Maternity data in Australia: a review of sources and gaps

Introduction

About 800 babies are born every day in Australia, with over 330 women becoming a mother for the first time (AIHW 2009). Maternity data, including information about maternal, fetal and neonatal deaths, are among the key indicators of health and wellbe

The United Nations named a reduction in child mortality and improvements in maternal health as two of the eight Millennium Development Goals (United Nations 2001). Australia's maternal and infant mortality rates are among the lowest in the world; howe there is significant inequality in outcomes for Aboriginal and Torres Strait Islander peop in particular. In 2001–2004, babies born to Aboriginal and Torres Strait Islander mothe were almost twice as likely to be born pre-term, had almost twice the fetal death rate, a had twice the neonatal death rate of babies born Indigenous women (AIHW 2007). The National Indigenous Reform Agreement provides an integrated framework for the

Review of maternity data collections

Scope of the review

The scope of the review was limited to national and state and territory (jurisdictional) data collections. It included key health, administrative and vital statistics data collected from conception to 28 days after the birth. For maternal deaths, the scope was extended to 1 year after the birth.

The following population data collections were included:

- National Perinatal Data Collection and all state/territory perinatal data collections
- AIHW National Perinatal Epidemiology and Statistics Unit collections: Australian Congenital Anomalies Monitoring System, National Maternal Deaths Database
- Australian Bureau of Statistics vital statistics collections: national births collection, national deaths collection, national perinatal deaths collection
- state and territory vital statistics collections—births, deaths, perinatal deaths
- state and territory collections for congenital anomalies in Western Australia, New South Wales, Victoria and South Australia.

The following collections containing data on specific subpopulations were included:

- Perinatal and Reproductive Epidemiology Research Unit collections held at the University of New South Wales: Australian and New Zealand Neonatal Network Register; and Australasian Maternity Outcome Surveillance System
- National Coroners Information System
- state and territory perinatal mortality review committees and maternal mortality review committees.

Australian data collections

Jurisdictional and national sources of information were documented at the data collection and data item levels. Findings were used to identify data collection issues, data gaps and opportunities for development.

A current list of data items, data collection forms, guidelines for data collection and/or data dictionaries were obtained from managers of each data collection. The following items were prepared as part of the review:

- a data collection overview that summarised information about each data collection's institutional environment, relevance and scope, timeliness, accuracy, accessibility, and interpretability
- the Maternity Information Matrix. The matrix is an electronic inventory of all data items in each data collection included in the review. In the matrix, currently collected data items are organised by topic, to correspond with each stage in the maternity pathway. Data items are grouped into subject areas and subtopics. For items included in multiple collections, definitions and characteristics of the data are summarised

to provide a complete picture of all the information currently collected on a speci c topic. e matrix provides information on the scope, de nitions, data availability and reporting of items for each collection included in the review

t a detailed report to the Australian Government Department of Health and Ageing, from which key ndings and recommendations are summarised in this bulletin.

International data collection practices

Maternity data collection practices in a selection of countries were reviewed to investigate the scope and content of national collections, governance issues, challenges and barriers to data collection, and to identify examples of good practice. e review of international collections focused on countries with broadly similar health services to those in Australia. Common themes that emerged include: the use of record linkage; the availability of unique patient identi ers; the introduction of web-based reporting systems; and diverse governance arrangements.

Key data gaps

Gaps in national data were identi ed through a review of state and territory and national collections. ere is a need for a systematic analysis of the information needs of key agencies involved in the shaping of policies on the nature and range of maternity services to determine the signi cance of these gaps and other areas for development.

Maternity care

Models of maternity care and continuity of caregiver are important factors contributing to safety and quality, patient experience and outcomes. e availability of these data needs improvement, through the development of consistent and nationally agreed de nitions that take account of local variations in service delivery. De nitions must align with models of care that will be implemented as a result of the Maternity Services Review. A data item on number of antenatal visits is being developed for inclusion in the National Perinatal Data Collection.

Maternal mortality

Although rare, maternal deaths are critical indicators of severe maternal morbidity. ere is currently no nationally agreed method to review and report maternal deaths. eir monitoring is essential to ensure that any changes to the provision of maternity services do not adversely a ect Australia's low maternal mortality ratio. e rarity of these events means that such monitoring is only feasible at a national level, using high-quality, consistent data.

