Planning for sustainable maternity and newborn services

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Overview

- Maternity and Newborn Services Program
- Victoria’s maternity and newborn service system
- Aligning maternity and neonatal service planning
- Frameworks supporting current service planning
- Impact of policy and funding
Maternity and Newborn Services Program

- Responsibility for policy and program development, planning and performance of maternity and newborn services in Victorian public hospitals.

- Working to strengthen the capacity and capability of Victoria’s maternity services through initiatives related to workforce, education, service development and the application of the Government’s future Directions for Victoria’s Maternity Services policy framework.
Victoria’s public maternity and newborn service system

63 public maternity service providers
- 3 tertiary maternity services
- 11 publicly funded antenatal outpatient services
- 11 Koori Maternity Services in ACCHOs (+3 by 2013-14)

Public neonatal system
- 4 tertiary services (NICU and SCN)
- 20 non-tertiary SCNs
Key policy

- *Neonatal services guidelines* (2005)
- *Rural directions – for a stronger healthier Victoria* (2009)
- *Capability framework for maternity and newborn services* (2010)
Future Directions – Five themes

1. Provide maternity care within local settings
2. Access to appropriate level of care
3. Woman-centred care
4. Continuity of care
5. Collaborative, multidisciplinary team approach
Program input to service planning is critical

- Preferred service model and options
- Throughput based on expected changes in practice and technology.
- Linkages between providers and levels.
Why is this important?

- Capacity and demand for maternity and neonatal services is interdependent
  - Changes in clinical management practices
  - Increasing demand for tertiary services
  - Ensuring access to clinically appropriate levels of care
- Managing key enablers of the service system
Maternity and Neonatal Service Demand

Number of registered births, Victoria, 1947-2007

Department of Health
Birth rate according to region

<table>
<thead>
<tr>
<th>Region</th>
<th>2003</th>
<th>2004</th>
<th>2005</th>
<th>2006</th>
<th>2007</th>
</tr>
</thead>
<tbody>
<tr>
<td>Barwon</td>
<td>1500</td>
<td>2000</td>
<td>2500</td>
<td>3000</td>
<td>3500</td>
</tr>
<tr>
<td>Grampians</td>
<td>1000</td>
<td>1500</td>
<td>2000</td>
<td>2500</td>
<td>3000</td>
</tr>
<tr>
<td>Loddon Mallee</td>
<td>500</td>
<td>1000</td>
<td>1500</td>
<td>2000</td>
<td>2500</td>
</tr>
<tr>
<td>Hume</td>
<td>200</td>
<td>250</td>
<td>300</td>
<td>350</td>
<td>400</td>
</tr>
<tr>
<td>Gippsland</td>
<td>100</td>
<td>150</td>
<td>200</td>
<td>250</td>
<td>300</td>
</tr>
<tr>
<td>North+West</td>
<td>50</td>
<td>100</td>
<td>150</td>
<td>200</td>
<td>250</td>
</tr>
<tr>
<td>Eastern</td>
<td>20</td>
<td>30</td>
<td>40</td>
<td>50</td>
<td>60</td>
</tr>
<tr>
<td>Southern</td>
<td>10</td>
<td>20</td>
<td>30</td>
<td>40</td>
<td>50</td>
</tr>
</tbody>
</table>
Survival rate of neonates
Increasing use of CPAP

Number of babies over 10 years.
Table 5.12  Admissions to neonatal nurseries according to admission source, 2003/04 to 2008/09.

<table>
<thead>
<tr>
<th>Hospital Level</th>
<th>Admission Source</th>
<th>Financial Year</th>
</tr>
</thead>
<tbody>
<tr>
<td>Level 2</td>
<td>Birth</td>
<td>4655</td>
</tr>
<tr>
<td>Level 2</td>
<td>Transfer</td>
<td>859</td>
</tr>
<tr>
<td>Level 2</td>
<td>Home</td>
<td>875</td>
</tr>
<tr>
<td>Level 3</td>
<td>Birth</td>
<td>2428</td>
</tr>
<tr>
<td>Level 3</td>
<td>Transfer</td>
<td>975</td>
</tr>
<tr>
<td>Level 3</td>
<td>Home</td>
<td>332</td>
</tr>
</tbody>
</table>

Source: VAED (all episodes where age at admission is less than 1 year and accommodation type is C).
Demand for tertiary neonatal services
Victorian maternity ALOS trends actual to 2008/09 and forecast to 2018/19
Models of Care

Community-based Midwifery – home birthing

Birth centres

Continuity of care

Team midwifery
Caseload midwifery
GP shared care
Community based
Home visiting - PNDC

