositories below:

https://cmmid.github.io/topics/covid19/
https://github.com/BDI-pathogens/OpenABM-Covid19

Regarding Question 2: Some of the data is available to download from the Public Health Wales Rapid Covid19 Surveillance web pages on the following link: Public Health Wales Headline summary

Any other data use is held by NHS Wales and available via your local health board or is Public Health Wales data and is individual level data that is shared with the specific instruction that it is used only for modelling and cannot be shared onwards.

We have published results of modelling here:

https://gov.wales/sites/default/files/publications/2020-10/technical-advisory-group-fire-breaks_2.pdf

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https://gov.wales/sites/default/files/publications/2020-09/technical-advisory-group-new-worst-case-scenario-for-winter.pdf

Regarding Questions 3 & 4: The models include scenario analysis rather than probabilistic sensitivity analysis. The data used for modelling is mainly deterministic and does not have sampling error data; however scenario analysis is used to estimate the impact of variation in key input parameters.

We do not produce 'quality reports' for the models.

Regarding Question 5: We do not factor in false positives or false negatives into the models we use but the models are principally calibrated to covid hospital activity and deaths, not confirmed cases so should be less subject to any issues around positive predictive value of tests.

Regarding Question 6: The models Welsh Government commissions are used for planning scenarios and testing policies, not making predictions, however we do track where we are against the scenario models we have, for instance the RWC (see attached PDF file). We do not use the models to test hypotheses.

RWC v actuals - 20201102 for FOI req

Next Steps

If you are dissatisfied with the Welsh Government's handling of your request, you can ask for an internal review within 40 working days of the date of this response. Requests for an internal review should be addressed to the Welsh Government's Freedom of Information Officer at:

Information Rights Unit,
Welsh Government,
Cathays Park,
Cardiff,
CF10 3NQ
or Email: Freedom.ofinformation@gov.wales

Please remember to quote the ATISN reference number above.

You also have the right to complain to the Information Commissioner. The Information Commissioner can be contacted at:

Information Commissioner's Office,
Wycliffe House,
Water Lane,
Wilmslow,
Cheshire,
SK9 5AF.

However, please note that the Commissioner will not normally investigate a complaint until it has been through our own internal review process.

Yours sincerely,