Maternal and perinatal data collection

Objectives: To provide advice on maternal and perinatal data collection.

Target audience: All health practitioners providing maternity care, and patients. In addition, this may provide useful information for those responsible for planning the delivery of maternity services.

Background: This statement was first developed by Women’s Health Committee in July 2010 to provide advice on maternal and perinatal data collection.

Funding: The development and review of this statement was funded by RANZCOG.

This statement has been developed and reviewed by the Women’s Health Committee and approved by the RANZCOG Board and Council.

A list of Women’s Health Committee Members can be found in Appendix A.

Disclosure statements have been received from all members of this committee.

Disclaimer: This information is intended to provide general advice to practitioners. This information should not be relied on as a substitute for proper assessment with respect to the particular circumstances of each case and the needs of any patient. This document reflects emerging clinical and scientific advances as of the date issued and is subject to change. The document has been prepared having regard to general circumstances.

First endorsed by RANZCOG: July 2010
Current: March 2018
Review due: March 2021
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1. Summary of recommendations

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<thead>
<tr>
<th>Recommendation 1</th>
<th>Grade</th>
</tr>
</thead>
<tbody>
<tr>
<td>A perinatal and maternal data set must be collected from all pregnancies across Australia and New Zealand.</td>
<td>Consensus-based recommendation</td>
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<thead>
<tr>
<th>Recommendation 2</th>
<th>Grade and reference</th>
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<td>Minimum data set will be determined on State/Territory/Country jurisdiction/requirements.</td>
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In addition to these standard items, specific attention must be paid to:

1. *Maternal and Perinatal, Morbidity and Mortality*
   The data set collected must include both perinatal and maternal outcomes, reporting both morbidity and mortality. Each parameter must be clearly defined to ensure uniformity of reporting and achieve maximal ascertainment.

2. *Clinical Indicators*
   The data collected should enable appropriate clinical indicators to be assessed such as those mutually agreed by RANZCOG and ACHS.

3. *Model of Care*
   Data should include:
   - Intended model of care (i.e. prior to the development of any complications);
   - Model of care at birth;
   - Duration before birth of transfer of model of care.

4. *Place of Birth*
   Data must include:
   - Intended place of birth (i.e. prior to the development of any complications);
   - Place of birth;
   - Duration before birth of transfer of place of birth.

**Good Practice Note**
Reporting and analysis of maternal and perinatal data should be contemporaneous, with agreed time frames that allow early assessment of any changes to maternity service delivery.

**Good Practice Note**
Reporting must be transparent and available to service providers, relevant authorities and the public.
2. Introduction

Data collection, with subsequent reporting and analysis must underpin an ongoing effort to improve quality of care and clinical outcomes. This cannot occur effectively unless the collection is complete and covers all key aspects of the pregnancy, birth, postnatal and neonatal outcomes.

3. Discussion and Recommendations

3.1 What data should be collected?

A perinatal and maternal data set must be collected from all pregnancies across Australia and New Zealand. The data set must be structured so as to enable both regional and international comparisons. Where regional differences exist, additional parameters may be collected with a view to directing specific improvements in care and outcomes.

3.2 What other specific data should be collected?

In addition to the standard demographic, obstetric and neonatal data collection specific attention must be paid to:

1. Maternal and Perinatal, Morbidity and Mortality

   The data set collected must include both perinatal and maternal outcomes, reporting both morbidity and mortality. Each parameter must be clearly defined to ensure uniformity of reporting and achieve maximal ascertainment.

2. Clinical Indicators

   The data collected should enable appropriate clinical indicators to be assessed such as those mutually agreed by RANZCOG and ACHS, or the NZ Committee and NZ Ministry of Health.

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In addition to the standard demographic, obstetric and neonatal data collection specific attention must be paid to:

1. **Maternal and Perinatal, Morbidity and Mortality**
The data set collected must include both perinatal and maternal outcomes, reporting both morbidity and mortality. Each parameter must be clearly defined to ensure uniformity of reporting and achieve maximal ascertainment.

