Household Analysis Review Group: Progress Report On Communal Establishments

Purpose

1. This paper provides HARG members with the three alternative approaches for producing CE figures for use in the 2004-based household projections.

2. HARG members are invited:

- to express their views on which of the three alternatives suggested should be used in the 2004-based household projections.
- to comment on any aspect of the work done so far.

Background

3. As explained in previous HARG papers, a better source of data on CEs would help improve the quality of household projections, by providing figures that were more up-to-date than those from the last Census.

4. At the last HARG meeting, GROS presented an update on progress in completing a set of alternative sources for data on CE and in the comparisons with 2001 Census data. It was agreed that for the 2004-based household projections, GROS could use alternatives to the Census where possible, supplemented by Census data for CE where an alternative source has not been found yet (e.g., halls of residence). GROS undertook to send each council the figures on residents in CE in their area for consultation.

Reasons for reconsidering this approach

5. Since the last HARG meeting, some concerns about the suitability of using this approach have arisen. The CE types for which alternative sources would be available for the 2004-based household projections are Hospitals, Adult Care Homes and Prisons, which represent approximately 60% of the population living in CE in 2001. The main problems with using this information are:

5.1 This approach mixes figures from different sources and different years.

5.2 **Hospitals**: ISD figures on hospital residents are only nationally complete as of 2001. Some Health Boards do not have complete data as of 2004 because of software implementation problems¹. ISD expects nationally consistent data for 2004 to be complete in the next months, but this would be too late for the 2004-based household projections. We think that the best GROS can do with the available information is to produce an estimate of a complete set as of 2004, using 2001-2003 data for those hospitals that have not submitted records for 2004. However, this would only be an estimate because there is not a definitive list of hospitals that should be submitting records for 2004. This means that when we do not

¹ Fife, Forth Valley and Glasgow in the case of patients in geriatric long stay specialties and Fife, Forth Valley and Lothian in the case of patients in mental health specialties. They represent approximately 25-30% in population terms.

have data for a hospital in certain years, we cannot be sure whether this is because the hospital has closed or does not cover this specialty any more, or it is still open but has not returned the data. Additionally, we cannot be sure that all the hospitals that should be in the list are in the list. Because of this, it is difficult to be certain about how complete the data are. The only way to be certain of this would be to ask ISD to contact each CE individually, but this is likely to take too long to carry out, and could be difficult to justify as ISD expect to have complete data from all CE within a few months.

5.3 Adult Care Homes: SE Community Care Statistics on Adult Care Homes come from the Scottish Care Home Census. Some imputation has been done by the Community Care Statistics branch, to produce information on long-stay residents (6 months or more) and break it down by gender and age group. This is because they only receive individual returns for roughly 75% of long stay residents (6 weeks or more) in care homes in census night, and not all of them have the field "date of admission" completed to allow for the length of stay to be calculated.

5.4 Some of the sources may **overlap**. In particular, we know that we have to assume that ISD and SE Community Care Statistics figures contain duplicates (see Annex). Where an institution is covered in both returns, we have removed that institution from the ISD return, to avoid duplication. This was done by institution (the same institution code was used in both sources), not individual resident. For Geriatric institutions, this means removing 294 residents (out of an original total of 2,749). (For Psychiatric institutions, using June 2001 data, this would mean removing 396 residents out of an original total of 4,636. 2004 data were not available at the time of preparing this paper).

5.5 There could also be some overlap between SE Community Care Statistics and 2001 Census Hostels data.

5.6 ISD sources on CE are likely to change in the near future, particularly the source for patients in long stay geriatric units. However, the information is still expected to be available from ISD (from a different source).

5.7 Detailed comparisons between alternative sources and the Census have been carried out for Prisons figures (see HARG 2005(13)), but not for the other CE types.

Three alternatives on CE figures for the 2004-based household projections

6. Because of the concerns listed above, two alternatives are suggested here, with a summary of their advantages and disadvantages.

Option 1 2001 Census CE proportions

6.1 This option consists of using the proportion of people living in CE according to the 2001 Census, and applying this proportion to each year's population figures. This is the same approach that was used for the 2002-based household projections.

6.2 Advantages:

- the simplest and easiest approach the CE figures are ready to be used in the projections (as presented in paper HARG 2006(3))
- the methodology will be consistent with previous household projections
- it is easy to understand, explain and justify the figures
- 6.3 Disadvantages:
 - the figures will reflect changes in the overall population since 2001 (e.g., if increasing numbers of elderly people result in a higher number of people living in care homes). However, they will not reflect any policy changes since 2001, such as a move to have fewer people living in hospitals and care homes, with more people supported in their own homes.

Option 2 2001 Census CE proportion – consulting with councils on the figures

6.4 This option consists of providing councils with a file containing CE figures from the 2001 Census, projected to 2004 (i.e., the 2001 proportions applied to the 2004 population estimate). This would show the number of residents in CE by type, sex and age group. GROS would ask the PAMS member in each council to update the figures, if they had more recent figures. If no comments were received, the unadjusted figures would be used.

6.5 For the 2002-based projections, Option 1 was used – councils were not consulted on the CE figures, as the Census figures were very recent. For the 2000-based household projections, a similar exercise was carried out to update figures from 1994, and 11 out of 32 councils suggested changes. This reduced the number of CE residents by 5% across Scotland (over this 6-year period), when compared to the unadjusted figures.

