Seeking

in Women's Health

National Women's Annual Clinical Report 2013

is an art won by training and habituation. We do not act rightly because we have virtue or excellence, but we rather have those because we have acted rightly. We are what we repeatedly do. Excellence, then, is not an act but a habit.

Aristotle (384 BC-322 BC) Greek philosopher.

in Women's Health

Department of Health and Human Services (1996 and 1999).

- comprehensive
- women-friendly
- women-focused
- women-relevant
- integrated
- multidisciplinary

Success dependent upon dual importance of:

- multidisciplinary programs of clinical care
- education of the future providers of women's healthcare

J Womens Health Gend Based Med. 2001 Sep;10(7):627-36.Academic models of clinical care for women: the National Centers of Excellence in Women's. Health.Milliken N, Freund K, Pregler J, Reed S, Carlson K, Derman R, Zerr A, Battistini M, Bowman S, Magnus JH, Sarto GE, Chambers JT, McLaughlin M.

Great

Good

Excellence in

- Healthcare delivery
- Clinical and quality outcomes
- Training and research

Achieved by

- Partnership around innovative models of care
- Empowerment of women and their healthcare providers
- Optimal facilites, efficiently utilised and appropriatly resourced
- Concentration of special expertise

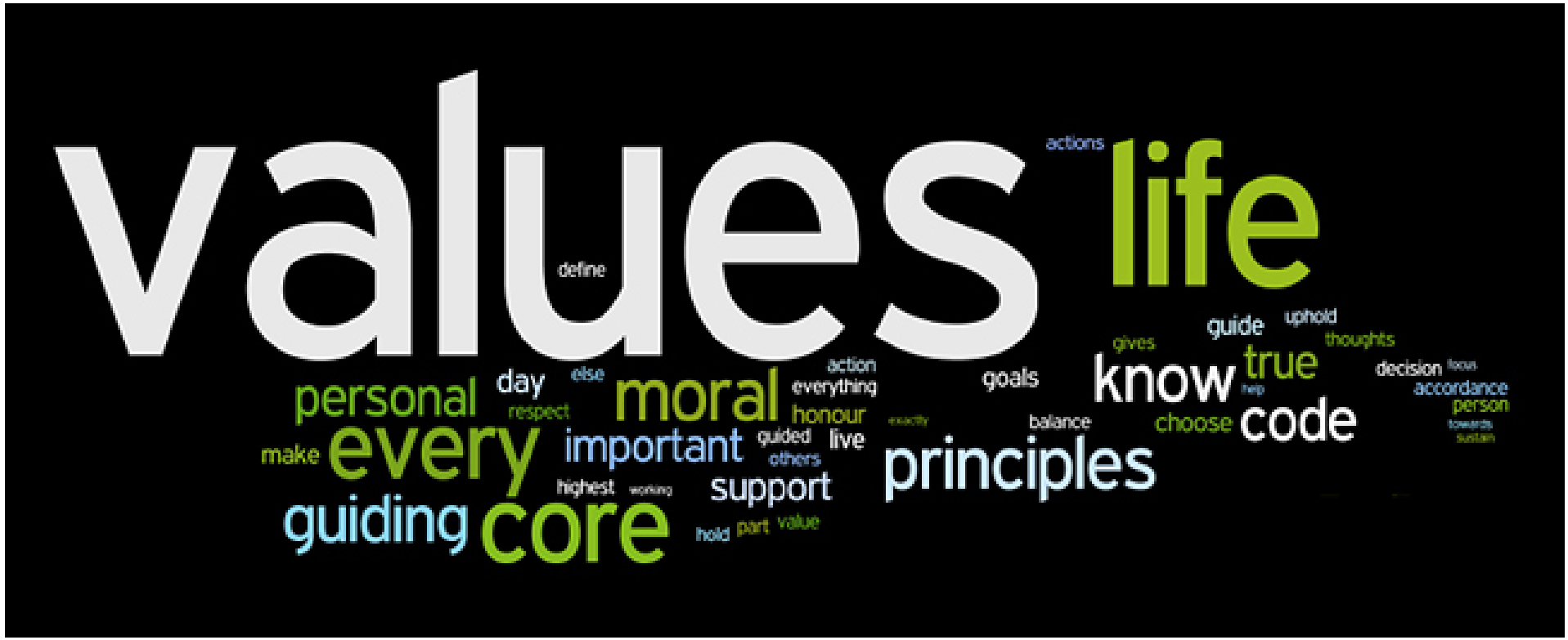
Resulting in

- an economically sustainable Women's Health Service

Our Vision

Excellence in Women's Health through **Empowerment** and **Partnership**

What should we be held accountable for?



Excellence in Women's Health through Empowerment and Partnership

Safe models of care

Evidence based care

Safe Care

Safe Staffing Levels

Great communication

Respectful relationships among all staff

Explicit Organizational values

23%

Better Quality Care

Women & family Centered Care

Women and family centered

Women led and empowered

Care responsive to women's needs

Equity of access for all women

17%

Safe evidence based care

Valued & supported workforce

People valued and nurtured

Teams working together

Training and education of healthcare professionals

Strong mentoring

Ensuring everyone can reach their full potential

26%

Engaged Workforce

Optimal resources, efficiently utilized

Efficient use of resources

Working productively

Eliminating system waste

Clinical pathways - KPI'

Living within our means

22%

Economic sustainability

Gold standard Outcomes

Excellent health outcomes

Research supported and valued

11%

Improved Healthcare Status

Integrity ***** **Respect** ***** **Innovation** ***** **Effectiveness**

Safe models of care


SUPPORTING WOMEN TO BIRTH WELL

Normal Birth

The baby is born head-first, through the vagina, but may include intervention by a health-care professional to support or help the birth. Interventions included:

- Augmentation
- Intermittent auscultation of FHR
- ARM
- pharmacological pain relief but not epidural
- Active management of 3rd stage

Definitions: Society O&G Canada

Birthing Well

- Empowered woman
- Well informed and prepared
- Realistic expectations
- Able to safely achieve the least interventional birth that is possible given her set of physical and emotional circumstances

Four pathways to birth

- according to ACR

1. Induction of labour
2. Elective CS
3. Emergency CS prior to the onset of labour
4. Spontaneous onset of labour

What is the significance of the order?

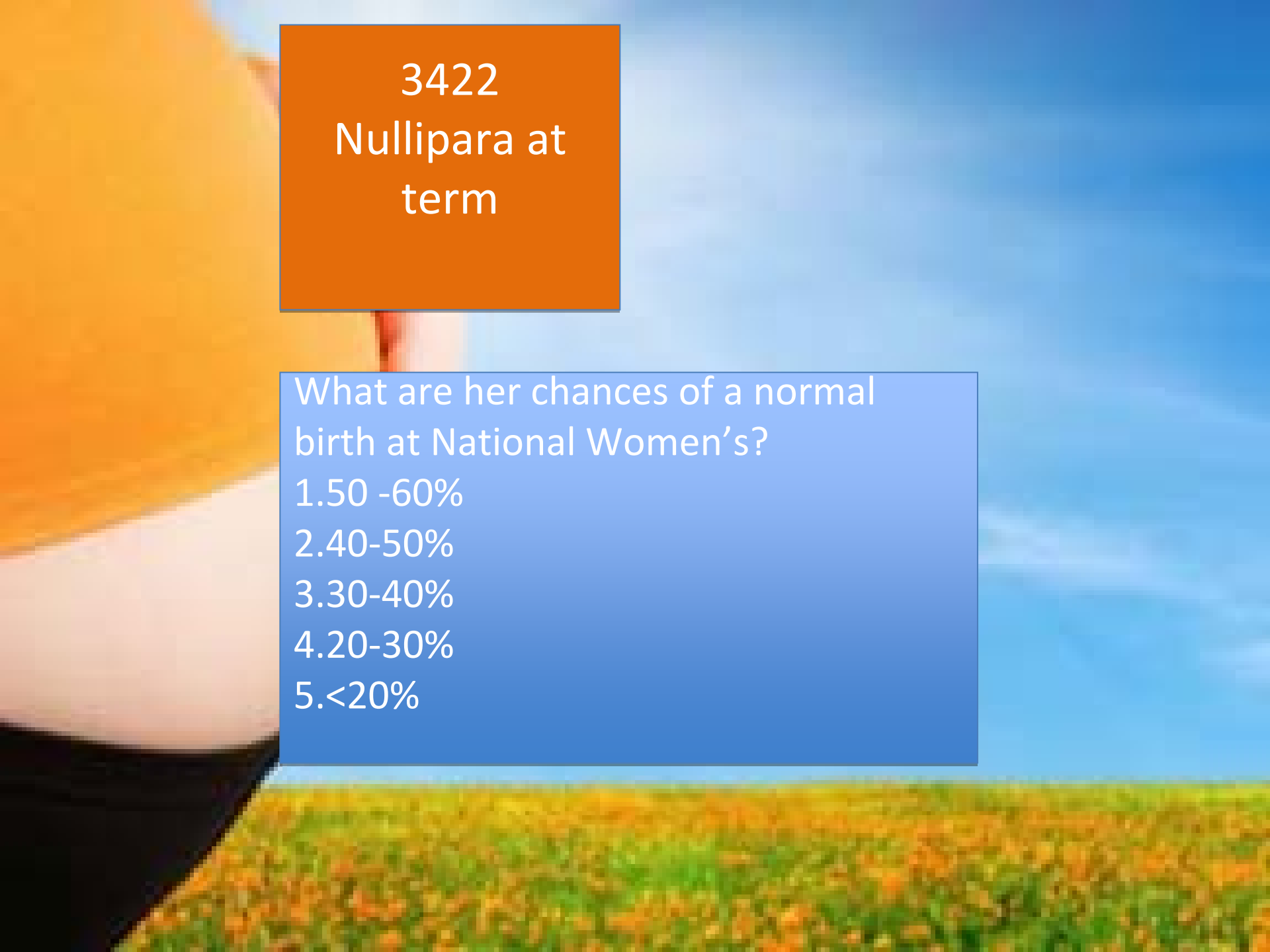
Nullipara at term 3422

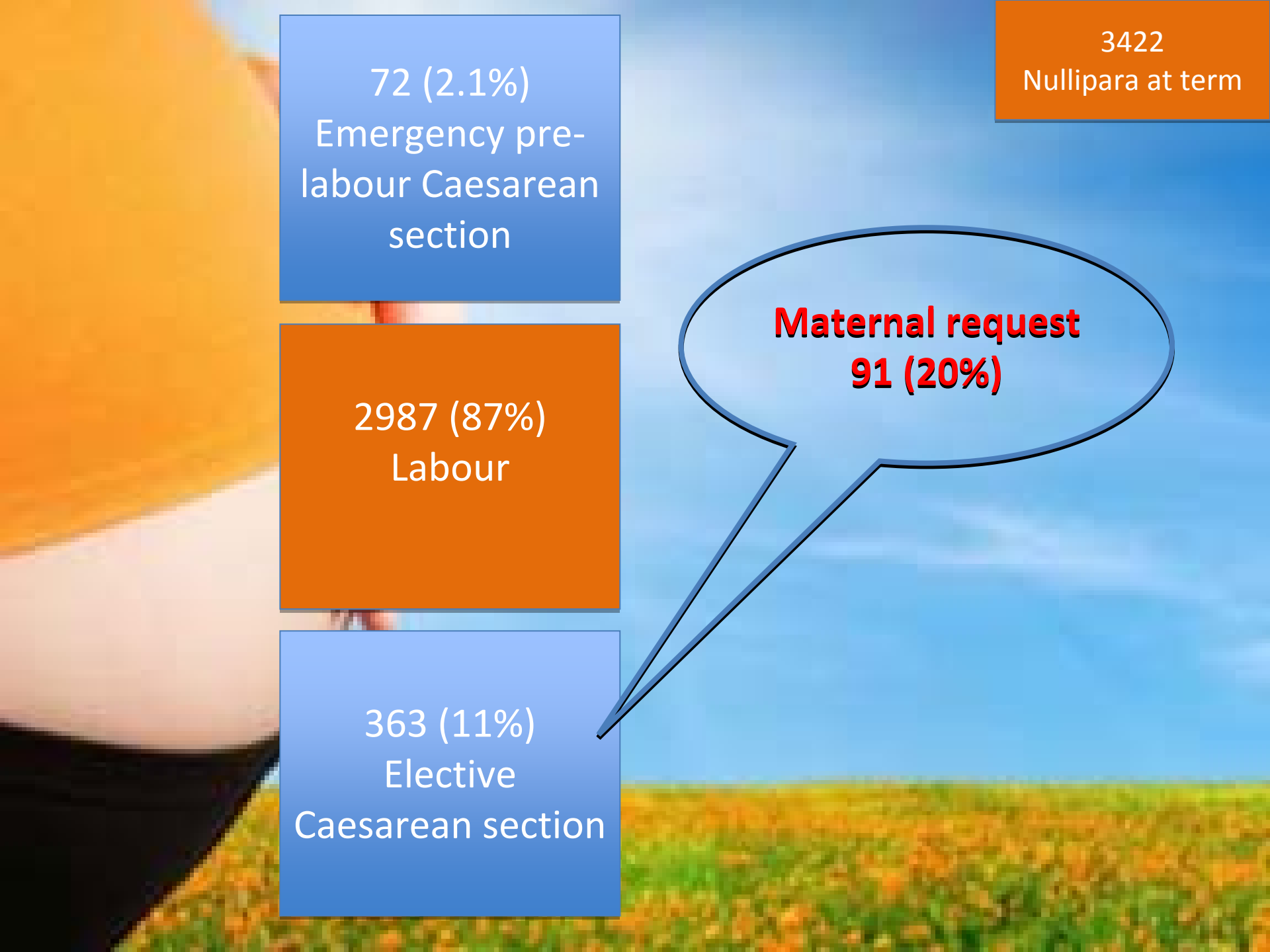
- 40% BMI>25, 18% > 30, 8%>35
- 5.8% smokers
- Rising maternal age (greatest increase in 35-40 age group)
- High deprivation scores in younger women & Maori & Pacific women