2. **Clinical Indicators**
The data collected should enable appropriate clinical indicators to be assessed such as those mutually agreed by RANZCOG and ACHS and Ministry of Health (NZ).

3. **Model of Care**
Data should include:
- Intended model of care (i.e. prior to the development of any complications);
- Model of care at birth;
- Duration before birth of transfer of model of care.

4. **Place of Birth**
Data must include:
- Intended place of birth (i.e. prior to the development of any complications);
- Place of birth;
- Duration before birth of transfer of place of birth.
3.3 How should reporting and analysis be undertaken?
Collection of data alone does not improve outcomes. Timely and relevant reporting and analysis of maternal and perinatal data should lead to recommendations for improvements in care, based on that data.

When comparisons are made between models of care or places of birth, it is important to take steps to ensure that, for the purposes of comparison, each subset had an equivalent obstetric risk profile.

Reporting and analysis of maternal and perinatal data should be contemporaneous, with agreed time frames that allow early assessment of any changes to maternity service delivery.

Reporting must be transparent and available to service providers, relevant authorities and the public.

Reporting should be accessible to consumers so that their choice in determining models of care and types of service delivery is based on accurate information regarding relevant benefits and risks.

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3.4 How should data collection be audited for completeness and quality?
Perinatal and maternal data should be subject to regular and random audit and validation to ensure that collection and recording methodologies are sound.

Audit of data collection against birth registrations is recommended to ensure completeness of data.

<table>
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<tr>
<th>Recommendation 3</th>
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<td>Consensus-based recommendation</td>
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</table>
4. Links to other College statements

Evidence-based Medicine, Obstetrics and Gynaecology (C-Gen 15)

5. Patient information

A range of RANZCOG Patient Information Pamphlets can be ordered via:
https://www.ranzcog.edu.au/Womens-Health/Patient-Information-Guides/Patient-Information-Pamphlets

6. Useful links

The Maternity Information Matrix (MIM) is a summary of data items in Australian national and jurisdictional data collections as of July 2016. The MIM includes 45 data collections and nearly 500 data items. (Available online at http://maternitymatrix.aihw.gov.au/Pages/About-the-MIM.aspx)


Australia’s Mothers and Babies reports https://www.aihw.gov.au/reports-statistics/population-groups/mothers-babies/reports

Appendices

Appendix A Women’s Health Committee Membership

<table>
<thead>
<tr>
<th>Name</th>
<th>Position on Committee</th>
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<tbody>
<tr>
<td>Professor Yee Leung</td>
<td>Chair</td>
</tr>
<tr>
<td>Dr Joseph Sgroi</td>
<td>Deputy Chair, Gynaecology</td>
</tr>
<tr>
<td>Associate Professor Lisa Hui</td>
<td>Member</td>
</tr>
<tr>
<td>Associate Professor Ian Pettigrew</td>
<td>EAC Representative</td>
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<tr>
<td>Dr Tal Jacobson</td>
<td>Member</td>
</tr>
<tr>
<td>Dr Ian Page</td>
<td>Member</td>
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<tr>
<td>Dr John Regan</td>
<td>Member</td>
</tr>
<tr>
<td>Dr Craig Skidmore</td>
<td>Member</td>
</tr>
<tr>
<td>Associate Professor Janet Vaughan</td>
<td>Member</td>
</tr>
<tr>
<td>Dr Bernadette White</td>
<td>Member</td>
</tr>
<tr>
<td>Dr Scott White</td>
<td>Member</td>
</tr>
<tr>
<td>Associate Professor Kirsten Black</td>
<td>Member</td>
</tr>
<tr>
<td>Dr Greg Fox</td>
<td>College Medical Officer</td>
</tr>
<tr>
<td>Dr Marilyn Clarke</td>
<td>Chair of the ATSI WHC</td>
</tr>
<tr>
<td>Dr Martin Byrne</td>
<td>GPOAC Representative</td>
</tr>
<tr>
<td>Ms Catherine Whitby</td>
<td>Community Representative</td>
</tr>
<tr>
<td>Ms Sherryn Elworthy</td>
<td>Midwifery Representative</td>
</tr>
<tr>
<td>Dr Amelia Ryan</td>
<td>Trainee Representative</td>
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Appendix B Overview of the development and review process for this statement

