

# Victorian Maternity Services Performance Indicators

Complete set for 2004–05  
January 2006



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## Acknowledgements

This report was prepared by Vickie Kyriakopoulos with expert assistance from Mary-Ann Davey and Associate Professor James King. It was developed in consultation with the Maternity Services Advisory Committee Performance Indicator Sub-Committee of the Department of Human Services, Victoria.

# 1. About this report

All Victorian public hospitals providing birthing services are required to report annually against ten key maternity services performance indicators. These indicators were developed by a multidisciplinary group of experts and consumers, and four of them were subjected to a detailed pilot prior to implementation. The indicators span a range of domains of care and address both process and outcome measures for the three phases of maternity care. These evidence-informed indicators have been shaped by the following principles:

Maternity services:

- provide optimal safety for women and their babies
- ensure early detection and appropriate intervention
- provide appropriate clinical care
- promote parenting confidence and optimal health of mothers and their babies
- respond to the needs of a diverse range of women and are customer-focused.

This report of the 2004–05 maternity services performance indicators for Victorian hospitals with birthing services collates the results of reporting requirements outlined in *Maternity services performance indicators business rules for 2004–05*.

## Observations on the data

- Intervention rates for women with uncomplicated pregnancies continue to show a wide variation between hospitals. While there is no agreed clinically appropriate rate for induction of labour and caesarean section among standard primiparae, overall rates appear quite high for these low risk women.
- The overall caesarean section rate among standard primiparae is 18.5 per cent. This has not changed significantly over the past three years, and these rates continue to be of concern. Rates range from 0–50 per cent at individual health services.
- The overall public hospital rate for induction of labour in the standard primiparae has decreased slightly to 17.2 per cent, from 22 per cent in 2003. Overall, larger hospitals have lower rates of induction of labour than smaller hospitals and the decrease is mainly due to reduced rates at the three tertiary centres. There continues to be considerable variation in rates of induction of labour at term between hospitals (from 0–35 per cent).
- Similar to the rate in 2003, 4.3 per cent of standard primiparae sustained a 3rd or 4th degree perineal tear.
- Administration of antenatal corticosteroids to mothers whom either birth or are transferred in preparation for birth before 34 weeks gestation occurred for 92.4 per cent of women. This rate has increased from 90 per cent in 2002–03 and 83 per cent in 2001–02.
- Twenty-eight per cent of women who had had a previous primary caesarean birth planned to have a vaginal birth (VBAC) in their following pregnancy. Of those women planning a VBAC, 55 per cent had a vaginal birth.
- The gestational age standardised perinatal mortality ratio varies considerably across maternity units, with a trend for the rate to be lower in larger hospitals compared with smaller hospitals.
- The change from birth weight to gestational age standardised perinatal mortality ratios was based on the agreement that gestational age is a more sensitive basis for this indicator than birth weight. Individual health services with higher rates than the state level need to ensure that all perinatal deaths are subjected to comprehensive multidisciplinary review, with appropriate practice improvement recommendations and follow-up.
- More health services are reporting on appropriate interventions in relation to smoking at the first antenatal visit, although many hospitals do not see women again before 20 weeks. Among women who have a second antenatal appointment prior to 20 weeks, there has been an improvement in follow-up rates. Nevertheless many hospitals have acknowledged capacity for further improvement.

- In this second year of reporting against the smoking indicator, the majority of hospitals provided comments and recommendations with regards to improving their data collection methods and achieving better results in the long and short term, such as through the provision of further education for clinicians providing antenatal care. Many hospitals have taken the initiative to find valid solutions which satisfy the intention and purpose of collecting data on interventions in relation to smoking.
- Hospitals are reporting nearly 100 per cent compliance with assessment of interpreter needs and there are also increased and high rates of interpreter service provision reported.

For the first time in the three years since reporting on the Victorian maternity services performance indicators began, all Victorian public hospital providing maternity services have provided data. Many hospitals are reporting that they are using the data to make and implement recommendations on improvements in the quality of their maternity services.

The wide variation between hospitals on most of the indicators reinforces their value as a flag for identifying systematic ways for improving clinical care (including consistency in care). It is expected that the information in this report will support quality measures within individual health services, implementing practice change and further reviewing outcomes in a multidisciplinary environment. The broader goal is to support improved outcomes for women and babies.

In August 2005 a Maternity Services Performance Indicator Clinical Forum, focusing on VBAC and induction of labour, attracted approximately 300 clinicians from across metropolitan and rural areas. The forum, which featured a consumer panel, concluded that while there are some risks associated with both VBAC and repeat caesarean section, additional efforts need to be directed towards decreasing the primary caesarean section rate through both clinical practice change and ensuring women are aware of sequelae. A further forum on caesarean section is planned for April 2006.

### **Suggested ways to use this report**

This report enables hospitals throughout the state to compare their results with similarly sized and other public health services. The intrapartum intervention indicators, being restricted to an analysis of first-time mothers with apparently uncomplicated pregnancies (standard primiparae), allow comparison between hospitals regardless of their casemix. Clinicians are also encouraged to study the trends within their own service by comparing their individual results with those in previous reports.

This report is intended to focus attention of hospitals, clinicians and program managers on outcomes and processes.

**Chief executive officers and boards of directors** are encouraged to distribute the report to program managers. They should also develop action plans to address areas of concern.

**Multidisciplinary quality review processes** within health services should address differences between index institutions and other similar institutions, and the statewide rate. A regular process for analysis at health service level on performance against maternity services indicators should be implemented to monitor future trends.

**Obstetric and midwifery staff** should be encouraged to participate in external forums, such as the one planned for early 2006 on caesarean section, to explore and understand the issues underlying the results.

**For further information and assistance please contact Gil Dwyer on telephone 9616 2151 or email [gil.dwyer@dhs.vic.gov.au](mailto:gil.dwyer@dhs.vic.gov.au).** Gil will ensure that relevant issues are directed for consideration to the Maternity Services Advisory Committee Performance Sub-committee.

## 2. Background

In 2001, the Victorian Government report, *Measuring maternity care*, commissioned by the Department of Human Services, recommended that a set of nine performance indicators be implemented throughout the state's maternity services.<sup>1</sup> An existing indicator—the proportion of women referred to postnatal domiciliary care—was added to complete the set. The ten indicators span a range of domains of care and address both process and outcome measures for the three phases of maternity care.

Initially the indicators were reported as part of the department's Quality Framework for Victoria. In November 2003, a report of the first two years of three of the indicators (MAT-1, MAT-4 and MAT-5), derived from the Perinatal Data Collection Unit (PDCU), was published on the web.<sup>2</sup> This is the second annual report of all ten indicators.

## 3. Introduction

The report was compiled through joint work between the Programs Branch of the department's Metropolitan Health and Aged Care Services Division and the PDCU, and the Public Health Branch of the department's Rural and Regional Health and Aged Care Services Division, in consultation with expert advice provided by the Maternity Services Advisory Committee Performance Indicator Sub-Committee.

The Maternity Services Indicator Program aims to improve public hospitals' ability to compare their performance over a range of maternal and perinatal outcomes. Implementing the indicators is expected to:

- enable comparisons about performance
- promote discussion within and between hospitals about performance against the indicators
- promote discussion about what level of performance should be achieved in a given area
- promote discussion and shared learning about how to improve the quality of maternity care generally.<sup>3</sup>

The complete set of maternity services performance indicators, which is included in this report, is:<sup>4</sup>

MAT-1. Outcomes for standard primiparae

MAT-2. The rate of term infants transferred or admitted to special care nursery (SCN) or neonatal intensive care unit (NICU) for reasons other than birth defect

MAT-3. The rate of administration of antenatal corticosteroids to women delivered or transferred before 34 weeks gestation

MAT-4. The rate of vaginal birth for women in the birth immediately following a primary caesarean section

MAT-5. Standardised perinatal mortality ratio

MAT-6. The proportion of women referred to postnatal domiciliary care

MAT-7. The proportion of women offered appropriate interventions in relation to smoking

MAT-8. The provision of appropriate breastfeeding support and advice

MAT-9. The proportion of women who receive timely hospital antenatal clinical services

MAT-10. The proportion of women from a non-English speaking background (NESB) without proficiency in English who receive appropriate interpreter services.

Each indicator is introduced with key question, purpose and rationale, definition, data source and indicator type (process, outcome or rate-based), adapted from the final set of performance indicators report in 2002.<sup>5</sup>

MAT-1, MAT-4 and MAT-5 are derived using data from the PDCU. MAT-2 and MAT-6 are derived using data from the Victorian Admitted Episodes Dataset (VAED). MAT-3, MAT-7, MAT-8, MAT-9 and MAT-10 are derived from data that are reported by Victorian public hospitals to the Department of Human Services. Data are collected over the calendar year for MAT-1, MAT-4 and MAT-5, and over the

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<sup>1</sup> Department of Human Services 2001, *Measuring maternity care: a set of performance indicators*, DHS, Melbourne.

<sup>2</sup> Stone, C & King, J 2003, *Victorian maternity services performance indicators: public hospitals indicators MAT1, MAT4 and MAT5 using combined data from 2001 and 2002. November 2003*, Victorian Department of Human Services, Melbourne.

<sup>3</sup> Department of Human Services 2001, *Measuring maternity care: a set of performance indicators*, DHS, Melbourne.

<sup>4</sup> Department of Human Services 2002, *Measuring maternity care: the final set of performance indicators*, DHS, Melbourne.

<sup>5</sup> Ibid

financial year, July 2004 to June 2005, for MAT-2, MAT-3, MAT-6, MAT-7, MAT-8, MAT-9 and MAT-10. Given this report represents one year's data, it was agreed that MAT-1 and MAT-4 would be best displayed as proportions with 95 per cent confidence intervals (CI). Histograms are provided for all other indicators, except MAT-5, the gestation standardised perinatal mortality ratio.

Unless indicated, results are graphed for hospitals with at least ten possible occasions for a given event; for example, ten or more standard primiparae giving birth over the time period of the report. Hospitals are ordered from largest to smallest, with respect to the number of confinements. A table giving the number of confinements per hospital can be found in Appendix 2. Where available, the statewide public rates are given. Where a statewide public rate is unavailable, the average for the reporting hospitals will be shown. Where confidence intervals are given, hospitals should give attention to the absolute difference between their rate and the state average, regardless of the confidence intervals.

It is important to note that several public hospitals have a significant proportion of private patients among their confinements.

## 4. MAT-1 Outcomes for standard primiparae in Victorian public hospitals 2004

This indicator is clearly defined in the report on the final set of performance indicators.<sup>6</sup>

MAT-1a	Induction of labour in standard primiparae
MAT-1b	Caesarean section in standard primiparae
MAT-1c	3rd and 4th degree perineal tears in standard primiparae

### Key question

How does this public hospital achieve outcomes for standard primiparae compared with the overall rates for standard primiparae in Victorian public hospitals?

### Purpose and rationale

Use of the standard primipara (rather than all women giving birth) as the basis for interhospital comparison of maternity care controls for differences in casemix (pre-risk adjustment) and increases the validity of those comparisons.

The standard primipara represents an uncomplicated pregnancy; therefore, a presumption of this indicator is that intervention and complication rates should be low and consistent across all hospitals. A 'cascade' effect of intervention has been described, particularly with nulliparous women, which starts with induction of labour and electronic fetal monitoring, and progresses through augmentation, epidural anaesthesia and increased risk of operative vaginal delivery or caesarean section. By reducing the number of standard primiparae who have induced labour, the number of women undergoing unnecessary operative birth and other interventions may be reduced.

This is an outcome indicator.

### Definition

The standard primipara is defined as a woman who is 20 to 34 years of age, giving birth for the first time, who is free of obstetric and specific medical complications and pregnant with a singleton pregnancy at term (37<sup>0</sup> to 41<sup>6</sup> weeks gestation), with a non-small for gestational age (greater than the 10<sup>th</sup> percentile) infant and a cephalic presentation.

