Thirteen possible reasons for deviating from the strict QALY rule

Results of a survey

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Abstract

This paper presents results from a survey designed to test public support for positive or negative discrimination when a medical problem is associated with one of thirteen attributes of the patient or the cause of the illness. A representative sample of 300 members of the public first indicated their preference for discrimination on an eleven point rating scale. Secondly, respondents completed a Relative Social Willingness to Pay (RS-WTP) questionnaire in which the health state scenarios included one of the study attributes. Results were compared with the RS-WTP score without the attribute and the implied importance weight for the attribute was calculated as the ratio of the two RS-WTP scores.

Results indicated a willingness to discriminate, but that positive discrimination was generally offset by negative discrimination. As a consequence importance weights were small and statistically significant in only a small number of cases: where the medical problem was attributable to a medical error, childhood physical or sexual abuse and when positive discrimination would accelerate a return to work. There was no support for positive discrimination in the case of Aboriginal patients, the socially disadvantaged or where a person had previously experienced significant ill health (a result conflicting with a recommendation of the recent Norwegian Priority Setting Commission). Negative discrimination was supported when illness was attributable to excess smoking, eating or alcohol consumption.

Three of the attributes were permanent disabilities – deafness, blindness or quadriplegia. Contrary to the concerns of those who have argued that such people may face ‘double jeopardy’ – lower priority because of their lesser health potential – the representative respondents in this survey assigned significantly higher priority to the treatment of unrelated health problems in each of these three cases.

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1 Introduction

Cost utility analyses (CUA) assigns priority to health services according to the incremental cost per quality adjusted life year (QALY) attributable to a service. QALYs are derived by multiplying the relevant number of life years by the utility of the life years. Consequently, the benefits which are compared with costs are restricted to these two elements: life extension and the utility of life years. This restriction may be termed the ‘strict QALY rule’.

However there is an increasing literature which investigates and quantifies people’s preferences for deviating from the strict QALY rule because of some other attribute associated with the service. The literature has been summarised by Dolan et al. (2005) and Schwappach (2002) and more recently by Whitty et al. (2014).

Greater attention has been given to personal attributes and particularly the age of the recipient (Tsuchiya et al. 2003)(Eisenberg et al 2011 need ref). There is also significant literature which suggests that severity per se – the baseline quality of life – may be independently important (Shah 2009). Recently it has also been suggested that past suffering and life time expected health should influence priority, a view which was incorporated in the recommendations of a recent priorities commission in Norway (Norheim et al. 2015).

The present paper reports results of an investigation of thirteen possible reasons for deviating from the strict QALY rule which include a number of reasons which have received less attention in the literature. Six relate to the reasons why a person requires health care; three relate to a person’s personal circumstances or history and one concerns ‘indirect benefits’ – a person’s ability to work as a result of the service. Three causes of permanent disability are included as potentially relevant attributes. These reduce the health potential of a person and therefore the benefit they receive from unrelated medical services. However deviation from the strict QALY rule could, in principle, take the form of according these disadvantaged patients higher, not lower priority to compensate for their disability.
Methods used in the study are described in Section 2 below. Results are presented and discussed in the following two sections.

The relevant literature is summarised in Appendix 1. In general, it indicates a rejection of employment status and contribution to society as appropriate criteria for setting priorities in a public health system. For example, Neuberger, Adams et al. questioned the general public, family doctors and gastroenterologists in the UK about which factors should be used to select patients for liver transplantation (Neuberger et al. 1998). Of the gastroenterologists, 77 per cent included work status (‘those who are likely to return to paid work or caring for family after transplant’) among their chosen criteria. Of the family doctors, 57 per cent chose work status, but only 44 per cent of the general public chose this criterion. ‘Value to society’ was selected by 31 per cent of family doctors and gastroenterologists, but only 21 per cent of the general public. This suggests that the general public attaches less significance to workforce status or social contribution than the medical profession.

Also in the UK, Dolan, Cookson et al. found that 97 per cent of respondents thought the unemployed should have the same priority for treatment as the employed and 95 per cent would give the same priority to those who ‘contributed a lot’ and to those who did not. Discussion and deliberation had no effect on the first response and a negligible effect on the second (Dolan et al. 1999).

In Australia Nord, Richardson et al. asked a random sample of the public whether working people and non-working people should have equal priority when they have the same illness or whether people in the workforce should have some priority over non-working people in order to limit possible economic losses to the country (Nord et al. 1995b). The results showed that 87 per cent of respondents rejected participation in the workforce as an important criterion for assigning priority. Follow-up interviews in stage 2 confirmed these findings with a slight increase in the percentage rejecting workforce participation as a criterion for assigning priority.

Self-harm is another area where several studies have been undertaken. In their British study, Dolan, Cookson et al., found that 55 per cent of respondents would give a lower priority to heavy drinkers, though this decreased to 37 per cent after discussion and deliberation with the majority thinking they should have equal priority. In their study of liver transplantation, Neuberger, Adams et al. asked respondents to select four (out of seven) factors that should be used to select patients for liver transplantation (Neuberger et al. 1998). One of the factors
was: ‘patients whose liver disease is unrelated to alcohol would be a higher priority than those who have alcohol related liver disease’. Of the general public, 28 per cent chose this factor, of the family doctors, 41 per cent chose it, and 68 per cent of the gastroenterologists chose it. Again, this suggests that the general public in the UK places less emphasis upon alcohol consumption than either family GPs or gastroenterologists.

The same tendency to give a lower priority to those perceived as ‘self-harmers’ has been observed in the case of smoking. Charney, Lewis et al. (1989) and Anderson, Richardson et al. (2011) report that 73.5 and 75.8 per cent respectively of respondents would give a lower priority to smokers. Interestingly, in the latter study ‘42 percent of smokers favored non-smokers for medical treatment as against 81 percent of non-smokers’, indicating that smokers ‘accept that their own possession of a vice or bad habit is grounds for reduced priority’ (p. 145).

Several studies have also revealed a willingness to ‘discriminate’ against those whose health problems are the results of an unhealthy diet. Most of the studies undertaken on this issue contrast an unhealthy diet with a healthy diet (Anderson et al. 2011; Dolan et al. 1999), or inherited health problems with those due to diet (Charny et al. 1989). In the study by Anderson, Richardson et al. (2011), however, the authors detected a willingness to give a lower priority to those who are ‘seriously overweight’, when no mention is made of the cause.

By contrast with the above studies, little empirical work has been undertaken on social attitudes towards prioritising health care for single parents. There is some data showing that people are willing to give priority to parents of young children (not necessarily single parents) (Dolan et al. 1999; Nord et al. 1995a; Williams 1988), and some studies show a preference for married patients over single (Anderson et al. 2011; Charny et al. 1989).

Studies of age-related social preferences – which often show a preference for young adult patients (Anderson et al. 2011; Cropper et al. 1994; Johannesson & Johansson 1997b; Tsuchiya et al. 2003) – are inconclusive in this regard, since young adults may be preferred because of their anticipated economic contribution or greater life-expectancy.

In an Australian study of health care decision-makers, Mooney, Jan et al. found that 41.3 per cent of respondents would give preference to ‘a population (say a geographical area) which is of lower socio-economic status on average’, compared with a population of ‘relatively higher socio-economic status’ (which only 2.8 per cent of respondents would preference) (Mooney et al. 1995). In this study the average health status across the two populations was described
as ‘broadly the same’. It is clear from this study, therefore, that it was the socio-economic status of the two groups, regardless of the effect upon health, that was driving the preferences. By contrast, in their British study Dolan, Cookson et al. found that 83 per cent of respondents thought the poor should be given the same priority as other groups, and 85 per cent thought that those with a low education should be given the same priority (Dolan et al. 1999). After discussion, the percentage supporting equal treatment of these groups increased to 90 per cent in both cases.

There has been little empirical work undertaken on the attitudes of the public to race and health care prioritisation. Using race as a criterion for prioritising health care is complicated by a number of factors. The foremost among these is the uncertainty surrounding the extent to which (the public believes) certain racial groups are ‘responsible’ for their own health problems versus the extent to which they are ‘victims’. For example, the following have been identified among the disparate array of causes implicated in the poor health of racial minorities: destruction of indigenous culture, limited education about health and nutrition, high levels of unemployment and low-status jobs, inadequate housing, inadequate electricity and sewerage systems, a sedentary lifestyle, high rates of alcohol abuse, smoking and obesity, geographical isolation, and dependence upon social welfare (Lowe et al. 1995, , p. 357). In their British study Dolan, Cookson et al. (1999) found that none of their 60 respondents would give either higher or lower priority to a white person, and maintained this position after discussion.

