International Steering Group – Note of Key Points

27th April 2023 : 9 am – 11 am (BST)

Attending

Professor James Brown – UTS

Abby Morgan – Stats New Zealand

Owen Abbott – ONS

Alastair McAlpine – SG

Andrew Morris - Health Data Research UK

Esta Clark – NRS

Damien Allen – NRS

Will Howes – NRS

Bethanie Fenney – NRS

Tom Macintyre - NRS

David Rowley – NRS

Benjamin Little - NRS

Ralph Mcdevitt – NRS

Jonathan Wroth-Smith - NRS

Michael Edie - NRS

Key Actions

1. NRS provided an update on data acquisition – as reported previously all essential admin data had been secured. Council tax exemption data on unoccupied properties was continuing to be pursued with good progress made.. Most councils have now supplied the data, but there remains several outstanding. ISG supported the continued effort to obtain this data.

2. NRS provided a summary of drop-in meetings that had taken place since the last full ISG meeting:

16h March 2023

NRS presented a set of rules to calculate the variable which evaluates the strength of evidence that the person on the admin data appears in the Scottish population. ISG asked for NRS to look into a different criteria for calculating rules – proportions of people removed rather than link rates – and to think about certain groups which may be real but excluded in the way the rules were originally proposed. NRS proposed to discuss this further on 23/03/23.

23rd March 2023

NRS and ISG had a second discussion on the strength of evidence analysis for administrative data. A decision was made to focus further analysis on a "core" group of individuals, who we are most confident are recorded in the administrative data at the correct address on census day. This decision was made by focusing on a range of factors including: a data driven approach to evaluate the merits of different rules, how we plan to use the data in our overall methodology and ensuring the rules are logical/explainable.

30th March 2023

NRS sought input on the Alternative Household Count (AHC) method. A hybrid method of stratified proportions and deterministic rules was discussed. ISG were content with the methodology and provided the steer that clear communication about the method and reasoning behind it will be needed because the AHC may be used to make a dependence adjustment to the census results.

The method for using administrative data to adjust for babies in the Census and CCS was also discussed. ISG agreed to review the work and provide further advice at a future meeting if needed.

13th April 2023

NRS presented the adjustment strategy which brings the census database in line with the population estimates. The approach is changing so that the low level accuracy of admin data can be utilised. Broadly, NRS propose bringing in skeleton records that are imputed from admin data information. The admin data will also be used to indicate where new skeleton records should be placed. However, this approach is incompatible with the planned adjustment methodology.

Therefore NRS proposed utilising a combinatorial optimisation algorithm in line with the approach used by the ONS. To mitigate the risk that large quantities of admin data could make the adjustment algorithm fail, NRS proposed adding this data iteratively so that it only makes up a percentage of the estimate shortfall.

ISG were positive about this approach. They suggested that instead of adding admin data iteratively, it might be quicker to add it all then iteratively prune the dataset.

3. NRS provided an update on linking the administrative data together, this linked data will be used to add records to CCS. The work has progressed well, with ISG advice around the strength of evidence variable being incorporated into the method. ISG emphasised the importance of communication around the use of administrative data being key. NRS are planning to release information in a methods paper and engage with data users prior to the release of first outputs to begin this process.

4. NRS presented on work to develop the Alternative Household Estimate (AHE). This work will provide a credible figure for the number of households that can be used as a QA tool for the census estimates and, if necessary, potentially be used to adjust the census estimates. ISG were content with this approach and provided the steer to carefully consider the data on unoccupied addresses and second homes in particular.

5. NRS provided an update on data processing progress – data cleansing has just completed, with the next phases due to begin being veteran linking and filter rules processing steps.
6. There was a discussion about the role of ISG going forward now that the methods development phase was coming to a close. It was agreed that NRS would consider this and discuss with ISG at the next meeting.

27th April 2023