#### **MAT-1a Induction of labour**

*Numerator:* The number of standard primiparae undergoing induction of labour

*Denominator:* The number of standard primiparae who give birth

#### **MAT-1b Caesarean section**

*Numerator:* The number of standard primiparae undergoing caesarean section

*Denominator:* The number of standard primiparae who give birth

#### **MAT-1c Perineal tear**

*Numerator:* The number of standard primiparae who sustain a 3rd degree or 4th degree tear

*Denominator:* The number of standard primiparae who give birth vaginally

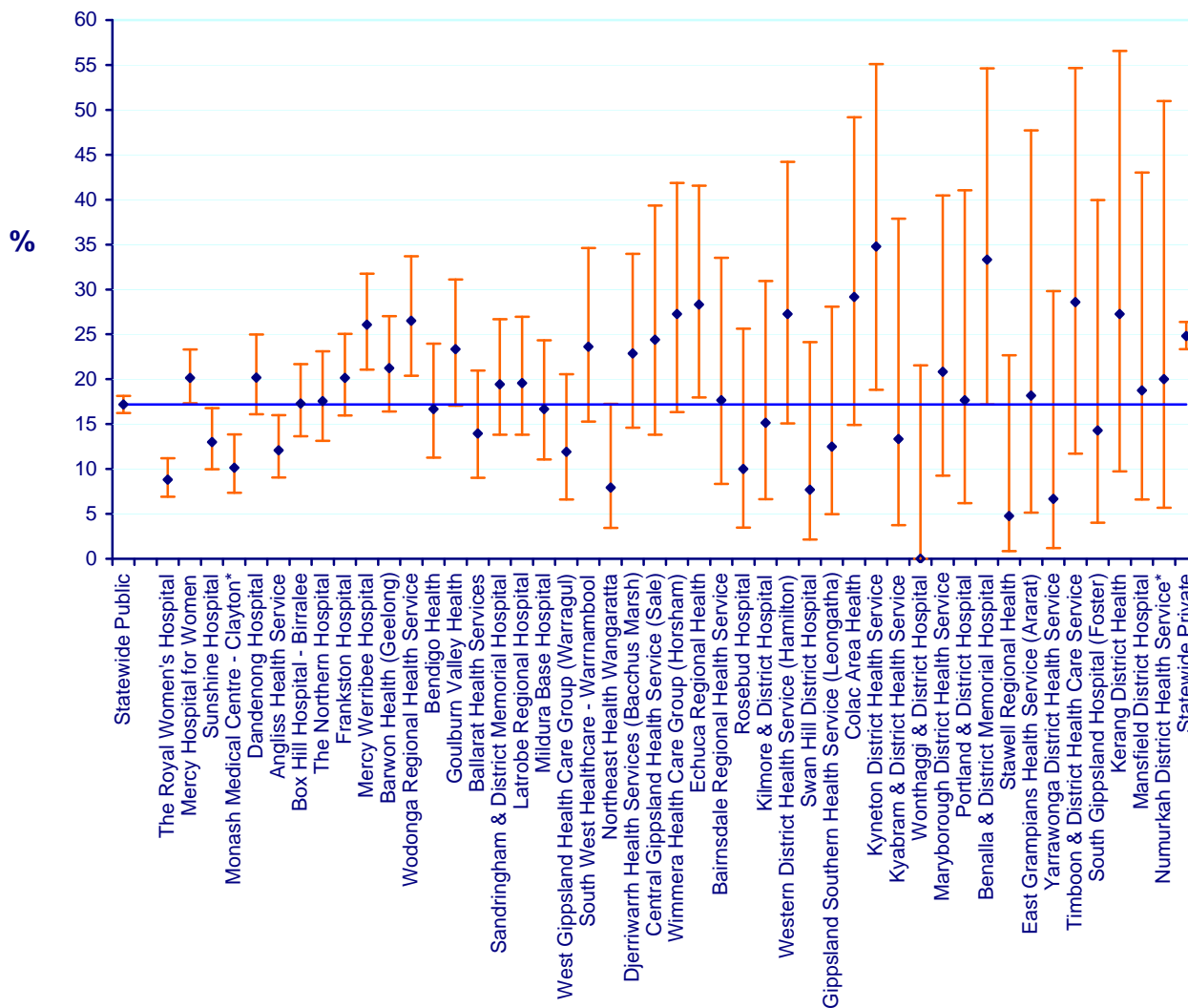
### Data source

The PDCU collects data for this indicator and reports back to hospitals.

In 2004 the method for classifying standard primiparae was refined. This resulted in a minor improvement in accuracy. This change would be expected to result in very slightly lower rates of intervention.

<sup>6</sup> Department of Human Services 2002, *Measuring maternity services: the final set of performance indicators*, DHS, Melbourne.

**Figure 1: MAT-1a Rate of inductions in standard primiparae in Victorian public hospitals 2004**



Statewide public rate = 17.2 per cent (95 per cent CI 16.2, 18.1)

**2003:**

Statewide public rate = 22.0 per cent (95 per cent CI 21.0, 23.1)

**2001 and 2002 combined:**

Statewide public rate = 22.6 per cent (95 per cent CI 21.0, 23.1)

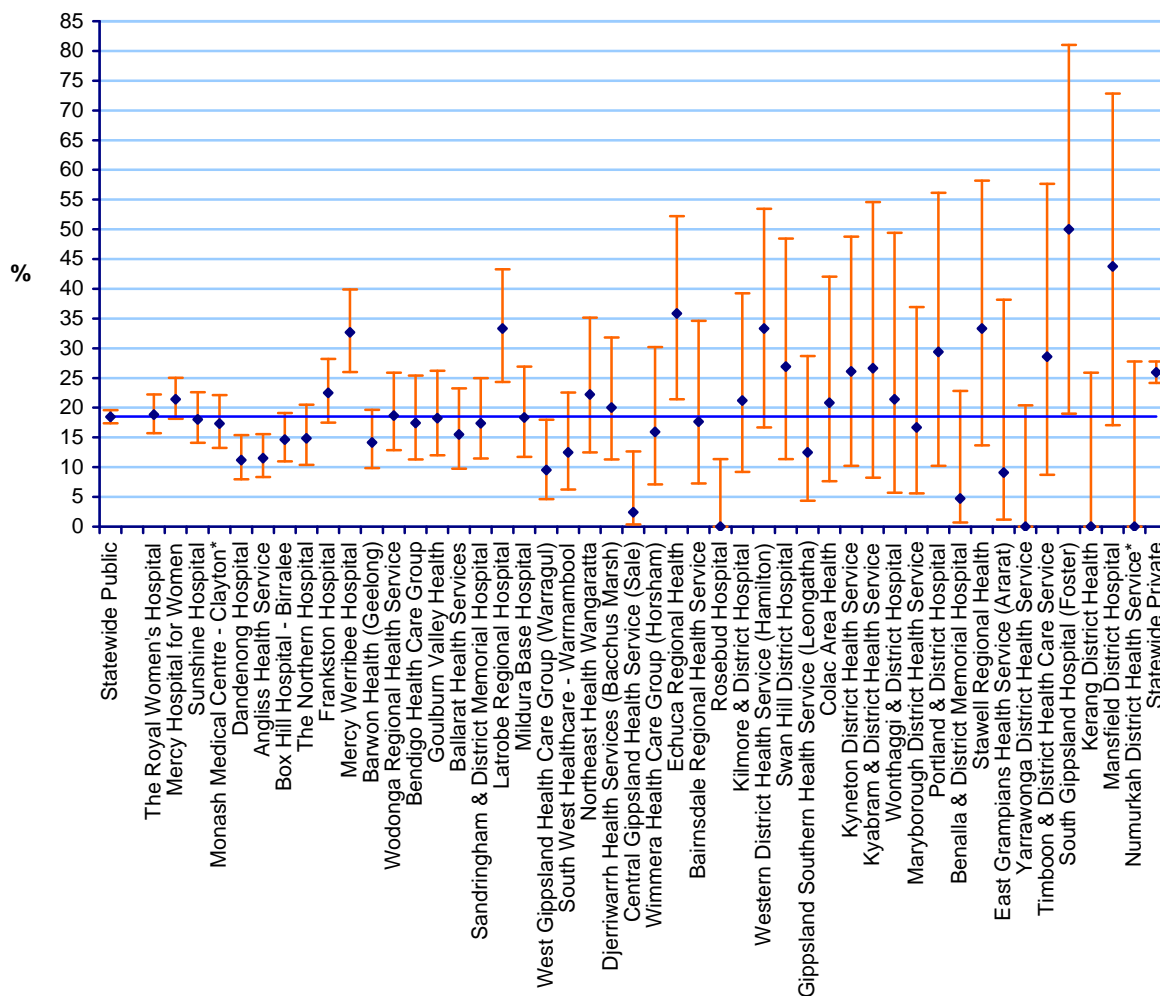
\* Numurkah District Health Service: No provision of intrapartum care from 2005.

\* Monash Medical Centre – Clayton figures include the final (37) confinements from Moorabbin Campus.

## **Comments on inductions in standard primiparae in Victorian public hospitals 2004**

1. Figure 1 displays the variation in inductions of labour for the standard primiparae occurring across Victorian public hospitals. A hospital's rate is significantly different from the statewide rate if its confidence interval does not overlap the statewide rate. However, hospitals should also give attention to the absolute difference between their rate and the statewide rate, regardless of the confidence intervals.
2. The statewide public rate for inductions in standard primiparae for 2004 is 17.2 per cent (95 per cent CI 16.2, 18.1), down from 22.0 per cent (95 per cent CI 21.0, 23.1) in 2003. For the two-year period (2001 and 2002), it was 22.6 per cent (95 per cent CI 21.8, 23.3). The overall reduction of 4.8 per cent in 2004 appears to be a result of lower rates in the larger hospitals.
3. Twenty-eight of the 46 hospitals have rates higher than the state average; five of these statistically significant. Eighteen hospitals have rates lower than the state average; four of these statistically significant. The rate of inductions in standard primiparae ranged from 0–34.8 per cent. The wide variation between hospitals shows that this indicator has the potential for identifying improved consistency in clinical practice.
4. Although there is no agreed optimal or clinically appropriate rate, these rates appear high for these low risk pregnancies.

**Figure 2: MAT-1b Rate of caesarean section in standard primiparae in Victorian public hospitals 2004**



Statewide public rate = 18.5 per cent (95 per cent CI 17.4, 19.6)

Note: Rosebud Hospital, Yarrawonga District Health Service and Numurkah District Health Service do not offer caesarean section.

**2003:**

Statewide public rate = 19.0 per cent (95 per cent CI 18.0, 19.9)

**2001 and 2002 combined:**

Statewide public rate = 17.1 per cent (95 per cent CI 16.5, 17.8)

\* Numurkah District Health Service: No provision of intrapartum care from 2005.

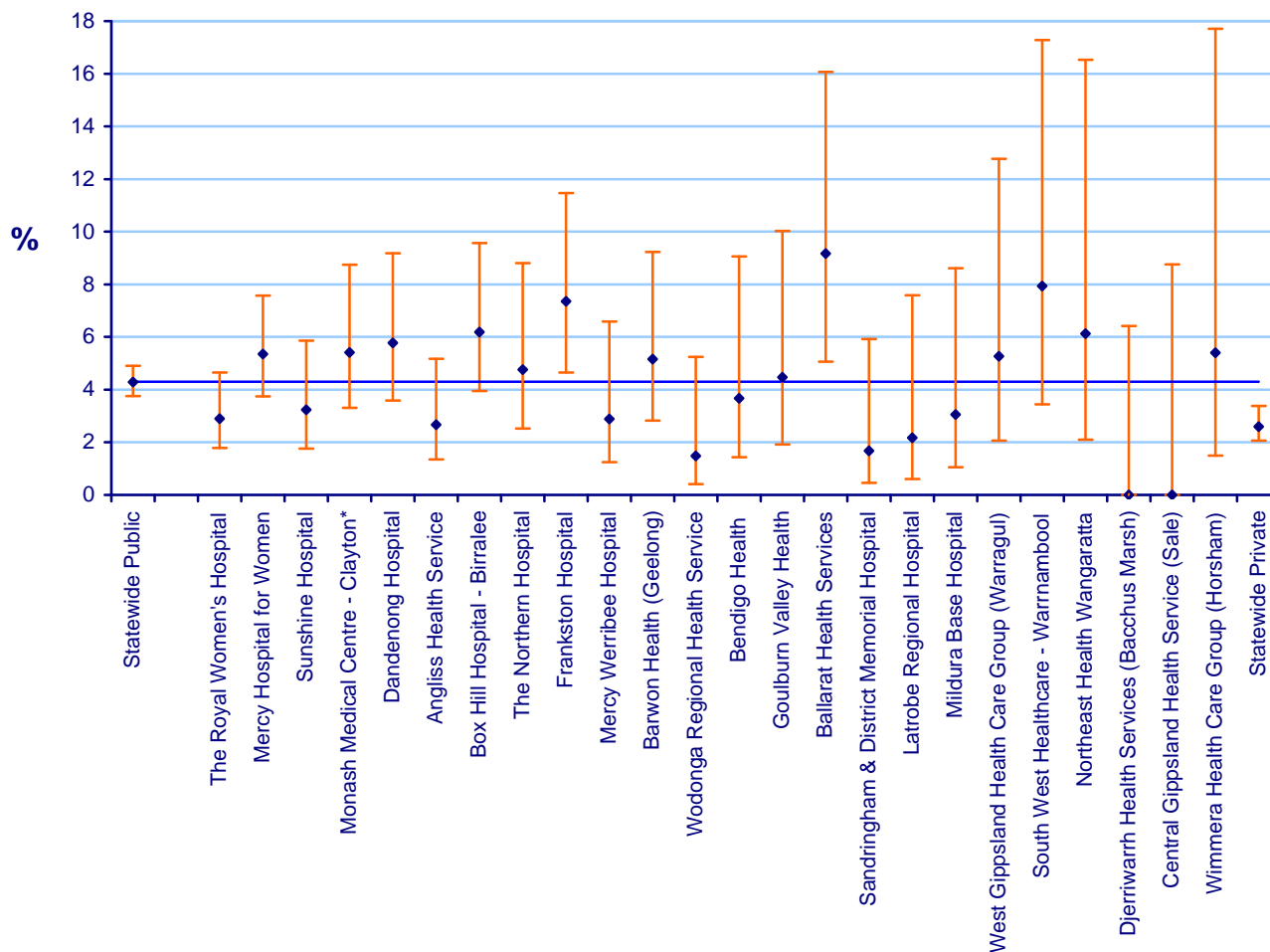
\* Monash Medical Centre – Clayton figures include the final (37) confinements from Moorabbin Campus.

