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*Better information and statistics  
for better health and wellbeing*

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# **Indigenous identification in hospital separations data—quality report**

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# Foreword

The life expectancy of Aboriginal and Torres Strait Islander peoples is about 10 to 12 years lower than for other Australians. Aboriginal and Torres Strait Islander people are also hospitalised at higher rates than other Australians for certain conditions, including diseases of the respiratory and cardiovascular systems and for dialysis treatment.

Monitoring of aspects of the health of Aboriginal and Torres Strait Islanders such as these is dependent on the quality of Indigenous identification data in the national health data sources, including the hospitals data collection. However, there are inaccuracies in the information on Indigenous status in the data collections. The Council of Australian Governments (COAG) has recognised this and is overseeing important national work to be undertaken by the Institute on assessing and improving the quality of data over the next few years – essential for developing appropriate and relevant policies for the delivery of health services.

This report presents the latest findings on the quality of Indigenous identification in hospital separations data in Australia. These findings are based on studies of Indigenous identification in public hospitals conducted during 2007 and 2008. The results of the studies indicate that, overall, the quality of Indigenous identification in hospital separations data has improved since last assessed. However, the quality of Indigenous identification still varied substantially between jurisdictions.

The recommendations and guidelines for analysis of data on the use of hospitals by Aboriginal and Torres Strait Islanders that were published in the 2005 AIHW report *Improving the quality of Indigenous identification in hospital separations data* have been updated in response to the findings of these studies.

Further information on the quality of Indigenous identification data in the Institute's national hospitals data collections will be published as our work for COAG progresses.

Penny Allbon

Director

February 2010

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This report would not have been possible without the valued cooperation and effort of the data providers in the health authorities of the states and territories. In particular, the audit project required a high degree of cooperation on the part of participating hospitals, and the AIHW thanks them for their assistance and the timely supply of the data.

The AIHW also wishes to thank the members of the Australian Hospital Statistics Advisory Committee (AHSAC) and the National Advisory Group on Aboriginal and Torres Strait Islander Health Information and Data (NAGATSIHID), who provided input and advice on the report's structure and content. In addition, the AIHW would like to acknowledge the funding and assistance provided for this project by the Office for Aboriginal and Torres Strait Islander Health (OATSIH) and the Australian Health Ministers Advisory Council (AHMAC).

# Abbreviations

ABS	Australian Bureau of Statistics
ACT	Australian Capital Territory
AHMAC	Australian Health Ministers Advisory Council
AHSAC	Australian Hospital Statistics Advisory Committee
AIHW	Australian Institute of Health and Welfare
ATSIHWIU	Aboriginal and Torres Strait Islander Health and Welfare Information Unit
HDSC	Health Data Standards Committee
IPP	Information Privacy Principles
METeOR	Metadata Online Registry
NAGATSIHID	National Advisory Group on Aboriginal and Torres Strait Islander Health Information and Data
NHIMPC	National Health Information Management Principal Committee
NHISSC	National Health Information Standards and Statistics Committee
NHMD	National Hospital Morbidity Database
OATSIH	Office for Aboriginal and Torres Strait Islander Health
RSE	relative standard error
SIMC	Statistical Information Management Committee

# Summary

In 2005, the Australian Institute of Health and Welfare released a report on the quality of Indigenous identification in hospital separations data (AIHW 2005a). It advised restricting analyses of hospital separations data for Indigenous persons to states and territories with a level of Indigenous identification that was adequate for analysis purposes (Queensland, South Australia, Western Australia, and the Northern Territory (public hospitals only)). It also advised against performing analyses of hospital separations data by remoteness for Indigenous persons, as variation in identification levels by remoteness could have biased the results.

This report presents the results of studies conducted between 2006 and 2008 by the AIHW, in collaboration with the state and territory health authorities, in a follow-up assessment of the quality of Indigenous identification in public hospitals. It presents revised recommendations for analysis of hospital separations data based on the results of the studies, and estimates of correction factors that can be applied to the data for analysis purposes.

