17. Health

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The beginning point of this analysis is the established fact that Indigenous health outcomes are recognised to be very poor both relative to those for the non-Indigenous population and in absolute terms—see, for example, Gray, Hunter & Taylor (2004) and Booth & Carroll (2005).

Life expectancies for Indigenous Australians are some 20 years lower [1] than for non-Indigenous Australians, an unacceptable statistic. Equally unacceptable is the fact that this life expectancy appears not to have risen in recent times. Of particular interest is to ascertain whether there have been significant improvements in Indigenous health outcomes; not only in an *absolute* sense but also *relative* to the non-Indigenous population standards.

Whatever the conclusion is about the aggregate picture for Indigenous peoples, it is also important to ascertain how balanced the picture is within the Indigenous population. For example, we can compare outcomes by factors such as location (defined by the remote/non-remote distinction in this context); geographic regions (States and Territories); age; gender; education; and labour force status. Finally, it is also important to ascertain what progress has been made between 1994 and 2002; that is, between the two NATSIS surveys.

A central question must be: how much of the health gap can be explained by socioeconomic factors, and how much can be explained by different levels of access to health services? Further, where there is access to health services, what is the take-up rate? These are very important questions. Depending on the answers, the policy responses should be very different. If socioeconomic factors can explain the entire gap, then policies must be directed towards improving Indigenous socioeconomic outcomes. However, the policy response should be quite different if it is a problem of availability and access to health services.

There is another caveat to be made upfront. That is that the coverage of 2002 NATSISS was limited to people living in private dwellings. While this may not be a major limitation for many aspects of the 2002 NATSISS analysis, I would argue that in the context of health, it is potentially a significant limitation. As the 2002 NATSISS did not canvass individuals who were in institutions, it is potentially overstating the general health levels in the Indigenous population. I'm thinking in particular of hospitals, nursing homes, hostels and prisons. By definition, people in hospitals are on average going to be suffering below average

[1] Over the period 1999–2001, the life expectancy at birth for an Indigenous male was 59 years, and for an Indigenous female, 64 years. Comparable life expectancies in the total Australian population were 77 years for males and 82 years for females. All these figures are from ABS (2004c).

health. Although many people in hospitals are there for very short spells and may be experiencing very temporary health setbacks, many are hospitalised for treatment for ongoing health conditions. A similar pattern occurs in relation to nursing homes and hostels, where it is likely that the health status of residents is lower than the average among residents of private dwellings. It is also well known that prison inmates are on average less healthy than those outside prisons. Given the disproportionately high incidence of incarceration for the Indigenous population, this is expected to bias the health measure upwards. According to ABS (2004e), the Indigenous population is over-represented in prisons by a factor of 10 to 1 and on the night of 30 June 2004, 20 per cent of all prisoners were Indigenous. The ABS (2005c: 3) estimates that at the time of the 2002 NATSISS, there were 19 320 Indigenous Australians living in non-private dwellings. This is equivalent to 7 per cent of the estimated total Indigenous population aged 15 and over of 282 200.

A survey such as the 2002 NATSISS cannot be expected to answer all the big questions about Indigenous health. For example, it is not a suitable instrument for assessing factors such as life expectancies which require externally measured, scientific data. It is not an appropriate instrument for collecting any epidemiological or public health information which requires the arms-length, objective collection of raw data.

The data

What information was asked?

The focus of the questions was on the respondent's self-perception of the state of their general health, and the disabilities they experienced. This was gathered via a *single* question seeking the person's own evaluation on a five-point scale: excellent, very good, good, fair or poor.

Considerably more information was gathered on disabilities and long-term health conditions. For the purposes of the 2002 NATSISS, disabilities were defined as 'conditions which you may have, that have lasted, or are likely to last, for six months'.

Participants were asked if they had any such conditions. For those who indicated they did have such a condition(s), a sequence of supplementary questions followed. These questions were designed to elicit considerations as to whether the conditions:

- meant they were restricted in any way in everyday activities as a consequence of the condition(s)
- necessitated any help or supervision with a range of tasks
- resulted in any difficulties with some specific tasks, and
- led to any difficulties with undertaking education or employment.

Most of the information obtained in the 2002 NATSISS was common to both sub-surveys,[2] but there were also several specific questions asked only in one sub-survey. The remote area questionnaire included some questions about medications and visits to clinics/doctors—information not requested in the non-remote area questionnaire. Conversely, included in the non-remote area questionnaire but not the remote area one was reference to some specific conditions such as arthritis, asthma, heart disease, Alzheimer's disease and dementia.