## Comments on caesareans in standard primiparae in Victorian public hospitals 2004

1. Figure 2 displays the variation in caesareans for the standard primiparae occurring across Victorian public hospitals. A hospital's rate is significantly different from the state average if its confidence interval does not overlap the statewide rate. However, hospitals should also give attention to the absolute difference between their rate and the statewide rate, regardless of the confidence intervals.
2. The statewide public rate for caesareans among standard primiparae for 2004 is 18.5 per cent (95 per cent CI 17.4, 19.6). For 2003, the rate was 19.0 per cent (95 per cent CI 18.0, 19.9) and for the two-year period (2001 and 2002), it was 17.1 per cent (95 per cent CI 16.5, 17.8). These differences are not statistically significant.
3. Twenty-one of the 46 hospitals have rates higher than the state average; four of these statistically significant. Twenty-five hospitals have rates lower than the state average; five of these statistically significant. The rate of caesareans in standard primiparae ranged from 0–50 per cent. The wide variation between hospitals shows that this indicator has the potential for identifying improved consistency in clinical practice.
4. Although there is no agreed optimal or clinically appropriate rate, these rates appear high for these low risk pregnancies.
5. For overall rates of type of birth, including caesarean section, please refer to *Births in Victoria*, an annual report published by the Victorian PDCU, which can be found at:  
<<http://www.health.vic.gov.au/perinatal/pubs.htm>>.

**Figure 3: MAT-1c Rate of 3rd and 4th degree perineal tears in standard primiparae in Victorian public hospitals 2004**

**Hospitals with  $\geq 350$  confinements**



Statewide public rate = 4.3 per cent (95 per cent CI 3.8, 4.9)

**2003:**

Statewide public rate = 4.4 per cent (95 per cent CI 3.8, 5.0)

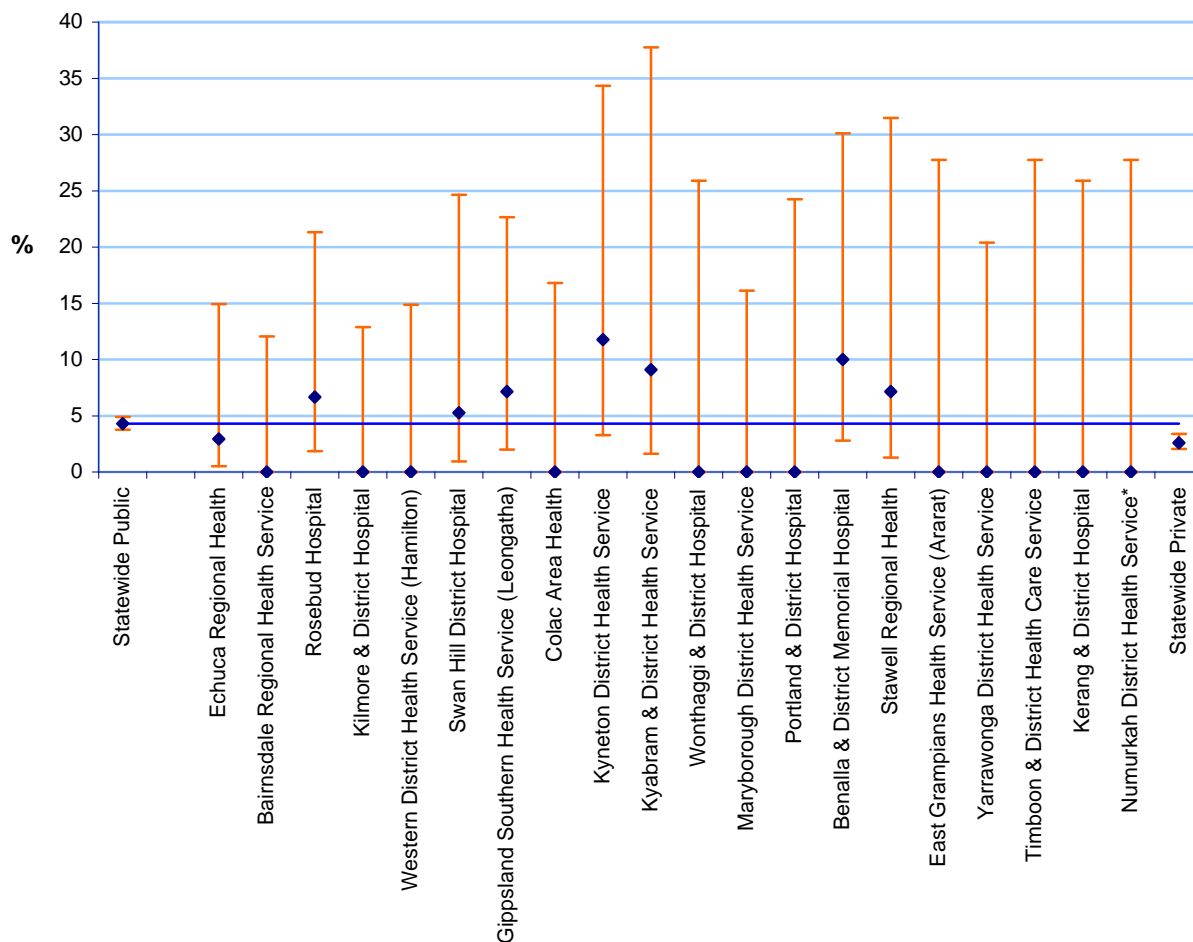
**2001 and 2002 combined:**

Statewide public rate = 3.3 per cent (95 per cent CI 3.0, 3.7)

\* Monash Medical Centre – Clayton figures include the last (37) confinements from Moorabbin Campus.

**Figure 4: MAT-1c Rate of 3rd and 4th degree perineal tears in standard primiparae in Victorian public hospitals 2004**

**Hospitals with < 350 confinements**



Statewide public rate = 4.3 per cent (95 per cent CI 3.8, 4.9)

**2003:**

Statewide public rate = 4.4 per cent (95 per cent CI 3.8, 5.0)

**2001 and 2002 combined:**

Statewide public rate = 3.3 per cent (95 per cent CI 3.0, 3.7)

\* Numurkah District Health Service: No provision of intrapartum care from 2005.

### **Comments on 3rd and 4th degree perineal tears in standard primiparae in Victorian public hospitals 2004**

1. Figures 3 and 4 display the variation in 3rd and 4th degree perineal tears among standard primiparae occurring across Victorian public hospitals. A hospital's rate is significantly different from the state average if its confidence interval does not overlap the statewide rate. However, hospitals should also give attention to the absolute difference between their rate and the overall statewide rate, regardless of the confidence intervals.
2. The statewide public rate for 3rd and 4th degree perineal tears in standard primiparae giving birth vaginally for 2004 is 4.3 per cent (95 per cent CI 3.8, 4.9). For 2003, the rate was 4.4 per cent (95 per cent CI 3.8, 5.0), up from 3.3 per cent (95 per cent CI 3.0, 3.7) for the initial two-year period (2001 and 2002).
3. Twenty of the 44 hospitals have rates higher than the state average; two of these statistically significant. Twenty-four hospitals have rates lower than the state average; none of these statistically significant. The rate of 3rd and 4th degree perineal tears ranged from 0–11.8 per cent. Differences in rates may be associated with differences in ascertainment and reporting, or may reflect a true difference in occurrence.
4. The wide variation between hospitals shows that this indicator has the potential for identifying improved consistency in clinical practice.

## 5. MAT-2 Term infants transferred or admitted to SCN or NICU for reasons other than birth defect in Victorian public hospitals July 2004 – June 2005

This indicator is clearly defined in the report on the final set of performance indicators.<sup>7</sup>

### Key question

Is the rate of admission of inborn term infants to special care nursery (SCN) or neonatal intensive care unit (NICU) for reasons other than birth defects principally due to non-avoidable factors?

### Purpose and rationale

Inborn term infants without birth defects are not normally expected to be admitted to a SCN or NICU. The indicator focuses on unplanned admission of term infants (without a birth defect), resulting from adverse events occurring in labour or immediate neonatal period, which require the facilities of SCN or NICU. This will include term infants with low five-minute Apgar scores, as well as those with birth trauma, early seizures/hypoxic ischaemic encephalopathy (HIE), intrauterine growth retardation (IUGR) and sepsis. It will also include some infants with more minor conditions, such as hyperbilirubinaemia.

This is a process indicator acting as a proxy for the quality of antenatal and perinatal care.

#### Definition

An inborn term infant is defined as an infant born at the reporting hospital at gestational age of 37 weeks or more.

#### Level 3 hospital

*Numerator:* The number of inborn term infants admitted to its SCN or NICU for reasons other than the management of birth defects

*Denominator:* The number of inborn term infants without major birth defect

#### Level 2 hospital

*Numerator:* The number of inborn term infants admitted to its SCN or transferred to a NICU for reasons other than the management of birth defects

*Denominator:* The number of inborn term infants without major birth defect

#### Level 1 hospital

*Numerator:* The number of inborn term infants transferred to a SCN or NICU for reasons other than the management of birth defects

*Denominator:* The number of inborn term infants without major birth defect

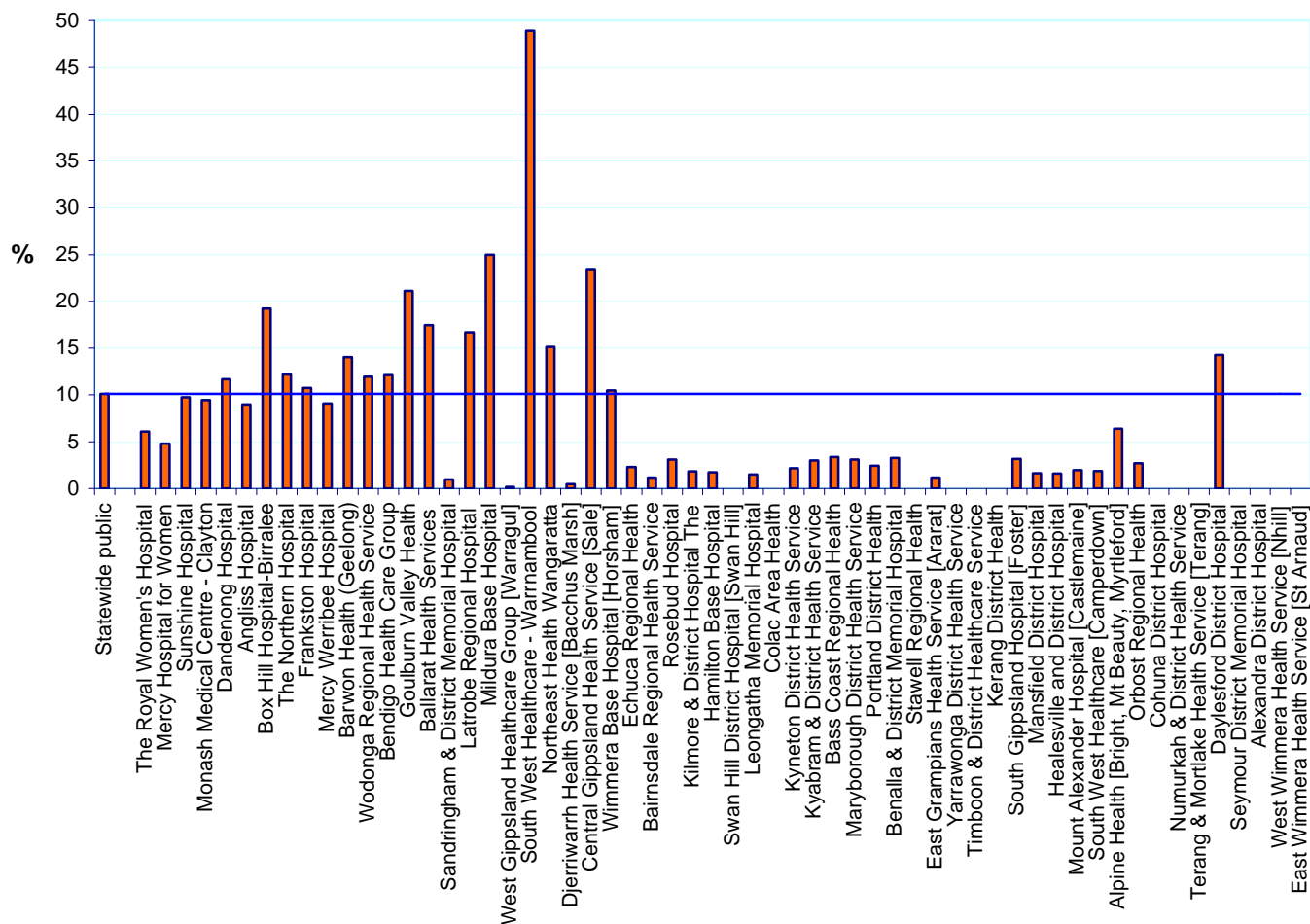
### Data source

Hospitals identify infants born at term (minimum 37 weeks gestation) without birth defect and admitted or transferred to a SCN or NICU through in-house data or the VAED.