Nullipara at term 3422

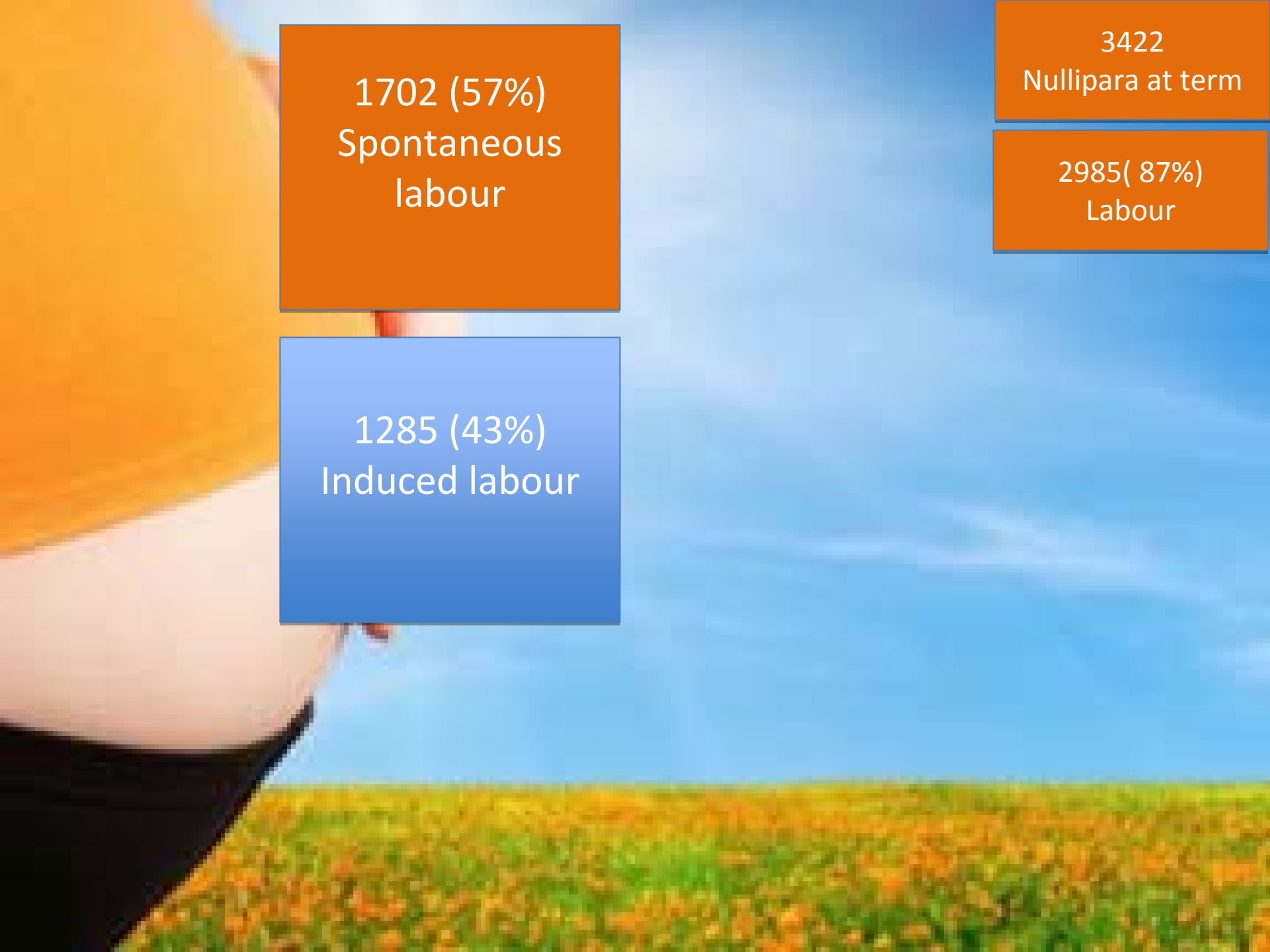
- Ethnicity
  - 47% European
  - 14% Maori and pacific
  - 35% Asian or Indian
- Cared for by
  - 71% under private obstetrician or independent LMC
  - Most complex medically and socially receiving care by NW medical & community teams


3422
Nullipara at
term

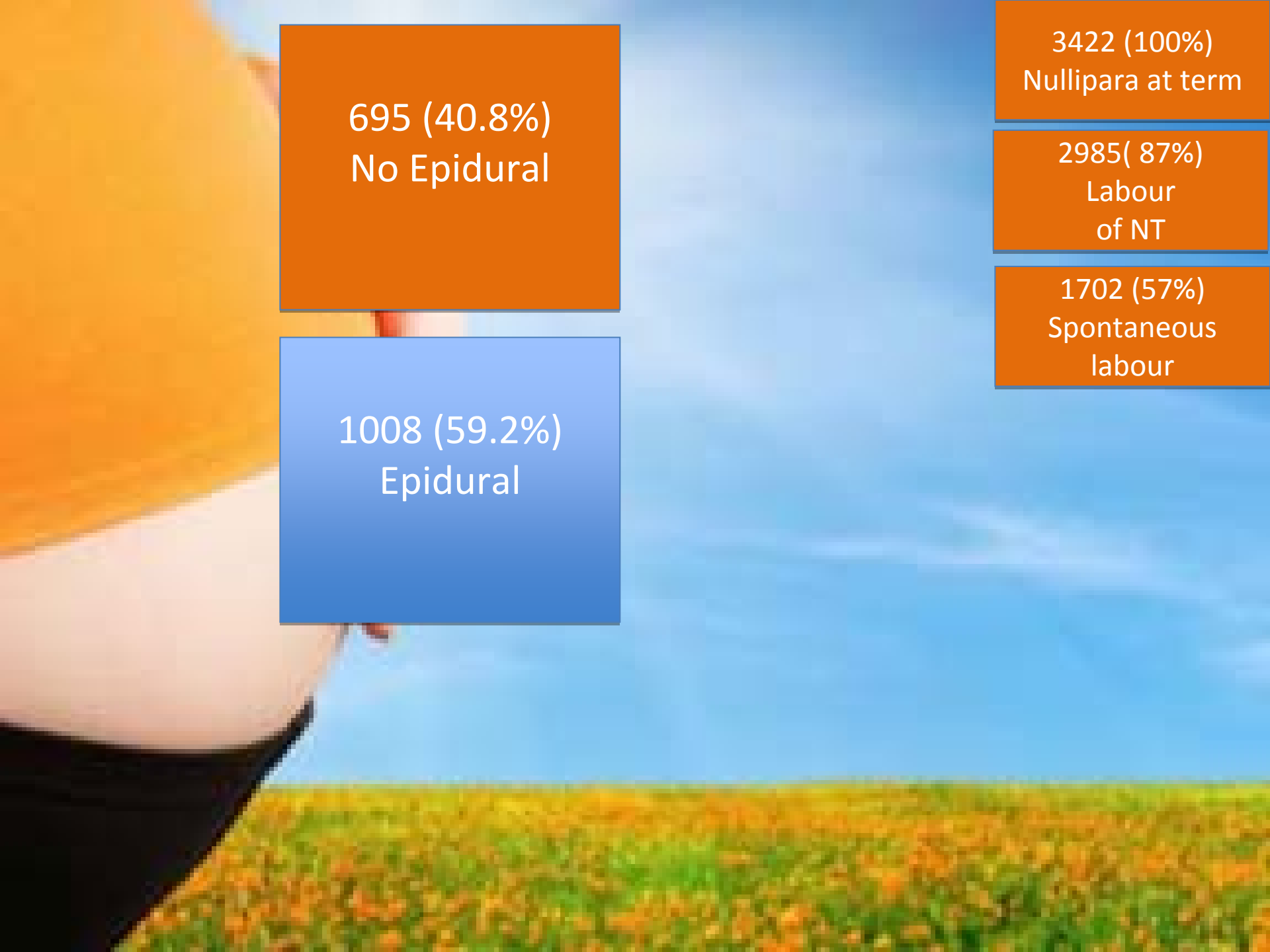

3422
Nullipara at term
What are her chances of a normal birth at National Women's?
1.50 -60%
2.40-50%
3.30-40%
4.20-30%
5.<20%


3422
Nullipara at term
72 (2.1%)
Emergency pre-labour Caesarean section
2987 (87%)
Labour
363 (11%)
Elective Caesarean section
Maternal request
91 (20%)

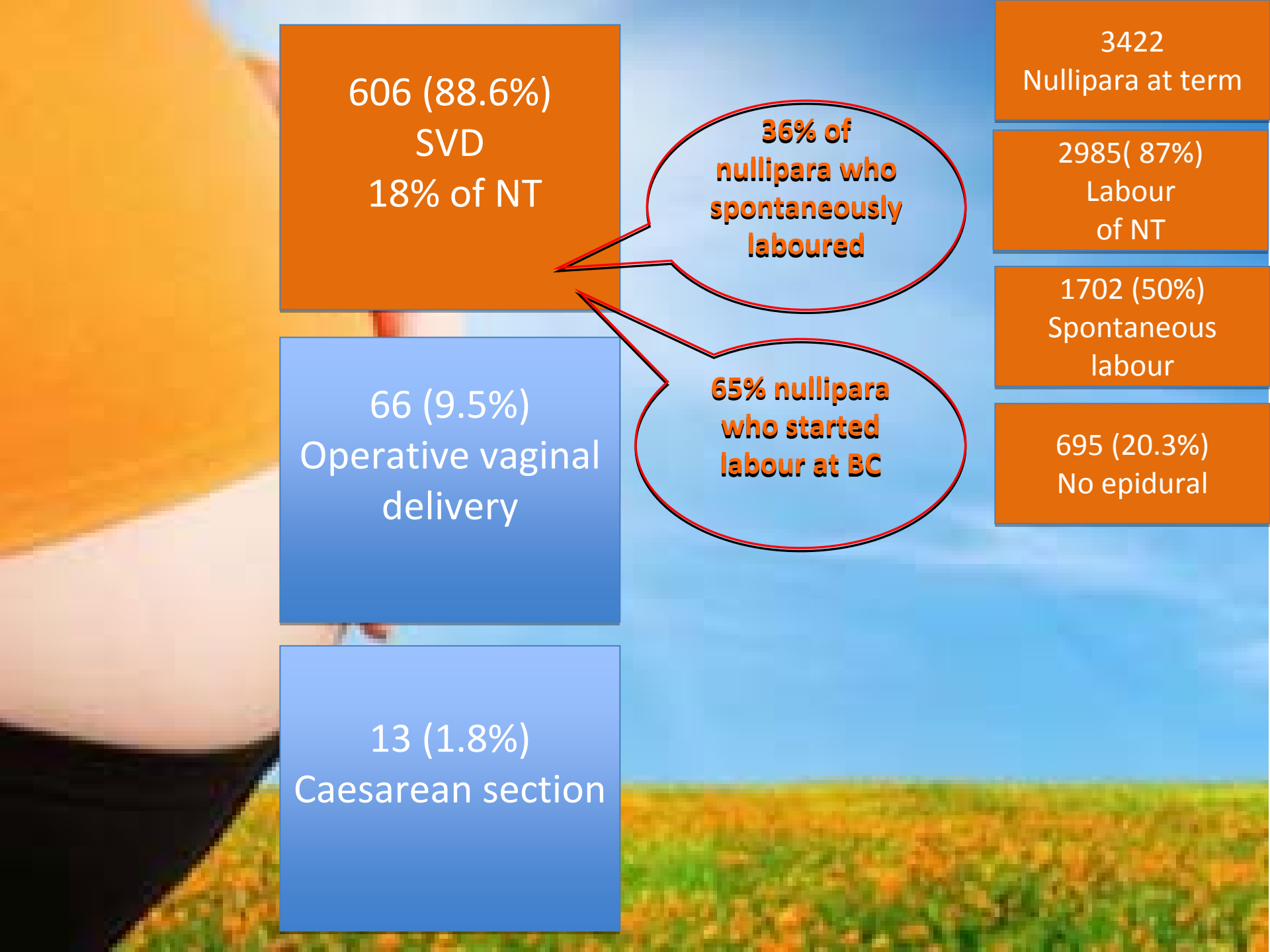

3422
Nullipara at term
2985(87%)
Labour


3422
Nullipara at term
2985(87%)
Labour
1702 (57%)
Spontaneous labour
1285 (43%)
Induced labour

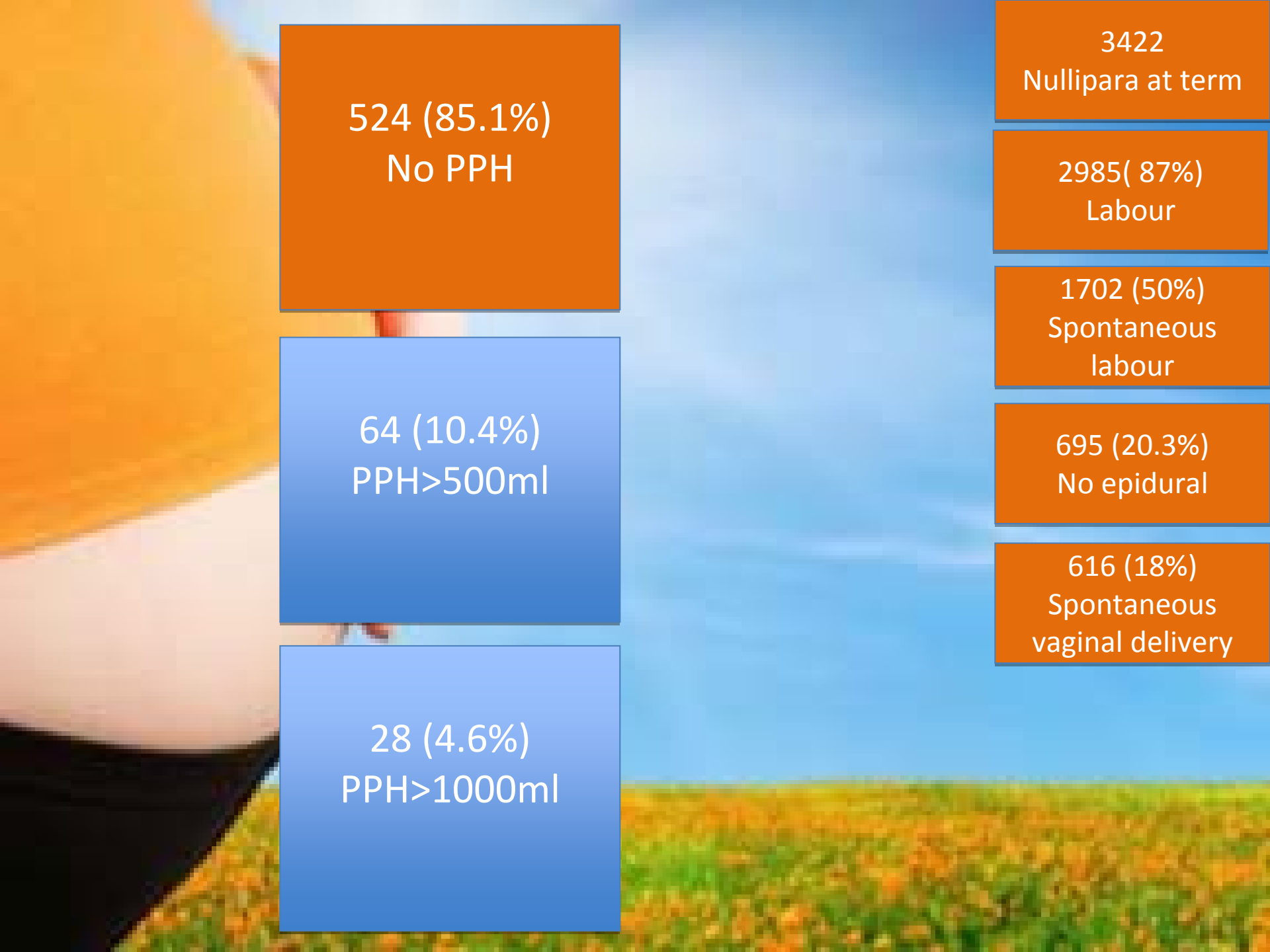

3422 (100%)
Nullipara at term
2985(87%)
Labour
1702 (57%)
Spontaneous labour


3422 (100%)
Nullipara at term
2985(87%)
Labour
of NT
1702 (57%)
Spontaneous
labour
695 (40.8%)
No Epidural
1008 (59.2%)
Epidural

