

Tony Dent  
Better Statistics CIC

(by email)

30 August 2022

Dear Tony,

Today we have [published the findings](#) from our review of ONS's Covid Infection Survey (CIS). We really appreciate the time you took to speak to us as during our review, and the additional evidence you shared with us. Given that our letter to ONS is quite high level, I wanted to address and update you on some of the specific points you raised.

We agree that it has not always been clear what the source is for information presented in ONS's Insight Tool. We have raised this with ONS as part of more-detailed feedback which we shared with the CIS team following our review. You also highlight some confusion around whether or not household size was, and could be, included in ONS's analyses. We agree that the explanation of whether the household size variable was and was not included in analyses was not very clear. We note that the updated version of the [CIS methods article](#) published on 5<sup>th</sup> August now provides a fuller explanation. A Bayesian MRP model is used to produce the estimates of daily positivity rates. How each household size varies by age, sex and region is required before it can be included in the post-stratification for this model, and this is not currently known. ONS has committed to exploring the option of adjusting for household size in this way when the household level data from Census 2021 results becomes available. ONS also produces analyses to identify characteristics of people who are more likely to test positive for coronavirus. In this case, logistic regression models are run where household size *can* be included. Although ONS has improved its methods article, we have asked ONS to include this additional detail to make the current situation absolutely clear.

When we met a few months ago, we discussed your concerns about the quality of the statistics, including response rates and representativeness. Our view is that the use of appropriate methods and thorough quality assurance, as well as involvement of experts in various fields, all provide sufficient assurance that the statistics from the CIS continue to be of high quality and fit their intended uses. We consider that response rates can often be a poor indicator of quality of estimates, as it's the overall sample size that matters most. However, we agree with you that representativeness is a very important aspect of quality. [ONS acknowledges](#) that the survey over and

underrepresents certain groups and has taken steps to address this. For example, we think it is good that ONS post-stratifies to take account of mis-represented groups in its analysis. We also found that ONS has comprehensive plans to understand and publish information about the recent change in mode to digital data collection, including any impact on the response rates and sample, and therefore the representativeness of the survey. We will review this information once published and provide further feedback to ONS if necessary.

Finally, you raise a really important point about the availability of UK-wide statistics. This is something which we know many users of health and social care statistics really value. In our [report](#) on lessons learned for health and social care statistics during the pandemic, we found that producers had successfully collaborated to provide comparable UK-wide statistics, for example on infections (through the CIS) and on vaccinations. However, we know that this is not always the case across other health and social care topics. We encourage producers in the four nations to continue to engage on projects to publish comparable data across the UK, while also recognising that differences in policies in each country may mean that providing UK-wide comparability is not always possible. Where UK-wide comparability is not possible, producers should clearly notify users that this is the case to aid user understanding and support appropriate use. As I say, we know that this is an important issue and therefore we will revisit it in a follow-up to our 2021 lessons learned report, which we expect to publish later in October. I would be happy to send you a copy of this report once it is published if that would be of interest.

Kind regards,

Anna

**Dr Anna Price**, Office for Statistics Regulation