Although much of the information obtained in the 2002 NATSISS was common to both sub-surveys, there were significant methodological differences in the way the information was obtained. These methodological differences are highlighted in Biddle and Hunter (in this volume). Not only were the questions asked differently between the remote and non-remote areas, there were also differences in the amount of detail sought for some of the health-related questions; see especially the explanatory notes section in ABS (2004a). The issues specific to health will be addressed below.

What information should have been asked

It is unfortunate that several other questions were not included in the 2002 NATSISS. In particular, it would have been very useful to be able to assess whether people's perceptions of their individual general health level had changed over time. This would have enabled a better feel for whether individuals see themselves as getting healthier, getting less healthy, or otherwise.

It would also be useful to have data on *access* to health services, and the rate of *use* of such services (where available).[3]

However, against this is the reliance on self-perception. I see a problem with using questions that are loaded with words such as 'may', 'likely to', and so on. The responses gained are very subjective, and subject to considerable variation in people's interpretation of both their own health and exactly what the question is seeking. Further, it relies heavily on the person's willingness to answer openly.[4]

Finally, I believe that the questions are too general in nature. It would be better to have included some questions which sought to gauge the depth of the

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[2] By this I mean the distinction between the remote and non-remote sub-surveys. See the papers by Webster, Roger & Black, and Biddle & Hunter in this volume for further discussion of this difference in the two sub-surveys. Although the ABS refers to the CA and NCA questionnaires, the questionnaires themselves are titled remote and non-remote.

[3] This is an important distinction, as there is a difference between people choosing not to use health services when they are accessible and being forced not to use them because the services are not accessible.

[4] The ABS is aware of this problem, at least in relation to disabilities and long-term health conditions, stating that 'there may be some instances of under-reporting as a consequence of respondents being unwilling to talk about a particular subject when interviewed' (ABS 2004c: 58).

problems. That is, where health problems are identified, there is no measure of depth or seriousness of the condition(s).

Of course, there will be a trade-off between the number of health questions and the overall length of the questionnaire, but in order to collect useful information, it is necessary to have a critical mass of questions, to include questions such as those referred to here.

Issues with the way the information was collected

It is important that we are able to relate the context of the questionnaire and the survey to the information in the data. The major methodological differences in the way the data were asked between the two sub-surveys raises serious questions about the comparability of the responses. In addition, the coverage of some questions and the amount of detail elicited in the two sub-surveys is of concern for analysts.

A problem I see is the over-reliance on self-perception of health status. Sibthorpe et al. (2001) and Crossley and Kennedy (2002) have both addressed this issue in relation to earlier surveys on Indigenous health. Crossley and Kennedy analysed data from the 1995 National Health Survey. That survey asked some respondents to categorise their own health status twice. A disturbing 28 per cent of people gave different responses to the two questions. Although most of these were only one category away from their previous answer, 3 per cent of the total sample gave answers more than one category different. This implies that the robustness of the answers is of some concern, and the sequencing of questions is very important.

Sibthorpe et al. (2001) have suggested that there are important differences in the link between self-perception of health and more objective measures (of health), especially for people living in very remote areas and/or for those for whom English is not their first language. Booth and Carroll (2005) also considered this aspect of reliance on self-perception measures but concluded that it probably is not a major concern.

Nevertheless, we do need to be aware of this issue and how it may impact on interpretation of the results.

A second issue with the data relates to significant differences between the questions asked, and the way they were asked, as there were major differences between the two sub-samples. [5] For example, in the remote area questionnaire, there were fewer questions asked. Unlike their non-remote counterparts, respondents in remote areas were not asked for information about factors such as disfigurements, deformities, mental illness, and restrictions on physical activities/work due to conditions such as back pain and migraines. They were

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[5] This information is taken from Explanatory Notes 43–7 in ABS (2004c: 58–9).

also not asked about any psychological disabilities. However, the remote area questionnaire did include some questions on visits to medical practitioners and medications—questions not asked in the non-remote questionnaire. These questions could, in some cases, allow the ABS to identify disabilities. The importance of this is seen in the explanatory note 47 to ABS (2004c: 59), which states:[6]

> In tables showing disability data from the 2002 NATSISS only, the disability populations are limited to the set of criteria used to identify disability in remote areas. In the table comparing the disability status of Indigenous people in non-remote areas and non-Indigenous people (Table 5), more extensive criteria have been used to identify disability.