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<sup>7</sup> Department of Human Services 2002, *Measuring maternity care: the final set of performance indicators*, DHS, Melbourne.

**Figure 5: MAT-2 Rate of term infants transferred or admitted to SCN or NICU for reasons other than birth defect in Victorian public hospitals July 2004 – June 2005**



Statewide public rate = 10.1 per cent

**July 2003 – June 2004**

Statewide public rate = 10.0 per cent\*

**July 2002 – June 2003**

Statewide public rate = 10.9 per cent\*

\*Corrected rates

Note: This calculation does not include babies admitted following discharge from birth episode.

### **Comments on term infants transferred or admitted for reasons other than birth defect in Victorian public hospitals July 2004 – June 2005**

1. Figure 5 displays the variation in rates across Victorian public hospitals and comparison with the statewide public rate, but does **not** demonstrate which hospitals are significantly different from the statewide public rate.
2. This year, systematic errors in data extraction for previous years were uncovered, precluding meaningful comparisons with previous years.
3. The overall statewide public rate for term infants transferred or admitted for reasons other than birth defect in Victorian public hospitals is 10.1 per cent for the year July 2004 – June 2005. The corrected rates for the two previous years were similarly high: 10.0 per cent for July 2003 – June 2004 and 10.9 per cent for July 2002 – June 2003.
4. The histogram demonstrates large variation among larger hospitals that have an authorised SCN or NICU facility. The reason for these differences requires further analysis, although they are more likely a reflection of neonatal bed management and usage practices than clinical practice; for example, the use of SCN beds for the treatment of physiological jaundice. For this reason, this indicator also highlights inappropriate use of resources.

## 6. MAT-3 The rate of administration of antenatal corticosteroids to women delivered or transferred before 34 weeks gestation in Victorian public hospitals July 2004 – June 2005

This indicator is clearly defined in the report on the final set of performance indicators.<sup>8</sup>

### Key question

Are women who give birth before 34 weeks gestation receiving an antenatal course of corticosteroids?

### Purpose and rationale

In Victoria, a Level 1 or 2 maternity service should give a first dose of corticosteroids to women at risk of preterm birth before they are transferred to a Level 3 hospital. A Level 3 hospital would ensure women at risk of preterm birth received a completed course of corticosteroids. However, it is recognised that some women will give birth before completing the course, and the numerator takes such cases into account.

The administration of a single course (two doses, 24 hours apart) of corticosteroids to such women has been shown to significantly improve neonatal outcome. There is Level I evidence that such treatment helps to mature the baby's lungs and prevent death. There are also demonstrated protective effects on other systems, such as reducing intraventricular haemorrhage.

This is a process indicator measuring compliance with internationally accepted best practice.

### Definition

#### Level 3 hospital

*Numerator:* The number of women who give birth between 25 and 34 weeks gestation who have received an initial dose of corticosteroid (excluding transfers)

*Denominator:* The total number of women who give birth between 25 and 34 weeks gestation (excluding transfers)

#### Level 2 hospitals

*Numerator:* The number of women who give birth between 25 and 34 weeks gestation or are transferred to a Level 3 hospital prior to 34 weeks gestation and have received an initial dose of corticosteroid

*Denominator:* The total number of women who give birth between 25 and 34 weeks gestation or are transferred to a Level 3 hospital prior to 34 weeks gestation

#### Level 1 hospitals

*Numerator:* The number of women who are transferred to a Level 2 or 3 hospital prior to 34 weeks gestation who have received an initial dose of corticosteroid

*Denominator:* The total number of women who are transferred to a Level 3 hospital prior to 34 weeks gestation

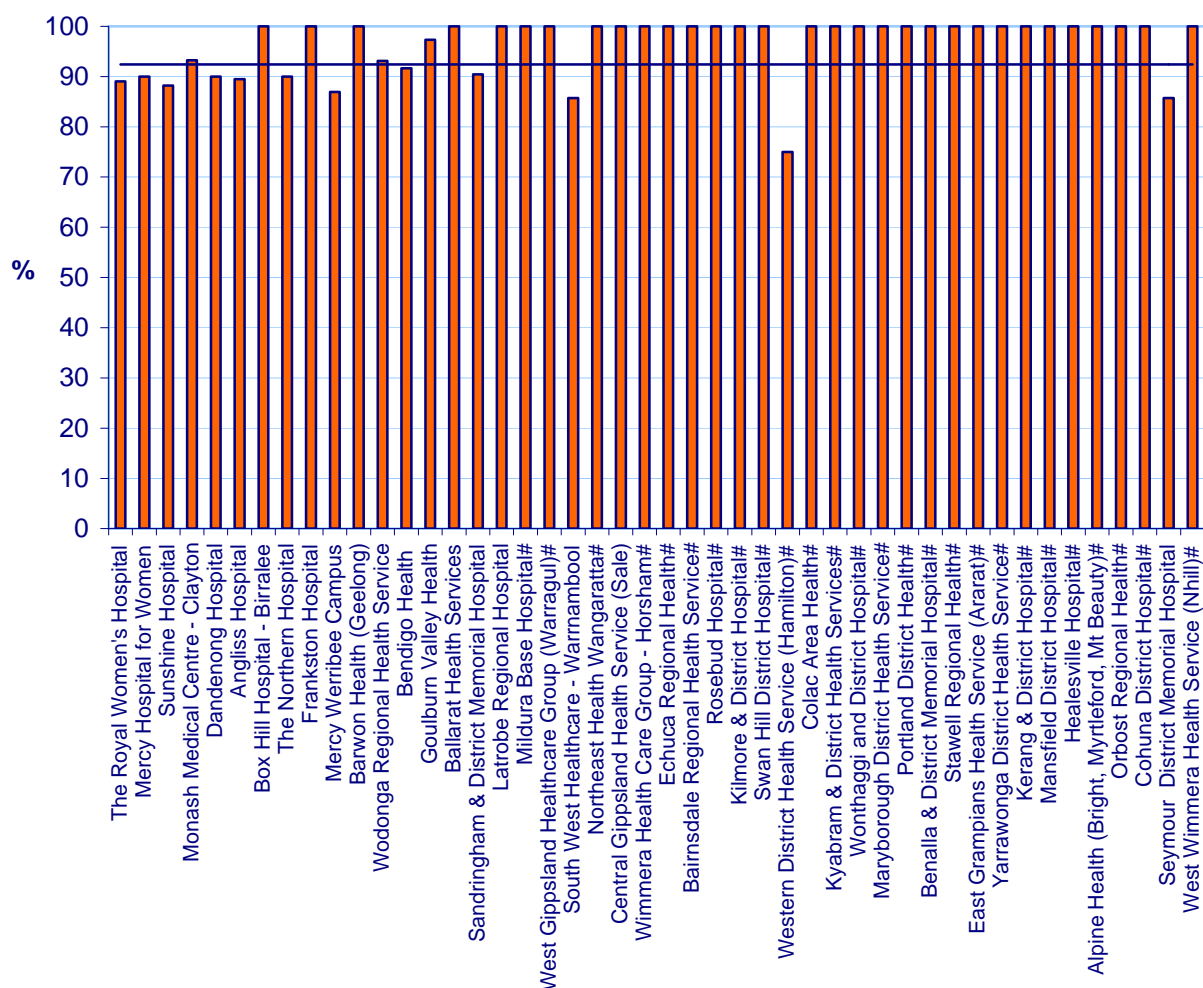
### Data source

Hospitals identify infants born between 25 and 34 weeks gestation and audit relevant medication charts for corticosteroid administration.

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<sup>8</sup> Department of Human Services 2002, *Measuring maternity care: the final set of performance indicators*, DHS, Melbourne.

**Figure 6: MAT-3 Rate of administration of antenatal corticosteroids to women delivered or transferred before 34 weeks gestation in Victorian public hospitals July 2004 – June 2005**



Statewide public rate = 92.4 per cent (All hospitals lodged data.)

**July 2003 – June 2004**

Average for reporting hospitals = 95.1 per cent (Statewide rate not available because not all hospitals lodged data.)

**July 2002 – June 2003**

Average for reporting hospitals = 89.8 per cent (Statewide rate not available because not all hospitals lodged data.)

**July 2001 – June 2002**

Average for reporting hospitals = 83.0 per cent (Statewide rate not available because not all hospitals lodged data.)

**Note:** Hospitals marked with # had less than ten women who gave birth or were transferred between 25 and 34 weeks gestation (denominator).

**The following hospitals had no cases:**

Gippsland Southern Health Service (Leongatha), Djerriwarrh Health Services (Bacchus Marsh), Kyneton District Health Service, South Gippsland Hospital (Foster), Timboon and District Health Care Service, Mt Alexander Hospital (Castlemaine), South West Healthcare – Camperdown, Terang and Mortlake Health Service, Hepburn Health Service (Daylesford), Alexandra District Hospital, and East Wimmera Health Service – St Arnaud.

**Comments on administration of corticosteroids to women delivered or transferred before 34 weeks gestation in Victorian public hospitals July 2004 – June 2005**

1. Figure 6 displays the variation in rates across Victorian public hospitals and a comparison with the statewide public rate, but does **not** demonstrate which hospitals are significantly different from the statewide public rate.
2. The overall rate of administration of antenatal corticosteroids for reporting hospitals in the reporting period is 92.4 per cent. In 2003–04 it was 95.1 per cent and in 2002–03 it was 89.8 per cent. This is the first year in which all hospitals contributed data. The increasing number of hospitals reporting data for this indicator each year will affect comparisons with previous years.
3. It is important to note that those hospitals marked with # had less than ten women transferred or giving birth prior to 34 weeks gestation (denominator), and their results should be interpreted with caution.
4. This indicator does not define and exclude women who give birth upon, or within a very short time of, arrival at hospital (and for this reason do not receive antenatal corticosteroids). Excluding these women would give improved rates for this indicator.

## 7. MAT-4 Vaginal births after a primary caesarean section in Victorian public hospitals 2004

This indicator is clearly defined in the report on the final set of performance indicators.<sup>9</sup>

### Key question

Do maternity hospitals provide appropriate care for women with a previous primary caesarean section?

### Purpose and rationale

The purpose of this indicator is to identify the proportion of women with a history of a primary caesarean section who are offered vaginal birth after a primary caesarean section (VBAC) and who achieve a term vaginal birth. This reflects appropriate management of these women.

This is a process indicator.

### Definitions

#### **MAT-4a Planned VBAC**

*Numerator:* The number of women (Para 1 and at term with a singleton pregnancy) whose previous birth was a caesarean section who enter labour with a plan for a vaginal birth

*Denominator:* The number of women (Para 1 and at term with a singleton pregnancy) whose previous birth was a caesarean section

#### **MAT-4b Achieved VBAC**

*Numerator:* The number of women (Para 1 and at term with a singleton pregnancy) whose previous birth was a caesarean section who enter labour with a plan for a vaginal birth and who achieve a vaginal birth

*Denominator:* The number of women (Para 1 and at term with a singleton pregnancy) whose previous birth was a caesarean section who enter labour with a plan for a vaginal birth

### Data source

The PDCU identifies and tracks outcomes for women (Para 1) at term whose previous birth was a caesarean section and who experience labour. These data are collected by the PDCU and reported back to hospitals.

