The Queensland Preterm Birth Prevention Program GP Workshop

Education Centre, Herston

9 March 2024

Improvement | Transparency | Patient Safety | Clinician Leadership | Innovation

AUSTRALIAN Preterm Birth Prevention ALLIANCE

Queensland Government

Online participants only

Queensland Preterm Birth Prevention Program GP Forum - March 9 - Registration

Housekeeping

Evacuation/Fire Exits

Mobile phones

Facilities

Questions

Survey

Queensland Preterm Birth Prevention Program GP forum (Pre-Education Survey)

Acknowledgement of Country

Image Credit: *Shutterstock*

AUSTRALIAN
Preterm Birth
Prevention
ALLIANCE

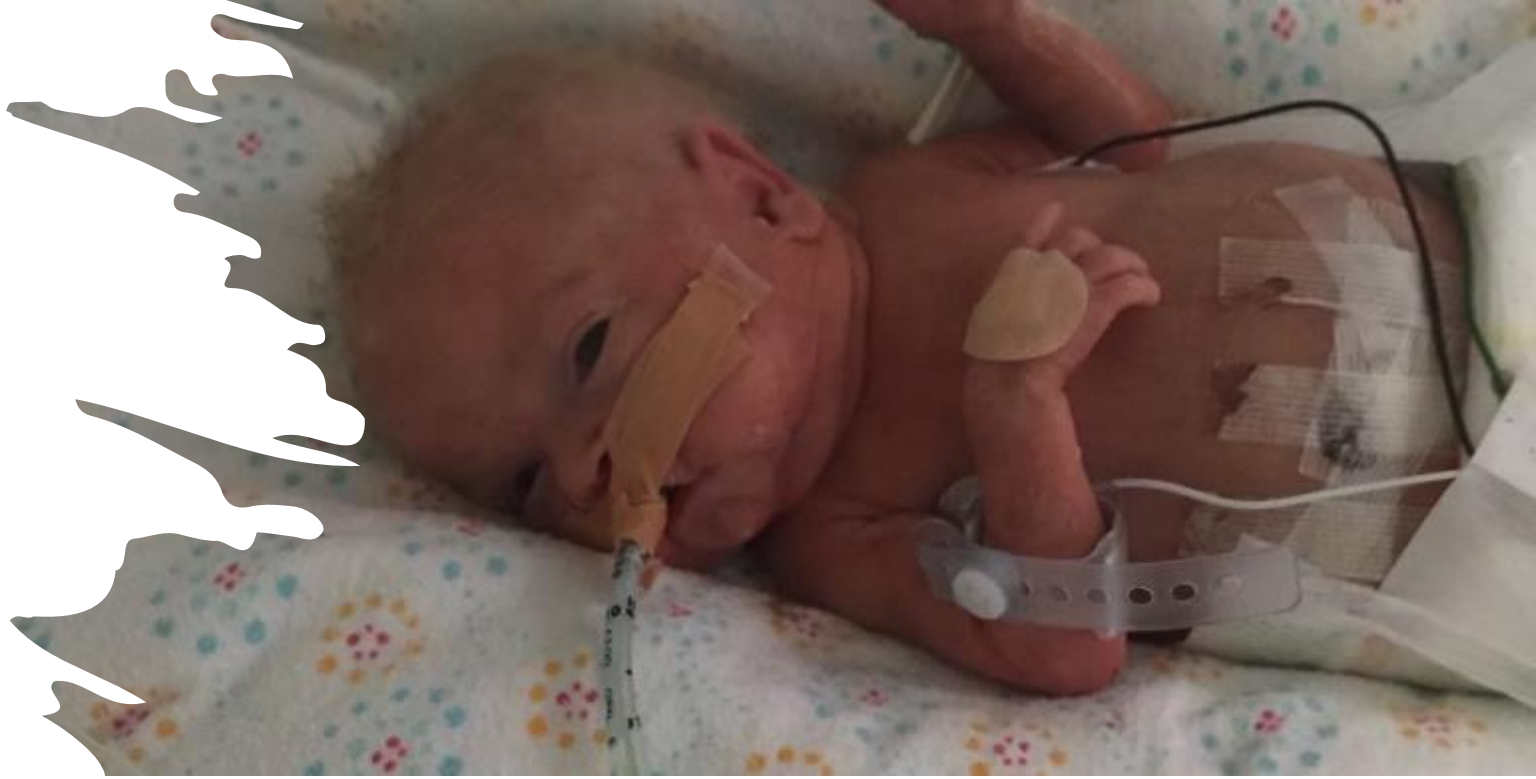
Objectives

- Reflect on a patient's lived experience to develop a patient-centred approach to care
- Recall the seven evidence-based strategies to prevent preterm birth and examine any barriers to implementing these in First Nations populations
- Determine factors influencing timing of birth incorporating risk management for stillbirth and prevention of preterm and early term birth where possible
- Apply evidence-based best practice to assess and manage the pregnancy at risk for preterm birth
- Determine indications and pathways for consultation and referral of women at high risk of stillbirth to determine safe timing of birth

Consumer lived experience

Tanya

Thank you for sharing your experience as Mum to Jack born at 23 weeks



The National Preterm Birth Prevention Program

GP Forum *Brisbane*

9th March 2024

Dr Chris Lehner

MD, PhD, FRANZCOG, CMFM

Queensland Clinical Lead – National Preterm Birth Prevention Program

Improvement | Transparency | Patient Safety | Clinician Leadership | Innovation

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Queensland Government

Image Credit: *Shutterstock*

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The problem – PRETERM BIRTH

Preterm Birth

The problems

For the mother
Increased risks of obstetric intervention and separation from child

For the newborn
Increased risks of death, cerebral haemorrhage, respiratory support, bowel necrosis and sepsis

For children
Increased risks of cerebral palsy, chronic lung disease, deafness, blindness, learning difficulties and behavioural problems

For adults
Increased risks of metabolic syndrome, diabetes/heart disease, loss of employment and socialisation issues

Aust N Z J Obstet Gynaecol 2021; 1–7

ANZJOG

DOI: 10.1111/ajo.13405

ORIGINAL ARTICLE

The health and educational costs of preterm birth to 18 years of age in Australia

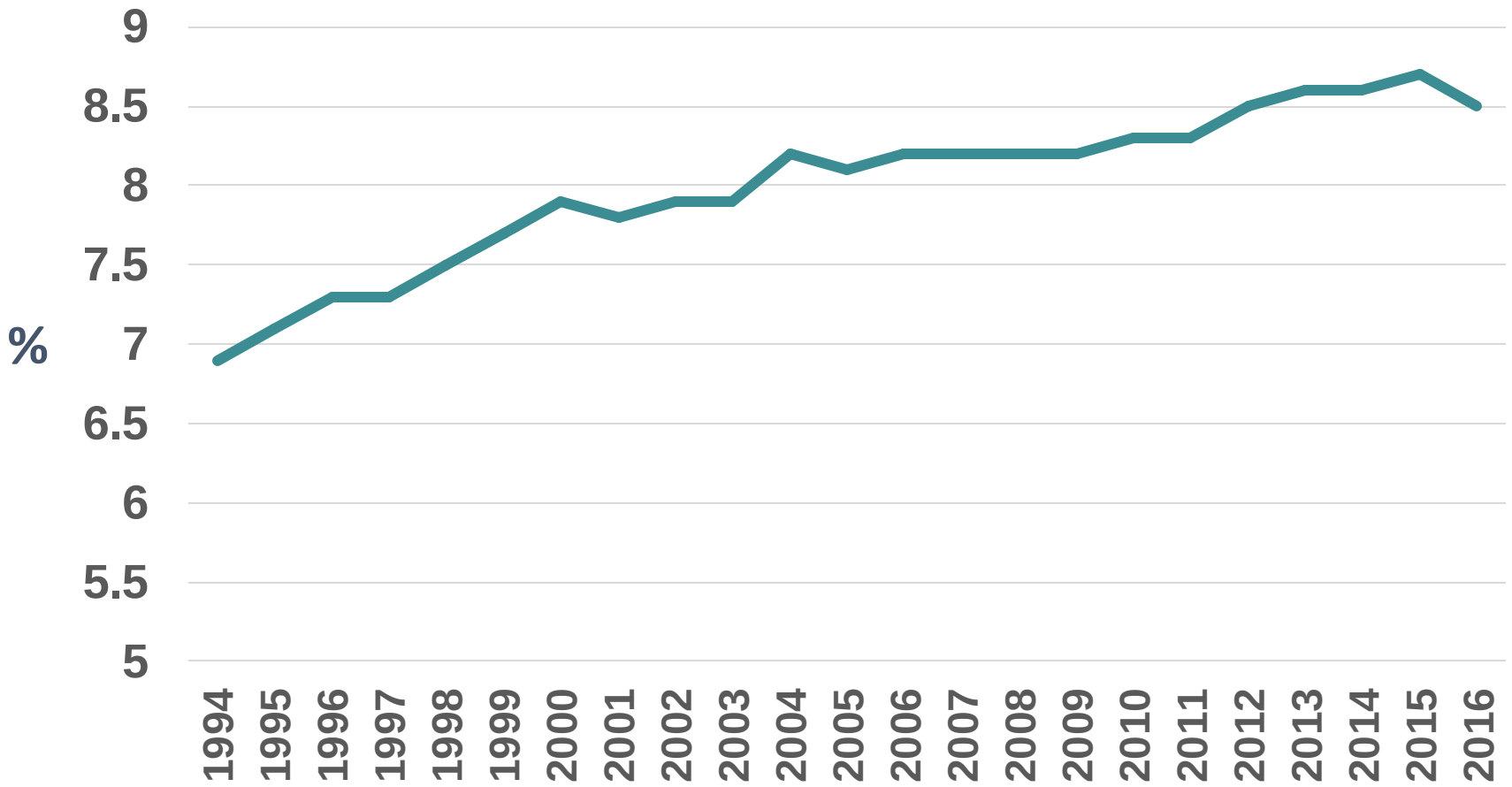
John P. Newnham[1,2], Chris Schilling[3], Stavros Petrou[4], Jonathan M Morris[5,6], Euan M. Wallace[7,8], Kiarna Brown[9], Lindsay Edwards[10], Monika M. Skubisz[11,12], Scott W. White[2,13], Brendan Rynne[3], Catherine A. Arrese[2] and Dorota A. Doherty[2]

- The cost of PTB to the Australian Government is $1.4 billion
- Two thirds of the costs are newborn healthcare
- One quarter are additional educational costs
- The average cost of an extremely preterm infant is $236,036

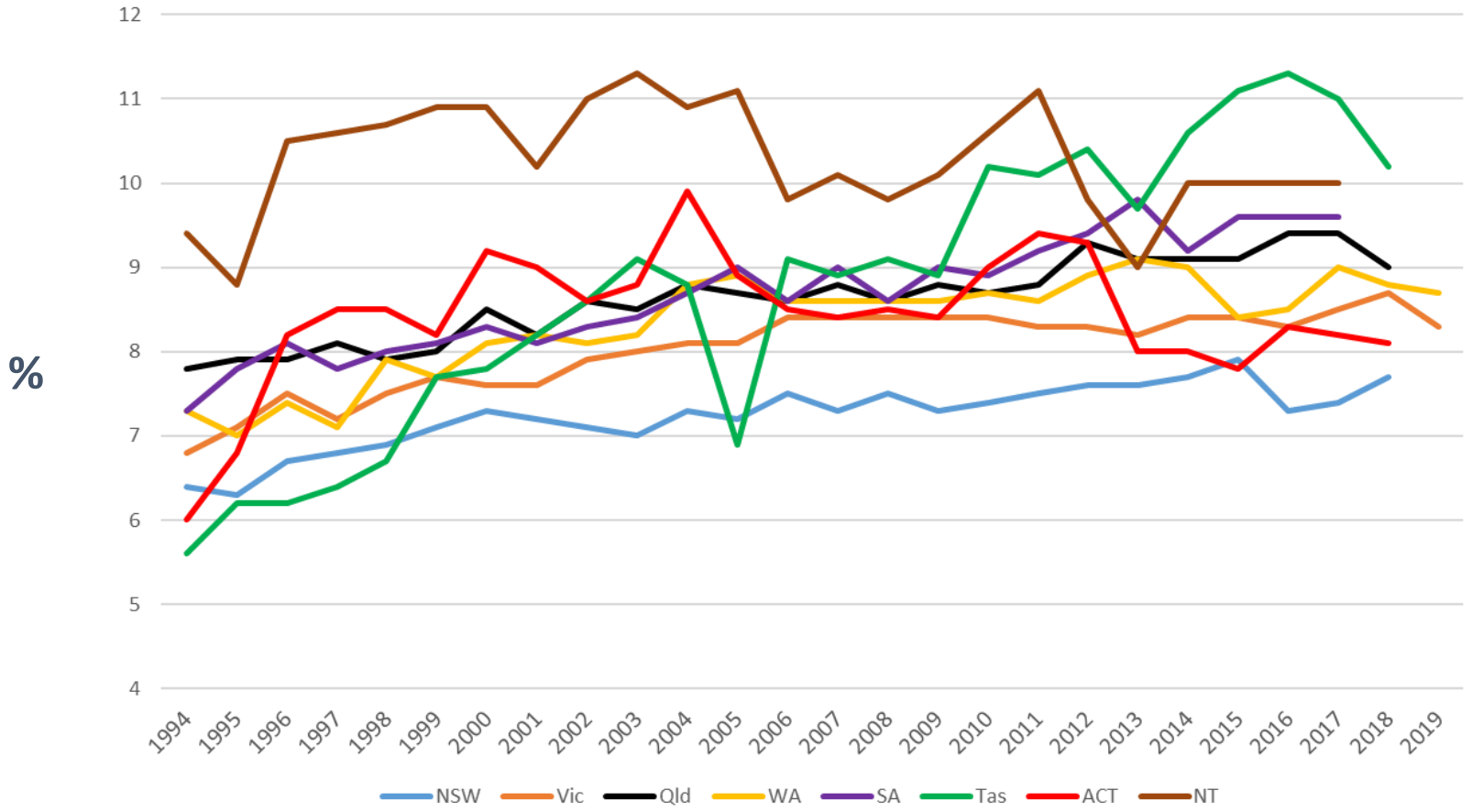
In collaboration with KPMG

2021

Australian PTB rates 1994 to 2016



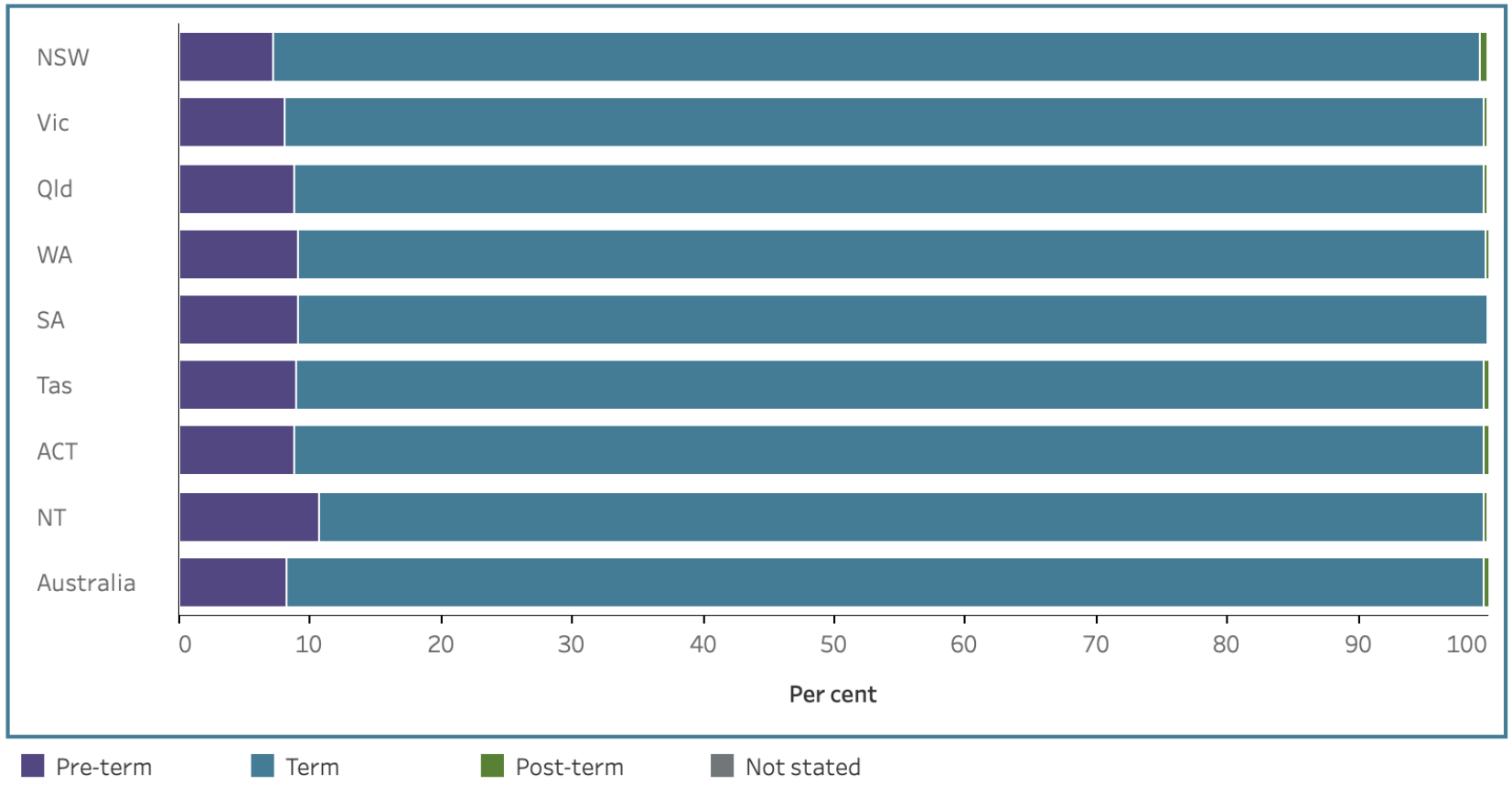
PTB rates Australian states and territories 1994-2019



AIHW Australia's mothers and babies

Updated 13.12.23

2021 PDC Data

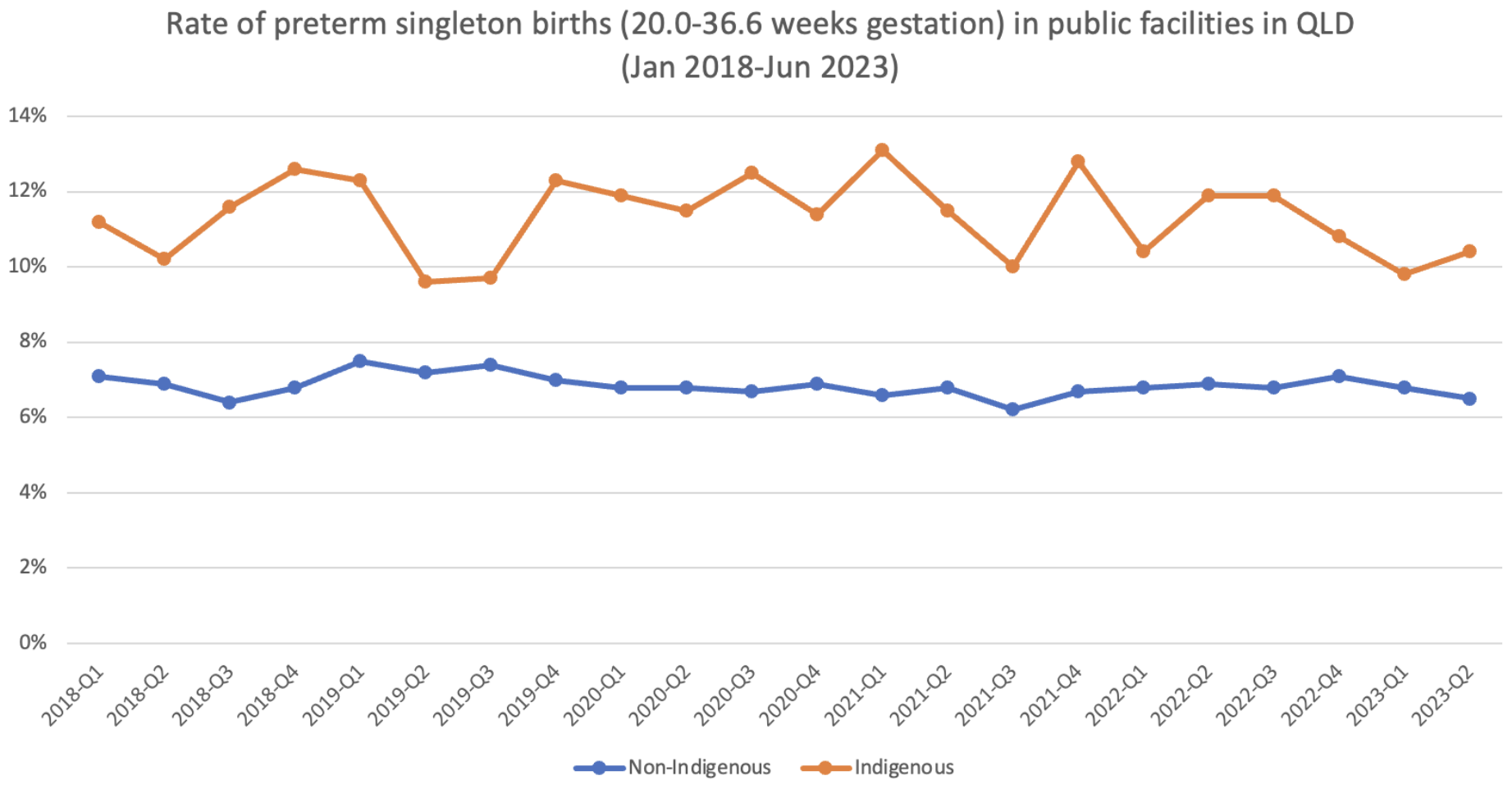


	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Australia
2011	7.5	8.4	8.8	8.6	9.2	10.1	9.4	11.1	8.3
2012	7.6	8.3	9.3	8.9	9.4	10.4	9.3	9.8	8.5
2013	7.6	8.6	9.0	9.1	9.8	9.7	9.3	10.5	8.6
2014	7.6	8.7	9.0	9.0	9.2	10.6	9.9	10.6	8.6
2015	7.9	8.7	9.1	8.7	9.6	11.1	9.2	10.3	8.7
2016	7.2	8.7	9.2	8.9	9.5	11.3	9.5	10.9	8.5
2017	7.4	8.9	9.4	9.5	9.6	11.0	9.9	11.0	8.7
2018	7.7	9.0	9.0	9.4	9.7	10.2	9.4	11.9	8.7
2019	7.4	8.7	9.4	9.2	9.0	8.9	9.0	11.3	8.6
2020	7.3	8.3	9.0	9.3	9.0	8.9	8.6	11.4	8.3
2021	7.2	8.0	8.7	9.1	9.0	8.9	8.8	10.7	8.2

Reference: AIHW Australia's mothers and babies
Web Report Updated 13.12.23

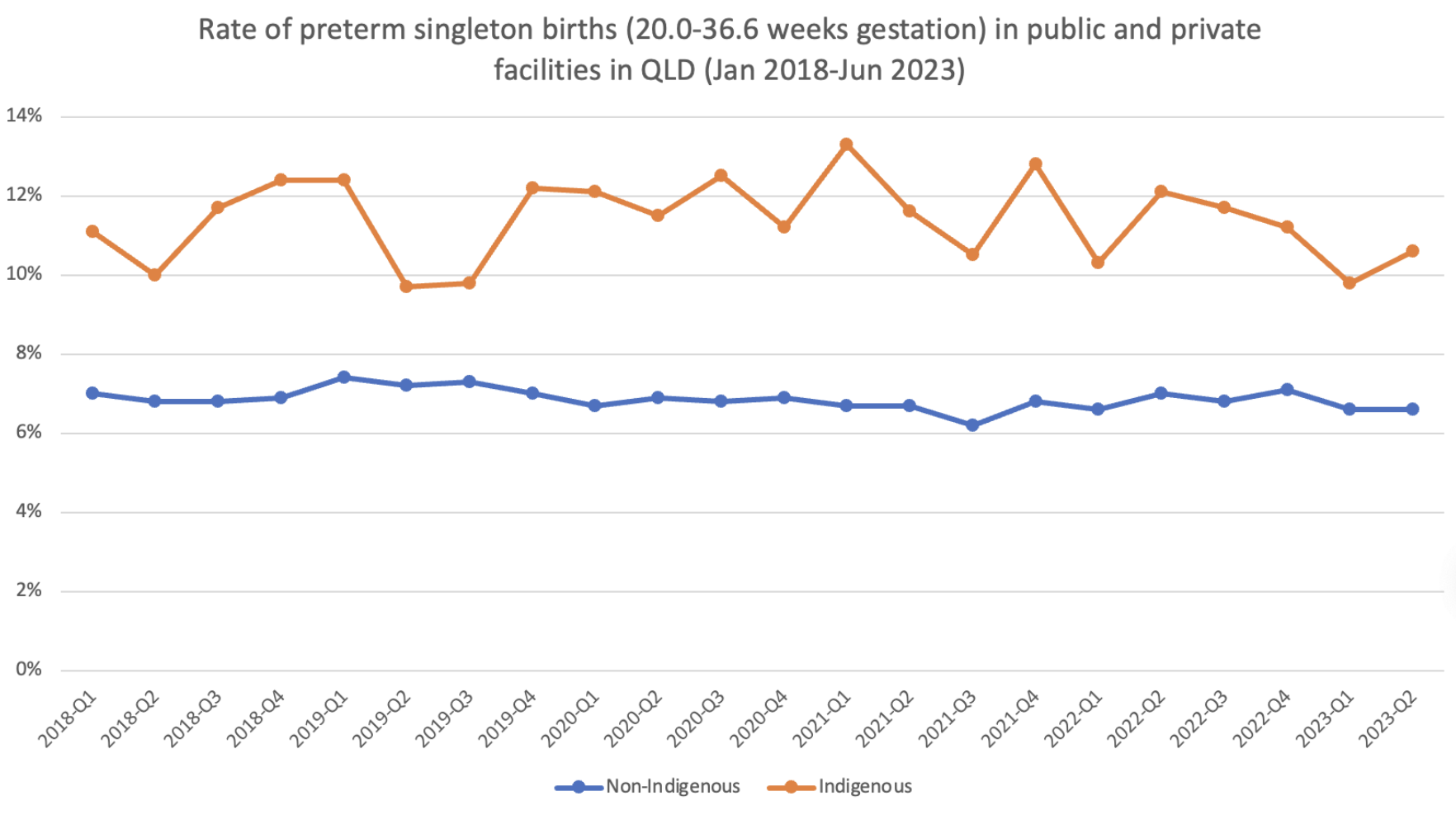
QLD singleton PTBs – public

PDC October 2023



QLD singleton PTBs – public + private

PDC October 2023



Preventing Preterm Birth – The Western Australian Initiative

Reports of Major Impact ajog.org

Reducing preterm birth by a statewide multifaceted program: an implementation study

John P. Newnham, MD; Scott W. White, MBBS; Suzanne Meharry, MBBS; Han-Shin Lee, MBBS; Michelle K. Pedretti, MAppSc; Catherine A. Arrese, PhD; Jeffrey A. Keelan, PhD; Matthew W. Kemp, PhD; Jan E. Dickinson, MD; Dorota A. Doherty, PhD

BACKGROUND: A comprehensive preterm birth prevention program was introduced in the state of Western Australia encompassing new clinical guidelines, an outreach program for health care practitioners, a public health program for women and their families based on print and social media, and a new clinic at the state's sole tertiary level perinatal center for referral of those pregnant women at highest risk. The initiative had the single aim of safely lowering the rate of preterm birth.