There have been several studies looking at social attitudes towards giving lower priority to the permanently disabled and chronically ill if their ability to benefit from treatment is less than an able-bodied person. The evidence suggests that people reject this form of ‘inequality’ (Abellan-Perpiñán & Prades 1999; Dolan & Cookson 2000; Nord 1993d; Nord et al. 1995a). Few of these studies look at particular health problems, however, such as blindness, deafness or quadriplegia. One exception is a study by Ubel, Richardson et al. (2002). In this study the authors explicitly distinguished between a ‘pre-existing paraplegia scenario,’ in which subjects were ‘asked how many paraplegics’ lives would have to be saved to be just as important as saving 100 “normal” people’s lives,’ and a ‘paraplegia onset scenario,’ in which they were ‘asked how many patients who would experience the onset of paraplegia need to be saved to equal the benefit of saving 100 “normal” lives’ (Ubel et al. 2002). They found, as in the previous studies, that subjects’ indifference points were inconsistent with the principle of
QALY maximisation (see Table 2). Whether a person begins as a paraplegic or ends up a paraplegic has less significance for the general population than a strict efficiency approach to prioritisation would suggest. The authors found that these results are susceptible to significant order effects.

Data base searches failed to reveal any studies looking at social attitudes towards giving the following groups priority access to health services: those who have been physically or sexually abused, those who have drawn on public health services extensively in the past, those whose need for services results from medical error, and whether the blind or deaf should receive special treatment (other things being equal).

2. Methods

The analysis employed two techniques for assessing the significance of the thirteen attributes. First, respondents were asked to rate the priority they would assign to each attribute on an 11 point scale. Prior to rating the attribute, arguments were presented in favour of, and against, taking the attribute into consideration when the health budget is allocated. The arguments are reproduced in Table 1. The second technique was the use of a new instrument, the Relative Social Willingness to Pay (RS-WTP). The instrument is justified and validated in Richardson et al. (2013). In sum, respondents are asked to allocate a budget between two patients. The first faces immediate death. Service 1 will move them to a morbid, non lethal health state for a year. The second patient is already in the health state and Service 2 will fully cure the problem and restore full health. Together, the two services move a person from immediate death to full health and therefore produce one quality adjusted life year (QALY). The share of the budget allocated to the two services indicates the relative social value of the services.

The importance of the study attributes is inferred by comparing results from questions including an attribute with the result of a ‘control’ or numeraire: the answer to an independently administered question which is identical in every respect except for the absence of the study attribute. The method has two advantages in the present context. First, it produces an estimate of social value on a 0.00-1.00 scale which permits the result to be used as social importance weights directly or to weight utilities obtained elsewhere. Secondly, while focusing attention upon the attribute of interest the technique does not impose a significant cognitive burden on respondents.
The 11 point rating scale and the preliminary arguments favouring or opposing the importance of attributes were administered prior to the RS-WTP. The two services of the RS-WTP were unchanged throughout the survey but service 2 – curing the non-lethal health state – was initially unaccompanied by any other attribute (‘the control’). In the following 10 questions the recipient of service 2 was described as having one of the attributes described in Table 3. Patients with a permanent disability – deafness, blindness or quadriplegia – could not be returned to full health so the disability was associated with service 1 and the three RS-WTP scores compared with the score for service 1 from the control. As rating results could not be compared with other attributes these three attributes were not assessed on the 11 point rating scale.

The RS-WTP was introduced and explained with the following statement:

Suppose you are a public representative on a government committee with directs Medicare. You must decide how to divide a budget of $40,000 between two services, Service 1 and 2. The benefit of the service will last for one year. The amount of money given to each service should be based upon your view of the benefit of the service NOT THE COST (which is another issue). Each question will ask:

Taking everything you believe to be important into account divide the money available between Service 1 and Service 2 so that the amount of money indicates your view of how Medicare should value the service. The benefit for each service lasts for one year. The services may be given again but will require new funding.

The explanation was followed by two examples which respondents were asked to complete. Those who could not achieve this, for example by allocating the wrong total amount to the two services were removed from the survey.

The visual prop used for the ‘control’ question is illustrated in Box 1. The health state description, which was common to all questions, included both positive and negative elements to avoid a framing effect. Services were always for a 30 year old patient. The duration of the benefit was one year and the available budget was $40,000: the threshold at which the Australian PBAC would, at the time, generally cease funding services which added a single QALY. Subsequent questions were spread over two pages. On the first, the study attribute was restated and the arguments shown in Table 1 were reproduced. On the second
page the prop in Box 1 was amended so that the description of service 2 included the study attribute. For example, in the case of ‘abuse’ the text read:

Service 2 improves the health of a 30 year old who is in health state A as a result of having been sexually and physically abused in childhood to excellent health for one year.

To achieve consistency, previous answers were displayed below the visual prop.

Edit procedures: An online survey is subject to bias as a proportion of respondents’ answers are random or ill considered in order to minimise the time taken to obtain the reward offered by the panel company. The present survey was prefaced by a letter from the panel company urging careful consideration. A similar letter from the research team followed (see appendix). Two edit procedures were also employed. Initially, individuals whose allocation of funds did not sum to $40,000 were removed from the survey. An equal allocation ($20,000) to both patients for every question asked was a possible but very improbable result. Such responses were also removed.

Survey administration: The questionnaire was administered online to panel members of a survey company, CINT Pty Ltd. Quotas were imposed to ensure a sample which was representative of the demographic composition of the Australian public. The survey was approved by Monash University Human Research Ethics Committee (MUHREC CF 15/410-2015000200)

Analysis: Responses to the rating scale were assigned a score from 10 (highest priority to 0.0 (lowest priority). The differences between the average responses and the scores for ‘equal priority’ (5.0 were tested using a students t-test. The significance of the difference between the RS-WTP with and without a study attribute was tested using a paired t-test. Implicit importance weights were calculated as the ratio of the RS-WTP with an attribute to the RS-WTP for the control.

3. Results

A total of 359 individuals completed the survey. Edit procedures described above reduced the sample to 300. Their demographic and educational characteristics are reported in Table 2.
Due to the use of quotas these closely resemble the characteristics of the Australian population.

Table 3 reports the results of the rating questionnaire. Respondents strongly discriminated between attributes. The proportion favouring positive discrimination varied from 81.7 percent for medical error to 11.0 percent for cigarettes. Conversely, the proportion favouring negative discrimination (score below 5.0) varied from 2.7 to 66.3 percent for the same two attributes. If decisions were based upon a majority vote (ie 50 percent above or below a score of 5.0) discrimination would occur in five cases: medical error and abuse (positive discrimination); eating, alcohol and cigarettes (negative discrimination). If scores are given cardinal significance (ie differences in scores have an interval property) then the mean ranking implied positive discrimination for 7 attributes and negative discrimination for 3. However the mean differed significantly from an equal priority (at the 1 percent level) only in the case of medical error. Average scores are plotted in Figure 1.

**RS-WTP Service 2**: Table 4 reports results from the RS-WTP. The final column of the table reports the average importance weight implied by a comparison of RS-WTP mean results with and without attributes. They are plotted in Figure 2. The introduction of the attributes into the description of service 2 did not have a quantitatively large effect upon mean scores.

The attributes of medical error and physical and sexual abuse both led to an increased allocation which was a statistically significant increase at the 1 percent level but the attributes increased the allocation to service 2 by only $1,500 and $1,200 – 7 and 6 percent – respectively. Four attributes resulted in a statistically significant loading less than unity; the three lifestyle attributes, eating, smoking and alcohol consumption, and an atypically large use of medical services in the past. The average reduction in the allocation associated with these attributes varied from $900 (past use of health services) to $2,800 (cigarettes).

As with the results from the rating questions, mean results mask a large variation between individual assessments. Across all attributes an average of 86 respondents assigned an average additional amount of $9,100 while an average of 97 respondents gave $9,700 less than in the control: that is, the majority of respondents significantly altered their allocation when the attribute was introduced. However the significant positive discrimination by a large number of respondents was almost exactly offset by a significant negative discrimination by others.
RS-WTP Service 1: Table 4 and Figure 2 also report results for the three cases when the patient needing service 1 had a permanent disability which limited their health potential. In each case the RS-WTP exceeds the control for service 1 ($18,800) and is statistically significant at the 1 percent level. The additional budgetary allocation implies importance weights of 1.14 for deafness; 1.15 for blindness and 1.18 for quadriplegia. Few respondents allocated less than to the control group.

