## Appendix A: Details of the national population health measurement surveys in the UK and USA

## **UNITED KINGDOM The Health Survey for England program**

The Health Survey for England comprises a series of annual surveys about the health of people in England. The survey provides regular information on various aspects of population health and monitors some national health goals and targets. All the surveys have covered the adult population aged 16 and over living in private households in England. The most recent surveys, 1995-1998, have also covered children aged 2 to 15 living in households selected for the surveys.

The series is part of an overall program of surveys commissioned by the Department of Health and designed to provide regular information on various aspects of the nation's health that cannot be obtained from other sources. Outputs from the survey program have included policy development, research and health promotion activity and the development of national height and growth charts for children.

The Health Survey series was designed to achieve the following aims:

- 1. To provide annual data for nationally representative samples to monitor trends in the nation's health;
- 2. To estimate the proportion of people in England who have specified health conditions;
- 3. To estimate the prevalence of certain risk factors associated with these conditions;
- 4. To examine differences between subgroups of the population (including regional populations) in their likelihood of having specified conditions or risk factors;
- 5. To assess the frequency with which particular combinations of risk factors are found, and in which groups these combinations most commonly occur;
- 6. To monitor progress towards selected health targets;
- 7. (From 1995) to measure the height of children at different ages, replacing the National Study of Health and Growth.

The Health Survey was first proposed in 1990 to improve information about morbidity by the (then) newly created Central Health Monitoring Unit within the Department of Health. This information is used to underpin and improve targeting of nationwide health policies. The survey was carried out in 1991-1993 by the Office for Population Censuses and Surveys that is now part of the Office for National Statistics. Since 1994, the Health Survey for England

has been carried out by the Joint Health Surveys Unit of the National Centre for Social Research, and the Department of Epidemiology and Public Health at the Royal Free and University College Medical School. A similar survey program is conducted for Scotland.

A provisional forward program for the Survey for 2001/6 has been agreed which envisages returning to individual topics at about five yearly intervals to monitor trends. The program is provisional and may change as priorities change. The program involves 2 years out of every 5 being an oversample of a minority population group (and consequent reduction in the main sample). The remaining 3 years of each 5 will be a full sample so that three years of data can be combined to give Health Authority level data on core topics.

The Health Survey has been designed to be nationally representative of people of different ages, sex, geographic area and socio-demographic circumstances. The 1991 and 1992 surveys had a limited population sample of about 3,000 and 4,000 adults respectively. For 1993 to 1996, the adult sample was boosted to about 16,000 to enable analysis by socio-economic characteristics and health regions. In 1995 for the first time, a sample of about 4,000 children was also introduced. For the 1997 Health Survey, the sample was about 7,000 children and 9,000 adults. From then on, the sample has been 16,000 adults and 4,000 children aged 2 to 15 years.

Each survey in the series consists of core questions and measurements (for example, anthropometric and blood pressure measurements and analysis of blood samples), plus modules of questions on specific issues that change periodically. The 'core' includes:

- questions on general health and psycho-social indicators
- smoking
- alcohol
- demographic and socio-economic indicators
- questions about use of health services and prescribed medicines –
   (the focus for these may vary from year to year to suit the modular content of the survey)
- blood pressure
- measurements of height, weight and blood pressure.

The special interest modules may be about a single topic, several topics or about population groups. The modules to date have been:

1993	cardiovascular disease
1994	cardiovascular disease
1995	asthma; accidents; disability
1996	asthma; accidents;
	special measures of general health (Euroquol, SF36)
1997	children and young people
1998	cardiovascular disease

selected ethnic groupsolder people; social exclusion.

From 1993 to 1994 when cardiovascular diseases were the main focus, the surveys included physical measures and the taking of a blood sample. A range of blood analyses was performed and a small sample was stored for possible future analysis with participant consent.

For 1998 where cardiovascular disease was the main focus, the following blood analyses were undertaken:

- total cholesterol
- HDL cholesterol
- fibrinogen (a clotting agent raised levels can contribute to cardiovascular disease and stroke)
- haemoglobin
- ferritin
- C-reactive protein.

Other physical and biochemical measures are included in the survey. For example, when asthma was the focus, lung function measurements were carried out and blood samples were analysed for Immunoglobulin E (IgE - the antibody responsible for the immediate type of immune response - a raised level of IgE is found in people with an atopic predisposition) and house dust mite specific IgE. Cotinine (a metabolite of nicotine) levels have also been included in the survey to measure for smoking and are particularly useful in assessing passive smoking. Cotinine levels were obtained from either a blood sample or a saliva sample.

From 1997 onwards, when samples have been taken, there has been the opportunity to store the samples for future research with participant consent.

## **UNITED STATES OF AMERICA (USA) National Health and Nutrition Examination Survey program (NHANES)**

The USA has an extensive and sophisticated program of surveys and data collection systems under the auspice of the National Center for Health Statistics (NCHS), which is part of the Centers for Disease Control and Prevention. Since 1960, the National Center for Health Statistics (NCHS) has been responsible for producing vital and health statistics for the United States. NCHS has legislative authority under the Public Health Service Act to collect statistics on the extent and nature of illness and disability of the population; environmental, social, and other health hazards: determinants of health: health resources; and utilization of health care. The National Health and Nutrition Examination Survey (NHANES) is the cornerstone of the National Nutrition Monitoring and Related Research Program, providing data needed for nutrition monitoring, food fortification policy, establishing dietary guidelines, and assessing government programs and initiatives such as the Healthy People 2000 and 2010 objectives of the US Department of Health and Human Services. The Program has had permanent, recurrent funding since federal legislation was enacted in 1992.

#### The goals of NHANES are:

- to estimate the number and percent of persons in the U.S. population and designated subgroups with selected diseases and risk factors;
- to monitor trends in the prevalence, awareness, treatment, and control of selected diseases;
- to monitor trends in risk behaviors and environmental exposures;
- to analyse risk factors for selected diseases;
- to study the relationship between diet, nutrition, and health;
- to explore emerging public health issues and new technologies; and
- to establish a national probability sample of genetic material for future genetic testing and research opportunities.

NHANES has been a program of periodic surveys conducted by NCHS. Examination surveys undertaken since 1960 have provided national estimates of health and nutritional status of the US civilian non-institutionalised population, using nationally representative samples.

From 1998, NHANES was implemented as a continuous, annual survey, linked to related Federal Government data collections conducted on the general US population. NHANES has collected data from a representative sample of the US population, newborns and older, every year. The number of people examined in a 12-month period is about the same as in previous NHANES, about 5,000. The new design has also allowed increased flexibility in survey content. Links to Medicare and the National Death Index records permit longitudinal and historical studies of disease. The NHANES I Epidemiologic Followup Study (NHEFS) is a national longitudinal study

designed to provide data on mortality, morbidity, and hospital utilisation as well as changes in risk factors, functional limitation, and institutionalisation.

In the USA, NHANES has a long history of successful and useful data collection activities with high response rates. The burden on the public is kept minimal, participation is voluntary, and there is no paperwork burden on businesses or health care providers. The technology innovations planned for NHANES result in rapid and accurate data collection, data processing, and timely access by researchers to the data, with peer-reviewed publication of results.

The NHANES program has been highly valued in setting the stage for national policy directions, consumer guidelines' development, research priorities and the contribution of material for research activities. In 1997-1998, there were over 300 publications based on the NHANES and published in peer-reviewed, international journals. The subject of these publications reflects the full range of diseases and conditions across all ages of participants, preventive strategies, health promotion, and epidemiological and statistical methods.

In NHANES, the number of people examined in a 12-month period is about 5,000 and people are screened using sample selection. This is followed by detailed household interviews. Sample persons are invited to receive physical examinations and health and dietary interviews in mobile examination centers (MEC's). Home examinations consisting of a subset of exam components will be offered to those sample persons who are unwilling or unable to come to the MEC for the full examination. Various medical tests and procedures will be conducted to enable analysis of the relationship between health and nutrition status and disease risk factors, to measure the prevalence and comorbidity of diseases and disorders, to establish reference standards, and to monitor secular trends in health and nutrition status.

In NHANES III conducted from 1988 to 1994 and currently, blood specimens are collected from participants aged 12 years and older and stored frozen in liquid nitrogen or as cell cultures. As a result of needing to collect more sample volume to accommodate out-of-range results that have to be repeated, large numbers of surplus serum samples have been stored frozen. This means that both cell cultures and frozen white blood cells are available to researchers with funded research programs. Though participants in the survey signed an extensive consent form, specific mention of genetic testing was not included. Given the scientific importance of this resource to the USA, a proposal to develop a plan to make DNA available to the research community for deidentified testing was approved by the NHANES Board in 1996, and deidentified samples for DNA research are also available to funded researchers, after an extensive process of approval and scrutiny.

# Appendix B: A framework for considering content for the AHMS program (based on consultation with jurisdictions and identified experts)

The following framework presents the priority conditions/diseases, associated risk factors and socioeconomic determinants that were considered important for inclusion in the AHMS in three periods of consultations with the jurisdictions including DoHA, and with a number of scientific experts in various fields. All areas fit the selection criteria for content outlined by the Steering Committee and the content for the first survey was selected from this framework (Section 4.1). It should be noted that the framework is not intended to be an exhaustive list of policy issues and will change over time. It should also be noted that not all jurisdictions agreed with the inclusion of every measure in the framework, but measures were only removed where there was a unanimous decision to do so. The framework is therefore a record of all the consultations undertaken.

A summary of the framework is shown below. The risk factors and determinants of any condition chosen from the right column can be traced through the left columns. Some risk factors and determinants are common to many disease outcomes.

Priority Condition or Disease	Initiators and promoters	Socioeconomic & environmental determinants
Condition/Disease	Health behaviours	Environmental conditions
- Cardiovascular disease	- Tobacco use	- Physical environment
- Diabetes mellitus	- Alcohol abuse	- Pollutants
- Renal disease	- Physical inactivity	
- Obesity/overweight		Socioeconomic status SES
- Respiratory disease	Food/supplement intake	- Occupation
- Musculoskeletal disease		- Income
- Oral health	Early life factors	- Ownership of property
- Mental health		- Area of residence
- Cancer	Psychosocial factors	- Education
- Nutritional deficiencies	- Early life factors	- Life course SES
- Communicable diseases	- Stress	- Economic capacity
	- Social support	
<b>Biological risk factors</b> (e.g.	- Self-efficacy	Demographic factors
- Blood pressure	- Locus of control	- Age
- Serum cholesterol		- Sex
- Blood glucose	Health system actions and	- Ethnicity
- Homocysteine	Disease management	- Indigenous status
- Gene markers		- Marital status

#### Appendix C: Australian Health Measurement Survey Skirmish Report (ABS)

November 26 to December 5 2001

#### 1 Introduction

This paper presents the results from the Australian Health Measurement Survey (AHMS) skirmish conducted in November and December 2001. The skirmish was conducted simultaneously in New South Wales and South Australia.

The skirmish was designed to test respondent reaction to the range of samples and physical measurements being considered for AHMS. The samples identified in the skirmish were blood, urine and saliva samples; the physical measurements were height, weight, waist circumference and blood pressure.

The skirmish involved respondents being asked whether they would consent to being contacted to make an appointment for the series of samples and measurements to be taken. As previous cognitive testing had raised some concern about using a consent form in a test situation, intent to allow the measurements taken was tested, rather than producing a consent form for respondents to sign. In the skirmish, there was no further contact to make an appointment. Hence, there was no actual taking of measurements or samples.

Respondents were informed of exactly which medical tests could be carried out, thus reducing the confusion of whether drug testing or DNA testing would occur.

The results consist of anecdotal evidence from interviewers following the skirmish, and quantitative analyses of collected data.

#### 2 Objectives

Objectives of the skirmish were to:

- test the impact on response rates, of introducing the AHMS in the primary approach letter and brochure
- look at consent versus non-consent, including cross classifying demographic information, reasons for non-consent and particular tests that were of concern
- analyse timing information

#### 3 Methodology

#### 3.1 Initial approach to household

Conditions for the skirmish followed as closely as possible conditions of a live survey. Selected households were sent Primary Approach Letters (PALs) and brochures in the week prior to the skirmish enumeration. A split sample approach was used for the PAL and brochure with:

- one half of the sample receiving a PAL and brochure which introduced the AHMS (AHMS PAL/brochure), and
- the other half receiving a PAL and brochure which were similar to those used in the 2001 NHS and, hence, did not mention the AHMS (NHS PAL/brochure).

The brochure and PAL introducing the AHMS explicitly stated that the AHMS was completely voluntary. In those households which received the NHS PAL and brochure, AHMS was introduced by the interviewer only at completion of the NHS questionnaire. At this point it was stated that AHMS was completely voluntary.

#### 3.2 Sample size and distribution

A sample size of 677 dwellings was selected for the skirmish. Due to the requirement for trained NHS interviewers to enumerate the AHMS, it was necessary to run the skirmish in NSW and SA. The larger than usual sample size was necessary to test the impact of the split sample design of the PAL and brochure. Dwellings were selected for either the AHMS or NHS PAL/brochure based on cluster. This meant that each interviewer had a mix of selections, with both the AHMS and NHS PAL/brochure, to minimise the interviewer effects.

#### 3.3 Selection of respondents

Interviewers randomly selected one adult aged 18 years and over per household for NHS and this person was also interviewed for AHMS. Only adults who were usual residents in the household were included in this process. The random person was selected as the person with the next birthday.

Respondents who were parents were also asked whether they would consent to have their children involved in the AHMS, although consent was not followed through with the children.

#### 3.4 Introduction of AHMS after NHS questions

The NHS was shortened, so that the full skirmish interview conformed with the ABS average of 45 minutes per household. Topics that were dropped from the NHS were mental well being (K10), alcohol consumption, adult vaccinations, injuries, dietary habits, asthma and asthma symptoms and eyesight. The shortened version of the NHS retained questions on a range of topics including socio-demographics characteristics and long term health conditions.

All interviewers used in the skirmish were familiar with the NHS, reducing the amount of training required. After asking the NHS questions, interviewers introduced the AHMS. The wording of the introduction to the AHMS was the same for all recipients ie irrespective of the type of PAL and brochure they had been sent as previous experience has been that PALs and brochures are not always read (PALs and brochures are addressed to 'The Householder'). However, there is no indication of which respondents who received the AHMS PAL/brochure told interviewers that they had not read the material.

#### 3.5 AHMS specific questions

Following the introduction, respondents were asked whether they would consent to having another organisation contact them to arrange an appointment to have the measurements (and samples) taken. Those respondents who had children and agreed to having the measurements taken for themselves were also asked whether they would consent to their children having the relevant measurements taken. Following consent/non-consent, respondents were advised that the AHMS was not being conducted at this point in time and that they had been involved in a test of respondent reaction to such a survey. They were then asked a further series of

questions to collect additional information relevant to their decision.

Respondents who consented were asked their preference of location for tests, and why they wanted to participate. Those who did not consent were asked the reasons for non-consent and whether there were conditions that would change them to consenters (ie removal of certain tests, change of location). Parents who did not consent for their children to be tested were also asked their reasons. A copy of the questionnaire is available in Attachment 1.

Interviewers were asked to record the time taken to introduce the AHMS and the time taken for consent or non-consent to be gained. The entire AHMS segment was also timed, allowing analyses on these variables.

In addition, permanent ABS officers were involved in the skirmish to explore the issues raised during cognitive testing when the consent form was used. Respondents in a small number of dwellings were approached with a consent form, as well as the standard questions asking for intent. The number of dwellings selected for this purpose was 27. Results are presented in Attachment 2.

#### 3.6 Advice re test situation

The skirmish was different to other tests undertaken by the ABS, in that respondents were specifically told that ABS was testing procedures for a later survey, so that respondents were clear that there would be no follow up by another agency for measurements to be carried out. Furthermore, if at any stage of the interview the respondent asked about when the measurements would be taken or when they would get their results, the interviewer was instructed to tell him or her that this was a test. In these cases, interviewers were instructed to record the point at which it had been necessary to tell the respondents about the test. It was found that 53 respondents were told that the skirmish was a test prior to gaining consent/non-consent, 25 of whom said they would consent.

#### 3.7 Interviewer material used

Interviewers were given three hours training on administering AHMS the week prior to enumeration. Interviewers' instructions were read by interviewers prior to this on-site training. Other materials used by interviewers were Prompt Cards (see Attachment 3) and spare copies of the PAL and brochure for those households who stated that they had not received these by post.

#### 4 Results

#### 4.1 Response Rates

#### 4.1.1 Overall response rate

Table 1: Response rate

Response	Number	Percent
Fully responding	434	64.1
AHMS consent	256	37.8
AHMS non-consent	178	26.2
Non-response	203	30.0
Full refusal	89	13.2
Part refusal	7	0.7
Full non-contact	57	8.5
Part non-contact	3	0.4
Language problems	22	3.3
Selected adult away entire enumeration period	9	1.3
All usual residents aged less than 18 years		
Other non-response	16	2.4
Sample loss	40	5.9
All persons out on scope	2	0.3
Vacant dwelling	26	3.9
Other sample loss	12	1.8
Total	677	100

Total response rate for the skirmish was 68.1% (number of fully responding /(total sample - sample loss)). Of those fully responding, 59.0% consented to AHMS measurements being taken.

This response rate was achieved without the usual follow up undertaken in a survey, such as following up refusals, or employing interpreters where language difficulties exist. Under these circumstances, the response rate achieved to the initial NHS contact (68.1%) is consistent with the level usually obtained in a field test. In a final survey, the compulsion sections of the Census and Statistics Act are invoked, hence yielding a significantly higher response rate. As a comparison, the response rate achieved in the 2001 NHS was over 90%. This would be expected to be achieved for future NHSs and hence would be the starting point for AHMS.

The analysis below discusses those questions asked in the AHMS relating to why respondents were unwilling to participate in this part of the survey. It is unclear how much the AHMS response rate could increase given the right conditions for respondents. However, if it is assumed that those who were willing to have all measurements or samples taken and those who would participate if they were given a copy of their results actually participated, the response rate would increase by 16 persons (2.5%).

Furthermore, if those who thought they were too healthy, or too old, could be convinced to participate because of the benefit the research would have to the general

public, the response rate would increase by a further 15 persons (2.3%).

Lastly, if those who currently have tests regularly could be convinced to participate because of the benefit to the general public and the promise of a copy of their results, the response rate would increase by a further 37 persons (5.8%). The majority of the respondents in this group would prefer their own doctor to do the tests and this would need to be overcome to increase the response rate by this amount.

It is difficult to know whether any of those respondents who stated that they were too busy could be convinced to participate in the study, so it assumed at this point that they would remain non-consenters.

Given these assumptions, the final response rate could be increased to 75% of those fully responding to the NHS. However, the conditions would have to be extremely favourable for this to occur. Some drop off prior to respondents seeing a nurse is also expected and overseas experiences indicate that this is on average about 16% of respondents.

Table 2: Child consent rates

Response	Number	Percent
Number of households fully responding to AHMS	256	100.0
Number of households with children aged under 18	77	30.1
Yes - Willing for all eligible children to participate	61	23.8
Yes - Willing for some eligible children to participate	1	0.4
No - unwilling for any eligible children to participate	15	5.9
Number of households with no children aged under 18	179	69.9

Only those respondents with children aged under 18 years who consented to the AHMS were also asked whether they would also agree for their children to participate in the survey. Of these respondents, 79.2.0% agreed for their children to have the relevant samples and measurements taken for their child's age.

