

CHANGING LIVES

Impact of smoking at the time of delivery and postnatal period

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Barnsley Hospital NHS Foundation Trust
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Introduction

The audit was initiated to look at the impact that smoking in pregnancy has on the outcome for mother and baby and how that impact affects the Maternity Unit.



Towards a Smokefree Generation

A Tobacco Control Plan for England

NICE
National Institute for
Health and Care Excellence

**NATIONAL
MATERNITY
REVIEW**

BETTER BIRTHS

Improving outcomes of
maternity services in England

A Five Year Forward
View for maternity care





Percentage of women smoking at time of delivery - Quarter 3 2018/19

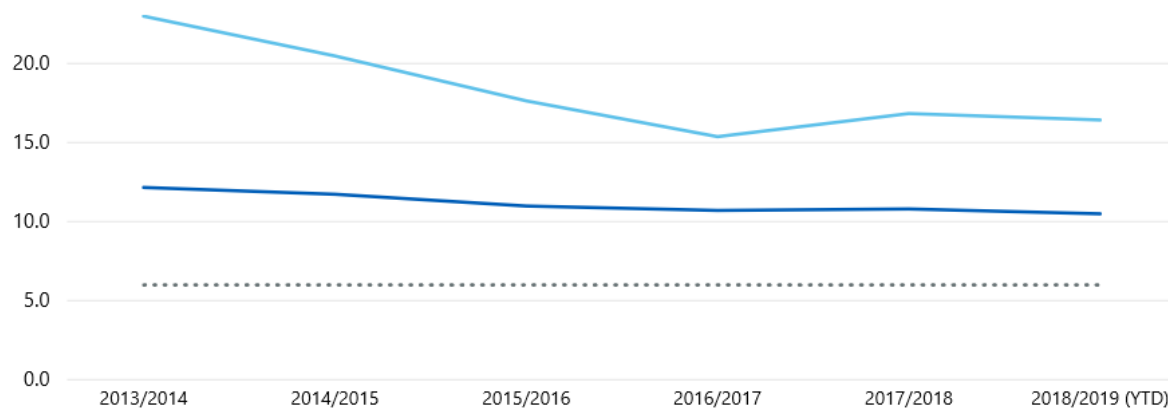
Select a CCG: NHS Barnsley CCG

Select a time period: Year to date

Clinical Commissioning Group (CCG) and National Comparisons

Use the arrows on the left to change the way the chart is displayed (by quarter or year)

● % Smokers CCG ● % Smokers England ● National Ambition



CCG Map

Key (percent)



CCG, Regional and National comparisons	Maternities	Smokers	% Smokers	% Unknown
NHS Barnsley CCG	2,136	351	16.4	0.0
NHS England North (Yorkshire And Humber)	44,487	6,338	14.4	1.2
England	451,190	46,466	10.5	1.9

Source: Lifestyles Statistics, NHS Digital.