OBJECTIVE: The objective of the study was to evaluate the outcomes of the initiative on the rates of preterm birth both statewide and in the single tertiary level perinatal referral center.

STUDY DESIGN: This was a prospective population-based cohort study of perinatal outcomes before and after 1 full year of implementation of the preterm birth prevention program.

RESULTS: In the state overall, the rate of singleton preterm birth was reduced by 7.6% and was lower than in any of the preceding 6 years. This reduction amounted to 196 cases relative to the year before the introduction of the initiative and the effect extended from the 28–31 week gestational age group onward. Within the tertiary level center, the rate of preterm birth in 2015 was also significantly lower than in the preceding years.

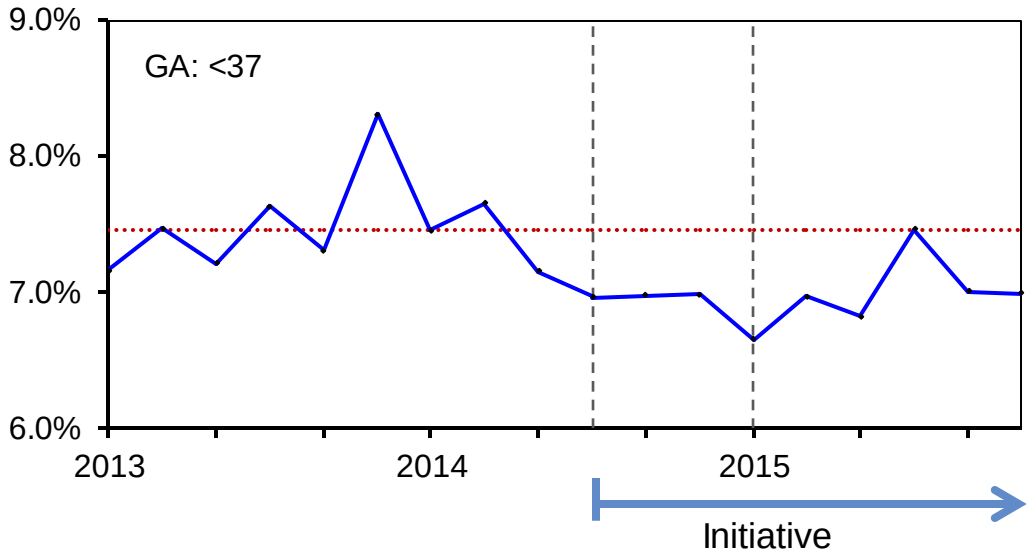
CONCLUSION: A comprehensive and multifaceted preterm birth prevention program aimed at both health care practitioners and the general public, operating within the environment of a government-funded universal health care system can significantly lower the rate of early birth. Further research is now required to increase the effect and to determine the relative contributions of each of the interventions.

Key words: implementation, population-based study, preterm birth, prevention

American Journal of Obstetrics & Gynecology MAY 2017

The State of Western Australia

The Western Australian Preterm Birth Prevention Initiative

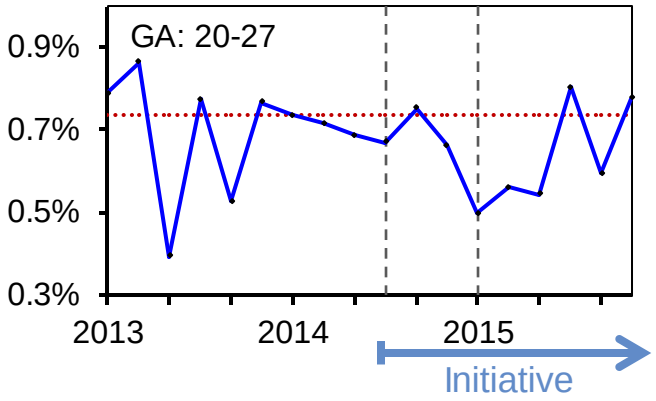


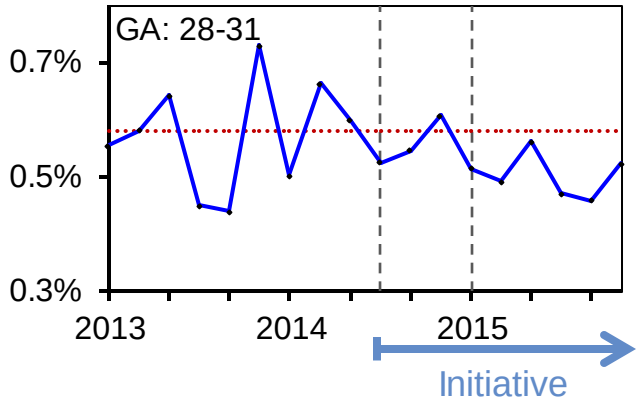
In 2015, the rate of PTB was reduced by 7.6%

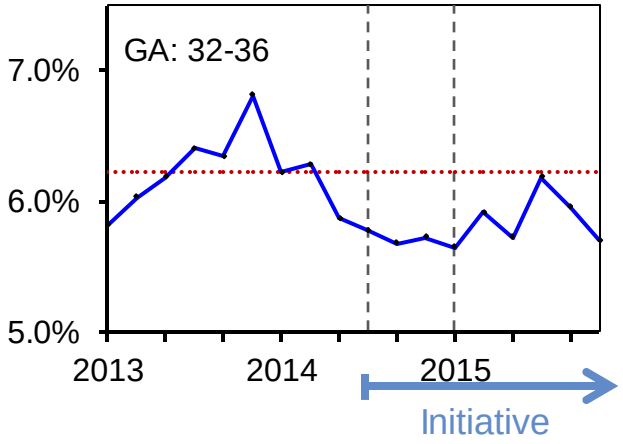
- PTB singleton rates:
- 2012: 7.4%
- 2013: 7.5%
- 2014: 7.2%
- 2015: 6.9%

The State of Western Australia

The Western Australian Preterm Birth Prevention Initiative



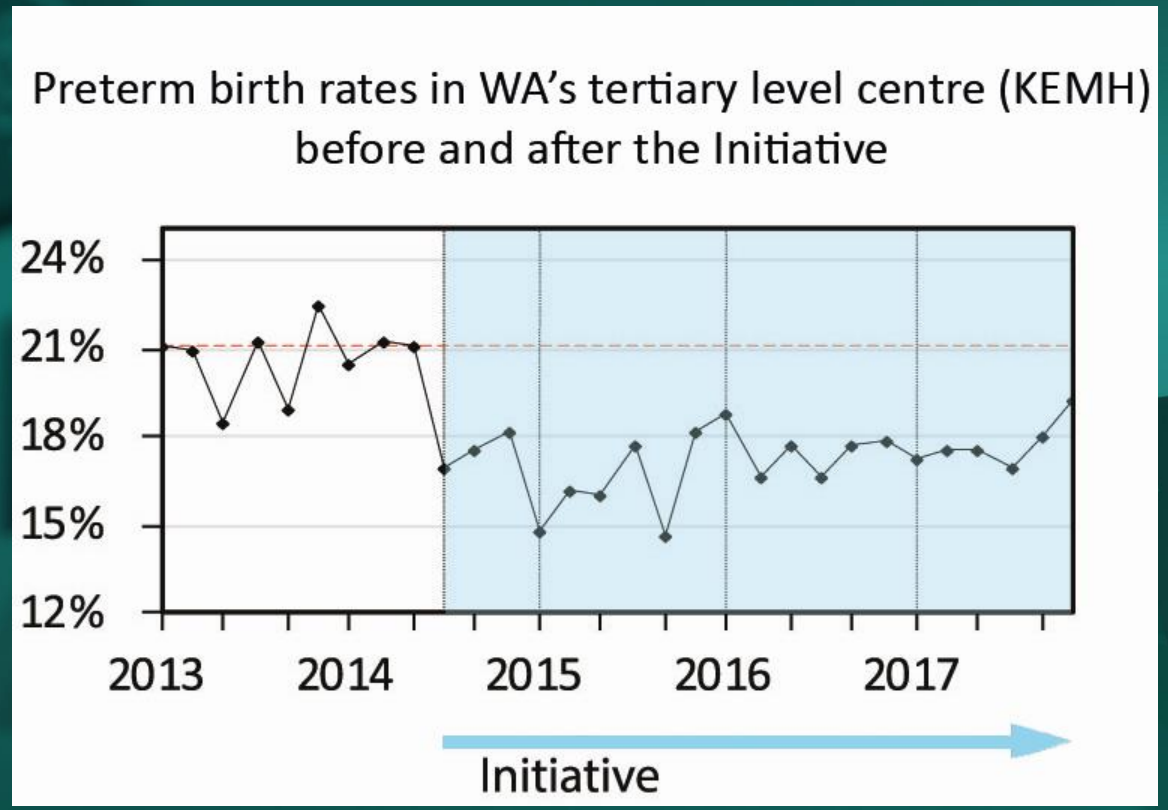




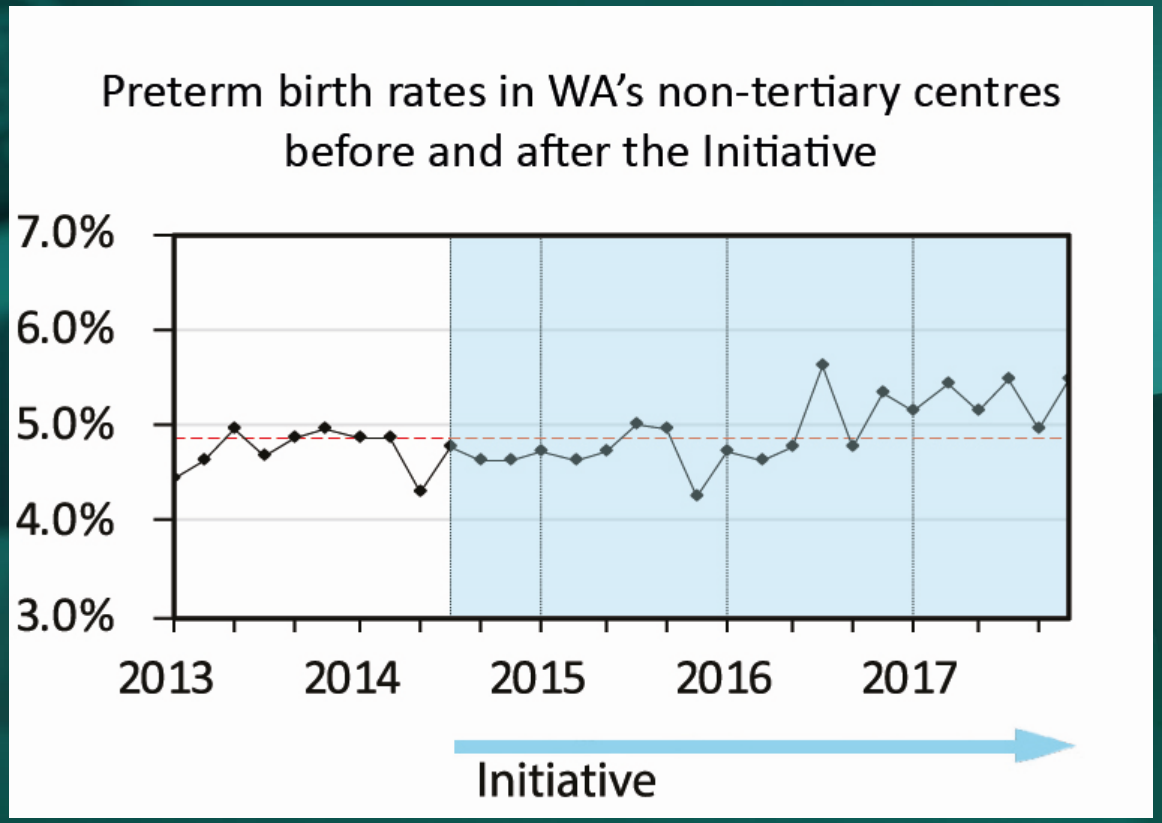
Decreased rates of PTB

- 32 – 36 week group
- 28 – 31 week group
- 20 – 27 week (but not stat sig.)

The Western Australian Preterm Birth Prevention Initiative



The Western Australian Preterm Birth Prevention Initiative



The Western Australian Preterm Birth Prevention Initiative

AUSTRALIAN Preterm Birth Prevention ALLIANCE

Australian Preterm Birth Prevention Alliance

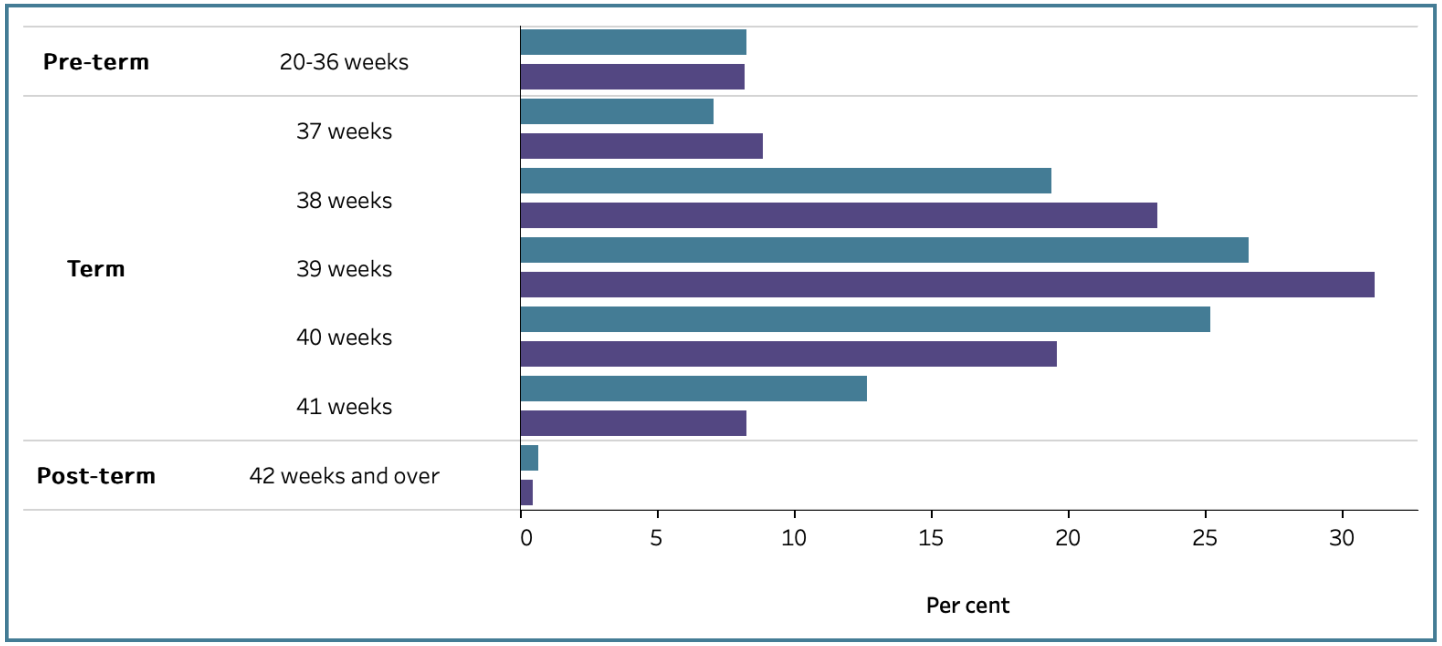
- Grew from the WA state-wide initiative 2014
- Became national in June 2018
- Supported by an NHMRC Partnership grant
- The world's first national PTB prevention program

Sydney

November 2018

AIHW 2021 Australia's mothers and babies

Proportion of babies, by gestational age grouped by term and completed weeks, 2011 and 2021



Note: Pre-term births may include a small number of births of less than 20 weeks gestation.

Source: AIHW analysis of National Perinatal Data Collection

The proportion of babies born between 20 and 36 weeks remained steady between 2011 (8.3%) and 2021 (8.2%) with a peak of 8.7% reached most recently in 2018, while the proportion born between 37 and 39 weeks increased (for example, babies born at 38 weeks increased from 19% in 2011 to 23% in 2021) and the proportion born from 40 weeks onwards decreased (for example, babies born at 40 weeks decreased from 25% in 2011 to 20% in 2021).

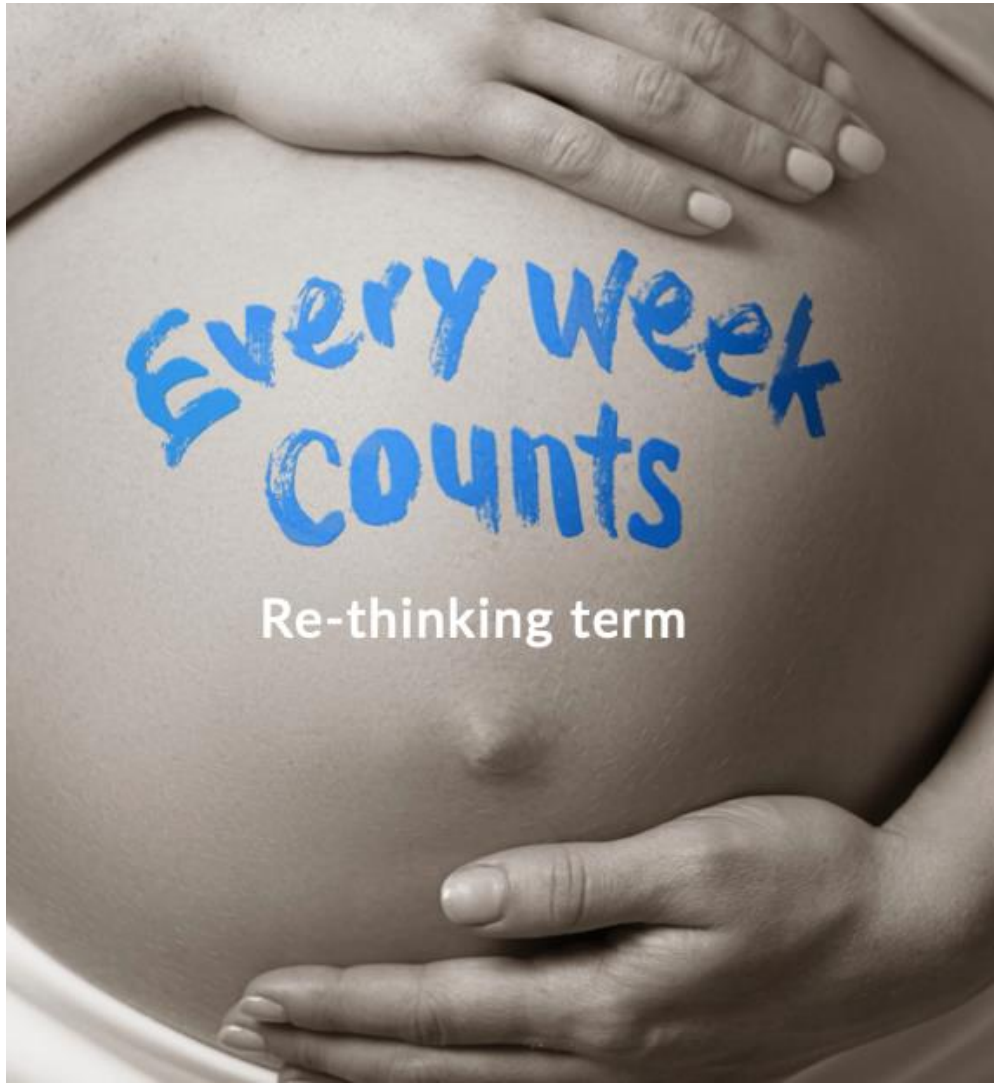
Australia's planned births before 39 completed weeks

Fourth Australian Atlas of Healthcare Variation | 2017

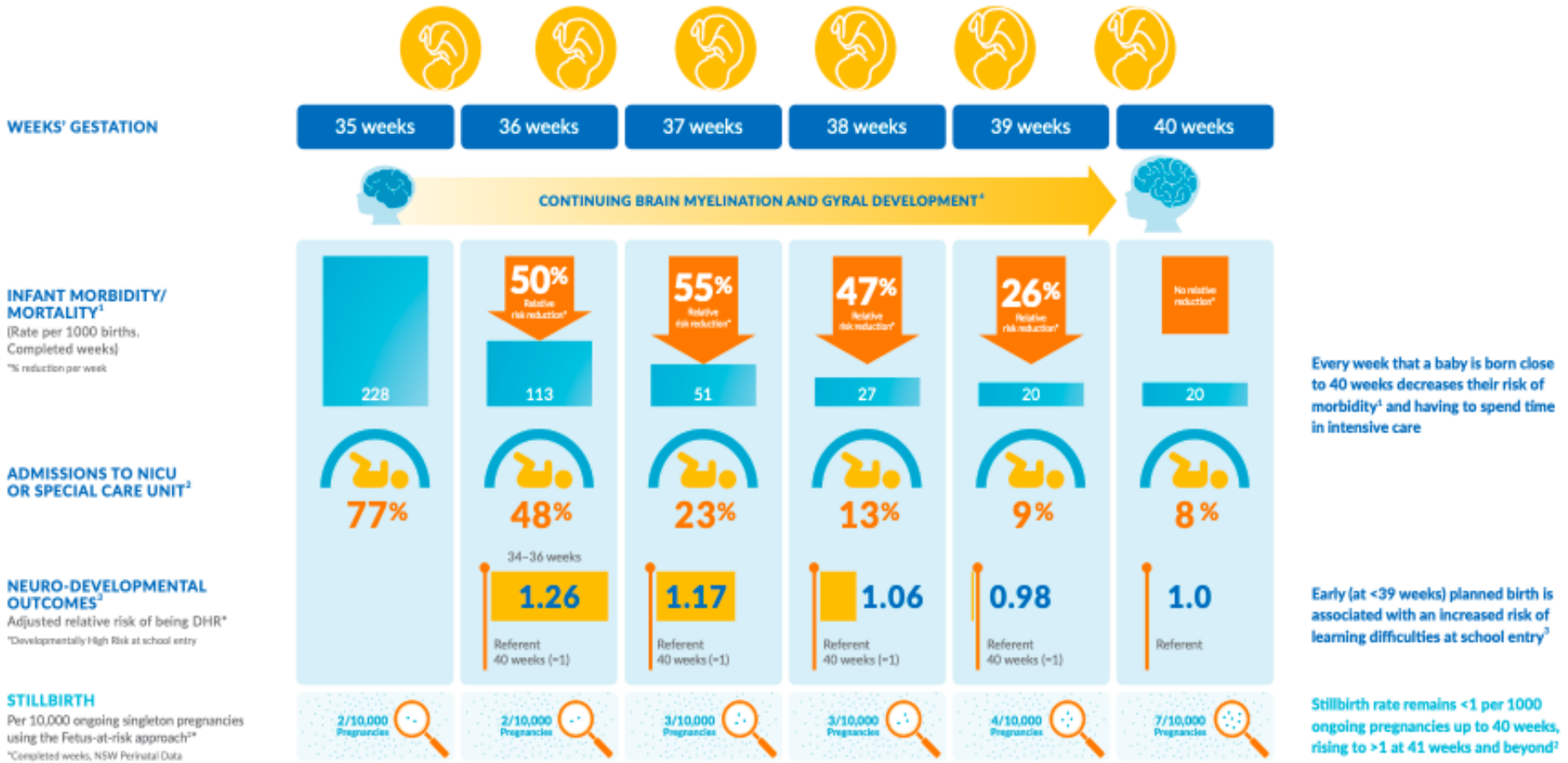
In 2017, Caesarean section with no medical or obstetric indication*:

Before 37 weeks	Before 38 weeks	Before 39 weeks
13% to 19%	**25% to 33%**	**43% to 56%**

*Ranges are based on rates from seven states and territories. NT is excluded. Data limitations include that main reason for caesarean section is used as a proxy for reason for early caesarean section.