#### 4.1.2 Analysis of response bias

Table 3: Consenters vs non-consenters - demographics

	Percentage of consent/1 AHMS	non-consent to
	Consent	Non-consent
Age		
18-19 years of age	55.6	44.4
20-29 years of age	48.3	51.7
30-39 years of age	53.6	46.4
40-49 years of age	61.0	39.0
50-59 years of age	62.9	37.1
60-69 years of age	68.0	32.0
70 and over	63.9	36.7
Sex		
Male	61.8	38.2
Female	57.0	43.0
Income		
Don't know	52.6	47.4
Less than \$10,000	59.5	40.5
\$10,000 - \$19,999	58.5	41.5
\$20,000 - \$29,999	63.5	36.5
\$30,000 - \$39,999	61.2	38.8
\$40,000 - \$49,999	57.7	42.3
\$50,000 - \$59,999	56.7	43.3
\$60,000 - \$69,999	64.3	35.7
\$70,000 and over	59.1	40.9

Table 4 - Comparison of AHMS demographic distribution and population distribution

	AHMS distribution		Population	
	Consenters	Non-consenters	Total	distribution(a)
Males				
Age				
18-19 years of age	1.8	4.4	2.8	3.9
20-29 years of age	12.7	20.6	15.7	19.9
30-39 years of age	20.0	22.1	20.8	20.3
40-49 years of age	16.4	16.2	16.3	19.6
50-59 years of age	12.7	16.2	14.0	16.0
60-69 years of age	16.4	10.3	14.0	10.0
70 and over	20.0	10.3	16.3	10.1
70 and over	20.0	10.5	10.5	10.1
Females				
Age				
18-19 years of age	2.1	0.9	1.6	3.6
20-29 years of age	10.3	15.5	12.5	18.8
30-39 years of age	20.6	27.3	23.4	19.8
40-49 years of age	19.9	17.3	18.8	19.1
50-59 years of age	17.1	10.9	14.5	15.2
60-69 years of age	11.0	8.2	9.8	10.0
70 and over	19.2	20.0	19.5	13.5
All				
Age				
18-19 years of age	2.0	2.3	2.1	3.8
20-29 years of age	11.3	17.4	13.8	19.3
30-39 years of age	20.3	25.3	22.4	20.1
40-49 years of age	18.4	16.9	17.8	19.3
50-59 years of age	15.2	12.9	14.3	15.6
60-69 years of age	13.3	9.0	11.5	10.1
70 and over	19.5	16.3	18.2	11.8
Sex				
Male	43.0	38.2	41.0	49.3
Female	57.0	61.8	59.0	50.7
1 ciliare	37.0	01.0	37.0	30.7

<sup>(</sup>a) Source: Population by Age and Sex, Australian States and Territories, June 2001 (Cat no. 3201.0)

Table 5: Long term health condition by consent

Percentage of consent/non-consent to AHMS

Long term health condition	Consent	Non-consent
	<del>-</del>	
Cancer		
Ever	68.9	31.1
Current	86.7	13.3
Heart and circulatory conditions		
Ever	59.0	41.0
Current	58.5	41.5
Diabetes and high sugar levels		
Ever	57.8	42.1
Current	58.6	41.4
Hearing problems	64.7	35.3
Arthritis	64.5	35.5
Other conditions expected to last 6 months or more	60.7	39.3
Total (with long term health condition)	61.5	38.5

Chi-square tests show that individually, the null hypotheses, ie that having had cancer and consenting/non-consenting to AHMS is independent, is retained for all health conditions. However, at the total level, the null hypothesis that having a long term health condition is independent of consenting/non-consenting to cancer is rejected at the  $\alpha = .05$  level.

#### 4.1.3 Impact of Primary Approach Letter/brochure

Table 6: Receipt of AHMS/NHS brochure by response status

	AHMS b	rochure	NHS br	ochure
Response	Number	Percent	Number	Percent
Fully responding	227	33.5	207	30.5
AHMS consent	135	19.9	121	17.9
AHMS non-consent	92	13.6	86	12.7
Non-response	107	15.8	96	14.2
Full refusal	50	7.4	39	5.8
Part refusal	3	0.4	4	0.6
Full non-contact	29	4.3	28	4.4
Part non-contact	1	0.2	2	0.3
Language problems	8	1.2	14	2.1
Selected adult away entire enumeration period	7	1.0	2	0.3
Other non-response	9	1.3	7	1.0
Sample loss	24	3.6	16	2.4
All persons out on scope	2	0.3	0	0.0
Vacant dwelling	15	2.2	11	1.6
Other sample loss	7	1.0	5	0.7
Total	358	52.9	319	47.1

Chi square tests were run to look at the independence of first receipt of AHMS or NHS brochure and response, and also receipt of AHMS or NHS brochure and consent. The null hypothesis that receipt of a particular brochure is independent to response status was retained at the  $\alpha$ =.05 level. The null hypothesis that consent to AHMS is independent on the type of brochure received was also retained at the  $\alpha$ =.05 level.

#### 4.1.4 Reasons for non-consent

Table 7: Non-consenters - reasons for non participation

Reasons for non-consent	Number	Percent
Cultural/religious reasons	1	0.6
No time/too busy	55	30.9
Types of tests/physical nature of tests	38	21.4
Location of test (in home)	1	0.6
Don't do that type of things/can't be bothered	22	12.4
No incentive/nothing in it for me	10	5.6
Concerns about confidentiality	22	12.4
Don't want people knowing about my health	17	9.6
Inconvenient due to my children	1	0.6
Need more time to think about it	1	0.6
Other	97	54.5
Total	178	100.0

Note - components will not add to 100%, as more than one answer may be selected

Responses in the 'other' category include 39 cases where the respondent is already having these tests, or would prefer to go to their own doctor. There were also 10 respondents who thought that they were healthy and therefore didn't need tests, and a few respondents who did not want to know their results. A number of respondents stated that they did not like needles, along with various other responses. A full list is available in Attachment 4.

#### 4.2 Profile of Consenters

#### 4.2.1 Reasons for consent

Table 8: Consenters - reasons for consent

Reasons for consent	Number	Percent
Will help understand risk factors	105	41.0
I wanted to contribute to a good cause	111	43.4
It was not much effort on my part	32	12.5
Assume I will get results/interested to see my results	106	41.4
Don't know	1	0.4
Other	72	28.1
Total	256	100.0

Note - components will not add to 100%, as more than one answer may be selected

The majority of comments in 'other' for consenters were that the tests and measurements would be of a benefit to the respondent themselves or others. Some commented that they had family histories of either longevity, heart disease or diabetes. These people thought that it was important for them to be included, as their samples could help better understand these conditions. A full list of comments is available in Attachment 5.

#### 4.2.2 Types of measurements or samples respondents will agree to

Table 9: Non-consenters - samples/measurements they would participate in

Type of tests	Number	Percent
		_
No tests	100	56.3
Don't know	5	2.8
Yes - some	73	40.9
Yes - all measurements (height, weight, waist)	57	32.0
Height	67	37.5
Weight	62	34.7
Waist circumference	59	33.0
Blood pressure	58	32.4
Yes - all samples (blood, urine, saliva)	10	5.6
Blood sample	12	6.3
Urine sample	28	15.3
Saliva sample	28	15.3
Total non-consenters	178	100.0

Note - components will not add to 100%, as more than one answer may be selected

Forty one percent of non-consenters would agree to having some measurements or samples taken. Grouping the types of tests into measurements or samples, it can be seen that 5.6% of non-consenters would agree to having all samples taken (blood, urine and saliva). There were 6.3% who said that they would agree to having a blood sample taken. Of the 12 who agreed to having a blood sample taken, 8 agreed to having all measurements and samples taken, indicating there were other reasons for not participating in AHMS. Reasons given by these respondents for not participating mainly were that they were either too busy, or they already have the tests done with their own doctor. Of the 4 respondents who agreed to the blood sample being taken, the samples that were contentious were urine (2 respondents), weight and waist circumference (2) and height and blood pressure (1).

Reasons given by those who would not agree to any measurements being taken were similar to those given by respondents who did not want samples taken, such as 'no time/too busy' (37%) and common 'other' responses such as already having tests, or the respondent is in good health, or they would prefer their own doctor to do these.

#### 4.2.3 Participation if results given

Table 10: Non-consenters: Impact of giving results to respondents

Participation if results given	Number	Percent
Yes	27	15.2
No	127	71.3
Don't know	24	13.5
Total non-consenters	178	100.0

Twenty seven (15.2%) of those who said they would not participate in AHMS, would have participated if they were given a copy of their results. However, 20 of these respondents would only agree to some of the measurements or samples being taken, with the result of this to only increase the (full) response rate by less than 1%.

#### 4.3 Location analysis

Table 11: Location preference

Preference for location	Number	Percent
Consenters		
Home	118	45.7
Community Centre	58	22.5
Don't know/don't care	82	31.8

Location preference was for someone to visit the respondent at home (45.7% of those who consented to AHMS). The skirmish specifically stated that the samples and measurements would be taken at the respondent's home. It is unclear whether consenters would object to having to go to a community centre if that were the only option. In contrast, for the skirmish, those who had a community centre preference would still have followed through with the samples and measurements at home.

Non-consenters were asked whether they would have been willing to travel to a community centre to have the samples and measurements taken. Of these, 32 respondents (20.4%) stated that they would have been willing to travel to a community centre, with 18 respondents (11.5%) answering 'Don't know'. However, some of these respondents may have had multiple reasons for not consenting, for example they may not have liked the types of samples, so that simply changing the venue would not necessarily encourage them to consent.

#### 4.4 Timing Analysis

Table 12: AHMS interview times

Variables	Mean
Time between introduction and consent/non-consent	1.8
Time between introduction and consent/non-consent (where child form completed)	3.6
Time between consent/non-consent and final time	6.4

Most interviewers had analogue watches, and hence detecting small time differences of one minute was difficult. The timing analysis showed that 1 minute was a common time between the introduction and consent/non-consent. Some interviewers showed this as 0, because the amount of time was less than one minute. Where this occurred, these have been rounded up to one.

#### 4.5 Respondent Reaction (Interviewer feedback)

#### 4.5.1 Reaction to the test

Interviewers reported that there was not a great amount of negative feedback from telling respondents that the skirmish was a test. However, some respondents were disappointed when told that the measurements would not be taken. Interviewers did not report a large number of respondents having to be told that the skirmish was a test earlier than expected. (Fifty four respondents (12.4%) were told that the AHMS was a test prior to giving consent, with a further 11 (2.5%) being told before answering the child consent.)

#### 4.5.2 Reaction to AHMS

Generally, interviewers reported that respondents were receptive to the AHMS. They felt that in some circumstances, in a live survey, providing respondents with more information could have increased the number of consenters. In a skirmish, the ABS does not invoke the Census and Statistics Act, and hence the skirmish remains voluntary. There is also no follow up of non response outside normal housecalls in the case of a skirmish. Interviewers are used to being able to show a compulsory statement to respondents who refuse. Even though the AHMS will remain voluntary, interviewers believed that some of the non-consenters could have been changed to consenters.

Interviewers also reported that more information regarding how the results would benefit the general public would also make a difference to some respondents. Interviewers felt that many non-consenting respondents were thinking of the personal benefit, rather than that of the community. Interviewers thought that either the very healthy, or those who were quite ill were more likely to be non-consenters. Interviewers reported that those people who thought they were healthy saw no use in having the measurements taken, and those who were quite ill were often under the care of a doctor, and did not want more measurements taken. Many interviewers reported using Australia's total health bill (which was in Interviewers' Instructions) as a selling point and thought that this could be included in the introduction.

Interviewers thought that non-consenters were likely to have private health cover. Results showed that of the 178 non-consenters, 90 (50.6%) had private health insurance.

Respondents did not seem to take a lot of time deliberating over whether they would participate in the AHMS. Interviewers reported that people answered quite quickly. However, some respondents who initially were non-consenters who were provided with more information, still changed their minds and consented.

Interviewers reported that many respondents stated they had not seen the PAL or brochure when they arrived for interviewing. At this stage, the interviewer needed to provide the respondent with a copy of these documents.

Permanent officers who enumerated the AHMS with the consent form reported similar reactions to interviewers, with no adverse effects of presenting this form.

#### 4.5.3 Key concerns

Interviewers key concern was telling people that the skirmish was a test. They felt that respondents may react to the amount of time that they had spent completing the NHS when the data would not be used. This was compounded when parents were

interviewed and NHS child forms were required. In cases where there were numerous children, often the interviewer would only complete the NHS for one child, rather than all.

Interviewers suggested that the prompt card describing the measurements that would be carried out on children at each age group was confusing, and could be simplified.

As asthma was dropped as a topic for the shortened version of the NHS, many interviewers reported receiving queries about this condition from people, who thought that it should have been included.

Interviewers expressed concern that there may be a further drop off in consent from this stage to following through with the samples/measurements being taken, as respondents talked to neighbours, relatives and the like.

#### 6 Recommendations

It is recommended that a Pilot Test is run with follow through to the tests being taken. This will give more information on drop off rates from initial consent to samples and measurements being taken. This Pilot Test would also need to ascertain the number of children who give their consent, as well as parents giving consent.

		I	
900.	Time	904.	WE ARE ALSO SEEKING TO FURTHER UNDERSTAND THE RELATIONSHIP
901.	THE AUSTRALIAN BUREAU OF		BETWEEN RISK FACTORS AND CERTAIN DISEASES IN CHILDREN.
	STATISTICS IS ALSO SEEKING TO UNDERSTAND IF YOU WOULD BE		Interviewer: Show Prompt Card 2
	WILLING TO PARTICIPATE IN AN		merviewer. Snow I rompi Cara 2
	AUSTRALIAN HEALTH MEASUREMENT		CHILDREN'S PARTICIPATION IN THIS
	SURVEY. THIS STAGE OF THE SURVEY IS SPONSORED BY THE DEPARTMENT OF		SURVEY WOULD INVOLVE A REGISTERED
	HEALTH AND AGED CARE.		NURSE COMING TO YOUR HOME AND MEASURING YOUR CHILD'S WEIGHT.
	PARTICIPATION IN THIS SURVEY WOULD		HEIGHT AND UPPER ARM
	BE VOLUNTARY.		CIRCUMFERENCE WOULD BE MEASURED
	THE INFORMATION COLLECTED IN THIS		FOR CHILDREN 2 AND OVER. SALIVA
	SURVEY WOULD ASSIST IN		SAMPLES WOULD BE TAKEN FROM THOSE 4 AND OVER.
	UNDERSTANDING THE RELATIONSHIP		THOSE + MID OVER.
	BETWEEN RISK FACTORS AND CERTAIN		CHILDREN 5 AND OVER WOULD HAVE
	DISEASES, SUCH AS THE RELATIONSHIP BETWEEN CHOLESTEROL LEVELS AND		THEIR BLOOD PRESSURE TAKEN AND
	HEART DISEASE.		CHILDREN 12 AND OVER WOULD HAVE BLOOD AND URINE SAMPLES TAKEN.
	HEART DISEASE.		BLOOD AND ORINE SAMI LES TAKEN.
	Interviewer: Show Prompt Card 1		FOR CHILDREN 14 YEARS AND OVER
	PARTICIPATION IN THIS SURVEY WOULD		WAIST CIRCUMFERENCE WOULD BE MEASURED INSTEAD OF UPPER ARM
	INVOLVE A REGISTERED NURSE TAKING		CIRCUMFERENCE.
	SOME PHYSICAL MEASUREMENTS IN		CIRCOM ENERVOE.
	YOUR HOME.		WOULD YOU BE WILLING FOR TO HAVE
	THESE MEASUREMENTS WOULD BE OF		THESE MEASUREMENTS TAKEN?
	YOUR HEIGHT, WEIGHT, WAIST AND		
	BLOOD PRESSURE AS WELL AS SMALL		Yes, willing for all eligible children 1
	SAMPLES OF YOUR BLOOD, URINE AND SALIVA.		
	SALIVA.		Yes, willing for some eligible children 2
	THESE MEASUREMENTS WILL PROVIDE		
	INFORMATION ABOUT YOUR RISK		No 3
	FACTORS FOR HEART DISEASE, KIDNEY DISEASE AND DIABETES.		Interviewer: If applicable, mark 'X' at the point
			where you needed to tell the respondent this is a
	RESULTS OF THE TESTS WILL BE		test.
	CONFIDENTIAL.		
	WOULD YOU BE WILLING FOR THESE	905.	Time
	MEASUREMENTS TO BE TAKEN?		
		906.	THANK YOU FOR PARTICIPATING IN THIS
	Yes 1		SURVEY.
			I NOW NEED TO LET YOU KNOW THAT
	No 2		THIS HAS BEEN A TEST OF A SURVEY
	Interviewer: If applicable, mark 'X' at the point		THAT MAY BE CONDUCTED IN THE FUTURE.
	where you needed to tell the respondent this is a		FUTURE.
	test.		IT IS IMPORTANT FOR THE AUSTRALIAN
			BUREAU OF STATISTICS TO CONDUCT
902.	Time		TESTS TO ENSURE THAT SURVEYS WORK PROPERLY.
		1	I KOI EKE I .
903.	Sequence Guide		AS WE WILL INTERVIEW
	If reenondent is willing to narticinate and own		APPROXIMATELY 30, 000 PEOPLE IN THE FINAL SURVEY, IT IS CRITICAL TO RUN
	. If respondent is willing to participate and own child's responses collected in NHS		THIS TYPE OF TEST WITH A SMALL
	(Go to Q.904) 1		GROUP OF PEOPLE FIRST TO IDENTIFY
	. ~ ~ _		ANY PROBLEMS.
	. Otherwise (Go to Q.906) 2		NOW I HAVE A FEW QUESTIONS TO
			ASSIST US IN BETTER DESIGNING THE
			FINAL SURVEY.