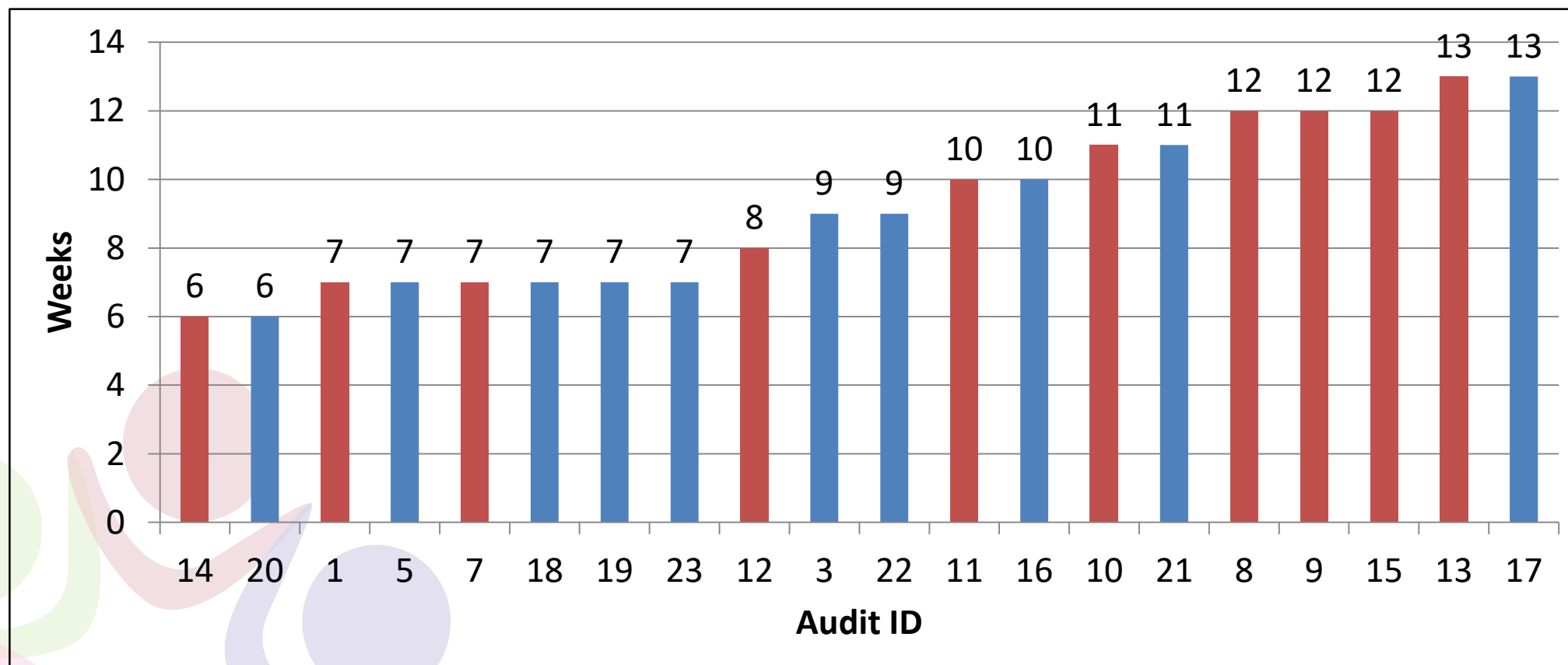
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Last Updated
06 March 2019

Methodology

- 1st June to 31st December 2016
- 20 Patients **randomly** selected (10 Smoking and 10 non-smoking mothers recorded at time of delivery)
- Age 18 - 35 years
- BMI 18 - < 25
- Study population = 1824 Women
- Final figure for analysis n=20

Gestation at Booking



20/20 Live Births

 = Non Smoker Gestation at Booking
 = Smoker Gestation at Booking

Previous Significant Obstetric History

Smokers	Non-Smokers
1/10 women – no previous significant obstetric history	6/10 women - no previous obstetric history
5/10 - Miscarriage (1 woman multiple x 2)	2/10 - Miscarriage
1/10 – Previous SGA 8 th centile	2/10 TOP
1/10 – Medical TOP reduced liquor/cysts/renal problems	
1/10 – 2 preterm births 31 & 34 wks and a late miscarriage at 19 weeks	
1/10 – Bleeding and static growth	
1/10 – Olighydramnios x 2 previous pregnancies	

Does anyone else in the house smoke?