Every Week Counts
Re-thinking term

EVERY WEEK COUNTS TOWARDS THE END OF PREGNANCY

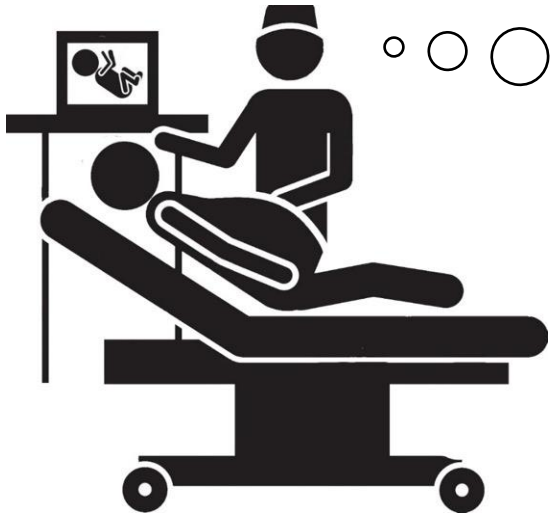


Every week that a baby is born close to 40 weeks decreases their risk of morbidity[1] and having to spend time in intensive care

Early (at <39 weeks) planned birth is associated with an increased risk of learning difficulties at school entry[3]

Stillbirth rate remains <1 per 1000 ongoing pregnancies up to 40 weeks, rising to >1 at 41 weeks and beyond[2]

Early term birth: the clinical question



37 weeks…
should I deliver today or
should I wait until 39 weeks?

Imagine…

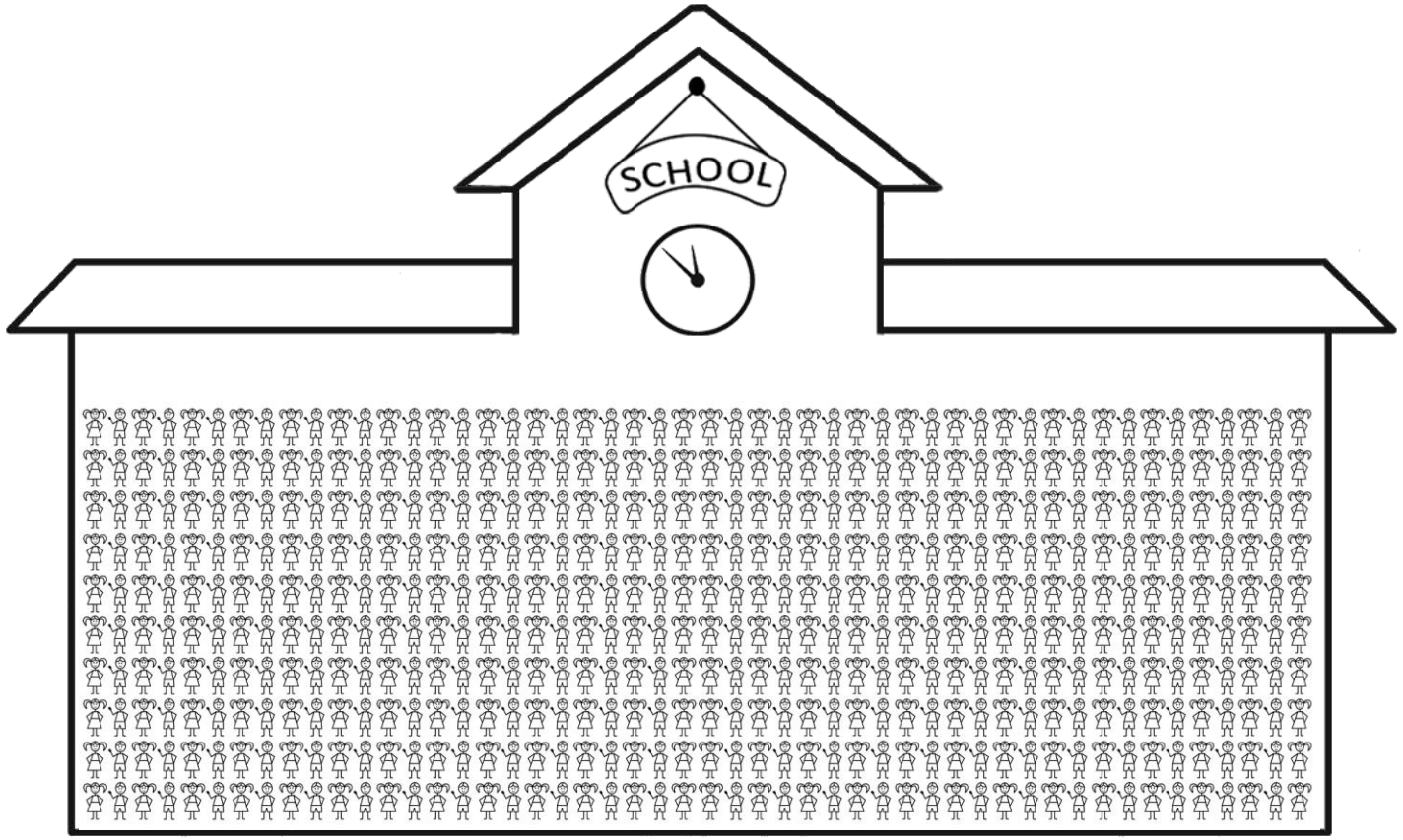
all the children from this obstetrician go to one school

…in 8 years time

what would the school look like?

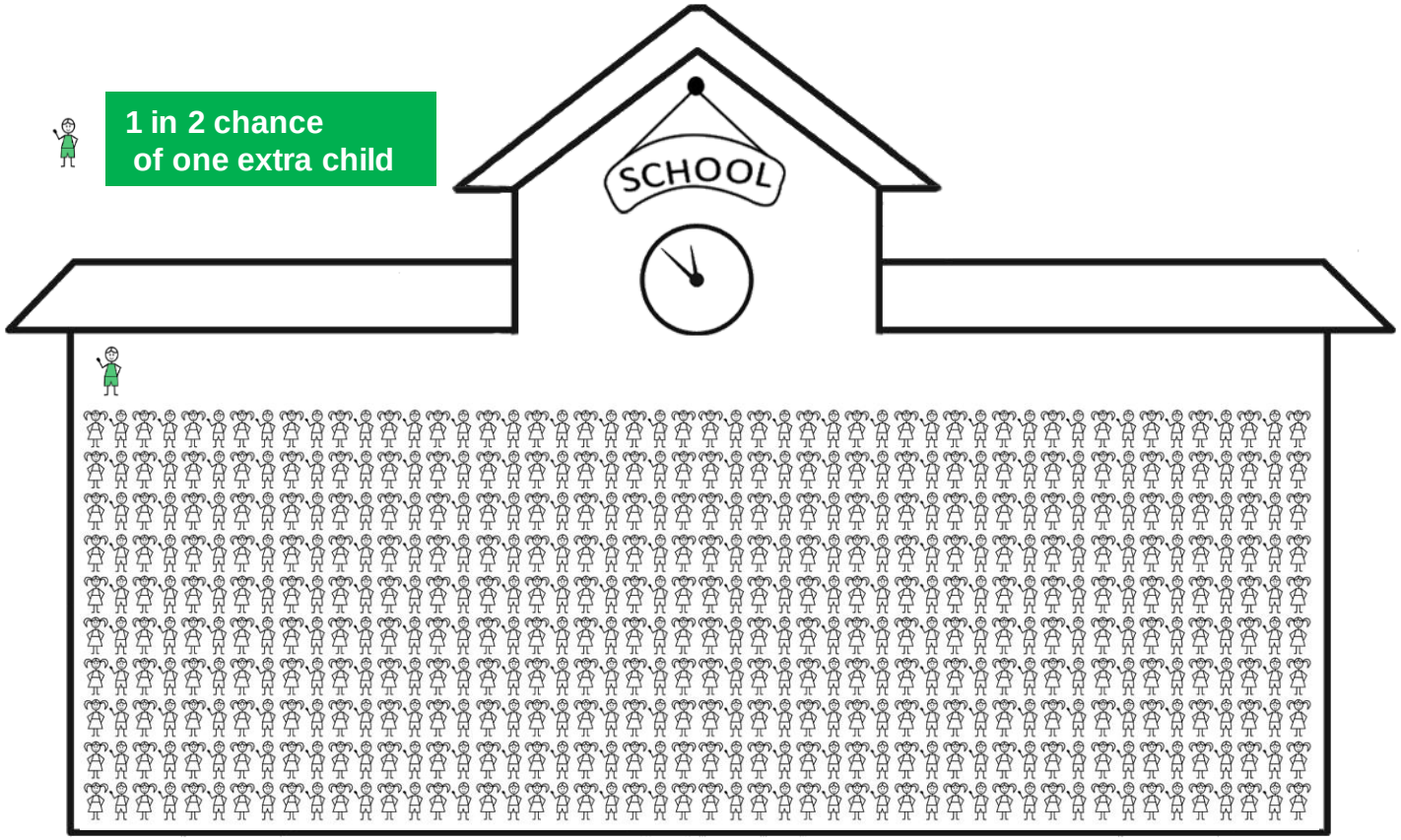
the Raine Study

In a school of 500 children
following a policy of electively ending all pregnancies at 37 weeks' gestation
compared with 39 weeks



the Raine Study

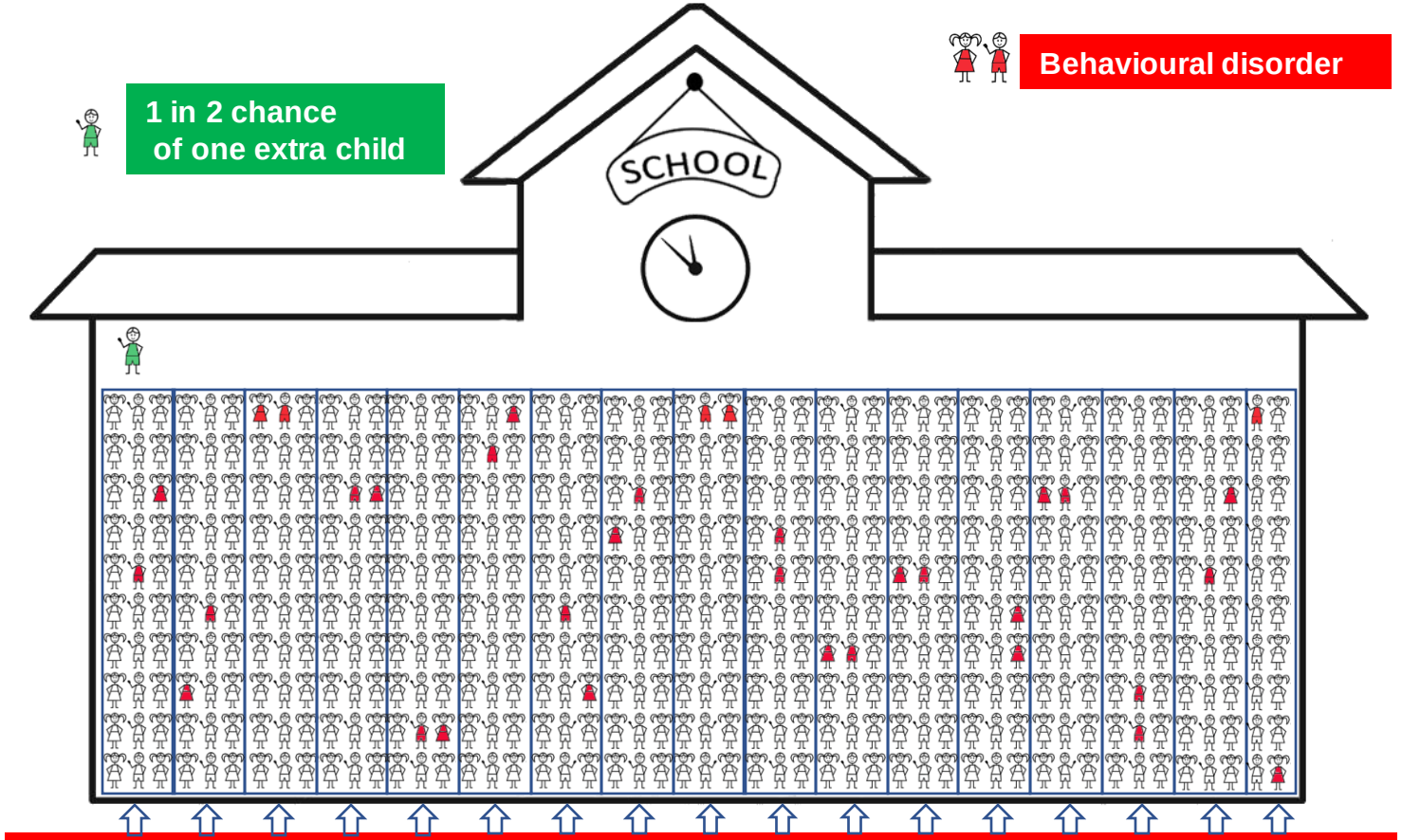
In a school of 500 children
following a policy of electively ending all pregnancies at 37 weeks' gestation



There is a 1 in 2 chance there may be one extra child in the school (prevented a stillbirth) (NNT about 1350 births)

the Raine Study

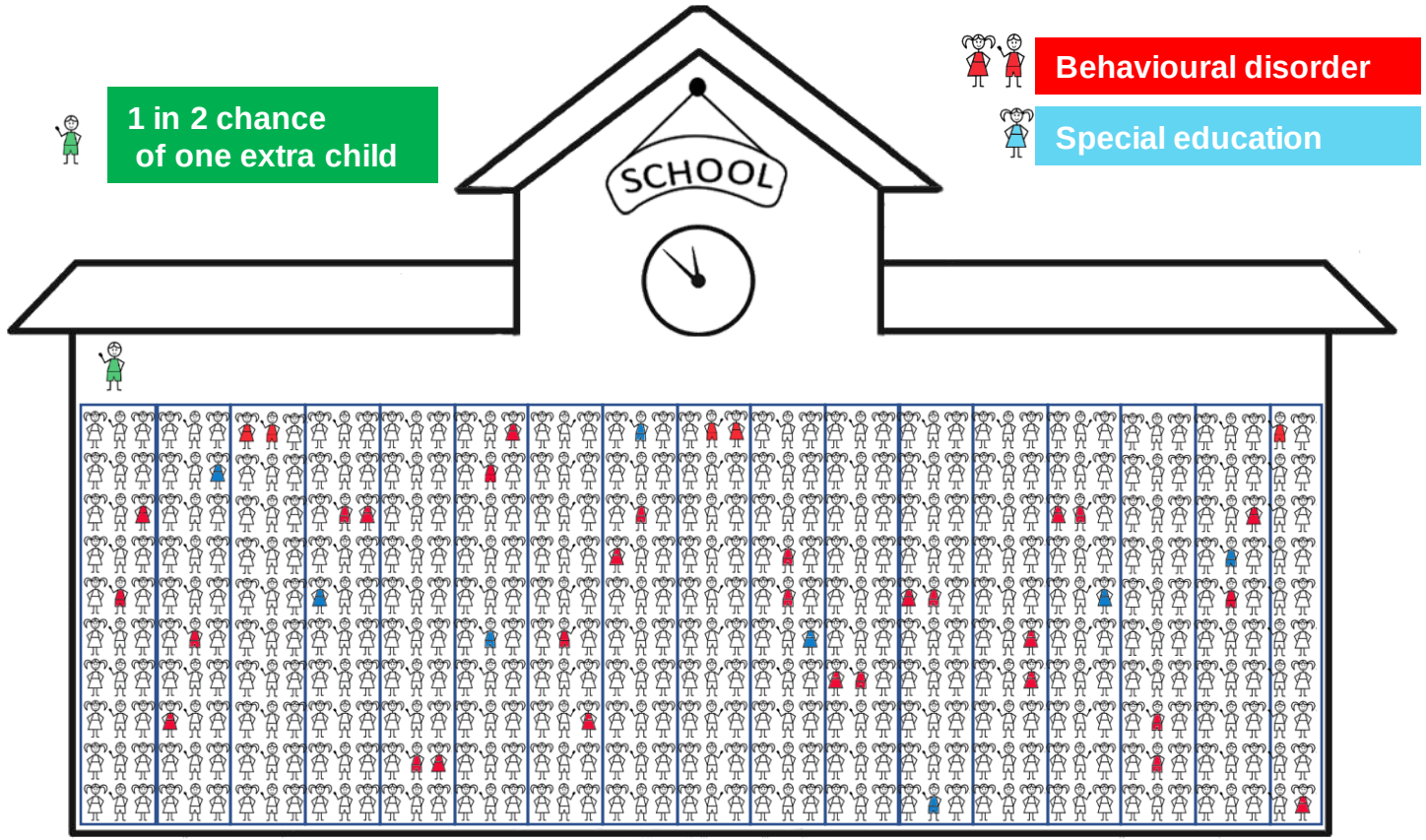
In a school of 500 children
following a policy of electively ending all pregnancies at 37 weeks' gestation



Each class of 30 will have two extra children with an externalising behavioural disorder

the Raine Study

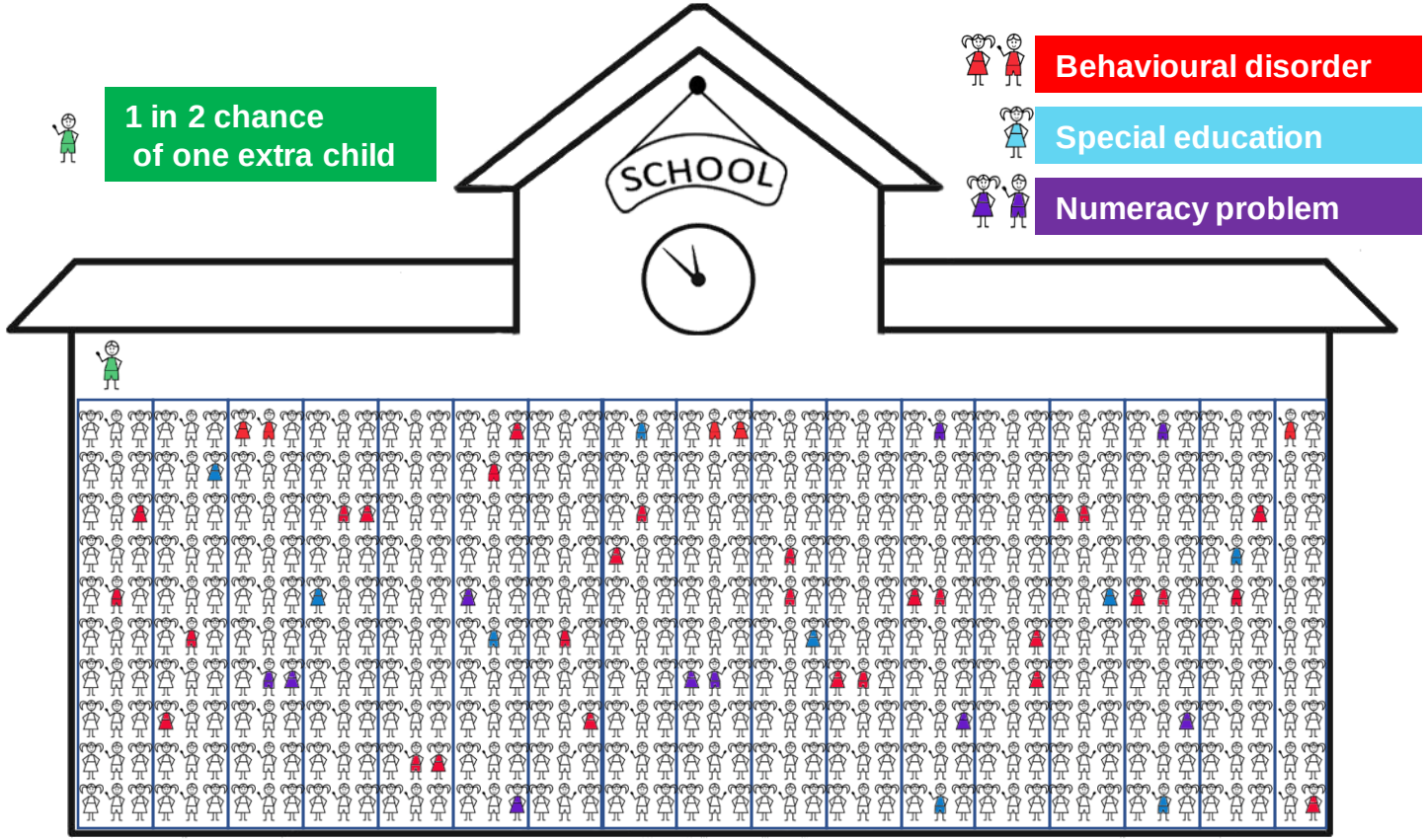
In a school of 500 children
following a policy of electively ending all pregnancies at 37 weeks' gestation



Across every two classes will be 1 extra child with need for special educational assistance

the Raine Study

In a school of 500 children following a policy of electively ending all pregnancies at 37 weeks' gestation



Across every three classes there will be 2 extra children with a basic numeracy problem

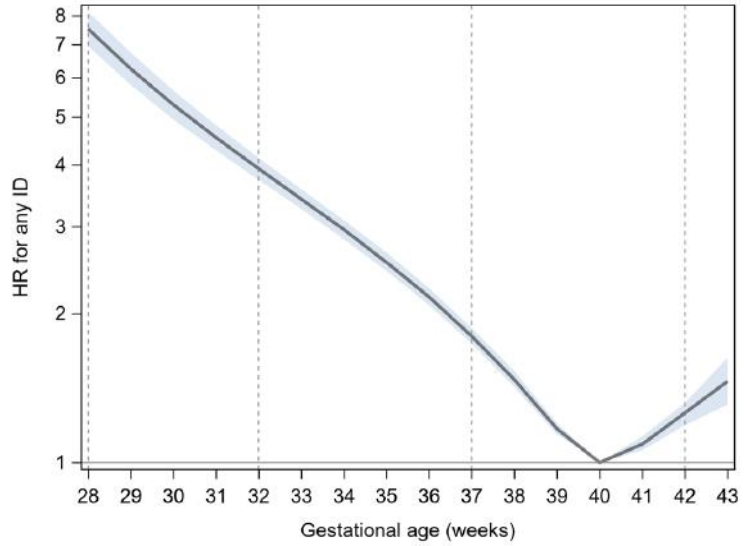
Original research

OPEN ACCESS

Gestational age and risk of intellectual disability: a population-based cohort study

Weiyao Yin [1,2] Nora Döring,[1] Monica S M Persson,[1] Martina Persson,[3] Kristina Tedroff,[4] Ulrika Ådén,[3] Sven Sandin [1,5]

- Swedish population study 1974-2017
- N = 3.5 million
- Risk of ID increased weekly before and after week 40
- Held for mild, moderate and severe, but strongest for severe
- Remained robust after adjustment for confounders



BMJ

Yin W, *et al*. *Arch Dis Child* 2022;**0**:1–7. doi:10.1136/archdischild-2021-323308

So then, can we in Australia safely lower the rate of early term birth?

Aust N Z J Obstet Gynaecol 2021; 1–7

ANZJOG

DOI: 10.1111/ajo.13328

ORIGINAL ARTICLE

Preventing early births in a regional tertiary maternity unit: Evaluating preterm and early term birth rates before and after implementation of the Preterm Birth Prevention Initiative in the Australian Capital Territory

Roberto Orefice[1,3], Julia Smythe[1], Dorota A. Doherty[2] and Boon Lim[1,3]

In the ACT, as part of the national program, the rate of early term birth was lowered by 34%

AUSTRALIAN Preterm Birth Prevention ALLIANCE

What we had learnt …

1. We can safely lower the rate of preterm, and early term birth, in the Australian environment using existing knowledge.