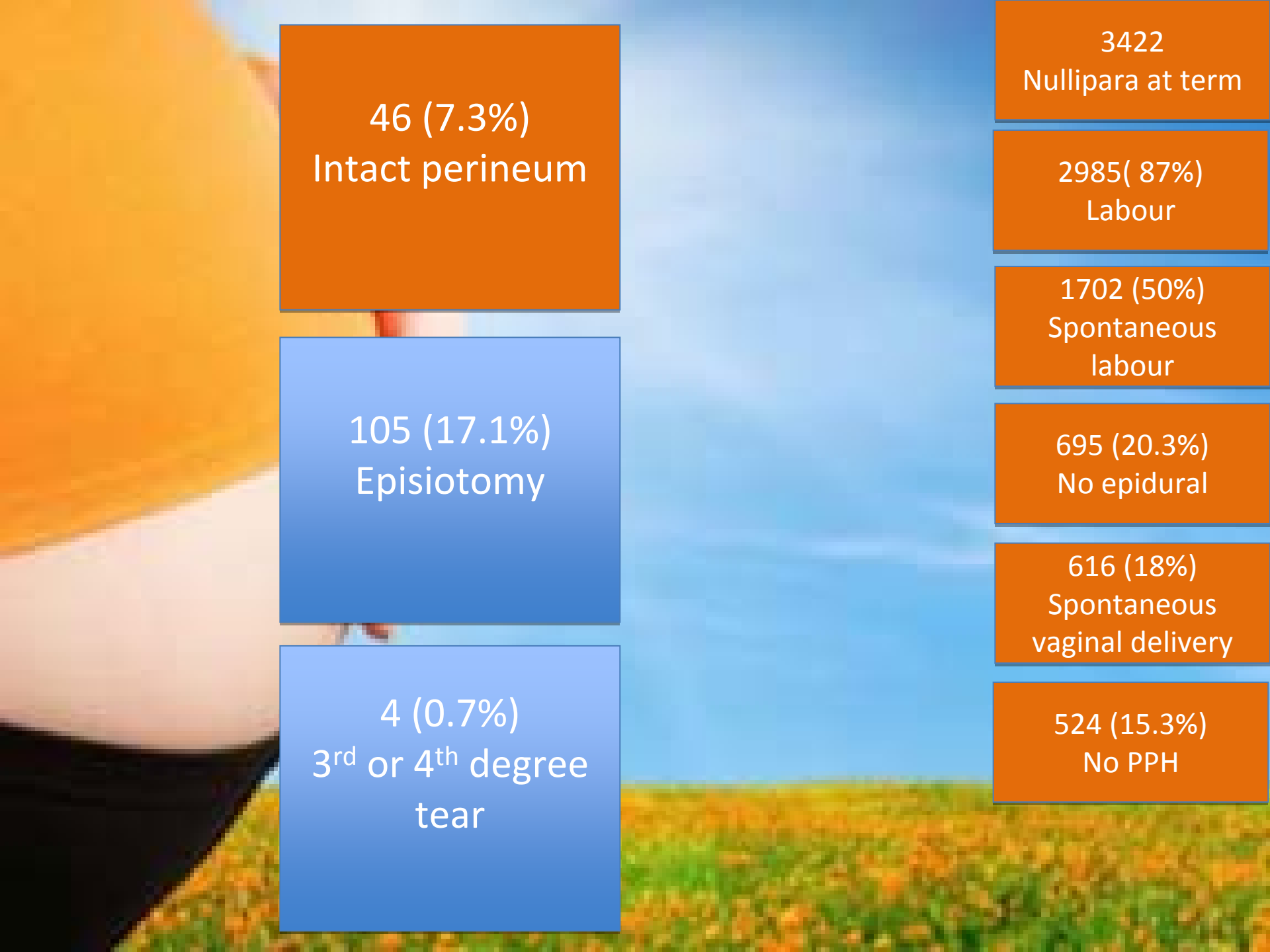

3422
Nullipara at term
2985(87%)
Labour
1702 (50%)
Spontaneous labour
695 (20.3%)
No epidural


606 (88.6%)
SVD
18% of NT
66 (9.5%)
Operative vaginal delivery
13 (1.8%)
Caesarean section
36% of nullipara who spontaneously laboured
65% nullipara who started labour at BC
3422
Nullipara at term
2985(87%)
Labour
of NT
1702 (50%)
Spontaneous labour
695 (20.3%)
No epidural


3422
Nullipara at term
2985(87%)
Labour
1702 (50%)
Spontaneous labour
695 (20.3%)
No epidural
616 (18%)
Spontaneous vaginal delivery


524 (85.1%)
No PPH
64 (10.4%)
PPH>500ml
28 (4.6%)
PPH>1000ml
3422
Nullipara at term
2985(87%)
Labour
1702 (50%)
Spontaneous labour
695 (20.3%)
No epidural
616 (18%)
Spontaneous vaginal delivery


3422
Nullipara at term
2985(87%)
Labour
1702 (50%)
Spontaneous labour
695 (20.3%)
No epidural
616 (18%)
Spontaneous vaginal delivery
524 (15.3%)
No PPH


46 (7.3%)
Intact perineum
105 (17.1%)
Episiotomy
4 (0.7%)
3rd or 4th degree tear
3422
Nullipara at term
2985(87%)
Labour
1702 (50%)
Spontaneous labour
695 (20.3%)
No epidural
616 (18%)
Spontaneous vaginal delivery
524 (15.3%)
No PPH

3422
Nullipara at term

2985(87%)
Labour

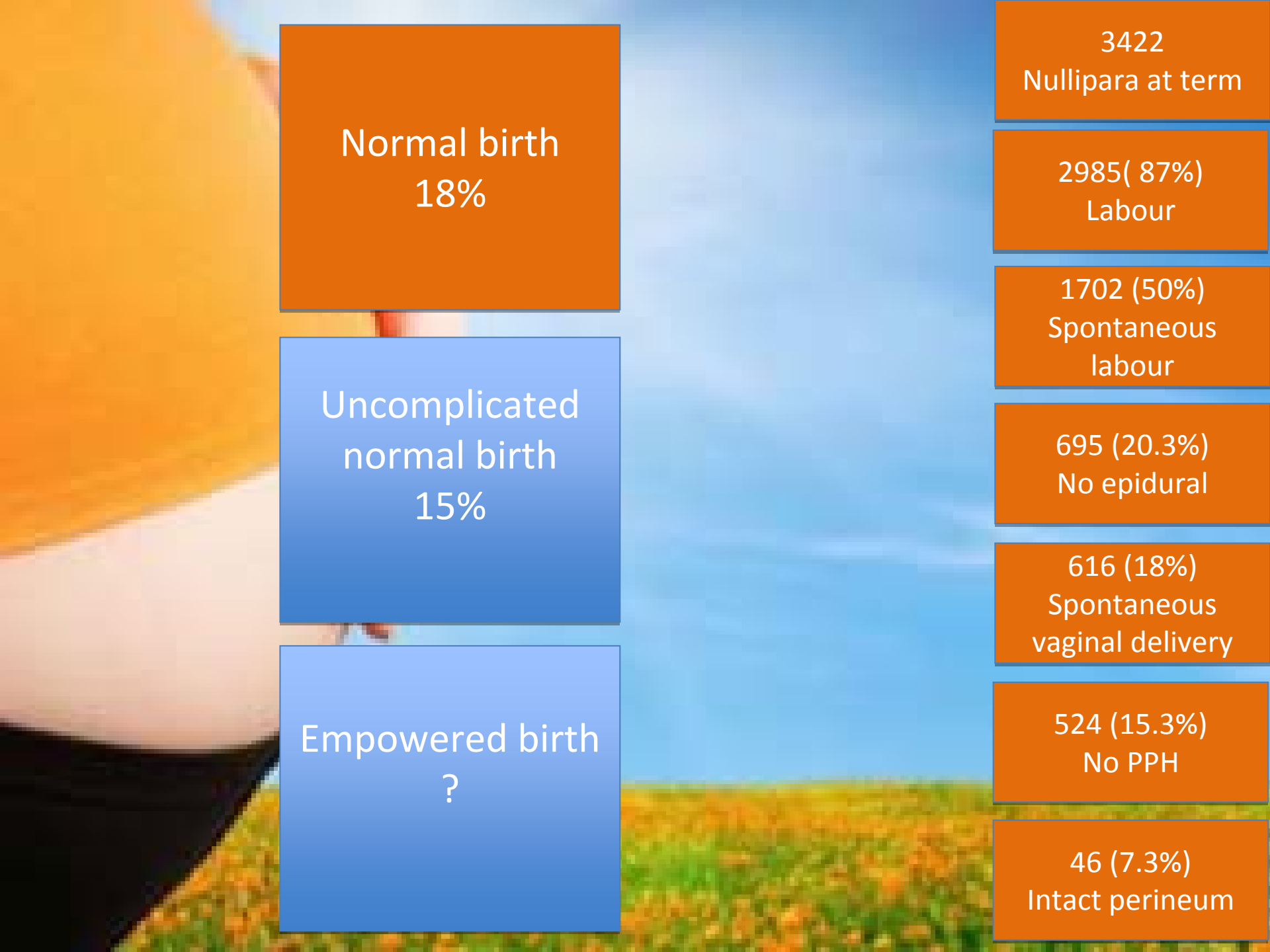
1702 (50%)
Spontaneous labour

695 (20.3%)
No epidural

616 (18%)
Spontaneous vaginal delivery

524 (15.3%)
No PPH

46 (7.3%)
Intact perineum

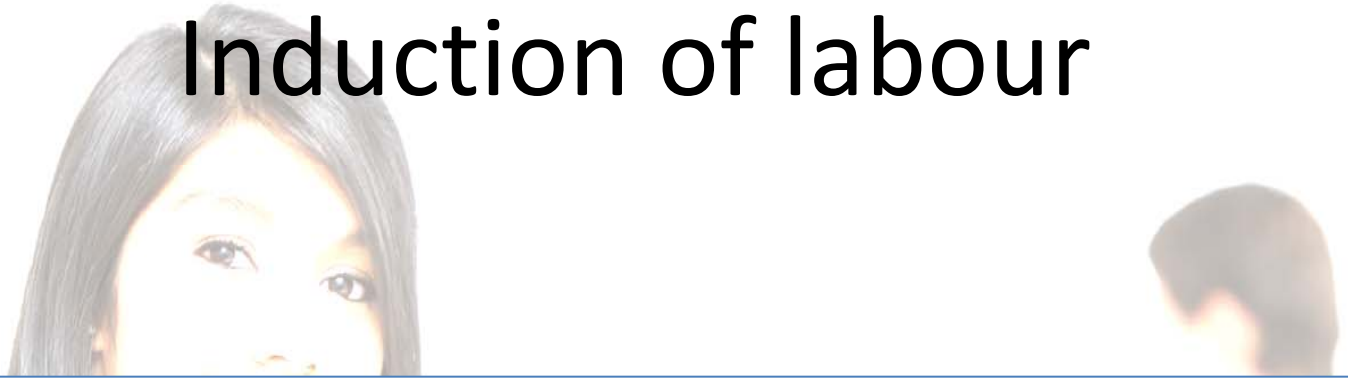

Normal birth
18%
Uncomplicated normal birth
15%
Empowered birth
?
3422
Nullipara at term
2985(87%)
Labour
1702 (50%)
Spontaneous labour
695 (20.3%)
No epidural
616 (18%)
Spontaneous vaginal delivery
524 (15.3%)
No PPH
46 (7.3%)
Intact perineum


Is this what you expected?
Could we do better?

