

2012 Progress Report on recommendations from the 2009 Response Plan to address methodological issues that may affect the quality of surveys undertaken by the NSW Health Survey Program

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Introduction

The New South Wales Population Health Survey is a continuous survey of the health of people of New South Wales using computer assisted telephone interviewing (CATI).

The main aim of the survey is to provide detailed information on health behaviours and health status of people in New South Wales [1].

In 2009 the Centre for Statistical and Survey Research, at the University of Wollongong developed a response plan to address methodological issues that may affect the quality of surveys undertaken by the NSW Health Survey Program [2].

This is a report on the progress to 2012.

References

1. NSW Population Health Surveys
<http://www.health.nsw.gov.au/surveys/Pages/default.aspx>
2. Dr Phil Hughes and Prof David Steel. **Response Plan to address methodological issues that may affect the quality of surveys undertaken by the NSW Health Survey Program**. Centre for Statistical and Survey Research, University of Wollongong, Sept, 2009.
3. Sampleworxs Pty Ltd. Household RDD
[http://www.sampleworx.com.au/household_rdd.html]
4. Pennay D. Profiling the 'mobile phone only' population: Results from a dual-frame telephone survey using a landline and mobile phone sample frame. ASCPRI Social Science Methodology conference proceedings. 2010.

Topic	2009 Response Plan Recommendations	Progress to 2012
Survey Management structures and management	No specific recommendations	
Sample design – Fixed line phone sample frame	Sampleworx [3] with its full coverage appears to be the superior frame, but getting sample by health administration area may be an issue. Recommend examination and testing in 2010 and use in 2011.	Sampleworx [3] since 2011 however RDD by health administration area performed in-house
Sample design – Mobile phone sample frame	Recommended that a stand-alone mobile only survey be developed and conducted in 2010. Following this a decision can be made about integrating mobile phone numbers into the main survey.	Used pilot conducted by Pennay et al [4] as test. Mobile only phones incorporated in 2012 using dual overlapping frames.
Sample design – Sample size by quarter	Recommended that the survey planning process be reviewed to ensure more equally spread of sample across the year for each health administration area.	Closer sample management undertaken by using quarterly rather than yearly health administration area quotas.
Sample design – Child boost design	Recommended testing alternatives such as selecting both an adult and a child or increasing the child probability of selection.	Both child and adult currently being selected for mobile frame where available. Further testing required.

Topic	2009 Response Plan Recommendations	Progress to 2012
Data collection processes – Foreign language interviews (FL)	Recommended a review of FL for possible discontinuation as small numbers and little impact on overall estimates. If maintained (1) examine if still most in demand languages and (2) ensure initial selected respondent interviewed.	Program maintained as important for the credibility of the survey. Chinese, Vietnamese, Italian, Greek and Arabic still most in demanded language groups. Transfer of information to language jobs now includes selection questions.
Survey quality measures – Measuring the quality of the interview process	Recommended that reporting of survey outcomes be extended to include a full set of measures: response rate; cooperation rate; non-contact rate; eligibility rate and invalid rate. Disposition codes should be reviewed to ensure ongoing consistency with AAPOR standards.	Call outcome programs modified. Full set of survey outcomes provided for 2011 and 2012 surveys. Calculating all previous years to provide full comparative statistics.
Survey quality measures – Other measures of survey quality	Recommend interviewer-based summary information be extended to include survey data such as age x sex profile of their responders, and rates for key indicators. Reports to continue to be produced on a quarterly basis.	Quarterly reports continue to be provided to interviewers through feedback session as well as ongoing in-house training and support. Reports also provided to interviewer employment agency each quarter. Extension to include survey data yet to be undertaken.
Weighting and analysis - Weighting	Recommend that annual proportional weights by health administration area x age x sex be used for quarterly weighting rather than rim weighting. Although it will impact on granulation of the weighting it will improve sessional adjustment. Efforts should also be made to get more up-to-date residential populations.	Weighting by health administration area x age x sex used for each quarter from 2012 and then quarters combined to make annual dataset.
Weighting and analysis – Household size weighting	Recommended that household weights are compared to ABS data on household size.	Yet to be completed. Plan to undertake with 2010 census data when released in 2012.
Weighting and analysis – Standard error estimation	Recommended that variance estimation process be modified for subgroups and randomly allocated question modules using the DOMAIN statement in SAS rather than by filtering out records.	Recommendation incorporated in 2009.
Reporting – Testing for statistically significant differences between sub-groups and NSW	Recommend using t-test with appropriate overlap adjustment when comparing sub-group with NSW. Text in reports should also be modified as recommended.	Recommendation incorporated in 2009 and in all subsequent analysis and reporting.
Reporting – Showing the confidence interval for every estimate	Recommend considering alternative ways of presenting standard errors. Consideration needs to be given to users and their understanding of survey error.	Providing graphs of smoothed estimates and providing tables that contain the smoothed estimates, actual estimates, confidence bands and relative standard errors on Health Statistics NSW from 2012.