2. The program needs to be population based and is most effective in cases that would have been considered low risk.

3. The program needs to be sustained or the effect will dissipate.

4. We have met with success in jurisdictions with smaller populations and with a single centre of influence (WA, ACT, Tas).

5. The larger states, with multiple major centres, will require a different strategy.

6. Collaborative breakthrough methodology is our next chosen strategy *(dual approach in Queensland)*.

7. A change package is required rather than a prescriptive bundle, to cater for our large nation, multiple population groups and uncertainty in some of the published evidence.

Australian Government
Department of Health

Budget 2021–22

AUSTRALIAN Preterm Birth Prevention ALLIANCE

Preventive Health – Preventing pre-term birth

The Australian Government is investing $13.7 million for the national rollout of a world-leading program to prevent pre-term birth in Australia. This investment includes:

- $8.8 million to roll out the successful Australian Preterm Birth Prevention Alliance (The Alliance) program nation-wide
- $2.5 million to deliver a national education campaign to raise awareness of safe and effective strategies to prevent pre-term birth, and
- $1.9 million to improve data and analysis for future policy development.

The Alliance is a partnership of clinical leaders, researchers, maternity hospitals, and communities working together to safely reduce the rate of early birth.

The seven strategies

1. No pregnancy to be ended until 39 weeks gestation unless there is obstetric or medical justification
2. Measurement of the length of the cervix at all mid-pregnancy scans[1]
3. Natural vaginal progesterone 200mg each evening if cervix <25mm (TV)[2,3]
4. If cervix continues to shorten, consider cerclage[3]
5. Vaginal progesterone if prior history of spontaneous preterm birth (or PPROM)[3]
6. Women who smoke should be identified and offered *Quitline* support
7. Promotion of continuity of care models[4]

References:
1 RANZCOG Best Practice Statement C-Obs 27 November 2021
2 Romero et al. AJOG 2018 Feb; 218(2):161-180
3 ISUOG Practice Guideline UOG 2022; 60: 435-456
4 Sandall et al. Cochrane Database Syst Rev 2016 Apr 28;4(4):CD004667

Measurement of cervix length at all mid-pregnancy scans

Trans-abdominal cervical length (with a full bladder) of 35mm or more is acceptable if the cervix can be imaged clearly and there is no prior history

All others require trans-vaginal scan (cut-off 25 mm)

Ultrasound Obstet Gynecol 2022
Published online in Wiley Online Library (wileyonlinelibrary.com). DOI: 10.1002/uog.26020

isuog.org

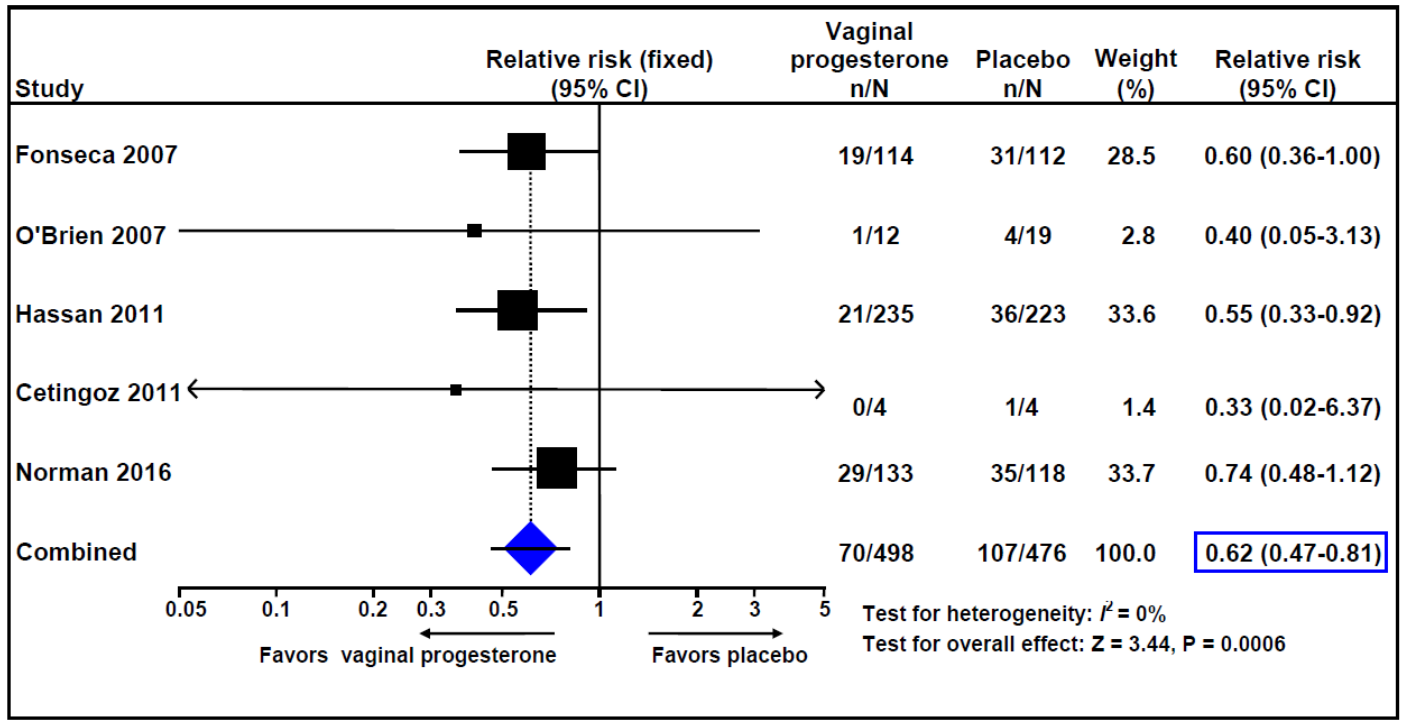
GUIDELINES

ISUOG Practice Guidelines: role of ultrasound in the prediction of spontaneous preterm birth

Provides guidelines on:

- Use of transvaginal measurement of cervical length
- Use of vaginal progesterone for short cervix
- Follow-up scanning and management
- Evidence for and against vaginal progesterone for past history of spontaneous preterm birth
- Does not cover trans-abdominal cervical measurement for which we will use RANZCOG Guidelines

Vaginal progesterone for short cervix - PTB < 33 weeks



Meta-analysis of Individual Patient Data (IPD)

Romero et al, AJOG Feb 2018

PLOS MEDICINE

BROWSE PUBLISH ABOUT

OPEN ACCESS PEER-REVIEWED

RESEARCH ARTICLE

Maternal cigarette smoking before and during pregnancy and the risk of preterm birth: A dose–response analysis of 25 million mother–infant pairs

Buyun Liu, Guifeng Xu, Yangbo Sun, Xiu Qiu, Kelli K. Ryckman, Yongfu Yu, Linda G. Snetselaar, Wei Bao

Published: August 18, 2020 • https://doi.org/10.1371/journal.pmed.1003158

Mega Cohort, US birth certificate data

Any maternal smoking (compared to non smoking)

3 months precon – T1	PTB OR 1.17
T2	OR 1.45
1-2 cigs a day precon + quit T1	OR 1.13
Quit in 3 months precon	OR 1.01

No safe level for cigarette smoking in pregnancy

Promotion of continuity of care models

Midwifery-led continuity of care models of care
April 2016

THE COCHRANE COLLABORATION®

Outcome	Relative Risk (RR) (95% CI)	Number of participants (RCTs)	Quality of evidence
PTB < 37 weeks	**0.76 (0.64 to 0.91)**	**13, 238 (8 RCTs)**	**High** (but no blinding)
Fetal and neonatal death	0.84 (0.71 to 0.99)	17,561 (13 RCTs)	High

More SVDs; Fewer Caesarean sections, instrumentals and epidurals

Midwifery continuity of care reduces PTB by 24%

Consultation with First Nations experts

- Advisory Group established
- Review of change package & driver diagram
- Advice on engagement with Aboriginal & Torres Strait Islander experts
- Tools for assessing cultural safety of care

Original Research

ajog.org

OBSTETRICS

LAB REPORT
https://doi.org/10.1071/MA22032

Aust N Z J Obstet Gynaecol 2023; 63: 521–526

ANZJOG

Brown *et al. BMC Pregnancy and Childbirth* (2024) 24:33
https://doi.org/10.1186/s12884-023-06164-6

BMC Pregnancy and Childbirth

RESEARCH Open Access

A retrospective, longitudinal cohort study of trends and risk factors for preterm birth in the Northern Territory, Australia

Kiarna Brown[1,2*], Carina Cotaru[2] and Michael Binks[1]

Preterm birth in First Nations Women

- Amongst highest rates globally!!
- Complex story, multifactorial (e.g. socioeconomic disadvantage, smoking, infection, chronic diseases)
- Intrauterine infection following PPROM causative in at least 25 %
- *Gardnerella, Lactobacillus and Ureaplasma (GLU)* predicted up to 45 % of cases of spontaneous PTB in Predict1000 study (predominantly Caucasian women)
- Validation in First Nations Women has begun

Listening to our women: feasibility and acceptability of preterm birth prevention strategies amongst First Nations women in metropolitan Queensland

- Two-part feasibility and acceptability study at RBWH
- *Part 1*: To evaluate acceptability of microbiome sampling (vaginal swabs) and compliance of vaginal Progesterone use amongst First Nations women in Ngarrama MGP (survey, Yarning)
- MDT MGP, Advanced Indigenous Health worker, Obstetrics
- 100 participants
- *Part 2*: To investigate feasibility of vaginal microbiome sampling in this cohort of pregnant women to determine causative organisms of preterm birth
- Collaborative project with *University of Western Australia (M Payne)*
- *Finalising Ethics and grant applications (vaginal microbiome testing in WA)*
- *Clinical Research Fellowship application submitted*

Acknowledgements


Queensland Health
Panasonic
Panaboard


Safer Baby Bundle
Safer Baby Bundle
Safer Baby Bundle

Our Partners

The Queensland Preterm Birth Prevention Program

GP Forum *Brisbane*

9th March 2024

Dr Chris Lehner

MD, PhD, FRANZCOG, CMFM

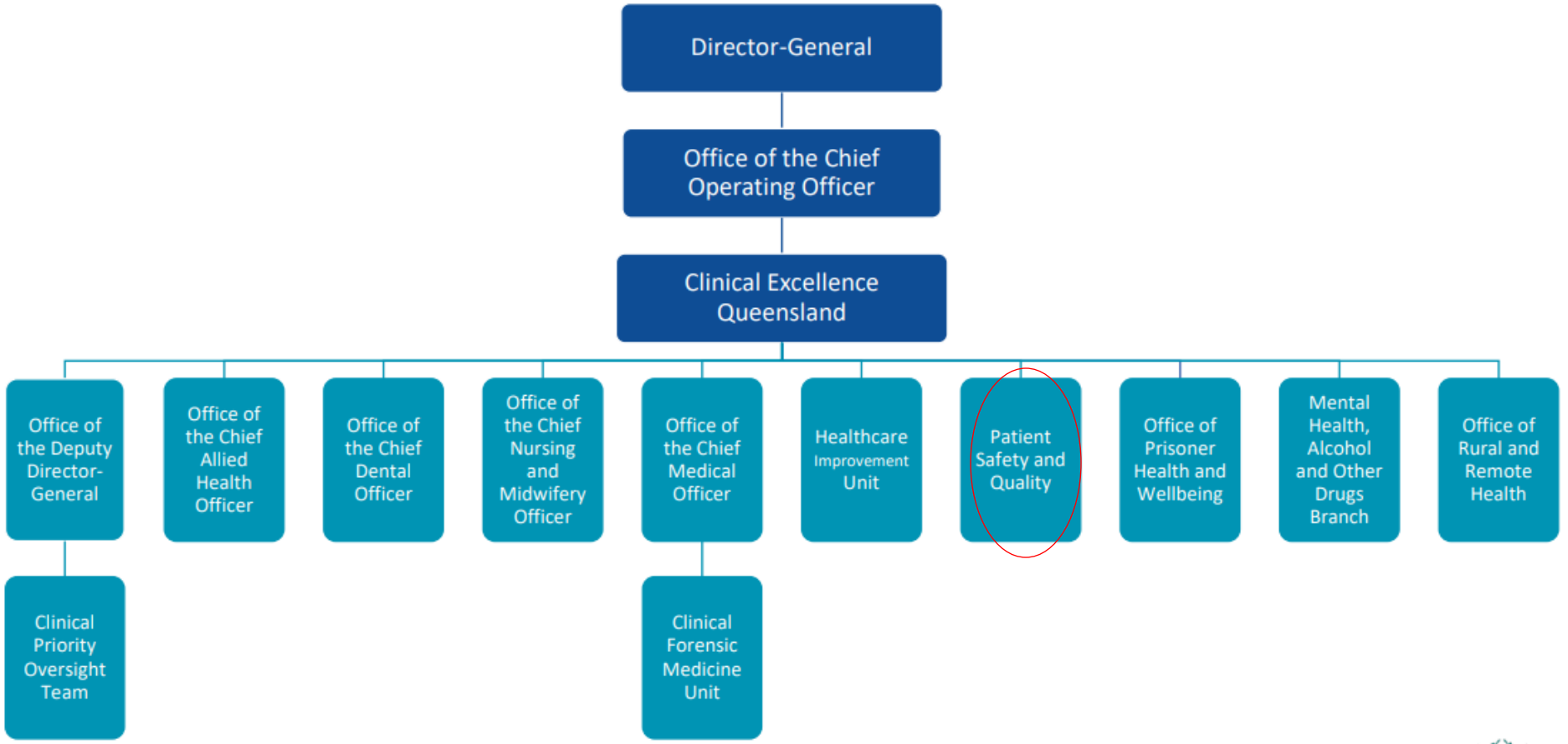
Queensland Clinical Lead – National Preterm Birth Prevention Program

Improvement | Transparency | Patient Safety | Clinician Leadership | Innovation

AUSTRALIAN Preterm Birth Prevention ALLIANCE

Queensland Government

Clinical Excellence Queensland

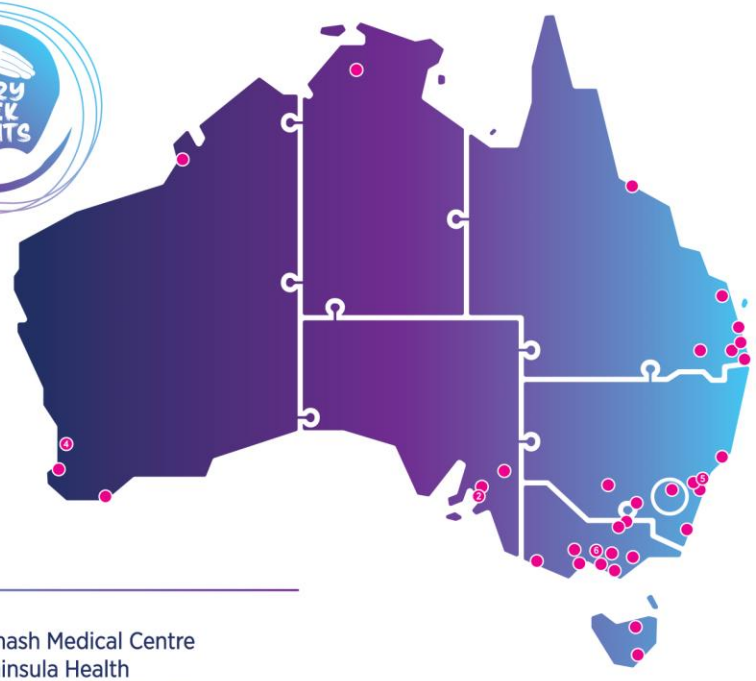


Queensland Government

Hospital sites participating in the Every Week Counts

National Preterm Birth Prevention Collaborative

50+ maternity hospitals working together to prevent preterm birth



Northern Territory

Royal Darwin and Palmerston Hospital

Western Australia

Albany Health Campus
Armadale Health Service
Broome Health Campus
Bunbury Hospital
Fiona Stanley Hospital
King Edward Memorial Hospital
Osborne Park Hospital

South Australia

Flinders Medical Centre
Lyell McEwin Hospital
Riverland Mallee Coorong Local Health Network
- Murray Bridge Soldier's Memorial Hospital
- Loxton Hospital
- Waikerie Health Service
- Riverland General Hospital

Women's and Children's Hospital

Victoria

Angliss Hospital
Barwon Health
Box Hill Hospital
Ballarat Base Hospital
Frances Perry House
Joan Kirner Women's & Children's Hospital
Latrobe Regional Hospital
Mercy Hospital for Women
Monash Medical Centre
Peninsula Health
Portland District Health
The Northern Hospital
The Royal Women's Hospital
Wangaratta District Base Hospital
Wodonga Hospital

Tasmania

Launceston General Hospital
Northwest Regional Hospital
Royal Hobart Hospital

Queensland

Darling Downs Health
- Kingaroy Hospital
- Chinchilla Hospital
- Stanthorpe Hospital
- Dalby Hospital
- Warwick Hospital
- Goondiwindi Hospital
- Toowoomba Hospital

Gold Coast University Hospital
Ipswich Hospital
Mater Mothers Hospital
Sunshine Coast University Hospital
The Royal Brisbane and Women's Hospital
Townsville University Hospital

New South Wales

Campbelltown Hospital
Fairfield Hospital
Griffith Base Hospital
Illawarra Shoalhaven Local Health District
- Wollongong Hospital
- Shoalhaven Hospital

Royal Hospital for Women
Royal Prince Alfred Hospital
Southern NSW Local Health District
- Queanbeyan District Hospital
- Moruya District Hospital
- South East Regional Hospital – Bega
- Goulburn District Hospital
- Cooma District Hospital

St George Hospital
Sutherland Hospital
Wagga Wagga Base Hospital
Westmead Hospital

Australian Capital Territory

Centenary Hospital for Women and Children

Australian Government Department of Health and Aged Care
Australian Preterm Birth Prevention Alliance
Women's Healthcare Australasia
Institute for Healthcare Improvement
SCV Safer Care Victoria
Women and Babies Research Sydney
women & infants research foundation

Two concurrent projects in QLD

National initiative

WOMEN'S HEALTHCARE AUSTRALASIA

Institute *for* Healthcare Improvement

Preterm Birth Prevention Collaborative

Nationally funded

Queensland based

Coming to a town near you

Preterm Birth Prevention Program

So what's the difference?

Image Credit: *Shutterstock*

Goal

To improve the health of women and babies by safely reducing the rate of preterm and early term birth by 20% in participating maternity services across Australia by June 2024

Preterm Birth Prevention Collaborative

Preterm Birth Prevention Program

Program Core Elements

7 key strategies to prevent preterm birth

Preterm Birth Prevention Collaborative

Preterm Birth Prevention Program

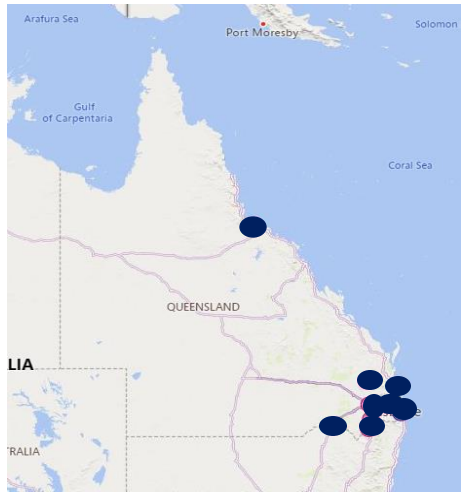
So is it the same then?

Image Credit: *Shutterstock*

Collaborative

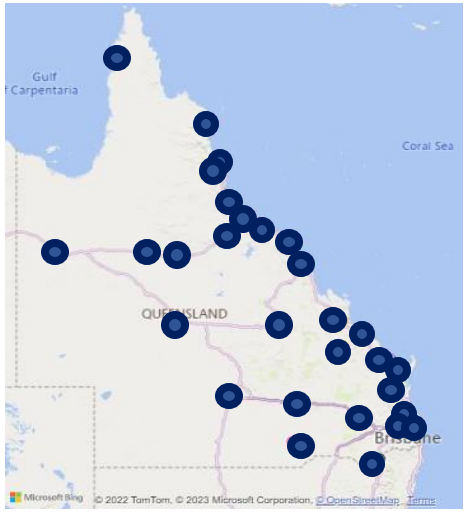
QPTBPP

7 Qld Sites



Preterm Birth Prevention Collaborative

All other sites

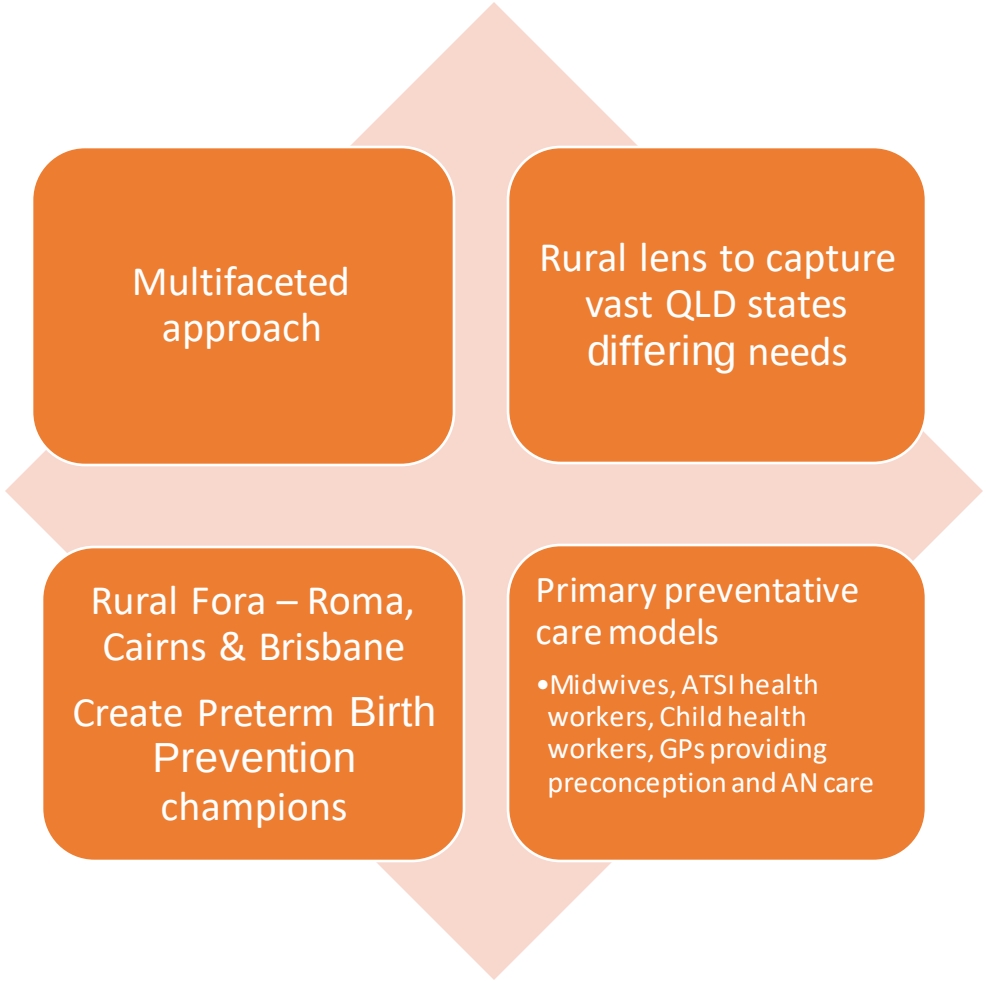


Preterm Birth Prevention Program

Collaborative / QPTBPP

Preterm Birth Prevention Collaborative	Preterm Birth Prevention Program
• Focus on improvement science • 3 x 2-day Learning Sessions (travel team) • Action Periods (whole team) • Data collection and measurement of progress • Coaching Calls/Monthly VCs • Project portal (Life-QI) • Share learning from other sites • Project support • Resources	• Focus on education / awareness - tailored to site need • Improvement science assistance • Face to face on site visits • Data collection and measurement of progress optional • Share learning from other sites • Project support • Resources

Queensland Preterm Birth Prevention Program (QPTBPP)



Outreach Itinerary – Hub & Spoke Model

Qld Preterm Birth Prevention Program Roadshow
Calendar of events

2023				
Month	**Date**	**Location**	**HHS**	**Spoke sites**
February	21st	Preterm Birth Prevention Program Virtual Launch		
March	23rd/24th	Roma Rural Forum	SWHHS	
April	18th	Caboolture	MNHHS	Redcliffe
May	11th/12th	Cairns Rural Forum Cairns Hospital	CHHHS	Atherton, Mareeba, Innisfail, Torres and Cape
June	6th 9th	Rockhampton Logan	CQ MSHHS	Gladstone, Emerald, Biloela Redlands, Beaudesert
July	25th	Longreach	CW	
August	8th 22nd 31st	Cairns Roma Mount Isa	CHHHS SWHHS NWHHS	Atherton, Mareeba, Innisfail, Torres and Cape Charleville, St George Cloncurry
September	-	No events	-	
October	-	No events	-	-
November	14th	Hervey Bay	Wide Bay	Bundaberg, Maryborough
December	-	No events	-	-

2024				
January	-	No events	-	-
February	19th/20th	Brisbane Rural Forum	Open to all QH	Open to all QH
March	9th 22nd	Brisbane GP Preterm Birth Prevention Workshop (Hybrid Event) Mackay	Open to all Queensland GPs MHHS	Brisbane Proserpine
April	30th	Thursday Island	TCHHHS	Cooktown, Weipa
May	18th	Private Obstetric Forum	Open to all Queensland Private Obstetricians	Brisbane

Queensland Government

Join us in Meanjin | Brisbane for RDAQ2024!