APPROPRIATE AND WELL TIMED INTERVENTIONS

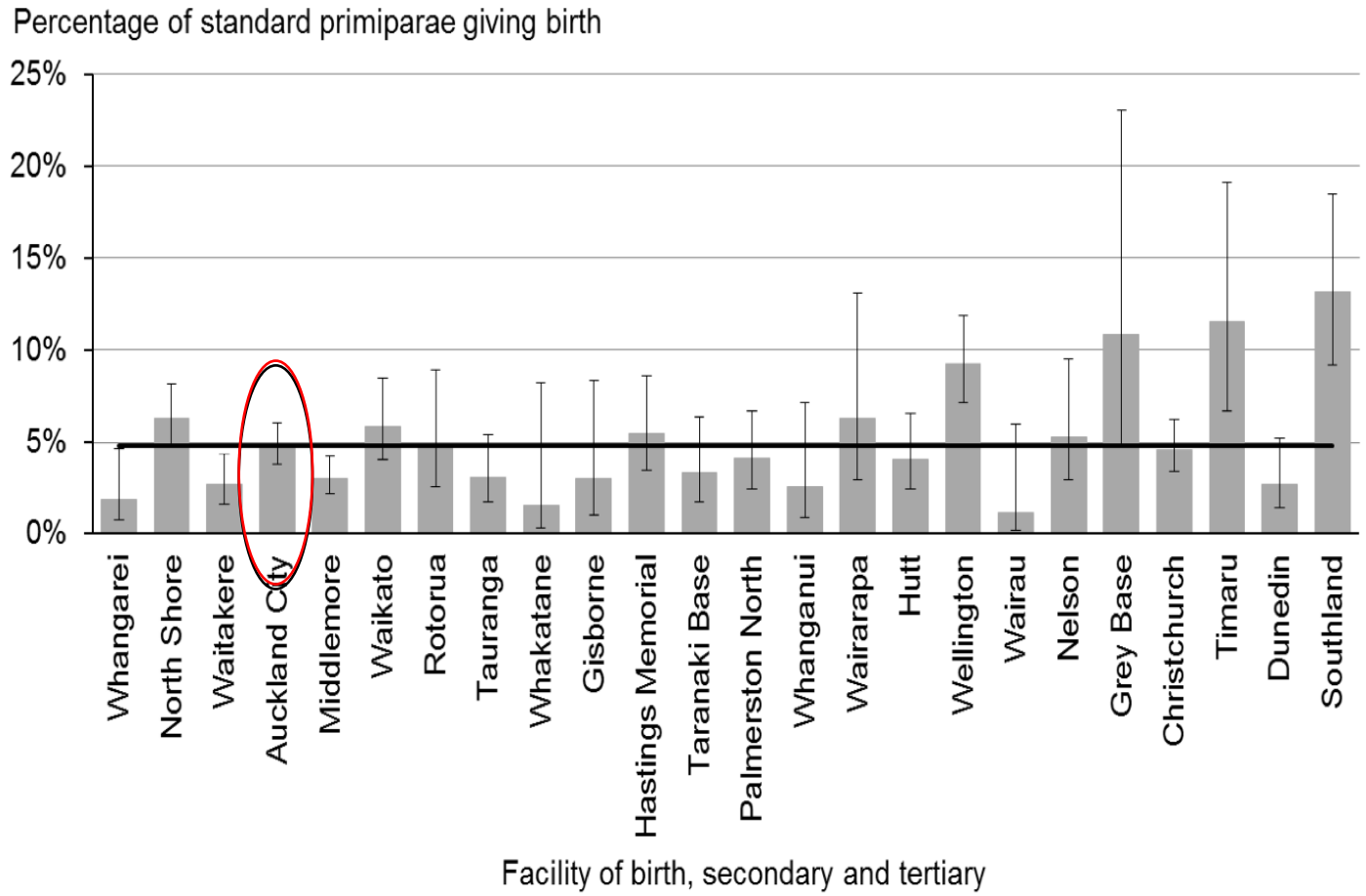
INDUCTION OF LABOUR

Induction of labour



- Steady increase in rate over last 20yrs (from 21% to 32.3%
- Greatest predictor of induced labour
  - Care by high risk medical team (43.2%)
  - Care by diabetes team (70.1%)

IOL Comparison Nationally



Induction for Prolonged Latent Phase

- Similar rates in Multips (15.2%) & Primips (16.4%)
- Predictor of need for intervention
  - Increased CS rate,
  - epidural rate,
  - operative vaginal delivery rates
- What is going on?
  - Is there an underlying labour abnormality?
  - Or does intervention cause labour abnormalities?

Are we intervening appropriately?


PAIN RELIEF

Analgesia use in labouring women

	Epidural	Pethidine	Water
All	60.3%	8.9%	5.9%
Nullipara Spontaneous Labour	58%	12.2%	14.6%
Nullipara Induced Labour	82.6%	15.4%	4.5%
Multip Spontaneous Labour	27.2%	8.4%	5.2%
Multip Induced Labour	57.9%	7.8%	2.5%

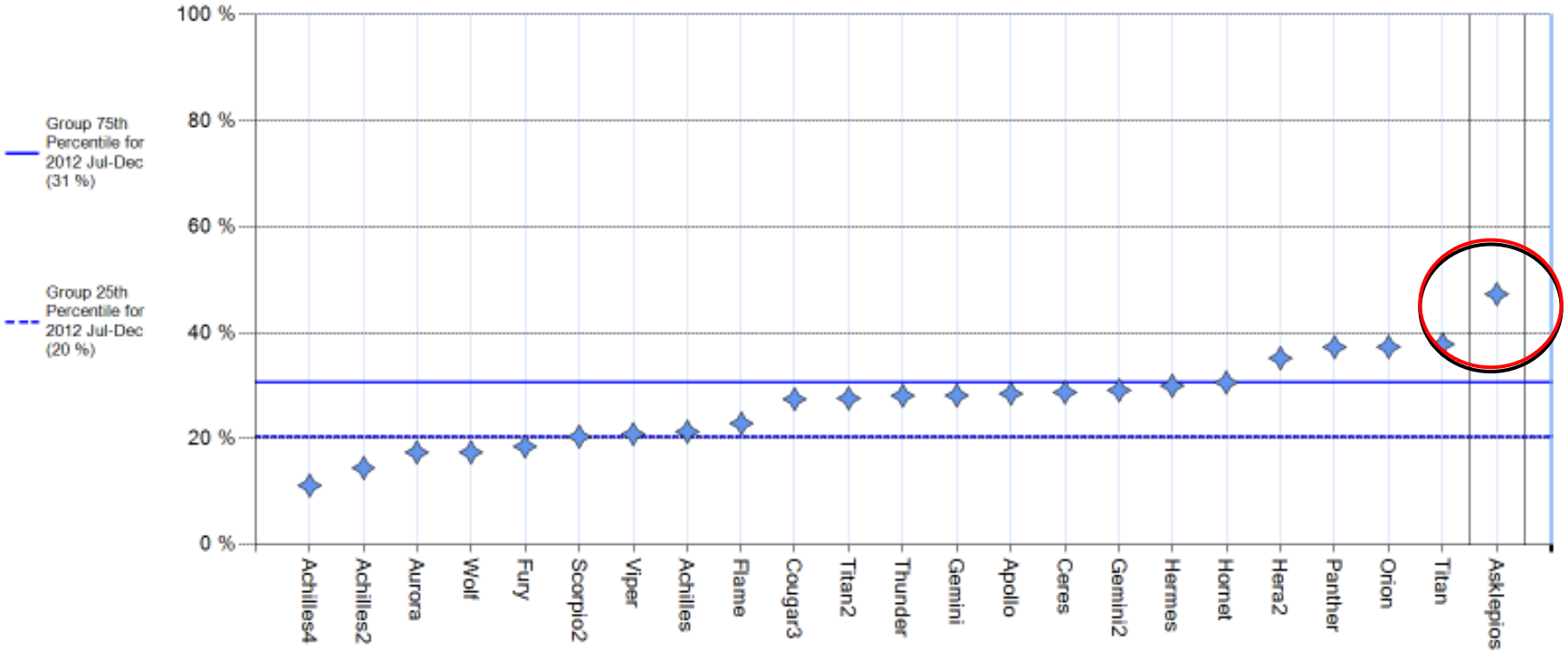
B 6.07 - Rate of epidural incidence in vaginal deliveries

Current Comparison

✓ New data for the Half Year | 2012 Jul-Dec | 6 months

Asklepios had a rate of 47 %

This KPI was highest at Asklepios at 47 % and lowest at Achilles4 at 11 %



Hospitals are ordered from left to right in order of performance on this KPI.

Associations with use of epidural

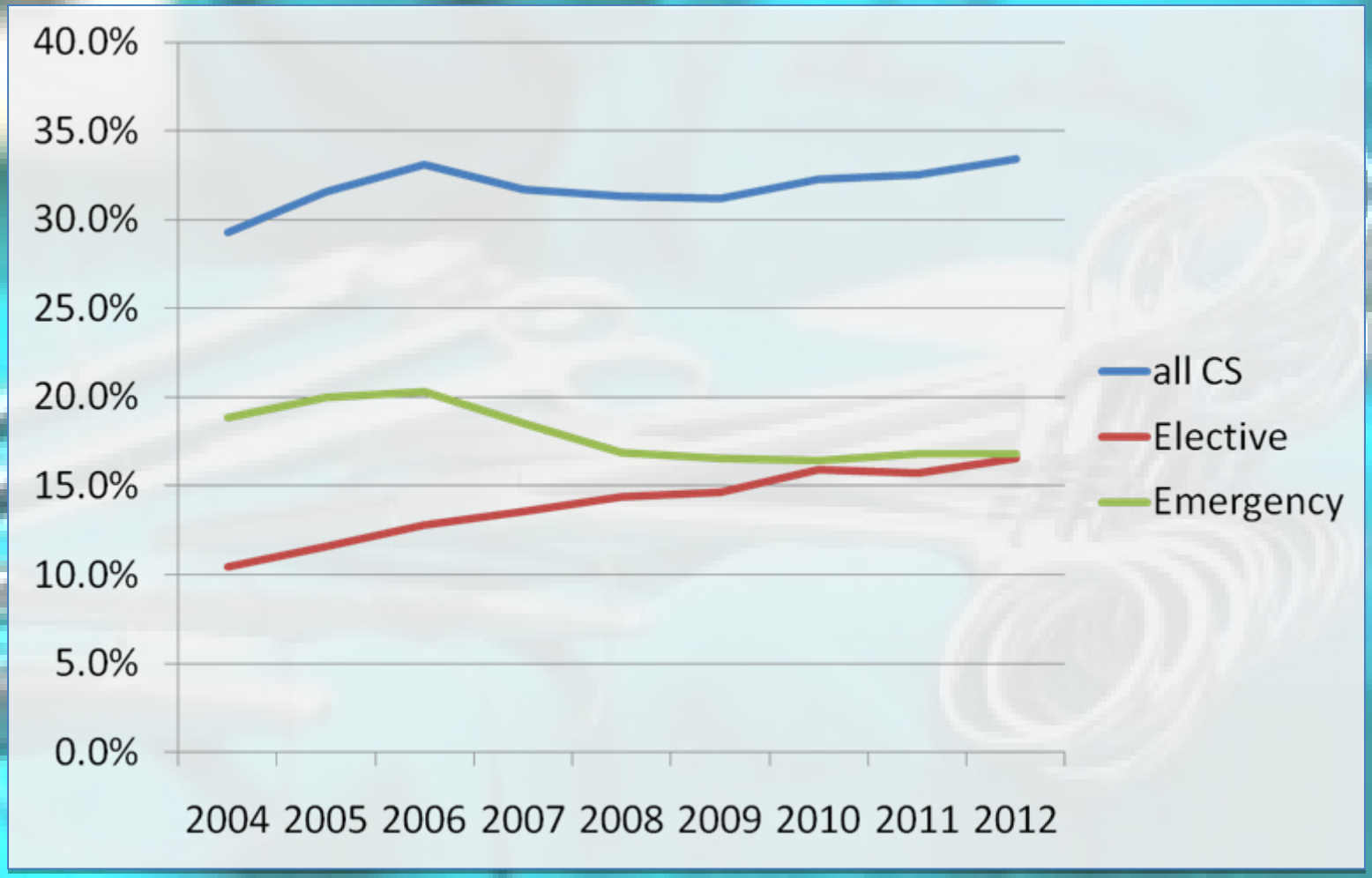
Nullipara, sp labour, at term, with SVD		
	Epidural (1008)	**No Epidural(695)**
PPH>500ml	20.6%	10.39%
PPH>1000ml	8.3%	4.6%
3rd/4th degree tear	8.8%	0.7%
Intact perineum	4.8%	7.3%

No differences in BMI or median birth weight of babies

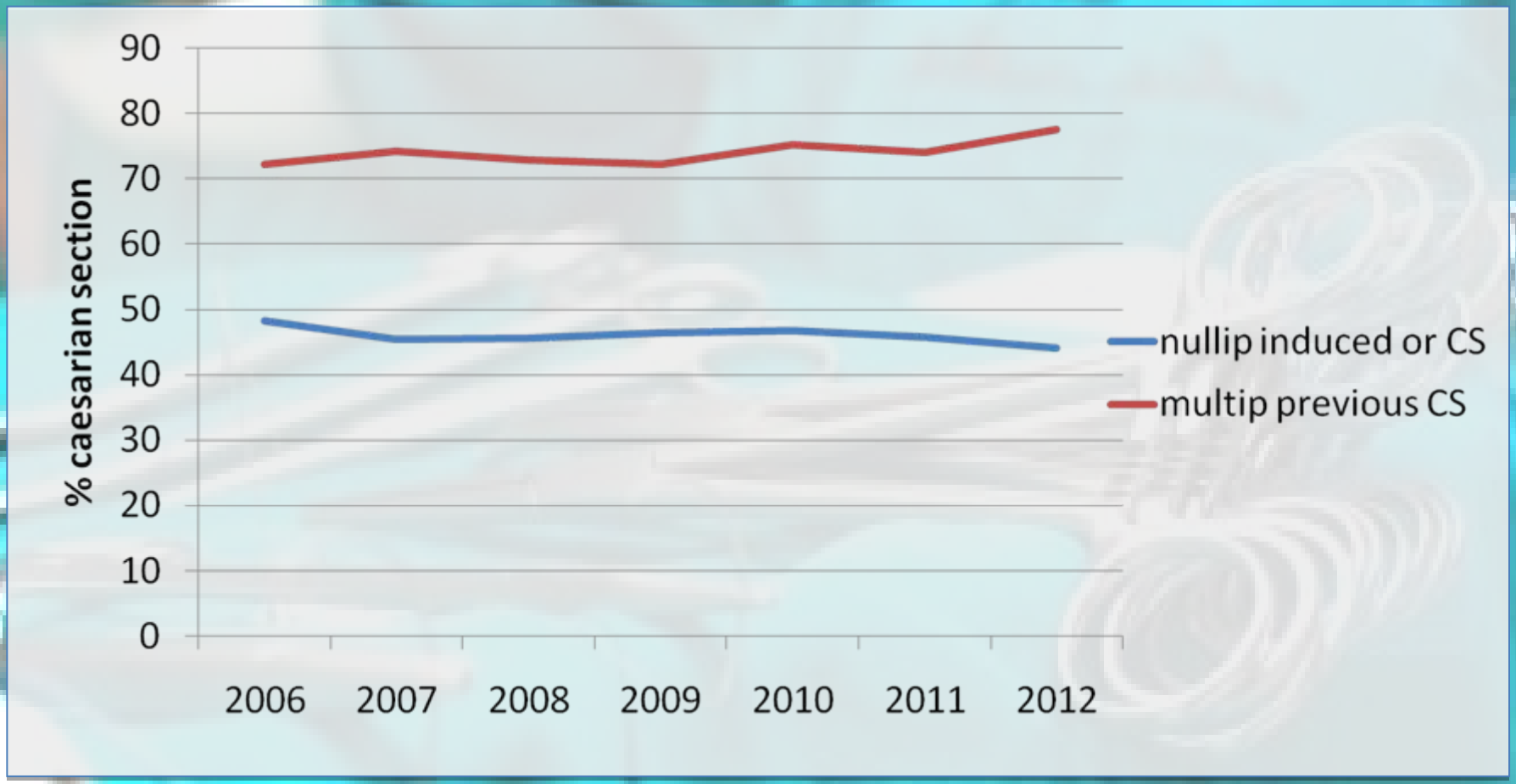
To what degree is this related to the epidural?