Smoker

7/10 were living in a household where other people smoked

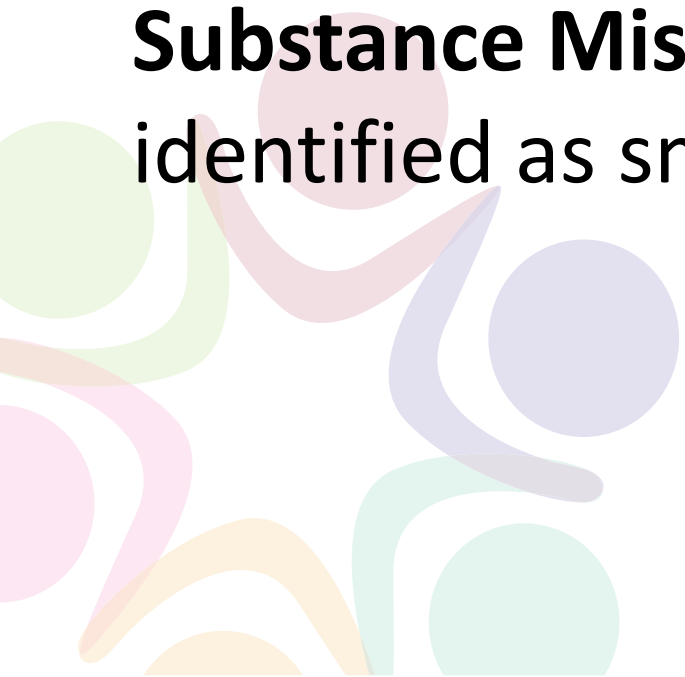
Non Smoker

0/10 were living in a household where other people smoked

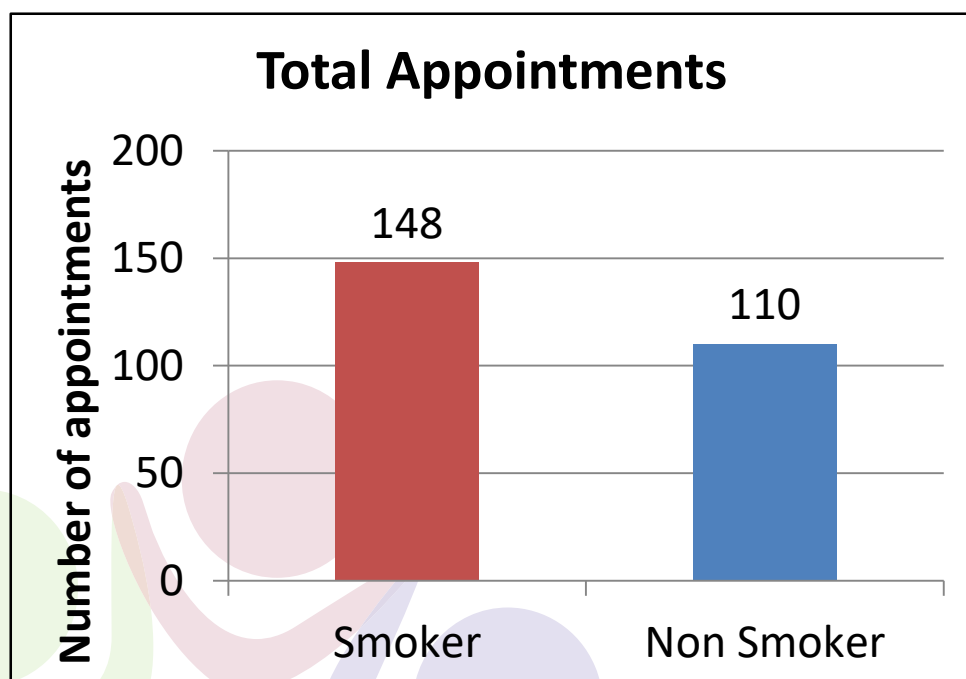
Alcohol and Substance Misuse

Alcohol: 0/20 patients were identified as consuming alcohol at booking

Substance Misuse: 1/20 patient (smoker) was identified as smoking cannabis.