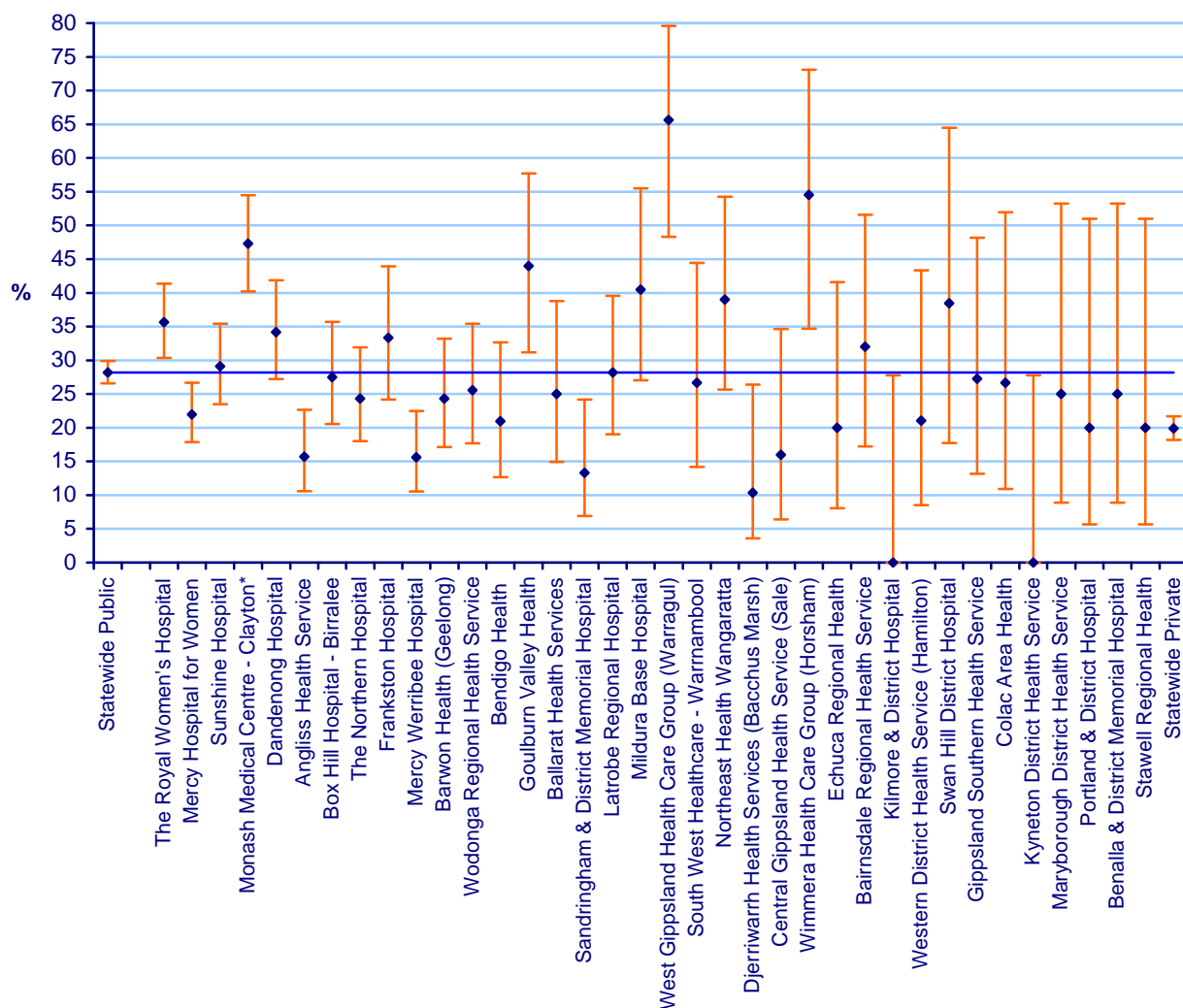
It is important to recognise that:

1. The PDCU does not record whether a woman has a plan for a vaginal birth but does record if a woman has laboured. So all women who were recorded as having laboured, **excluding** those who were recorded as going on to have an elective caesarean section, were selected as having a plan for vaginal birth. **This calculation differs slightly from the November 2003 report, which used combined data from 2001 and 2002, in which all women who were recorded as having laboured were selected as having a plan for VBAC, including those who were recorded as going on to have an elective caesarean section.**
2. The way this indicator is defined may differ from other VBAC indicators. Primary caesarean is often defined as the first ever caesarean regardless of parity, whereas this indicator selects only caesareans in primiparae.

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<sup>9</sup> Department of Human Services 2002, *Measuring maternity care: the final set of performance indicators*, DHS, Melbourne.

**Figure 7: MAT-4a Rate of women who plan for vaginal birth (VBAC) for the birth immediately following a primary caesarean section in Victorian public hospitals 2004**



Statewide public rate = 28.2 per cent (95 per cent CI 26.6, 29.9)

Note: Kilmore and District Hospital and Kyneton District Health Service do not offer VBAC.

**2003:**

Statewide public rate = 27.3 per cent (95 per cent CI 25.6, 28.9)

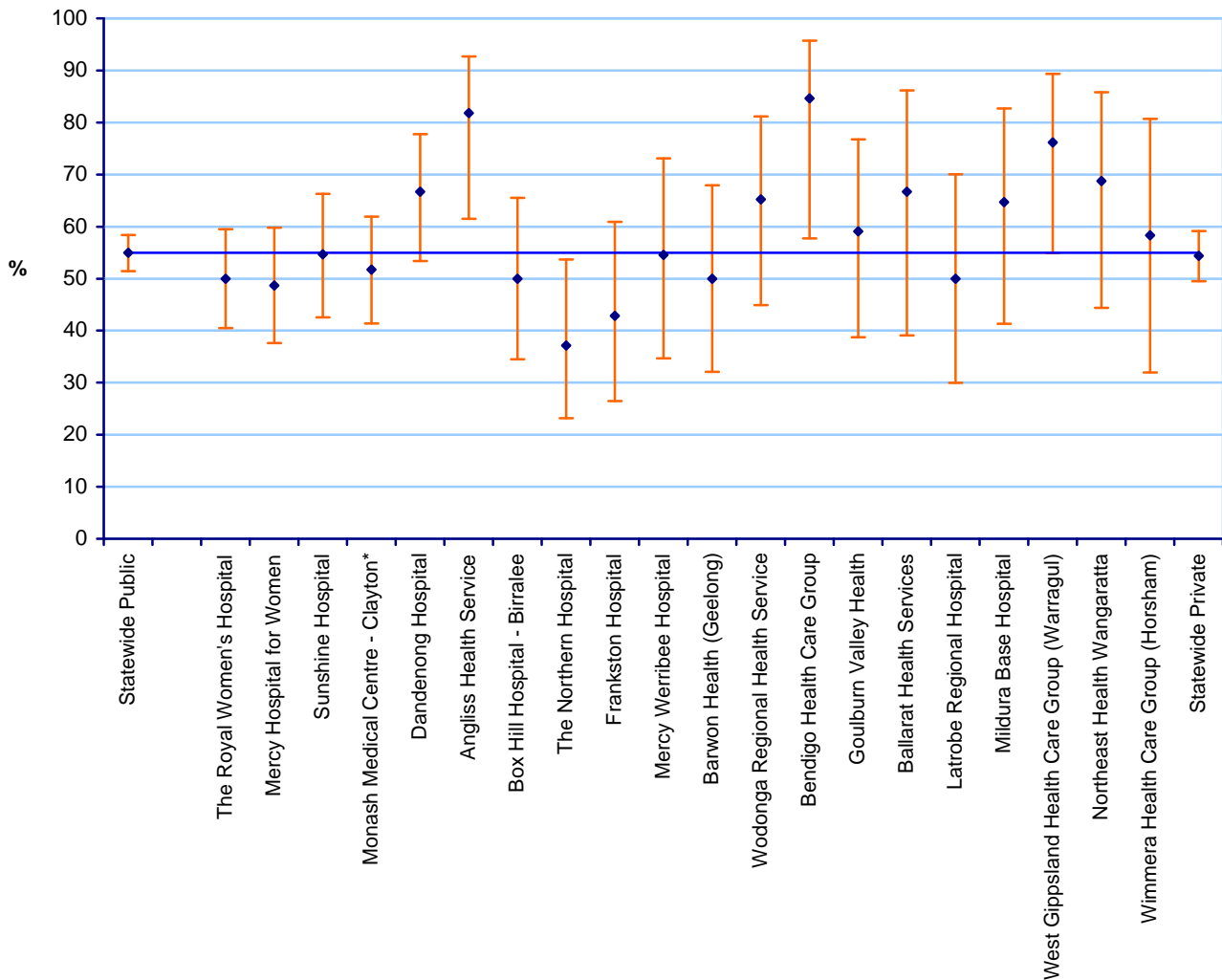
**2001 and 2002 combined:**

Statewide public rate = 32.7 per cent (95 per cent CI 31.4, 34.0)

### **Comments on 'planned' VBAC in Victorian public hospitals 2004**

1. Figure 7 displays the variation in planned VBAC occurring across Victorian public hospitals. A hospital's rate is significantly different from the state average if its confidence interval does not overlap the statewide rate. However, hospitals should also give attention to the absolute difference between their rate and the statewide rate, regardless of the confidence intervals.
2. The statewide public rate for planned VBAC for 2004 is 28.2 per cent (95 per cent CI 26.6, 29.9), compared with 27.2 per cent (95 per cent CI 25.6, 28.9) for 2003. For the two-year period (2001 and 2002), the statewide public rate for planned VBAC was 32.7 per cent (95 per cent CI 31.4, 34.0).
3. Twenty-three of the 36 hospitals have rates lower than the state average; seven of these statistically significant. Twelve hospitals have rates higher than the state average; five of these statistically significant. The rate of 'planned' VBAC among offering hospitals ranged from 10.3–65.6 per cent. The wide variation between hospitals shows that this indicator has the potential for identifying improved consistency in clinical practice.
4. As planning for VBAC involves a process of selection, hospitals need to consider their 'plan VBAC' and 'achieved VBAC' rates together.
5. It should be noted that there is no agreed optimal or clinically appropriate rate for this indicator.

**Figure 8: MAT-4b Rate of vaginal birth (VBAC) among women who plan for VBAC in the birth immediately following a primary caesarean section in Victorian public hospitals 2004**



Statewide public rate = 55.0 per cent (95 per cent CI 51.5, 58.4)

**2003:**

Statewide public rate = 50.0 per cent (95 per cent CI 46.4, 53.6)

**2001 and 2002 combined:**

Statewide public rate = 50.1 per cent (95 per cent CI 47.7, 52.5)

## Comments on 'achieved' VBAC in Victorian public hospitals 2004

1. Figure 8 provides a visual demonstration of the variation in achieved VBAC occurring across Victorian public hospitals. A hospital's rate is significantly different from the state average if its confidence interval does not overlap the statewide rate. However, hospitals should also give attention to the absolute difference between their rate and the statewide rate, regardless of the confidence intervals.
2. The statewide public rate for achieved VBAC for 2004 is 55.0 per cent (95 per cent CI 51.5, 58.4), an increase from 50.0 per cent (95 per cent CI 46.4, 53.6) in 2003. Because the confidence intervals for the overall rates in 2003 and 2004 overlap, this is not considered statistically significant. For the two-year period (2001 and 2002), the statewide public rate for achieved VBAC was 50.1 per cent (95 per cent CI 47.7, 52.5). Most hospitals shown in Figure 8 had improved rates from 2003.
3. Ten of the 20 hospitals have rates higher than the state average; two of these statistically significant. Ten hospitals have rates lower than the state average; one of these statistically significant. The rate of 'achieved' VBAC ranged from 37.1–76.2 per cent. The wide variation between hospitals shows that this indicator has the potential for identifying improved consistency in clinical practice.
4. As planning for VBAC involves a process of selection, hospitals need to consider their 'plan VBAC' and 'achieve VBAC' rates together.
5. Hospitals are included in the calculation if they have at least ten women who 'plan' for VBAC (denominator). Twenty hospitals were included this year, down from 27 last year, although the overall statewide public rate for women planning VBAC increased slightly from last year.
6. There is no agreed optimal or clinically appropriate rate for this indicator.

## 8. MAT-5 Five-year (2000–04) gestation standardised perinatal mortality ratio in Victorian public hospitals

This indicator is clearly defined in the report on the final set of performance indicators.<sup>10</sup>

### Key question

Does the perinatal care provided in this hospital result in optimal survival of infants? How does this hospital compare with the state average with respect to perinatal mortality, adjusted for gestation (gestation standardised perinatal mortality ratio = GSPMR)?

### Purpose and rationale

Care promoting the birth and survival of babies is one of the primary objectives of a maternity service. The standardisation is a risk-adjusted calculation, enabling hospitals with higher proportions of low gestation infants (and therefore higher likelihood of perinatal mortality) to be validly compared with hospitals with a different casemix.

The purpose of including this indicator is to provide assurance that mortality rates are within a safe range, and to identify variations and outliers. Pooling the data over five years (2000–04) adds stability to the data and reduces the risk of over-interpretation of chance fluctuations.

This indicator will enable identification of those public hospitals where:

- care meets the statewide reference standard
- a more detailed evaluation is indicated because of a consistently raised GSPMR.

This is an outcome indicator.

### Definitions

Perinatal death: a stillbirth or a death occurring within 28 days of birth in a live born baby of at least 20 weeks gestation (or, if gestation is unknown, weighing at least 400 grams)

$$\text{SPMR} = \frac{\text{observed perinatal deaths}}{\text{expected perinatal deaths}} \times 100$$

### Data source

In 2004 the gestational age adjusted SPMR was calculated and applied to all hospitals having five or more observed or expected perinatal deaths in the year of analysis (2004), or to any hospital included in last year's report. The SPMR is standardised according to the gestational age-specific perinatal mortality rates of the total population in Victoria. The standardisation does not adjust for interhospital transfers.

Last year, the Performance Indicator Sub-Committee of the Maternity Services Advisory Committee considered that the SPMR, unadjusted for terminations of pregnancy (ToP) and deaths due to congenital malformations, as presented prior to 2004, was a crude indicator, and agreed to present the data as follows:

1. GSPMR excluding infants of less than 500 grams, with data for public hospitals being shown against the statewide public rate as the standard or reference population
2. as above, but also excluding all terminations and deaths due to congenital malformations.

<sup>10</sup> Department of Human Services 2002, *Measuring maternity care: the final set of performance indicators*, DHS, Melbourne.

