

Call outcome information for the NSW Population Health Survey using AAPOR definitions 2002-2012

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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].

The American Association for Public Opinion Researchers (AAPOR) has developed standard disposition and outcome definitions for surveys [2]. Although not required to be used in Australia the use of the AAPOR definitions is encouraged in order to compare between surveys. Outcome information had been provided in the annual reports until 2010 [1] but not using the (AAPOR) standard definitions.

Methods

Operational data for the survey were downloaded. The data included telephone number, number of attempts, details of each attempt (including duration) and final disposition. Although the final disposition codes used for the survey were site specific they could be easily mapped to the AAPOR standard definitions as shown in Table 1.

Table 1: Study disposition codes and their mapping to AAPOR codes and categories

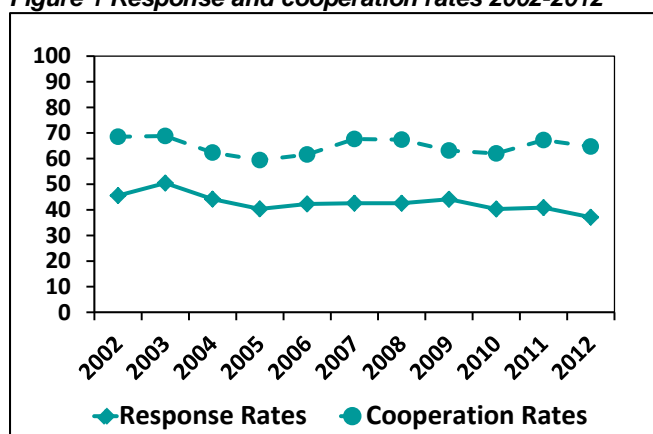
AAPOR		NSW	
Categories	Code	Categories	Code
Interview (I)	1.1	Complete interviews	25,26
Refusal (R)	2.112	Respondent refusal	20
	2.1	Household refusal and breakoff	15,19,31,35
Non contact (NC)	2.2	Respondent never available;	21,24,27,32,
	2.21	Away for duration of survey	34
Other (O)	2.32	Respondent physically or mentally unable to complete interview	22
	2.333	Non-translated language	33
	2.3	Other non-refusal : Hang up said nothing; Terminated by interviewer; Technical problems	30 23 36
Unknown Household (UH)	3.12	Engaged busy	1
	3.13	No answer	2
	3.14	Always answering machine	3
Not eligible (NE)	4.2	Fax data line	4
	4.3	Non-working number	5
	4.31	Unusual tone	6
	4.51	Business, government office, other organizations	7
	4.7	Non-eligible respondent: No child in household; Not in NSW; Mobile owned by child	38, 8, 60+ 29,39

These final dispositions were then entered into the AAPOR outcome rate calculator [3] and all AAPOR levels of response (1-4), cooperation (1-4), refusal (1-3) and contact rates (1-3) were calculated from the groupings of the final dispositions.

Call Outcome Information

Call outcomes and levels of response, cooperation, refusal and contact rates calculated as per AAPOR definitions are provided in Table 2 for 2002 to 2012. Response (level 3) and cooperation (level 3) rates are highlighted in Figure 1.

Figure 1 Response and cooperation rates 2002-2012



Discussion and Summary

As shown in Figures 1 response (level 3) and cooperation (level 3) rates have remained relatively constant over time even with the introduction of mobile phone numbers in 2012.

As shown in table 1 the AAPOR categories clearly differentiate between eligible and ineligible and known and unknown persons and households.

The main differences between outcome information when reporting using the AAPOR definitions and the previously reported outcome information in the annual reports are: (i) classification of 'hang up said nothing' and 'terminated by interviewer' to 'other' rather than 'refusal'; and (ii) the addition of 'non-contacts', 'other' and a proportion (e) of 'unknown households' to the denominator when calculating the response rates.