907.	Sequence Guide	910.	WHICH ONES?
	. If respondent is willing to participate (Code 1 marked in Q.901) (Go to Q.921)  1		Height 1
	(Code 1 marked in Q.901) (Go to Q.921) 1  . If respondent is unwilling to participate		Weight 2
	(Code 2 marked in Q.901) (Go to Q.908) 2		Waist circumference 3
908.	WE ARE TRYING TO GET A BETTER		Upper arm circumference 4
	UNDERSTANDING OF WHY SOME PEOPLE ARE UNWILLING TO PARTICIPATE IN THE		Blood pressure 5
	AUSTRALIAN HEALTH MEASUREMENT SURVEY. COULD YOU PLEASE TELL ME		Blood sample 6
	WHY YOU DIDN'T WANT TO PARTICIPATE?		Urine sample 7
	Cultural/religious reasons		Saliva sample 8
	No time/too busy 2	911.	Sequence Guide
	Types of tests/physical nature of tests 3		. If unwilling to have blood sample taken (Code 6 not marked in Q.910) (Go to Q.912)
	Location of test (in home) 4		. If unwilling to have urine sample taken
	Don't do that type of thing/don't participate in surveys/can't be bothered		(Code 7 not marked in Q.910) (Go to Q.914) 2  Otherwise (Go to Q.915) 3
	No incentive/nothing in it for me 6		<u> </u>
	Concerns about confidentiality	912.	WHY WERE YOU UNWILLING TO HAVE A BLOOD SAMPLE TAKEN?
	Don't want people knowing about		Cultural/religious reasons 1
	my health 8		No time/too busy
	Inconvenient due to my children 9		Types of tests/physical nature of tests 3
	Need more time to think about it 10	10	Location of test (in home) 4
	Other (Specify)		Don't do that type of thing/don't participate in surveys/can't be bothered
			No incentive/nothing in it for me 6
909.	Interviewer: (Show Prompt Card 1)	1	Concerns about confidentiality 7
	PLEASE LOOK AT CARD 1.		Don't want people knowing about
	WOULD YOU BE WILLING FOR ANY OF THESE MEASUREMENTS TO BE TAKEN?		my health 8
	Yes 1		Inconvenient due to my children 9
	No (Go to Q.915) 2		Need more time to think about it 10
	Don't know (Go to Q.915) 3		Other (Specify)
		-	
		913.	Sequence Guide
			. If unwilling to have urine sample taken
			(Code 7 not marked in Q.910) (Go to Q.914)

914.	WHY WERE YOU UNWILLING TO HAVE A URINE SAMPLE TAKEN?	917.	WHY IS THAT?
	Cultural/religious reasons		Prefer strangers not to come to my home 1
	No time/too busy 2		More convenient 2
	Types of tests/physical nature of tests 3		Location not determining factor 3
	Location of test (in home) 4		Other (Specify)
	Don't do that type of thing/don't participate in surveys/can't be bothered		4
	No incentive/nothing in it for me 6	918.	<u>Sequence Guide</u>
	Concerns about confidentiality 7		(Go to Q.920) 1
	Don't want people knowing about my health	919.	
	Inconvenient due to my children 9		Cultural/religious reasons
	Need more time to think about it 10		Don't want to do tests anywhere 3
	Other (Specify)		Location of community centre 4
			Difficult to travel to community centre 5
915.	WOULD YOU HAVE BEEN WILLING TO	-	Unwilling to travel to community centre 6
)13.	PARTICIPATE IF YOU WERE GIVEN A COPY OF YOUR TEST RESULTS?		Lack of privacy at community centre 7
	Yes 1		Don't do that type of thing/don't participate in surveys/can't be bothered 8
	No		No incentive/nothing in it for me 9
	Don't know 3	-	Concerns about confidentiality 10
916.	WOULD YOU BE WILLING TO TRAVEL TO A LOCAL COMMUNITY CENTRE, AT A TIME CONVENIENT TO YOU, TO HAVE THESE MEASUREMENTS TAKEN?		Don't want people knowing about my health
	Yes		Inconvenient due to my children 12
	No (Go to Q.919) 2		Need more time to think about it 13
	Don't know (Go to Q.919) 3		Other (Specify)
		1	

920.	Sequence Guide	925.	WHY IS THAT?
			Cultural/religious reasons 1
921.	WE ARE TRYING TO GET A BETTER UNDERSTANDING OF WHY SOME PEOPLE		No time/too busy
	ARE WILLING TO PARTICIPATE IN THE AUSTRALIAN HEALTH MEASUREMENT SURVEY AND OTHERS ARE NOT.		Location of community centre 3
	COULD YOU PLEASE TELL ME WHY YOU		Difficult to travel to community centre 4
	WERE INTERESTED IN PARTICIPATING?		Unwilling to travel to community centre 5
	It will help to understand risk factors associated with certain diseases		Lack of privacy at community centre 6
	I wanted to contribute to a good cause 2		No incentive/nothing in it for me 7
	It was not much effort on my part 3		Concerns about confidentiality 8
	Assume I will get results/ interested to see my results		Don't want people knowing about my health 9
	Don't know		Inconvenient due to my children 10
	Other (Specify)		Need more time to think about it 11
			Other (Specify)
	6		
922.	WOULD YOU BE WILLING TO TRAVEL TO A LOCAL COMMUNITY CENTRE, AT A TIME CONVENIENT TO YOU, TO HAVE THESE MEASUREMENTS TAKEN?	926.	Sequence Guide
	Yes		. If respondent willing to participate but unwilling for at least one child to participate (Code 1 marked in Q901 AND Code 2 or Code 3 marked in Q904)
	No		
	Don't know (Go to Q.925) 3		
923.	WOULD YOU PREFER THE MEASUREMENTS TO BE TAKEN AT YOUR HOME OR AT A LOCAL COMMUNITY CENTRE?		
	Home 1		
	Community centre 2		
	Don't know/don't care 3		
924.	Sequence Guide		
	(Go to Q.926) 1		

927.	WE ARE INTERESTED TO COLLECT HEALTH INFORMATION FROM BOTH ADULTS AND CHILDREN.		
	COULD YOU TELL ME WHY YOU WERE UNWILLING TO ALLOW YOUR (CHILD/ CHILDREN) TO PARTICIPATE IN THE AUSTRALIAN HEALTH MEASUREMENT SURVEY?		
	Too young	1	
	It is their decision/not my decision	2	
	Too inconvenient for child to be involved	☐ 3	
	Child/children would not want to	□ 4	
	Don't want to upset them/put them through it	<u> </u>	
	Other (Specify)		
		□ 6	
928.	THANK YOU FOR PARTICIPATING IN THIS SURVEY. YOUR TIME AND COOPERATION IS GREATLY APPRECIATED. THE INFORMATION YOU HAVE PROVIDED WILL BE VALUABLE IN ASSISTING US TO DESIGN THE FINAL SURVEY.		
929.	Time		
930.	No more questions.		
931.	<u>Interviewer</u> : When was the respondent told that we are conducting a test?		
	Before Q.901 was asked	1	
	Before they answered Q.901	2	
	Before they answered Q.904	3	
	At Q.906	4	

### **IN CONFIDENCE**



#### **POPULATION SURVEY**

# NATIONAL HEALTH SURVEY 2001

#### **ADULT FORM**

PSU BLOCK DWELLING HH PERSON Interviewer: Commence interview at Q.18	
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**	
1. OFFICE USE ONLY 5. INDIGENOUS STATUS 7. YEAR OF ARRIVAL	ф ф
02 04 06 07 08 Neither 1	44
09 10 11 12 Aboriginal 2	(3) (3) (3) (3)
Torres Strait Islander 3	9 42 42 9 5 5 5
Both 4	0 6 6 7 7
Male	(\$) (\$) (9) (9)
Female	
3. AGE	T 1
in household)	占 2
Years New Zealand 1201	DRM
Italy	
Viet Nam	
Scotland 2105 HEALTH FORM is collect	rted 🖵 1
Greece	
Germany = 2304 WOMEN'S HEALTH FOI	
Philippines = 5204 <i>Otherwise</i>	🛓 3
Netherlands 2308	
Other (Specify)	
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10.	HOUSEHOLD TYPE	16.	(	OFFICE USE ONLY			
	1 (Nothing further) 1 2 2 3 3	A Relationship	B Family Number	C UR Scope Exclusion	D Initial Schedule Response	E Incomplete Schedule Response	
	5	물문정성물병육단용용 물문정	문정관물관용단용용	ф ф	H & & H	# # # # #	
	9 (Complete Q.13) 9	F Income	G Compulsion Queried	H Number of the	Number of peopl	J Number of people	
11.	Husband (Nothing further) 1  Wife (Nothing further) 2  Son/daughter (Nothing further) 3  Father/mother (Nothing further) 1  Son/daughter	<del>1</del> <del>2</del>	<del>1</del>	i .ouse.	sed 7-14 in household	aged 15-17 in household	
13.	Parent (Nothing further) 2  Parent (Nothing further) 1  Partner/spouse (Nothing further) 2  Son/daughter in couple family (Nothing further) 3  Son/daughter in lone parent family (Nothing further) 4  Other relative (Nothing further 5	K Numb of pec d 18 o useh	L elected adult ading er ational citution (full-time 18-24)	M Social Marital Status	N Selected adult has child(ren) 0-14 in household	O Selected adult has child(ren) 15-24 in household	
	Not related (Nothing fur 🖻 3	P Selected adult has child(ren) in household 15-24 who are full-time students	S Registered Marital Status				
		# 상·상	<del>문</del> 상 중 중 중				

18.	Interviewer: Code best description of structure of dwelling	23.	DO YOU CONSIDER YOU SPEAK ENGLISH VERY WELL, WELL OR NOT WELL?
	Separate house 01		Very well = 1
	Semi-detached, row or terrace house, town house etc. with:		Well
	1 storey 02		Not well
			Not at all
	2 or more storeys		
	Other flat/unit/apartment	24.	Sequence Guide:
	in a 1 or 2 storey block 05		. If aged 25 or more
			. If currently attending school, TAFE, university, or other educational institution <u>full-time</u>
	in a 3 storey block 66		(column G on HF)
	in a 4 or more storey block b 07		. Otherwise <b>2.25</b> $\stackrel{1}{\rightleftharpoons}$ 3
	Caravan/tent/cabin in a caravan park, houseboat in a marina, etc 08	25.	ARE YOU CURRENTLY ATTENDING A TAFE, UNIVERSITY, OR OTHER EDUCATIONAL INSTITUTION ON A PART-TIME BASIS?
	Caravan not in a caravan park/ houseboat not in a marina, etc 09		Yes 71
	Improvised home/campers out 📙 10		No 2
	House or flat attached to a shop,	254	
	office, etc <u></u> 11	25A.	→ Q.28
20.	THE FIRST QUESTIONS ARE ABOUT LANGUAGE, EDUCATION AND WHETHER YOU ARE CURRENTLY WORKING.	26.	ARE YOU CURRENTLY ATTENDING A TAFE, UNIVERSITY, OR OTHER EDUCATIONAL INSTITUTION?
	THESE HELP US TO UNDERSTAND THE	1	Yes 7
	RELATIONSHIP BETWEEN HEALTH AND OTHER ISSUES IN PEOPLE'S LIVES.		No → <b>Q.28</b> → 2
	DO YOU SPEAK A LANGUAGE OTHER THAN ENGLISH AT HOME?	27.	IS THIS ON A FULL-TIME OR PART-TIME BASIS?
	Interviewer: If more than one language, prompt for		Full-time 7
	language used most often		Part-time2
	No, English only 01	28.	AT WHAT AGE DID YOU MOST RECENTLY LEAVE
	Yes, Italian 02		PRIMARY OR SECONDARY SCHOOL?
	Yes, Greek 03		Never went to school $\longrightarrow Q.30 \qquad \boxed{} 01$
	Yes, Cantonese 04		13 years and under 02
	Yes, Mandarin 05		14 years 03
	Yes, Arabic 06		15 years 04
	Yes, Vietnamese 07		16 years 05
	Yes, German 08		17 years 06
	Yes, Spanish 09		18 years 07
	Yes, Tagalog (Filipino) 10		19 years 08
	Yes, Other (Specify) 11		20 years 09
	21. 中中中中		21 years and over 10
	<u> </u>		Still at school 🗀 11
	\$3 \$3 \$3 \$3 \$4 \$4 \$4 \$4 \$5 \$5 \$5 \$5		WHAT IS THE HIGHEST YEAR OF PRIMARY OR SECONDARY SCHOOL YOU HAVE COMPLETED?
	\$\text{\$\exitt{\$\text{\$\text{\$\text{\$\text{\$\text{\$\text{\$\text{\$\text{\$\exitt{\$\text{\$\text{\$\text{\$\text{\$\text{\$\text{\$\text{\$\text{\$\exitt{\$\text{\$\text{\$\text{\$\text{\$\text{\$\text{\$\text{\$\text{\$\exitt{\$\text{\$\text{\$\text{\$\text{\$\text{\$\text{\$\text{\$\text{\$\exitt{\$\text{\$\text{\$\text{\$\text{\$\text{\$\text{\$\text{\$\text{\$\text{\$\text{\$\text{\$\text{\$\text{\$\text{\$\text{\$\text{\$\text{\$\tinx{\$\text{\$\exitting{\$\text{\$\exitt{\$\text{\$\text{\$\text{\$\text{\$\text{\$\text{\$\text{\$\text{\$\exitt{\$\text{\$\text{\$\text{\$\text{\$\text{\$\text{\$\text{\$\text{\$\exitt{\$\text{\$\text{\$\text{\$\text{\$\texi\\$}}}}}\$\text{\$\text{\$\text{\$\text{\$\text{\$\text{\$\text{\$\text{\$\text{\$\text{\$\tex{		Year 12 or equivalent 7
	(2) (2) (2) (3) (4) (4) (4) (4) (4) (4) (4) (4) (4) (4		Year 11 7
22.	Sequence Guide:	-	Year 10 3
at.	. If English only (code '01') in Q.20 → <b>Q.24</b> — 1		Year 9 7
1	Otherwise $\rightarrow$ 0.23 $\stackrel{?}{\longrightarrow}$ 2		Year 8 or lower

30.	(SINCE LEAVING SECONDARY SCHOOL,) HAVE YOU COMPLETED A TRADE CERTIFICATE, DIPLOMA, DEGREE OR ANY OTHER EDUCATIONAL OUALIFICATION?	34.	HOW LONG DOES THAT (CERTIFICATE/DIPLOMA/ QUALIFICATION) TAKE TO COMPLETE, STUDYING <u>FULL-TIME</u> ?
	Yes 🖵 1		Less than 1 semester 1
	No → <b>Q.35</b> _ 2		1 semester to less than 1 year 2
31.	WHAT IS THE NAME OF THE HIGHEST QUALIFICATION YOU HAVE COMPLETED?		1 year to less than 3 years
	<u>Interviewer:</u> If 'certificate', 'diploma' or 'degree', prompt for the type	35.	THE NEXT FEW QUESTIONS ARE ABOUT WHETHER YOU ARE WORKING OR LOOKING FOR WORK.
	Secondary school qualification → <b>Q.35</b> 中 01		I WOULD LIKE TO ASK YOU ABOUT LAST WEEK,
	Nursing qualification $\rightarrow$ <b>Q.32</b> ${\leftarrow}$ 02		THAT IS, THE WEEK STARTING MONDAY THE AND ENDING (LAST SUNDAY THE
	Teaching qualification $\rightarrow Q.33 = 03$		/YESTERDAY). LAST WEEK, DID YOU DO ANY WORK AT ALL
	Trade Certificate/ Apprenticeship → <b>Q.35</b> → 04		IN A JOB, BUSINESS OR FARM?
	Technician's Certificate/ Advanced Certificate → <b>Q.35</b> □ 05		Yes
	Certificate other than above → <b>Q.34</b> □ 06		Permanently unable to work
	Associate Diploma → <b>Q.34</b> 07		Permanently not intending to work (if aged 65+ only) → <b>Q.57</b>
	Undergraduate Diploma → <b>Q.34</b> — 08	36.	LAST WEEK, DID YOU DO ANY WORK WITHOUT
	Bachelor Degree → <b>Q.35</b> — 09		PAY IN A FAMILY BUSINESS?  Yes → <b>Q.38</b> □ 1
	Postgraduate Diploma/ Graduate Certificate → <b>Q.35</b> ☐ 10		No 2
	Masters Degree/Doctorate → <b>Q.35</b> → 11		Permanently not intending to work (if aged 65+ only)   2.57  3
	Other → <b>Q.34</b> — 12	37.	DID YOU HAVE A JOB, BUSINESS OR FARM THAT
32.	WHAT IS THE NAME OF THE HIGHEST NURSING QUALIFICATION YOU HAVE COMPLETED?	<b>3</b> /.	YOU WERE AWAY FROM BECAUSE OF HOLIDAYS, SICKNESS OR ANY OTHER REASON?
	Mothercraft Nurse → Q.35 □ 1		Yes
	Enrolled Nurse 2.35 2		Permanently not intending to work
	Nursing Aide/Auxiliary Nurse/Psychiatric Aide		(if aged 65+ only) → <b>Q.57</b> → 3
	Registered Nurse/Sister $\rightarrow$ <b>Q.35</b> $\rightleftharpoons$ 4	38.	DID YOU HAVE MORE THAN 1 JOB OR BUSINESS (LAST WEEK)?
	Triple/Double Certificate Nurse/Theatre Nurse/		Yes 1
	Registered Midwife $\rightarrow$ <b>Q.35</b> 5		No → <b>Q.40</b> <sup>L</sup> 2
33.	Other → Q.34 = 6  WHAT IS THE NAME OF THE HIGHEST TEACHING	39.	I WOULD NOW LIKE TO ASK YOU ABOUT THE JOB OR BUSINESS IN WHICH YOU USUALLY WORK THE MOST HOURS.
	QUALIFICATION YOU HAVE COMPLETED?  Teaching certificate/TPTC/ TSTC/TITC → Q.35 中 1	40.	DID YOU WORK FOR AN EMPLOYER, OR IN YOUR OWN BUSINESS?
	Diploma of Teaching (Dip T)		Employer 🖵 1
	→ <b>Q.35</b>		Own business → <b>Q.43</b> = 2
	Graduate Certificate/ Diploma of Education (Dip Ed)		Other/Uncertain <b>2.42</b> 3
	Other 4	41.	ARE YOU PAID A WAGE OR SALARY, <u>OR</u> SOME OTHER FORM OF PAYMENT?
			Wage/Salary → <b>Q.45</b> ☐ 1
			Other/Uncertain 2

42.	WHAT ARE YOUR (WORKING/PAYM ARRANGEMENTS?	ENT)	47.	WHAT IS THE NAME OF YOUR (EMPLOYER/BUSINESS)?	
	Unpaid voluntary work →	<b>Q.51</b> 👝 01			
	Contractor/Subcontractor	🛓 02			
	Own business/Partnership	03			
	Commission only	📙 04	48.	(IN YOUR JOB WITH (Specify employer/business	
	Commission with retainer -	<b>Q.45</b> 05		in Q.47),) DID YOU DO ANY SHIFT WORK AT AN TIME DURING THE LAST 4 WEEKS?	ΙΥ
	In a family business without pay →	<b>Q.45</b> — 06			<b>-</b> 1
	Payment in kind →	<b>Q.45</b> ${\sqsubseteq}$ 07		No → <b>Q.50</b>	<b>-</b> 2
	Paid by the piece/ item produced	<b>0.45</b> 08	49.	IS YOUR SHIFT -	
	Wage/salary earner →	_		A ROTATING SHIFT WHICH CHANGES PERIODICALLY?	<b>1</b>
	Other	-		A REGULAR EVENING, NIGHT OR GRAVEYARD SHIFT?	<b>2</b>
43.	DO YOU HAVE EMPLOYEES (IN THA	T BUSINESS)?		A REGULAR MORNING SHIFT?	<b>3</b>
	Yes	🖵 1		A REGULAR AFTERNOON SHIFT?	<b>-</b> 4
	No	2		WHAT KIND OF SHIFT IS IT?	
44.	IS THAT BUSINESS INCORPORATED	?		Irregular shift	<b>=</b> 5
	Yes	🖵 1		Split shift (consisting of two distinct periods each day)	<b>=</b> 6
	No				<b>-</b> 0 <b>-</b> 7
45.	WHAT IS YOUR OCCUPATION IN (THAT/YOUR MAIN) (JOB/BUSINESS	)?			<b>3</b> 7
	(Title)		50.	HOW MANY HOURS DO YOU <u>USUALLY</u> WORK EACH WEEK IN (THAT JOB/THAT BUSINESS/ ALL YOUR JOBS)?	
	WHAT ARE YOUR MAIN TASKS AND DUTIES?			Number of hours Q.57	
	(Main tasks/duties)	5 5 5 5 6 6 6 6 7 7 7 7 8 8 8 8 9 9 9 9		Less than 1 hour/ ${\leftarrow}$ 96 ${\sim}$ No hours	5 6 5 7 5 8 5 9
46.	WHAT KIND OF BUSINESS OR SERV OUT BY YOUR (EMPLOYER AT THE YOU WORK/BUSINESS)?		51.	AT ANY TIME DURING THE LAST 4 WEEKS, HA YOU BEEN LOOKING FOR FULL-TIME WORK?	VE
		•••		Yes	<b>-</b> 1
		+++ ++++		No	<b>-</b> 2
		\$ \$ \$ \$ \$ 4 \$	52.	HAVE YOU BEEN LOOKING FOR PART-TIME WO	ORK
		\$ \$ \$ \$ \$ \$		AT ANY TIME DURING THE LAST 4 WEEKS?  Yes	<b>=</b> 1
	a	7777 8888			<b>-</b> 2
		9999			
	Ь	# 2 3			
		<b>-9</b> -	-		