Antenatal Appointments



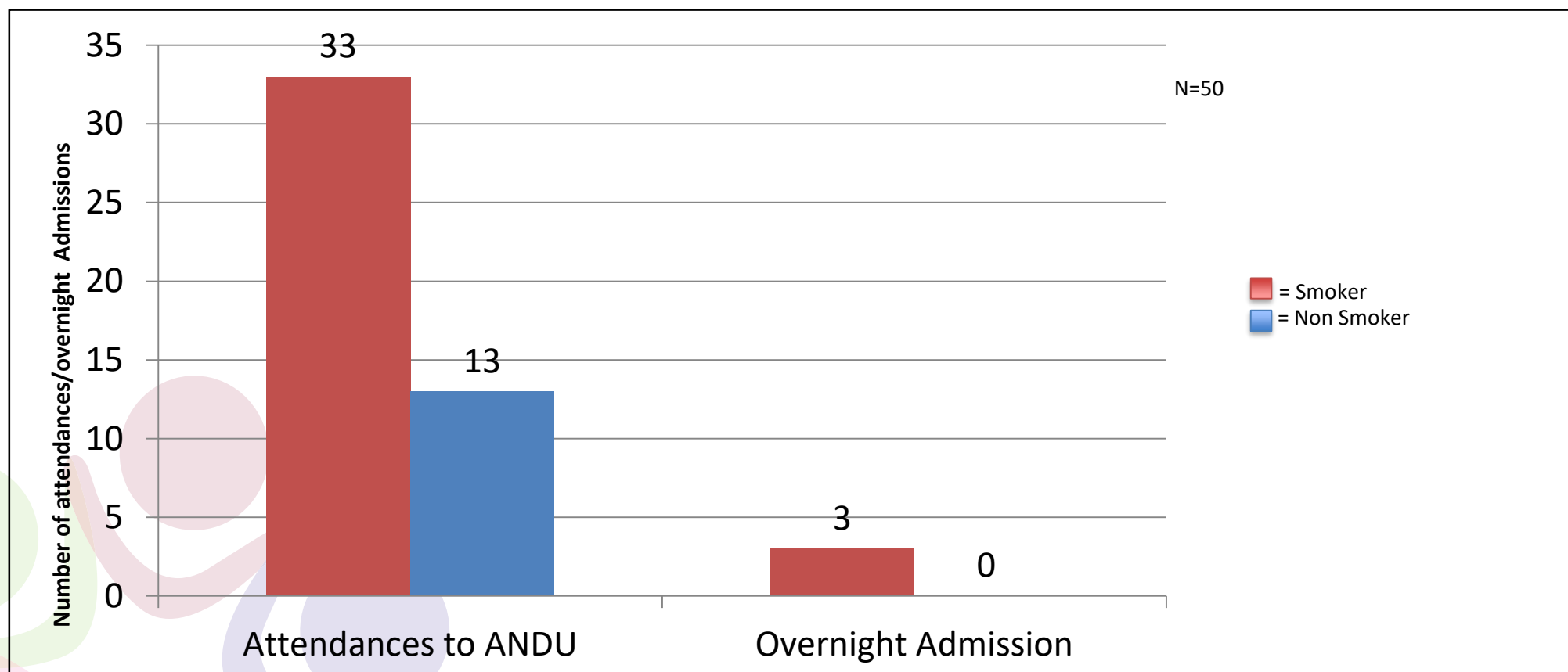
Appointments	Smokers	Non Smokers
Minimum	9	8
Maximum	24	14
Average	14.8	11

Number of DNA Appointments

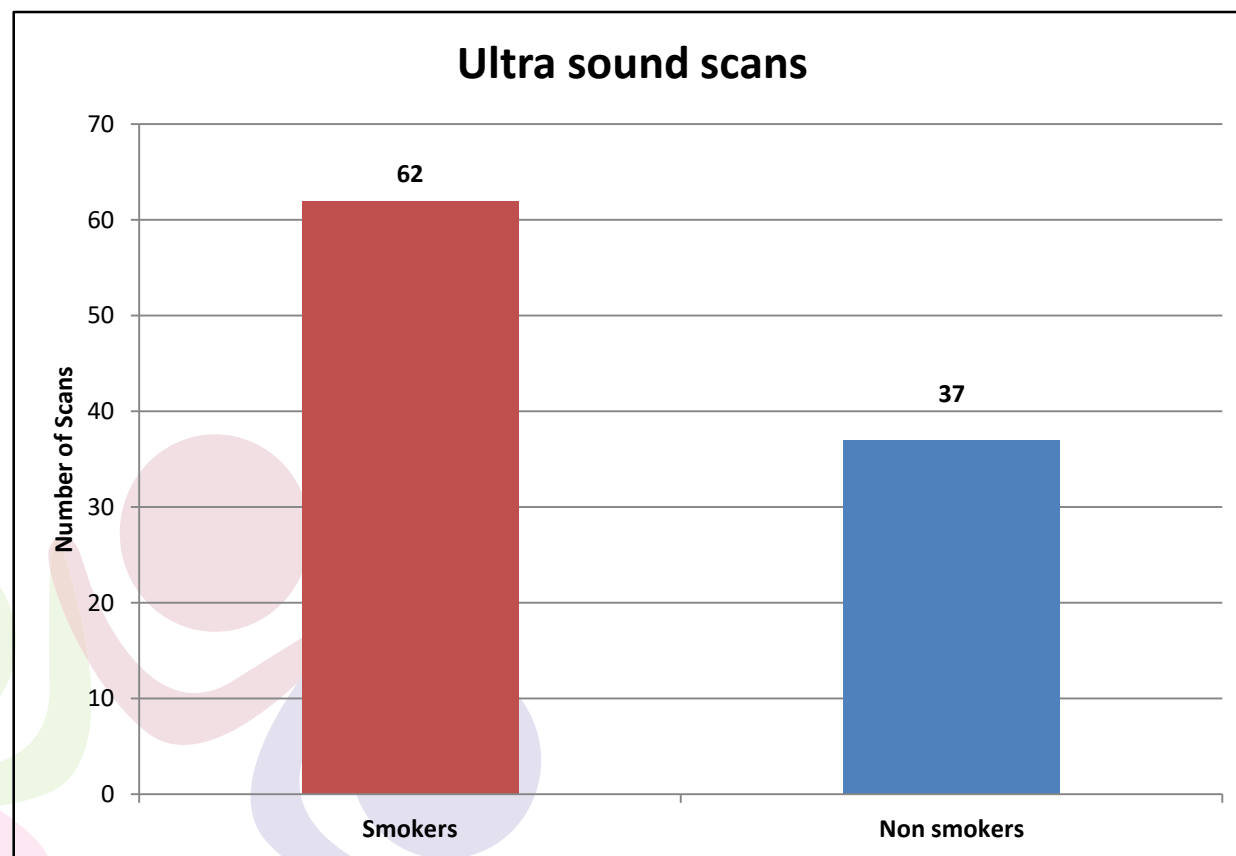
No of Appointments	Smokers	Non Smokers
DNA	3	1



