

WOMEN'S
HEALTHCARE
AUSTRALASIA

IHP Activity based Funding
Conference 2014

**Opportunities for quality and efficiency
improvements through reducing
unwanted variation in clinical practice in
Australian maternity care**

A/Prof Michael Nicholl,
Vice President, WHA

Overview

- About WHA & our benchmarking program
- Significant variations in clinical practice in Australian maternity care
- Significant variation in rates of adverse outcomes
- Cost implications of clinical variation
- Opportunities for the maternity services sector

About WHA...

Vision:

To enhance the health and wellbeing of women and babies.

Mission:

To support women's hospitals and health services to achieve excellence in clinical care through

- advocacy,
- benchmarking performance,
- networking to share knowledge & evidence underpinning best practice
- education & training

Governance:

Peak not for Profit Association for Hospitals providing maternity & women's Healthcare services in Australia and New Zealand



WOMEN'S
HEALTHCARE
AUSTRALASIA

Who are our Members?

34 Member hospitals:

Tertiary services:

- Centenary Hospital, for Women & Children ACT
- Christchurch Women's Hospital, NZ
- Fiona Stanley Hospital, WA
- King Edward Hospital, WA
- Mater Mothers Hospital, QLD
- Mercy Hospital for Women, VIC
- Royal Darwin Hospital, NT
- Royal Hobart Hospital, TAS
- Royal Hospital for Women, NSW
- Royal North Shore Hospital, NSW
- The Royal Women's Hospital, VIC
- Women's & Children's Health Network, SA

Metropolitan & Regional Maternity Services

- Alice Springs Hospital, NT
- Angliss Hospital, VIC
- Armadale Hospital, WA
- Ballarat Health Service, VIC
- Bendigo Health Service, VIC
- Box Hill Hospital, VIC
- Calvary Health Care, ACT
- Frankston Hospital, VIC
- Gold Coast University Hospital, QLD
- Ipswich Hospital, QLD
- Launceston General Hospital, TAS
- Lyell McEwin Hospital, SA
- Mersey Community Hospital
- Nambour Hospital, QLD
- Northern Health, VIC
- Northwest Regional Hospital, TAS
- Gympie Hospital, QLD
- Ryde Hospital, NSW
- St Vincent's Private Hospital, VIC
- Sunshine Hospital, VIC
- Townsville Hospital, QLD
- Werribee Mercy Hospital, VIC



WHA's benchmarking program

- 31 hospitals participated for 2012-13 – collectively caring for 100,000 births p.a (1/3 of annual births in Australia)
- Collects & reports data on an agreed dashboard of clinical indicators including all of the National Core Maternity Indicators
- Collects & reports data on activity and cost by maternity & women's health related DRGs and by complexity
- Annual snapshot and time series data provided
- Compares hospitals with similar profiles



WOMEN'S
HEALTHCARE
AUSTRALASIA



BENCHMARKING
maternity care

Variations in Clinical Practice

Variables influencing practice:

- Demographic of local populations of women – risk profile
- Level of services provided
- Insurance status of women
- Skills & knowledge of obstetric staff
- Skills & knowledge of midwifery staff
- Models of care
- Communications between care providers
- Women's expectations/demands



The 'Selected Primipara'

Important to enable meaningful comparisons by looking at a clinically 'standard' cohort of women: 'selected primiparous women defined as:



- All women giving birth for the first time at >20 weeks gestation
- 20-34 years of age at the time of giving birth
- at term (37.0 weeks - 41.0 weeks gestation)
- Singleton pregnancy
- Cephalic presentation



Total number of selected primiparas giving birth (2011-12)