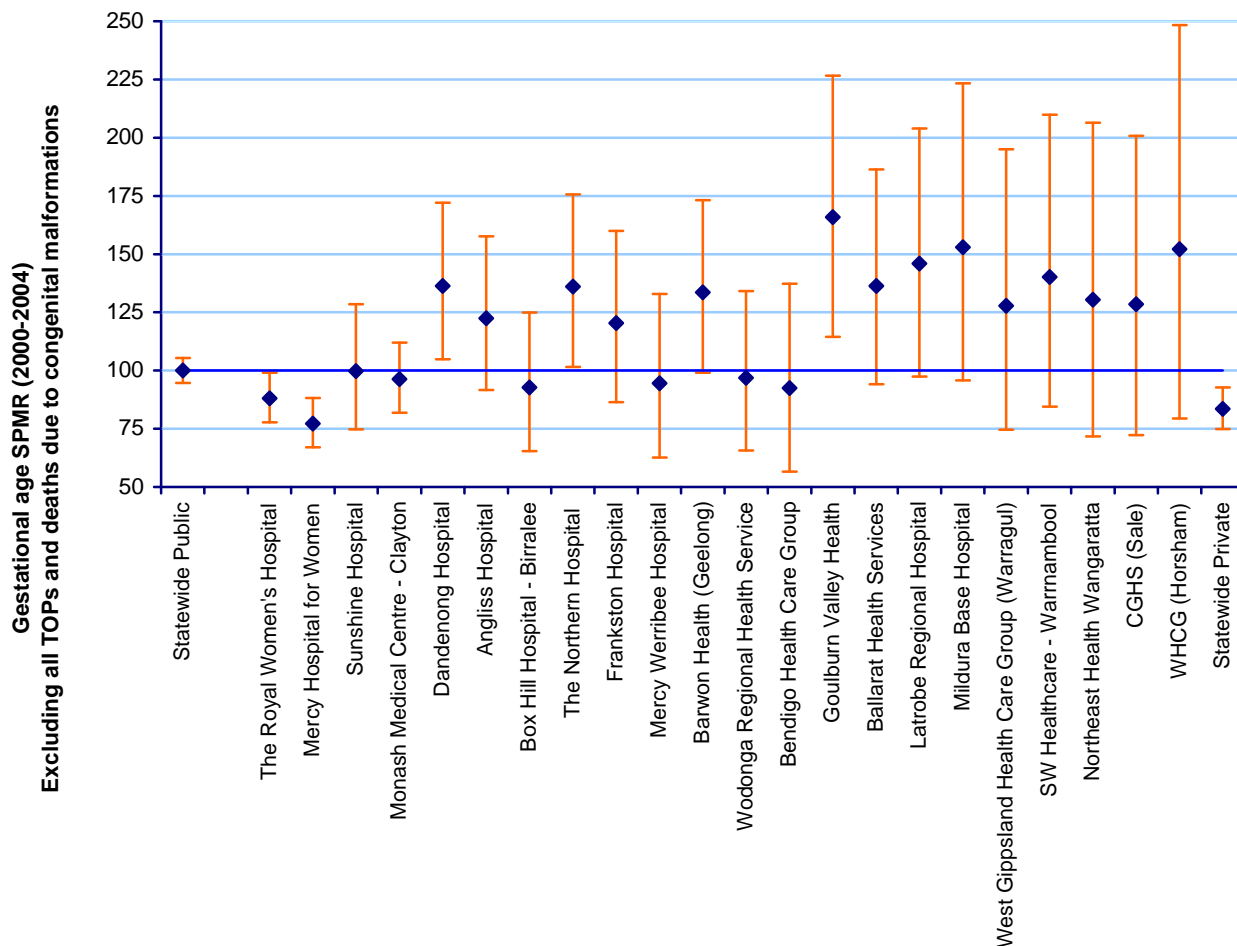
This adjustment is considered by MSAC to be a more sensitive indicator, and more closely reflects quality of care. The onus is on outliers to assess individual mortality cases, exploring the presence of contributing factors to address the potential for preventability.

The data in this report are calculated:

- from five years of pooled data
- standardised to the gestational age SPMR in Victorian public hospitals
- excluding births less than 500 grams or less than 22 weeks gestation
- excluding all terminations of pregnancy and deaths due to congenital malformations.

In interpreting these ratios, conclusions cannot be drawn about avoidability of any of these deaths. This needs to be undertaken by peer review panels.

**Figure 9: MAT-5 Gestation standardised perinatal mortality ratio excluding all terminations of pregnancy and deaths due to congenital malformations, using five years pooled data, in Victorian public hospitals 2004**



## **Comments on the gestational age SPMR excluding all ToPs and deaths due to congenital malformations in Victorian public hospitals 2004**

1. Figure 9 displays the variation in SPMR occurring across Victorian public hospitals in relation to the statewide average as the reference population (100), and the confidence interval around each rate-ratio. For example, an SPMR of 150 is equal to 1.5 times the statewide rate. A hospital's rate is significantly different from the state average if its confidence interval does not include 100. However, hospitals should also give attention to the absolute difference between their rate and the statewide rate, regardless of the confidence intervals.
2. The gestational age SPMR is presented for the first time in this year's report because gestational age is thought to provide more accurate risk adjustment than birth weight, which was historically introduced in the absence of reliable data on gestation. The adjusted SPMR (excluding terminations of pregnancy and deaths due to congenital anomalies) was presented for the first time in last year's report and is thought to be a more precise reflection of quality of care than the otherwise unadjusted rates presented in Figure 9 last year.
3. Fourteen of the 22 hospitals have an SPMR higher than the statewide average; three statistically significant. Eight of the 22 hospitals have an SPMR lower than the statewide average; two statistically significant. The perinatal mortality ratios ranged from 77.3–165.8.
4. Hospitals with rates higher than the state average should carefully review all perinatal deaths, identifying opportunities for practice improvement.

## 9. MAT-6 The rate of women referred to postnatal domiciliary care in Victorian public hospitals July 2004 – June 2005

This indicator is clearly defined in the report on the final set of performance indicators.<sup>11</sup>

### Key question

Do Victorian public hospitals providing maternity services provide adequate postnatal domiciliary care and support to women following discharge from hospital?

### Purpose and rationale

The purpose of this indicator is to assess the proportion of women referred to postnatal domiciliary care.

It is requirement that all public hospitals with maternity services provide postnatal domiciliary support to women following birth. The offer of one or more postnatal domiciliary visits by a midwife, depending on need, has been a clearly established requirement of all Victorian public hospitals with maternity services for the past five years.

This is a process indicator.

### Definitions

*Numerator:* Number of women giving birth referred to postnatal domiciliary care or Hospital-in-the-Home  
*Denominator:* Number of women giving birth excluding women transferred to another hospital

### Data source

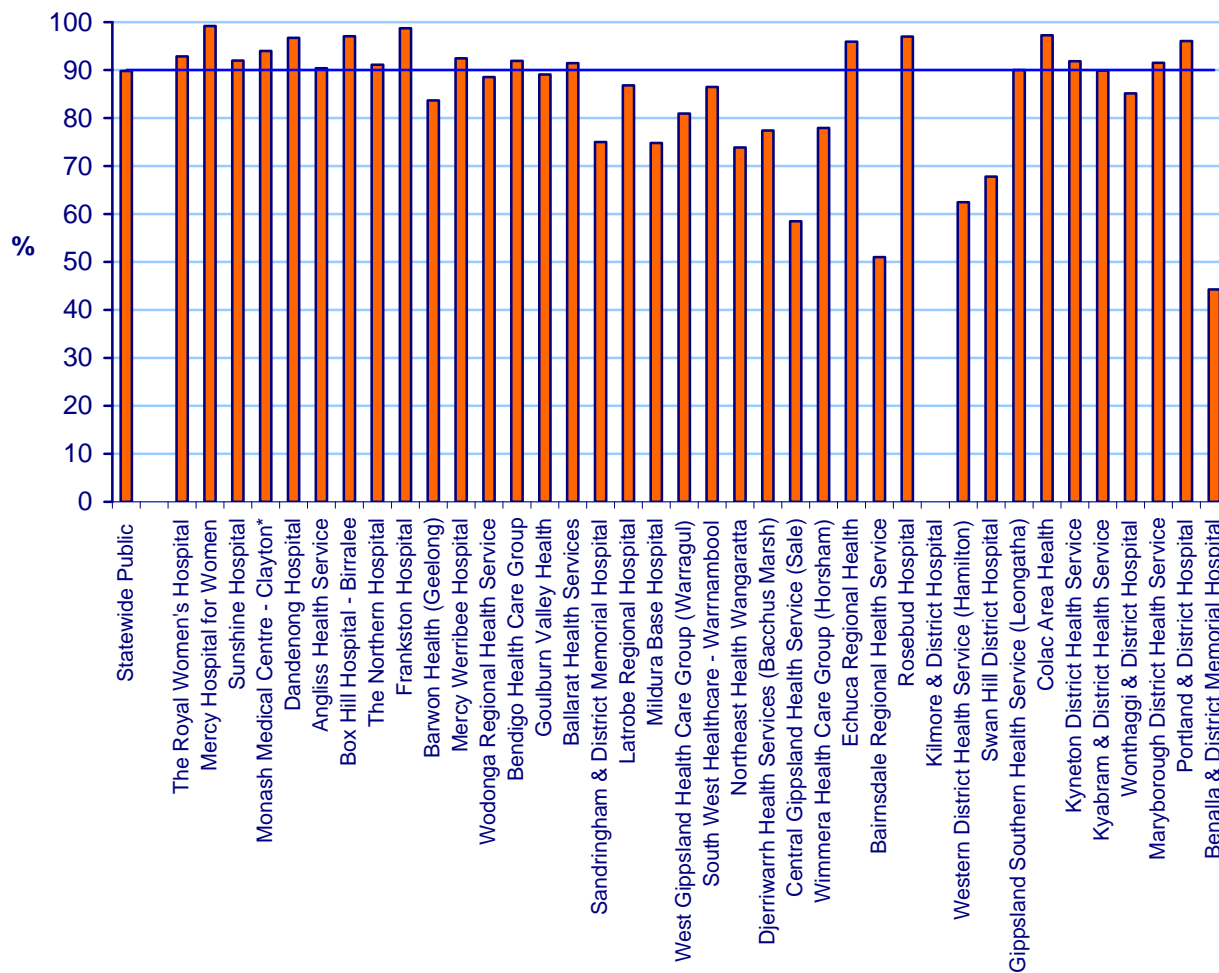
Data are provided to the Department of Human Services via the VAED.

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<sup>11</sup> Department of Human Services 2002, *Measuring maternity services: the final set of performance indicators*, DHS, Melbourne.

**Figure 10: MAT-6: Rate of referral to postnatal domiciliary care or Hospital-in-the-Home in Victorian public hospitals July 2004 – June 2005**

**Hospitals with ≥ 100 confinements**



Statewide public rate = 90 per cent

**July 2003 – June 2004**

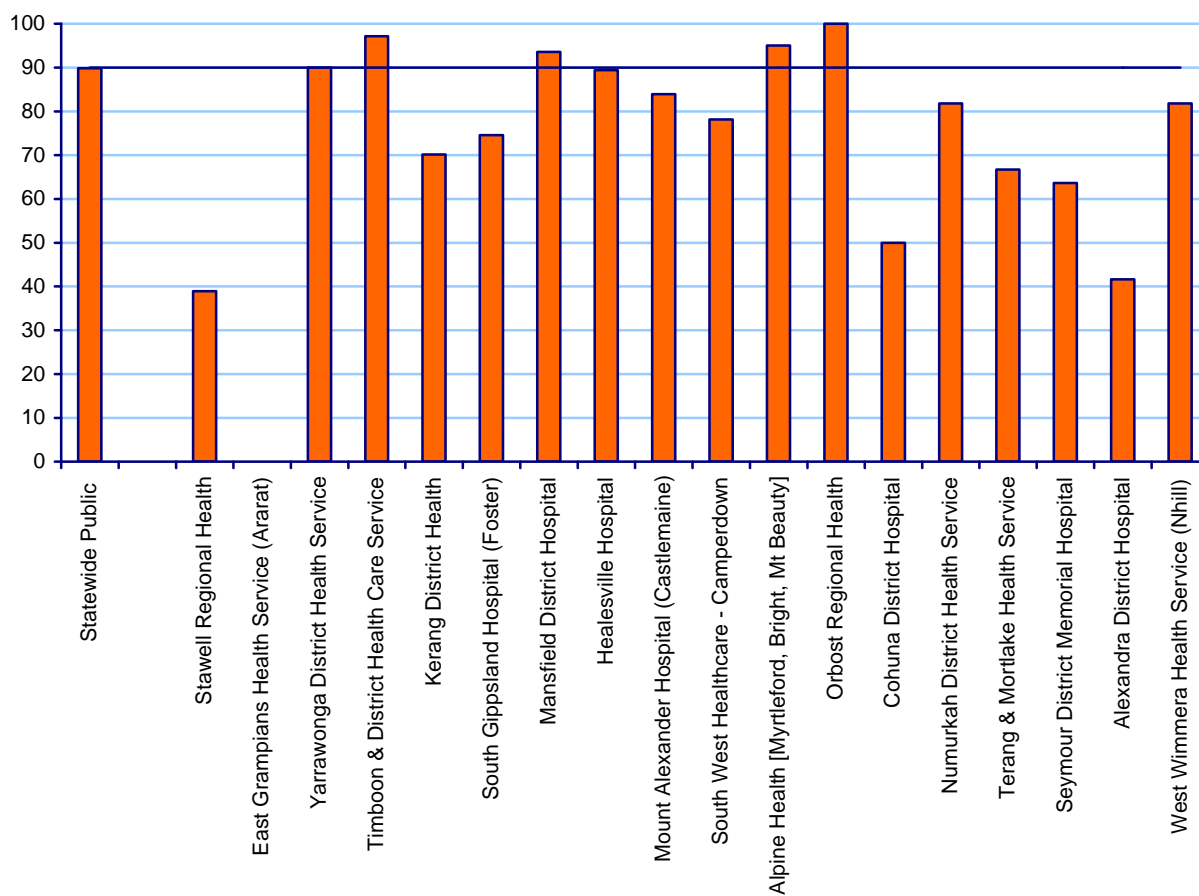
Statewide public rate = 89.0 per cent

**July 2002 – June 2003**

Statewide public rate = 88.0 per cent

**Figure 11: MAT-6: Rate of referral to postnatal domiciliary care or Hospital-in-the-Home in Victorian public hospitals July 2004 – June 2005**