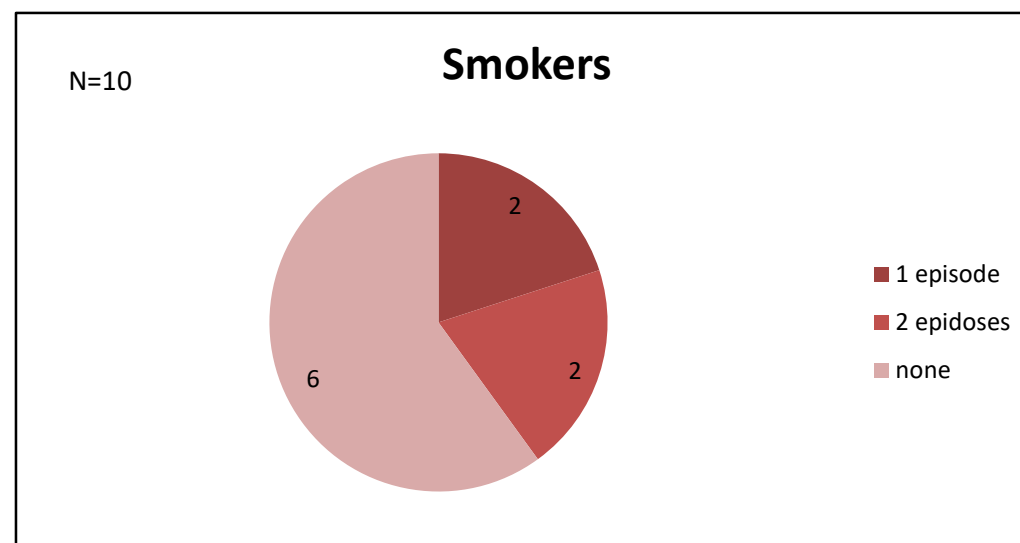
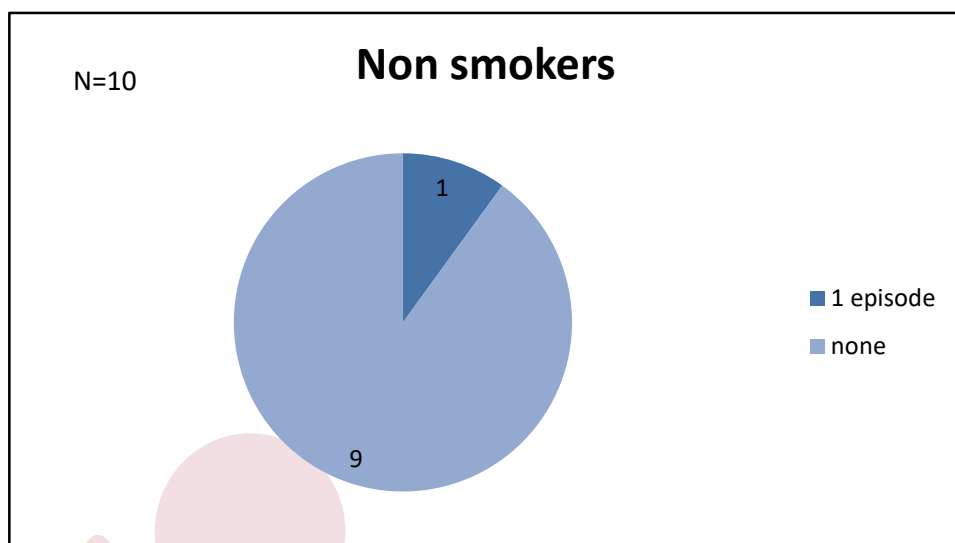
ANDU Attendances/Hospital Admissions