53.	AT ANY TIME IN THE LAST 4 WEEKS HAVE YOU -	56.	WHEN DID YOU LAST WORK FOR AT LEAST 2 WEEKS IN A JOB OF 35 HOURS OR MORE A WEEK?
	WRITTEN, PHONED OR APPLIED IN PERSON TO AN EMPLOYER FOR WORK?	а	Enter date
	T		Less than
	ANSWERED AN ADVERTISEMENT FOR A JOB?		2 years ago// YY
	LOOKED IN NEWSPAPERS?		2 years or
	Yes 🖵		more agoMM YY
	No 📙		5 years or
	CHECKED FACTORY NOTICE BOARDS, OR USED THE TOUCHSCREENS AT CENTRELINK OFFICES?		more ago YYY  Day Month Year
	AT ANY TIME IN THE LAST 4 WEEKS HAVE YOU -		由由 由由 20 日 由由 22 2 2 2 2 2 3 3 3 3 3
	BEEN REGISTERED WITH CENTRELINK AS A JOBSEEKER?		(本)
	CHECKED OR REGISTERED WITH AN EMPLOYMENT AGENCY? 05		7 7 7 7 7 7 6 6 6 6 6 6 9 9 9
	DONE ANYTHING ELSE TO FIND A JOB?  Advertised or tendered for work	ь	Has never worked in a job of 35+hrs/week (for 2 weeks
			or more) 1
	Contacted friends/relatives	57.	THE NEXT QUESTION IS ABOUT THIS (Specify dwelling type in Q.18).
	Only looked in newspapers		HOW MANY BEDROOMS ARE THERE IN THIS
	None of these → <b>Q.57</b> 10		(Specify dwelling type in Q.18)?
54.	IF YOU HAD FOUND A (PART-TIME) JOB COULD YOU HAVE STARTED WORK LAST WEEK?		Number
	Yes 7		44
	No • <b>Q.57</b> • 2		\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$
	Don't know 3		Bedsitter = 96 7 7 8 8 8
55.	WHEN DID YOU BEGIN LOOKING FOR WORK?		<b>9 9</b>
	Enter date		
а	Enter date		
	Less than 2 years ago  DD MM YY		
	2 years or more ago// YY		
	5 years or more agoYY		
	Day Month Year  19		
b	Did not look for work 1		

#### 7 SELF ASSESSED HEALTH **201.** THE NEXT QUESTION IS ABOUT HOW YOU FEEL OVERALL. HOW DO YOU FEEL ABOUT YOUR LIFE AS A WHOLE, TAKING INTO ACCOUNT WHAT HAS HAPPENED IN THE LAST YEAR, AND WHAT YOU EXPECT TO HAPPEN IN THE FUTURE? Interviewer: Show Prompt Card 4 PLEASE TELL ME THE NUMBER THAT MOST CORRESPONDS TO HOW YOU FEEL. 1 - Delighted ..... 2 - Pleased ..... 2 3 - Mostly satisfied ..... 3 4 - Mixed ..... **4** 5 - Mostly dissatisfied ..... 5 6 - Unhappy ..... $\stackrel{\perp}{\rightarrow}$ 6 **\_** 7 7 - Terrible ..... I WOULD NOW LIKE TO ASK YOU SOME QUESTIONS ABOUT YOUR OWN HEALTH. IN GENERAL, WOULD YOU SAY THAT YOUR HEALTH IS EXCELLENT, VERY GOOD, GOOD, FAIR OR POOR? Excellent ..... 1 2 Very good ..... 3 Poor ..... 5 COMPARED TO 1 YEAR AGO, HOW WOULD YOU RATE YOUR HEALTH IN GENERAL NOW? WOULD YOU SAY IT WAS MUCH BETTER, SOMEWHAT BETTER, ABOUT THE SAME, SOMEWHAT WORSE OR MUCH WORSE (THAN 1 YEAR AGO)? Much better now than 1 1 year ago ..... Somewhat better now than 2 1 year ago ..... About the same as 1 year ago ...... 3 Somewhat worse now than 1 year ago ..... Much worse now than 1 year ago ..... DO YOU CONSIDER YOURSELF TO BE ACCEPTABLE 204.

WEIGHT, UNDERWEIGHT OR OVERWEIGHT? Acceptable weight .....

Underweight .....

Overweight .....

1 2

3

			# BIOIII/IIBIOIII	
<b>205.</b> HOW M	UCH DO YO	OU WEIGH?		
<u>Interviewer:</u> Record reported weight in appropriate category				
Kilograms	0	1		
Stone/ pounds		2	#### #### ####	
Pounds	0	3	\$ \$ \$ \$	
Don't knov	v =	99998	9 9 9	
<b>206.</b> HOW TA	ALL ARE YO	OU WITHOUT	T SHOES?	

Centimetres 1 3 3 3 444 5 5 5 inches ...... 2 666 **4 4 4** Don't know 9998 രോ രോ രോ 9 9 9

Interviewer: Record reported height in appropriate category

207. 208. 209.	IN THE LAST 2 WEEKS, HAVE YOU WALKED FOR SPORT, RECREATION OR FITNESS?  Yes		IN THE LAST 2 WEEKS, DID YOU DO ANY (OTHER) EXERCISE WHICH CAUSED A LARGE INCREASE IN YOUR HEART RATE OR BREATHING, THAT IS, VIGOROUS EXERCISE?  Interviewer: Show Prompt Card 5  Yes
	SPENT WALKING IN THE LAST 2 WEEKS?  Interviewer: Record appropriate time  Hours/ minutes  1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	215.	WHAT WAS THE TOTAL AMOUNT OF TIME YOU SPENT DOING VIGOROUS EXERCISE IN THE LAST 2 WEEKS?
	100 hours or more = 9999		Hours/ the
210.	I WILL NOW ASK YOU ABOUT MODERATE AND VIGOROUS EXERCISE APART FROM WALKING.  Interviewer: Show Prompt Card 5  IN THE LAST 2 WEEKS, DID YOU DO ANY EXERCISE WHICH CAUSED A MODERATE INCREASE IN YOUR HEART RATE OR BREATHING, THAT IS, MODERATE EXERCISE?  Yes		100 hours or more 9999
211.	HOW MANY TIMES DID YOU DO ANY MODERATE EXERCISE IN THE LAST 2 WEEKS?  Interviewer: Record number  Number		
212.	WHAT WAS THE TOTAL AMOUNT OF TIME YOU SPENT DOING MODERATE EXERCISE IN THE LAST 2 WEEKS?  Interviewer: Record appropriate time  Hours/ minutes  Hours/ Minutes		

-	
220.	I WOULD NOW LIKE TO ASK YOU SOME QUESTIONS ABOUT SMOKING.
	DO YOU CURRENTLY SMOKE?
	Yes 1
	No → <b>Q.222</b>
221.	DO YOU SMOKE REGULARLY, THAT IS, AT LEAST ONCE A DAY?
	Yes → <b>Q.223</b> 📥 1
	No 2
222.	HAVE YOU <u>EVER</u> SMOKED REGULARLY (THAT IS, AT LEAST ONCE A DAY)?
	Yes 1
	No <u>L</u> 2
223.	Sequence Guide:
	. If single person household → Q.228 📮 1
	. Otherwise → <b>Q.224</b> 📥 2
224.	DOES ANYONE ELSE IN THIS HOUSEHOLD SMOKE REGULARLY, THAT IS, AT LEAST ONCE A DAY?
	Yes 7
	No → <b>Q.228</b> 📥 2
225.	HOW MANY OTHER PEOPLE IN THIS HOUSEHOLD SMOKE REGULARLY?
	Interviewer: Record number
	Number 2 2 2 2 3 3
	Don't know 98 5 5 5 6 6
	サナ 数: 数 数: 数
228.	THE NEXT QUESTION IS ABOUT CHANGES IN FRECKLES AND MOLES.
	DO YOU, OR ANYONE ELSE, REGULARLY CHECK YOUR SKIN FOR CHANGES IN FRECKLES AND MOLES?
	Yes 7
	No 2

400.	THE NEXT FEW QUESTIONS ARE ABOUT CA	NCER.	406.	AT WHAT AGE WERE YOU FIRST DIAGNOSED WITH BREAST CANCER?	
	HAVE YOU EVER BEEN TOLD BY A DOCTOR NURSE THAT YOU HAVE CANCER?	OR		Interviewer: Record age in years	фф
	Yes	<u> </u>			
	No → <b>Q.450</b>	2		Age	3 3 4
404	<del>-</del>				5 5 6 6
401.	WHAT TYPE OF CANCER WERE YOU TOLD YOU HAD?				ŽŽ
	Skin cancer (include melanoma,				\$ \$ \$ \$
	basal cell carcinoma, squamous cell carcinoma)	<b>—</b> 01	407.	INCLUDING CANCER WHICH IS IN REMISSI	ON,
	Colon/rectum/bowel cancer			DO YOU CURRENTLY HAVE CANCER?	
	(colorectal)b	<b>—</b> 02		Yes	〒1
	Breast c	<b>—</b> 03		No → <b>Q.450</b>	<u></u> 2
	Prostate d	<b>—</b> 04	408.	WHAT TYPE OF CANCER DO YOU HAVE?	
	Lung (include trachea, pleura	05		Skin cancer (include melanoma,	
	and bronchus)e	<b>—</b> 03		bas <mark>al cell</mark> carcinoma, squamous cell carcinoma)	<b>—</b> 01
	Female reproductive organs (include cervix, uterus, ovary) f	<b>—</b> 06		Colon/rectum/bowel cancer	
	Bladder/kidney g	<b>—</b> 07		(colorectal)b	<b>—</b> 02
	Stomach	<b>—</b> 08		Breast c	<b>—</b> 03
	Leukaemia /	09		Prostate d	<b>—</b> 04
	Lymphoma (include Non-Hodgkin's	_ ''		Lung (include trachea, pleura and bronchus)e	<b>—</b> 05
	Lymphoma)	<u> </u>		Female reproductive organs	
	Cancer of unknown primary site k	<b>—</b> 11		(include cervix, uterus, ovary) f	<b>—</b> 06
	Other (Specify)			Bladder/kidneyg	<b>—</b> 07
	1	12		Stomach	<b>—</b> 08
	OFFICE US	SE ONLY		Leukaemia i	<b>—</b> 09
	402.			Lymphoma (include Non-Hodgkin's	
				Lymphoma) j	<b>—</b> 10
				Cancer of unknown primary site $\dots k$	<u> </u>
403.	Sequence Guide:			Other (Specify)	
	. If skin cancer (code '01') in Q.401 $\rightarrow$ Q.404	<del>-</del> 1			<b>—</b> 12
	. Otherwise	2		OFFICE U	SE ONLY
404.	WHAT TYPE OF SKIN CANCER WAS THIS?			409.	
	Melanomaa	<b>—</b> 1			
	Basal cell carcinoma (BCC) b	_ 2			
	Squamous cell carcinoma (SCC) c	3	410.	*	
	Other form of skin cancer d	<b>—</b> 4		. If skin cancer (code '01') in Q.408 → <b>Q.411</b>	「
	Don't knowe			. Otherwise → <b>Q.412</b>	<u></u> 2
405					
405.	Sequence Guide:  . If breast cancer (code '03')				
	in Q.401 → <b>Q.406</b>	<b>—</b> 1			
	. Otherwise → <b>Q.407</b>	2			

411.	WHAT TYPE OF SKIN CANCER IS THIS?	415.	WHAT ARE THE NAMES OR BRANDS OF ALL THE MEDICATION YOU HAVE USED FOR CANCER
	Melanoma a <u> </u>		IN THE LAST 2 WEEKS?
	Basal cell carcinoma (BCC) $b = 2$		Interviewer: Write a maximum of 3 names or brands
	Squamous cell carcinoma (SCC) c 😑 3		(a)
	Other form of skin cancer		(b)
	Don't know e <u></u> 5		(c)
12.	THE NEXT FEW QUESTIONS ARE ABOUT MEDICATION THAT YOU MAY HAVE USED OR TAKEN FOR CANCER IN THE <u>LAST 2 WEEKS</u> .		Interviewer: Mark number of medications 1 2
	WE ARE ONLY INTERESTED IN MEDICATION YOU ARE USING OR TAKING WHICH IS DIRECTLY RELATED TO THE CONDITION(S) YOU HAVE TOLD ME ABOUT.		or  Mark if 4 or more medications reported  3
	INCLUDING ANY VITAMIN AND MINERAL SUPPLEMENTS, AS WELL AS ANY NATURAL OR HERBAL MEDICINES, HAVE YOU USED ANY MEDICATION FOR CANCER IN THE LAST 2 WEEKS?	416.	OFFICE USE ONLY  417.  418.
	Yes = 1		
	No → <b>Q.450</b>		
13.	(IT MIGHT BE EASIER TO ANSWER THESE QUESTIONS IF YOU HAVE THE MEDICATION IN FRONT OF YOU.)		
	IN THE <u>LAST 2 WEEKS</u> , FOR CANCER, HAVE YOU TAKEN ANY -		
	VITAMIN OR MINERAL SUPPLEMENTS? a = 1		
	HERBAL OR NATURAL TREATMENTS OR REMEDIES? b == 2		
	Neither of these $\rightarrow$ <b>Q.415</b> $c = 3$		
14.	OTHER THAN THE VITAMINS OR HERBAL TREATMENTS YOU JUST TOLD ME ABOUT,		
	HAVE YOU USED OR TAKEN ANY MEDICATION FOR CANCER IN THE LAST 2 WEEKS?		
	Yes 7		
	No		

450.	THE NEXT FEW QUESTIONS ARE ABOUT CONDITIONS OF THE HEART AND CIRCULATORY	<b>454.</b> WHAT ARE THE NAMES OF THESE HEART OR CIRCULATORY CONDITIONS?
	SYSTEMS.	Rheumatic heart disease $a = 01$
	Interviewer: Show Prompt Card 15	Heart attack
	THIS CARD SHOWS SOME <u>EXAMPLES</u> OF THESE CONDITIONS.	Stroke (including after effects of stroke)
	INCLUDING ANY CONDITIONS WHICH CAN BE CONTROLLED WITH MEDICATION, HAVE YOU	Anginad <u>— 04</u>
	EVER BEEN TOLD BY A DOCTOR OR NURSE THAT YOU HAVE ANY HEART OR CIRCULATORY CONDITIONS?	High blood pressure/hypertension $e = 05$
	Yes 1	Hardening of the arteries/ atherosclerosis/arteriosclerosis f = 06
	No → <b>Q.500</b> 占 2	Fluid problems/fluid retention/ oedema
451.	WHAT ARE THE NAMES OF THESE CONDITIONS?	High cholesterol
	Rheumatic heart disease	Rapid or irregular heartbeats/
	Heart attack	tachycardia/palpitations i - 09
	Stroke (including after effects	Heart murmur/heart valve disorder j 🗀 10
	of stroke)	Haemorrhoids
	Angina d 📥 04	Varicose veins
	High blood pressure/hypertension $e = 05$	Other
	Hardening of the arteries/ atherosclerosis/arteriosclerosis f _ 06	(Interviewer: Write in the names of up to 3 conditions below)
	Fluid problems/fluid retention/ oedema 9 07	(a)
	High cholesterol	(b) <i>n</i> — 14
		(c)
	Rapid or irregular heartbeats/tachycardia/palpitations	OFFICE USE ONLY
	Heart murmur/heart valve disorder $j = 10$	455(a). 455(b). 455(c).
	Haemorrhoidsk = 11	
	Varicose veins	
	Other	<b>456.</b> <u>Sequence Guide:</u>
	( <u>Interviewer:</u> Write <mark>in the names of up</mark> to 3 conditions <mark>below</mark> )	. If shaded box marked in Q.454 🔷 <b>Q.457</b> 📮 1
	(a) <i>m</i> = 13	. Otherwise → <b>Q.459</b> 2
	(b) n <u></u> 14	<b>457.</b> (AGAIN REMEMBERING TO INCLUDE ANY
	(c)	CONDITIONS WHICH CAN BE CONTROLLED WITH MEDICATION,)
	OFFICE USE ONLY	(HAS THIS/HAVE ANY OF THESE) CONDITION(S) LASTED, OR (IS IT/ARE THEY) EXPECTED TO LAST,
45	2(a). 452(b). 452(c).	FOR 6 MONTHS OR MORE?
		Yes
		1 es
		No
453.	INCLUDING ANY CONDITIONS WHICH YOU ARE CONTROLLING WITH MEDICATION, DO YOU CURRENTLY HAVE ANY HEART OR CIRCULATORY CONDITIONS?	
453.	INCLUDING ANY CONDITIONS WHICH YOU ARE CONTROLLING WITH MEDICATION, DO YOU CURRENTLY HAVE ANY HEART OR CIRCULATORY	
453.	INCLUDING ANY CONDITIONS WHICH YOU ARE CONTROLLING WITH MEDICATION, DO YOU CURRENTLY HAVE ANY HEART OR CIRCULATORY CONDITIONS?  Yes	
453.	INCLUDING ANY CONDITIONS WHICH YOU ARE CONTROLLING WITH MEDICATION, DO YOU CURRENTLY HAVE ANY HEART OR CIRCULATORY CONDITIONS?	
453.	INCLUDING ANY CONDITIONS WHICH YOU ARE CONTROLLING WITH MEDICATION, DO YOU CURRENTLY HAVE ANY HEART OR CIRCULATORY CONDITIONS?  Yes	
453.	INCLUDING ANY CONDITIONS WHICH YOU ARE CONTROLLING WITH MEDICATION, DO YOU CURRENTLY HAVE ANY HEART OR CIRCULATORY CONDITIONS?  Yes	

	Angina		TREATMENTS YOU JUST TOLD ME ABOUT,  HAVE YOU USED OR TAKEN ANY OTHER  MEDICATION FOR YOUR HEART OR CIRCULATORY CONDITIONS IN THE LAST 2 WEEKS?
	Hardening of the arteries/		MEDICATION FOR YOUR HEART OR CIRCULATORY CONDITIONS IN THE <u>LAST 2 WEEKS</u> ?
	atheroscierosis/arterioscierosis 2 👝 03		Yes → <b>Q.489</b> 1
			No → <b>Q.500</b> 2
	Fluid problems/fluid retention/ oedemad 👝 04		Don't know
	High cholesterol $e = 05$	454	
	Rapid or irregular heartbeats/ tachycardia/palpitations	464.	(THE NEXT FEW QUESTIONS ARE ABOUT MEDICATION THAT YOU MAY HAVE USED OR TAKEN, IN THE LAST 2 WEEKS, WHICH ARE
	Heart murmur/heart valve disorder $g = 07$		DIRECTLY RELATED TO YOUR HEART OR CIRCULATORY CONDITION(S).)
	Haemorrhoidsh 👝 08		INCLUDING ANY VITAMIN AND MINERAL
	Varicose veins <i>i</i> <b>=</b> 09		SUPPLEMENTS, AS WELL AS ANY NATURAL OR HERBAL MEDICINES, HAVE YOU USED ANY MEDICATION FOR (S)
	Condition '(a)' from Q.454 j 😑 10		MEDICATION FOR (Specify name of condition 1 recorded in Q.454) IN THE LAST 2 WEEKS?
	Condition '(b)' from Q.454 k = 11		Yes 1
	Condition '(c)' from Q.454 / = 12		No → <b>Q.471</b> 2
159.	Sequence Guide:	1	Don't know → <b>Q.471</b> 3
	. If I box <u>only</u> marked in Q.454 <b>Q.464</b> 📮 1	465.	(IT MIGHT BE EASIER TO ANSWER THESE
	. Otherwise <b>→ Q.460</b> _ 2		QUESTIONS IF YOU HAVE THE MEDICATION IN FRONT OF YOU.)
	THE NEXT FEW QUESTIONS ARE ABOUT MEDICATION THAT YOU MAY HAVE USED OR TAKEN, IN THE <u>LAST 2 WEEKS</u> , WHICH ARE DIRECTLY RELATED TO YOUR HEART OR		IN THE <u>LAST 2 WEEKS</u> , FOR ( <i>Specify name of condition 1 recorded in Q.454</i> ), HAVE YOU TAKEN ANY -
	CIRCULATORY CONDITIONS.		VITAMIN OR MINERAL SUPPLEMENTS? a 🗀 1
	INCLUDING ANY VITAMIN AND MINERAL SUPPLEMENTS, AS WELL AS ANY NATURAL OR HERBAL MEDICINES, HAVE YOU USED ANY		HERBAL OR NATURAL TREATMENTS OR REMEDIES? $b = 2$
	MEDICATION FOR ANY OF YOUR HEART OR CIRCULATORY CONDITIONS IN THE LAST 2 WEEKS?		Neither of these → <b>Q.467</b> c 3
	Yes = 1	466.	OTHER THAN THE VITAMINS OR HERBAL TREATMENTS YOU JUST TOLD ME ABOUT,
	No → <b>Q.500</b> 📥 2		HAVE YOU USED OR TAKEN ANY MEDICATION FOR (Specify name of condition 1
	DO YOU KNOW WHI <mark>CH CONDITIONS</mark> YOU ARE TAKING EACH MED <mark>ICATION FOR?</mark>		recorded in Q.454) IN THE LAST 2 WEEKS?
	Yes → 0.464 □ 1		Yes 1
	No 2		No → <b>Q.471</b> → 2
	Some → <b>Q.464</b> □ 3		Don't know → <b>Q.471</b> 📥 3
	(IT MIGHT BE EASIER TO ANSWER THESE QUESTIONS IF YOU HAVE THE MEDICATION IN FRONT OF YOU.)	_	
	IN THE LAST 2 WEEKS, FOR YOUR HEART OR CIRCULATORY CONDITIONS, HAVE YOU TAKEN ANY -		
	VITAMIN OR MINERAL SUPPLEMENTS? a 🗀 1		
	HERBAL OR NATURAL TREATMENTS OR REMEDIES? $b = 2$		
	Neither of these $\rightarrow$ <b>Q.489</b> $c = 3$		