CAESAREAN SECTION

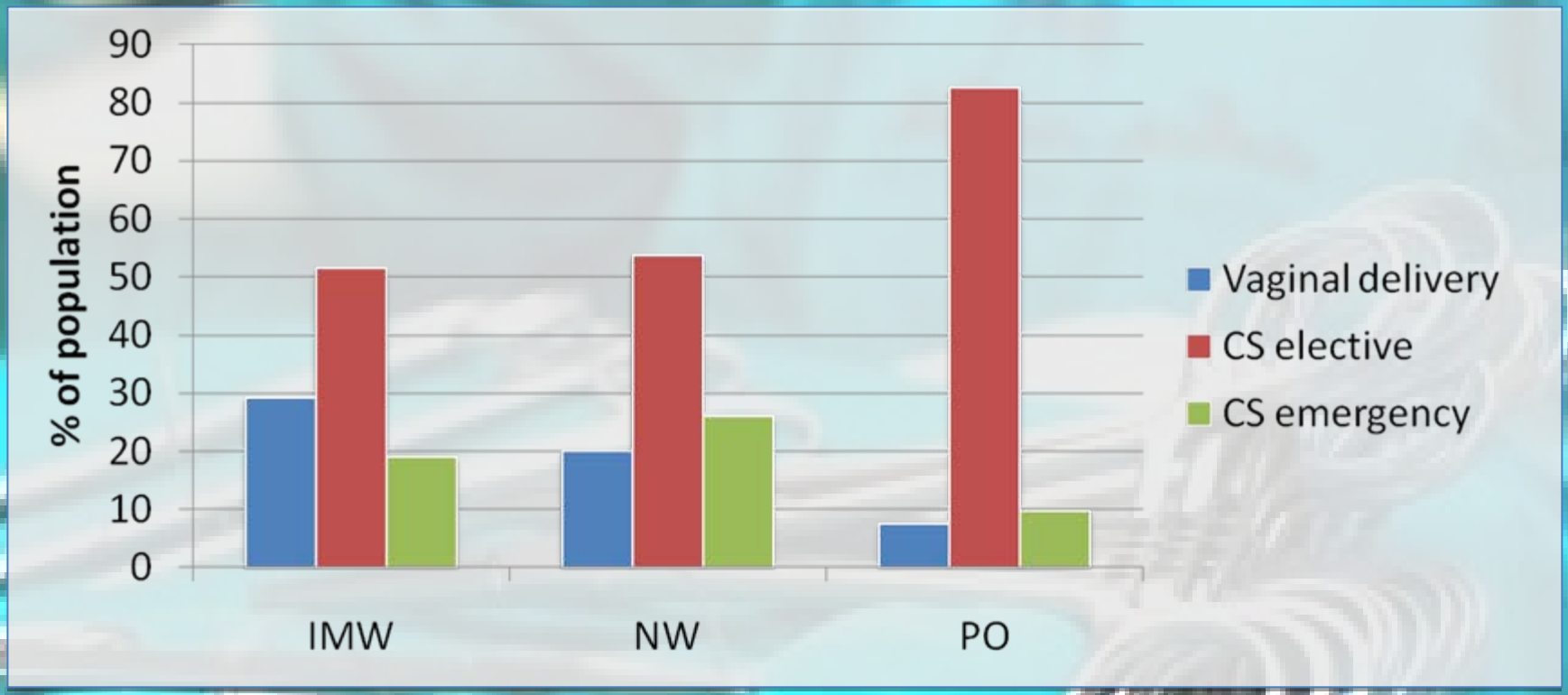
Overall Caesarean Section rates



Major Contributions to CS rates (56.2%)
Singleton cephalic at term

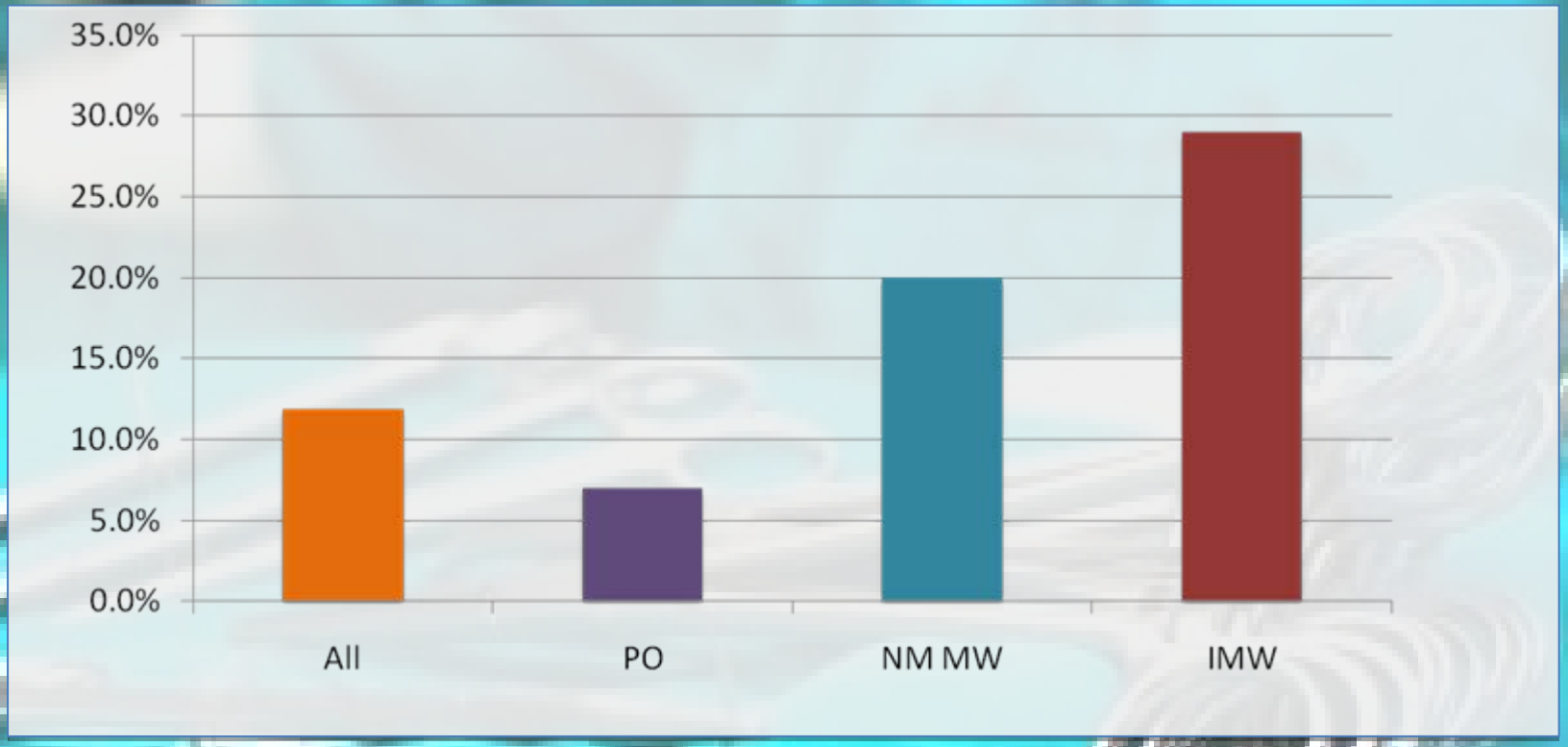


Previous CS, singleton, cephalic, term



Is this a consequence of care giver preference or are women desirous of CS more likely to seek care from a private obstetrician?