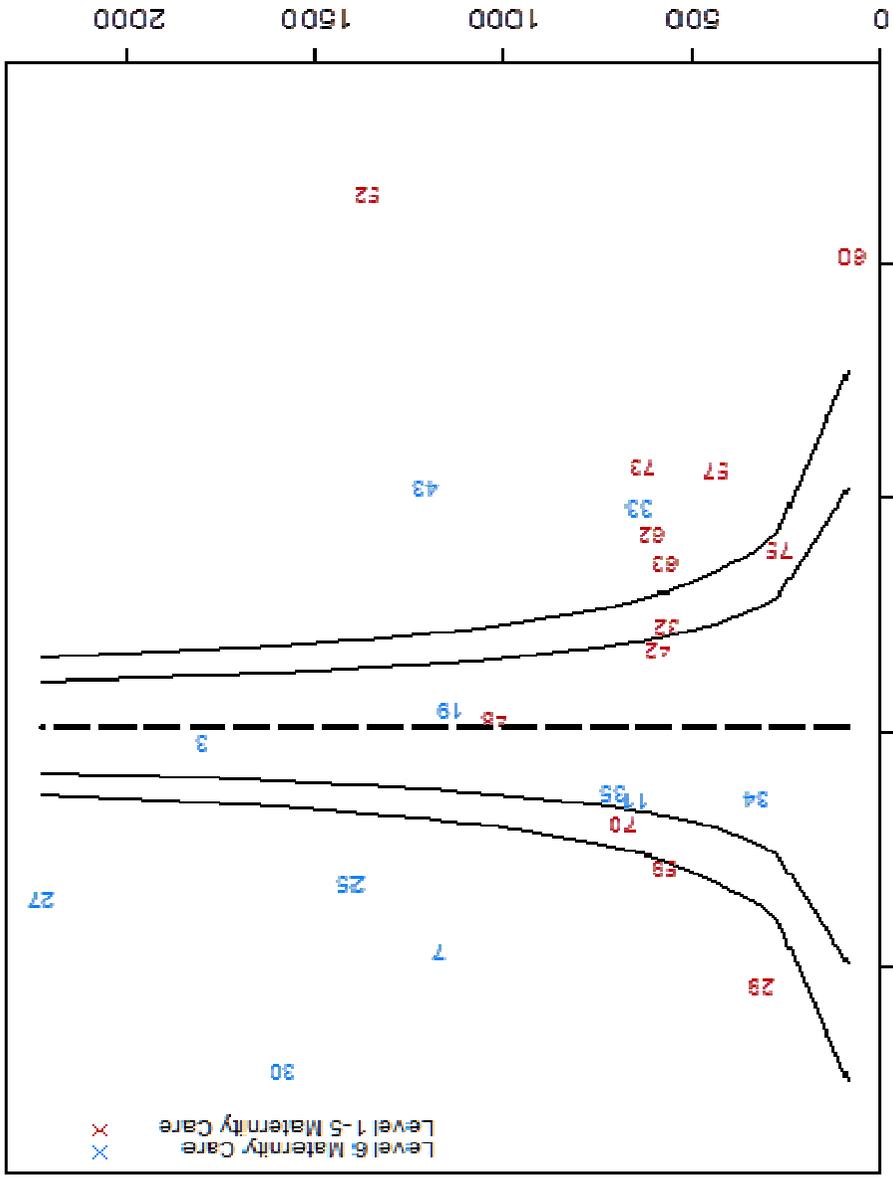


Figure 14: % selected primiparas having induction of labour (2011-12)