It is also important to keep in mind how the data was organised once it had been collected. The primary limitations on the usefulness of the data are generated by the format of the questions asked, rather than by the way the data were coded. Although some of the tables provided in ABS (2004c: 59), the ABS's published data output from the 2002 NATSISS, do collapse data into more aggregated categories, this should be less of a problem for those able to access the data via RADL.[7]

This is especially true in the health data, where often the 'good' category is omitted from the tables in ABS (2004b). Although it is straightforward for the analyst to reconstruct the missing data, it is simply inefficient for every researcher to have to do so.

Analysis of the 2002 NATSISS data

Examination of the existing ABS publications can give only very basic information; and even some of that is subject to interpretation. The following comments are based on analysis of the health components of selected tables in ABS (2004c: 59). It should be stressed that this analysis is based only on one source of data. There are a number of other sources of data on health. These include the general social surveys which ask some questions on health (e.g. ABS 2003b), the national health surveys (ABS 2002b), and publications from the ABS and Australian Institute of Health and Welfare (e.g. ABS/AIHW 2005).

Where applicable, the comparison also includes corresponding information from either the 2002 GSS or the 1994 NATSIS. The former is used for comparing the Indigenous figures with those of the non-Indigenous population, and the latter is used for comparisons of Indigenous figures at the two points in time (1994

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[6] The table referred to in this quote, table 5, is in ABS (2005b). It is not Table 5 of this paper.
[7] RADL is an ABS service which allows web-based analysis in much greater detail than is possible with published data. It permits analysis based on individual-level data, subject to a number of restrictions which protect the confidentiality of NATSISS respondents. This enables researchers to structure their analysis to very specific issues.

and 2002). In the comparisons with other data sets, some compromises are necessary. For example, the 2002 GSS had a slightly more restricted age coverage (18+ years of age) than the 2002 NATSISS and also did not survey in remote areas. Also, 1994 NATSIS did not ask questions on disabilities.

Throughout the following discussion, two main indicators of health are used: firstly, the distribution of the responses to the self-perception of health question; and secondly, the overall indication of the incidence of disabilities (as defined above). Each table has these figures for the target group, and in each table is an indication of which statistics are significantly different from others. The standard of statistical significance is at the 5 per cent level. Occasional reference is made to 'weak' statistical significance—this is used to indicate where significance is at the 10 per cent level but not the 5 per cent level.

The analysis discussed here can only identify linkages between the variables. It does not identify the direction of causality of the linkage. That is, when two factors are connected, it is often important to know which factor is causing the other factor. For example, when we see a link between poor health and unemployment; is the unemployment leading to poor health or is the poor health meaning that the person cannot work? This issue, of lack of indication of the direction of causality, is common to all the tables presented here. For a complete picture, it is important to be able to determine this direction of causality, especially if we are to make policy implications, but that analysis is beyond the scope of this chapter. For further discussion of the general issue of causality, see Kawachi et al. (1999: xi–xxxiv).

Summary health indicators, Indigenous Australia, 2002

The broad aggregate comparisons within the Indigenous population are shown in Table 17.1. That table shows that at the aggregate levels of remote versus non-remote, and Aboriginal versus Torres Strait Islander, there are virtually no discernible differences. The only statistically significant difference is between remote and non-remote, and even then only for the 'fair/poor' categories. Although Table 17.1 also appears to show a real difference in the 'good' category as well, that difference is only weakly significant. More will be made of this implication later.

This overall 'sameness' of outcomes suggest that further analysis is needed at a less aggregated level. Throughout this analysis, no further distinction is made between Aborigines and Torres Strait Islanders, as there are no statistically significant differences between the two populations in any of these health categories.

The first two rows of Table 17.1 do not contain information on the breakdown between excellent and very good health categories separately for Aborigines and Torres Strait Islanders, as this was not available in ABS (2004c). In the

remainder of the tables, these two categories are re-collapsed into the one category 'excellent/very good'. This has been done as there are no discernible variations in the composition of these two categories between remote and non-remote areas.