467.	WHAT ARE THE NAMES OR BRANDS OF THE MEDICATION YOU HAVE USED FOUND (Specify name of condition 1 recorded in QUANTHE LAST 2 WEEKS?	OR	475.	WHAT ARE THE NAMES OR BRANDS OF ALL THE MEDICATION YOU HAVE USED FOR (Specify name of condition 2 recorded in Q.454) IN THE LAST 2 WEEKS?
	Interviewer: Write a maximum of 3 names of	or brands		Interviewer: Write a maximum of 3 names or brands
	(a)			(a)
	(b)			(b)
	(c)			(c)
	<u>Interviewer:</u> Mark number of medications reported in a-c	$\begin{array}{ccc} & 1 \\ & 2 \\ & 3 \end{array}$		Interviewer: Mark number of medications reported in a-c 1 2 3
	or			or
	Mark if 4 or more medications reported	+ 4		Mark if 4 or more medications reported 4
	or			or
	Mark if no names or brands known	<u></u> 8		Mark if no name <mark>s o</mark> r brands known 📙 8
	OFFICE USE ONLY			OFFICE USE ONLY
468.	469.		476.	477.
471.	Sequence Guide:		479.	Sequence Guide:
	. If <u>only</u> 1 condition recorded in Q.454 → <b>Q</b>	<b>.500                                   </b>		. If <u>only</u> 2 conditions recorded in Q.454 → <b>Q.487</b> — 1
	. If more than 1 condition recorded in Q.454 → Q			. If more than 2 conditions recorded in Q.454 → <b>Q.480</b> □ 2
472.	INCLUDING ANY VITAMIN AND MINE SUPPLEMENTS, AS WELL AS ANY NAT HERBAL MEDICINES, HAVE YOU USE MEDICATION FOR (Specify name of cond recorded in Q.454) IN THE LAST 2 WEEK	TURAL OR D ANY dition 2	480.	INCLUDING ANY VITAMIN AND MINERAL SUPPLEMENTS, AS WELL AS ANY NATURAL OR HERBAL MEDICINES, HAVE YOU USED ANY MEDICATION FOR (Specify name of condition 3 recorded in Q.454) IN THE LAST 2 WEEKS?
	Yes			Yes 1
	No → <b>Q</b>	<b>.479</b> — 2		No
	Don't know → Q	<b>.479 -</b> 3		Don't know → <b>Q.487</b>
473.	IN THE <u>LAST 2 WEEKS</u> , FOR (Specify na condition 2 recorded in Q.454), HAVE YOU	ume of U TAKEN ANY -	481.	IN THE <u>LAST 2 WEEKS</u> , FOR ( <i>Specify name of condition 3 recorded in Q.454</i> ), HAVE YOU TAKEN ANY -
	VITAMIN OR MINERAL SUPPLEMENTS?	a 🗀 1		VITAMIN OR MINERAL SUPPLEMENTS? a □ 1
	HERBAL OR NATURAL TREATMENTS OR REMEDIES?	<i>b</i> 🗖 2		HERBAL OR NATURAL TREATMENTS OR REMEDIES? $b = 2$
	Neither of these → Q.42	<b>75</b> c <u> </u>		Neither of these → <b>Q.483</b> c □ 3
474.	OTHER THAN THE VITAMINS OR HERITREATMENTS YOU JUST TOLD ME AB		482.	OTHER THAN THE VITAMINS OR HERBAL TREATMENTS YOU JUST TOLD ME ABOUT,
	HAVE YOU USED OR TAKEN ANY MED FOR ( <i>Specify name of condition 2 recorded</i> IN THE LAST 2 WEEKS?			HAVE YOU USED OR TAKEN ANY MEDICATION FOR ( <i>Specify name of condition 3 recorded in Q.454</i> ) IN THE <u>LAST 2 WEEKS</u> ?
	Yes	T		Yes
	No → <b>Q</b>			No → <b>Q.487</b> 中 2
	Don't know → Q	<b>.479</b> <u> </u>		Don't know → <b>Q.487</b> = 3

483.	THE N	MEDICA fy name o	TION YOU	J HAVE U n 3 recorde	ANDS OF AI SED FOR ed in Q.454)		500.	THE NEXT FEW QUESTIONS ARE ABOUT DIABET AND HIGH SUGAR LEVELS.
	<u>Intervi</u>	<u>iewer:</u> Wi	rite a maxi	imum of 3 n	ames or bra	nds		HAVE YOU EVER BEEN TOLD BY A DOCTOR OR NURSE THAT YOU HAVE -
	(a)							DIABETES? a =
	(b)							HIGH SUGAR LEVELS IN YOUR BLOOD OR URINE?
	(c)							Neither → 0.522 c = 1
		i <u>ewer:</u> M ed in a-c		er of medica	ations	$\begin{array}{ccc} & 1 \\ & 2 \\ & 3 \end{array}$	501.	AT WHAT AGE WERE YOU FIRST TOLD THAT YO' HAD (DIABETES/HIGH SUGAR LEVELS)?
	or							Interviewer: If diabetes and high sugar levels marked
	Mark į	if 4 or mo	ore medica	tions repor	ted	4		in Q.500, record age first told had diabetes
	or							Years
	Mark i	if no nam	es or bran			<b>□</b> 8		Less than 1 year 97 5
40.4				USE ONL				Don't know
484.			485.		486.		]	
							502.	Sequ <mark>ence Guide:</mark>
487.	Seque	nce Guid	<u>'e:</u>					. If diabetes (code '1') in Q.500 → <b>Q.503</b> ¬
	. If ye	s (code	'1') in Q.46	61	→ Q.500	₽ 1		. Otherwise → <b>Q.506</b>
	. If so	me (code	e '3') in Q.	461	→ Q.488	_ 2	503.	WHAT TYPE OF DIABETES WERE YOU TOLD
		OITIONS Yes .	IN THE <u>L</u>	AST 2 WE	OR CIRCU <u>EKS</u> ? 	<b>P</b> 1		Type 1 (Insulin Dependent Diabetes Mellitus/Juvenile Onset Diabetes)
489.	THE ( YOUR THE <u>L</u>	Γ ARE TI OTHER) R HEART LAST 2 V	HE NAME MEDICA OR CIRO VEEKS?	S OR BRATION YOU	ANDS OF ALL J HAVE USI Y CONDITION	EL ED FOR ON(S) IN		Diabetes Melitus/Adult         b         2           Onset Diabetes)         c         3           Gestational (pregnancy)         c         3           Diabetes insipidus         d         4           Other (Specify)
						nus		e = 5
								Don't know f = 0
	(b)							
	(c)							OFFICE USE O
		iewer: M ed in a-c		er of medice	ations	$\begin{array}{ccc} & 1 \\ 2 \\ 3 \end{array}$		
	or					<del>-</del> 3	505.	Sequence Guide:
	Mark if 4 or more medications reported 4  OFFICE USE ONLY					<u></u> 4	303.	. If diabetes insipidus <u>only</u>
								(code '4') in $Q.503$ $\rightarrow$ $Q.522$
490.			491.		492.		,	. Otherwise → <b>Q.506</b> 🛓 2
							Enk	DO YOU CURRENTLY HAVE (DIABETES/HIGH
							506.	SUGAR LEVELS)?
								Yes 1
								No → <b>Q.522</b> → 2
								Don't know → <b>Q.522</b> — 3

508.	Sequence Guide:  If Type 1 or Type 2 diabetes (code '1' or '2') in Q.503		QUESTION IF YOU HAVE THE MEDICATION IN FRONT OF YOU.)  (APART FROM INSULIN INJECTIONS.) WHAT ARE THE NAMES OR BRANDS OF ALL THE MEDICATION YOU HAVE USED FOR (DIABETES/HIGH SUGAR LEVELS) IN THE LAST 2 WEEKS?  Interviewer: Write a maximum of 3 names or brands  (a)
	OR HERBAL MEDICINES, FROM YOUR ANSWER. THESE WILL BE RECORDED LATER.  (APART FROM INSULIN INJECTIONS.) HAVE YOU USED ANY (OTHER) MEDICATION(S) FOR (DIABETES/HIGH SUGAR LEVELS) IN THE LAST 2 WEEKS?  Yes	519.	OR BEING ON A SPECIAL DIET,)  IN THE LAST 2 WEEKS, HAVE YOU TAKEN ANY (OTHER) ACTION TO MANAGE YOUR (DIABETES/HIGH SUGAR LEVELS)?  Yes

520	• Interviewer: Show Prompt Card 17	
	IN THE <u>LAST 12 MONTHS</u> , (HAS/HAVE) YOUR (DIABETES/HIGH SUGAR LEVELS) INTERFERED WITH ANYTHING YOU USUALLY DO?	
•		
	Yes	
521 -	. WHICH ACTIVITIES?  Work a □ 1	
	Study $b = 2$	
	Other day to day activities $\ldots c = 3$	
-	Other day to day activities c 🗀 3	
.		
•		
- 1		

542.	DO YOU HAVE ANY HEARING PROBLEMS OR	545.	DO YOU <u>CURRENTLY</u> HAVE -
	PROBLEMS WITH YOUR EARS THAT HAVE LASTED, OR ARE EXPECTED TO LAST, FOR 6 MONTHS OR		OSTEO <u>ARTHRITIS</u> ? $a = 1$
	MORE? Yes		RHEUMATOID ARTHRITIS? $b = 2$
	No → <b>Q.545</b> = 2		GOUT? <i>c</i> == 3
543.	WHAT HEARING OR EAR PROBLEMS DO YOU HAVE?	1	RHEUMATISM? $d = 4$
343.	Total deafness		OTHER TYPE OF ARTHRITIS? (Specify)
	Deaf in 1 ear b = 2		(Specify)
	Hearing loss/partially deaf $c = 3$		e = 5
	Tinnitus d = 4		Arthritis - type unknown f = 6
	Meniere's Disease/Syndrome e □ 5		None of these $\rightarrow$ <b>Q.550</b> $g = 7$
	Otitis media $f = 6$		
	Other (Specify)		OFFICE USE ONLY
	g 🗀 7		546.
	Don't know		
		547.	Sequence Guide:
			. I <mark>f osteoarthritis o</mark> nly (code '1') in Q.545 → <b>Q.550</b> <mark>무</mark> 1
			. Otherwise
		548.	(HAS THIS/HAVE ANY OF THESE) CONDITION(S)
			LASTED, OR (IS IT/ARE THEY) EXPECTED TO LAST, FOR 6 MONTHS OR MORE?
			Yes 1
			No → <b>Q.550</b>
			Don't know → <b>Q.550</b> 3
		549.	
			ask WHICH ONES?
			Rheumatoid arthritis a 1
			Gout
			Rheumatism
			Other type of arthritis $\dots d = 4$
			Arthritis - type unknowne 5

18

Long TERM CONDITIONS	
<b>550.</b> THE NEXT FEW QUESTIONS ARE ABOUT OTHER LONG TERM CONDITIONS, THAT IS, CONDITIONS WHICH HAVE LASTED, OR ARE EXPECTED TO LAST, FOR 6 MONTHS OR MORE.	552. (APART FROM THE CONDITION(S) YOU HAVE ALREADY TOLD ME ABOUT,)  DO YOU HAVE ANY <u>OTHER</u> CONDITIONS THAT
DO YOU HAVE ANY OF THESE CONDITIONS?	HAVE LASTED, OR ARE EXPECTED TO LAST, FOR 6 MONTHS OR MORE. <u>FOR EXAMPLE</u> :
<u>Interviewer:</u> Show Prompt Card 20	Interviewer: Show Prompt Card 21
Yes 1	Yes
No → <b>Q.552</b>	No 2.558 2
<b>551.</b> WHICH OF THESE DO YOU HAVE?	<b>553.</b> WHICH CONDITIONS DO YOU HAVE?
Hayfever a 🗀 01	(a)
Sinusitis or sinus allergy	
Other allergy c 🖂 03	(b)
Anaemia	(c)
Bronchitis e 😑 05	(d)
Cystic fibrosis f 😑 06	$\Rightarrow$ 2
Emphysemag 😑 07	Interviewer: Mark number of conditions 3 reported in a-d
Epilepsy /л 🗀 08	,
Fluid problems/fluid retention/ oedema (not due to heart or circulatory problems)	OFFICE USE ONLY <b>554. 555.</b>
Hernias j 🗖 10	
Kidney stones	
Migraine / = 12	556.
Osteoporosis	
Psoriasis 14	558. (APART FROM THE CONDITION(S) YOU HAVE ALREADY TOLD ME ABOUT.)
Stomach ulcers or other gastrointestinal ulcers	DO YOU HAVE ANY (OTHER) LONG TERM CONDITIONS SUCH AS THESE:
Thyroid trouble/goitrep 🗀 16	Interviewer: Show Prompt Card 22
Tuberculosisq 🗀 17	Yes 1
	No → <b>Q.564</b> 2
	<b>559.</b> WHICH CONDITIONS DO YOU HAVE?
	(a)
	(b)
	(c)
	(d)
	Interviewer: Mark number of conditions  reported in a-d
	OFFICE USE ONLY
	560. 561.
	562.

ILL (	CONDITIONS			
564.	. If <u>any</u> condition reported anywhere (including sight and hearing conditions)	573.	(IS THIS/ARE ANY OF THE) CONDITION(S) HAVE TOLD ME ABOUT, THE RESULT OF A INJURY?	YOU N
	. Otherwise		Yes	2
566.	THE NEXT FEW QUESTIONS ARE ABOUT (ALL OF) THE CONDITION(S) YOU HAVE TOLD ME ABOUT.		Don't know → <b>Q.600</b>	3
	(IS THIS/ARE ANY OF THESE) CONDITION(S) WORK RELATED?	574.	WHICH CONDITIONS ARE THEY? (a)	
	Yes 1		45	
	No → <b>Q.573</b> — 2		(b)	
	Don't know → <b>Q.573</b>		(c)	
567.	WHICH CONDITIONS ARE THEY?		(d)	
			(e)	<b>□</b> 1
	(b)		Interviewer: Mark number of conditions	2 3 4
	(c)		reported in a-e	$\stackrel{4}{\square}$ 5
	(d)		OFFICE USE ONLY	
	(4)	575.	576. 577.	
	(e) 1			
	Interviewer: Mark number of conditions reported in a-e	578.	579.	
	· 5	-		
	OFFICE USE ONLY	580.	Interviewer: Ask Q.581, Q.582 and Q.583 for eac	h condition
568.	569.	300.	reported in Q.574 (a-e). Mark the box in Q.581, Q.583 which corresponds to the code (a-e) in Q.	Q.582 and
571.	572.	581.	DID YOU RECEIVE THIS INJURY -	
			WHILE AT (WORK/SCHOOL)?	
		-	$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	$\stackrel{e}{-}$ 1
			No J	
		582.		
		302.		
			IN A MOTOR VEHICLE ACCIDENT?	
			$\begin{array}{cccccccccccccccccccccccccccccccccccc$	<i>e</i>
			No 🕁 🕁 🕁	<u></u> 2
		583.	(DID YOU RECEIVE THIS INJURY -) DURING EXERCISE OR SPORT?	
			$\begin{array}{cccccccccccccccccccccccccccccccccccc$	е
			Yes 🖵 🖵 🖵	<b>-</b> 1
			No 5 5	2

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700.	Sequence Guide:	708.	(APART FROM WHEN YOU WERE AWAY FROM (WORK/SCHOOL/YOUR PLACE OF STUDY),)
	. If aged 65 years or more → <b>Q.707</b> <mark>-</mark> 1		ON ANY (OTHER) DAYS IN THE LAST 2 WEEKS,
	. If student (code '2') in Q.24 or (code '1') in Q.25 or Q.26 → <b>Q.701</b> □ 2		HAVE YOU HAD TO CUT DOWN ON ANYTHING YOU USUALLY DO BECAUSE OF THESE ILLNESSES
			OR INJURIES?
	. If had job last week (code '1' or '2') in Q.38 → <b>Q.701</b> □ 3		Yes 1
	. Otherwise → <b>Q.707</b> 占 4		No → <b>Q.710</b> _ 2
01.	I NOW WANT YOU TO THINK ABOUT <u>ANY ILLNESS</u> <u>OR INJURY</u> YOU HAD, AND THE EFFECTS THIS MAY HAVE HAD ON YOU IN THE <u>LAST 2 WEEKS</u> .	709.	ON HOW MANY DAYS IN THE <u>LAST 2 WEEKS</u> , HAVE YOU CUT DOWN ON YOUR USUAL ACTIVITIES?
	IN THE LAST 2 WEEKS, HAVE YOU STAYED AWAY FROM YOUR (WORK/SCHOOL/PLACE OF STUDY) FOR MORE THAN HALF THE DAY		Number
	BECAUSE OF <u>ANY</u> ILLNESS OR INJURY <u>YOU</u> HAD?  Yes 1		33 45
	No → <b>2.704</b> 2		5 6
		-	14 days 14 7
02.	ON HOW MANY DAYS IN THE <u>LAST 2 WEEKS</u> HAVE YOU STAYED AWAY FROM YOUR (WORK/SCHOOL/PLACE OF STUDY)?		9
	Interviewer: Record number		
	Number		
	中 (中		
	14 days → <b>Q.710</b>		
	<b>19</b>		
04.	IN THE <u>LAST 2 WEEKS</u> , DID YOU HAVE ANY DAYS		
	OFF (WORK/SCHOOL/STUDY) TO LOOK AFTER OR CARE FOR SOMEONE ELSE BECAUSE THEY WERE		
	SICK OR INJURED?		
	Yes 1		
	No → <b>Q.708</b> → 2	-	
705.	ON HOW MANY DAYS IN THE LAST 2 WEEKS, HAVE YOU STAYED AWAY FROM YOUR (WORK/SCHOOL/PLACE OF STUDY) TO LOOK AFTER SOMEONE ELSE?		
	Interviewer: Record number		
	Number		
	5		
	14 days — <b>Q.710</b> — 14 — 14		
	& & & & & & & & & & & & & & & & & & &		
706.	→ Q.708		
		-	
707.	OR INJURY YOU HAD, AND THE EFFECTS THIS MAY HAVE HAD ON YOU IN THE LAST 2 WEEKS.		
	AND THE LAST 2 WEEKS.	-	