Selected
Primipars
Indicator 4:
Induction of
Labour

Indicator 6b: Epidural Rate – selected primipids

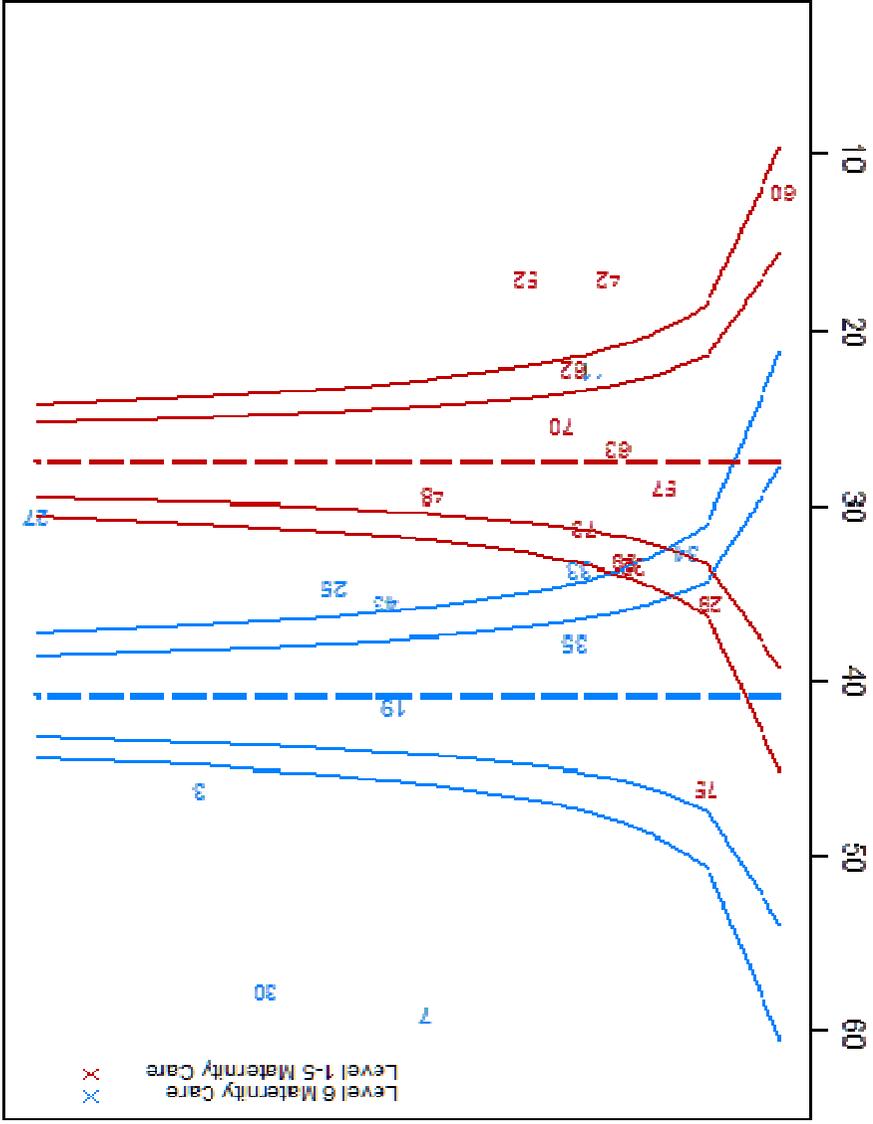


Figure 26: % selected primipids giving birth vaginally who had an epidural for pain relief in labour (2011-12)

Total number of selected primiparas giving birth vaginally (2011-12)

1500
1000
500
0

10 20 30 40 50 60

Level 1-5 Maternity Care
Level 6 Maternity Care

Total number of selected primiparas giving birth (2011-12)