Table 17.1. Summary health indicators by remoteness and Indigenous status[a]

	Remote	Non-remote	All Indigenous	Aboriginal	Torres Strait Islander
	%	%	%	%	%
Self-assessed health status					
Excellent	16.9	18.0	17.7	n/a	n/a
Very good	27.3	26.0	26.4	n/a n/a	
Excellent/very good	44.2	44.0	44.1	44.1	44.9
Good	35.1	31.4	32.4	32.4	32.3
Fair/poor	20.0	24.5	23.3	23.4	22.8
Has a disability or long-term health condition	35.4	36.9	36.5	36.3	34.8

a. There is a significant difference between the remote and non-remote data for people with 'fair/poor' health status. The difference between the remote and non-remote data for people with 'good' health status is weakly significant.
Source: ABS (2004c: Tables 1 & 13)

Selected disability characteristics by remoteness, Indigenous Australia, 2002

The second comparison looks at the types of disabilities reported in the survey. This is shown in Table 17.2, which presents the disability component disaggregated into a list covering:

- those without a disability and/or long-term condition
- those with a disability or long-term condition, and
- for those with a disability, some broad categories of the type of disability/condition.

This information shows that there are no significant differences between the remote figures and the non-remote figures for any type of disability except for the 'intellectual' option. Even there, the figures, although statistically significantly different from one another, are very low at 7.7 per cent (non-remote) and 4.9 per cent (remote). Consequently, in the latter tables, only the aggregate level of 'disability or long-term health condition' is used.

It should also be remembered that there were significant differences in the methods used to collect the data; see discussion in Biddle and Hunter (in this volume).

Table 17.2. Selected disability characteristics by remoteness

	Remote	Non-remote	Total
	%	%	%
Disability status			
Has a disability or long-term health condition			
Has profound core activity restriction	4.0	2.9	3.2
Has severe core activity restriction	4.9	4.4	4.5
Disability/restriction not defined	26.5	29.6	28.7
Total with a disability or long-term health condition	35.4	36.9	36.5
Has no disability or long-term health condition	64.6	63.1	63.5
Disability type			
Sight, hearing, speech	14.2	13.5	13.7
Physical	24.0	23.4	23.6
Intellectual [a]	4.9	7.7	7.0
Disability type not specified	16.7	16.1	16.3
Total with a disability or long-term health condition	35.4	36.9	36.5

a. There is a significant difference between the remote and non-remote data for people with a declared intellectual disability.
Source: ABS (2004c: Table 13)

Health variables by quintile of weekly equivalised gross household income, Indigenous Australia, 2002

The first factor examined is income. Table 17.3 and Figure 17.1 present health status by a very broad measure of household incomes; that is, by weekly equivalised income quintiles. The numbers in Table 17.3 indicate that there is a strong, positive relationship between income and self-assessed health, at least at this level of aggregation. Figure 17.1 also shows that the incidence of disabilities/health conditions falls as household incomes rise. Of course, this table does not indicate the direction of causality; is poor health causing low incomes, or are low incomes causing poor health? It makes a big difference to the policy implications of this analysis if it is poor health that is leading to (i.e. causing) people to have low incomes, or the reverse, that is, if it is the fact that people have low incomes which causes them to have poor health.

Table 17.3. Self-assessed health variables by quintile of weekly equivalised gross household income

	Income quintiles			
	Lowest	Second	Third	Fourth and fifth
Self-assessed health status	%	%	%	%
Excellent/very good	38.0	42.8	49.2	56.7
Good	32.3	34.2	33.3	32.9
Fair/poor	29.7	23.0	16.5	12.4

Note: There is a significant difference between the first quintile and the highest two quintile groups for groups with the highest and lowest health status. There is also a weakly significant difference between the second quintile and the first quintile group for those with excellent or very good health and those with fair/poor health.
Source: ABS (2004c: Table 9)

Figure 17.1. Disabilities by quintile of household income
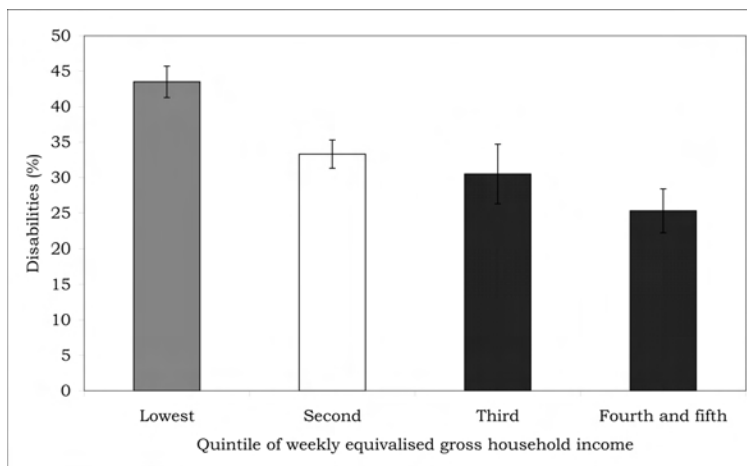
Source: ABS (2004c: Table 9).