Intervention rates

Lifestyle impact - obesity
### Workforce changes drive new models of care

#### Midwife-only birthing services

<table>
<thead>
<tr>
<th>Driver for Implementation</th>
<th>Withdrawal of services by one GP Obstetrician leaving a sole part-time GP Obstetrician</th>
<th>Negotiated change of model of care</th>
<th>Ageing GPs leading to reduced interest</th>
<th>GP Obstetricians (2) left town at the same time</th>
<th>Reduced availability of medical staff with further</th>
</tr>
</thead>
<tbody>
<tr>
<td>Low Risk Birthing Service</td>
<td>Yes - No induction of labour No access to C/section Intrapartum c/section remains an option – undertaken by GP from Bairnsdale who travels to Orbost – even for emergency C/Section</td>
<td>Yes No C/Section available Very limited induction of labour – women travel to Wangaratta for birth if required</td>
<td>Yes No C/Section No induction of labour</td>
<td></td>
<td>Identified as a low risk services Able to have induction of labour and C/Section Reviewer assessed at low to moderate risk</td>
</tr>
<tr>
<td>Birth Numbers</td>
<td>300 per year</td>
<td>35 per year</td>
<td>100 per year</td>
<td>250-300 per year</td>
<td>10 per year</td>
</tr>
<tr>
<td>Model of Care</td>
<td>Modified caseload / Rostered shifts Originally wanted a caseload model comprising two teams of three midwives in addition to rostered core staff – providing for primary midwifery care and case management. This was not implemented - the initial model implemented involved regular maternity shift arrangements with two Community Midwife Program – Community midwife on call each day (3 shifts) 8 Community midwives who work across the continuum in addition to two hospital midwives who undertake postnatal care Considered caseload but was not suitable given the birth numbers and the number of midwives that wanted to be involved in maternity services</td>
<td>Rostered midwifery staff Shared antenatal care – midwife and GP at the GP clinic Degree of duplication in antenatal care Midwives rostered to mixed ward (usually one per shift), on-call midwife provides second resource after hours GP's called for birth</td>
<td>Caseload Changed from a community midwife model in the last 12 months 6 midwives working in pairs Provides for annual leave</td>
<td>Midwife-led model with remote medical input There is only one principal midwife, the incumbent has multiple roles and is generally on call for birthing women. She is supported by a small number of other midwives</td>
<td>Rostered midwifery staff Shared antenatal care – midwife and GP at the GP clinic Midwives rostered to mixed ward (usually one per shift) GP's called for birth</td>
</tr>
</tbody>
</table>
Example - primary midwifery model, 2011

- Previously, 3 x GP Obstetricians provide intrapartum care.

- Age and increasing burden of on-call requirements drive GP withdrawal from intrapartum service.

- Since February 2011, midwives provide intrapartum care for low-risk women and births.

- Higher risk women and births, including expected caesars, transferred to Regional Hospital (Level V service). Specialist obstetrician availability and leadership expected to reduce caesars rate in this cohort by 50%.
Maternity and Newborn Clinical Network

Vaginal Birth After Caesar (VBAC) rate

• coordinating VBAC fora,

• scoping VBAC capability within health services

• assisting health services to develop workplan to achieve improved VBAC rates where appropriate,

• assist in achieving goals of the workplan, including through development of clinical practice guidelines, decision making aids, escalation processes etc.

Induction of Labour (IOL) rate

• Establishment of expert clinical advisory team

• Development of clinical practice guidelines, decision making aids, escalation processes etc.

• Where there is no evidence, consensus opinion will inform practice regimes.
Example - birthing episodes
Maternal and newborn separations by year

- Neonatal birth episodes
- Caesarian and vaginal deliveries
- Antenatal admissions
- Other obstetric admissions
- Abortions

Year: 2000-01 to 2009-10

VAED separations
Impact of Policy, Funding and Practice on Planning

Policy

Normal Birth Policy
Post Natal Dom Policy
Antenatal Policy
Admission Policy (lactation support)

Funding

Normal Birth Policy
Post Natal Dom Policy

Practice

VBAC
IOL guidelines
Reduction in variation
Challenges in baseline for forecasting

Antenatal admissions

July to December data

Department of Health
Capability Framework - Focus

• Delineates the roles of maternity and newborn services and describes each level of care and the relationships with other maternity and newborn services within the context of state-wide services.

• Assist a transparent planning approach for service providers, consumers and the department, based on service capability.

• Assist health services to provide a service appropriate to their individual circumstances and communities

• Assist health services to make informed decisions, by defining the minimum standards in terms of resources, protocols and service arrangements that need to be formalised to manage different degrees of complexity of care.
Capability Framework - Principles

• Ensuring quality and safety

• Providing women with informed choice and greater control of their birthing experience

• Achieving the right balance between primary level care and having access to appropriate levels of medical expertise where it is needed

• Making the best use of complementary skills of midwives, general practitioners and obstetricians

• Enhancing a maternity team approach
Neonatal Planning Framework - Principles

- Safe and high quality outcomes
- Accessible services
- Coordinated and integrated services
- Aligned maternity and neonatal services
- Family-centred care
- Sustainable workforce capability
Neonatal Planning Framework - Reform Strategies

- Delineate and build the capability of neonatal services
- Promote family-centred neonatal services
- Strengthen the neonatal workforce configuration and capability
- Improve the efficiency of neonatal services
- Promote effective relationships between neonatal services
- Strengthen the focus on clinical outcomes