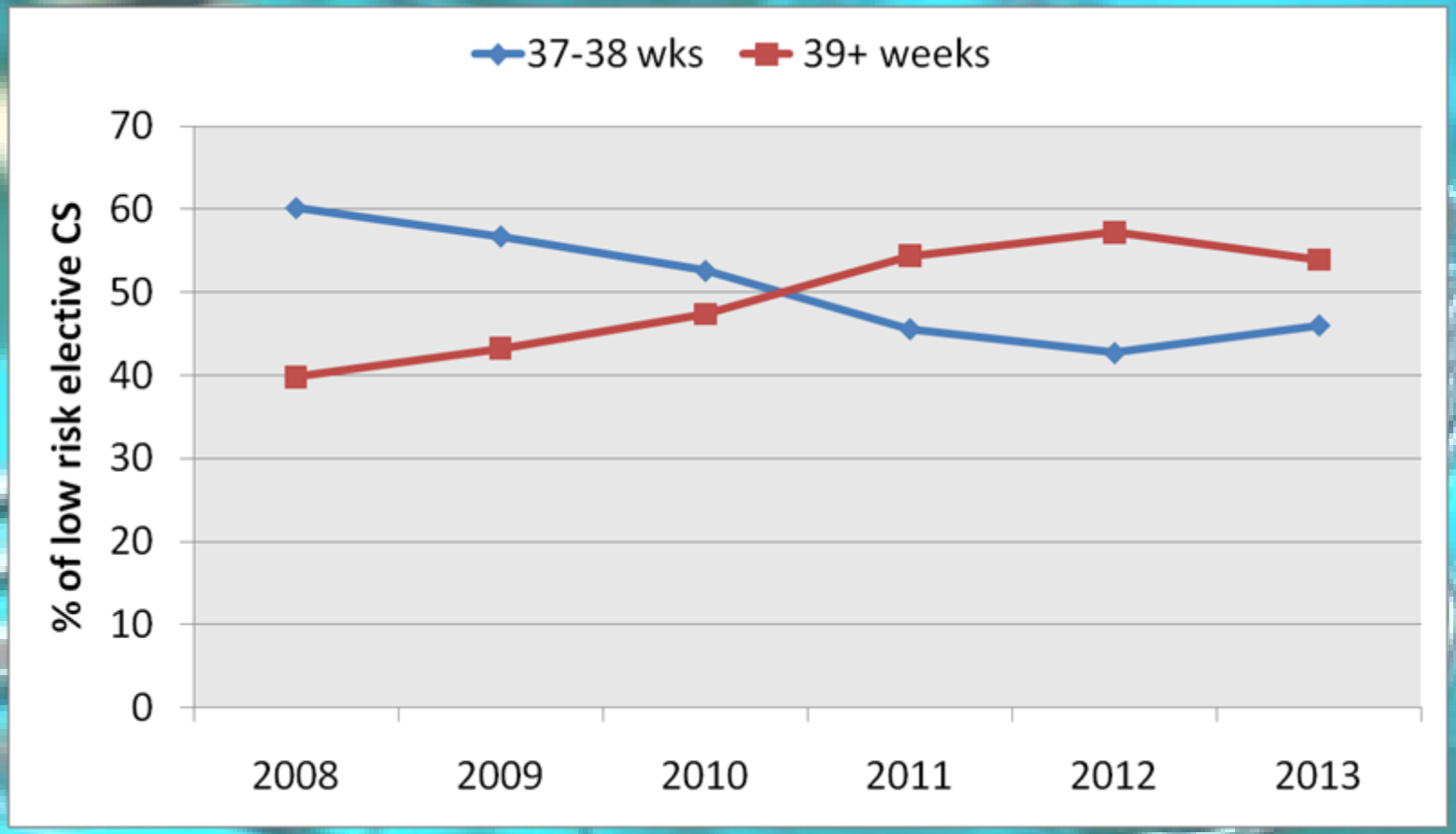
VBAC rate by care giver group



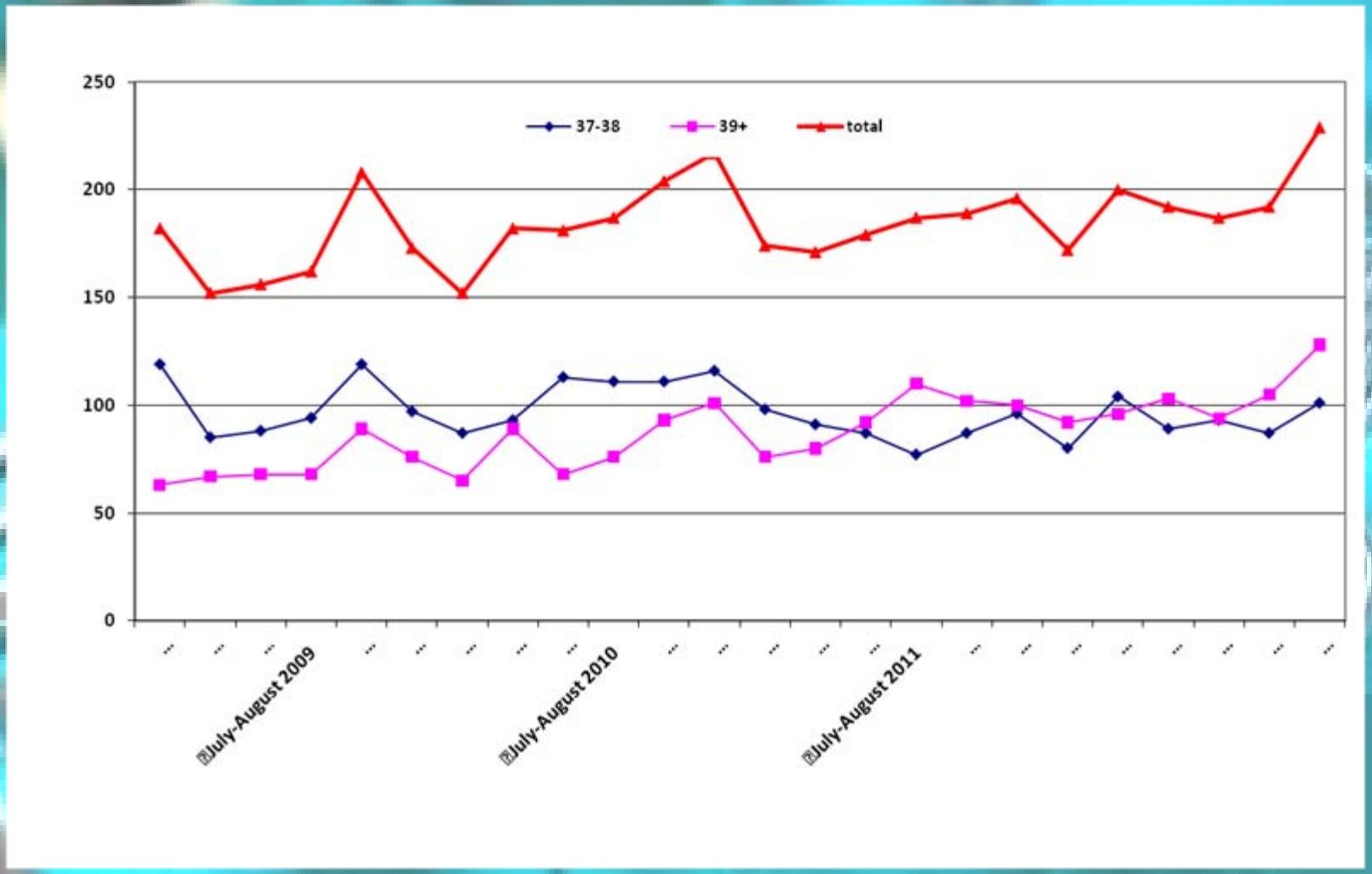
298 had TOL – 78% VBAC (60% 2011)

Is this better selection? Is this the impact of VBAC clinic?

Elective CS after 39 weeks



Elective CS at Term by Gestational Grouping



Safe models of care

Safe models of care

Evidence based care

Safe Care

Safe Staffing Levels

Great communication

Respectful relationships among all staff

Explicit Organizational values

23%

- **Do we increase risk of intervention in low risk women by providing care in a high risk delivery unit?**
- **Could we do better to prepare women for and support then during birth?**
- **Could we manage pain in ways other than epidural?**
- **What is the contribution care giver bias makes to outcome?**

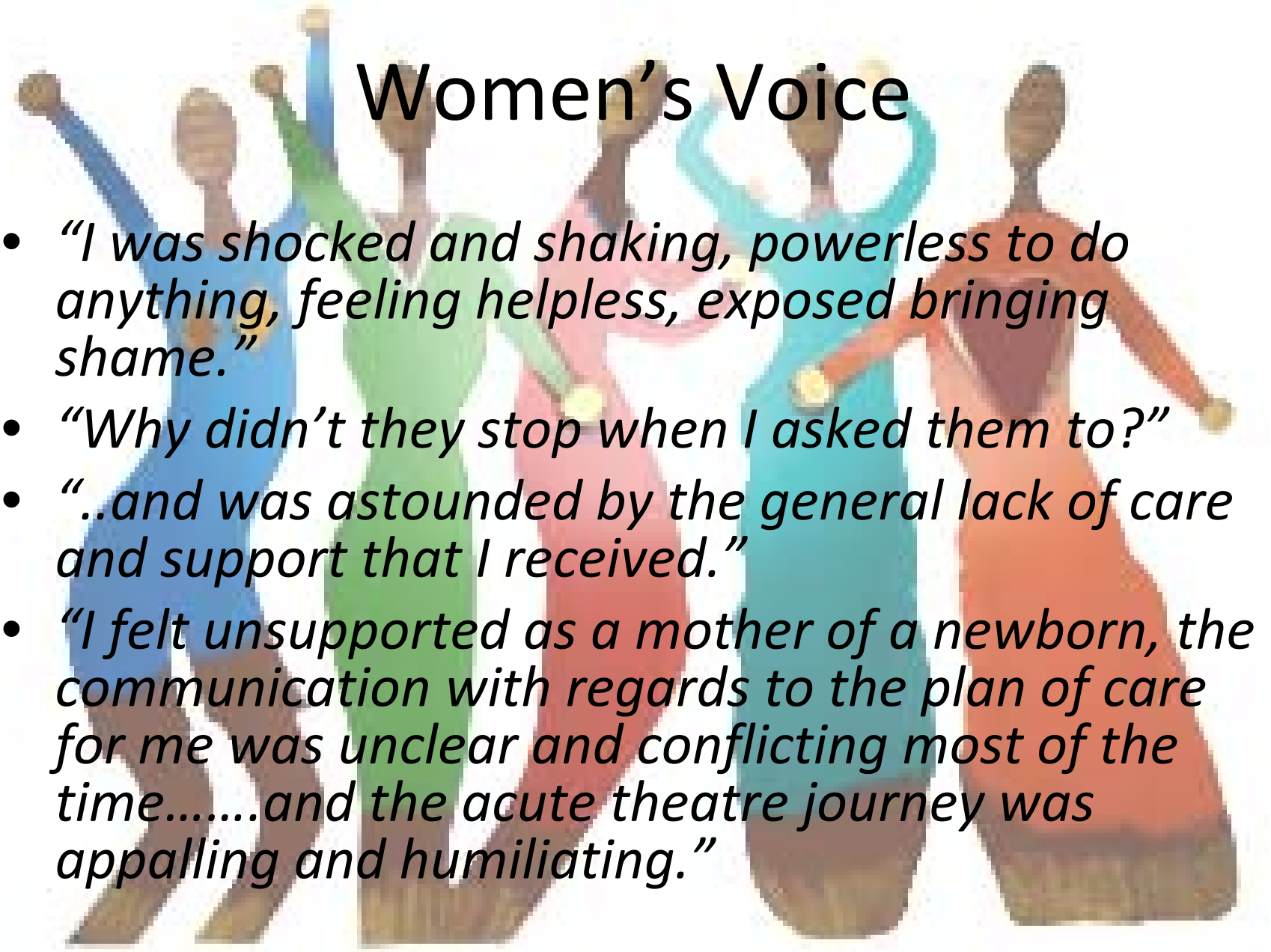
SAFE MODELS OF CARE

Clinical Governance Structure

SAFE MODELS OF CARE

Women & Family Centered Care

Women's Voice



- *"I was shocked and shaking, powerless to do anything, feeling helpless, exposed bringing shame."*
- *"Why didn't they stop when I asked them to?"*
- *"..and was astounded by the general lack of care and support that I received."*
- *"I felt unsupported as a mother of a newborn, the communication with regards to the plan of care for me was unclear and conflicting most of the time…….and the acute theatre journey was appalling and humiliating."*

Women & Family Centered Care

Women & family Centered Care

Women and family centered

Women led and empowered

Care responsive to women's needs

Equity of access for all women 17%

- We need to understand women's needs.
- Explore ways to provide care better linked to community.
- Work on broader aspects of care delivery: empathy, respect, empowerment.

WOMEN & FAMILY CENTERED CARE


VALUED AND SUPPORTED
WORKFORCE

What could we do more of?

1. Improved communication
2. Caring culture
3. Supporting staff
   - Recruit great quality and committed staff and keep them!
   - More recognition of staff doing great job
   - Continual high demands on staff - work life balance
   - Medical group more involved in normal during training
   - Increased registrar teaching and training

Support for difficult decisions

Audit of Caesarean section at full dilitation

218 women identified

Excluded

- category 1 CS (52)
- Care provided by Private obstetrician (55)
- Not FD or record incomplete (3)

Training Intern Audit: Bridget Wilson, Mark Zhu

Support for difficult decisions

Analysis of 108 records

Obstetrician was present for 66.6%

Unrelated to

- Time of day
- Day of week
- Category of CS

How did this relate to registrar experience level?

Training Intern Audit: Bridget Wilson, Mark Zhu

Support for difficult decisions

Double instrumental deliveries (34/5125) 0.66%

- Rate of NICU admission increase from 10.6% to 17.7%
- 3/4th degree tear rate increase from 6.6% to 14.7%
- PPH >1000ml increased from 8.9% to 17.7%

In 2/3 SMO or senior registrar/fellow was listed as the operator

What about the other 1/3?

Support for difficult decisions

Valued and Supported Workforce

Valued & supported workforce

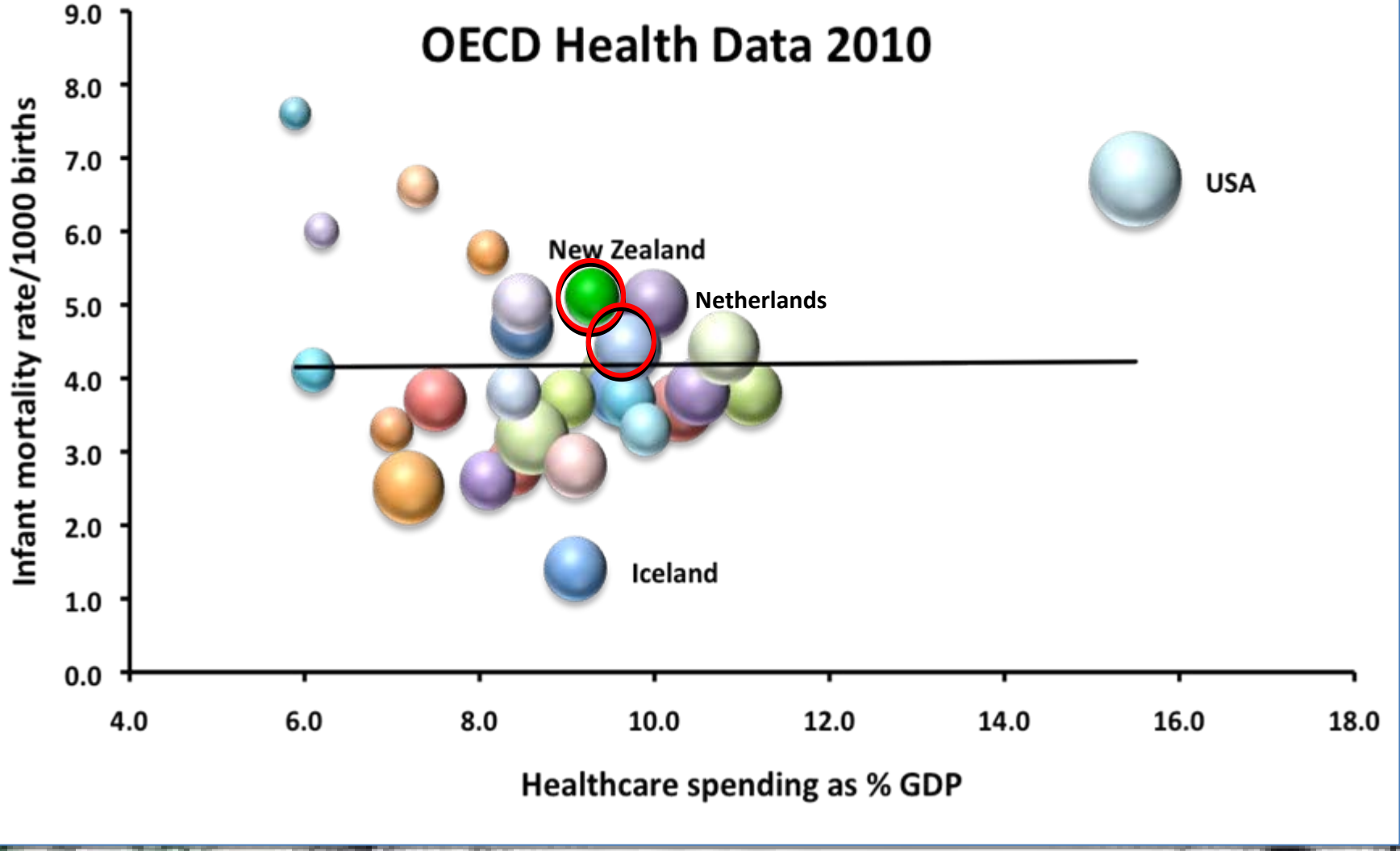
People valued and nurtured
Teams working together
Training and education of healthcare professionals
Strong mentoring
Ensuring everyone can reach their full potential