Health indicators by age and gender, Indigenous Australia, 2002

Another important factor to consider is the age and gender profile of the population and hence of health status. These are shown in Table 17.4 and Figure 17.2. The figures show clearly that health is a declining function of age. The figures also show that there are some significant gender differences in health status.

The dispersion of health status varies with age. Whereas there is no difference in the proportion of each age group who reported their health as 'good', the proportions reporting better than 'good' declines with age and conversely the proportion reporting worse than 'good' rises with age. This is true for both males and females.

This is also true for the incidence of disabilities, where the incidence rises with age throughout the entire age range.

In addition, there are some differences between the genders within some age groups, especially at the younger end of the range. In the 15–24 age group, males' self-assessed health status is significantly better than that for females, although there is no statistical difference in the reported incidence of disabilities. Of young males, 63.9 per cent reported themselves to be in better than good health, compared with only 53.4 per cent of females. Conversely, a higher proportion of females rated themselves to be good or worse.

Table 17.4. Self-assessed health status by age and gender

	Aged 15–24	Aged 25–34	Aged 35–44	Aged 45–54	Aged 55 and over	All respondents
	%	%	%	%	%	%
Males						
Excellent/very good	63.9	53.0	41.1	33.2	15.5	47.1
Good	29.7	29.9	33.1	26.3	30.7	30.1
Fair/poor	6.2	16.6	25.7	40.1	53.7	22.5
Females						
Excellent/very good	53.4	46.9	37.7	31.1	18.0	41.3
Good	36.6	36.3	34.9	33.1	27.6	34.6
Fair/poor	9.9	16.8	27.3	35.8	54.2	24.0

Source: ABS (2004c: Table 3)

Figure 17.2. Disabilities by age and gender
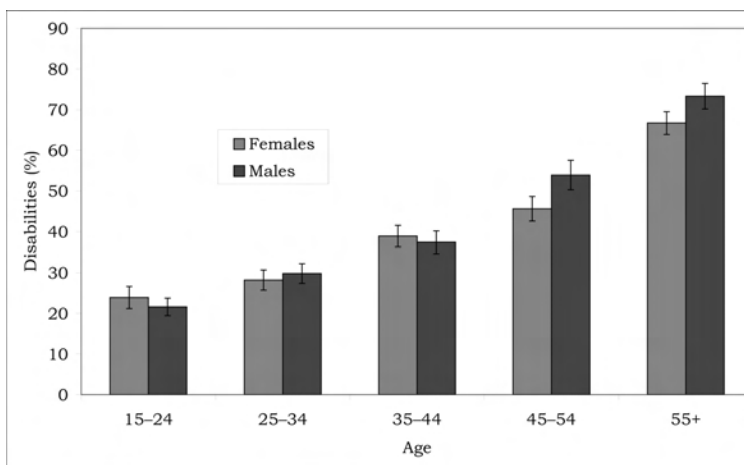
Source: ABS (2004c: Table 3).

Comparing health indicators, Indigenous and non-Indigenous Australia, 2002

The statistics in Table 17.1 above did not provide a comparison with the non-Indigenous population. This is done in Figure 17.3, which compares NATSISS figures with those from the 2002 GSS. In order to provide a meaningful comparison, it is necessary to take into account the differences in the age structure of the Indigenous and non-Indigenous populations. The NATSISS data in Figure 17.3 have been recalculated to provide this comparison. The Indigenous figures in this figure differ from those in the earlier tables because the 2002 GSS covered people aged 18 and over, whereas the 2002 NATSISS included ages 15 and over.

Figure 17.3 clearly shows two important differences. Firstly, these figures confirm that Indigenous health is still way below that for the non-Indigenous population.

The figures in the last two columns indicate that a majority (58.9%) of the non-Indigenous population enjoys 'excellent' or 'very good' health, but only one in three (35.2%) Indigenous Australians report their health thus. At the other extreme, twice as many Indigenous people report their health as 'fair' or 'poor' compared to the non-Indigenous population (32.7% and 16.1% respectively).