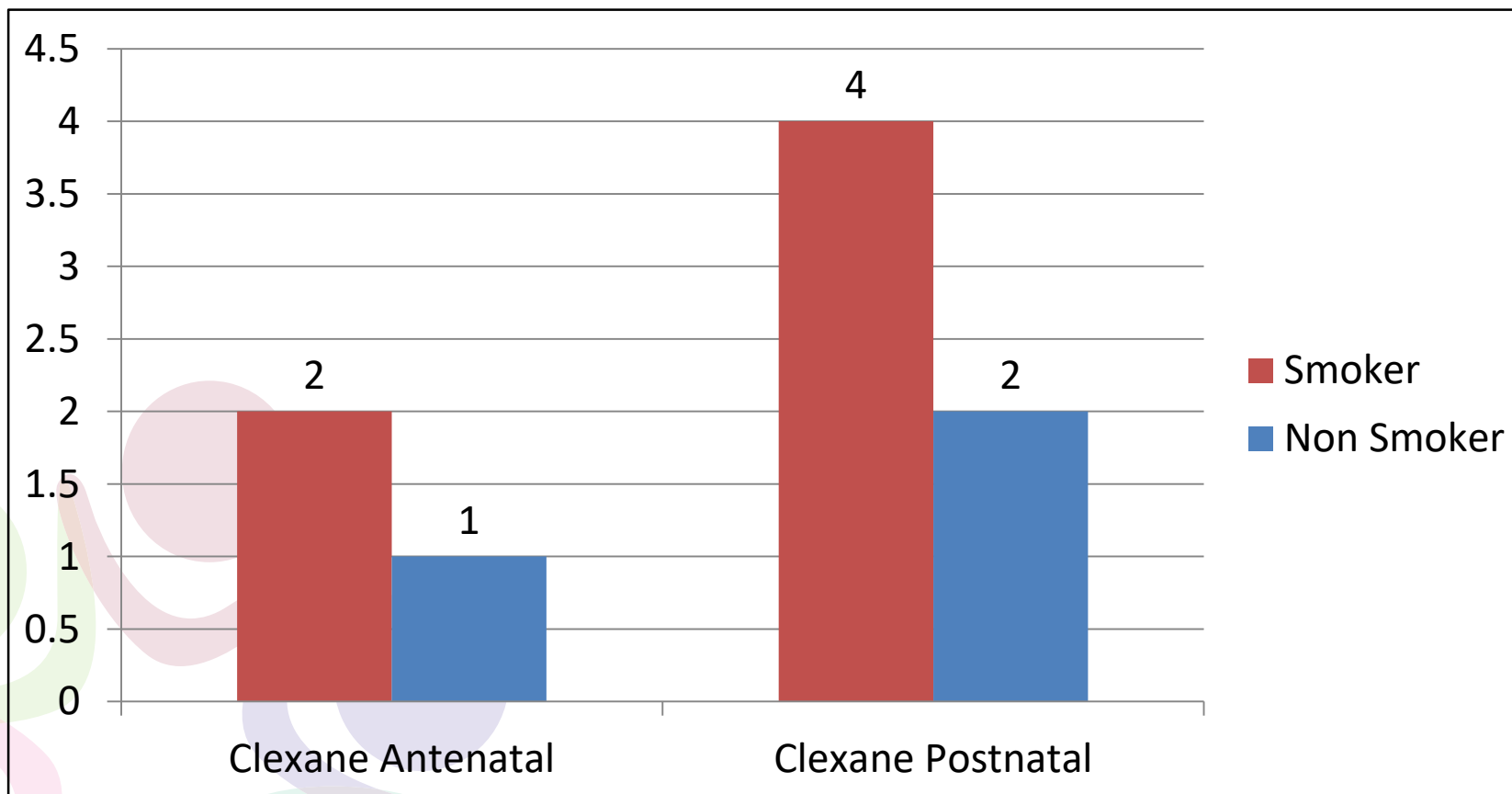
Number of ultrasound scans



Diminished Fetal Movements