RANZCOG Symposium 2024

Lessons learnt so far

- Care fragmentation common – major contributor to poor obstetric outcomes in rural and remote Queensland
- Do your own PDSA and drop interventions which don't work!!
- Try to measure what you do … even if you think it is impossible!
- Listen … and learn
- Reflect … and change
- Networking is key (GPs and Statewide Maternity Alignment Network, rural GPOs, ACRRM, RDAQ, radiologists, private obstetricians, ACM etc.)
- Grateful for buy in and high level support (e.g. QCG)

Shared Resources

- PHR changes

Antenatal Screening Tests

Preconception screening: ☐ Yes ☐ No Comments:

Date	Gestation (weeks)	**Findings** (document follow-up and management plan on page a11)
/ /		Estimated due date by dating scan
/ /		Screening tests (11–13 weeks + 6 days) • PaPP-A: _____ MoM • NT: _____ mm • EDD: _____ / _____ / _____ • ☐ Chance of: _____ 1 in _____ • ☐ NIPT (optional): Low chance: _____ High chance: _____
/ /		Reproductive carrier screening – preconception/early pregnancy: ☐ Yes ☐ No Outcome: ☐ Low chance result ☐ High chance result
/ /		Morphology scan Cervical length (if known): _____ mm (TA/TV) ☐ TA <35mm ☐ TV <25mm Vaginal progesterone discussed/prescribed: ☐ Yes (document intervention on page a12) ☐ No Placenta: ☐ Anterior ☐ Posterior ☐ Fundal ☐ Low lying ☐ Clear of the OS Fetal morphology: ☐ No abnormalities detected
/ /		Additional scans (plot scan results on graphs)

Page a5 of 19

Shared Resources

- PHR changes

		/ /		
		/ /		

Medical and Obstetric Issues and Management Plan

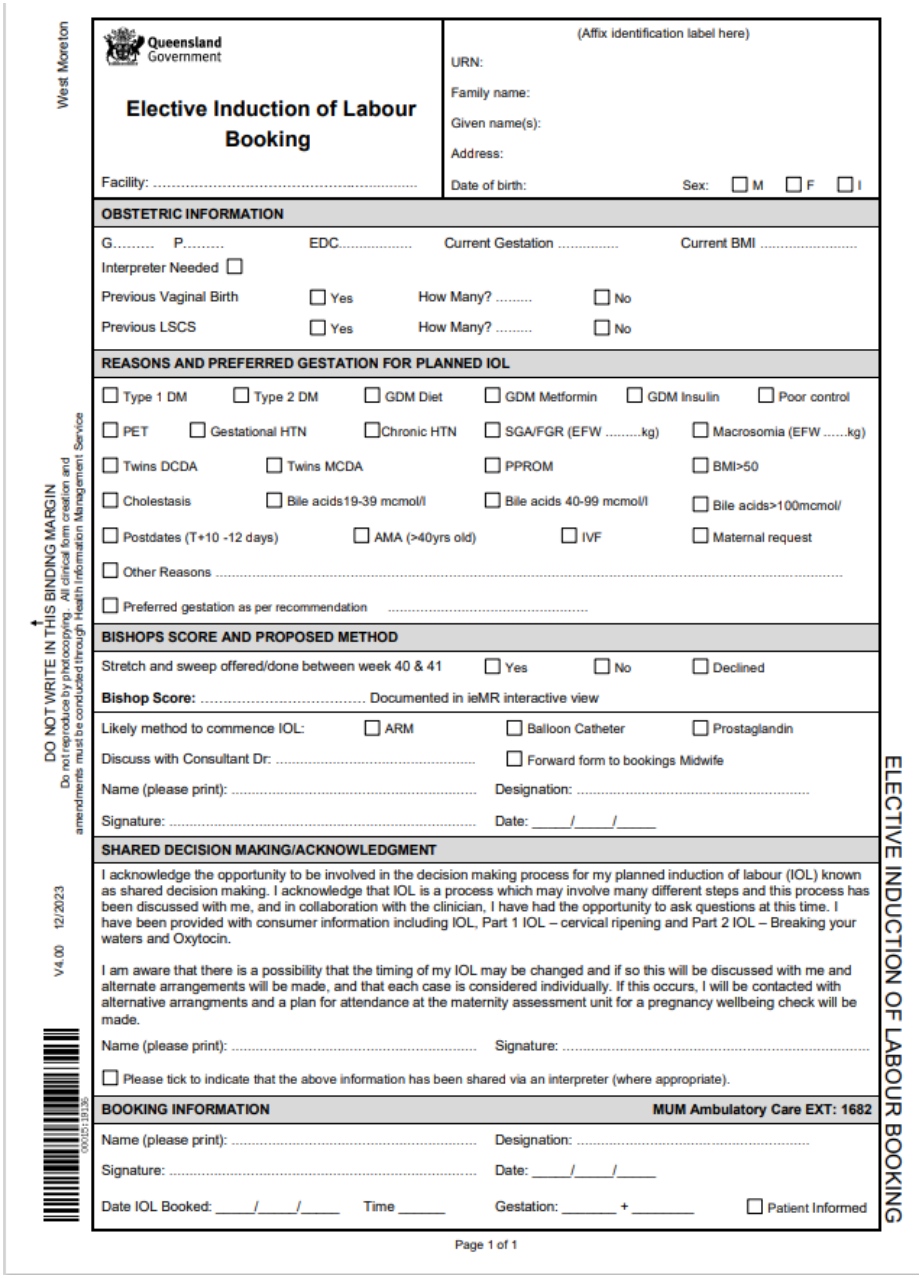
Resources:
Partnering with the woman who declines recommended maternity care (2020)
Yarning and Support Care Plan: Declining Recommended Maternity Care

Date	**Antenatal risk factors** (Refer to observations, medications, US, graph plots, screening tests)	**Management plan** (including follow-up)	Initials
/ /	☐ Pre-pregnancy therapeutic anticoagulation: Antenatal therapeutic anticoagulation		
/ /	☐ Cervical length		
/ /	☐ Cervical cerclage		
/ /			
/ /			
/ /			
/ /			
/ /			

Birth management plan (for events occurring prior to, during and after birth. Refer to page b3 for further preferences)

Postnatal management

☐ Cervical screening test ☐ Contraception - Type: ☐ MMR ☐ OGTT ☐ ECHO request
☐ Cardiology referral ☐ Paediatric review ☐ Perinatal Mental Health screening and if indicated referral
☐ Other:



West Moreton

Queensland Government

Elective Induction of Labour Booking

(Affix identification label here)

URN:

Family name:

Given name(s):

Address:

Facility: .....

Date of birth: Sex: ☐ M ☐ F ☐ I

OBSTETRIC INFORMATION

G..... P..... EDC..... Current Gestation ..... Current BMI .....

Interpreter Needed ☐

Previous Vaginal Birth ☐ Yes How Many? ..... ☐ No

Previous LSCS ☐ Yes How Many? ..... ☐ No

REASONS AND PREFERRED GESTATION FOR PLANNED IOL

☐ Type 1 DM ☐ Type 2 DM ☐ GDM Diet ☐ GDM Metformin ☐ GDM Insulin ☐ Poor control

☐ PET ☐ Gestational HTN ☐ Chronic HTN ☐ SGA/FGR (EFW .....kg) ☐ Macrosomia (EFW .....kg)

☐ Twins DCDA ☐ Twins MCDA ☐ PPROM ☐ BMI>50

☐ Cholestasis ☐ Bile acids19-39 mcmol/l ☐ Bile acids 40-99 mcmol/l ☐ Bile acids>100mcmol/

☐ Postdates (T+10 -12 days) ☐ AMA (>40yrs old) ☐ IVF ☐ Maternal request

☐ Other Reasons .....

☐ Preferred gestation as per recommendation .....

BISHOPS SCORE AND PROPOSED METHOD

Stretch and sweep offered/done between week 40 & 41 ☐ Yes ☐ No ☐ Declined

Bishop Score: ..... Documented in ieMR interactive view

Likely method to commence IOL: ☐ ARM ☐ Balloon Catheter ☐ Prostaglandin

Discuss with Consultant Dr: ..... ☐ Forward form to bookings Midwife

Name (please print): ..... Designation: .....

Signature: ..... Date: ____/____/____

SHARED DECISION MAKING/ACKNOWLEDGMENT

I acknowledge the opportunity to be involved in the decision making process for my planned induction of labour (IOL) known as shared decision making. I acknowledge that IOL is a process which may involve many different steps and this process has been discussed with me, and in collaboration with the clinician, I have had the opportunity to ask questions at this time. I have been provided with consumer information including IOL, Part 1 IOL – cervical ripening and Part 2 IOL – Breaking your waters and Oxytocin.

I am aware that there is a possibility that the timing of my IOL may be changed and if so this will be discussed with me and alternate arrangements will be made, and that each case is considered individually. If this occurs, I will be contacted with alternative arrangments and a plan for attendance at the maternity assessment unit for a pregnancy wellbeing check will be made.

Name (please print): ..... Signature: .....

☐ Please tick to indicate that the above information has been shared via an interpreter (where appropriate).

BOOKING INFORMATION

MUM Ambulatory Care EXT: 1682

Name (please print): ..... Designation: .....

Signature: ..... Date: ____/____/____

Date IOL Booked: ____/____/____ Time _____ Gestation: _____ + _____ ☐ Patient Informed

DO NOT WRITE IN THIS BINDING MARGIN
Do not reproduce by photocopying. All clinical form creation and amendments must be conducted through Health Information Management Service

V4.00 12/2023

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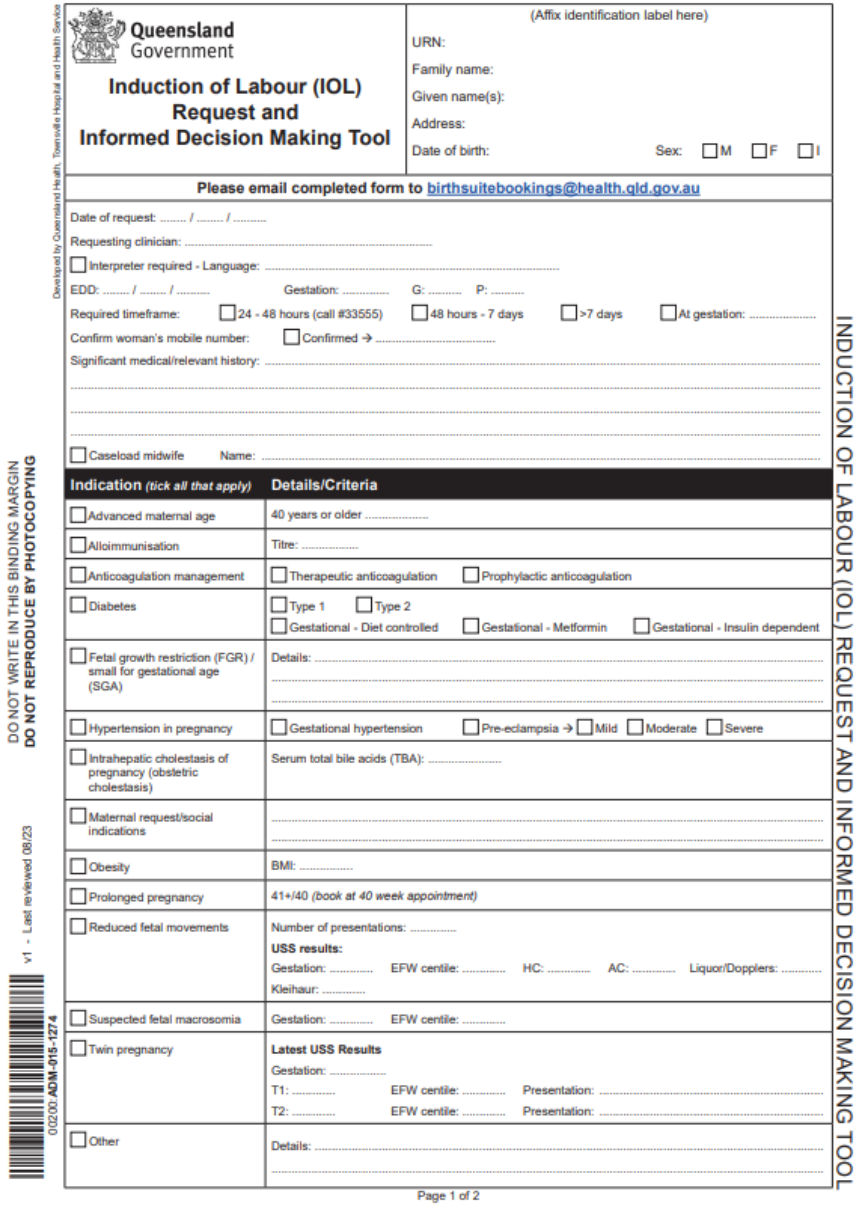
ELECTIVE INDUCTION OF LABOUR BOOKING

Page 1 of 1



Developed by Queensland Health, Townsville Hospital and Health Service

Queensland Government

Induction of Labour (IOL) Request and Informed Decision Making Tool

(Affix identification label here)

URN:

Family name:

Given name(s):

Address:

Date of birth: Sex: ☐ M ☐ F ☐ I

Please email completed form to birthsuitebookings@health.qld.gov.au

Date of request: ..... / ..... / .....

Requesting clinician: .....

☐ Interpreter required - Language: .....

EDD: ..... / ..... / ..... Gestation: ..... G: ..... P: .....

Required timeframe: ☐ 24 - 48 hours (call #33555) ☐ 48 hours - 7 days ☐ >7 days ☐ At gestation: .....

Confirm woman's mobile number: ☐ Confirmed → .....

Significant medical/relevant history: .....

☐ Caseload midwife Name: .....

Indication *(tick all that apply)*	Details/Criteria
☐ Advanced maternal age	40 years or older .....
☐ Alloimmunisation	Titre: .....
☐ Anticoagulation management	☐ Therapeutic anticoagulation ☐ Prophylactic anticoagulation
☐ Diabetes	☐ Type 1 ☐ Type 2 ☐ Gestational - Diet controlled ☐ Gestational - Metformin ☐ Gestational - Insulin dependent
☐ Fetal growth restriction (FGR) / small for gestational age (SGA)	Details: .....
☐ Hypertension in pregnancy	☐ Gestational hypertension ☐ Pre-eclampsia → ☐ Mild ☐ Moderate ☐ Severe
☐ Intrahepatic cholestasis of pregnancy (obstetric cholestasis)	Serum total bile acids (TBA): .....
☐ Maternal request/social indications	.....
☐ Obesity	BMI: .....
☐ Prolonged pregnancy	41+/40 *(book at 40 week appointment)*
☐ Reduced fetal movements	Number of presentations: ..... **USS results:** Gestation: ..... EFW centile: ..... HC: ..... AC: ..... Liquor/Dopplers: ..... Kleihaur: .....
☐ Suspected fetal macrosomia	Gestation: ..... EFW centile: .....
☐ Twin pregnancy	**Latest USS Results** Gestation: ..... T1: ..... EFW centile: ..... Presentation: ..... T2: ..... EFW centile: ..... Presentation: .....
☐ Other	Details: .....

DO NOT WRITE IN THIS BINDING MARGIN
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v1 - Last reviewed 08/23

0020.00 **ADM-015-1274**

INDUCTION OF LABOUR (IOL) REQUEST AND INFORMED DECISION MAKING TOOL

Page 1 of 2

Metro North Hospital and Health Service

Maternity Services / Royal Brisbane and Women's Hospital / Women's and Newborn Services

Work Instruction

Effective from: March 2022
Review date: January 2025

006725 Indications for Induction of Labour

NSQHS STANDARDS — 5 Comprehensive Care; 4. Medication Safety; 6. Communicating for safety; 8. Recognising and Responding to Acute Deterioration

Purpose and intent

The purpose of this document is to provide information for clinicians determining whether the pregnant woman has an indication for an induction of labour. Recommendations in this guideline are based on evidence provided within the Queensland Clinical Guideline (QCG) Induction of Labour guideline and specific maternal condition guidelines, the Australian Commission on Safety and Quality in Health Care (ACSQHC) Fourth Atlas of Healthcare Variation, as well as both local and international evidence and health service guidelines (see reference list).

Scope and target audience

This document applies to all Royal Brisbane and Women's Hospital (RBWH) staff (permanent, temporary or casual), students on placement within the RBWH and Australian Defence Force personnel working in Women's and Newborn Services who provide clinical care for induction of labour.

Process

Induction of labour (IOL) is intended to reduce pregnancy complications and is performed when the risks of continuing the pregnancy are greater than the risks of IOL.

The risks for stillbirth or maternal morbidity must be balanced with the developmental benefits of spending more time in utero including the early term weeks, the intervention involved in the induction process, and maternal wishes.

There is growing evidence that delivery prior to 39 weeks gestation is associated with:

- Higher incidence of special care or neonatal nursery admission [1]
- Higher incidence of hospital admission within the first year of life [1]
- Higher incidence of poor childhood development at school age [2]

All women should have an assessment of risk factors for stillbirth and discussion on timing of delivery between 34+0 and 36+6 weeks gestation as per the Safer Baby Bundle [3].

Planning for IOL should involve informed decision making by the woman and her partner/support people in consultation with her maternity care provider. The risks and benefits of IOL are to be discussed and written information provided to aid informed decision making and understanding of what will happen during the IOL process.

Metro North Health | Queensland Government

Evidence for specific indications for induction of labour

Diabetes in Pregnancy	
Definition	Type 1 or 2 diabetes mellitus in the absence of fetal concerns or poor diabetic control.
Evidence	• As per the Natural Institute of Health and Care Excellence (NICE) Royal College of Obstetricians and Gynaecologists (RCOG) guidelines, women with type 1 or type 2 diabetes and no other complications are recommended induction of labour between 37 – 38+6 weeks of pregnancy [4]. • As per NICE RCOG guidelines, consider elective birth before 37 weeks for women with type 1 or type 2 diabetes who have metabolic or other maternal or fetal complications [4].
Review of Current Practices (Benchmarking)	**West Moreton Health [2]** Type 1 diabetes – IOL 37 – 38+6 Type 2 diabetes – IOL 38 – 38+6 **South Australia Health [5]** Type 1 diabetes – IOL 37 – 37+6 Type 2 diabetes – IOL 38 – 38+6 **Mater Health [6]** Individualised basis but generally recommended from 38 weeks and before 40 weeks. Mode of birth will be discussed with the woman, including the risk of shoulder dystocia in vaginal birth. Elective caesarean sections are offered for the usual indications and if estimated fetal weight is expected to be greater than 4250 g. **New Zealand [7]** For women with Type 2 diabetes, continue expectant management to 39 weeks' gestation, unless there are obstetric or fetal indications for earlier birth, or diabetes complications such as vascular disease. The management of women with Type 1 diabetes is to be individualised.
RBWH Recommendation	In the absence of obstetric or fetal indication, offer IOL by 39 weeks.

Gestational Diabetes	
Definition	Gestational diabetes (GDM) in the absence of fetal macrosomia or growth restriction or poor diabetic control Patients may be managed with diet, oral hypoglycaemic agents or insulin
Evidence	• As per the NICE RCOG Guidelines, Women with gestational diabetes and no evidence of fetal or maternal complications are recommended induction of labour by 40+6 weeks of pregnancy. Patients with maternal or fetal complications are advised induction of labour before 40+6 weeks gestation.

Indications for IOL - Ipswich

West Moreton Indication for Induction – Updated Aug 2023.

Indication	Gestation based on offer, recommendation, or consideration
Post dates No additional risk factors identified	Initiate shared decision-making regarding timing of birth. • ***Recommend*** induction of labour **between 41+0 – 41+6 weeks**
Advanced maternal age	Initiate shared decision-making regarding timing of birth. • All women age 40 years or over: ***Recommend*** IOL **from 39 weeks**
BMI	Initiate shared decision-making regarding timing of birth • **BMI >50** with no co-morbidities. ***Offer*** IOL **from 39 weeks.** **Consider* CTG monitoring from 38 weeks if additional risk factors are identified.
GDM Well controlled with diet alone If diet controlled and no other perinatal concerns, management should be in accordance with usual maternity care for women without diabetes	Initiate shared decision-making regarding timing of birth as for post-dates. • ***Recommend*** IOL from **41 weeks**
GDM Well controlled with metformin or insulin (without additional risk factors)	Initiate shared decision-making regarding timing of birth • Where **no** additional risk factors are present ***recommend*** IOL **from 39+0 weeks** • Where there are **additional** identified risk factors, ***consider*** IOL **from 38 weeks**
Pre-existing diabetes (Type 1 or Type 2)	Consultant led discussion to initiate shared decision-making regarding timing of birth • *Type 1 Diabetes* – ***recommend*** IOL between **37+0 - 37+6** • *Type 2 Diabetes* – ***recommend*** IOL between **38+0 - 38+6**
Multiple pregnancy	Initiate shared decision-making regarding timing and mode of birth. • **Uncomplicated DCDA twins: *Recommend*** IOL (or LSCS) at **37 - 37+6 weeks** • **Uncomplicated MCDA twins**: ***Recommend*** IOL or LSCS at **36 - 36+6 weeks**.
SGA Constitutionally small or small for gestational age fetus - AC between 3rd and 10th centile with normal umbilical artery PI	Initiate shared decision-making regarding timing of birth, • ***recommend*** IOL from **39 weeks.**

West Moreton Indication for Induction – Updated Aug 2023.

Indication	Gestation based on offer, recommendation, or consideration
FGR Late FGR defined by AC/EFW < 3rd centile **OR** at least two out of three of the following • AC/EFW < 10th centile • Cerebroplacental ratio (CPR) < 5th centile or Umbilical A PI > 95th centile • AC/EFW crossing centiles >30 centiles on growth chart	Initiate shared decision-making regarding timing of birth, If **oligohydramnios** (deepest pool <2 cms) or **abnormal dopplers**, individual plan required • ***recommend*** birth at **37 weeks** at the latest If **normal liquor** volume: • aim to get to **38 – 38+6 weeks** if dopplers and CTG continue to remain normal, and there are no additional risk factors identified
Large for gestational age (LGA)/ Macrosomia	Initiate shared decision-making regarding timing of birth. *Consider* the patient's parity and previous obstetric birth weight when determining if they should be offered/ recommended for an IOL. ***Consider* offering** IOL **from 38 – 39 weeks** if the risk of macrosomia is confirmed on ultrasound scan (US done from **36 weeks**), if estimated fetal weights (EFW) are: • Greater than 3500 at 36 weeks • Greater than 3700 at 37 weeks • Greater than 3900 at 38 weeks: ***Consider*** elective CS if EFW is: • Greater than 4500 g in women with diabetes • Greater than 5000 g in women without diabetes
Obstetric cholestasis	Initiate shared decision-making regarding timing of birth, based on biochemistry. • **TBA (total bile acids) 19-39 micromol/l** (with no other risk factors for still birth) ***consider* IOL by 40 weeks** • **TBA 40-99 micromol/l** (with no other risk factors for still birth) ***consider* IOL 38-39 weeks** • **TBA >100 micromol/l (low threshold for pre term delivery** due to significant increase in risk of still birth from **35 weeks)**. Given increased stillbirth rate when TBA > 100, from 35 weeks, close surveillance and consultant led birth planning should be discussed with low threshold for preterm birthing.