Secondly, when the populations are standardised for age, the difference between the remote and non-remote Indigenous populations for the 'good' category becomes statistically significant, while it is only weakly significant in Table 17.1 for the non-standardised figures.

Due to the differences in the way the disability information was collected for the two sub-surveys in the 2002 NATSISS, it is not possible to compare disabilities data from the remote sub-survey with those from the GSS. This limits any comparison with the non-Indigenous population to non-remote areas only. The incidence of disabilities is almost twice as high among the Indigenous population (at 56.6%) as it is among the non-Indigenous population (40.1%). [8]

Figure 17.3. Self-assessed health status by Indigenous status, non-remote areas
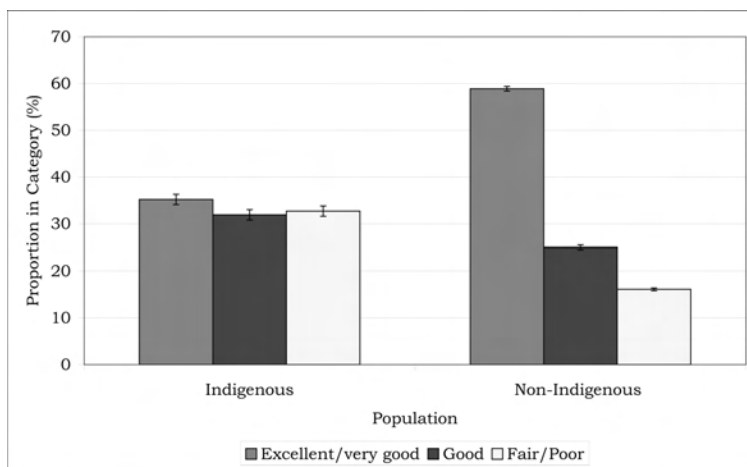
Source: ABS (2004c: Table 4). Non-Indigenous data are from the 2002 GSS.

Indigenous health, Australia, 1994 and 2002

Has Indigenous health improved between 1994 and 2002? Table 17.5 presents a comparison of these broad indicators with the corresponding figures derived from the 1994 NATSIS. This comparison is only presented for the self-assessed health status, as it is not possible to derive a similar measure for disabilities from

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[8] It seems redundant to state that this difference is very statistically significant.

the 1994 NATSIS. The figures in Table 17.6 indicate that the situation has actually worsened, at least if any credence is to be given to these figures.

Although the same proportion reported health as 'excellent' or 'very good' (45.3% and 44.1% with no statistical significance between these two figures), there was a shift from the 'good' category to the 'fair' and 'poor' categories. The good category fell from 37.1 per cent to 32.4 per cent, while the fair and poor categories rose correspondingly (17.5% to 23.3%), with all these differences being statistically significant.

Table 17.5. Indigenous health, Australia, 1994 and 2002[a]

	1994	2002
	%	%
Self-assessed health status		
Excellent/very good	45.3	44.1
Good [b]	37.1	32.4
Fair/poor [b]	17.5	23.3

a. The content of this table has been restricted to those items that are comparable between 1994 and 2002.
b. There is a significant difference between 1994 and 2002 estimates for those with good and fair or poor health.
Source: ABS (2004c: Table 6)

However, I caution against reading too much into these figures without further analysis. It is possible that these figures are hiding some improvements, and may be picking up a fallacy of composition problem.

For example, these figures could be reflecting improvements in health care that have saved lives but left the people in poor health. Alternatively, these figures could reflect a greater awareness of poor health issues over time. Further, the figures could be reflecting better sampling design and administration. Most likely, a combination of all three of these is important.

What the inter-year comparison should really be trying to ascertain is: Are individuals getting healthier over time? I'd like to know if people aged 'X' in 1994 were reporting better health positions in 2002 when they were aged 'X+8'. In any event, these figures give a very superficial picture of the changes over time. Considerably more analysis is required on this aspect.

I also recall that at the CAEPR conference held to discuss the results from the 1994 NATSIS, Anderson and Sibthorpe (1996) stressed that the use of self-assessed health status was a comparatively recent phenomenon. They highlighted some issues with this measure in a sample where over 80 per cent of the respondents declared themselves to be in good or better health, yet it was widely known that Indigenous health levels were low. This may simply reflect the fact that if people do not have good access to health services, they may well have undiagnosed health problems. Alternatively, their perception of what is good health may be different from what is considered the norm for 'good' in other situations. As one example, Anderson and Sibthorpe (1996) noted that a research

paper based on the 1995 NHS reported that one half of all people with diabetes considered themselves to be in good health.