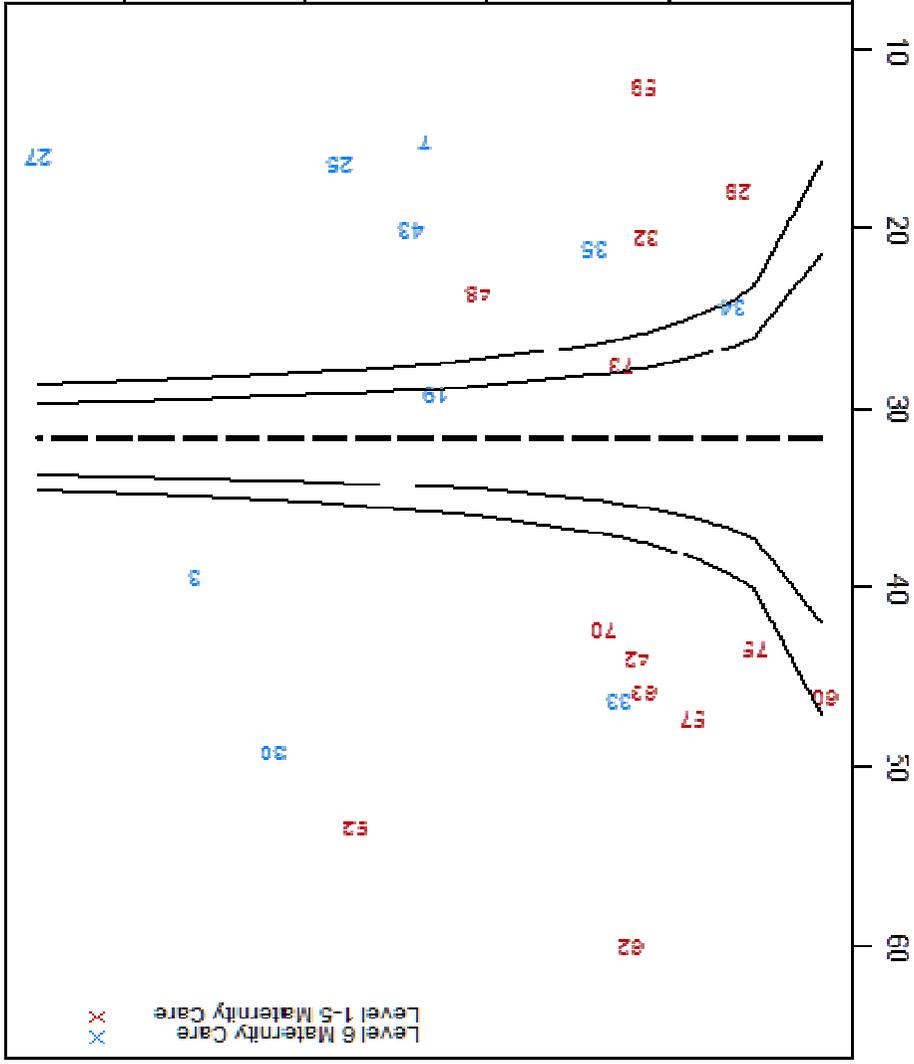
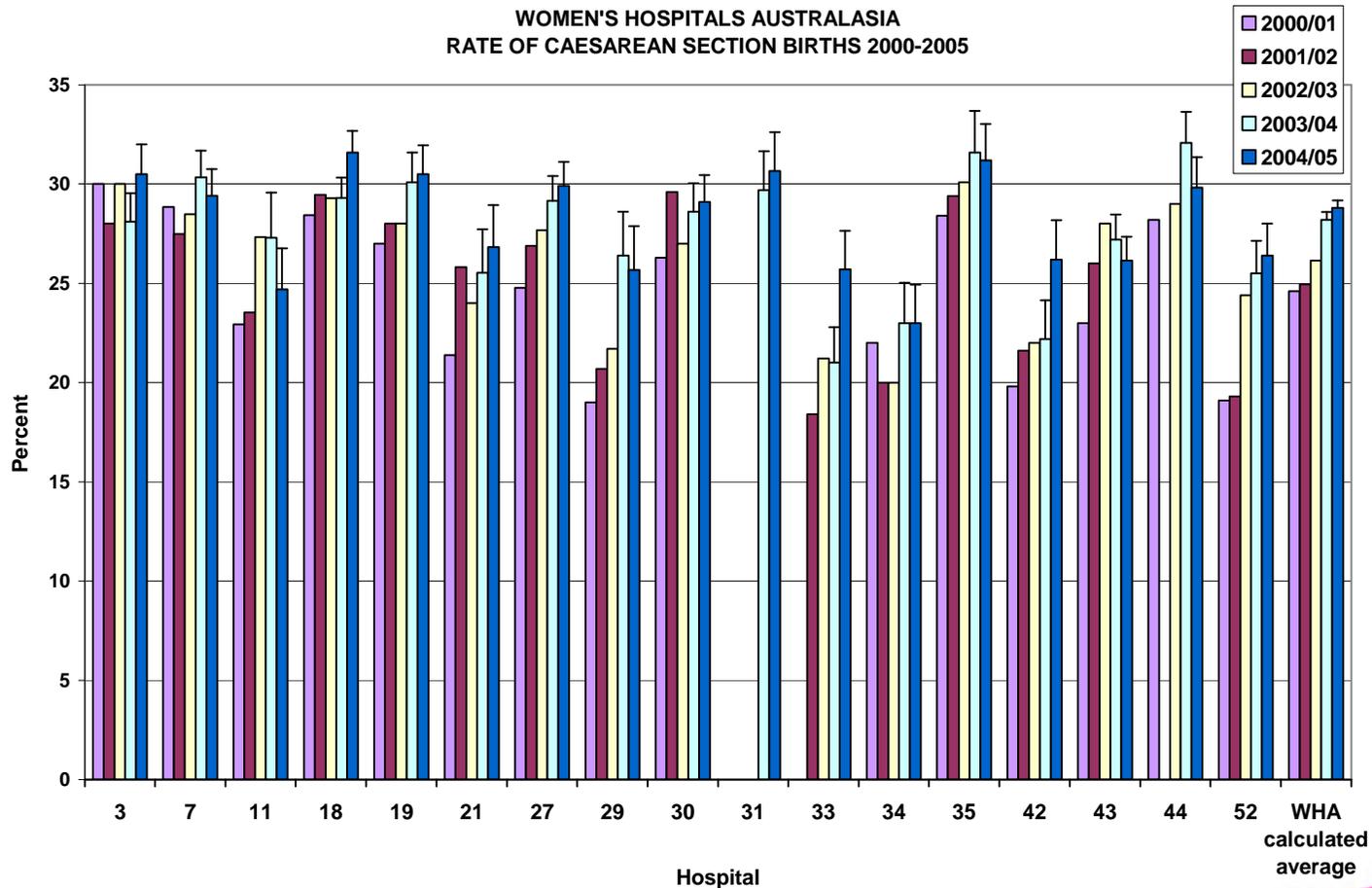