**Hospitals with ten to 99 confinements**



Statewide public rate = 90.0 per cent

**July 2003 – June 2004**

Statewide public rate = 89.0 per cent

**July 2002 – June 2003**

Statewide public rate = 88.0 per cent

## **Comments on referral to postnatal domiciliary care in Victorian public hospitals July 2004 – June 2005**

1. Figures 10 and 11 display the variation in rates across Victorian public hospitals and a comparison with the statewide public rate, but does **not** demonstrate which hospitals are significantly different from the statewide public rate.
2. The Victorian statewide public hospital rate of referral to postnatal domiciliary care in 2004–05 is 90.0 per cent. The agreed targets for Victorian hospitals providing maternity care is 90 per cent for metropolitan hospitals and 80 per cent for rural/regional hospitals.
3. There is greater variation among smaller rural hospitals, with many rural hospitals demonstrating low rates of referral to postnatal domiciliary services. This may reflect a longer hospital stay, as is the case in many rural hospitals, or reduced availability of services to more remote locations. Two hospitals show no referral to postnatal domiciliary care.

## 10. MAT-7 The rate of women offered appropriate interventions in relation to smoking in Victorian public hospitals July 2004 – June 2005

This indicator is clearly defined in the report on the final set of performance indicators.<sup>12</sup> This is the second year of reporting on this indicator. Because this indicator came into effect on 1 October 2003, the reporting period for the first year was nine months. Only health services that provide antenatal services or a booking-in visit prior to 20 weeks are required to report on this indicator.

### Key question

Does the hospital help pregnant women to quit smoking and to reduce the risk of smoking-associated adverse health outcomes for the baby?

### Purpose and rationale

This indicator assesses the performance of providers of maternity care in providing smoking cessation advice, assistance and follow-up during routine antenatal care. It aims to reduce the rate of smoking among pregnant women and improve outcomes for their babies.

The antenatal phase is an ideal opportunity for smoking cessation or reduction education programs, which might involve both hospital and community-based carers.

This is a process indicator.

### Definitions

#### **Ask/assess/advise/assist**

*Numerator:* For the population sample, the number of women who are asked about smoking status, assessed as to motivation to quit and offered advice and assistance at the first hospital antenatal appointment

*Denominator:* The population sample (every fourth woman who had their first antenatal visit at the hospital and subsequently gave birth at the hospital within the last six months)

#### **Ask again**

*Numerator:* For the population sample, the number of women identified as smokers (including spontaneous quitters) at the first hospital antenatal appointment who are asked again about smoking status by 20 weeks gestation

*Denominator:* For the population sample, the number of women who attended an antenatal visit by 20 weeks gestation (either hospital or community) and who had been identified as smokers (including spontaneous quitters) at the first hospital antenatal appointment

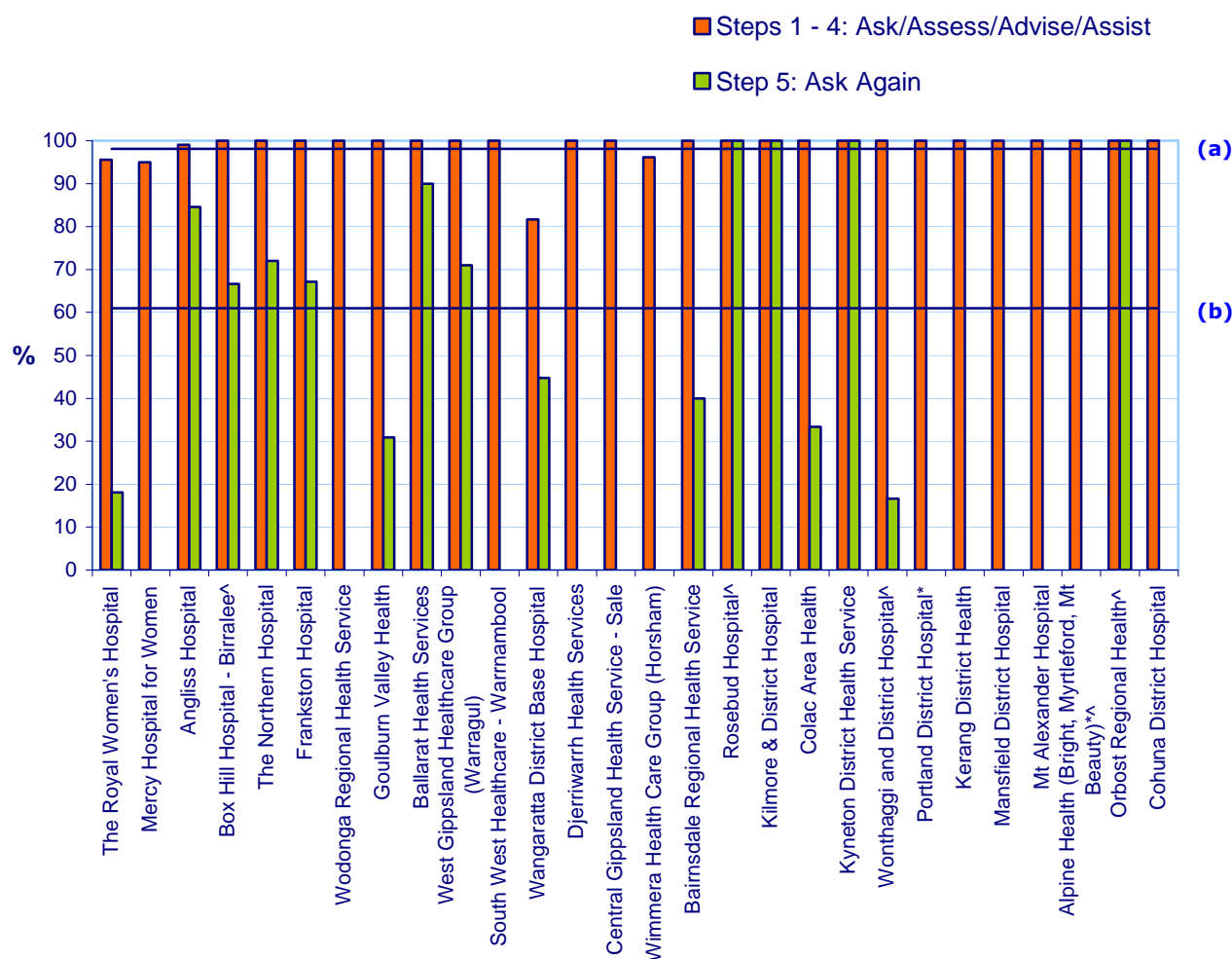
### Data source

Victorian public maternity hospitals, having established a system capable of recording smoking assessments and advice at the first hospital appointment and at the subsequent antenatal appointments, report these data annually to the Department of Human Services. This may require collaboration with community-based providers, including shared documentation systems.

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<sup>12</sup> Department of Human Services 2002, *Measuring maternity care: the final set of performance indicators*, DHS, Melbourne.

**Figure: 12 MAT-7 Rate of women offered appropriate antenatal interventions in relation to smoking in Victorian public hospitals July 2004 – June 2005**



**(a) Ask/assess/advise/assist**

The average for the hospitals charted = 98.1 per cent (statewide public rate not available)

**(b) Ask again (not applicable in those hospitals that have no bar)**

The average for the hospitals charted = 63.3 per cent (statewide public rate not available)

Hospitals with no bar for 'Ask again' denotes that women are not seen again prior to 20 weeks or data were not collected for (b), therefore 'Ask again' is not applicable. It does not denote 0 per cent in any case.

**July 2003 – June 2004**

**(a)** The average for the reporting hospitals = 90.1 per cent (statewide public rate not available)

**(b)** The average for the reporting hospitals = 56.8 per cent (statewide public rate not available)

**Note**

1. \* Denotes hospitals where denominator less than ten for 'Ask, assess, advise, assist'
2. ^ Denotes hospitals where denominator less than ten for 'Ask again'

### **Comments on the proportion of women offered appropriate antenatal interventions in relation to smoking in Victorian public hospitals July 2004 – June 2005**

1. Figure 12 displays the variation in rates across Victorian hospitals that reported these data to the department and a comparison with the average across these hospitals. It does **not** demonstrate which hospitals are significantly different from the average.
2. This is the second year that hospitals have been required to report data for this indicator.
3. Fewer hospitals report against this indicator because many rural hospitals do not:
  - a. provide antenatal clinic services
  - b. book women in to their hospital prior to 20 weeks gestation
  - or
  - c. see women again in hospital-based antenatal clinic prior to 20 weeks gestation.
4. On average, for 2004–05 the proportion of women assessed for smoking behaviour and given advice and assistance at the first antenatal appointment prior to 20 weeks gestation is 98.1 per cent for the chartered Victorian hospitals. In 2003–04 this was 90.1 per cent. The proportion of further appropriate intervention in relation to smoking prior to 20 weeks gestation for those hospitals, which identified smokers or recent quitters, is 63.3 per cent. In 2003–04 this was 56.8 per cent. This year 27 hospitals reported against this indicator, up from 20 hospitals in the previous year.
5. There remains potential for improvement in:
  - a. data collection methods demonstrating further intervention in relation to smoking was given
  - b. the actual provision of appropriate intervention in relation to smoking prior to 20 weeks.
6. Many hospitals have reported difficulty collecting data for this new indicator. Larger hospitals cite human resources as the reason; many smaller rural hospitals without antenatal clinics report not seeing women again prior to 20 weeks as the reason. Some rural hospitals have begun asking women to book or attend the hospital prior to 20 weeks for supplementary antenatal care for the purpose of providing assessment and intervention in relation to smoking behaviour.

## 11. MAT-8 The provision of appropriate breastfeeding support and advice in Victorian public hospitals July 2004 – June 2005

This indicator is clearly defined in the report on the final set of performance indicators.<sup>13</sup>

### Key question

Does the hospital provide information and support on breastfeeding in accordance with the Baby Friendly Hospital Initiative (BFHI), which is based on the World Health Organisation (WHO) *Ten steps to successful breastfeeding*?

### Purpose and rationale

The indicator supports care practices for women who wish to breastfeed their baby to ensure:

- breastfeeding initiation is enhanced
- breastfeeding advice and support is in line with the WHO *Ten steps to successful breastfeeding*
- babies separated from their mothers (due to illness/prematurity) receive breast milk.

This indicator provides a means of monitoring ongoing compliance with WHO *Ten steps* for Baby Friendly accredited hospitals. Alternatively, it can be used as an opportunity to assess readiness for accreditation.

The implementation of this indicator does not require hospitals to become accredited as Baby Friendly hospitals, nor does it equate with accreditation.

This is a score-based indicator, which is an administrative/clinical measure for care and the process of care delivery on a range of parameters.

### Definitions

*Numerator:* Number of WHO *Ten steps* approved at time of assessment

*Denominator:* WHO *Ten steps*

This is an organisational assessment; a score of 10/10 is considered best practice.