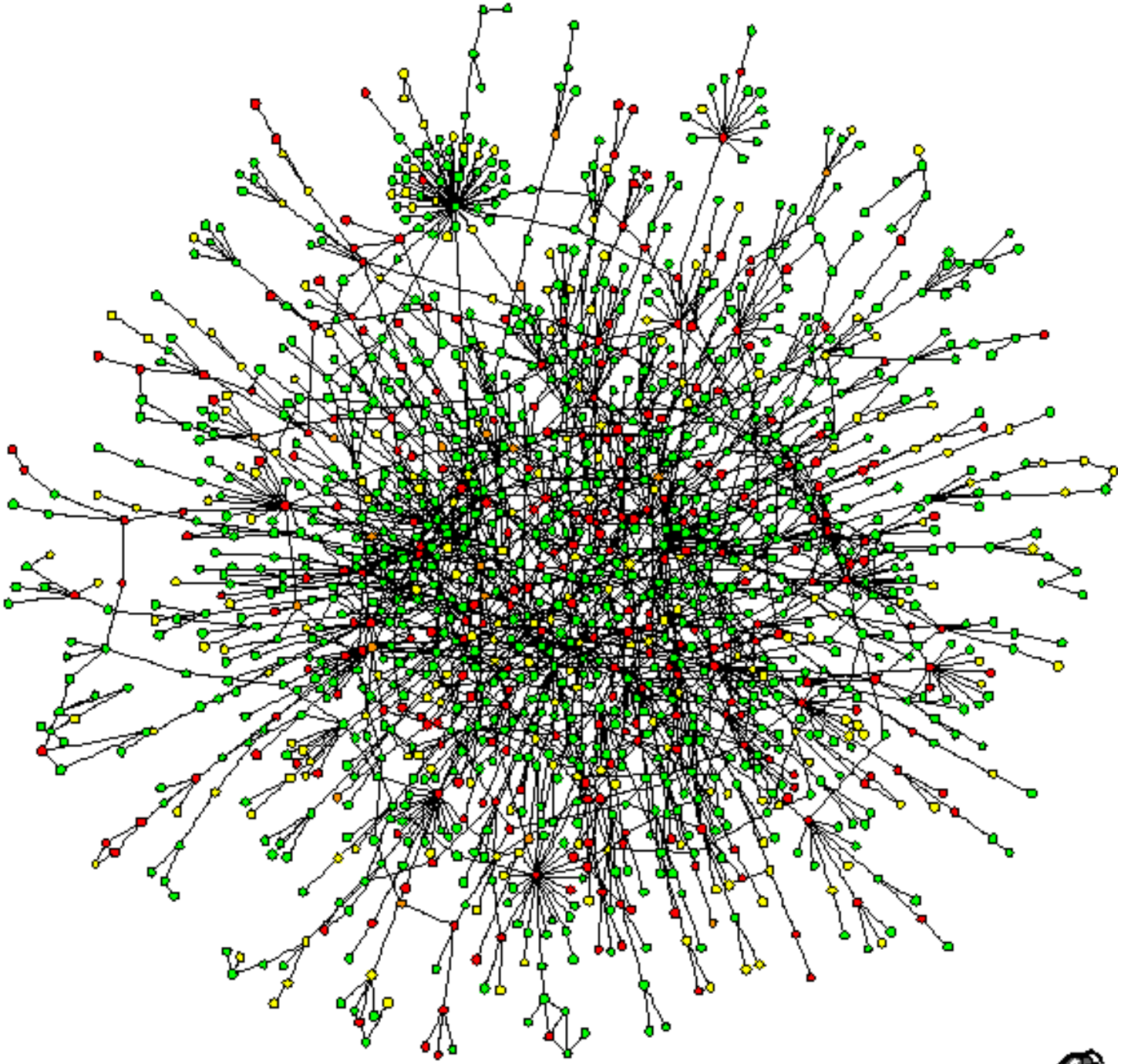
26%

- Senior doctor led care
- Strong support and training for junior doctors
- Team work

VALUED AND SUPPORTED WORKFORCE


OPTIMAL RESOURCES EFFICIENTLY
UTILIZED

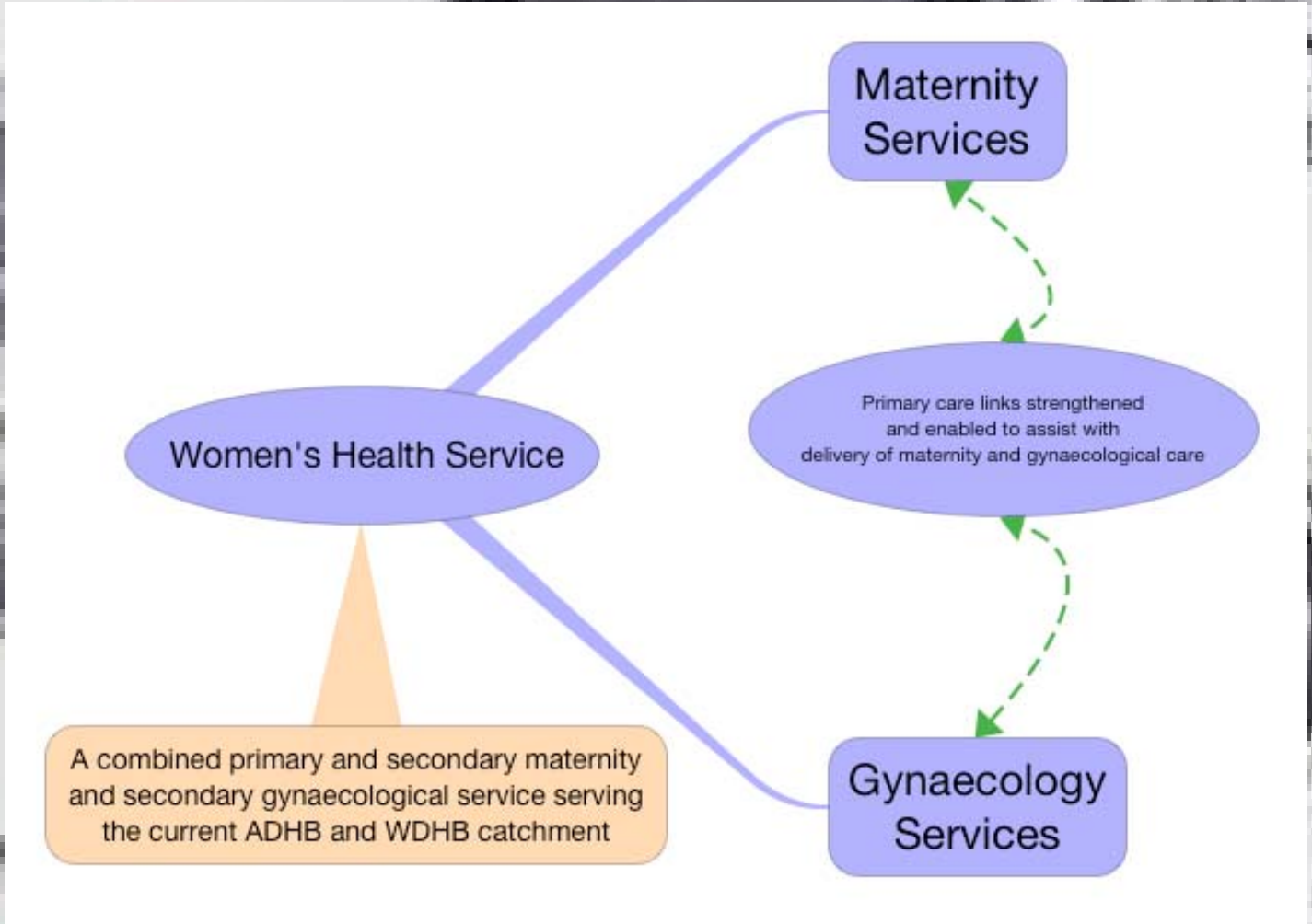

OECD Health Data 2010
Infant mortality rate/1000 births
9.0
8.0
7.0
6.0
5.0
4.0
3.0
2.0
1.0
0.0
4.0
6.0
8.0
10.0
12.0
14.0
16.0
18.0
Healthcare spending as % GDP
USA
New Zealand
Netherlands
Iceland


Pajek

Improvement Projects

- Eras- Maternity services
- Lactation clinic
- Mapping postnatal flow
- Review of inductions process
- Accelerating release to care 96/98
- Iron infusion
- FBC after caesarian

Regional Collaboration



Optimal Resources Efficiently Utilized

Optimal resources, efficiently utilized

Efficient use of resources

Working productively

Eliminating system waste

Clinical pathways - KPI’

Living within our means

22%

- Lots of work in progress
- Great enthusiasm for improving the way we deliver care

OPTIMAL RESOURCES EFFICIENTLY UTILIZED


GOLD STANDARD
OUTCOMES

NZ Maternity Clinical Indicators

Indicator	All NZ	NW
Standard primp who have a SVD	65.6%	65.1%
Standard primp who has instrumental delivery	16%	15.7%
Standard primip who have a CS	17.9%	19.2%
Standard primip who has an induction	4.8%	4.8%
Standard primip with an intact lower genital tract	27.3%	**18.2%**
Standard primip with episiotomy no 3/4th deg tear	22.1%	**32.4%**
Standard primip with out episiotomy & 3/4th degree tear	3.2%	**2.3%**
Standard primip with episiotomy & 3/4th degree tear	1.3%	1.4%
Women having GA CS	8.3%	6.0%
Women requiring a blood transfusion & CS	3.3%	3.8%
Women requiring a blood transfusion with vaginal birth	1.8%	**2.3%**
Premature births between 32 & 36 wks	6.7%	7.3%

Maternal Mortality & Morbidity

NZ wide

- 35% of maternal deaths avoidable
- Contributory factors in 55%
  - Organization and management
    - Protocols and guidelines
    - Screening for maternal mental health
  - Personnel or barriers in access to care
- National Women's
  - Early warning score
  - Massive transfusion protocol

AMOSS Notifiable Conditions

Table 76: New Zealand and Australasian rates (per 10,000 maternities) of AMOSS notifiable conditions 2010–2011

	Data collection period	NZ registered births	NZ cases		NZ rate	Australasian rate/ratio[2]		95% CI[2]
		n	n	NW		NW		
Amniotic fluid embolism	2010–2011	127,728	7	3	0.6	0.4	0.4	0.3–0.6
Antenatal pulmonary embolism	2010–2011	127,728	9	2	0.7	0.27	1.2	1.0–1.4
Eclampsia	2010–2011	127,728	25	2	2	0.27	2.2	1.8–2.6
Influenza with intensive care admission	2010	65,124	8	?	1.2	?	1.9	1.4–2.8
Placenta accreta	2010–2011	127,728	50[1]	10	3.9	1.33	4.2	3.8–4.8
Peripartum hysterectomy	2010–2011	127,728	56[1]	12	4.4	1.6	6	5.5–6.5
BMI >50	2010	65,124	297		45.6		26.8	24.9–28.7

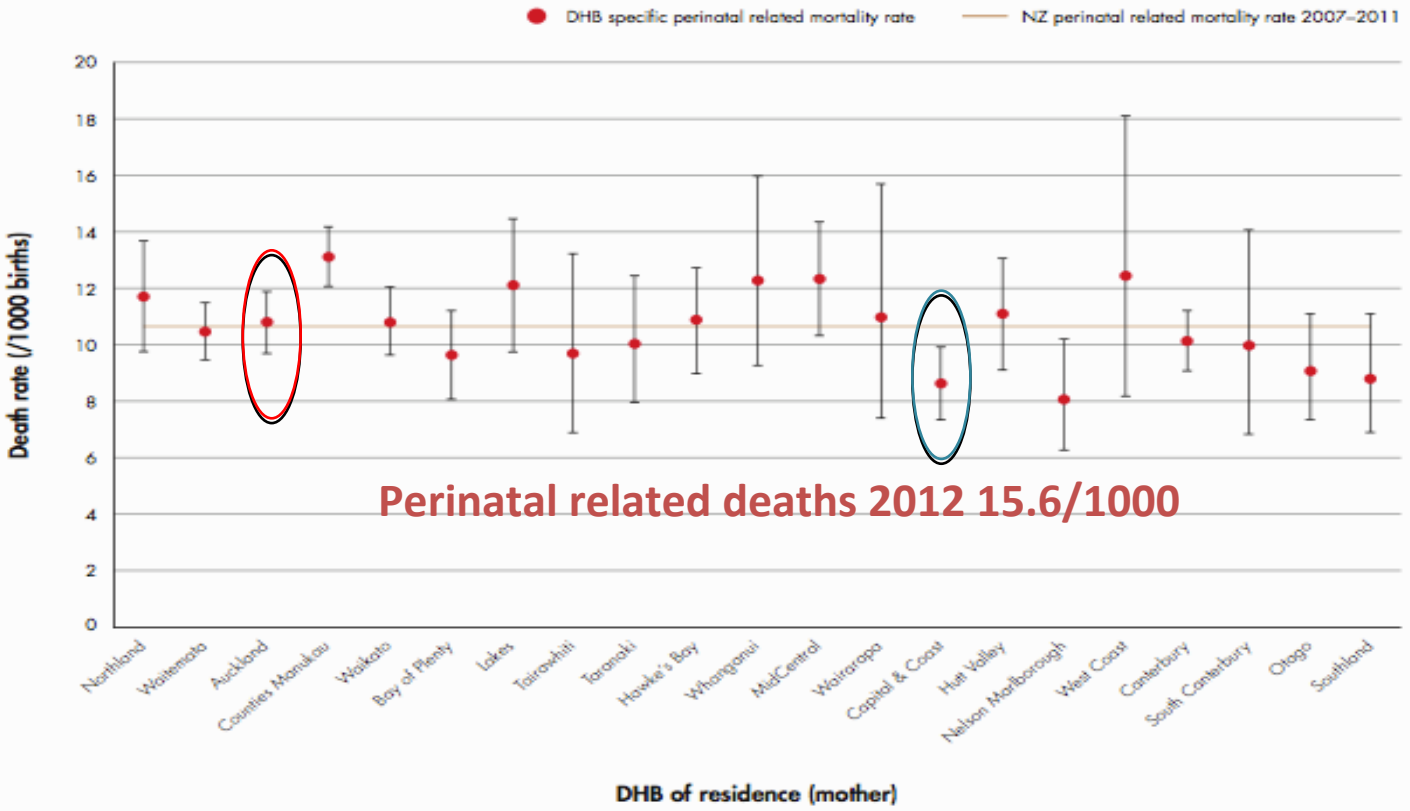
1 Twenty-five women had placenta accreta and peripartum hysterectomy.