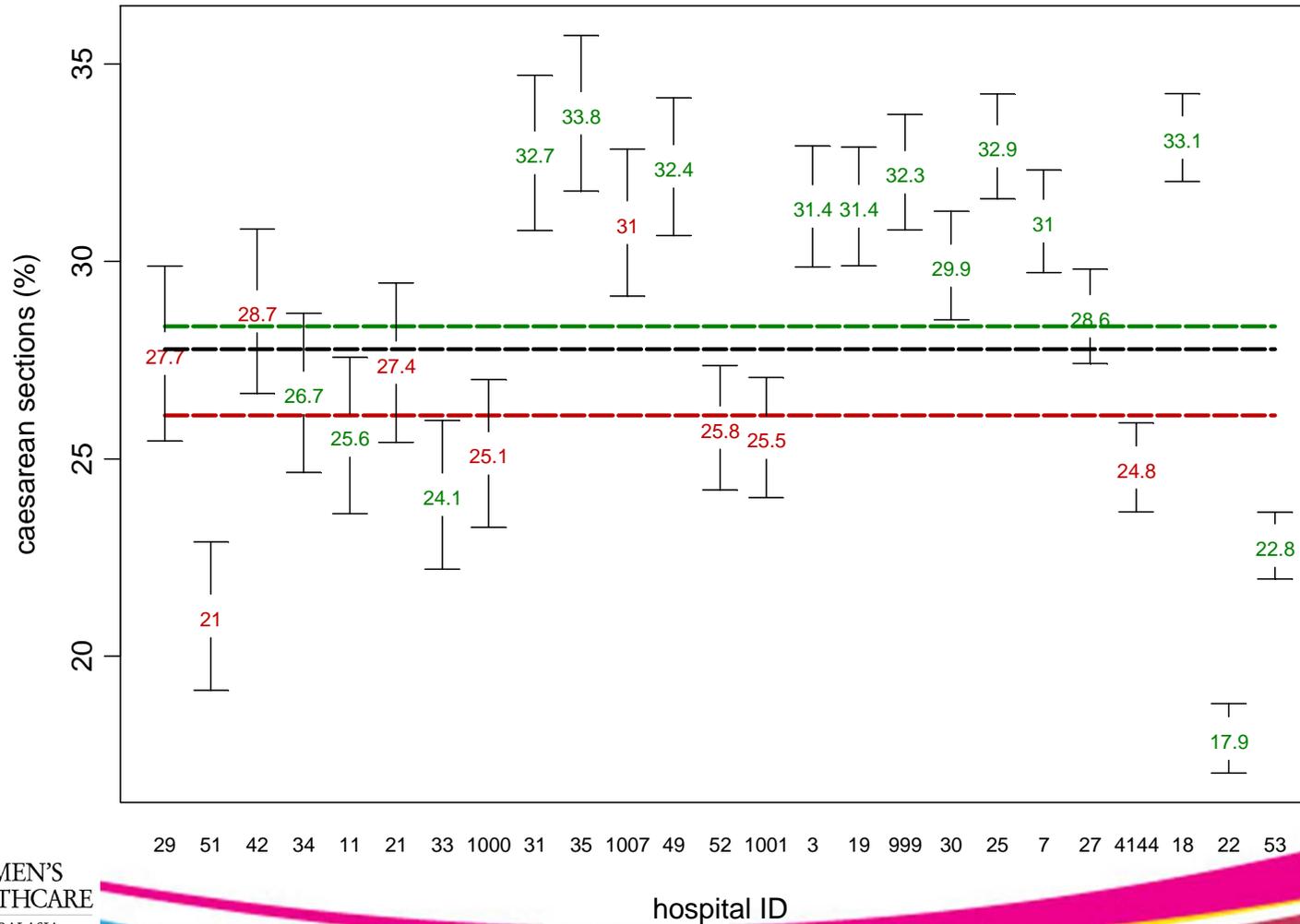
Figure 12: % selected primipars having spontaneous vaginal birth (2011-12)