Maternal conditions and morbidity

Substantial work is needed to develop national de nitions of: the scope of conditions that comprise maternal morbidity; the period; and the conditions to be included. ere are no mandatory national data items, nor is there consensus on nationally consistent de nitions for common maternal conditions and complications such as gestational

Data ows

Figure 1 illustrates the relationship between data collections included in the review. Collections are grouped together using a colour key. For example, yellow represents vital statistics data collections, and blue represents perinatal data collections. A broken line indicates that there is a comparison of infor999nforllecol9eincltions. A brokciole999n(h)-2
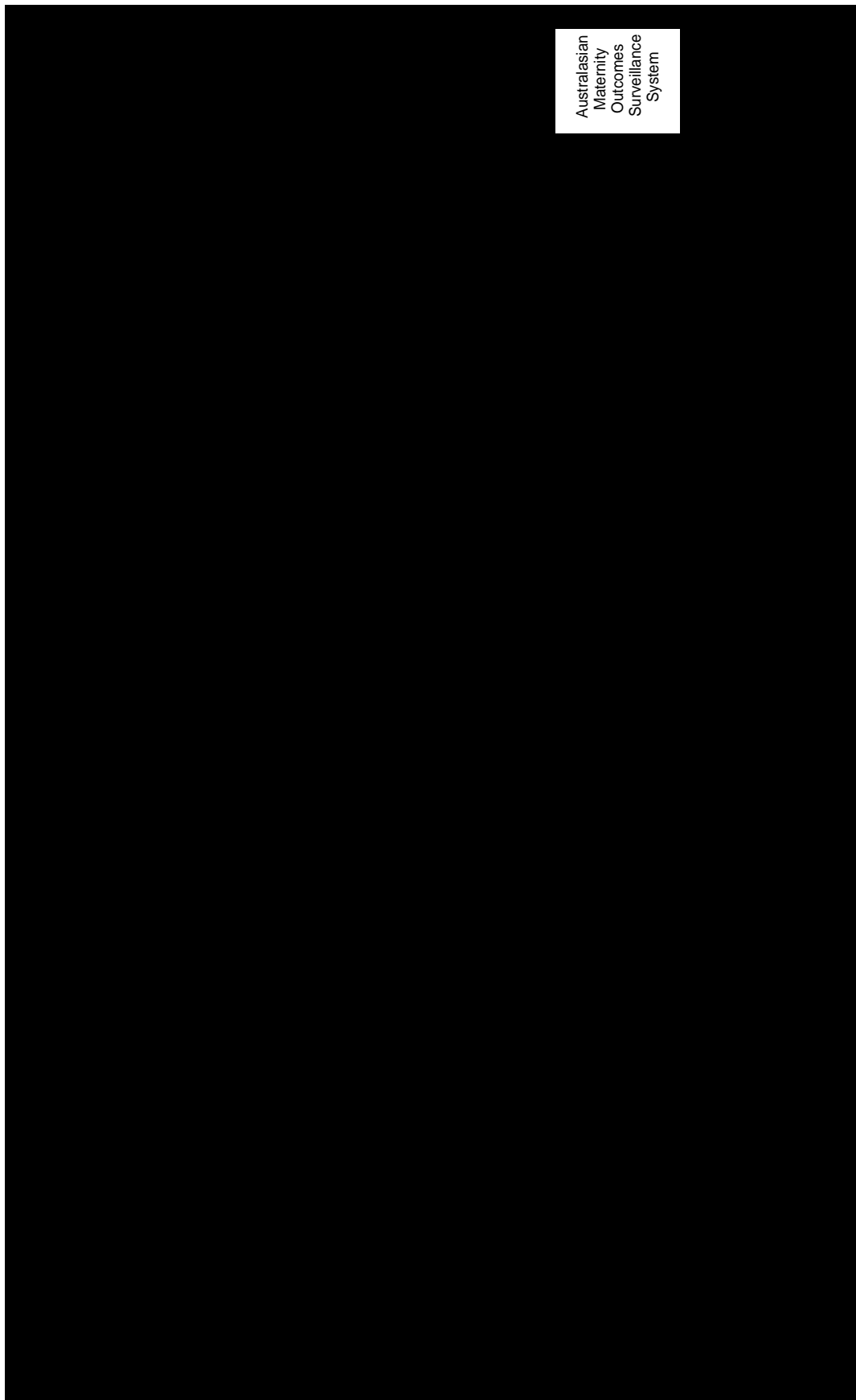
Australasian
Maternity
Outcomes
Surveillance
System

Figure 1: Relationship between data collections included in the review

References

References