4. Discussion

The chief conclusion from the survey is that, based upon average results, the case for special treatment as a result of the study attributes is generally weak: the collective view implied by average results is that, with only a few exceptions, patients should be treated equally irrespective of the aetiology of their illness or personal characteristics.

A possible reason for the overall result is that the survey techniques may have been unreliable or encouraged respondents to avoid positive or negative discrimination. However the consistency of the results from the two independent methods used in the survey does not support the first suggestion. The rank order of the priorities implied by the two sets of results, which are compared in Figure 3, are almost identical.

Table 3 gives some support for the view that the rating scale encouraged respondents to assign equal priority. For six of the attributes between 40 and 60 percent of respondents selected the equal priority option. However in the budget allocation exercise only an average of 102 respondents deviated from an equal allocation, implying that the number seeking this outcome was similar using both methods. The consistency of the results indicates an overall disinclination to discriminate on the basis of the study attributes. However, when respondents did discriminate the average deviation was large. The small variation in the mean RS-WTP with differing attributes is the result of these large positive and negative deviations offsetting each other.

Several of the results presented here are, to our knowledge, unique in the literature. These include the high priority given to those whose problem is associated with a medical error, physical and sexual abuse and the low priority to those who have used medical services extensively in the past. The latter result is of particular relevance for the recent Norwegian
Commission which recommended positive, not negative, priority in such cases (Norheim et al. 2015). The literature has discussed at length the case for protecting those with a limited capacity for health improvement from the possibility of discrimination (‘double jeopardy’). Our results imply that, rather than discriminate against such patients, Australians would afford them higher priority.

Results raise three methodological issues which are not widely discussed in the attributes literature. The first is the statistical criteria for group decision making: the use of the mean or median. The former gives equal importance to each dollar allocated to a service. The latter gives an equal vote to each respondent. In the present case the two methods result in very similar ranking. However the possibility of difference raises the question of whether the decision criterion should ultimately be political (use of the median voter) or based upon a notion of net social welfare in which the strength of preferences count.

The second issue arises from the fact that social preferences, as measured by average preference weights, may imply discrimination against certain groups. The present results suggest that Australians are unsympathetic to the socially disadvantaged as represented by single parents, the (‘socially’) disadvantaged and Australian Aboriginals. They are punitive towards those who may be held responsible for their ill health and, in the case of those who have used past health services heavily, they appear to be more influenced by the negative argument that these patients have already had their fair share of services than by the positive argument that past suffering may warrant higher priority. While these arguments were suggested to respondents other arguments may have been influential. The apparent lack of sympathy towards the previously ill contrasts with the strong prioritisation of those who are permanently disabled. A possible reason is that in the latter case the permanent problem is presumed to be beyond the control of the patient. In other cases respondents may have equated heavy use of medical services with their over-use.

The third issue arises from the second. There are grounds for discriminating between preferences which are judged acceptable and unacceptable. This explicitly normative procedure has been described as ‘laundered preferences’. Goodin, for example, argues that for the ethical foundation of welfarism, and for the sovereignty of individual preferences to be defensible, people must be protected from ‘the meddlesome (or indeed sadistic) preferences of others’ and that some preferences are ‘so awfully perverse as to forfeit any right to respect’ (Goodin 1995, p. 132). Similarly Adler and Posner (2008) argue that
preferences distorted by a lack of information or by ill considered preferences should be ‘re-calibrated to reflect what their holders would in fact prefer in the presence of full information’ ‘Objectively bad preferences should also be discounted’ (p 138-140).

In the present context it might be argued that while positive discrimination on the basis of compassion is acceptable, negative discrimination to punish people who are disliked or for behaviours attributable to unknown circumstances is not acceptable. This argument could be applied with varying force to the reasons for negative discrimination presented in the present survey. Most would probably agree with the laundering of negative preferences in the case of Aboriginals (81 respondents), socially disadvantaged (88 respondents) and single parents (84 respondents), the laundering of a negative preference with respect to those who are ill because of eating, alcohol and cigarette consumption (131, 137, 140 respondents respectively) might receive some support.

5 Conclusion

A large number of reasons have been given for deviating from the strict QALY rule. This paper has investigated the public support for some form of discrimination on the basis of thirteen attributes which have received little attention in the literature. The two methods employed led to a similar ranking of priorities. However results were not identical. The use of a rating scale resulted in most respondents assigning equal priority in the majority of cases. In contrast, the RS-WTP elicited very significant deviation from equal priority from most respondents and for most attributes. However positive discrimination was largely matched by negative discrimination so that mean RS-WTP scores associated with the attribute did not generally differ significant from RS-WTP scores without the attributes.

Despite this overall result there was support for positive discrimination when a problem was the result of a medical error, the result of physical or sexual abuse in childhood and weak support when discrimination would accelerate a return to work. The strongest positive discrimination occurred when patients suffered a permanent disability for reasons that were unrelated to the current problem. There was significant support for discrimination against those whose problems were attributable to excess consumption of food, alcohol and cigarettes.
Table 1 Attributes and arguments included in the survey

<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Attribute</th>
<th>Reasons given for/against priority</th>
</tr>
</thead>
</table>
| 1. Abuse     | Physical and sexual abuse in childhood has caused the person to require health care | 1. Unfair treatment has caused their problems. It is fair to treat them more generously as compensation.  
2. People who are in the health state are suffering no matter what the reason. The reason should not count. |
| 2 Aboriginal | Being Aboriginal or Torres Strait Islander has caused the person to require health care | 1. These Australians live 17 years less and in worse health than other Australians. Australia has a debt to them.  
2. Each individual should be treated equally. |
| 3 Disadvantaged | Belonging to a disadvantaged social group has caused the person to require health care | 1. Disadvantaged groups should receive special compensation. They live 10 years less than other Australians and their social and economic background has caused their problems.  
2. Each individual should be treated equally. |
| 4 Past Health | People have already received a very large number of services from Medicare | 1. These people have suffered more in the past from poor health and should receive more care.  
2. The past should be irrelevant.  
3. These people have already received a "fair share" of help from Medicare. They should get a smaller share now. |
| 5 Single parent | These people are single parents with two young children | 1. Children need a parent to care for them. Single parents should receive priority.  
2. Medicare should not judge people's worth |
| 6 Medical error | A mistake made in hospital has caused the person to require health care | 1. It's unfair that people should suffer because of hospital mistakes. These people should be compensated by Medicare.  
2. Mistakes are unavoidable, other people need treatment just as much |
| 7 Return to work | People who would receive the service will return to the workplace | 1. Re-entering the workforce means the person will pay taxes and not need social support.  
2. Medicare should not take account of a person's circumstances, including their economic position. |
| 8 Alcohol | Heavy, ongoing alcohol consumption has caused the person to require health care | 1. Medicare should not judge the reasons for a person's illness.  
2. People should be responsible for their own actions and should not receive the same priority as others |
| 9 Cigarettes | Heavy, ongoing cigarette smoking has caused the person to require health care | 1. Medicare should not judge the reasons for a person's illness.  
2. People should be responsible for their own actions and should not receive the same priority as others. |
| 10 Eating | Ongoing over-eating has caused the person to require health care | 1. Medicare should not judge the reasons for a person's illness.  
2. People should be responsible for their own actions and should not receive the same priority as others. |
| 11 Blindness | Service 1 is for a permanently blind 30 year old  
Service 2 is for a person with normal vision | 1. Blind people should have priority as it would compensate a little for their blindness.  
2. Health care should be the same for everyone.  
3. Service 1 cannot restore vision. It therefore provides less health benefit as it leaves a person
<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Attribute</th>
<th>Reasons given for/against priority</th>
</tr>
</thead>
<tbody>
<tr>
<td>12 Deafness</td>
<td>Service 1 is for a permanently deaf 30 year old. Service 2 is for a person with normal hearing.</td>
<td>1. Deaf people should have priority as it would compensate a little for their deafness. 2. Health care should be the same for everyone. 3. Service 1 cannot restore hearing. It therefore provides less health benefit as it leaves a person both deaf and in health state A. Therefore it should have lower priority.</td>
</tr>
<tr>
<td>13 Quadriplegia</td>
<td>Service 1 is for a someone with quadriplegia</td>
<td>1. People with quadriplegia should have higher priority, special treatment: they are already disadvantaged. 2. Health care should be the same for everyone. 3. Service 1 provides less health benefit as people will remain paralysed. Therefore it should have lower priority.</td>
</tr>
</tbody>
</table>
**Table 2 Respondent characteristics**