Selected Primipars Indicator 3: Spontaneous Vaginal Birth

Selected Primipis: Rates of Caesarean Section Births 2008/09 to 2012/13

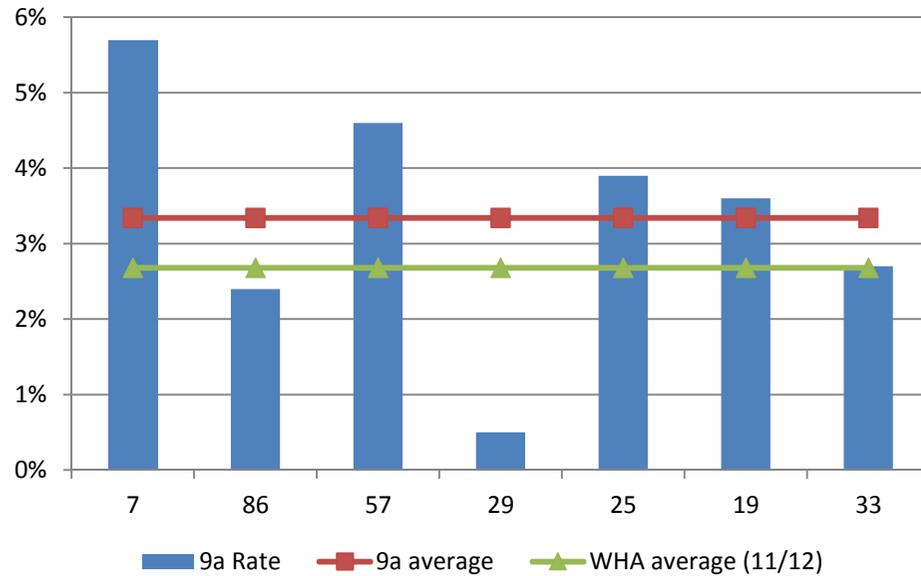


Selected Primipis: Rates of Caesarean Section Births 2012-13

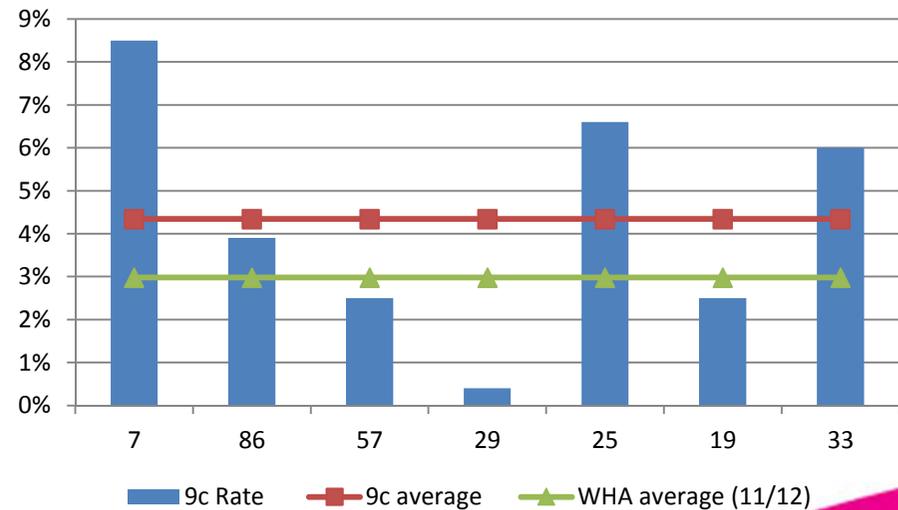


Adverse Outcomes: PPH Rates for 'Weighing' Hospitals

**Indicator 9a: Postpartum haemorrhage >1,000 mls
<1,500 mls - all women who give birth vaginally**

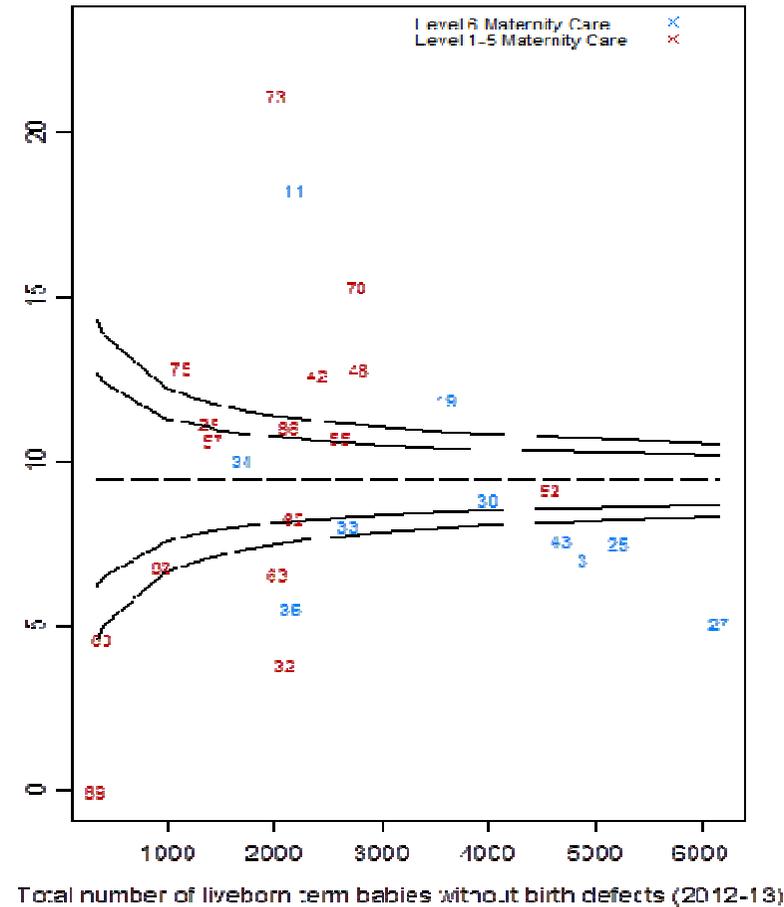
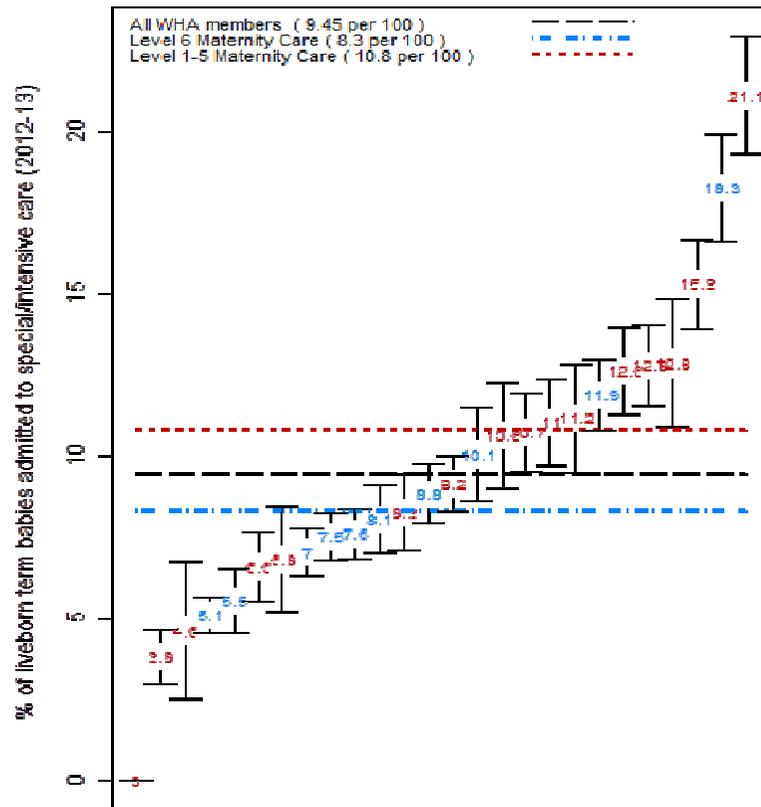