## Overall

An estimated 89% of Indigenous patients were correctly identified in Australian public hospital admission records in 2007–08. In other words, 11% of Indigenous patients were not identified, and the ‘true’ number of hospital admissions for Indigenous persons was about 12% higher than reported.

## States and territories

While there is still scope for improvement in the identification of Indigenous persons in hospital separations data, the results of the studies support expanding national reporting to include data for New South Wales, Victoria, Queensland, South Australia, Western Australia, and the Northern Territory (public hospitals only). Levels of Indigenous identification were 80% or higher for those jurisdictions.

For Tasmania and the Australian Capital Territory, the levels of Indigenous identification were not considered acceptable for analysis purposes.

Since the 2005 report, the levels of Indigenous identification for public hospitals:

- increased in New South Wales and Victoria to 88% and 84% respectively, and were considered to have been at ‘acceptable’ levels from the 2004–05 data year
- increased for Queensland, Western Australia, and the Northern Territory
- decreased (but were still regarded as acceptable) for South Australia.

## Remoteness areas

The studies show that there were acceptable levels of Indigenous identification for all remoteness areas, ranging from 80% in *Major cities* to 97% in *Remote* and *Very remote* areas.

Therefore the quality of the data supports analyses by remoteness areas, in aggregate, across states and territories for which the levels of identification were considered to be acceptable.

The sample size was insufficient to allow assessment of the quality of Indigenous identification by remoteness area within jurisdictions.

# Recommendations

The 2005 report recommended that data only for Queensland, South Australia, Western Australia, and the Northern Territory (public hospitals only) should be included in national analyses of Indigenous admitted patient care, based on an agreed acceptable level of 80% Indigenous identification. This acceptable level of identification was determined for the purpose of allowing 'a reasonably precise quantification of hospital use for a majority of the Indigenous population' (AIHW 2005a).

Based on the results studies reported here, the National Health Information Standards and Statistics Committee, and the National Aboriginal and Torres Strait Islander Advisory Group on Health Information and Data have endorsed the following amendments to the analysis guidelines published in 2005 (AIHW 2005a). The complete set of recommendations is in *Chapter 5* of this report.

For the use of state and territory data:

- When using Indigenous status information for analytical purposes, the data for only New South Wales, Victoria, Queensland, Western Australia, South Australia and the Northern Territory (public hospitals only) should be used, individually or in aggregate.
- It is also acceptable to use data from hospitals in all states and territories to undertake analyses by the state or territory of the patient's area of usual residence, for patients usually resident in New South Wales, Victoria, Queensland, Western Australia, South Australia and the Northern Territory, individually or in aggregate.
- Analyses based on data for New South Wales, Victoria, Queensland, Western Australia, South Australia and the Northern Territory in aggregate should be accompanied by caveats about limitations imposed by jurisdictional differences in data quality, and about the data not necessarily being representative of the jurisdictions that are not included.
- Caution should be exercised in time series analysis of data for New South Wales, Victoria, Queensland, Western Australia, South Australia and the Northern Territory (public hospitals only) (individually or in aggregate). Caveats should include the possible contribution of changes in ascertainment of Indigenous status for Indigenous patients to changes in hospitalisation rates for Indigenous people.

For the use of regional data:

- Analysis of data by remoteness area of the hospital's location can be undertaken for New South Wales, Victoria, Queensland, Western Australia, South Australia and the Northern Territory (public hospitals only), in aggregate.
- It is also acceptable to use data from hospitals in all states and territories to undertake analysis by the remoteness area of the patient's area of usual residence, for patients usually resident in New South Wales, Victoria, Queensland, Western Australia, South Australia and the Northern Territory, in aggregate.
- Analyses based on remoteness area should be accompanied by caveats about limitations imposed by jurisdictional differences in data quality, and about the data not necessarily being representative of the jurisdictions that are not included.

It is also recommended that ongoing studies be conducted to assess the data quality and to encourage improvement in the reporting of these data.