<table>
<thead>
<tr>
<th></th>
<th>Respondents by age</th>
<th>% by education</th>
<th>Total</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>18-24</td>
<td>25-34</td>
<td>35-44</td>
<td>45-54</td>
</tr>
<tr>
<td>Male</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>10.2</td>
<td>15.0</td>
<td>20.4</td>
<td>17.7</td>
</tr>
<tr>
<td>Female</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>11.1</td>
<td>19.6</td>
<td>18.3</td>
<td>17.6</td>
</tr>
<tr>
<td>Total</td>
<td>10.6</td>
<td>17.3</td>
<td>19.4</td>
<td>17.7</td>
</tr>
<tr>
<td>Aus†</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>11.0</td>
<td>19.3</td>
<td>18.2</td>
<td>17.5</td>
</tr>
</tbody>
</table>

(1) Percent total Australian population above 18 (ABS 2015)

**Table 3 Priority ranking of attributes**

<table>
<thead>
<tr>
<th>Attributes</th>
<th>Rank of ranking</th>
<th>Mean ranking(1)</th>
<th>SD</th>
<th>t</th>
<th>Less than equal</th>
<th>Equal</th>
<th>Greater than equal</th>
</tr>
</thead>
<tbody>
<tr>
<td>Medical error</td>
<td>1</td>
<td>7.20</td>
<td>1.68</td>
<td>2.27</td>
<td>2.7</td>
<td>15.7</td>
<td>81.6</td>
</tr>
<tr>
<td>Abuse</td>
<td>2</td>
<td>6.44</td>
<td>1.73</td>
<td>1.44</td>
<td>3.7</td>
<td>43.0</td>
<td>53.3</td>
</tr>
<tr>
<td>Return to work</td>
<td>3</td>
<td>5.98</td>
<td>1.61</td>
<td>1.05</td>
<td>8.7</td>
<td>43.0</td>
<td>48.3</td>
</tr>
<tr>
<td>Single parent</td>
<td>4</td>
<td>5.73</td>
<td>1.65</td>
<td>0.76</td>
<td>9.3</td>
<td>47.0</td>
<td>43.7</td>
</tr>
<tr>
<td>Disadvantaged</td>
<td>5</td>
<td>5.59</td>
<td>1.43</td>
<td>0.71</td>
<td>9.0</td>
<td>50.7</td>
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<td>Aboriginal</td>
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<td>5.40</td>
<td>1.88</td>
<td>0.37</td>
<td>14.0</td>
<td>53.7</td>
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<tr>
<td>Past health</td>
<td>7</td>
<td>5.27</td>
<td>1.36</td>
<td>0.34</td>
<td>16.0</td>
<td>57.0</td>
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</tr>
<tr>
<td>Eating</td>
<td>8</td>
<td>4.06</td>
<td>1.92</td>
<td>-0.85</td>
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<tr>
<td>Alcohol</td>
<td>9</td>
<td>3.88</td>
<td>1.94</td>
<td>-1.00</td>
<td>59.7</td>
<td>27.3</td>
<td>13.0</td>
</tr>
<tr>
<td>Cigarettes</td>
<td>10</td>
<td>3.41</td>
<td>2.03</td>
<td>-1.36</td>
<td>66.3</td>
<td>22.7</td>
<td>11.0</td>
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</table>

*t = (Mean rank - 5)/se

(1) Highest ranking = 11; lowest ranking = 1
Table 4 Results from the RS-WTP, Service 2

<table>
<thead>
<tr>
<th>Attribute</th>
<th>Mean ($000)</th>
<th>t</th>
<th>Diff</th>
<th>n</th>
<th>Diff</th>
<th>n</th>
<th>Weight (1)</th>
</tr>
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<tbody>
<tr>
<td><strong>Control Service 2</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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<td></td>
</tr>
<tr>
<td>1. Medical error</td>
<td>22.70</td>
<td>2.94</td>
<td>9.8</td>
<td>125</td>
<td>8.8</td>
<td>85</td>
<td>1.07</td>
</tr>
<tr>
<td>2. Abuse</td>
<td>22.44</td>
<td>3.54</td>
<td>7.7</td>
<td>99</td>
<td>6.8</td>
<td>58</td>
<td>1.06</td>
</tr>
<tr>
<td>3. Return to work</td>
<td>21.88</td>
<td>1.52</td>
<td>8.6</td>
<td>101</td>
<td>8.8</td>
<td>76</td>
<td>1.03</td>
</tr>
<tr>
<td>4. Single parent</td>
<td>21.50</td>
<td>0.57</td>
<td>8.4</td>
<td>99</td>
<td>9.0</td>
<td>84</td>
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</tr>
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<td>5. Disadvantage</td>
<td>21.04</td>
<td>-0.33</td>
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<td>90</td>
<td>9.0</td>
<td>88</td>
<td>0.99</td>
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<tr>
<td>6. Aboriginal</td>
<td>20.91</td>
<td>-0.65</td>
<td>8.4</td>
<td>79</td>
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<td>81</td>
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<td>7. Past health</td>
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<td>-3.07</td>
<td>8.3</td>
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<td>9.1</td>
<td>89</td>
<td>0.94</td>
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<td>8. Eating</td>
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<td>-4.22</td>
<td>9.8</td>
<td>78</td>
<td>11.9</td>
<td>131</td>
<td>0.87</td>
</tr>
<tr>
<td>9. Alcohol</td>
<td>18.71</td>
<td>-3.68</td>
<td>10.9</td>
<td>84</td>
<td>12.1</td>
<td>137</td>
<td>0.88</td>
</tr>
<tr>
<td>10. Cigarettes</td>
<td>18.37</td>
<td>-3.84</td>
<td>11.5</td>
<td>87</td>
<td>13.1</td>
<td>140</td>
<td>0.87</td>
</tr>
<tr>
<td><strong>Average</strong></td>
<td></td>
<td></td>
<td>9.1</td>
<td>85.6</td>
<td>9.7</td>
<td>96.9</td>
<td></td>
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<tr>
<td><strong>Control Service 1</strong></td>
<td>18.80</td>
<td>6.00</td>
<td>4.42</td>
<td>193</td>
<td>7.98</td>
<td>107</td>
<td>1.00</td>
</tr>
<tr>
<td>Blind</td>
<td>21.595 (00)</td>
<td></td>
<td>4.73</td>
<td>253</td>
<td>7.64</td>
<td>47</td>
<td>1.15</td>
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<tr>
<td>Deaf</td>
<td>21.403 (00)</td>
<td>5.75</td>
<td>4.27</td>
<td>255</td>
<td>6.88</td>
<td>45</td>
<td>1.14</td>
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<tr>
<td>Quadriplegic</td>
<td>22.214 (00)</td>
<td>6.20</td>
<td>6.42</td>
<td>239</td>
<td>8.36</td>
<td>61</td>
<td>1.18</td>
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</tbody>
</table>

(1) Weight, = Mean (attributei)/Mean (control)

(2) Paired t-test
Box 1 Visual prop for the control question

*Total of all entries must equal $40,000

Please write your answer(s) here:

Dollars allocated to Service 1

Dollars allocated to Service 2
Figure 1 Average rank score by attribute: Service 2 poor to full health
Key * significant at 1 percent; ** significant at 7 percent

(1) Attributes vary with service 2, a return to full health except for the attributes of permanent disability; blindness, deafness and quadriplegia
Figure 3 Rank order of average ranking versus rank of rank order of average RS-WTP

Key:
C=cigarettes; A=alcohol; E=eating; PH=past health; Abor=aboriginal; D=disadvantage; SP=single parent; RW=return to work; Abu=abuse; M=medical error
## Appendix 1