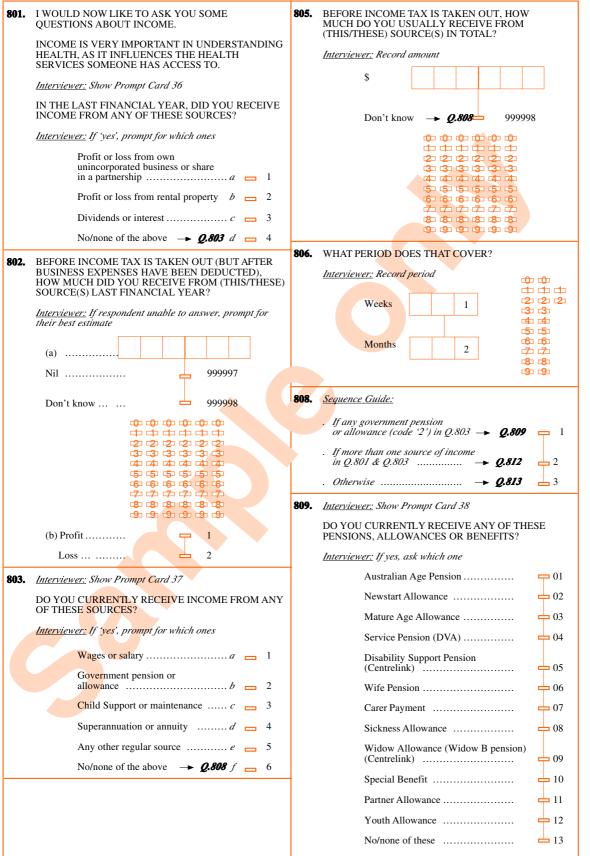
710.	THE FOLLOWING QUESTIONS ARE ABOUT YOUR USE OF HEALTH SERVICES IN THE <u>LAST 2 WEEKS</u> .	716.	HOW MANY TIMES IN THE <u>LAST 2 WEEKS,</u> DID YOU VISIT A DAY CLINIC?
	IN THE LAST 2 WEEKS, HAVE YOU VISITED THE OUTPATIENTS SECTION OF A HOSPITAL FOR YOUR OWN HEALTHS		Interviewer: Record number
	OWN HEALTH?		Number
	Yes 1		3 3 4 4 4 4 1
	No → <b>Q.713</b>		5 5 6 6
711.	HOW MANY TIMES IN THE <u>LAST 2 WEEKS</u> , DID YOU ATTEND THE OUTPATIENTS SECTION?		77 77 88 88 99 99
	Interviewer: Record number	717.	I WOULD NOW LIKE TO ASK YOU ABOUT ALL OF
	Number		THE TIMES YOU HAVE BEEN ADMITTED TO HOSPITAL IN THE LAST 12 MONTHS.
	டி டி தே தே டி டி		(APART FROM YOUR VISIT(S) TO (OUTPATIENTS/ (OR) CASUALTY OR EMERGENCY/(OR) A DAY CLINIC),)
	# # # # # # # # # # # # # # # # # # #		DURING THE <u>LAST 12 MONTHS</u> , HAVE YOU BEEN ADMITTED TO HOSPITAL?
712	(I WANT TO ASK ABOUT THE MOST RECENT OF		Yes 1
/12.	THESE VISITS.)		No → <b>Q.722</b> ≥ 2
	WAS THIS VISIT RELATED TO -	718.	(APART FROM YOUR VISIT(S) TO (OUTPATIENTS/
	A PREVIOUS ADMISSION TO		(OR) CASUALTY OR EMERGENCY/(OR) A DAY CLINIC),)
	HOSPITAL? 1		HOW MANY TIMES HAVE YOU BEEN ADMITTED
	AN EXPECTED ADMISSION TO HOSPITAL? 2		TO HOSPITAL IN THE <u>LAST 12 MONTHS</u> ?
	Neither 3		Interviewer: Record number
	Don't know 4		Number
713.	IN THE <u>LAST 2 WEEKS</u> , HAVE YOU VISITED A		3 (3) 4 (4)
	CASUALTY OR EMERGENCY WARD FOR YOUR OWN HEALTH?		5 명 6 명
	Yes		Don't know = 98 7 7 8 8 8
	No <b>Q.715</b> = 2		9 9
714.	HOW MANY TIMES IN THE LAST 2 WEEKS, DID YOU ATTEND A CASUALTY OR EMERGENCY	719.	I WOULD LIKE TO TALK ABOUT (THIS/YOUR MOST RECENT) ADMISSION TO HOSPITAL.
	WARD?		HOW MANY NIGHTS DID YOU STAY IN HOSPITAL?
	Interviewer: Record number		Interviewer: Record number
	Number		Number
	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$		5 5 6 6 6 6
	ラウ ラ <del>ク</del>		Don't know 98 7 7 7 8 8 8
	9 9		9 9
715.	(APART FROM YOUR VISIT(S) TO (OUTPATIENTS/ (OR) CASUALTY OR EMERGENCY),)	720.	WERE YOU DISCHARGED FROM HOSPITAL IN THE LAST 2 WEEKS?
	IN THE LAST 2 WEEKS, HAVE YOU BEEN TO A DAY		Yes 1
	CLINIC FOR MINOR SURGERY OR DIAGNOSTIC TESTS, OTHER THAN AN X-RAY, FOR YOUR <u>OWN</u> HEALTH?		No
	Yes 7	721.	DURING (THIS/YOUR MOST RECENT) ADMISSION TO HOSPITAL, WERE YOU ADMITTED AS A -
	No → <b>Q.717</b> ${\smile}$ 2		MEDICARE PATIENT?
			PRIVATE PATIENT? 2
			Don't know
			DOIL CRIEDW

<b>722</b> .	IN THE <u>LAST 2 WEEKS</u> , HAVE YOU CONSULTED A DENTIST OR DENTAL PROFESSIONAL ABOUT YOUR TEETH, DENTURES OR GUMS?	726.	HOW MANY TIMES IN THE <u>LAST 2 WEEKS</u> , DID YOU CONSULT A GENERAL PRACTITIONER?
	Yes 1		<u>Interviewer:</u> Record number
723.	No $\rightarrow$ <b>Q.724</b> $\stackrel{1}{=}$ 2 HOW MANY CONSULTATIONS HAVE YOU HAD IN		Number
	THE LAST 2 WEEKS?  Interviewer: Record number		生生 5 6 6 6 7
	Number	727.	(APART FROM CONSULTATIONS DURING ANY
	යා යා ආ ආ උ උ	,	HOSPITAL OR DAY CLINIC VISITS,) IN THE LAST 2 WEEKS, HAVE YOU CONSULTED
	80 60 90 90		A SPECIALIST? Yes
724.	WHEN WAS THE LAST TIME YOU CONSULTED A DENTIST OR DENTAL PROFESSIONAL?		No → <b>Q.729</b> 📥 2
	Less than 3 months ago	728.	HOW MANY TIMES IN THE LAST 2 WEEKS, DID YOU CONSULT A SPECIALIST?
	3 months to less than 6 months ago		Interviewer: Reco <mark>rd n</mark> umber
	6 months to less than 12 months ago		Number → <b>Q.731</b>
	12 months to less than 2 years ago 4		\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$
	2 years ago or more 5  Never 6		## ## ## ## ## ##
	Don't know 7	729.	Sequence Guide:
725.	THE NEXT FEW QUESTIONS ARE ABOUT VISITS TO DOCTORS OR SPECIALISTS.		. If consulted a General Practitioner in last 2 weeks (code '1') in Q.725 → <b>Q.731</b> □ 1
	(APART FROM CONSULTATIONS DURING <u>ANY</u> HOSPITAL OR DAY CLINIC <mark>VISITS,</mark> )		. Otherwise <b>2.730</b> 2
	IN THE <u>LAST 2 WEEKS</u> , <u>HAVE</u> YOU CONSULTED A GENERAL PRACTITIONER?	730.	(APART FROM CONSULTATIONS DURING <u>ANY</u> HOSPITAL OR DAY CLINIC VISITS,)
	Yes		WHEN WAS THE LAST TIME YOU CONSULTED A DOCTOR ABOUT YOUR <u>OWN</u> HEALTH?
	No <b>4 9.727 2</b>	-	Less than 3 months ago
			6 months ago
			6 months to less than 12 months ago
			12 months ago or more 4
			Never 5
			Don't know 6
		731.	Interviewer: Show Prompt Card 33  (APART FROM CONSULTATIONS DURING ANY HOSPITAL OR DAY CLINIC VISITS,)
			IN THE <u>LAST 2 WEEKS</u> , HAVE YOU CONSULTED ANY OF THESE (FOR YOUR <u>OWN</u> HEALTH)?
			Yes 1
			No → <b>Q.751</b> — 2
			Don't know → <b>Q.751</b>

732.	WHICH OF THESE HAVE YOU CONSULTED IN THE LAST 2 WEEKS ABOUT YOUR $\underline{\text{OWN}}$ HEALTH?	7	35.	HOW MANY TIMES IN THE LAST 2 WEEKS, DID YOU CONSULT A (Specify only OHP in Q.732 OR mos recent OHP in Q.734)?	rt
	Aboriginal health worker (nec) a 😑 01			Interviewer: Record number	
	Accredited counsellor b 🗖 02			ф ф	
	Acupuncturist			Number	- 1
	Alcohol and drug worker (nec)			本 (5) (5) (6) (6)	
	Audiologist/ Audiometrist			サーマー で 1920 で 1930 で	3 <b>-</b>
	Chemist (for advice only) f 🗖 06	7.	36.	Sequence Guide:	
	Chiropodist/Podiatristg 🗀 07			. If only 1 OHP in Q.732 → Q.751 7	
	Chiropractor			. If only 2 OHPs in Q.732 <b>Q.738</b>	
	Dietitian/Nutritionist i 👝 09			. If more than 2 OHPs in Q.732	
	Herbalist	7.	37.	OTHER THAN THE (Specify OHP in Q.734) WHICH O	F
	Hypnotherapist			THESE DID YOU VISÍT SÉCOND MOST RECENTLY	?
	Naturopath			Interviewer: Transcribe code from Q.732	
	Nurse m == 13				b ∣
	Occupational Therapist n 🗀 14				<b>∌</b> □
	Optician/Optometrist o 🗖 15			Ę	‡=  ===================================
	Osteopathp 🗀 16	T		, a	<u>\$</u> □
	Physiotherapist/ Hydrotherapist q 🗀 17				3:□  :::::::::::::::::::::::::::::::::::
	Psychologist r 🖂 18	7.	38.	HOW MANY TIMES IN THE <u>LAST 2 WEEKS</u> , DID YOU CONSULT A (Specify second OHP in Q.732 or	
	Social worker/ Welfare Officer			OHP in Q.737)?	
	Speech Therapist/ Pathologist	Ĭ		Interviewer: Record number	
733.	Seguence Guide:	$\dashv$		Number	2-
,,,,,,	. If only 1 OHP marked in Q.732 → Q.735 □ 1				₽
	. Otherwise				à ∣
734.	Interviewer; Show Prompt Card 33	$\dashv$		30 cBs 30 cBs	3- │
/34.	IN THE LAST 2 WEEKS, WHICH OF THESE DID YOU	, _			
	VISIT MOST RECENTLY?				
	Interviewer: Transcribe code from Q.732				
	22				
	中中				
	等 安				
	9-	$\dashv$			

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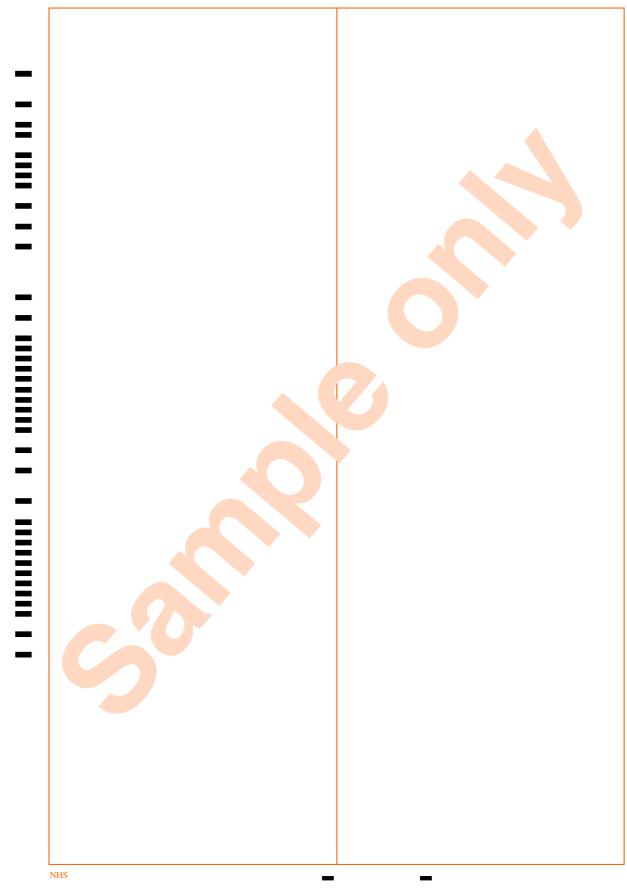
751.	THE NEXT FEW QUESTIONS ARE ABOUT PRIVATE HEALTH INSURANCE.	755A	. → Q.757
	APART FROM MEDICARE, ARE YOU CURRENTLY COVERED BY PRIVATE HEALTH INSURANCE?	756.	WHAT ARE <u>ALL</u> THE REASONS YOU ARE <u>NOT</u> COVERED BY PRIVATE HEALTH INSURANCE?
	Yes 1		Can't afford it/too expensive $\dots a = 01$
	No → <b>Q.756</b> _ 2		High risk category b = 02
	Don't know → <b>Q.757</b> → 3		Lack of value for money/ not worth it
752.	ARE YOU COVERED BY FAMILY, COUPLE, SOLE PARENT OR SINGLE MEMBERSHIP?		Medicare cover sufficient
	Family membership 7		Don't need medical care/in good health/have no dependents e 05
	Couple membership 2		Won't pay Medicare levy and private health insurance premium
	Sole parent membership 3		Disillusionment about having to pay
	Single membership 4		"out of pocket" costs/Gap fees g
753.	Interviewer: Show Prompt Card 34		Prepared to pay cost of private treatment from own resources h = 08
	WHICH OF THESE BEST DESCRIBES WHAT YOUR PRIVATE HEALTH INSURANCE COVERS?		Pensioner/Veterans' Affairs/ health concession card
	Hospital only 1		Not high priority/previously
	Ancillary only 2		included in parents' cover j = 10
	Both hospital and ancillary 3		Other k - 11
	Don't know 4	757.	DO YOU HAVE A DEPARTMENT OF VETERANS' AFFAIRS TREATMENT ENTITLEMENT CARD?
754.	WHAT ARE <u>ALL</u> THE REASONS YOU ARE COVERED BY PRIVATE HEALTH INSURANCE?		Yes 7 1
	Security/protection/peace of mind $a = 01$		No → <b>Q.759</b> → 2
	Lifetime cover/avoid age surcharge $b = 02$		Don't know → <b>Q.759</b>
	Choice of doctor	758.	WHAT COLOUR IS THAT CARD?
	Allows treatment as private patient in hospital		White 1
			Gold
	Provides benefits for ancillary services/"extras"e = 05		Other = 3
	Shorter wait for treatment/concern over public hospital waiting lists $f = 06$	759.	Interviewer: Show Prompt Card 35
	Always had it/parents pay it/		ARE YOU COVERED BY ANY OF THESE GOVERNMENT CONCESSION CARDS?
	condition of job $g = 07$		Health care card $a = 1$
	To gain government benefits/ avoid extra Medicare levyh — 08		Pensioner concession card $b = 2$
	Other financial reasons i 🖂 09		Commonwealth seniors $\frac{\text{health}}{\text{card}}$ card
	Has illness/condition that requires treatment		None of the above $d = 4$
	Elderly/getting older/likely to need treatment		
	Other		
755.	HOW LONG HAVE YOU BEEN COVERED BY PRIVATE HEALTH INSURANCE?	1	
	Less than 1 year = 1		
	1 4- 1 4 2 2		
	1 year to less than 2 years 📙 2		
	2 years to less than 5 years		



Mages or salary   Mages or		DO YOU CURRENTLY RECEIVE ANY OF THESE PENSIONS, ALLOWANCES OR OTHER FORMS OF ASSISTANCE?		RECEIVE INCOME FROM ANY OF THESE SOURCES?
Pension (DVA)		ASSISTANCE/		Interviewer: Show Prompt Card 41
Pension (DVA)				Wages or salary $a = 1$
Any government pension, benefit or allowance		Interviewer: If yes, ask which ones		
or allowance		War Widow's Pension (DVA) a 🗀 1		
Any other regular source		Disability Pension (DVA)		
None of the above → Q.818 e		Carer Allowance (Child Disability Allowance)		
## 1816. BEFORE INCOME TAX IS TAKEN OUT, HOW MUCH DOES YOUR (SPOUSE/PARTNER) USUALLY RECEIVE FROM (THIS/THESE) SOURCE(S) IN TOTAL?  ## 1816. BEFORE INCOME (SPOUSE/PARTNER) USUALLY RECEIVE FROM (THIS/THESE) SOURCE(S) IN TOTAL?  ## 1816. BEFORE INCOME (SPOUSE/PARTNER) USUALLY RECEIVE FROM (THIS/THESE) SOURCE(S) IN TOTAL?  ## 1816. BEFORE INCOME TAX IS TAKEN OUT, HOW MUCH DOES YOUR (SPOUSE/PARTNER) USUALLY RECEIVE FROM (THIS/THESE) SOURCE(S) IN TOTAL?  ## 1816. BEFORE INCOME TAX IS TAKEN OUT, HOW MUCH DOES YOUR (SPOUSE/PARTNER) USUALLY RECEIVE FROM (THIS/THESE) SOURCE(S) IN TOTAL?  ## 1816. BEFORE INCOME TAX IS TAKEN OUT, HOW MUCH DOES YOUR (SPOUSE/PARTNER) USUALLY RECEIVE FROM (THIS/THESE) SOURCE(S) IN TOTAL?  ## 1816. BEFORE INCOME TAX IS TAKEN OUT, HOW MUCH DOES YOUR (SPOUSE/PARTNER) USUALLY RECEIVE FROM (THIS/THESE) SOURCE(S) IN TOTAL?  ## 1816. BEFORE INCOME TAX IS TAKEN OUT, HOW MUCH DOES YOUR (SPOUSE/PARTNER) USUALLY RECEIVE FROM (THIS/THESE) SOURCE(S) IN TOTAL?  ## 1816. BEFORE INCOME TAX IS TAKEN OUT, HOW MUCH DOES YOUR SPOUSE/PARTNER) USUALLY RECEIVE FROM (THIS/THESE) SOURCE(S) IN TOTAL?  ## 1816. BEFORE INCOME TAX IS TAKEN OUT, HOW MUCH DOES YOUR SPOUSE/PARTNER) USUALLY RECEIVE FROM (THIS/THESE) SOURCE(S) IN TOTAL?  ## 1816. BEFORE INCOME TAX IS TAKEN OUT, HOW MUCH DOES TAKEN OUT, HOW MUCH DOES TAKEN OUT TAX IS TAKEN OUT, HOW MUCH DOES TAKEN OUT TAX IS TAKEN OUT, HOW MUCH DOES TAKEN OUT TAX IS TAKEN OUT		(Centrelink) $c = 3$		
DOES YOUR (SPOUSE/PARTNER) USUALLY RECEIVE FROM (THIS/THESE) SOURCE(S) IN TOTAL?    Interviewer: If respondent unable to answer, prompt for best estimate   (a)   Source of Income   (b)   Source of Income   (c)   Source of		Overseas pensions/benefits $d = 4$	816	REFORE INCOME TAX IS TAKEN OUT HOW MUCH
Interviewer: If respondent unable to answer, prompt for best estimate   (a)		Parenting Payment e 🗖 5	010.	DOES YOUR (SPOUSE/PARTNER) USUALLY RECEIVE
best estimate  (a)  best estimate  (a)  best estimate  (a)  Don't know		Other $f = 6$		
## of income		No/none of these $g = 7$		
## of income	311.	Sequence Guide:		
Don't know → <b>Q.818</b> 999998  SOURCE OF INCOME?  In Card 40  y (including from led business)		. If more than one source of income in Q.801 or Q.803 → <b>Q.812</b> □ 1		
SOURCE OF INCOME?  on Card 40  y (including from eed business)		~ ~		Don't know - 000000
y (including from ted business)		<del>-</del>	-	
y (including from eed business)		WHAT IS YOUR MAIN SOURCE OF INCOME?		
rom own business or share  2 (b)  Profit		Interviewer: Show Prompt Card 40		के के के के के
rom own business or share  2 (b)  Profit		Wages or salary (including from own incorporated business) 1		ණ ණ ණ ණ ණ
prom rental property  3 Profit		Profit or loss from own	Z	
rom rental property  3 Profit		unincorporated business or share in a partnership 2		9 9 9 9 9
817. WHAT PERIOD DOES THAT COVER?  Interviewer: Record period  Weeks  Months  Months		Profit or loss from rental property 3		
or maintenance		Dividends or interest 4		Loss 2
Interviewer: Record period  Weeks  Months  Interviewer: Record period  Weeks  Months		Any government pension	817.	WHAT PERIOD DOES THAT COVER?
weeks 1 2 2 2 2 2 3 3 3 4 4 5 5 6 6 6 7 7 7 8 8				Interviewer: Record period
Weeks Weeks San				
Months 2 5 5 6 6 6 7 7 7 8 8 8				Weeks
Months Months				5-5-
		Other 4 9	1	Months
	313.	<u>Sequence Guide:</u>		යි. යි. යා යා
ouse/ → 0,815 □ 1		. If selected adult has spouse/ partner → 0.815 □ 1		
818. <u>Interviewer:</u> Where selected adult is Jemale, please			818.	
819. No more questions B			210	No more questions B
818. Interviewer: Where selected a	313.	Other	818.	Interviewer: Where selected a