Endorsed by K Sivanesan

Position A/Director O&G


GREAT NORTHERN
ROMA
RACE CLUB

Morning Tea

Stillbirth
CENTRE OF RESEARCH EXCELLENCE

Partnerships in Stillbirth & Preterm Birth Prevention

'Timing of Birth is the key'

David A Ellwood
Professor of O&G, Griffith University and Director of MFM, Gold Coast Health
Co-Director of the Stillbirth CRE

mater research

Griffith UNIVERSITY

AUSTRALIAN Preterm Birth Prevention ALLIANCE

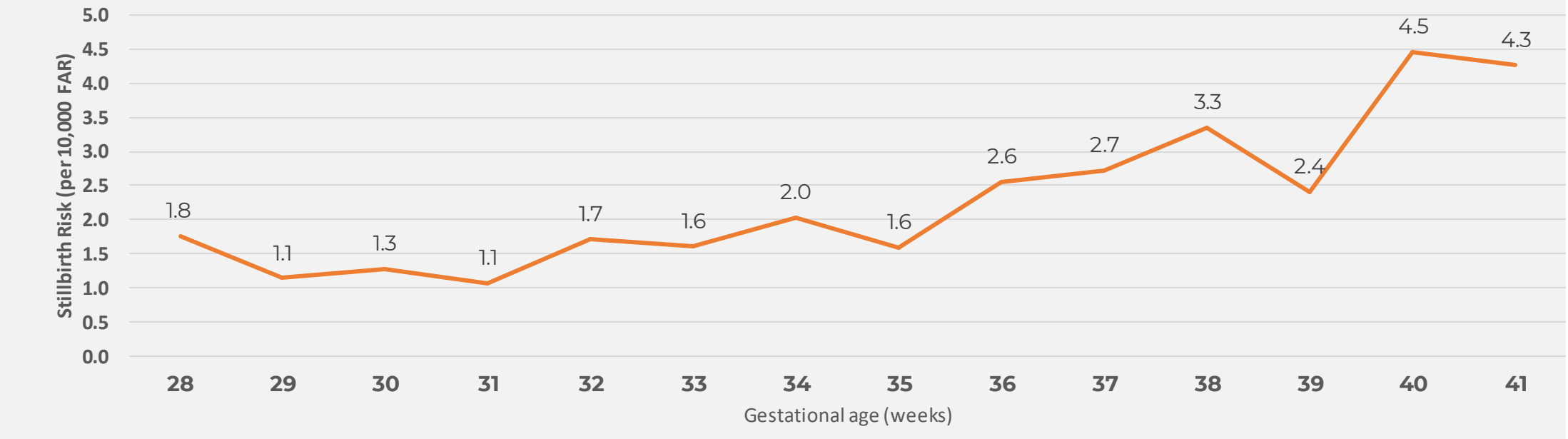
international stillbirth alliance

Australian Stillbirth risk

Stillbirth CENTRE OF RESEARCH EXCELLENCE

By gestational week – Births in 2021 (AIHW 2023)

Fetuses at risk (FAR) is the stillbirth risk per 10,000 ongoing pregnancies



Gestation	28^{+0} - 28^{+6}	29^{+0} – 29^{+6}	30^{+0} – 30^{+6}	31^{+0} – 31^{+6}	32^{+0} – 32^{+6}	33^{+0} – 33^{+6}	34^{+0} – 34^{+6}	35^{+0} – 35^{+6}	36^{+0} – 36^{+6}	37^{+0} – 37^{+6}	38^{+0} – 38^{+6}	39^{+0} – 39^{+6}	40^{+0} – 40^{+6}	41^{+0} 41^{+6}
Stillbirth risk (per 10,000)	1.8	1.1	1.3	1.1	1.7	1.6	2.0	1.6	2.6	2.7	3.3	2.4	4.5	4.3
Number of stillbirths	51	33	37	31	49	46	58	45	71	73	81	42	37	11
Number of ongoing pregnancies	289,139	288,765	288,359	287,840	287,131	286,090	284,637	281,943	277,543	268,102	242,154	174,526	83,127	25,850

Timing of Birth and Stillbirth Prevention

Stillbirth CENTRE OF RESEARCH EXCELLENCE

- Element 5 of the Safer Baby Bundle is concerned with *'Improving decision-making around timing of birth for women with risk factors for stillbirth'*
- The Stillbirth CRE have produced a range of resources including
  - A position statement (recently updated)
  - A brochure for women on planned birth
  - A timing of birth guide (to be used at 36 weeks)
  - A decision aid for women
- The last two resources are undergoing final evaluation before release, to examine clinical utility and impact on IOL rates

Stillbirth
CENTRE OF RESEARCH EXCELLENCE

Steps to assessing and managing risk factors

S	Stillbirth risk assessment in early pregnancy
T	Tests and further investigations as indicated
E	Evaluate and re-assess risk at 34 to 36+6 weeks
P	Plan for increased surveillance where indicated
S	Support informed, shared decision-making about timing of birth

Let's Talk Timing – Resources for women

- Given in the first half of pregnancy
- Should always be given with accompanying conversation

Let's Talk Timing – Resources for Healthcare Professionals

Stillbirth CENTRE OF RESEARCH EXCELLENCE

When and how to use the Let's Talk Timing resources

QR codes to resources

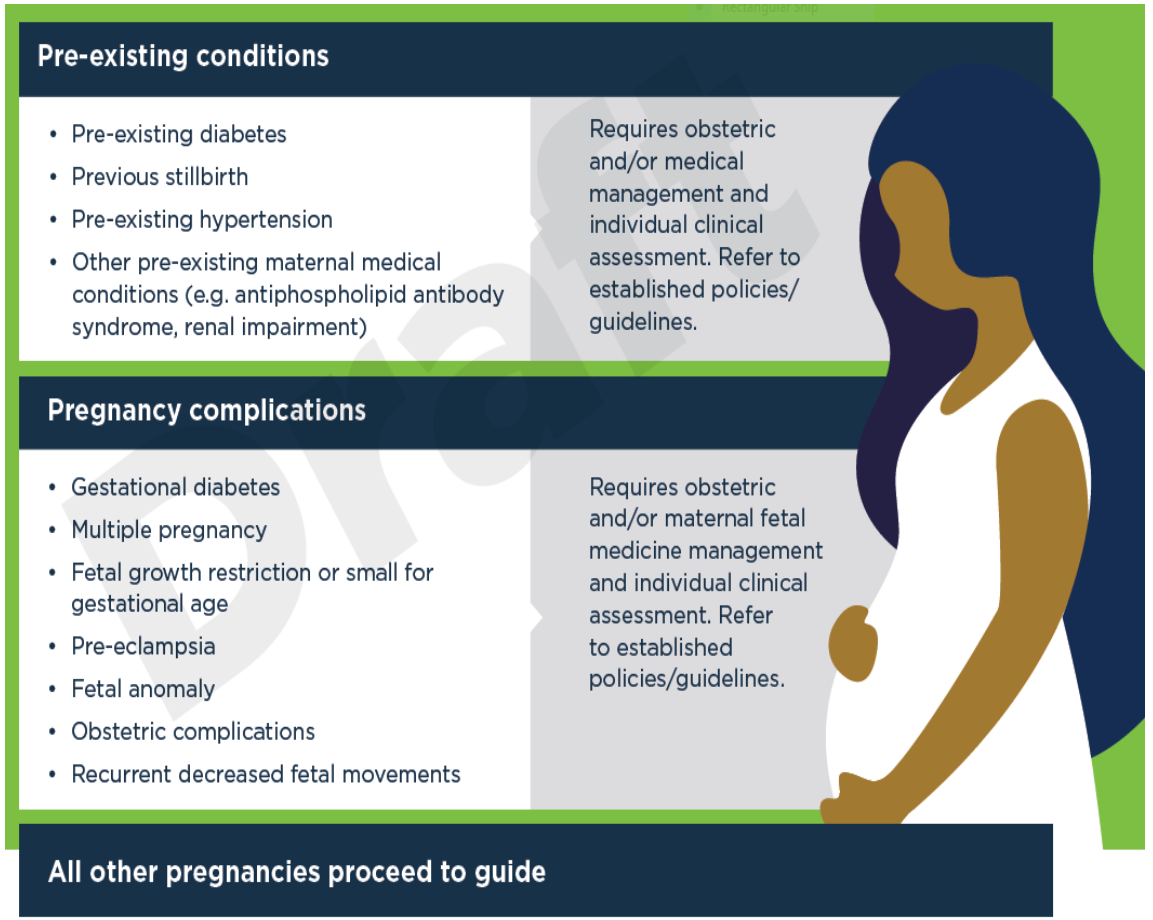
Inclusion & Exclusion Criteria

Stillbirth CENTRE OF RESEARCH EXCELLENCE

For all women with a singleton pregnancy **without** any medical or pregnancy complication which would already have identified management pathway or alter management

This is for women who are;

- No risk factors present
- High BMI
- Advancing Age
- Conceived using IVF
- Smoke or use drugs & alcohol throughout pregnancy
- Nulliparous



Timing of Birth Guide

Which of these apply?	0	1
Having your first baby	☐ No	☐ Yes
Age	☐ <35	☐ 35-39
Above a healthy body weight (Body Mass Index, BMI)	☐ <25	☐ 25-29
Smoking cigarettes at beyond 20 weeks of pregnancy	☐ No	
Using alcohol and/or other drugs throughout pregnancy	☐ No	
Having this baby conceived through IVF	☐ No	
TOTAL SCORE		

Level 1	Level 2	
Stillbirth chance at 37-42 weeks		
Score 0-2	Score 3-6	
It is recommended that you wait for your labour to start on its own up until 41 weeks of pregnancy	Have a discussion about whether you should plan to have your baby once you reach 39 weeks of pregnancy	

For women in Level 2 and Level 3 who choose to wait rather than have an e
of increased fetal surveillance may be considered. This may take various fo
of resources. Women should be reminded to report changes in fetal m

Gestational age	Week 37	Week 38	Week 39	
Level 1	*Stillbirth risk per 10,000 births at ea*			
Level 2	*gestational age to be confirmed follo*			
Level 3	*move more advanced data set in*			

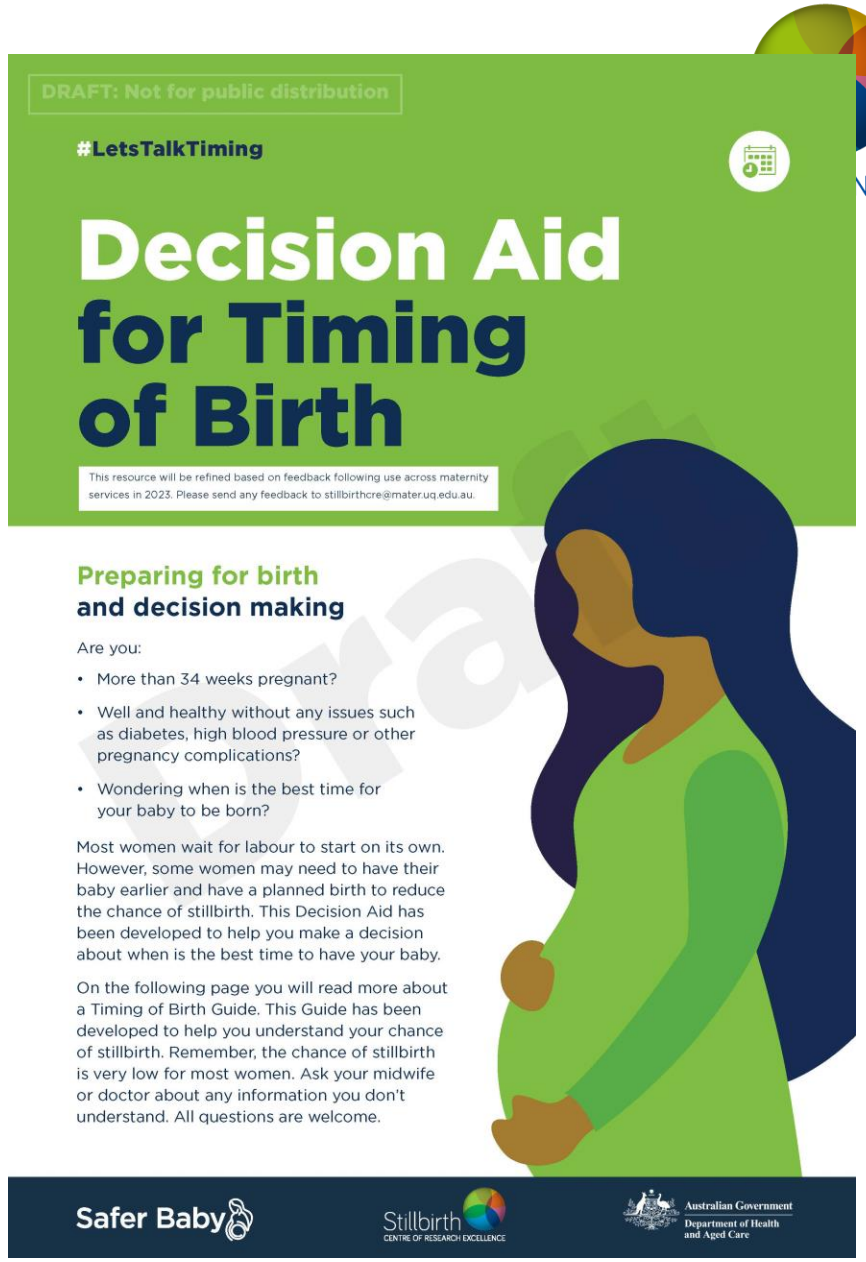
Timing of Birth Guide

	Points			
Which of these apply?	**0**	**1**	**2**	**3**
Having your first baby	☐ No	☐ Yes		
Age	☐ <35	☐ 35-39	☐ 40-44	☐ 45+
Above a healthy body weight (Body Mass Index, BMI)	☐ <25	☐ 25-29	☐ 30-39	☐ 40+
Smoking cigarettes at beyond 20 weeks of pregnancy	☐ No			☐ Yes
Using alcohol and/or other drugs throughout pregnancy	☐ No		☐ Yes	
Having this baby conceived through IVF	☐ No		☐ Yes	
TOTAL SCORE				

Level 1	Level 2	Level 3
Stillbirth chance at 37-42 weeks		
Score 0-2	Score 3-6	Score >7

Decision Aid (DA)

- Resource designed for women to help to facilitate discussion between the woman and her midwife and/or doctor about:
  - Timing of Birth
  - Making a choice about spontaneous vs planned birth



Reducing preterm and early term births

- The national PTB/ETB prevention initiative has been rolled out
- There has been much discussion about how TOB advice is managed
- A joint position statement on TOB has been developed
- An education program on TOB has been developed jointly between the Stillbirth CRE and the APTBA

Joint Position Statement on TOB

Stillbirth CENTRE OF RESEARCH EXCELLENCE

- There are many medical and pregnancy complications where early planned birth by induction of labour or Caesarean section is necessary and may be beneficial to the woman and her baby, and prevent stillbirth. *However, for most women planned birth can be delayed safely until 39 weeks or beyond, or to await spontaneous onset of labour.*
- *In the absence of a reason for early planned birth, women should be encouraged to continue their pregnancy until 39 weeks or later to enable the baby to develop fully.* Birth before this time cannot normally be justified for social reasons alone.

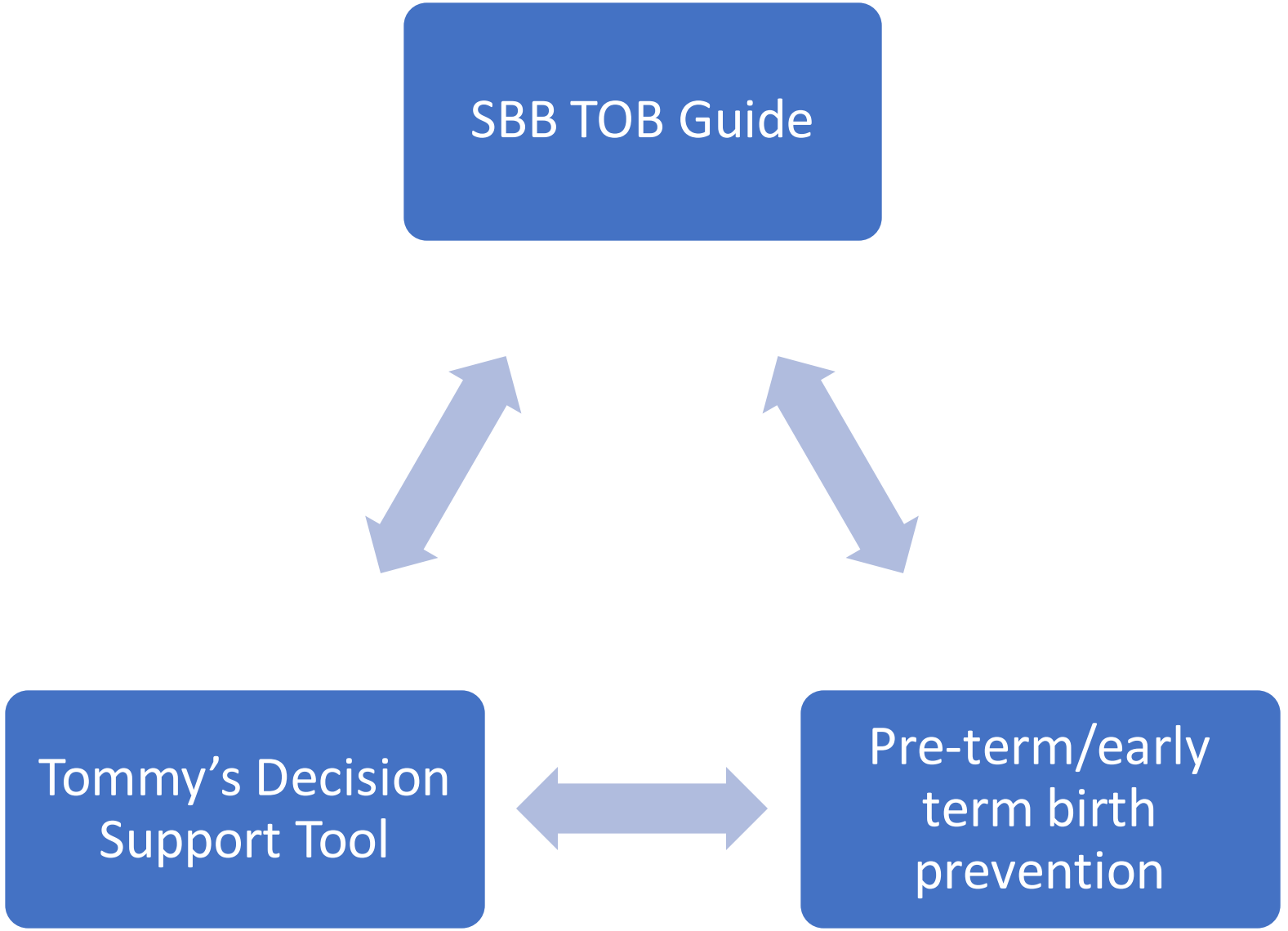
Timing of Birth (ToB) assessment around 36 weeks

Tommy's National Centre for Maternity Improvement | Royal College of Midwives | Royal College of Obstetricians & Gynaecologists

Routinely completed for women who are moderate or high chance of placental dysfunction

Run Timing of Birth assessment (≥36/40)

	High chance PD ≤16w	EFW 3-10th centile	EFW <3rd centile	Abnormal dopplers
Offer birth from 41 weeks	Offer birth from 40 weeks	Offer birth from 39 weeks	Offer birth from 37 weeks	Refer to Fetal Medicine or Senior Obs review


SBB TOB Guide
Tommy's Decision Support Tool
Pre-term/early term birth prevention

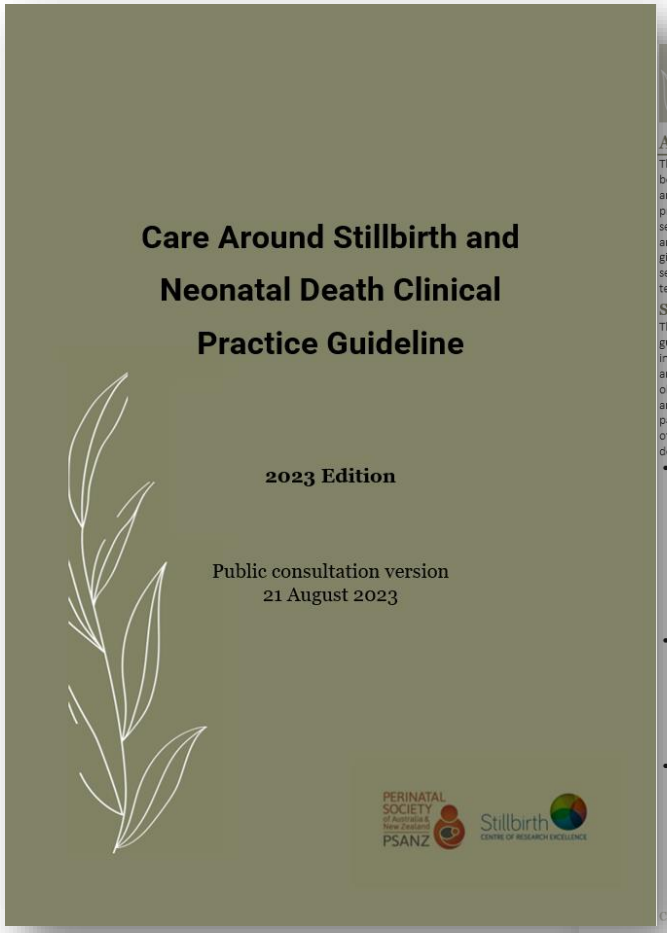
Conclusions

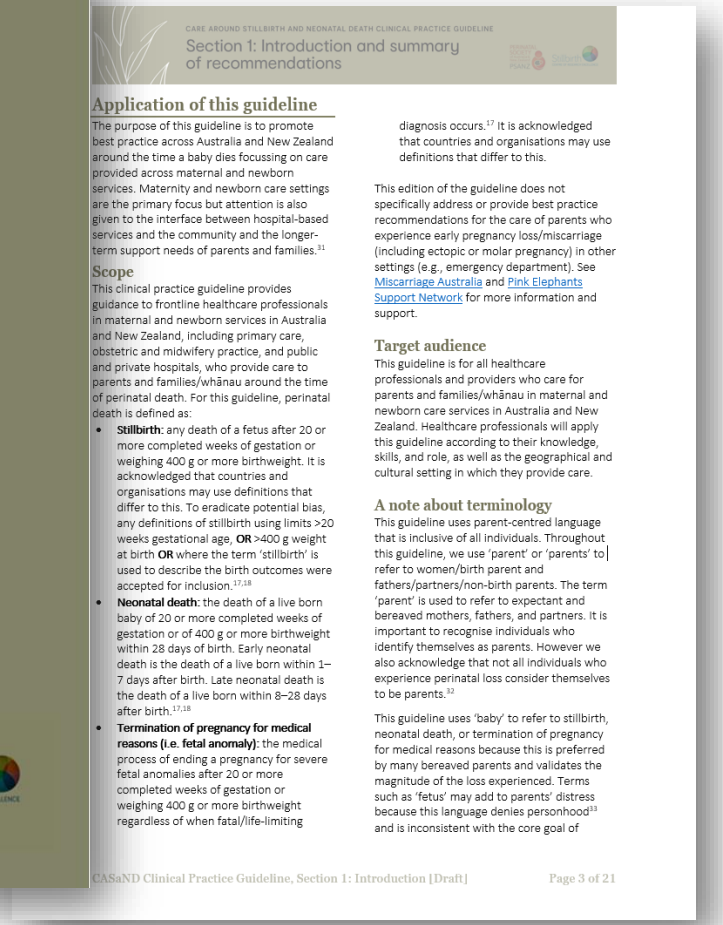
Stillbirth CENTRE OF RESEARCH EXCELLENCE

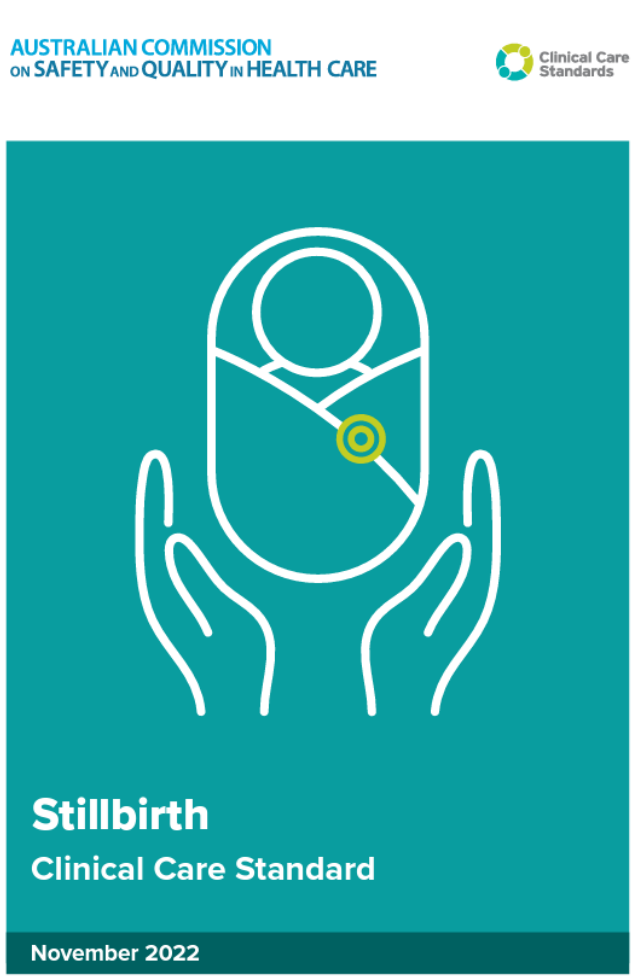
- We believe that we can get decision-making around TOB right, and reduce both stillbirth, and preterm/early term birth
- The TOB recommendations using the Tommy's Decision Support Tool are reasonably in line with Element 5 of SBB
- The challenge is to work out if and how the SBB TOB guide integrates with 12 weeks screening and subsequent scans
- The goal of all programs must be to improve pregnancy outcomes overall, and minimize harm in achieving this goal