### Previous studies on the relevance of personal characteristics: Percent support for discrimination

<table>
<thead>
<tr>
<th>Characteristic</th>
<th>Study</th>
<th>Description</th>
<th>Priority (%)</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>Higher</td>
<td>Lower</td>
<td>Equal priority/ No choice</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>(Charny et al. 1989)</td>
<td>Unemployed</td>
<td>15.6</td>
<td>50.2</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Employed</td>
<td>33.1</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Unskilled</td>
<td>28.5</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Director</td>
<td>21.5</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Lorry Driver</td>
<td>15.2</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Teacher</td>
<td>34.5</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>(Dolan et al. 1999)</td>
<td>Contributed a lot</td>
<td>2</td>
<td>2</td>
<td>96</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Unemployed</td>
<td>3</td>
<td>0</td>
<td>97</td>
</tr>
<tr>
<td><strong>Productive worker</strong></td>
<td>(Williams 1988)</td>
<td>When at the peak of their earning power$^{(1)}$</td>
<td>4.0</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>(Neuberger et al. 1998)</td>
<td>Unemployed man</td>
<td>56$^{(2)}$</td>
<td>2$^{(3)}$</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(Nord et al. 1995b)</td>
<td>Favour workers</td>
<td>12.6</td>
<td></td>
<td>87.4</td>
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<tr>
<td></td>
<td></td>
<td>Productive and active</td>
<td>38.2</td>
<td></td>
<td>58.0</td>
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<tr>
<td></td>
<td></td>
<td>Leisurely and unproductive</td>
<td>3.9</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Good community contributor</td>
<td>29.7</td>
<td></td>
<td>69.3</td>
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<tr>
<td></td>
<td>(Anderson et al. 2011)</td>
<td>Non-contributor</td>
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<td></td>
<td></td>
<td>Employed person</td>
<td>9.2</td>
<td></td>
<td>88.9</td>
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<td></td>
<td></td>
<td>Unemployed person</td>
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<td>Professional occupation</td>
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<td></td>
<td>Unskilled laborer</td>
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<tr>
<td></td>
<td>(Bowling 1996)</td>
<td>Contribute to their own illness (e.g. smoking, obesity, excessive drinking)</td>
<td></td>
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<td>42</td>
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<tr>
<td><strong>Self-harm</strong></td>
<td>(Charny et al. 1989)</td>
<td>High alcohol</td>
<td>5.8</td>
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<td></td>
<td></td>
<td>Low alcohol</td>
<td>80.1</td>
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<tr>
<td></td>
<td>(Dolan et al. 1999)</td>
<td>Heavy drinkers</td>
<td>2</td>
<td>37</td>
<td>61</td>
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<tr>
<td></td>
<td>(Neuberger et al. 1998)</td>
<td>Alcoholic liver disease</td>
<td>16$^{(2)}$</td>
<td>17$^{(3)}$</td>
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<tr>
<td></td>
<td>(Anderson et al. 2011)</td>
<td>Alcoholic person</td>
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<td></td>
<td>22.1</td>
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<td>Characteristic</td>
<td>Study</td>
<td>Description</td>
<td>Priority (%)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>------------------------</td>
<td>-------------------------------</td>
<td>--------------------------------------</td>
<td>--------------</td>
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<tr>
<td></td>
<td></td>
<td></td>
<td>Higher</td>
<td>Lower</td>
<td>Equal priority/No choice</td>
</tr>
<tr>
<td><strong>Cigarettes</strong></td>
<td>(Charny et al. 1989)</td>
<td>Non-alcoholic</td>
<td>76.0</td>
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<td></td>
<td></td>
<td>Smoker</td>
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<td></td>
<td>Non-smoker</td>
<td>73.5</td>
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<tr>
<td></td>
<td>(Dolan et al. 1999)</td>
<td>Smokers</td>
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<td>32</td>
<td>68</td>
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<tr>
<td></td>
<td>(Nord et al. 1995a)</td>
<td>Non-smokers</td>
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<td>0</td>
<td>40.5</td>
</tr>
<tr>
<td></td>
<td>(Anderson et al. 2011)</td>
<td>Smoker</td>
<td>3.9</td>
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<td>20.3</td>
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<td></td>
<td></td>
<td>Non-smoker</td>
<td>75.8</td>
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<tr>
<td><strong>Diet</strong></td>
<td>(Charny et al. 1989)</td>
<td>Health problem due to diet</td>
<td>14.2</td>
<td></td>
<td>25.9</td>
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<td></td>
<td></td>
<td>Health problem inherited</td>
<td>60.0</td>
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<td></td>
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<tr>
<td></td>
<td>(Dolan et al. 1999)</td>
<td>Unhealthy diet</td>
<td>5</td>
<td>17</td>
<td>78</td>
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<tr>
<td></td>
<td>(Anderson et al. 2011)</td>
<td>Unhealthy diet</td>
<td>1.5</td>
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<td>Healthy diet</td>
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<td>Seriously overweight</td>
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<td>39.9</td>
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<td>Not overweight</td>
<td>56.7</td>
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<td></td>
</tr>
<tr>
<td><strong>Single parent</strong></td>
<td>(Charny et al. 1989)</td>
<td>Single</td>
<td>4.0/4.5(^{(3)})</td>
<td>15.7/21.3</td>
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<td></td>
<td>Married</td>
<td>80.4/74.1</td>
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<td></td>
</tr>
<tr>
<td></td>
<td>(Dolan et al. 1999)</td>
<td>With children</td>
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<td>3</td>
<td>77</td>
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<td>Married</td>
<td>0</td>
<td>2</td>
<td>98</td>
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<tr>
<td></td>
<td>(Nord et al. 1995a)</td>
<td>Parents</td>
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<td>66.6</td>
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<tr>
<td></td>
<td>(Williams 1988)</td>
<td>When bringing up children(^{1})</td>
<td>32.9</td>
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</tr>
<tr>
<td></td>
<td>(Anderson et al. 2011)</td>
<td>Someone caring for children</td>
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<td></td>
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<td>Not currently a carer</td>
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<td>Married person</td>
<td>23.8</td>
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<td>Single person</td>
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<tr>
<td><strong>Disadvantaged social group</strong></td>
<td>(Mooney et al. 1995)</td>
<td>Lower socio-economic status</td>
<td>41.3</td>
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<td>Higher socio-economic status</td>
<td>2.8</td>
<td></td>
<td></td>
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<tr>
<td></td>
<td>(Dolan et al. 1999(^{5}))</td>
<td>Poor</td>
<td>10</td>
<td>0</td>
<td>90</td>
</tr>
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<td></td>
<td></td>
<td>Low education</td>
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<td>2</td>
<td>90</td>
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<td></td>
<td></td>
<td>Rich</td>
<td>0</td>
<td>23</td>
<td>77</td>
</tr>
<tr>
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<td>(Anderson et al. 2011)</td>
<td>Poor person</td>
<td>12.7</td>
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<td>84.9</td>
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<td>Wealthy person</td>
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<td></td>
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<tr>
<td><strong>Australian aboriginal</strong></td>
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<td>White (UK)</td>
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<td>100</td>
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<tr>
<td>Characteristic</td>
<td>Study</td>
<td>Description</td>
<td>Priority (%)</td>
<td>Equal priority/No choice</td>
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<td>-------------</td>
<td>-------------</td>
<td>--------------</td>
<td>-------------------------</td>
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<td>Comorbidity</td>
<td>Blindness</td>
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<td>n.a.</td>
<td>n.a.</td>
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<td>Deafness</td>
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<td>n.a.</td>
<td>n.a.</td>
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<td></td>
<td>Quadriplegia</td>
<td>(Ubel et al. 2002)</td>
<td>(6)</td>
<td>n.a.</td>
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<td>Physical and sexual abuse</td>
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<td>n.a.</td>
<td>n.a.</td>
<td>n.a.</td>
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<td>Past use of Medicare</td>
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<td>n.a.</td>
<td>n.a.</td>
<td>n.a.</td>
<td></td>
</tr>
<tr>
<td>Medical error</td>
<td>n.a.</td>
<td>n.a.</td>
<td>n.a.</td>
<td>n.a.</td>
<td></td>
</tr>
</tbody>
</table>

Notes:

1. Indicates the percentage of subjects who chose this as the stage of life at which they considered it most important to keep people well.

2. Indicates the percentage of subjects who chose this person as one of four to receive a liver transplant. This study surveyed the general public, family doctors and gastroenterologists. Only the results from the general public are given here.

3. Indicates the percentage of subjects (among the general public) who chose this person as the least deserving of a liver transplant.