Health characteristics by non-school qualification and highest year of school completed, Indigenous Australia, 2002

We now turn our attention to education, measured by two broad categories of educational achievement: attainment of a post-secondary school qualification, and years of completed schooling. Table 17.6 presents the results for the post-school qualification, and for those without such a qualification, by years of completed schooling. Schooling here excludes tertiary level education; that is, it only refers to primary and secondary schooling. The qualifications measure is very heterogeneous, covering anything from a trade certificate to a university higher degree.

Table 17.6. Non-school qualification by highest year of school completed by selected health characteristics[a]

	Does not have a non-school qualification				
	Year 9 or below [b]	Completed Year 10 or Year 11	Completed Year 12	Total without qualification	Has a non-school qualification
	%	%	%	%	%
Self-assessed health status					
Excellent/very good	30.7	47.1	57.9	40.9	46.1
Fair/poor	35.1	17.7	12.7	25.2	22.9
Has a disability or long-term health condition	49.7	29.9	22.1	38.2	35.3

a. Excludes people who were attending secondary school.
b. Includes people who never attended school. Year of schooling is only shown for those who do not have a non-school qualification.
Source: ABS (2004c: Table 7)

Table 17.6 shows that although there is no statistical significance at the 'aggregate' level—that is, between those with and without a non-school qualification—there are some very significant differences *within* the group without non-school qualifications, as follows:

- there is a clear trend among those without post-schooling qualifications
- those who have completed Year 12 are far healthier than those who have not, and have fewer disabilities
- in turn, those who have completed Years 10/11 are healthier than those who have only completed Year 9, and have fewer disabilities, and
- those who completed Year 11 or Year 12, but have no non-school qualifications, are healthier than those with non-school qualifications, and have fewer disabilities.

It is likely that this trend is really capturing the fact that more and more Indigenous people are completing high school (i.e. Year 12). By default, these people are younger than those who previously only completed Year 9, and as younger Indigenous people tend to be healthier, these figures follow. Biddle (2005) tested a number of hypotheses concerning the inter-relationships between age, education and health. He shows a clear positive (negative) relationship between poor (good) health and age which is mitigated by higher educational attainment; see, in particular, his Figure 4 (Biddle 2005: 24).

Health characteristics by labour force status, Indigenous Australia, 2002

It is also widely acknowledged that there is a link between health status and employment prospects in the labour market; see, for example, Booth and Carroll (2005). Table 17.7 and Figure 17.4 present the evidence from the 2002 NATSISS. As is now standard with Indigenous employment statistics, the employment figures are disaggregated between CDEP and non-CDEP. The figures presented tell a very interesting story about the link between health and employment. However, as with the other tables, it does not indicate in what direction the causality is directed.

Figure 17.4. Labour force status by self-assessed health
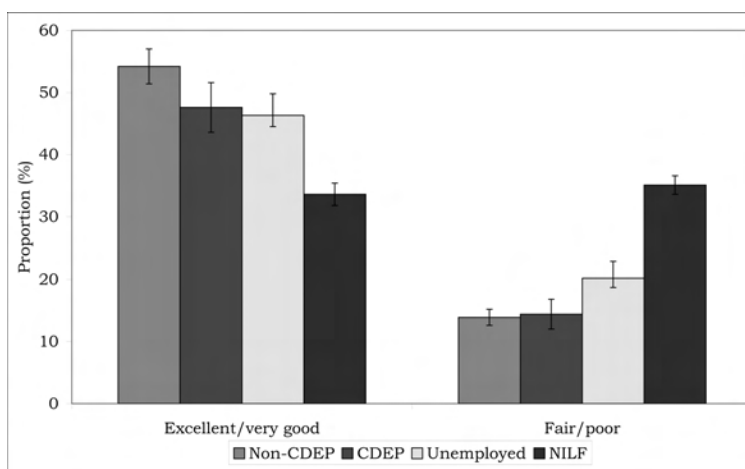
Source: ABS (2004c: Table 8).