### WHO: The ten steps to successful breastfeeding

Every facility providing maternity services and care for newborn infants should:

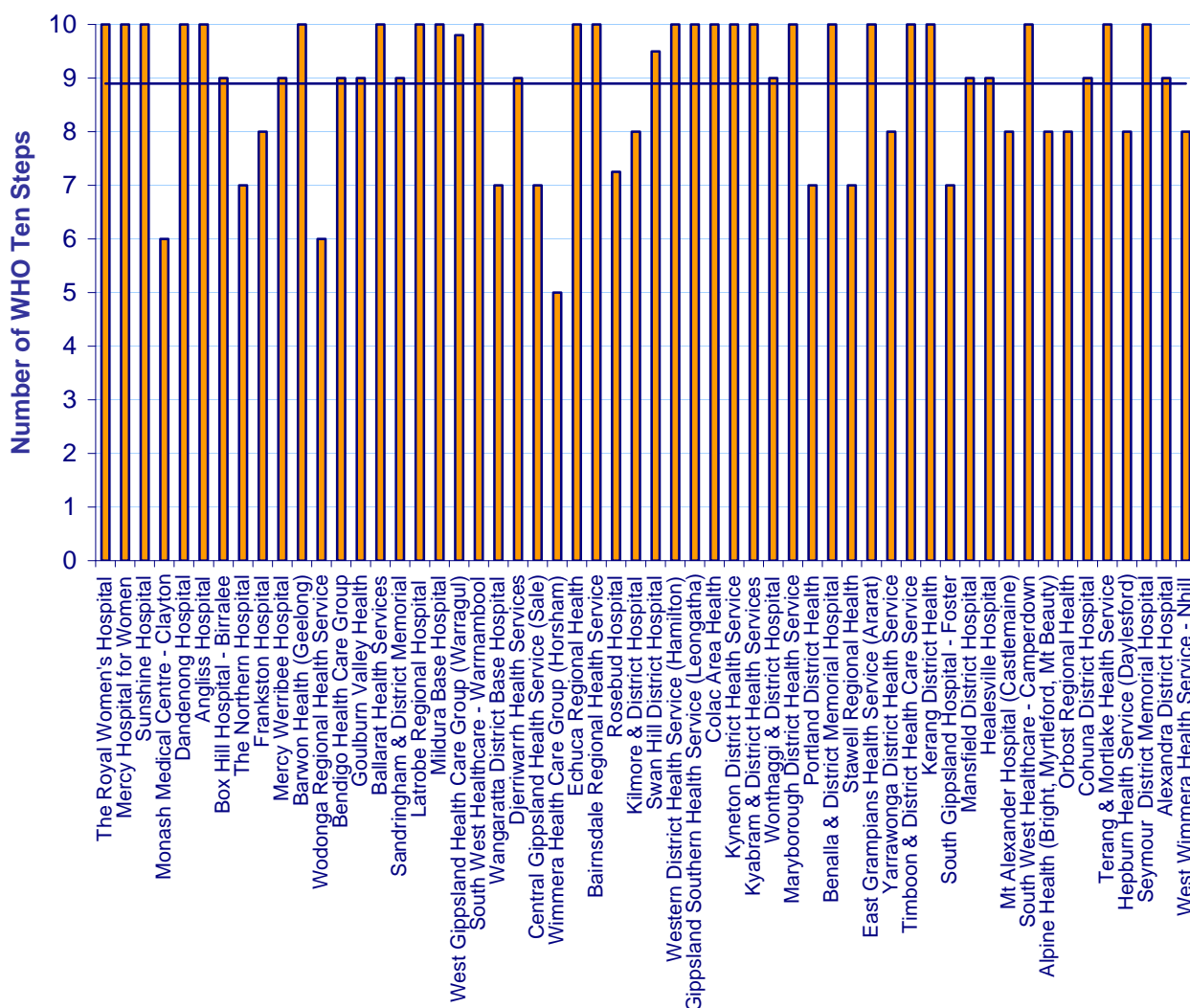
- Step 1 have a written breastfeeding policy that is routinely communicated to all health care staff
- Step 2 train all health care staff in skills necessary to implement this policy
- Step 3 inform all pregnant women about the benefits and management of breastfeeding
- Step 4 help mother initiate breastfeeding within a half-hour of birth
- Step 5 show women how to breastfeed and how to maintain lactation, even if they should be separated from their infants
- Step 6 give newborn infants no food or drink other than breast milk unless medically indicated
- Step 7 practice rooming-in; allow mothers and infants to remain together 24 hours a day
- Step 8 encourage breastfeeding on demand
- Step 9 give no artificial teats or pacifiers (also called dummies or soothers) to breastfeeding infants
- Step 10 foster the establishment of breastfeeding groups and refer mothers to them on discharge from the hospital or clinic.

### Data source

Assessment and documentation in line with WHO accreditation governed and coordinated by the Australian College of Midwives Incorporated (ACMI). Hospitals conduct annual self-assessment using the BFHI self-assessment tool and report annually to the Department of Human Services.

<sup>13</sup> Department of Human Services 2002, *Measuring maternity care: the final set of performance indicators*, DHS, Melbourne.

**Figure 13: MAT-8 Number of WHO Ten steps achieved in Victorian public hospitals for the sample periods July 2004 – June 2005**



Statewide public rate = 8.9/10 (All health services lodged data.)

**June 2003 – July 2004 sample periods:**

The average score for the hospitals charted = 8.5/10 (statewide public rate not available)

**June 2002 – July 2003 sample periods:**

The average score for the reporting hospitals = 8/10 (statewide public rate not available)

### **Comments on the provision of appropriate breastfeeding support and advice in Victorian public hospitals July 2004 – June 2005**

1. Figure 13 displays the variation in rates across Victorian public hospitals that reported these data to the department and a comparison with the average across these hospitals. It does **not** demonstrate which hospitals are significantly different from the average.
2. The statewide public number of WHO *Ten steps* achieved by Victorian hospitals for 2004–05 is 8.9/10, a slight increase from 8.5 in 2003–04.
3. Steps 1, 2, 9 and 10 of the WHO *Ten steps* featured as areas for improvement among many hospitals with results less than 8/10. Steps 4 and 6 were also lacking in lower-scoring hospitals to a lesser extent.
4. Sixteen more hospitals lodged their data in 2005 than in 2004. Of the 56 hospitals, 22 are Baby Friendly (BFHI) accredited, based on the WHO *Ten steps to successful breastfeeding*.
5. Of the ten hospitals that scored less than 8/10, none were BFHI accredited.
6. Of the 22 hospitals that are BFHI accredited, 21 had achieved a score of 10/10 and one hospital achieved 9/10.

## 12. MAT-9 The rate of women receiving timely hospital antenatal clinic services in Victorian public hospitals July 2004 – June 2005

This indicator is clearly defined in the report on the final set of performance indicators.<sup>14</sup>

### Key question

Does the hospital provide antenatal care in a timely and efficient way?

### Purpose and rationale

Several studies have identified waiting times as a factor in maternal satisfaction. It is anticipated that by using this indicator there should be a fall in the percentage of women who wait for more than 30 minutes from time of appointment to the time attended by the clinician.

This indicator measures organisational efficiency and a key component of patient satisfaction.

This is a process indicator.

### Definitions

*Numerator:* For the period of one month, the number of women waiting more than 30 minutes from hospital antenatal appointment time to the time clinician consultation begins

*Denominator:* For the period of one month, the number of women presenting for hospital antenatal appointment

### Data source

Data are to be collected for all clinics providing antenatal care, via outpatient booking systems.

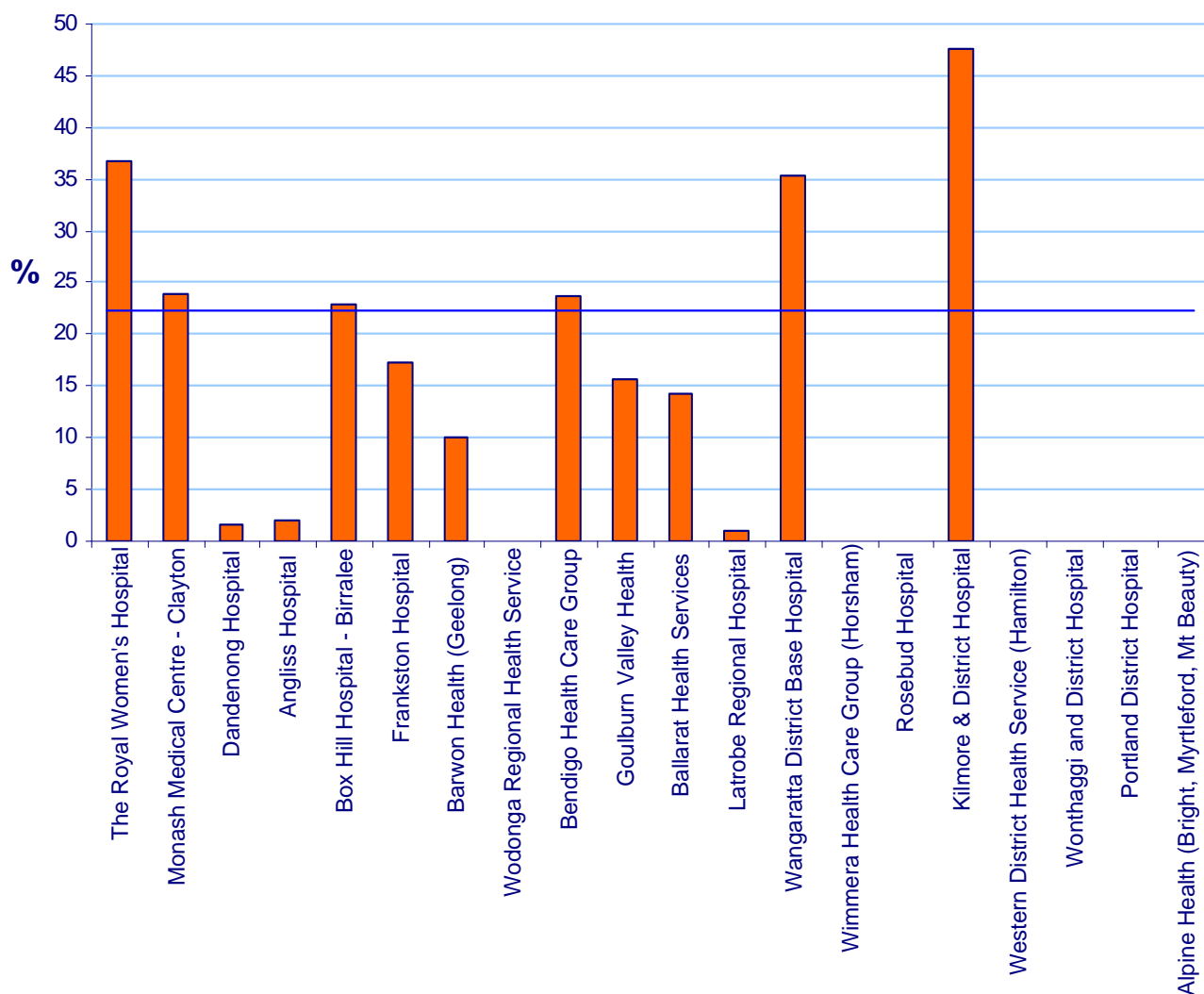
Not all facilities have computerised booking systems. Some hospitals institute manual audits.

Data are reported to the Department of Human Services by reporting hospitals.

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<sup>14</sup> Department of Human Services 2002, *Measuring maternity care: the final set of performance indicators*, DHS, Melbourne.

**Figure 14: MAT-9 Rate of women who wait more than 30 minutes for hospital antenatal clinic services in Victorian public hospitals for the sample periods July 2004 – June 2005**



The average for the hospitals charted = 22.0 per cent (statewide public rate not available)

**July 2003 – June 2004 sample periods:**

The average for the hospitals charted = 16.4 per cent (statewide public rate not available)

**July 2002 – June 2003 sample periods:**

The average for the reporting hospitals = 33.7 per cent (statewide public rate not available)

## Comments on the proportion of women who receive timely hospital antenatal clinic services in Victorian public hospitals July 2004 – June 2005

1. Figure 14 displays the variation in rates across Victorian public hospitals that reported these data to the department and a comparison with the average across these hospitals. It does **not** demonstrate which hospitals are significantly different from the average.
2. Fewer hospitals are represented in this indicator because many rural hospitals do not provide antenatal clinic services.
3. On average, 22.3 per cent of women waited more than 30 minutes for their antenatal clinic appointments in Victorian hospitals lodging data in 2004–05. This is a considerable increase from 16.4 per cent last year, although data have come from a different mix of reporting hospitals. The rate in 2002–03 was 33.7 per cent for the reporting hospitals.
4. Three of the 20 hospitals had a high proportion of women waiting more than 30 minutes (more than 30 per cent). Ten hospitals had a low proportion waiting more than 30 minutes (less than 10 per cent). Given that reduced waiting times for antenatal clinic are associated with greater satisfaction of care<sup>15</sup>, these results demonstrate a potential for improvement in women's satisfaction with antenatal care.
5. Overall, 13.6 per cent of women were reported as arriving late for their antenatal appointments. These women were excluded from the calculation.
6. In 2004-05, as in 2003-04, hospitals continue to report:
  - poor compliance among clinicians in entering accurate data electronically or manually
  - difficulty in managing waiting times when doctors have been 'called away' from clinic to attend more urgent matters.

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<sup>15</sup> Bruinsma, F, Brown, S & Darcy, MA 2001, *Victorian survey of recent mothers 2000: women's views and experiences of different models of maternity care*, Centre for the Study of Mothers' and Children's Health, School of Public Health, La Trobe University, Melbourne.















