

Census 2001

One Number Census Quality Assurance information: Quality Assurance themes

1991 underenumeration adjustments

Problem

For many Local Authority Districts (LADs) it was noted during the ONC quality assurance process that the diagnostic range was higher than the One Number Census (ONC) estimate for some recurring age-sex groups (mainly males aged 25-29, 30-34 and 35-39 year olds). This pattern often coincided with the large underenumeration adjustments made in the 1991 Census for the corresponding population cohort. It did not coincide with the 20-24 age-groups, for whom non-response to surveys and Censuses is generally highest and where response to the 2001 Census had been found to be most difficult. This indicated the possibility that the 1991 post-Census underenumeration adjustment was too large in London, the Metropolitan areas and Non-metropolitan cities.

Background

The assessment of underenumeration in the 1991 Census was problematic. The 1991 post enumeration survey (the Census Validation Survey, CVS) was a combined quality and coverage survey in which a sample of about 6,000 households were selected for interview. It was not completely independent of the census and it was carried out to the same basic procedure as the original census. Given the problems with the 1991 CVS, it was decided that the total figure for the national population of England and Wales in mid-1991 would be a number that was very close to that derived by updating from the 1981 Census. This was judged to be more plausible than the national total based on the results of the 1991 Census. It was only this one figure that was used - the national total of the rolled-forward from 1981 estimates. Thus the Census and CVS results had to be adjusted for the underenumeration that had not been identified by the CVS. To achieve this England

and Wales was divided into 8 area types and differential adjustments for under-enumeration were made by area type, sex and age group. Certain of the area types, namely inner London, outer London, metropolitan cities, and some other non-metropolitan cities, were given quite large adjustments, particularly to add in more men aged 20-29. Further information on the 1991 Census adjustment issues can be found at www.statistics.gov.uk/census2001/implications.asp#1991

Actions

If the diagnostic range was noticeably higher than the ONC estimate then the adjustment for the corresponding cohort age-sex group in 1991 was examined. If a large adjustment was made in 1991, then the 2000 mid-year estimate would still reflect that adjustment and in a significant number of areas this resulted in the mid-year estimates being higher than the patient register information used in the quality assurance. This provided a further indication that the mid-year estimates were inflated; they were higher than the patient register numbers which themselves are known to be inflated, particularly for young men, because they contain patients who have moved out of an area and not yet registered elsewhere. There were also other indications that the mid-year estimates were likely to be inflated because of difficulties in measuring migration, particularly outward migration. (Commentary on this feature was published with the first release of Census results at www.statistics.gov.uk/census2001/methodology.asp.)

Provided there was no evidence from the qualitative information used in the quality assurance to suggest a problem with the 2001 One Number Census estimate, the ONC estimate was judged to be more reliable than the 2000 Mid-Year Estimate (MYE).