2 Ellwood D. 2013. Reducing the Impact of PPH. Health Round Table presentation, Sydney.

Perinatal Related Death Rates

District health board (DHB) of residence

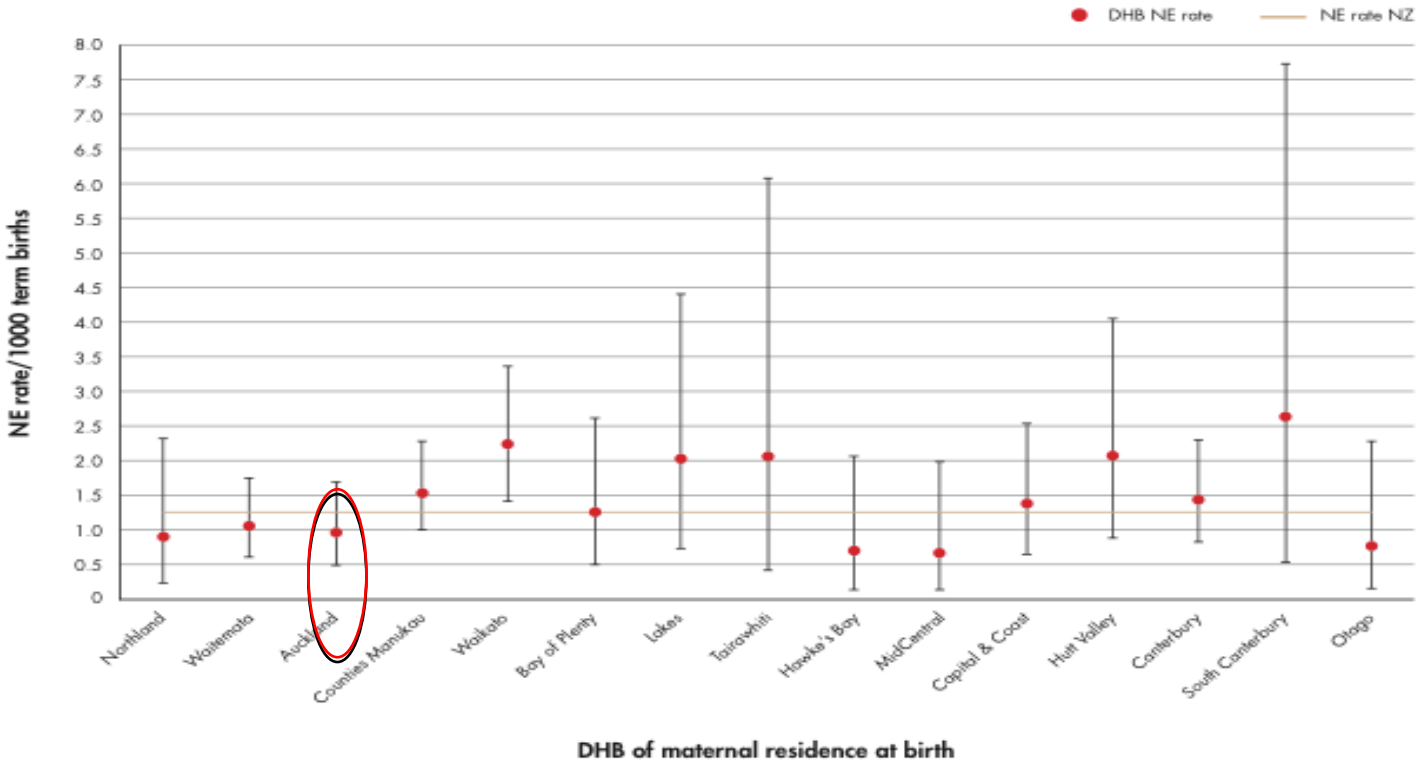
Figure 27: Perinatal related death rates (per 1000 births) by DHB of residence (mother) compared to New Zealand perinatal related mortality (with 95% CIs) 2007–2011



Perinatal related deaths 2012 15.6/1000

Neonatal Encephalopathy Rates

Figure 49: Neonatal encephalopathy rates[1] (per 1000 term births) by DHB of maternal residence (with 95% CIs) compared to New Zealand neonatal encephalopathy rate 2010–2011



1 No estimates are given for DHBs where number of cases reported was fewer than three.

Pre-term outcomes

- Survival rates from 26 weeks approach those of term babies
- Survival of 24 -27 week babies exceeds that of ANZNN

Gold Standard Outcomes

Gold standard Outcomes

Excellent health outcomes

Research supported and valued

11%

- Benchmark well Nationally and Internationally
- Active research and audit

GOLD STANDARD OUTCOMES

DEDICATION AND WORK OF THE INTELLIGENCE TEAM

Sheila Stubbs,

Author

Birthing the easy way

“The midwife considers the miracle of childbirth as normal, and leaves it alone unless there's trouble.

The obstetrician normally sees childbirth as trouble; if he leaves it alone, it's a miracle.”

Challenges from Annual clinical Report Presentation 2013

Dr Peter van de Weijer challenged National Women's with regard to the:

- High iatrogenic intervention rates
- High discrepancy in care between care providers
- High iatrogenic complication rates

High Iatrogenic Intervention Rates

	2012		2011	2010
	Mothers	7695	7523	7709
	n	%	%	%
Spontaneous onset of labour	3666	47.6	48.2	52.0
Iatrogenic onset of birth	4029	52.4	51.8	48.0
Elective cesarean section	1278	16.6	15.7	15.9
Emergency cesarean section before labour	268	3.5	3.3	3.5
Induction of labour	2483	32.3	32.7	28.7

Cesarean Section Rate

	2011	2012
Overall C/S rate	32.5%	33.4%
Elective C/S rate	15.7%	16.6%
Emergency C/S rate	16.8%	16.8%
Nullipara elective C/S rate	10.0%	10.8%
Multipara elective C/S rate	20.8%	22.2%
Nullipara emergency C/S rate	24.6%	23.3%
Multipara emergency C/S rate	9.8%	10.5%

The challenges……

The first challenge is to agree what normal birth is and to collect appropriate data to enable us to report our normal birth rate in the 2013 ACR.

In 2012 54.2% women had a spontaneous vertex delivery compared to 55.6% during 2011.

What interventions are included in a normal (or physiological) birth?

- Induction?
- Artificial rupture of membranes in labour?
- Augmentation?
- Episiotomy?
- Post partum haemorrhage?
- Physiological third stage?

The Challenges of Primary Birthing

To reduce iatrogenic interventions it is essential that we increase primary birthing in Auckland - yet the numbers of births are decreasing , 451 women in 2011 reducing to 398 in 2012.

The challenge is to provide real choice to women whilst maintaining safety and confidence in our maternity services

How many women who live in Auckland would be able to have a similar birth to this if they choose to do so?

How many women who live in Auckland could have an elective C/S if they choose to do so?

The Challenges of Primary Birthing (2)

- Women's choice
- Respecting and supporting each other
- The media
- Agreeing the 'risk factors' and sticking to the agreement
- The difficulties interpreting the interface between primary and secondary birthing
- Providing normal birth environments in secondary units

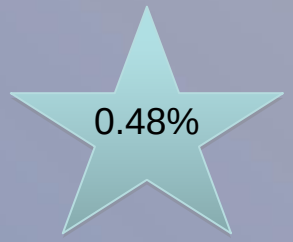
Normal Birth Environments
St Mary's Birth Centre

AUCKLAND DISTRICT HEALTH BOARD
Te Toka Tumai

Normal Birth Environments

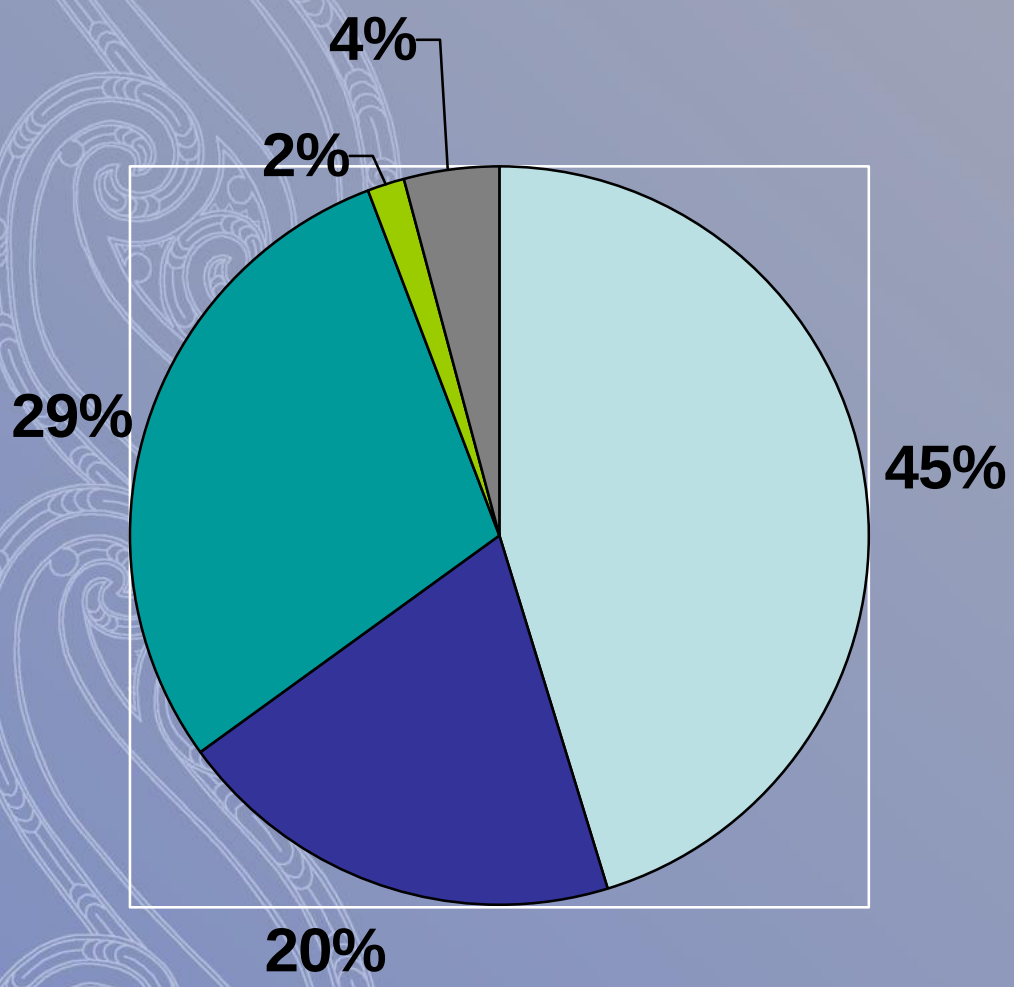
Intrapartum

- No of births: 604
- Primiparous: 302 (50%)
- Multiparous: 302 (50%)
- Waterbirths: 188 (31%)
- Women using pool for labour and birth: 302 (50%)



Water Birth

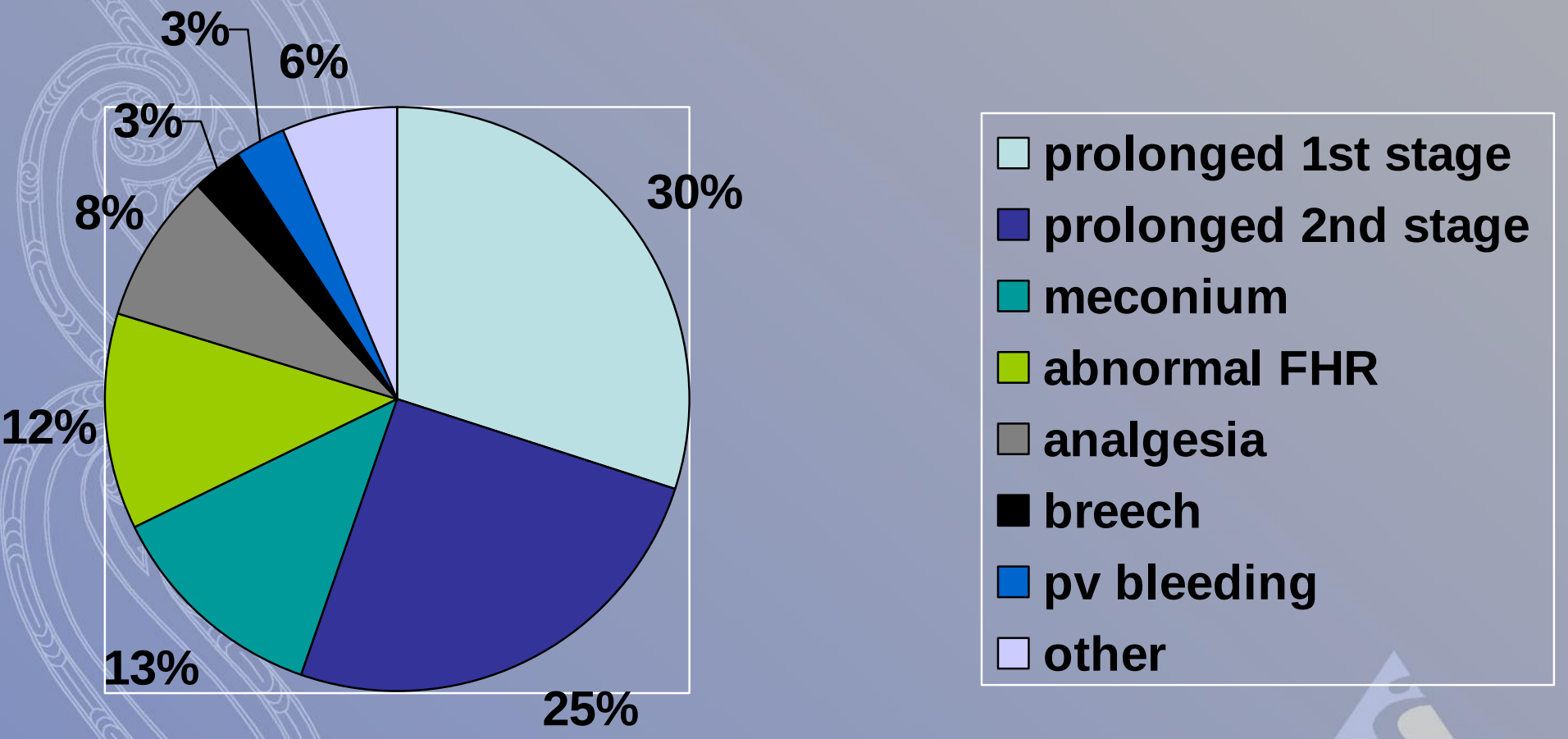
Perineal trauma



22.8%

- Intact
- 1st degree
- 2nd degree
- 3rd degree
- Episiotomy

Intrapartum transfers: 143 (23.6%)



The challenges for Secondary Birthing Units

- Providing environments that will enable as ‘normal’ a birth as possible if that is the woman’s choice
- To provide water as an option for pain relief (using telemetry monitoring)
- Not to use interventions unless they are necessary

The Way Forward ……

- Define ‘normal’ or physiological birth
- Report in 2013 ACR
- Identify normal birth champions
- Change birth environment in DU
- Build on the success of PBAC
- Introduce normal birth pathway
- Identify the barriers to achieving normal birth