

## Population and Migration Statistics Committee (Scotland)

### Alternative Sources Update

#### 1. Administrative Data Research

We have continued to investigate a range of administrative data sources with a view to supporting the production of population statistics across all key areas: traditional census enumeration; population and migration estimates; and the development of alternative methods for census taking in the future.

The work on census alternatives is focused on the feasibility of constructing a demographic spine out of existing administrative sources. The National Health Service Central Register (NHSCR), which offers the best coverage for Scotland, has a key role to play in this. Our initial assessment found that the number of records on the NHSCR exceeds by around 16% the size of the Scottish population as estimated in our mid-year population estimates (MYE), and this varies considerably across Local Authorities and demographic groups. We are looking to use other data sources, as they become available at record level, to understand the nature of this excess and develop an adjustment for it. For example the Higher Education Student Record collected by the Higher Education Statistics Agency (HESA) would help assess the extent to which young people who move away for their studies fail to de-register with their GP. We plan to begin shortly a linkage study with the Census Rehearsal data. This should help assess aspects of under-coverage and timeliness of registration on the NHSCR as well as other data quality aspects.

Current work with the NHSCR includes an investigation of the information on migrants. Figures on the small area distribution of international migrants recorded on the NHSCR were used to inform feasibility work for a potential Scottish Government survey of migrants. There is work in place aiming to compare current methods for estimating internal migration flows in the production of MYE with an alternative direct use of the NHSCR.

Another piece of work concerned with migration linked 2006/07 and 2007/08 school census data using Unique Pupil Numbers (UPN) to examine how residential moves of pupils captured by the school census compare to the health data based flow estimates used in our MYE. The results suggest a level of discrepancy across sources which is higher than that observed for estimates of population stocks.

Regular assessments of aggregate small area statistics from sources such as school census, DWP pensions records and child benefit statistics have been conducted for most of the post 2001 Census period. One key conclusion is that while reasonably good agreement with the MYE may exist at the Scotland level, there is more variation at small area geography and discrepancies are difficult to account for. One possible reason is the inconsistency of address data held on different sources. There is also a strong indication that to make further progress on understanding coverage issues, and develop the use of the administrative data available, more use of record linkage should be made.

Finally, to support the conventional census enumeration we developed a small area level index aiming to identify areas where enumeration is likely to present greater challenge. The census rehearsal found this to work well, particularly in urban areas, and the index is now being updated for use in the 2011 Census.

## **2. Data Access and Data Sharing**

To implement our research programme we require greater access to record level administrative data. Key recent development was the conclusion of work investigating the potential for onward disclosure of administrative data acquired by the Office for National Statistics (ONS) under the 2007 Statistics and Registration Services Act (SRSA). It has now been agreed that ONS will share with the General Register Office for Scotland (GROS) extracts of HESA student record data and HMRC Migrant Worker Scan for the purpose of producing population statistics. In future, this approach will be applied to Department of Work and Pensions (DWP) data on benefit recipients, when the relevant data sharing regulations have been approved by Parliament.

There has been no progress on sharing data with Local Authorities (LA's). Although a number of potentially useful sources were identified, LA's powers to share these data with GROS still require clarification.

Work has started to investigate the feasibility of collecting data from independent schools on pupils' residential addresses. The initial focus is on aggregate counts to supplement information from the school census and build up alternative estimates of school age populations around the time of the 2011 Census.

## **3. Future Plans**

Our overall objective remains the use of record linkage studies to investigate the feasibility of constructing alternative estimates or measures based on administrative data that can be compared to census results. In the immediate future this will continue to draw mainly on NHSCR data and incorporate other supplementary sources as necessary access is secured. The work will seek to assess registration rates, data currency and coverage bias, and adjust NHSCR based measures and estimates of stock and flows as necessary.

Given the data access secured so far it is unlikely that sufficiently developed and reliable alternative estimates can be produced in advance of the 2011 Census. We plan to continue this work after the census and use data collected in the enumeration to improve the administrative-data-based outputs and develop the methodology further.

**General Register Office for Scotland  
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