NHS



# Results from permanent officer workload

Response	Number	Percent
Eully responding	13	48.1
Fully responding AHMS consent	<b>13</b> 5	18.1
AHMS non-consent	8	29.6
Arivis non-consent	O	29.0
Non response	12	44.4
Sample loss	2	7.4
Total	27	100

Weight

Waist circumference

Height

**Blood pressure** 

Saliva sample

**Blood sample** 

**Urine sample** 

All children: Weight

Children 2 years and over:

Height
Upper arm circumference

Children 4 years and over: Saliva sample

Children 5 years and over: *Blood pressure* 

Children 12 years and over:

Blood sample
Urine sample

Children 14 years and over:

Waist circumference instead of
upper arm circumference

#### 'Other' reasons for not participating in AHMS

little health problems invasive doesn't like giving blood invasion of privacy prone to fainting Concerns about contamination to others, has Hep. C. Prefer to do tests with own doctor. Has own regular checks when necessary. Prefer to see family doctor. If wants tests prefers to initiate & see own doc. Is in perfect health, so doesn't need tests. already know they are healthy have own doctor Don't like needles. Language problem, age. Prefer to get it done by own doctor. No special reason. don't like people coming to my door prefer own doctor to do tests not compulsory. Doctor has results fear of needles only wants own doctor due to existing health problems have enough tests everyday as is don't want to know if something wrong already having them done for future surgery. don't want to know results Good health, age, don't need it. Have own doctor. Don't need it - have own doc. & in good health. Has own doctors - under constant care. Go to own doctor often enough - don't need it. had tests done recently only 18 not concerned about health tests done already by doctor other priorities at the moment

moving house soon & has own doctor they like works in health industry - tested all the time not able to do tests as on medication health not of benefit to anyone else just not interested inconvenient to self Difficult to make appointments. Inconvenience due to future children. Had enough of medical procedures lately. Intrusive Already having tests done. Do these with own doctor regularly. Unwilling to believe in illness/weakens resolve. Don't believe will be available. already under doctors care wanted payment. also did not want to know results nurse already tests regularly shiftworker - bad time wise already undergoing regular testing already healthy has tests done regularly overweight already had tests done recently rather go to own doctor already get tests done with own doctor very healthy. don't need tests is healthy. currently pregnant already has tests already have tests done regularly thinks everyone should do it like the census thought information is already available recent death in family Not necessary as well looked after by own doctor. Intrusive/concerns ,ie. data collection (big pond) Risk factors have been assessed/not necessary. Have tests at own doctor regularly, so not necessary. Would rather go to own doctor. Healthy, not necessary, doesn't need test done. Pregnant. Self conscious of weight problem. Personal.

Has own doctor. one person doesn't make a difference Taking blood samples. Too old. both usual residents are invalids Don't feel comfortable adequately covered by own private health insurance has tests regularly done by a doctor Don't mind answering questions , not keen on having tests. Has these tests done on a regular basis. have regular checkups already quite healthy doesn't like needles Bad experience in survey at hospital. Test too personal. too old Already having regular tests by own doctor. Fairly healthy, no need to have tests done. Already involved in on-going health survey. Age - too old. Feel uncomfortable. Often moving house (too hard to track down)

#### 'Other' reasons for participation

interested in health issues See direct benefit from stats. help anyone in the future Want the govt. to monitor my health. due to profession (nurse) Help govt. understand financial costs of health. Family health background. don't have time to go to doctor nothing to hide help others and self for good of own health helps my health be to my benefit check up been involved in collecting data aged care nurse and sees what happens hear about problems in hospitals Don't see any harm in it. curious about own health interested in health and diet information could be useful long life in immediate family, so could help other believe in preventative medicine help keep medical costs down Out of country a lot of time. Likes to be a good citizen & be helpful. Conscientious citizen Right thing to do to get better facilities. Stats, need to get realistic figures. Beneficial to others more so than himself. To be helpful, good to know how nation is going. At my age all those tests are indicative of health Important for govt. to know what's going on. Always worked in health. Better understand myself.

Benchmark for own health.

Improve the situation for disadvantaged people.

Want to understand own health.

works in health area and is interested

presume excellent survey.

because they were asked to participate

like to see if health ok

no response from personal doctor. Expect better car confidential

nothing to hide, does no harm

help with family history

health is important

health is an important issue

comfort of own home and having tests

don't have regular health monitoring

be helpful with government surveys

Doesn't worrv her.

Family history of heart disease.

Indirect benefit/plan for future health services.

Hasn't had health check/family history of diabetes

Health very important.

Value in statistics/doesn't invade her privacy.

Would love to do it.

For stats only, would not want results released.

Good idea in preventing health problems.

Ouick and easy.

Nice person!

Was asked to.

benefit to self

second opinion on health

may pick up something that has been missed elsewhere

Can't see why anyone would refuse/for good of all.

Along the way it could help someone.

Easy to get on with/don't mind.

Understands research is important

Indirectly help family.

Helping others in the future.

# **Appendix D:** Proposed content for the AHMS program

A range of content has been proposed and considered, and a decision made on its inclusion in the core content of the AHMS.

This appendix contains two tables illustrating the status of the various measurements proposed. Table D.1 shows proposed core content by the associated disease/risk area/s (cardiovascular disease, diabetes, renal disease etc.) and the current status (agreed or not agreed for inclusion as core content).

Table D.2 shows the range of self-reported topics required in the NHS to make best use of the AHMS results.

Table D.1: Proposed core content by topic area (includes those measures considered but not agreed to be in the final core content).

Alrways resistance  Biochemical markers: Blood  Serum creatinine  A S S S S S S S S S S S S S S S S S S														T
Blood pressure Height Weight Abdominal circumference Lung function: Spirometry Alirways resistance Biochemical markers: Blood Serum lipid levels: (cholesterol, LDL, triglycerides (fasting), HDL (fasting)) C-reactive protein (marker of inflammation) Homocysteine (fasting) Glucose (fasting) Oral Glucose Tolerance Test (sub sample) Glycosylated haemoglobin (HbAlc) Insulin (fasting) Serum creatinine  X Markers of fruit and veg intake: carotenoids (lutein, cryptoxanthin, lycopene, beta carotene) Red cell folate and B12 Biochemical markers: Saliva Cotinine (tobacco exposure) Corrisol (psychosocial stress) Biochemical markers: Urine Dipstick test urine Spot urine for	CVD	Diabetes	Renal dis.	Obesity/reduced growth	Respiratory: COPD	Respiratory: asthma	Musculoskeletal	Mental health	Nutritional deficiencies	Tobacco use	Cancer	Food intake	Stress*	
Blood pressure Height Weight Abdominal circumference Lung function: Spirometry Alirways resistance Biochemical markers: Blood Serum lipid levels: (cholesterol, LDL, triglycerides (fasting), HDL (fasting)) C-reactive protein (marker of inflammation) Homocysteine (fasting) Glucose (fasting) Oral Glucose Tolerance Test (sub sample) Glycosylated haemoglobin (HbA1c) Insulin (fasting) Serum creatinine  X Markers of fruit and veg intake: carotenoids (lutein, cryptoxanthin, lycopene, beta carotene) Red cell folate and B12 Biochemical markers: Saliva Cotinine (tobacco exposure) X Cortisol (psychosocial stress) Biochemical markers: Urine Dipstick test urine Spot urine for														Physical measurements
■	•													
Abdominal circumference  Lung function: Spirometry  Airways resistance  Biochemical markers: Blood Serum lipid levels: (cholesterol, LDL, triglycerides (fasting), HDL (fasting))  C-reactive protein (marker of inflammation)  Homocysteine (fasting)  Glucose (fasting)  Oral Glucose (fasting)  Oral Glucose Tolerance Test (sub sample)  Glycosylated haemoglobin (HbA1c)  Insulin (fasting)  Serum creatinine  X  Markers of fruit and veg intake: carotenoids (lutein, cryptoxanthin, lycopene, beta carotene)  Red cell folate and B12  Biochemical markers: Saliva Cottnine (tobacco exposure)  X  Cortisol (psychosocial stress)  Biochemical markers: Urine Dipstick test urine  Spot urine for		•		•									•	Height
Abdominal circumference  Lung function: Spirometry  Airways resistance  Biochemical markers: Blood Serum lipid levels: (cholesterol, LDL, triglycerides (fasting), HDL (fasting))  C-reactive protein (marker of inflammation)  Homocysteine (fasting)  Glucose (fasting)  Oral Glucose (fasting)  Oral Glucose Tolerance Test (sub sample)  Glycosylated haemoglobin (HbA1c)  Insulin (fasting)  Serum creatinine  X  Markers of fruit and veg intake: carotenoids (lutein, cryptoxanthin, lycopene, beta carotene)  Red cell folate and B12  Biochemical markers: Saliva Cottnine (tobacco exposure)  X  Cortisol (psychosocial stress)  Biochemical markers: Urine Dipstick test urine  Spot urine for		•		•										Weight
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Glucose (fasting)  Coral Glucose Tolerance Test (sub sample)  Glycosylated haemoglobin (HbA1c)  Insulin (fasting)  Serum creatinine  Markers of fruit and veg intake: carotenoids (lutein, cryptoxanthin, lycopene, beta carotene)  Red cell folate and B12  Biochemical markers: Saliva Cotinine (tobacco exposure)  Cortisol (psychosocial stress)  Biochemical markers: Urine Dipstick test urine  Spot urine for	X													
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Serum creatinine  Markers of fruit and veg intake: carotenoids (lutein, cryptoxanthin, lycopene, beta carotene)  Red cell folate and B12  Biochemical markers: Saliva Cotinine (tobacco exposure)  Cortisol (psychosocial stress)  Biochemical markers: Urine Dipstick test urine Spot urine for		•		•									•	Glycosylated haemoglobin
Markers of fruit and veg intake: carotenoids (lutein, cryptoxanthin, lycopene, beta carotene)  Red cell folate and B12  Biochemical markers: Saliva Cotinine (tobacco exposure)  Cortisol (psychosocial stress)  Biochemical markers: Urine Dipstick test urine Spot urine for		•											•	Insulin (fasting)
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carotene)  Red cell folate and B12  Biochemical markers: Saliva Cotinine (tobacco exposure)  Cortisol (psychosocial stress)  Biochemical markers: Urine Dipstick test urine Spot urine for											X	X		intake: carotenoids (lutein,
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Cortisol (psychosocial stress)      Biochemical markers: Urine     Dipstick test urine     Spot urine for														
Biochemical markers: Urine Dipstick test urine Spot urine for										•				*
Dipstick test urine     Spot urine for													Х	
Spot urine for			_											
			•											*
														Spot urine for albumin/creatinine ratio

Note:  $\bullet$  = Measures agreed to be included; x = 1 = not agreed to be included.

<sup>\* =</sup> A cluster of markers of chronic (systematic) stress in a population is proposed.

In order to collect the full range of risk factor and determinant information, the NHS interview needs to include self reported data about demographic information, other risk factors and socioeconomic determinants.

**Table D.2:** Self reported topics required in the NHS to match to AHMS measures

Demographics	Health care (related to	Socioeconomic status
Age	special interest module)	Income
Sex	Self management	Home ownership
Indigenous status	Professional management	Motor car at dwelling
Ethnicity	Knowledge of risk factors	<b>Education attainment</b>
Locality	Use of/access to services	Economic capacity
Hereditary conditions	Use of/access to screening	(e.g. ability to raise \$2000
Tobacco exposure	Medications	in a week)
Self smoking	Occupation	Food security
Parental smoking	Current occupation	Life-course SES:
Exposure (work, social,	Employment status	Reported birth weight
home)	Work conditions	Parents' occupation at
		birth
Physical activity	Work control	
Food and supplements	Employment history	
Alcohol intake		
Psychosocial factors		

Social support

# Appendix E: Sample size and anticipated response rates

As noted in Section 5.4.1, the final sample design will be determined in conjunction with the ABS.

The estimates in Table 5.2 have been produced to enable costings to be made to inform the decision-making process for the conduct of the AHMS. They are based on the ABS achieving a response rate of 92% in the NHS. This is consistent with response rates achieved in the NHS program in recent surveys.

An assumption has been made that 90% of those fully responding to the NHS would be asked to participate in the AHMS. In practice, it may more efficient to include all those fully responding.

For adults, the remaining estimates in the table are based on an assumption that 54.3% of adults would consent to the AHMS. This figure was derived by applying the percentage, from the skirmish, of those fully responding to the NHS and consenting to AHMS measurements being taken (59%), to the likely NHS response rate (92%). This proportion (54.3%) was then applied to the estimate of 16,215 adults expected to be asked to participate in the AHMS (90% of NHS respondents).

Response rates for the other measures were calculated by applying an estimated response rate drop off (based on the experience of the Health Survey of England) between the number consenting to a nurse visit, and the taking of a blood sample. The HSE data may be an overestimate of the initial response achievable with a fasting sample, as some people may find this an unacceptable requirement. In addition, the HSE data may also represent on overestimate of the response rate for all measurements, to the extent that people fail to fast.

For children and young people, the response rates used were again those reported for the Health Survey for England.

# Appendix F: Ethical considerations for a proposed program of national population health surveys using physical and biochemical measures for Australia

The purpose of this paper is to identify a range of ethical considerations that arise as part of the design and implementation of a proposed program of national population health surveys using physical and biochemical measures, the Australian Health Measurement Survey (AHMS) program. A number of broad policy issues emerge that require discussion and resolution as part of the further development of the proposed AHMS program.

#### 1. Introduction

National sample surveys can provide important information on the prevalence of various health conditions and distributions of physical, mental and biochemical characteristics of the population, as well as providing data on the relationship between risk factors and selected conditions, and social and environmental determinants.

A program of national population health surveys using self-reported information and a range of more objective measures (using physical, mental and biochemical data) is proposed for Australia, the Australian Health Measurement Survey program (AHMS). The ethical, legal and social issues that arise from a survey program of this kind are numerous, and will be determined largely by the final survey design and its implementation. In order to ensure that the program is conducted within an ethical framework, these issues must be identified, discussed and broad agreement reached about the ways to proceed.

#### 2. An ethical framework for research

Ethical considerations are essential to good research, and ethical inadequacies in a research program are as significant as scientific inadequacies (National Health and Medical Research Council (NHMRC) 1999a). In Australia, research involving human participation must be conducted in accordance with agreed ethical considerations as set out in the National Statement on Ethical Conduct in Research Involving Humans (NHMRC 1999a). In addition, international codes and agreements are also pertinent, such as the World Medical Association's Declaration of Helsinki (amended October 2000).

Ethical principles serve to identify good, desirable or acceptable conduct in all spheres of human activity. There are four basic ethical principles that have been identified as the basis of ethical conduct in research involving humans (Gillon 1994; NHMRC 1999a).

These principles are:

- Integrity of researchers a commitment to the principles as set out in the Joint NHMRC/AVCC Statement and Guidelines on Research Practice 1997:
- Respect for autonomy the obligation to respect the autonomy of others, in so far as this is compatible with equal respect for the autonomy of all potentially affected;
- Beneficence and non-maleficence the obligation to maximise possible benefits and minimise possible harms. Researchers exercise beneficence in assessing the risks of harm and benefits to participants, in respecting the rights and interests of participants and in reflecting on the cultural and social implications of the research;
- Justice the obligation to act fairly and to address the question of who ought to receive the benefits of research and bear its burdens.

Research must be so designed that respect for the dignity and well being of participants takes precedence over the expected benefits to knowledge (NHMRC 2000a).

Research involving human participation is also subject to a variety of legal requirements at Federal, State and Territory levels. All research must comply with any relevant Commonwealth and State/Territory legislation (NHMRC 2000a).

## 3. The nature of the survey program

The process of conducting a national population health survey using physical and biochemical measures leads to ethical issues arising at each step in the process. For example, the design of the survey program will raise ethical issues peculiar to it. The selection of special sub-population groups for inclusion in the sampling frame requires ethical consideration. The choice of content areas and their measurement have ethical implications, as do issues surrounding the feedback to participants of results. Informed consent and its scope, confidentiality and privacy of information must be considered. The possible storage of samples and their future use also raise significant ethical concerns.

Participants in the survey program and the Australian community as a whole must be assured that each of these areas has been examined in detail and ethical considerations addressed.

## 4. Survey processes requiring ethical consideration

### 4.1 Subject recruitment

Participants in the survey program can be recruited in ways that can have ethical implications. This is particularly true if subjects are coerced into participating or are given false expectations. It may be unlikely that such coercion or deception would be overt; rather, it may be subtle and more

difficult to detect. For example, the use of any incentives to encourage participation ought not precede the gaining of informed consent, as this may impair the voluntary character of that consent (NHMRC Statement, S1.10).

The recruitment of special groups will require additional consultative processes. This is particularly relevant for groups such as Indigenous peoples. The survey design may present Indigenous Australians with difficult choices about participation. Additional information will be needed to assist them to decide about participation. Particular attention will also be required to survey protocols if seeking the involvement of children through their parents, to ensure that coercion does not occur to any extent.

# 4.2 Informed consent

During the recruitment phase, survey subjects should be clearly informed of the intent and activities required for participation and of possible consequences of participating in the survey (for example, that they may receive information about aspects of their health). Participation in the survey will be voluntary and subjects should be informed that they may cease their participation at any stage of the survey. Issues of the extent of the consent to be sought from participants will be largely determined by the nature of the survey, its content and the age groups who will be asked to participate. Languages other than English and the use of interpreters, literacy levels, and the ability to understand and to give one's own consent will need to be thought through carefully. Cultural considerations will also be very important.

The ethical and legal requirements of consent have two components: the provision of information and the capacity to make a voluntary choice. The requirements for obtaining consent are outlined in the NHMRC Statement 1999 (refer to S1.7). The onus is on researchers to ensure that each subject understands the implications of participating in the survey, is competent to consent and is exercising a voluntary choice.

In some circumstances and in some communities, consent is not only a matter of individual agreement, but also involves other properly interested parties (for example, community elders in Indigenous communities or family members in some ethnic communities). In such cases, researchers need to obtain the consent of all parties before commencing (NHMRC Statement, S1.9). In the case of research that involves Indigenous individuals or communities, the Interim NHMRC Guidelines on Ethical Matters in Aboriginal and Torres Strait Islander Health Research (NHMRC 1991) should be consulted. These are currently undergoing revision.