i. **Steps in developing and updating this statement**

This statement was originally developed in July 2010 and was reviewed in March 2014. The Women’s Health Committee carried out the following steps in reviewing this statement:

- Declarations of interest were sought from all members prior to reviewing this statement.
- Structured clinical questions were developed and agreed upon.
- An updated literature search to answer the clinical questions was undertaken.
- At the March 2018 face-to-face committee meeting, the existing consensus-based recommendations were reviewed and updated (where appropriate) based on the available body of evidence and clinical expertise. Recommendations were graded as set out below in Appendix B part iii).

ii. **Declaration of interest process and management**

Declaring interests is essential in order to prevent any potential conflict between the private interests of members, and their duties as part of the Women’s Health Committee.

A declaration of interest form specific to guidelines and statements was developed by RANZCOG and approved by the RANZCOG Board in September 2012. The Women’s Health Committee
members were required to declare their relevant interests in writing on this form prior to participating in the review of this statement.

Members were required to update their information as soon as they become aware of any changes to their interests and there was also a standing agenda item at each meeting where declarations of interest were called for and recorded as part of the meeting minutes.

There were no significant real or perceived conflicts of interest that required management during the process of updating this statement.

### iii. Grading of recommendations

Each recommendation in this College statement is given an overall grade as per the table below, based on the National Health and Medical Research Council (NHMRC) Levels of Evidence and Grades of Recommendations for Developers of Guidelines (2009). Where no robust evidence was available but there was sufficient consensus within the Women’s Health Committee, consensus-based recommendations were developed or existing ones updated and are identifiable as such. Consensus-based recommendations were agreed to by the entire committee. Good Practice Notes are highlighted throughout and provide practical guidance to facilitate implementation. These were also developed through consensus of the entire committee.

<table>
<thead>
<tr>
<th>Recommendation category</th>
<th>Description</th>
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<tbody>
<tr>
<td>Evidence-based</td>
<td></td>
</tr>
<tr>
<td>A</td>
<td>Body of evidence can be trusted to guide practice</td>
</tr>
<tr>
<td>B</td>
<td>Body of evidence can be trusted to guide practice in most situations</td>
</tr>
<tr>
<td>C</td>
<td>Body of evidence provides some support for recommendation(s) but care should be taken in its application</td>
</tr>
<tr>
<td>D</td>
<td>The body of evidence is weak and the recommendation must be applied with caution</td>
</tr>
<tr>
<td>Consensus-based</td>
<td>Recommendation based on clinical opinion and expertise as insufficient evidence available</td>
</tr>
<tr>
<td>Good Practice Note</td>
<td>Practical advice and information based on clinical opinion and expertise</td>
</tr>
</tbody>
</table>
Appendix C Full Disclaimer

This College Statement is intended to provide general advice to Practitioners. The statement should never be relied on as a substitute for proper assessment with respect to the particular circumstances of each case and the needs of each patient.

The statement has been prepared having regard to general circumstances. It is the responsibility of each Practitioner to have regard to the particular circumstances of each case, and the application of this statement in each case. In particular, clinical management must always be responsive to the needs of the individual patient and the particular circumstances of each case.

This College statement has been prepared having regard to the information available at the time of its preparation, and each Practitioner must have regard to relevant information, research or material which may have been published or become available subsequently.

Whilst the College endeavours to ensure that College statements are accurate and current at the time of their preparation, it takes no responsibility for matters arising from changed circumstances or information or material that may have become available after the date of the statements.