4. Two questions on this characteristic were asked in this study.

5. Results for this study are after discussion and deliberation.

6. Ubel et al. (2002) employed a person trade-off technique to find a very wide range of values for the number of quadriplegics’ lives that should be saved to be of equal value to saving the life of a ‘normal’ person. Numbers depended upon the order of presentation of questions and varied form 1.0 to 7.9.
Appendix 2 The Questionnaire RS-WTP-Attributes II

Dear Respondent,

We are seeking your help with a Monash University Research Project which concerns Medicare and how the public believes it should allocate medical services.

It is important for integrity of this research that you read the questions and try to imagine yourself in the health state we will describe.

We want you to think carefully about how you believe the health system should treat different Australians.

Results will be reported to the relevant government agencies, therefore it is essential that your answers are well considered.

Thank you in advance for your assistance.

Professor Jeff Richardson
Foundation Director

Dr. John McKie
Senior Research Fellow

Angelo Iezzi
Program Manager

There are 67 questions in this survey

00 Quota

1 subsid
Please write your answer here:

2 Are you: *
Please choose only one of the following:

○ Male
○ Female

3 Which age group do you belong to? *
Please choose only one of the following:

○ 18-24
○ 25-34
○ 35-44
○ 45-54
○ 55-64
○ 65+

4 What is your highest level of education (even if not finished)?*
Please choose only one of the following:

○ High school
○ Diploma or certificate or trade or TAFE
○ University
Imagine yourself in the following health state ...

This person is
- constantly depressed
- dissatisfied with life, personal and social relationships
- lacking self-confidence

In spite of this, this person is
- physically active and independent
- in no pain
- coping fully

Please write down the 3 main ways this health state would affect your life. E.g., it may spoil your social life. *

Please write your answer(s) here:
1 ………………………………………………………………………………………………………………….
2 ………………………………………………………………………………………………………………….
3 ………………………………………………………………………………………………………………….

On the scale below, move the slider to indicate how good or bad this health state is to you. USE THE FULL SCALE, e.g., if you think that the state is as bad as death then score it as 0. The number you choose should indicate how strongly you feel about the health state. *

Please write your answer(s) here:
|0 = Death|100 = Excellent Health| ……………………………………………………………………………….

What % of your yearly (after-tax) take-home pay would you be willing to pay to avoid being in this state and to be in the best possible health state? *

Please write your answer here: ……………………………………………………………………………….

---

8 Introduction

Suppose you are a public representative on a government committee which directs Medicare.

You must decide how to divide a budget of $40,000 between services, 1 and 2. The benefit of the services will last for one year.

The amount of money given to each service should be based upon your view of the benefit of the service NOT THE COST (which is another issue).
The amount of money given to each service should be based upon your view

Each question will ask:
'Taking everything you believe to be important into account, divide the money available between service 1 and service 2, so that the amounts of money indicate your view of how Medicare should value the services.

The benefit from each service lasts for one year. The services may be given again, but require new funding.

Test2
9 Service 1 saves a life for 1 year but leaves a person in poor health (Health State X)
Service 2 cures a person in Health State X for 1 year

10

* Total of all entries must equal 40000

Please write your answer(s) here:
Dollars allocated to Service 1 received by a person aged 30 .................................
Dollars allocated to Service 2 received by a person aged 30 .................................

Test3
11

* Total of all entries must equal 40000

Please write your answer(s) here:
Dollars allocated to Service 1 received by a person aged 30 .................................
Dollars allocated to Service 2 received by a person aged 30 .................................
Rank

Please indicate the relative importance of each of the service 2 recipients from Low Priority to High Priority. Remember, service 2 improves quality of life.

12 Physical and sexual abuse in childhood has caused the person to require service 2.
Arguments surrounding prioritisation: Unfair treatment has caused their problems. It is fair to treat them more generously as compensation.
People who are in the health state are suffering no matter what the reason. The reason should not count. *
Please choose the appropriate response for each item:

**Low** priority  Equal priority  **High** Priority

13 Being Aboriginal or Torres Strait Islander has caused the person to require service 2.
Arguments surrounding prioritisation:
These Australians live 17 years less and in worse health than other Australians. Australia has a debt to them.
Each individual should be treated equally. *
Please choose the appropriate response for each item:

**Low** priority  Equal priority  **High** Priority

14 Belonging to a disadvantaged social group has caused the person to require service 2.
Arguments surrounding prioritisation:
Disadvantaged groups should receive special compensation. They live 10 years less than other Australians and their social and economic background has caused their problems.
Each individual should be treated equally.
Please choose the appropriate response for each item:

**Low** priority  Equal priority  **High** Priority

15 People who require service 2 have already received a very large number of services from Medicare.
Arguments surrounding prioritisation:
These people have suffered more in the past from poor health and should receive more care.
The past should be irrelevant.
These people have already received a "fair share" of help from Medicare. They should get a smaller share now. *
Please choose the appropriate response for each item:

**Low** priority  Equal priority  **High** Priority

16 People in the health state who would receive service 2 are single parents with two young children.
Arguments surrounding prioritisation:
Children need a parent to care for them. Single parents should receive priority.
Medicare should not judge people’s worth. *
Please choose the appropriate response for each item:
17. A mistake made in hospital has caused the person to require service 2.
Arguments surrounding prioritisation:
It's unfair that people should suffer because of hospital mistakes. These people should be compensated by Medicare.
Mistakes are unavoidable, other people need treatment just as much. *
Please choose the appropriate response for each item:

<table>
<thead>
<tr>
<th>Low priority</th>
<th>Equal priority</th>
<th>High Priority</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

18. People who would receive Service 2 will return to the workplace.
Arguments surrounding prioritisation:
Re-entering the workforce means the person will pay taxes and not need social support.
Medicare should not take account of a person's circumstances, including their economic position. *
Please choose the appropriate response for each item:

<table>
<thead>
<tr>
<th>Low priority</th>
<th>Equal priority</th>
<th>High Priority</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

19. Heavy, ongoing alcohol consumption has caused the person to require service 2.
Arguments surrounding prioritisation:
Medicare should not judge the reasons for a person's illness.
People should be responsible for their own actions and should not receive the same priority as others. *
Please choose the appropriate response for each item:

<table>
<thead>
<tr>
<th>Low priority</th>
<th>Equal priority</th>
<th>High Priority</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

20. Heavy, ongoing cigarette smoking has caused the person to require service 2.
Arguments surrounding prioritisation:
Medicare should not judge the reasons for a person's illness.
People should be responsible for their own actions and should not receive the same priority as others. *
Please choose the appropriate response for each item:

<table>
<thead>
<tr>
<th>Low priority</th>
<th>Equal priority</th>
<th>High Priority</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

21. Ongoing over-eating has caused the person to require service 2.
Arguments surrounding prioritisation:
Medicare should not judge the reasons for a person's illness.
People should be responsible for their own actions and should not receive the same priority as others. *
Please choose the appropriate response for each item:
C_intro
22 In the next 10 questions the Health State shown does not change
Service 1 is live-saving and is always for a 30 year old
Service 2 improves quality of life and is for a 30 year old belonging to a different group each time
30_30
23

* Total of all entries must equal 40000
Please write your answer(s) here:
Dollars allocated to Service 1 .................................................................
Dollars allocated to Service 2 .................................................................

S&P_abuse
24

People receiving Service 2 have been physically and sexually abused in childhood and this has caused their problems.

Possible arguments
People who are in the health state have been unfairly treated and this has caused the problems they suffer. It is fair to treat them more generously as compensation.
People who are in the health state are suffering no matter what the reason. The reason should not count.
Your previous answer was:

30 year old, Service 1 = $

30 year old, Service 2 = $

* Total of all entries must equal 40000

Please write your answer(s) here:

Dollars allocated to Service 1 ..............................................................

Dollars allocated to Service 2 ..............................................................

ATSI

26

**Question 5: Aboriginal and Torres Strait Islanders**

People receiving Service 2 are Aboriginal and Torres Strait Islanders who die, on average, 17 years younger and have higher rates of illness than other Australians – this has caused their problems.

Possible arguments

It is unfair that Indigenous Australians should know they will probably live less and in worse health than others. Australia has a debt to pay to them.