6.6 Advantages:

- More up to date than Option 1
- It includes local knowledge

6.7 Disadvantages:

- Some councils may not have up to date and complete records on people living in CE
- There might be no responses from some councils
- This may result in figures not being treated consistently across Scotland.
- Waiting for the councils to check the figures would hold up the production of the household projections.

Option 3

2004 figures for Prisons, Adult Care Homes and Hospitals, and 2001 Census for other CE types (projected forward to 2004 by type of CE)

6.8 This option was the one agreed at the last HARG meeting. It consists of using the most up to date information available for each CE type, with respect to June 2004, in particular:

CE type	Date	Source	Residents ¹	2001 Census ^{1,2}	
Prisons	30th June 2004	SE Prison Statistics	4,476 ³	4,097	
Adult Care Homes	31st March 2004	SE Community Care Statistics	30,896 4	38,316	
Psychiatric hospitals	31st March 2004 (incomplete) 5	ISD	4,240 ⁶	3,841	
Geriatric hospitals	31st March 2004 (incomplete)	ISD	2,455 ⁷	4,824	
Other CE	29th April 2001 projected to 2004	2001 Census	31,763	31,402	
Children's home (including secure units)			244	235	
Defence establishments			4,748	4,925	
Education establishments			19,621	19,115	
Hotel, boarding house, guest house			2,576	2,583	
Hostel (including youth hostels and hostels for the homeless)			2,330	2,306	
Civilian ship, boat or barge			2	2	
Other (includes religious establishments)			2,242	2,236	
Total	73,830	82,480			

Notes:

- (1) The number of residents in this table only covers population aged 16 and over.
- (2) This column shows the number of residents according to the 2001 Census (no adjustments).
- (3) Number of prisoners sentenced to one year or more.
- (4) Number of residents as of 31st March 2004 who had been resident for 6 months or more.
- (5) Figures as of 31st March 2004 were not available when this table was produced but will be available shortly. The figure shown in this table is an estimate and it was calculated as explained in footnote 4.
- (6) This figure for Psychiatric hospitals is an estimate. The number of long term residents (6 months or more) in psychiatric hospitals on the 30th June 2001 was 4,636 (Source: ISD). If duplicates are removed comparing this data to 31st March 2004 Adult Care Homes, following the method explained in paragraph 5.4 the resulting figure would be 4,240.
- (7) The number of residents in geriatric hospitals provided in the table correspond to the total long term residents estimated by GROS, once the original data set was completed as explained in paragraph 5.4 and duplicates were removed.

6.9 For those CE types for which no alternative sources are available, 2001 Census figures would be projected forward to 2004 by type of establishment, sex and age group, using the percentage that they represented over the total population in 2001 and applying that percentage to the 2004 mid-year population estimate. This would be equivalent to Option 2 above.

6.10 As in Option 2, councils would be asked to comment on the figures. They would be provided with the following information:

1) Number of residents (by type of CE, by gender and age group).

2) List of CE (by type of CE, including name of the establishment, address, and total number of residents), only for those CE types for which alternative sources are available.

6.11 Advantages:

- It is more up to date than Options 1 and 2 (the relevance of this is shown in paper HARG 2006(2)).
- It includes detailed information about each CE type, so reflects changes such as CE closing or opening.
- 6.12 Disadvantages:
 - It mixes figures from different sources and different years.
 - ISD data on hospitals are only nationally complete as of 2001.
 - Some imputation is required to obtain the number of long stay (6 months) residents in a care home by sex and age group.
 - Some sources may overlap (Hospitals Adult Care Homes; Adult Care Homes Hostels).
 - Some ISD sources maybe replaced by new ones (though we expect them to still be able to provide the information we would be interested in).
 - Detailed comparisons with the 2001 Census have been only carried out for Prisons.

Next steps

7. GROS will put together the CE figures to be used in the next set of household projections according to the option agreed by HARG Members in this meeting. If so decided, GROS will contact the PAMS member from each council on the figures. After the households projections publication, work will continue on trying to complete the gaps and improve the quality of these alternative source of data on CE.

GROS: Household estimates branch February 2006

ANNEX

Changes in the number of residents in CE according to alternative sources

8. At the last HARG meeting it was suggested that GROS should produce a table showing the changes in the number of residents in each CE type (where available). Table 2 below presents those changes, together with the 2001 Census data. There is not much information available so far, mainly because the hospitals figures are not complete, but the information below seems to reinforce the idea that ideally we should use up to date data on people living in CE (for example, Prisons figures changed significantly in 2004).

Table 2 : Alternative sources on CE – comparisons between 2001 and 2004/2005¹

CE type	2001	2002	2003	2004	2005	Change last year - 1st year	% change	2001 Census
Adult Care Homes ²			32,009	30,896	30,852	-1,157	-3.6	38,316
Prison ³	3,804	3,806	3,959	4,476		672	17.7	4,097
Other hospitals ⁴	3,062	3,055	2,795	2,715	2,508	-554	-18.1	4,824

Note:

1. The figures in this table cover population aged 16 and over.

2. Number of residents as of 31st March of the corresponding year who had been resident for 6 months or more.

3. Number of prisoners sentenced to one year or more as of the 30th of June of the corresponding year.

4. ISD data on the number of residents in the specialties geriatrics medicine and GP other than obstetrics in a long stay unit for care of the elderly who had been resident for 6 months or more at 31st March of the corresponding year. These data are nationally complete only as of 2001 (all Health Boards but Fife, Forth Valley, Greater Glasgow and Dumfries & Galloway have data complete as of March 2005). The figures have not been adjusted (they have not been completed and duplicates have not been removed).