Care Around Stillbirth and Neonatal Death Clinical Practice Guideline, 2024

Stillbirth
CENTRE OF RESEARCH EXCELLENCE







Approaches to Culturally-Safe Care

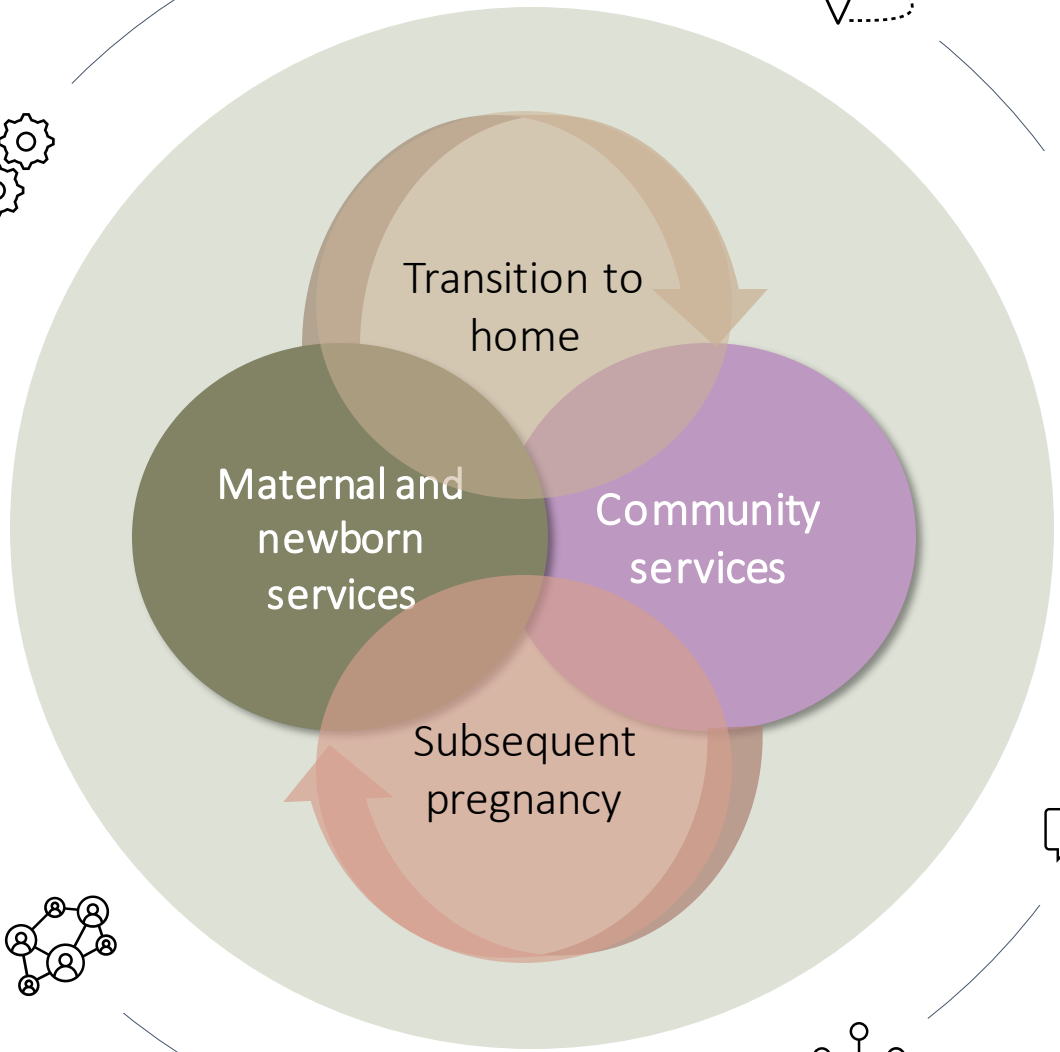
Stillbirth CENTRE OF RESEARCH EXCELLENCE

Evidence-Based Recommendation 2.13 (moderate confidence) Care must be appropriate to parent's cultural, religious and/or spiritual needs. Healthcare professionals should:

- Recognise that parents and family/whānau come from a wide range of backgrounds and acknowledge diversity within and between cultural groups.
- Avoid cultural stereotypes and culture-based assumptions.
- Be aware of and responsive to individual, cultural, religious and/or spiritual approaches to death and expressions of grief and loss.

"Protection"

Guiding framework to optimise care for bereaved families



Centralised access to Clinical Practice Guideline & Clinical Standards

HCP customisable toolkit and parent resources *e.g. Guiding Conversations parent guideline; Stillbirth Investigations Resources; Birth planning in grief; Engaging parents in the perinatal mortality review process.*

Increased training and education in perinatal bereavement care for clinicians (e.g. *IMPROVE face-to-face and eLearning)* and community-based HCPs (e.g. GPs *via Living with Loss GP program*)

Core outcome set of measures for stillbirth care research

Links to Community of Practice for HCPs providing perinatal bereavement care in Australia

Peer support network and evidence-based resources to prevent and reduce burnout in HCPs

Connecting parents at every step of the pathway with appropriate health professionals and support organisations

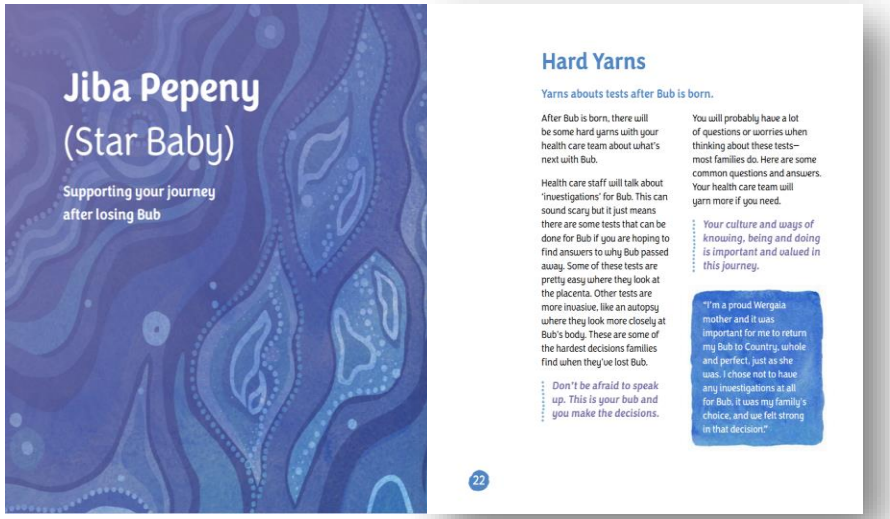
Bridging the gaps between maternity and community-based services for parents (led by parent organisations)

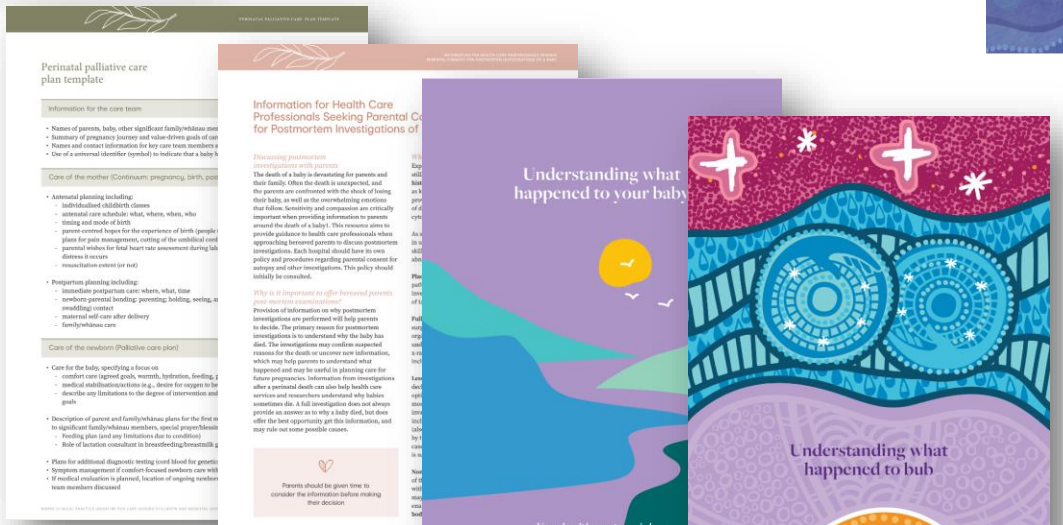
Increased availability and accessibility to evidence-based psychosocial resources *e.g. Living with Loss online program*

Implementation framework for service quality improvement

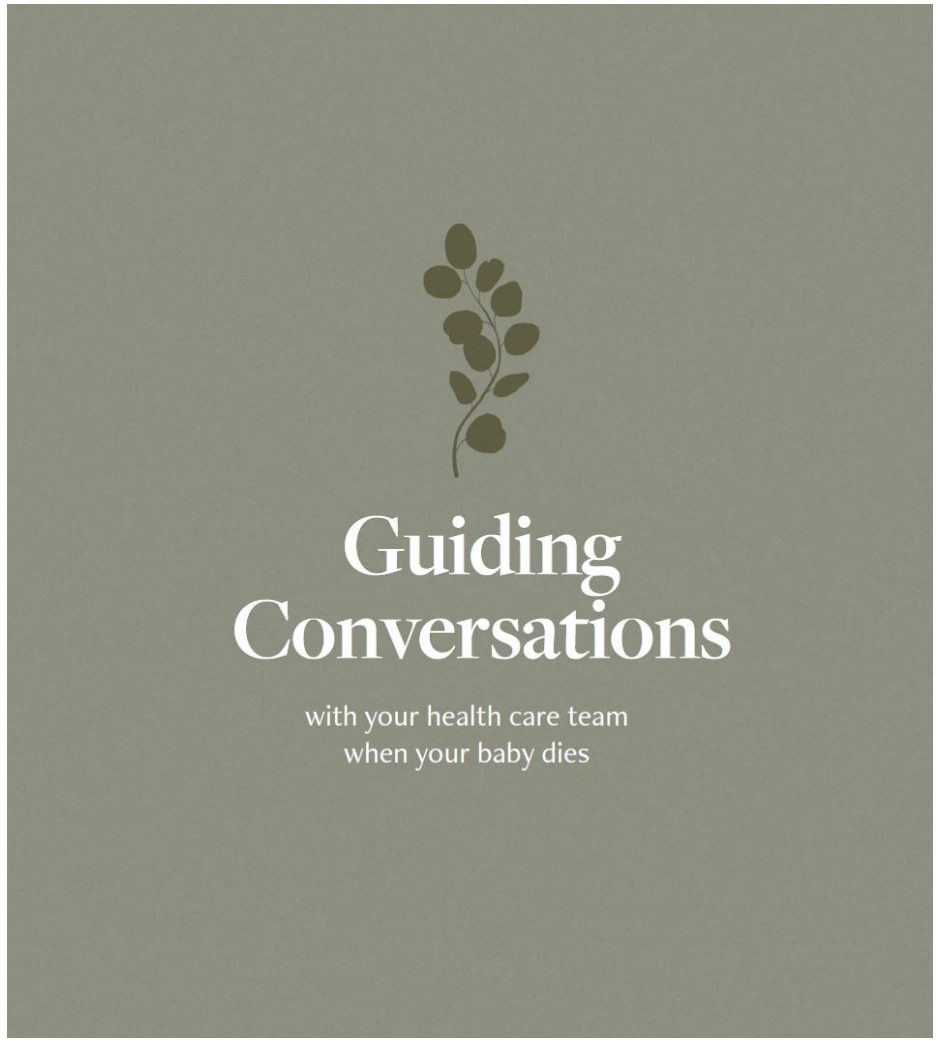
Bereavement outreach model of care connecting rural services with key metro services


Guiding
Conversations
with your health care team
when your baby dies


Jiba Pepeny
(Star Baby)
Supporting your journey
after losing Bub
Hard Yarns
Yarns abouts tests after Bub is born.
After Bub is born, there will be some hard yarns with your health care team about what's next with Bub.
Health care staff will talk about 'investigations' for Bub. This can sound scary but it just means there are some tests that can be done for Bub if you are hoping to find answers to why Bub passed away. Some of these tests are pretty easy where they look at the placenta. Other tests are more invasive, like an autopsy where they look more closely at Bub's body. These are some of the hardest decisions families find when they've lost Bub.
Don't be afraid to speak up. This is your bub and you make the decisions.
You will probably have a lot of questions or worries when thinking about these tests– most families do. Here are some common questions and answers. Your health care team will yarn more if you need.
Your culture and ways of knowing, being and doing is important and valued in this journey.
"I'm a proud Wergaia mother and it was important for me to return my Bub to Country, whole and perfect, just as she was. I chose not to have any investigations at all for Bub, it was my family's choice, and we felt strong in that decision."
22


Perinatal palliative care
plan template
Information for Health Care
Professionals Seeking Parental
for Postmortem Investigations of
Understanding what
happened to your baby
Your healthcare team is here
for you at this very difficult time.
We are so sorry for your loss.
Understanding what
happened to bub

When my baby died, I had no idea what I needed to know, or what was possible. It was such an overwhelming time. What I really needed was to know the options I had so that we could make decisions that were right for us.



Partners and Collaborators

mater research
Stillbirth CRE Coordinating Centre

The University of Queensland AUSTRALIA

Stillbirth Foundation Australia

international stillbirth alliance

PERINATAL SOCIETY of Australia & New Zealand PSANZ

Griffith UNIVERSITY

murdoch children's research institute

red nose

sands miscarriage, stillbirth & newborn death support

The Royal Australian and New Zealand College of Obstetricians and Gynaecologists

MONASH University

Burnet Institute Medical Research. Practical Action.

Mercy Health

THE UNIVERSITY OF SYDNEY

Curtin University

Remembering Riley

HUDSON INSTITUTE OF MEDICAL RESEARCH

The Ritchie Centre

Australian College of Midwives

THE UNIVERSITY OF MELBOURNE

LA TROBE UNIVERSITY

raisingchildren.net.au

THE PERINATAL LOSS CENTRE

UNSW AUSTRALIA

SAHMRI South Australian Health & Medical Research Institute

bears of hope Pregnancy & Infant Loss Support

WOMEN'S HEALTHCARE AUSTRALASIA

MULTICULTURAL CENTRE FOR WOMEN'S HEALTH

NORTHERN TERRITORY GOVERNMENT Department of Health

ACT Government

NSW GOVERNMENT

CLINICAL EXCELLENCE COMMISSION

Government of Western Australia Department of Health

Clinical Excellence Queensland

Queensland Government

Tasmanian Government

SCV Safer Care Victoria

Managing the woman at risk of preterm birth

A case-based discussion

GP Forum Brisbane

9th March 2024

Dr Chris Lehner

MD, PhD, FRANZCOG, CMFM

Queensland Clinical Lead – National Preterm Birth Prevention Program

Sally Cooper

35 yo Para 1

Hx spontaneous preterm birth at 32 weeks

Follow up appointment 6 weeks postpartum

Which potential modifiable risk factors should be screened for and addressed prior to a subsequent pregnancy?

Modifiable risk factors for PTB

- Chlamydia trachomatis OR 2.28
- Bacterial vaginosis OR 2.19
- Asymptomatic bacteruria OR 2.10
- Very high physical activity in pregnancy OR 2.10
- Domestic violence OR 1.91
- Recreational drug use aRR 1.60
- High BMI 35-40 aOR 1.33 >40 aOR 1.83
- Smoking aOR 1.70 PTB < 32 weeks
- Unemployment aOR 1.52
- Conception <6 months postpartum aOR ≥1.20

Goodfellow et al. BJOG 2021

Page 7 - QCG Preterm Labour and Birth

2 Risk assessment

The cause of spontaneous preterm labour remains unidentified in up to half of all cases.[13] Although many factors have been associated with an increased risk of spontaneous PTB[3], there is a relative paucity of high level research.[13,14] The majority of women with traditional risk factors will not experience PTB and of those women who do, many have no identifiable risk factors. Whether or not some risk factors are markers for other conditions and/or other risk factors is unknown.

Table 2. Risk factors associated with preterm birth

Aspect	Consideration

Maternal characteristics	• Age of woman[3,5]:
	  ○ Younger than 20 years
	  ○ Older than 40 years
	• Women who smoke during pregnancy[5]:
	  ○ 13.6% babies are born preterm compared to 8.1% of babies whose mothers did not smoke
	• Women residing in rural and remote areas[5]:
	  ○ 13.5% babies are born preterm compared to 8.4% in major cities
	• Risk of PTB based on ethnicity compared to Caucasian women[15]:
	  ○ African American women: increased (OR 2.0, 95% CI 1.8 to 2.2)[16]
	  ○ East African women: increased (aOR 1.55, 95% CI 1.27 to 1.90)[17]
	  ○ Asian or Hispanic women: no significant difference[17]
	• Women who identify as Aboriginal and/or Torres Strait Islander[5]:
	  ○ 14.2% babies are born preterm compared to 8.5% of babies born to non-Indigenous women
	• Late or no antenatal care
	• Lack of continuity of care
	• Low socio-economic status
	• High or low body mass index (BMI)

Medical and pregnancy conditions	• Multiple birth[5]:
	  ○ 66% of twins
	  ○ 98.2% of all other multiples (triplets and higher order)
	• Presence of fetal fibronectin (fFN) in the vaginal secretions
	• Short cervical length[18]:
	  ○ Previous PTB recurrence risk related to gestational age of prior PTB[19]
	  ○ Approximately 30% of women who give birth prematurely in a prior pregnancy will give birth before 37 weeks in a subsequent pregnancy[6]
	  ▪ Extremely preterm: 0.5%, aOR 2.0, (95% CI 1.6 to 2.3)[19]
	  ▪ Very preterm: 6.8%, aOR 3.0, (95% CI 2.9 to 3.2)[19]
	  ▪ Moderately preterm: 37.7%, aOR 2.2, (95% CI 2.2 to 2.3)[19]
	• Genital tract infections[1]:
	  ○ Bacterial vaginosis[20] risk of PTB doubled
	• Urinary tract infections[21]
	• Vaginal bleeding[21]
	• Assisted reproduction[21] associated with two-fold risk of PTB
	• Preterm prelabour rupture of membranes (PPROM)
	• Surgical procedures involving the cervix[22]
	• Uterine anomalies[21]
	• Polyhydramnios/oligohydramnios
	• Chronic medical conditions
	• Acute medical conditions (e.g. preeclampsia, antepartum haemorrhage)

You meet Sally again 2 years later in her subsequent pregnancy

- 16 weeks booking-in visit

What can you offer Sally to reduce her risk of recurrent preterm birth?

Use of vaginal progesterone if you have a prior history of spontaneous preterm birth.

THE LANCET

Volume 397, Issue 10280, 27 March–2 April 2021, Pages 1183-1194

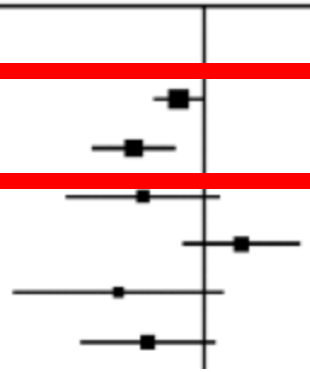
Articles

Evaluating Progestogens for Preventing Preterm birth International Collaborative (EPPPIC): meta-analysis of individual participant data from randomised controlled trials

The EPPPIC Group*

Vaginal Progesterone – singleton pregnancies

	Women (n)	Relative risk (95% CI)
Vaginal progesterone		
Preterm (<37 weeks)	3769	0·92 (0·84–1·00)
Preterm (<34 weeks)	3769	0·78 (0·68–0·90)
Preterm (<28 weeks)	3769	0·81 (0·62–1·06)
Maternal complications	2551	1·14 (0·93–1·40)
Perinatal death	3769	0·74 (0·52–1·07)
Serious neonatal complications	3535	0·82 (0·65–1·04)



How about cerclage?

Yes … if the cervix is short!

Cerclage – short cervix, Hx spont PTB

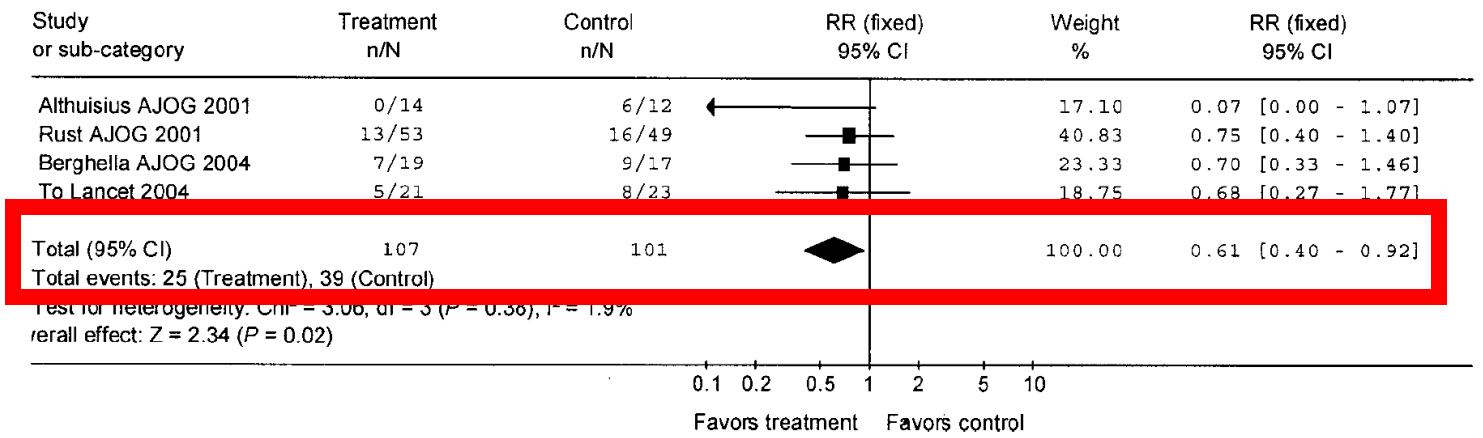


Fig. 3. Meta-analysis of cerclage for preterm birth at less than 35 weeks: singleton gestations in women with a prior preterm birth at 16–36 weeks.

Berghella. Cerclage for Short Cervix: A Meta-Analysis. Obstet Gynecol 2005.

Sally is keen to avoid surgery … and you read this!!

Review > Am J Obstet Gynecol. 2022 Sep;227(3):440-461.e2.
doi: 10.1016/j.ajog.2022.04.023. Epub 2022 Apr 20.

Does vaginal progesterone prevent recurrent preterm birth in women with a singleton gestation and a history of spontaneous preterm birth? Evidence from a systematic review and meta-analysis

Agustin Conde-Agudelo [1], Roberto Romero [2]

What can you offer Sally at this appointment?

Measure the cervix!!