Everyone should be treated equally by Medicare. All that should count is a person’s present health state and the benefit they will get from treatment.
| 30 year old, Service 1 = $ | 30 year old, Service 2 = $ |

* Total of all entries must equal 40000
Please write your answer(s) here:
Dollars allocated to Service 1 ……………………………………………………………………………
Dollars allocated to Service 2 ……………………………………………………………………………

Disad
28

**Question 6: Disadvantaged Social Group**

People receiving service 2 are from a group who die, on average, 10 years earlier than other people because of their social and economic background and this has caused their problems.

Possible arguments
Australia's health policy should, broadly speaking, favour disadvantaged groups and therefore the individuals from those groups should receive special consideration.

Medicare should consider individuals, not because they come from a particular group. Each individual should be treated equally.
Your previous answers were:

<table>
<thead>
<tr>
<th>Description</th>
<th>Service 1</th>
<th>Service 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>30 year old, Service 1</td>
<td>$</td>
<td>$</td>
</tr>
<tr>
<td>30 year old, Service 2</td>
<td>$</td>
<td>$</td>
</tr>
<tr>
<td>Physically/sexually abused, Service 2</td>
<td>$</td>
<td>$</td>
</tr>
<tr>
<td>Aboriginal/Torres Strait Islander, Service 2</td>
<td>$</td>
<td>$</td>
</tr>
</tbody>
</table>

* Total of all entries must equal 40000

Please write your answer(s) here:

Dollars allocated to Service 1 ...........................................................................................................
Dollars allocated to Service 2 ...........................................................................................................

PastMedi

30

**Question 7: Past Use of Medicare**

People receiving service 2 have had an exceptionally large number of services from Medicare in the past.

Possible arguments
These people have suffered more in the past from poor health. They should receive more care like any other disadvantaged person.

The past should be irrelevant.

People receiving service 2 have already received a ‘fair share’ of help from Medicare. They should be prepared to accept a smaller share now.
Your previous answers were:

<table>
<thead>
<tr>
<th>30 year old, Service 1 = $</th>
<th>30 year old, Service 2 = $</th>
</tr>
</thead>
<tbody>
<tr>
<td>30 year old, Service 1 = $</td>
<td>Physically/sexually abused, Service 2 = $</td>
</tr>
<tr>
<td>30 year old, Service 1 = $</td>
<td>Aboriginal/Torres Strait Islander, Service 2 = $</td>
</tr>
<tr>
<td>30 year old, Service 1 = $</td>
<td>Disadvantaged group, Service 2 = $</td>
</tr>
</tbody>
</table>

* Total of all entries must equal 40000

Please write your answer(s) here:
Dollars allocated to Service 1 ..........................................................
Dollars allocated to Service 2 ..........................................................

Sing P

**Question 8: Single Parents**

People receiving service 2 are single parents with two young children.

Possible arguments
Children need a parent who can give them affection and care. Single parents should, therefore, receive priority.

Medicare should not judge people’s worth.
Your previous answers were:

<table>
<thead>
<tr>
<th>Scenario</th>
<th>Service 1 Allocation</th>
<th>Service 2 Allocation</th>
</tr>
</thead>
<tbody>
<tr>
<td>30 year old, Service 1 = $</td>
<td>30 year old, Service 2 = $</td>
<td></td>
</tr>
<tr>
<td>30 year old, Service 1 = $</td>
<td>Physically/sexually abused, Service 2 = $</td>
<td></td>
</tr>
<tr>
<td>30 year old, Service 1 = $</td>
<td>Aboriginal/Torres Strait Islander, Service 2 = $</td>
<td></td>
</tr>
<tr>
<td>30 year old, Service 1 = $</td>
<td>Disadvantaged group, Service 2 = $</td>
<td></td>
</tr>
<tr>
<td>30 year old, Service 1 = $</td>
<td>Lots of Past Medicare, Service 2 = $</td>
<td></td>
</tr>
</tbody>
</table>

* Total of all entries must equal 40000

Please write your answer(s) here:

Dollars allocated to Service 1 .................................................................
Dollars allocated to Service 2 .................................................................

MedErr

34

**Question 9: Medical Error**

People receiving service 2 are in Health State A because of a mistake made while they were in hospital and this has caused their problems.

Possible arguments

Medicare should fully compensate people for its own mistakes. It is not fair that people should suffer because of other peoples’ mistakes.

Mistakes are an unavoidable part of life in or out of a hospital. Other people in this health state need treatment just as much.
Your previous answers were:

<table>
<thead>
<tr>
<th>Category</th>
<th>Service 1</th>
<th>Service 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>30 year old</td>
<td>$</td>
<td>$</td>
</tr>
<tr>
<td>Physically/sexually abused</td>
<td>$</td>
<td>$</td>
</tr>
<tr>
<td>Aboriginal/Torres Strait Islander</td>
<td>$</td>
<td>$</td>
</tr>
<tr>
<td>Disadvantaged group</td>
<td>$</td>
<td>$</td>
</tr>
<tr>
<td>Lots of Past Medicare</td>
<td>$</td>
<td>$</td>
</tr>
<tr>
<td>Single parents</td>
<td>$</td>
<td>$</td>
</tr>
</tbody>
</table>

* Total of all entries must equal 40000

Please write your answer(s) here:

Dollars allocated to Service 1 .................................................................
Dollars allocated to Service 2 .................................................................

**ProdWork**

36

---

**Question 10: Productive worker**

*People receiving service 2 will return to the workforce.*

**Possible arguments**

Re-entering the workforce means the person will pay taxes and not need social support. This reduces the tax burden on others.

Medicare should not take account of a person’s circumstances, including their economic position.
Your previous answers were:

<table>
<thead>
<tr>
<th>Description</th>
<th>Service 1</th>
<th>Service 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>30 year old, Service 1 = $</td>
<td>30 year old, Service 2 = $</td>
<td></td>
</tr>
<tr>
<td>30 year old, Service 1 = $</td>
<td>Physically/sexually abused, Service 2 = $</td>
<td></td>
</tr>
<tr>
<td>30 year old, Service 1 = $</td>
<td>Aboriginal/Torres Strait Islander, Service 2 = $</td>
<td></td>
</tr>
<tr>
<td>30 year old, Service 1 = $</td>
<td>Disadvantaged group, Service 2 = $</td>
<td></td>
</tr>
<tr>
<td>30 year old, Service 1 = $</td>
<td>Lots of Past Medicare, Service 2 = $</td>
<td></td>
</tr>
<tr>
<td>30 year old, Service 1 = $</td>
<td>Single parents, Service 2 = $</td>
<td></td>
</tr>
<tr>
<td>30 year old, Service 1 = $</td>
<td>Hospital mistake group, Service 2 = $</td>
<td></td>
</tr>
</tbody>
</table>

* Total of all entries must equal 40000

Please write your answer(s) here:

Dollars allocated to Service 1 ..........................
Dollars allocated to Service 2 ..........................

ALc
Your previous answers were:

<table>
<thead>
<tr>
<th>Scenario</th>
<th>Service 1</th>
<th>Service 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>30 year old, Service 1 = $</td>
<td>30 year old, Service 2 = $</td>
<td></td>
</tr>
<tr>
<td>Physically/sexually abused, Service 2 = $</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Aboriginal/Torres Strait Islander, Service 2 = $</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Disadvantaged group, Service 2 = $</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lots of Past Medicare, Service 2 = $</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Single parents, Service 2 = $</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hospital mistake group, Service 2 = $</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Productive Workers, Service 2 = $</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* Total of all entries must equal 4000

Please write your answer(s) here:

Dollars allocated to Service 1 ……………………………………………………………………………
Dollars allocated to Service 2 ……… ……………………………………………………………………

---

**Question 12: Self Harm: Cigarettes**

People receiving service 2 are in need of the service because of the number of cigarettes they continue to smoke.

Possible arguments:

People should be responsible for their own actions. Those who inflict self-harm should not receive the same priority as others.