**Indicator 9c: Postpartum haemorrhage >1,000 mls
<1,500 mls - all women who give birth by c/section**



Adverse Outcomes:

Admissions to SCN for term babies for reasons other than congenital abnormality



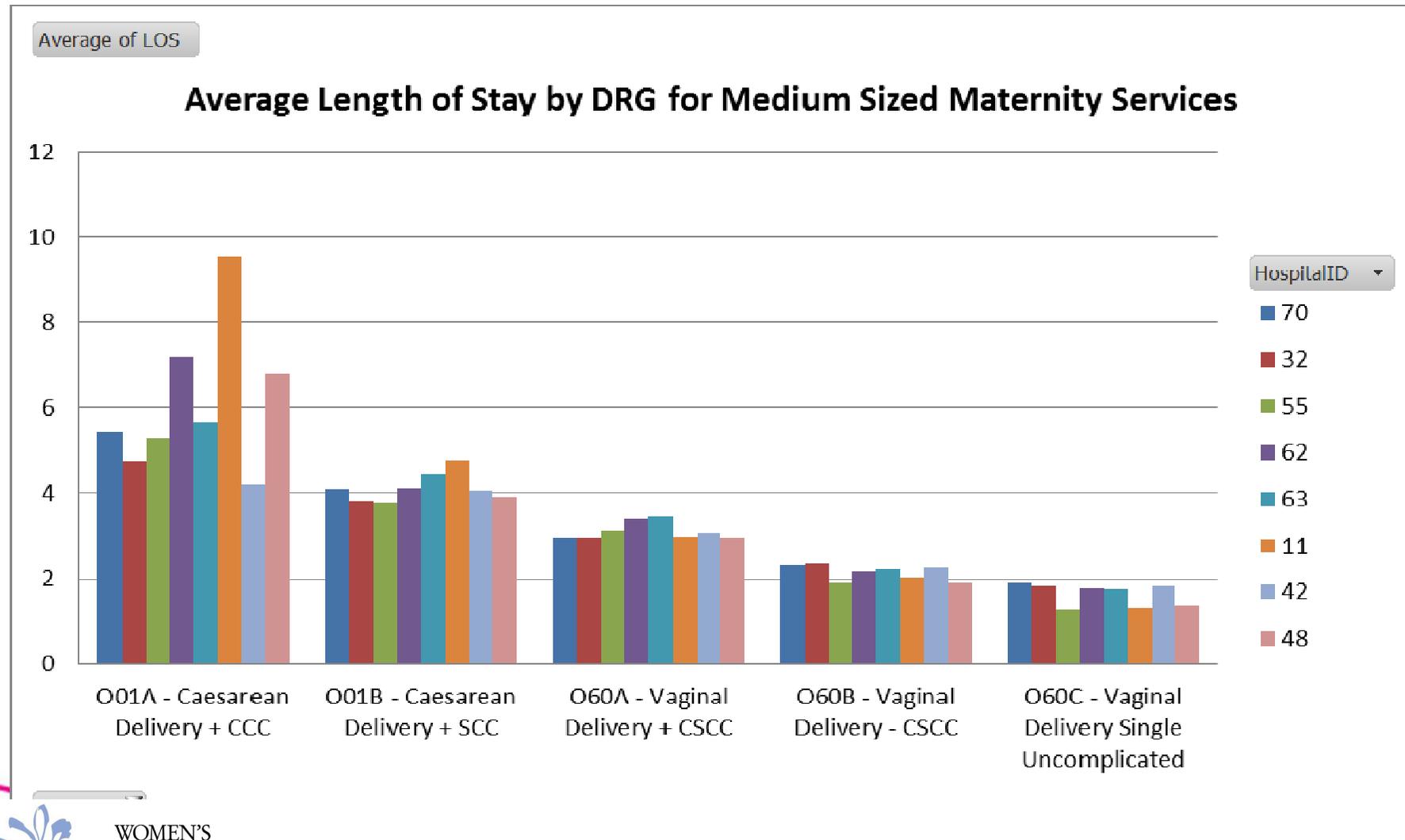
Cost Implications

- The Commission on Safety & Quality has identified caesarean section and hysterectomy as areas with high unwarranted variability in practice
- IHPA has identified obstetrics as a high volume area of healthcare with high unwarranted variability in both practice and cost
- WHA is proposing to partner with UNSW and IHPA to analyse these cost differences

Cost Implications – WHA Response

- WHA is assisting members to analyse their costs through benchmarking both clinical and activity & costing data
- Activity reports cover all high volume obstetric and gynaecology DRGs & provide benchmarks:
 - In distribution of costs across cost buckets
 - in terms of comparative levels of activity by DRG
 - In terms of complexity of DRGs
 - In terms of ALOS by DRG

Cost Implications



Opportunities for Cost & Quality Improvements

– Reducing variation in Caesarean Rates

- Population-based record linkage study of births in 81 hospitals in New South Wales, 2009–2010, using the Robson classification to categorise births (i.e. classified on risk profile not indicators for CS) – see Lee et al 2013
- Found wide unexplained variation in hospital CS rates persisted after adjusting for casemix, with scope to reduce variation by lowering CS rates in the following groups of women:
 - first time mothers giving birth at term;
 - women with previous Caesarean Section;
 - women with twin pregnancies, and
 - women giving birth pre-term (before 37 completed weeks)



Opportunities for Cost & Quality Improvements

– Implementing MGP models of care

- Midwifery Group Practice care (MGP) involves women receiving care throughout pregnancy, labour, birth and the early postnatal period from the same primary midwives, working collaboratively with obstetricians
- RCTs have confirmed safety for women of all obstetric risk using MGPs with lower rates of Caesarean Section, and other interventions (see McLachlan 2012; Tracy 2013)
- Lower rates of intervention produce cost savings:

“Over one financial year the average cost of care for the standard primipara in MGP was \$3903.78 per woman. This was \$1375.45 less per woman than those receiving Private obstetric care and \$1590.91 less than Standard hospital care per woman ”
(Tracy et al 2014)



Opportunities for Cost & Quality Improvements

– Networking with peers on best practice

- WHA holds regular meetings between members to facilitate sharing of information on both quality & cost improvements (11 Special Interest Groups)
- WHA is working to develop a consensus guideline on induction of labour
- WHA offers members access to expert advice from Peer Advisors, who visit their hospital to discuss & plan quality & efficiency improvements with the local team informed by benchmarking data.



Supporting women's hospitals and healthcare services to achieve excellence in clinical care together



WOMEN'S
HEALTHCARE
AUSTRALASIA

References

- Lee, Y et al 2013 Unexplained variation in hospital caesarean section rates, *MJA* 199(5), Sept 2013, 348-353
<https://www.mja.com.au/journal/2013/199/5/unexplained-variation-hospital-caesarean-section-rates>
- McLachlan, H, et al 2012 Effects of continuity of care by a primary midwife (caseload midwifery) on caesarean section rates in women of low obstetric risk: the COSMOS randomised controlled trial, *BJOG*, 119:12:1483-1492
<http://onlinelibrary.wiley.com/doi/10.1111/j.1471-0528.2012.03446.x/abstract>
- Tracy, S et al, 2013 Caseload midwifery care versus standard maternity care for women of any risk: M@NGO, a randomised controlled trial, *The Lancet*, September 2013 [http://dx.doi.org/10.1016/S0140-6736\(13\)61406-3](http://dx.doi.org/10.1016/S0140-6736(13)61406-3)
- Tracy, S et al, 2014 Caseload midwifery compared to standard or private obstetric care for first time mothers in a public teaching hospital in Australia: a cross sectional study of cost and birth outcomes, *BMC Pregnancy & Childbirth*, 14:46
<http://www.biomedcentral.com/1471-2393/14/46>



Acknowledgements

Thanks to co-authors:

- Prof David Ellwood, Griffith University & Gold Coast University Hospital
- A/Prof Peter Baghurst, University of Adelaide
- Dr Barb Vernon, CEO WHA
- Heather Artuso, WHA
- Beth McGaw, WHA



Contact us:

- Women's Healthcare Australasia
- www.women.wcha.asn.au
- Tel: 02 6175 1900



WOMEN'S
HEALTHCARE
AUSTRALASIA