Table 17.7. Labour force status by disabilities[a]

	Employed			Unemployed	Not in labour force
	CDEP	Non-CDEP	Total		
	%	%		%	%
Has a disability or long-term health condition	31.2	24.4	26.2	35.2	48.8

a. The differences between 'non-CDEP employed' and 'unemployed' is statistically significant at the 10% level, whereas the difference between 'total employed' and 'unemployed' is statistically significant at the 5% level.
Source: ABS (2004c: Table 8)

These figures indicate a significant difference in health status between those employed and those unemployed for the 'fair/poor' category (see Fig. 17.4) and for those with disabilities (Table 17.7). However, the gap for the 'excellent/very good' categories (i.e. 52.5% against 46.3%) is not even weakly statistically significant.

Within the employed groups, there are significant differences in each category. Those in non-CDEP employment are significantly healthier and have fewer disabilities than those in CDEP employment. Indeed, and not surprisingly, those in CDEP employment have health statuses identical to those for the unemployed for all practical purposes. That is, the gaps between the figures for CDEP employment and for unemployed are not statistically significant for any row.

Further, the gaps between the unemployed and those outside the labour force are statistically significant. The unemployed are healthier and have fewer disabilities than do those outside the labour force.

Disability status and self-assessed health status by age

The relationship between health status and the incidence of disabilities for the older population is also revealing, as is demonstrated in Table 17.8. The emphasis in that table is on the impact of age on the two measures of health.

Comparing those without disabilities—that is, columns 2 and 4—it is clear that health status deteriorates with age even without disabilities. For those aged under 50, the majority (59%) rated themselves in better than good health, and only 8 per cent considered themselves to be in fair or poor health. Conversely, only 39 per cent of those aged over 50 with no disability rated themselves as in better than good health, and 16 per cent rated themselves in fair or poor health.

Similarly, for those with disabilities, columns 1 and 3, a significantly larger percentage of the older group considered themselves to be in bad health. For those aged 50 or over, the vast majority (68%) are in fair or poor health—up from 39 per cent for those under 50. Conversely, only 11.6 per cent of those aged over 50 with a disability rated themselves as in better than good health, compared to 25.1 per cent of those under 50.

Table 17.8. Self-assessed health status by age and disability

	15–49 Years		50 Years or over		All respondents	
	Disability[a]	No disability	Disability[a]	No disability	Disability[a]	No disability
	%	%	%	%	%	%
Excellent/very good	25.1	59.4	11.6	39.4	20.9	57.4
Good	35.6	32.2	19.9	44.7	30.7	33.5
Fair/poor	39.1	8.2	68.3	15.9	48.3	9.0

a. Includes people with a long-term health condition.
b. Statistics in italics indicate that the difference between 'disability' and 'no disability' data is statistically significant.
Source: ABS (2004c: Table 10)

Indigenous health indicators by State/Territory and Australia, 2002

Also of interest are the regional variations, as measured by State and Territory boundaries. These figures are shown in ABS (2004c: Table 2). Compared to the national figures, there are significant differences, as follows:

- in the Northern Territory, Indigenous people are healthier and have fewer disabilities
- in Victoria, Indigenous people are less healthy and have more disabilities
- in the ACT, fewer Indigenous people are in poorer health, but there is no difference in disabilities
- in New South Wales, more Indigenous people are in poorer health, but this figure is only weakly significant
- in Tasmania, there are no differences in health status but more disabilities.

It is worth highlighting the fact that on all measures, Queensland reflects the national averages. None of the Queensland statistics are significantly different from the national averages. This supports the position taken earlier to not present separate figures for the Torres Strait Islander population, all of whom are in Queensland.

Concluding remarks

There is a wealth of information on health contained in the 2002 NATSISS. This chapter has provided an overview of the data and offered some insights into these data. One particular conundrum of interest is the comparison with the 1994 NATSIS. If taken at face value, that comparison indicated that Indigenous health has gone backwards in the intervening eight years. This raises doubts more about the reliability of the 1994 data than about the efficacy of health expenditures.

It is unfortunate that there were such differences in the methodology and coverage on the two sub-samples—the remote versus non-remote areas

samples—which has resulted in some restrictions on the validity of comparisons on key health data between the two types of localities.

The analysis does highlight the complex interactions between a person's health and key socioeconomic factors such as education, employment, age and gender.

Nevertheless, the 2002 NATSISS provides strong evidence that there is still much work and effort required before it can be concluded that the gap between Indigenous and non-Indigenous health standards has been substantially reduced, let alone eliminated.