

Inclusion of mobile telephone numbers into New South Wales Population Health Surveys

Landline random digit dialling (RDD) sampling have been the method of choice for telephone based population health survey conducted by the NSW Ministry of Health and other Australian States and Territories over the last decade. However because of the increase in mobile telephone ownership and mobile-only telephone users (estimated to be 19% in 2011) the frame coverage and impact on the prevalence estimates was being compromised. So at the beginning of 2012 the methodology was modified to include mobile telephone numbers using an overlapping dual-frame design, in which both landline and mobile telephone numbers are sampled.

To facilitate this change Margo Barr at the NSW Ministry of Health and David Steel at the Centre for Statistical and Survey Methodology at the University of Wollongong developed methods that would include mobile telephone numbers with minimal impact on the existing data collection methodology.

As part of this process an evaluation of the design change is being conducted using data collected in February and March 2012 from over 3000 respondents. The evaluation includes comparisons of call outcomes, interviewer and respondent acceptance, sample representativeness and costing between the previous landline frame design and the overlapping dual-frame design. The evaluation also includes an examination of possible weighting strategies for the overlapping design and how these are likely to impact on the time series.

Further information about the NSW Population Health Surveys and the evaluation of the design change is available from the NSW Ministry of Health's and the Centre for Statistical and Survey Methodology at the University of Wollongong websites at <http://www.health.nsw.gov.au/publichealth/surveys/index.asp> and <http://cssm.uow.edu.au/publications/index.html> respectively.

A paper has recently been published on this work:

Barr, M. L., van Ritten, J. J., Steel, D. G. and Thackway, S. V. (2012). Inclusion of mobile telephone numbers into an ongoing population health survey in New South Wales, Australia: design, methods, call outcomes, costs and sample representativeness. *BMC Medical Research Methodology* 2012, 12:177. doi:10.1186/1471-2288-12-17