References

1. NSW Population Health Surveys: <http://www.health.nsw.gov.au/surveys/Pages/default.aspx>
2. The American Association for Public Opinion Research. **Standard definitions: Final dispositions of case codes and outcome rates for surveys. 7th edition.** AAPOR. 2011.
3. The American Association for Public Opinion Research. **Response rate calculator V3.1** (Excel) [\[http://www.aapor.org/Resources.htm\]](http://www.aapor.org/Resources.htm)

Table 2: Call outcome information and rates – 2002-2012

Call Outcomes	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
T=Total phone numbers used	78081	78097	63433	84870	67539	100055	83604	83850	110494	422402	204193
I=Complete Interviews	15442	15837	11830	13701	10345	17266	13369	13746	13289	16039	15149
P=Partial Interviews	0	0	0	0	0	0	0	0	0	0	0
R=Refusal and break off	7098	7182	7141	9357	6457	8260	6471	8020	8137	7814	8779
NC=Non Contact	1582	1186	800	1127	1513	1954	1351	1361	1495	4530	3143
O=Other	3002	2633	2085	2705	2245	6689	4215	3186	4205	7450	8793
UH=Unknown Household	15572	11360	11636	17645	10804	15751	15982	12986	19545	36887	53510
NE=Not eligible											
<i>Not in NSW, not eligible age group</i>	512	496	345	809	414	698	487	436	4162	1059	26694
<i>Business, government, other organizations</i>	5369	5732	4239	6130	5381	7576	6182	6057	8105	67675	41772
<i>Non-working number unusual tone</i>	29504	33671	25337	33396	30380	41861	35547	38058	51556	280948	45410
UO=Unknown other	0	0	0	0		0	0	0	0	0	0
e: estimated proportion unknown eligibility that are eligible	0.43	0.40	0.42	0.40	0.36	0.41	0.38	0.37	0.30	0.09	0.24
Response Rates											
Response Rate 1: $I / (I+P+R+NC+O+UH+UO)$	36.2	41.5	35.3	30.8	33.0	34.6	32.3	35.0	28.5	22.1	17.0
Response Rate 2: $(I+P) / (I+P+R+NC+O+UH+UO)$	36.2	41.5	35.3	30.8	33.0	34.6	32.3	35.0	28.5	22.1	17.0
Response Rate 3: $I / ((I+P+R+NC+O) + e(UH+UO))$	45.6	50.4	44.2	40.4	42.3	42.6	42.6	44.1	40.3	40.9	31.0
Response Rate 4: $(I+P) / ((I+P+R+NC+O) + e(UH+UO))$	45.6	50.4	44.2	40.4	42.3	42.6	42.6	44.1	40.3	40.9	31.0
Cooperation Rates											
Cooperation Rate 1: $I / (I+P+R+O)$	60.5	61.7	56.2	53.2	54.3	53.6	55.6	55.1	51.8	51.2	46.3
Cooperation Rate 2: $(I+P) / (I+P+R+O)$	60.5	61.7	56.2	53.2	54.3	53.6	55.6	55.1	51.8	51.2	46.3
Cooperation Rate 3: $I / (I+P+R)$	68.5	68.8	62.4	59.4	61.6	67.6	67.4	63.2	62.0	67.2	63.3
Cooperation Rate 4: $(I+P) / (I+P+R)$	68.5	68.8	62.4	59.4	61.6	67.6	67.4	63.2	62.0	67.2	63.3
Refusal Rates											
Refusal Rate 1: $R / (I+P+R+NC+O+UH + UO)$	16.6	18.8	21.3	21.0	20.6	16.5	15.6	20.4	17.4	10.7	9.8
Refusal Rate 2: $R / ((I+P+R+NC+O) + e(UH + UO))$	20.9	22.9	26.7	27.6	26.4	20.4	20.6	25.8	24.7	19.9	17.9
Refusal Rate 3: $R / (I+P+R+NC+O)$	26.2	26.8	32.7	34.8	31.4	24.2	25.5	30.5	30.0	21.8	24.5
Contact Rates											
Contact Rate 1: $(I+P+R+O) / (I+P+R+O+NC+UH+UO)$	59.8	67.2	62.9	57.8	60.7	64.5	58.1	63.5	54.9	43.0	37.9
Contact Rate 2: $(I+P+R+O) / ((I+P+R+O+NC) + e(UH+UO))$	64.8	68.6	63.6	61.1	64.7	79.4	76.6	80.1	77.8	79.7	71.5
Contact Rate 3: $(I+P+R+O) / (I+P+R+O+NC)$	94.2	95.6	96.3	95.8	92.6	94.3	94.7	94.8	94.5	87.4	91.2