When subjects are recruited, they should be informed of the benefits and risks of participation, details of the survey activities and any possible use of data of all kinds being collected. As part of the survey, some measures may involve the taking of samples of blood, saliva or other physiological substances. In the NHMRC Statement 1999, Section 15.4 outlines the requirement for consent

where human tissue samples are collected for research purposes. The collection of biological samples requires that the subjects be told, in lay language, of the purposes and risks of the research, and the uses to which the samples will be put, as well as other information. In addition, the NHMRC Statement 1999 (S15.3) identifies the need for the institution responsible for the conduct of the survey to have policies in place that conform to relevant legislation and are consistent with the NHMRC Statement regarding tissue sampling. Such policies need to consider the source, nature and cultural or religious sensitivity of the sample, the original purpose for its collection, and the purpose of the research. Issues such as the access of other parties who may purport to have an interest in the information (for example insurance companies, police, family members) need further discussion.

A number of questions arise about the extent to which a researcher must go to inform participants of the unknown or unplanned use of samples, particularly if a decision is made to store and bank the samples for future use in possibly unspecified research. What is the long-term responsibility of the researcher, or agency, to keep the participants informed of the use of their samples? What are the limitations of conducting additional analyses that are unrelated to the original survey purposes? To what extent does the initial informed consent cover any later research? Are the rights of participants disregarded when unspecified research is conducted on samples collected for another purpose? Is there a duty to inform participants of the results of subsequent research? Is there a duty to inform participants of the subsequent disposal of the sample in the future? These issues are significant and complex and the rights of participants must be ensured and safeguarded.

A major dilemma is whether a generic consent to undertake research on a sample given by a participant originally, is adequate consent to conduct a specific test on stored samples in the future. The obvious strategy of obtaining fresh consent has at least three major problems: (a) subjects may be very difficult to contact if follow-up has not been maintained or they are deceased, (b) a high proportion of non-consent either due to inability to recontact or to refusal may bias the results, (c) for certain samples, multiple measures may emerge of interest and a process of very specific informed consent would generate an almost continuous stream of consent requests to the participant. Failure to obtain a new informed consent will expose a researcher to (a) allegations of unethical behaviour, and/or (b) a difficult situation if the measure information may be of clinical relevance to the participant, yet the participant was not counselled about the test before samples were taken and tested (Schulte et al. 1997). These issues need further discussion and resolution.

The banking and future use of samples also raises questions of the ownership of samples, and access to the samples and results by other researchers or even nonscientific interests, such as employers, police or insurance companies.

Issues relating to sample storage, access and future use are dealt with in the NHMRC Statement 1999, which addresses such practices in paragraphs 1.7 to 1.12 and 15.4 to 15.8. The effect of these paragraphs is that later use of collected tissue for research without consent would not comply with the National Statement, unless an institutional ethics body reviewing the AHMS program waived the consent requirement pursuant to paragraph 15.8. This is a key issue that needs to be resolved, for example, by providing participants with adequate information about how the samples will be used.

The issue of genetic testing has been the subject of NHMRC attention and relevant advice is contained in the NHMRC *Guidelines for Genetic Registers and Associated Genetic Material* (1999b) and *Ethical Aspects of Human Genetic Testing – an Information Paper* (NHMRC 2000b).

#### For consideration:

What procedures will be needed to ensure that consent is informed, voluntary and that the participant is capable of giving consent?

Who on the survey team will be responsible for the gaining of informed consent? How will the giving of consent be recorded?

Will survey information and consent forms be available in languages other than English?

What are the cultural and religious issues associated with the survey design that may influence consent?

What processes are the most appropriate for Indigenous peoples?

Will the use of interpreters be offered?

What about literacy issues?

What about subjects with communication difficulties or other disabilities?

What procedures will be in place to gain consent on behalf of children? How will the assent of children be gained? How will researchers determine if a child is able to consent on their own behalf?

Will there be any people who are excluded from participating? On what grounds should those decisions be made?

What are the ethical implications of sample storage for future research, and how might this affect consent procedures?

# 4.3 Confidentiality and Privacy

Confidentiality refers to an obligation that arises from a relationship, often contractual, between two parties in which one has given information to the other. The recipient is under an obligation not to use that information for any purpose other than that for which it was given. Legally, confidentiality is protected by the right of the person who provided the information to compel the recipient of the information to comply with their obligation (NHMRC 2000a).

Privacy refers to a person's interest in exerting effective control over the collection of, access to, use of, or disclosure of any personal information that has been collected or could be collected by another person (NHMRC 2000a). In Australia, privacy is legally protected within the jurisdiction of the Commonwealth and in some States and Territories, by statutory codes of conduct that must be followed by public authorities. The Information Privacy Principles, in Section 14 of the *Privacy Act 1988 (Cth)* set standards to ensure privacy of personal information. The NHMRC has produced guidelines that reflect the Principles as they relate to health research (*Guidelines Under Section 95 of the Privacy Act 1988*, March 2000). The survey and its processes must comply with these guidelines to ensure an ethical duty to participants is observed.

Exceptions to obligations of confidentiality and to the statutory codes concerning privacy include when:

- the information provider consents to the release of the information;
- the law authorises or compels release; and/or
- the information is released in the public interest (NHMRC 2000).

Protocols for the survey will require consideration of confidentiality and privacy issues for possible sharing of information within the research team, for access to any long-term storage of samples and other data (if approved), and for any administrative data linkage (if approved). There will also need to be protocols developed for access to data by other researchers, non-scientific interests and possible family members of participants. Issues of consent, confidentiality and privacy from subsequently deceased persons will also require consideration.

#### For consideration:

What mechanisms need to be in place at each stage of the survey to ensure that measures to protect confidentiality and privacy of participants comply with NHMRC guidelines and legal provisions?

How will these provisions affect the objectives of the survey?

To what extent will identified data be maintained and its protection ensured? What processes should be followed for de-identification of data?

How will the privacy and confidentiality of participants who subsequently die be managed, particularly in the case of consent for future access to data or samples for additional research, if this is approved?

How will the confidentiality and privacy of participants be ensured during the collection of measures?

# 4.4. Interpretation and communication of test and survey results

Several questions are pertinent to the sharing of information from a survey, including when to inform, whom to inform, how to inform, and maintaining the confidentiality of the information. The traditional paradigm that

epidemiological research is concerned with data about group risk rather than individual effects is less appropriate in a survey of this kind. Participants are contributing to the research through their individual results, many of which may have particular and identifiable meaning for their own health status, and may represent opportunities to access treatment or preventive interventions.

#### When to inform?

There are three levels of need for information sharing which are likely to emerge in the implementation of the survey.

- i) The most urgent level of need will be where an emergency arises during the interview or measurement phase of the survey and transportation of a participant to a health facility or other service is required. Information regarding the health status and testing results if available should be given to the participant (or ambulance officer, if more appropriate) to transmit to the appropriate personnel at the receiving facility.
- ii) For the majority of measures performed as part of the survey, standard interpretations of the findings exist. For these measures, there is general scientific agreement regarding threshold levels. Consequently, these findings should be shared with the participant, subject their agreement. When the health status of the participant is known to be at risk, the information should be shared as a matter of priority.

The participant should be given information on possible next steps that might be pursued to obtain further evaluation of the findings and their implications. Subjects whose measures are in the normative range should also be informed of the results, but not as rapidly as those with abnormal findings. Protocols will be required to set out standard interpretations of measures, consistently worded information and agreed approaches to the transmission of results to participants, with suggestions of further sources of assessment, such as general practitioners. The issue of consent from participants for the receipt of results will also need to be considered (see later).

iii) For some measures performed as part of the survey, there may be no clear interpretations of the findings or agreed-upon critical levels. In such cases, it will be difficult to interpret the findings for a participant. Such a measure might be included in the survey because of the need to determine its distribution in the general population, but there may be no clear guidelines as to reportable levels. It should be considered whether or not to report these findings to participants on a measure-by-measure basis.

# Whom to inform?

Another ethical issue is whom to inform and there are a number of aspects to consider. In a survey of this kind, there is a probable duty of care to inform participants of results. Therefore all participants should be given the opportunity to receive results from the survey, unless this is specifically contraindicated, either by the expressed wish of the person not to receive

results, or because there are known circumstances that indicate such information would be harmful to a person's emotional well being. In general, subjects should be provided with their results and some immediately useful information in exchange for their participation. The survey might represent an opportunity to provide participants with information about strategies to address certain aspects of their health risk.

Additional complications arise if measures include genetic or DNA testing, or survey samples are made available for this type of testing at a later date. Is there a responsibility for the survey team to inform participants or their family members of a possible risk identified by the testing? Should pre- and post-test counselling be offered in these circumstances? How practical might that be several years after completion of the survey?

The family of a participant is often an interested party, not only in the case of any DNA testing, but also when previously unrecognised risk factors are found. Clearly, the family would share the burden of caring for an ill family member. However, the greater duty of care is clearly owed to the participant, and it is probably sound ethical practice to inform only the subject and allow him or her to determine whether family members should be informed. An exception to this is when the subject is a child.

Other aspects should be considered. If an environmental health measure indicated a high exposure in a participant, what duty would exist to notify an employer or a relevant environmental health authority or to alert the participant to possible methods of exposure? To what extent should the results of measures be made available to parents if a young person is unwilling for this to occur? What extent of effort should occur to ensure notification of an abnormal result to a participant's medical practitioner with the consent of the participant?

#### How to inform?

It is important that a subject is not 'diagnosed' by participating in a general population health survey of this kind. Rather, a subject should be informed that a finding is abnormal and that medical advice and follow-up should be sought. There are several reasons why a 'diagnosis' should not be used. There may be additional circumstances of which the survey team is unaware that contributed to the finding. Additional tests may be required to determine the status of the person more accurately, and information should be imparted in such a way that clarifies it as a risk, not as a diagnosis.

The receipt of information about one's personal health and the presence of new or existing risk factors can be a source of immediate anxiety, psychological distress and depression (Shaw et al. 1999). The receipt of a positive result on testing for risk factors in the majority of studies is normally associated with psychological distress, anxiety and depression in the first four weeks following, but only in a minority of cases are such effects evident for longer than this. Results from studies using experimental designs show that

presenting results to participants and providing post-test emotional support prevents or reduces some of the mood disturbance following positive results. The ability to provide counselling for participants in the survey may be limited, but survey team members who are responsible for feeding back results should be aware of these issues.

There are wider issues involved in the communication of results of the survey, especially for particular population sub-groups or communities. Gathering and interpreting data is unlikely to be independent from social and political contexts. Where there are current debates over health risks, communicating the results of such data cannot be separated from the use of the data (Nelkin et al. 1989). Dissemination of risk information can have implications for citizens' and employees' rights to privacy, confidentiality and nondiscrimination, and researchers should be aware of the social power of this type of information.

#### For consideration:

If a testing procedure reveals a result that indicates that the person's sample is abnormal or indeterminate, what level of reliability and sensitivity does this represent? Will any re-testing be offered?

What does an abnormal result mean for the person's physical and mental wellbeing, and future health?

Who will be responsible for talking to the person and explaining the results? To whom should the information be given – the subject or his/her general practitioner, or both? What about people who do not have a general practitioner? What about the case of a young person under the age of 18 years and what is the duty of care to a young person whose legal guardians refuse to disclose an abnormal result? What about the psychological impact of transmitting a false positive result to a person and subsequently discovering that it has been made in error?

# 5. Special considerations for the involvement of children

The inclusion of children and young people in a survey program of this kind will advance knowledge about their health and wellbeing. However such research should only be conducted where:

- the research is important to the wellbeing of children and young people,
- their participation is indispensable to the research,
- the study method is appropriate for children and young people, and
- the circumstances in which the research is conducted provide for the physical, emotional and psychological safety of the child or young person (NHMRC Statement 1999, S4).

The gaining of consent to the participation of children and young people also involves consideration. Consent must be obtained from a child or young person whenever he or she has sufficient competence to make this decision, and either

- the parents/guardian in all but exceptional circumstances, for a child; or
- any organisation or person required by law.

Refusal to participate on the part of a child or young person must be respected (NHMRC 1999a), and such a refusal will override parental permission. Thus, in addition to consent, the assent of a child must also be gained. Assent refers to a child's affirmative agreement to participate in research. Mere failure to object should not be construed as assent.

The benefits and possible harms associated with the taking of measures, particularly physiological samples such as blood, and the communication of results should be considered carefully. The use of microtechniques for the collection and assaying of samples should be investigated, as well as strategies to minimise any adverse effects of sample collection (e.g. the use of anaesthetic creams). The decision to allow blood sampling for a purpose such as this, which is non-therapeutic, must be the child's, and it is inappropriate to insist on the taking of blood or other samples, if a child indicates either significant unwillingness before the start or significant stress during the procedure.

# 6. Consumer involvement in survey design and implementation strategies

There is a significant responsibility to involve community members in the identification of ethical issues and in finding satisfactory solutions to resolve them. A range of strategies can be employed to undertake this, from consultation with consumer organisations and community representatives, to the use of focus groups and cognitive testing, to pilot testing of the survey processes.

Consumer involvement in a survey of this kind will be critical in determining its success, given the response rates that are needed to ensure that sampling is representative of the population(s) of interest. Significant investment will be required to encourage consumer participation and support at every stage of the survey. Consumer confidentiality and privacy concerns will require a concerted effort and a planned strategy to ensure issues of data collection, storage, security and access to researchers for analyses are handled ethically. Consumer anxieties are also likely to be heightened when biomedical sampling, particularly of blood, is initially raised in the public domain. The benefits of the survey and aspects of the methodology will need to be asserted and discussed fully, and community confidence maintained if the AHMS program is to achieve its objectives and benefit the Australian community.

# 7. Suggested processes for the resolution of ethical issues

There are a number of ways to proceed. Clearly each of the issues identified above requires careful thought and discussion. Existing Australian ethical guidelines provide direction in some areas. Advice has also been sought from researchers and agencies in Australia and overseas who have experience in the conduct of surveys of this kind. Some issues, such as the possibility of sample storage and banking for future research, have substantial ethical implications and have been excluded from the initial AHMS program survey.

A continuing process of consultation with consumer organisations, ethnic and Indigenous groups and community representatives will also be required to explore community attitudes and concerns about ethical issues and to determine the way to proceed with the survey program's development and execution. Ultimately, any proposed survey will be subject to the usual processes of ethical oversight by an Institutional Ethics Committee before it can commence. It has been suggested that this be the AIHW Ethics Committee, given that it is likely that the AIHW will have oversight of the further development of the AHMS program.

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# **Appendix G: Assumptions underlying the calculation of cost estimates for the AHMS program**

# Survey development and conduct

# 1. Staff

Staff costs have been based on the survey being contracted to an agency or consortium employing a director (salary of \$125,000), heading a team with two senior researchers (\$80,000 each) and a research assistant (\$60,000), employed for 2.5 yrs with recurrent expenses of \$100,000 (2.5 years covers the 44 weeks of the survey, 12 months before and 8 months after). On costs are included. These staff would develop the protocols required for the effective conduct of all stages of the AHMS, including a pilot test and a dress rehearsal.

# 2. Other costs

The staff would undertake tasks as listed in Table 9.1 to ensure the effective conduct of the measurements in the AHMS. Additional funds are allocated against data preparation, publicity and promotion and publication. A separate estimate has been included to cover the cost of providing a telephone information line for participants and potential participants to check on any concerns they may have regarding aspects of the survey. This estimate includes funds to cover the cost of collating and providing to respondents and/or their general medical practitioner (on their advice and consent) the results of the measurements and tests.

#### Payment to ABS

The ABS will be closely involved in the AHMS process through the NHS. In addition to existing payments made by DoHA for the inclusion of certain topics (e.g. National Health Priority Areas) and for sample supplementation for the Indigenous population (2004/05 and later) in the NHS, the ABS will seek funding for additional costs associated with the conduct of the measurement phase (the AHMS). These have currently been identified as:

- ABS management of interviewers; organising workloads; training; interviewer time to recruit NHS respondents to the AHMS, and follow up with those who need more time to consider participation (estimated at \$105,000).
- Non-response adjustment the NHS survey will provide information on non-respondents that will allow for extensive adjustment for nonresponse in the AHMS (estimated at \$65,000).
- Output processing and data handling merging of AHMS data with NHS data, non-response analysis and weighting (estimated at \$70,000), and meta data maintenance and data storage (estimated at \$20,000).

Client support and dissemination - preparation of web based tables, data cubes and other ABS reports (estimated at \$100,000); preparation of microdata file for datalab access and external synthetic file (estimated at \$80,000); and joint research and ongoing provision of special tabulations over the 3 year period 2006/07 to 2008/09 and then on a cost recovery basis (estimated at \$100,000).

# Field costs: measurements [including staff on costs and insurances] and samples

The costs in Table G.1 were derived on the basis of sample size estimates (see Section 5); an estimate of 1.5 hours per visit (some dwellings will have children in addition to an adult for measurement), with 1.5 visits per dwelling (to allow for instances where the measurement phase cannot proceed (e.g. because of failure to fast, illness) and another appointment will need to be made; and the limited number of nurse visits possible per day because of the need to complete these in the morning, to achieve the best response to fasting. The individual estimates are shown in the following table.

Table G.1: Details of calculations used in estimating costs

Item	Comment	\$
Recruitment of nurses	Recruitment agency costs	50,000
Cost of nurses to undertake home visits, including on costs	\$37.50/hr plus on costs (35%)	1,125,000
Insurances	Liability, indemnity	10,000
Mileage		337.500
Training	10 hours for nurses, plus a qualified trainer	20,000
Equipment	Purchase 50 sets @ \$300 ea	15,000
Supervisors (incl. quality checks)	15% of all interviewer costs	221,625
Phone back service for queries during survey & provision of results to respondent and/or GP by mail	1 FTE @ \$50,000 for 12 mths. plus Info line (time spread over 18 mths.)	100,000
Tests (for the range of tests costed, see following Table G.2)	Includes bottles, syringes, collection, transport and analyses @ \$153 per participant	1,611,090
	Est. @ 9000 tests - more saliva, fewer blood	
Anaesthetic cream offered at ages < 18 yrs & where adult present requests it	2,500 doses @ \$4 ea	10,000
Add contingencies, inflation, GST		

Table G.2 shows the range of laboratory analyses costed for the purpose of the initial estimate. Note that this will need to be updated following decisions on the final range of samples to be collected, and the laboratory analyses to be undertaken (and which will be fewer than those listed below).

Table G.2: Laboratory analyses costed

Saliva:	Cotinine
	Cortisol
Blood:	Serum lipid levels:
	Cholesterol
	LDL
	Triglycerides (fasting)
	HDL (fasting).
	C-reactive protein
	Homocysteine (fasting)
	Glucose (fasting)
	Oral Glucose Tolerance Test (sub sample only of approx. 16%)
	Glycosylated haemoglobin (HbA1c)
	Insulin (fasting)
	Serum creatinine
	Red cell folate
	Carotenoids (lutein, cryptoxanthin, lycopene, beta carotene)
Urine:	Spot urine for albumin/creatinine ratio

#### Pilot test and dress rehearsal

The estimates allow for development costs associated with a pilot test to be undertaken (e.g. in 2002/3) to inform as to response rates likely if respondents are recruited and blood taken and other measurements made. These costs cover payment to the ABS for the pilot test of the NHS, and field costs for the AHMS. Costs associated with the development of survey protocols etc. for the conduct of the pilot test (proposed for February 2003) and a dress rehearsal (in 2003/4) are included in the staffing costs above.

The ABS has recommended that the pilot test seek to obtain 700 blood samples, rather than the 400 estimated from the skirmish results. This would allow for better estimation of response rates for different modes e.g. fasting (as is desirable) or not fasting (as in the Health Survey of England, and a possibility if response rates with fasting are too low overall, or for particular populations e.g. those 12 to 17 years of age).

#### Other costs

The management of the AHMS will be undertaken by the AIHW, who will manage the development process (including community and professional consultations). In addition, the AIHW will manage the contract for the conduct of the AHMS. The secretariat to the new AHMS Reference Group may also be

provided by this agency. Neither of these cost elements is included in the estimates provided.