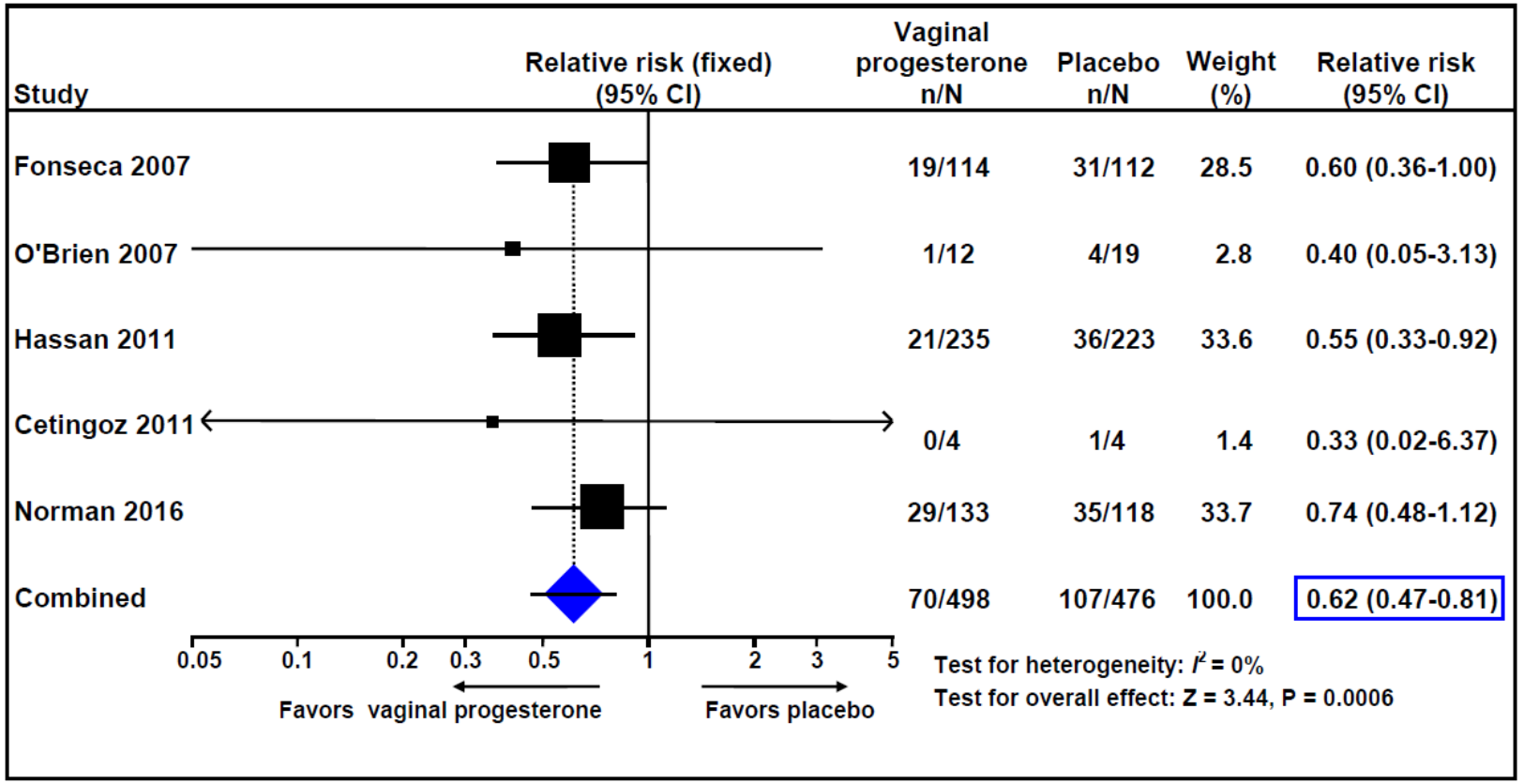
Why?

It's short!! 21 mm TV

What to do next??

Vaginal Progesterone for short cervix PTB <33 weeks

Romero et al. AJOG 2018



Ultrasound Obstet Gynecol 2022; **60**: 435–456
Published online 29 July 2022 in Wiley Online Library (wileyonlinelibrary.com). **DOI:** 10.1002/uog.26020

isuog.org

GUIDELINES

ISUOG Practice Guidelines: role of ultrasound in the prediction of spontaneous preterm birth

Recommendation

- Although evidence is still conflicting, in women with singleton gestation and prior spontaneous PTB, treatment with vaginal progesterone every night from 16 to 36 weeks, or surveillance and treatment in those with CL ≤ 25 mm, should be considered (**GOOD PRACTICE POINT**).

If this was Sally's first pregnancy and the cervix was short …

When should a cerclage be considered?

First up or if cervix continues to shorten on vaginal progesterone?

Cerclage first? The evidence says NO …

Review > Ultrasound Obstet Gynecol. 2017 Nov;50(5):569-577. doi: 10.1002/uog.17457.
Epub 2017 Oct 5.

Cerclage for sonographic short cervix in singleton gestations without prior spontaneous preterm birth: systematic review and meta-analysis of randomized controlled trials using individual patient-level data

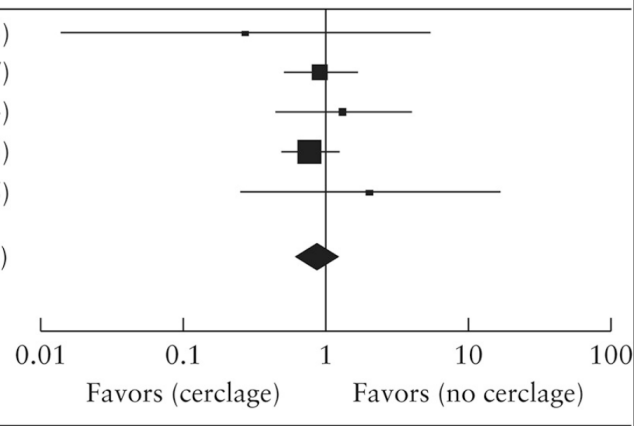
V Berghella [1], A Ciardulli [2], O A Rust [3], M To [4], K Otsuki [5], S Althuisius [6], K H Nicolaides [7], A Roman [1], G Saccone [8]

5 RCTs, 419 asymptomatic singleton pregnancies with TVS-CL < 25 mm and no prior spontaneous PTB

Study or Subgroup	Cerclage Events	Cerclage Total	No cerclage Events	No cerclage Total	Weight	Risk ratio (95% CI)
Althuisius (2001)[33]	0	5	1	4	3.0%	0.28 (0.01–5.43)
Rust (2001)[32]	15	51	17	54	30.3%	0.93 (0.52–1.67)
Berghella (2004)[35]	4	9	4	12	6.3%	1.33 (0.45–3.94)
To (2004)[34]	25	106	31	103	57.8%	0.78 (0.50–1.23)
Otsuki (2016)[25]	5	53	1	22	2.6%	2.08 (0.26–16.76)
Total (95% CI)		224		195	100.0%	0.88 (0.63–1.23)
Total events	49		54			

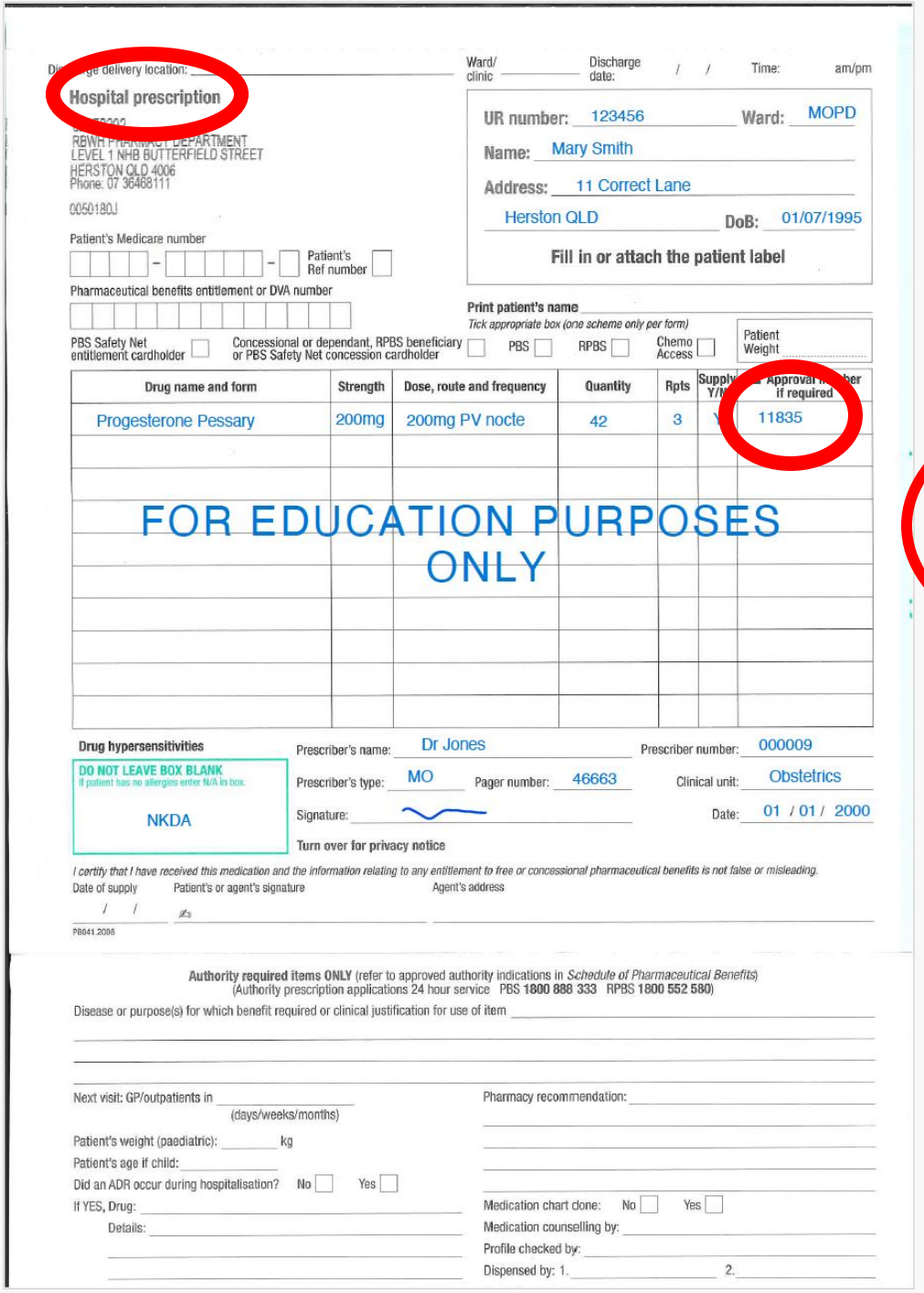
Heterogeneity: $\chi^2 = 2.09$, df = 4 ($P = 0.72$); $I^2 = 0\%$

Test for overall effect: $Z = 0.74$ ($P = 0.46$)



So you decide to start vaginal Progesterone …

… what should your prescription look like??



Hospital prescription

RBWH PHARMACY DEPARTMENT
LEVEL 1 NHB BUTTERFIELD STREET
HERSTON QLD 4006
Phone: 07 36468111

Ward/ clinic ____ Discharge date: / / Time: am/pm

UR number: 123456 Ward: MOPD
Name: Mary Smith
Address: 11 Correct Lane
Herston QLD DoB: 01/07/1995
Fill in or attach the patient label

Patient's Medicare number
Patient's Ref number
Pharmaceutical benefits entitlement or DVA number
Print patient's name
Tick appropriate box (one scheme only per form)
PBS Safety Net entitlement cardholder
Concessional or dependant, RPBS beneficiary or PBS Safety Net concession cardholder
PBS RPBS Chemo Access
Patient Weight

Drug name and form	Strength	Dose, route and frequency	Quantity	Rpts	Supply Y/N	Approval number if required
Progesterone Pessary	200mg	200mg PV nocte	42	3	Y	11835

FOR EDUCATION PURPOSES ONLY

Drug hypersensitivities
DO NOT LEAVE BOX BLANK
If patient has no allergies enter N/A in box.
NKDA

Prescriber's name: Dr Jones Prescriber number: 000009
Prescriber's type: MO Pager number: 46663 Clinical unit: Obstetrics
Signature: Date: 01 / 01 / 2000
Turn over for privacy notice

I certify that I have received this medication and the information relating to any entitlement to free or concessional pharmaceutical benefits is not false or misleading.
Date of supply / / Patient's or agent's signature Agent's address

PB041.2008

Authority required items ONLY (refer to approved authority indications in *Schedule of Pharmaceutical Benefits*)
(Authority prescription applications 24 hour service PBS 1800 888 333 RPBS 1800 552 580)

Disease or purpose(s) for which benefit required or clinical justification for use of item

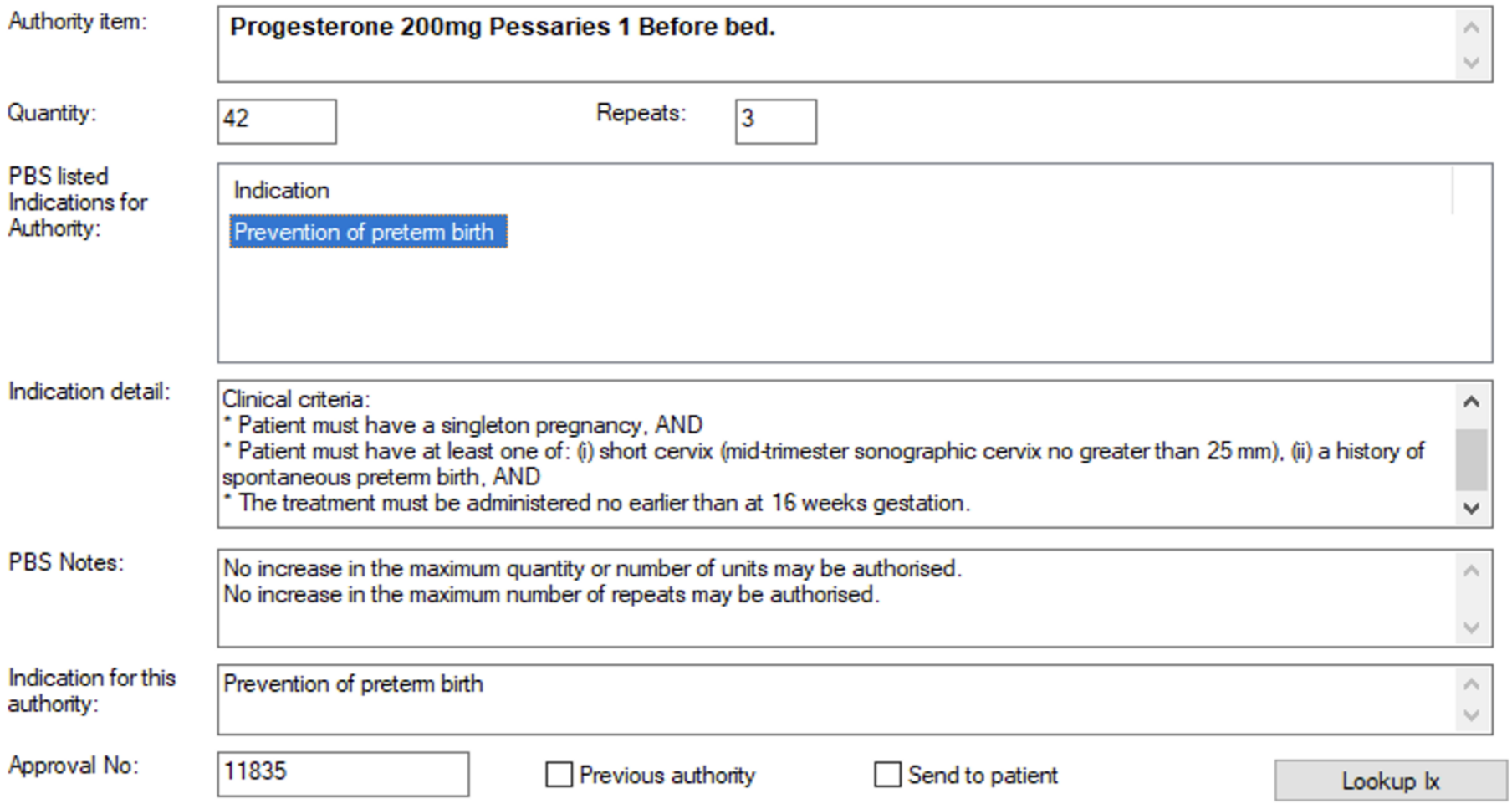
Next visit: GP/outpatients in (days/weeks/months)
Patient's weight (paediatric): kg
Patient's age if child:
Did an ADR occur during hospitalisation? No Yes
If YES, Drug:
Details:

Pharmacy recommendation:
Medication chart done: No Yes
Medication counselling by:
Profile checked by:
Dispensed by: 1. 2.

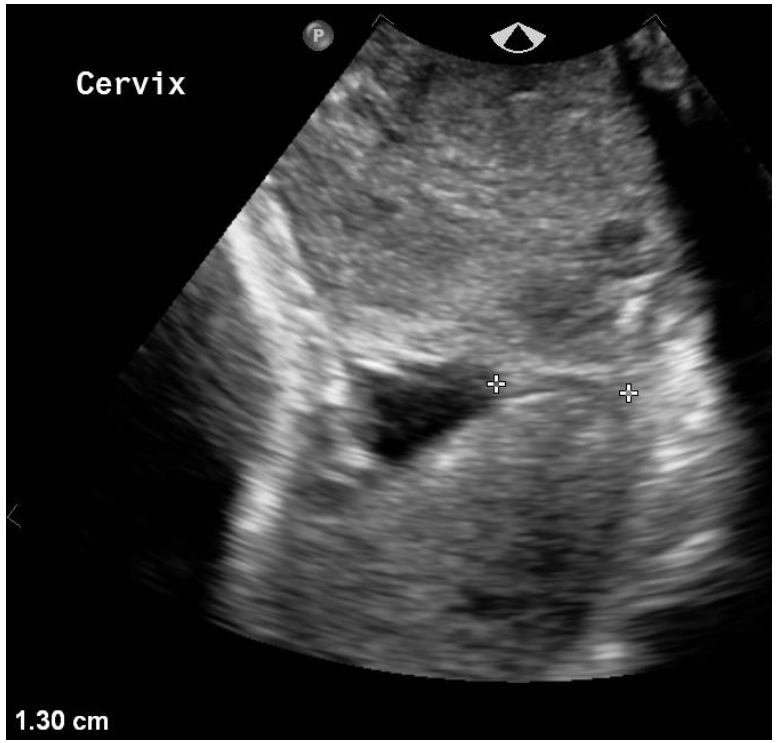
Streamline Code
11835 (Quant 42, Rpts 3)

GP Prescription – Streamlined Authority

Acknowledgement Dr Meg Cairns



Despite good compliance with vaginal Progesterone pessaries, the cervix continues to shorten …

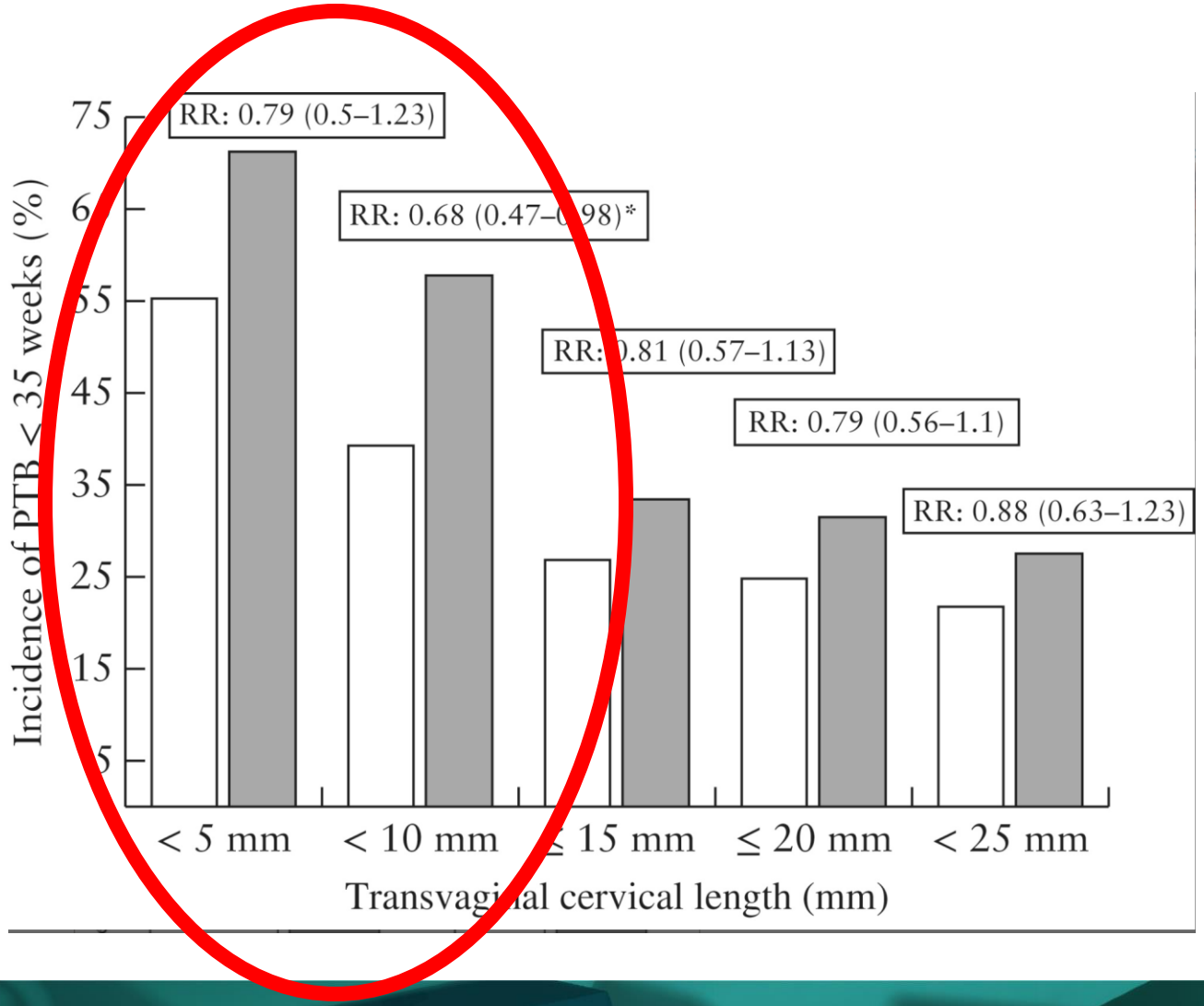


Frequency of CL-monitoring?

Cerclage yes or no?

When?

Berghella et al. UOG 2017



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GUIDELINES

ISUOG Practice Guidelines: role of ultrasound in the prediction of spontaneous preterm birth

Recommendations

- After initiating progesterone treatment, follow-up every 1–2 weeks up to 24 weeks can detect further shortening of the cervix (**GOOD PRACTICE POINT**).
- Cervical cerclage can be considered in women whose cervix shortens to < 10 mm despite being on progesterone (**GRADE OF RECOMMENDATION: C**).

Summary Progesterone vs Cerclage

1. No history of spontaneous preterm birth:

- Routine cervical length screening between 16-24 weeks
- Start natural vaginal progesterone if TV-CL ≤25 mm
- Consider cerclage if cervix shortens to <10 mm on progesterone

2. History of spontaneous preterm birth:

Cerclage if cervix short <25 mm
Progesterone PV nocte from 16-36 weeks or
CL-monitoring and treatment once cervix short

Stillbirth
CENTRE OF RESEARCH EXCELLENCE

Fetal Growth Restriction

David Ellwood

Griffith University & Gold Coast Health

Stillbirth
CENTRE OF RESEARCH EXCELLENCE

Risk Factors for FGR

- KB is a 23 years old primigravida with a BMI of 35
- She has no significant PMH, but is smoking 5-10 cigarettes a day
- Her menstrual dates are uncertain but a dating scan at 8 weeks give an EDB of 17th February 2024
- How many risk factors for FGR or stillbirth does she have?

Screening for FGR

What can be done by way of investigations to improve the detection for FGR?

- Combined first trimester screening (CFTS) includes PAPP-A, an early measure of placental function
- Morphology ultrasound
- Fetal growth scans at 24, 28, 32 & 36 weeks

Diagnosis of FGR

Normal CFTS, except the PAPP-A is 0.38 MoM

Normal morphology scan.

A 28 weeks scan shows an EFW on the 10th centile, with normal Dopplers and amniotic fluid volume.

- What next?

Definitions of FGR

SGA (less than 10th or less than 3rd centile) v **FGR**?

- the small healthy baby or a baby whose growth is restricted by maternal, placental or fetal factors.

Early onset FGR v **Late onset FGR**

- Early onset can be fetal/maternal causes, may have abnormal Dopplers, and may not go to term
- Late onset usually due to placental dysfunction, later signs of slowing growth, reduced amniotic fluid. Timing of birth is usually at term.

Management of FGR 1

Her next scan at 32 weeks shows growth velocity has fallen and both the AC and EFW are now on the 5th centile

The fetal Dopplers (UA, MCA and DV) are all normal, as is the amniotic fluid volume

- What next?

Management of FGR 2

Scenario 1: Serial scans show growth continuing between the 3rd & 10th centiles with normal Dopplers.

Scenario 2: By 36 weeks fetal growth is < 3rd centile and the UA shows an increased PI (95th centile)

Scenario 3: The 34 weeks scan shows fetal growth is less than the 1st centile (EFW 1700g) and the UA Doppler shows absent end-diastolic flow.

Timing of Birth in FGR (ISUOG Guidelines 2020)

In late FGR, delivery should be based on biophysical assessments or maternal indications.
At any gestational age, deliver if:

- Abnormal CTG
- Maternal indication (e.g. severe pre-eclampsia, HELLP syndrome) or obstetric emergency requiring delivery
- Absent or reversed UA-EDF

36 to 37^{+6} weeks: deliver if UA-PI >95^{th} centile or AC/EFW <3^{rd} centile
38 to 39^{+0} weeks: deliver if evidence of cerebral blood flow redistribution or other features of FGR
In the absence of contraindications, induction of labor is indicated. During labor, continuous fetal heart rate monitoring is recommended

Questions?

Panel Discussion

Dr Meg Cairns
Dr Christoph Lehner
David Ellwood

Summary & questions

Queensland Preterm Birth Prevention Program - GP forum (Post Education Survey)

Thank you for attending the Queensland Preterm Birth Prevention Program GP Forum

Educational Activities (EA) 1.5 CPD Hours

Reviewing Performance (RP) 2 CPD Hours

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Networking lunch