We do not know all the circumstances of a person’s life. Medicare should not judge the reasons for a person’s illness.
Your previous answers were:

<table>
<thead>
<tr>
<th>Group</th>
<th>Service 1</th>
<th>Service 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>30 year old, Service 1 = $</td>
<td>30 year old, Service 2 = $</td>
<td></td>
</tr>
<tr>
<td>30 year old, Service 2 = $</td>
<td>Physically/sexually abused, Service 2 = $</td>
<td></td>
</tr>
<tr>
<td>30 year old, Service 1 = $</td>
<td>Aboriginal/Torres Strait Islander, Service 2 = $</td>
<td></td>
</tr>
<tr>
<td>30 year old, Service 1 = $</td>
<td>Disadvantaged group, Service 2 = $</td>
<td></td>
</tr>
<tr>
<td>30 year old, Service 1 = $</td>
<td>Lots of Past Medicare, Service 2 = $</td>
<td></td>
</tr>
<tr>
<td>30 year old, Service 1 = $</td>
<td>Single parents, Service 2 = $</td>
<td></td>
</tr>
<tr>
<td>30 year old, Service 1 = $</td>
<td>Hospital mistake group, Service 2 = $</td>
<td></td>
</tr>
<tr>
<td>30 year old, Service 1 = $</td>
<td>Productive Workers, Service 2 = $</td>
<td></td>
</tr>
<tr>
<td>30 year old, Service 1 = $</td>
<td>Heavy drinkers, Service 2 = $</td>
<td></td>
</tr>
</tbody>
</table>

* Total of all entries must equal 40000

Please write your answer(s) here:

Dollars allocated to Service 1 ..........................................................

Dollars allocated to Service 2 ..........................................................

**Obese**

42

**Question 13: Self Harm: Eating**

People receiving Service 2 are in need of the service because they are obese from the amount they eat.

Possible arguments:

People should be responsible for their own actions. Those who inflict self-harm should not receive the same priority as others.

We do not know all the circumstances of a person’s life. Medicare should not judge the reasons for a person’s illness.
Your previous answers were:

<table>
<thead>
<tr>
<th>30 year old, Service 1 = $</th>
<th>30 year old, Service 2 = $</th>
</tr>
</thead>
<tbody>
<tr>
<td>30 year old, Service 1 = $</td>
<td>Physically/sexually abused, Service 2 = $</td>
</tr>
<tr>
<td>30 year old, Service 1 = $</td>
<td>Aboriginal/Torres Strait Islander, Service 2 = $</td>
</tr>
<tr>
<td>30 year old, Service 1 = $</td>
<td>Disadvantaged group, Service 2 = $</td>
</tr>
<tr>
<td>30 year old, Service 1 = $</td>
<td>Lots of Past Medicare, Service 2 = $</td>
</tr>
<tr>
<td>30 year old, Service 1 = $</td>
<td>Single parents, Service 2 = $</td>
</tr>
<tr>
<td>30 year old, Service 1 = $</td>
<td>Hospital mistake group, Service 2 = $</td>
</tr>
<tr>
<td>30 year old, Service 1 = $</td>
<td>Productive Workers, Service 2 = $</td>
</tr>
<tr>
<td>30 year old, Service 1 = $</td>
<td>Heavy drinkers, Service 2 = $</td>
</tr>
<tr>
<td>30 year old, Service 1 = $</td>
<td>Heavy smokers, Service 2 = $</td>
</tr>
</tbody>
</table>

* Total of all entries must equal 40000

Please write your answer(s) here:

Dollars allocated to Service 1 .............................................................

Dollars allocated to Service 2 .............................................................

Intro2

Service 1 is now for people with a permanent condition

while the Service 2 person does not change

Blind
Your previous answers were:

30 year old, Service 1 = $          30 year old, Service 2 = $

*  

* Total of all entries must equal 40000

Please write your answer(s) here:

Dollars allocated to Service 1  ...........................................................................................................

Dollars allocated to Service 2  ...........................................................................................................

Deaf

47
Your previous answers were:

<table>
<thead>
<tr>
<th>30 year old, Service 1 = $</th>
<th>30 year old, Service 2 = $</th>
</tr>
</thead>
<tbody>
<tr>
<td>30 year old, Service 1 = $</td>
<td>30 year old, Service 2 = $</td>
</tr>
</tbody>
</table>

* Total of all entries must equal 40000

Please write your answer(s) here:

Dollars allocated to Service 1 ……………………………………………………………………………
Dollars allocated to Service 2 ………………………………………………………………………….
Quad
49

**Question 16: Quadriplegia**

Service 1 is for someone with quadriplegia. They cannot move any limb or feel anything in their arms and legs. People receiving service 2 do not have quadriplegia.

**Possible arguments**

1. People with quadriplegia should have higher priority, special treatment: They are already disadvantaged. Making them a higher priority for other health services would be fair as it would compensate for their quadriplegia.
2. Health care should be the same for everyone.
3. Service 1 provides less health benefit as people will remain paralysed. Therefore it should have lower priority.

---

50

Your previous answers were:

<table>
<thead>
<tr>
<th>30 year old, Service 1 =</th>
<th>30 year old, Service 2 =</th>
</tr>
</thead>
<tbody>
<tr>
<td>$</td>
<td>$</td>
</tr>
<tr>
<td>$</td>
<td>$</td>
</tr>
<tr>
<td>$</td>
<td>$</td>
</tr>
</tbody>
</table>

* Total of all entries must equal 40000

Please write your answer(s) here:

Dollars allocated to Service 1 .................................................................
Dollars allocated to Service 2 .................................................................
Demographics

51 Are you: *
Please choose only one of the following:
- Male
- Female

52 Your year of birth? *
Please write your answer here: ..........................................................................................................................

53 Country of birth? *
Please choose only one of the following:
- Australia
- Other

54 What is your postcode?: *
Please write your answer here: ..........................................................................................................................

55 How well do you understand/speak English? *
Please choose only one of the following:
- Very well
- Well
- Not well
- Not at all

Demographics 2

56 Are you married or living with a partner? *
Please choose only one of the following:
- Yes
- No

57 Currently, what is the highest level of education you have reached (even if not completed)? *
Please choose only one of the following:
- High school
- TAFE/Diploma/Trade
- University - Bachelor degree
- University - Postgraduate Degree, Graduate Diploma

58 What year level did you reach? *
Only answer this question if the following conditions are met:
° Answer was `1` 'High school' at question '57 [D7]' (Currently, what is the highest level of education you have reached (even if not completed)?)
Please choose only one of the following:
- equivalent to Yr 7 in Australia
- equivalent to Yr 8 in Australia
- equivalent to Yr 9 in Australia
- equivalent to Yr 10 in Australia
- equivalent to Yr 11 in Australia
- equivalent to Yr 12 in Australia

59 What TAFE/Diploma/Trade qualification do you have? *
Only answer this question if the following conditions are met:
Answer was `2` 'TAFE/Diploma/Trade' at question '57 [D7]' (Currently, what is the highest level of education you have reached (even if not completed)?)
Please write your answer here: ..........................................................................................................................

60 Name of course? *
Only answer this question if the following conditions are met:
Answer was ‘4’ ‘University - Postgraduate Degree, Graduate Diploma’ or ‘University - Bachelor degree’ at question ‘57 [D7]’ (Currently, what is the highest level of education you have reached (even if not completed)?)

Please write your answer here: ……………………………………………………………………………………………..

61 Which best describes your current work situation? *

Please choose only one of the following:
- Full time
- Part-time or casual
- Unemployed, seeking work
- Not in the labour force / retired / pensioner
- Student
- Other

62 Choose the option that corresponds with your pre-tax or gross household income (include all sources).

Please choose only one of the following:
- below $350pw (less than $18,200pa)
- $350-649pw ($18,200 - 33,748pa)
- $650-999pw ($33,800 - 51,948pa)
- $1000-1399pw ($52,000 - 72,748)
- $1400-1999pw ($72,800 - 103,948pa)
- $2000-2999pw ($104,000 - 155,948pa)
- above $3000pw (above $156,000pa)

63 Are you the main wage-earner in your household? *

Please choose only one of the following:
- Yes
- No

64 How would you rate your current level of health, for someone of your age? *

Please choose only one of the following:
- Excellent
- Very good
- Good
- Fair
- Poor
- Very poor

65 What is your height in centimetres?

If you don't know your height in cms, please use the converter below.

Please write your answer here: ……………………………………………………………………………………………..

66 What is your weight in kilograms?

If you don't know your weight in kgs, use the converter.

Please write your answer here: ……………………………………………………………………………………………..

67 Thank you for completing our survey, please press submit to finalise your responses.

Thank you for your time your responses have been saved.

11.06.2010 – 12:09
Submit your survey.
Thank you for completing this survey.
References


ABS. 2015, 'Estimated Resident Population (ERP) by Region, Age & Sex 2001-2013', in Book Estimated Resident Population (ERP) by Region, Age & Sex 2001-2013, eds Editor, City.