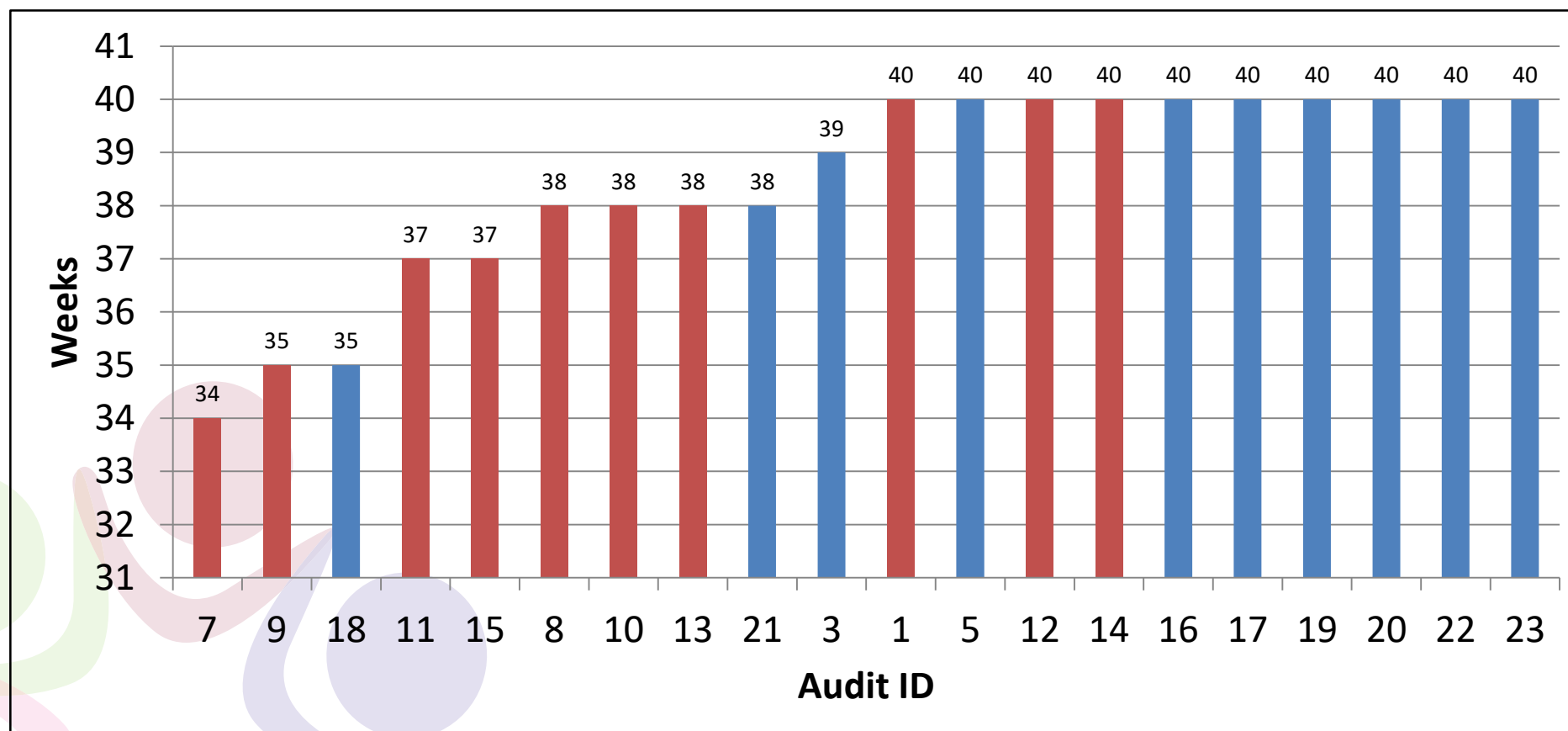
Number of women prescribed clexane during the ante/postnatal period



Complications in Labour

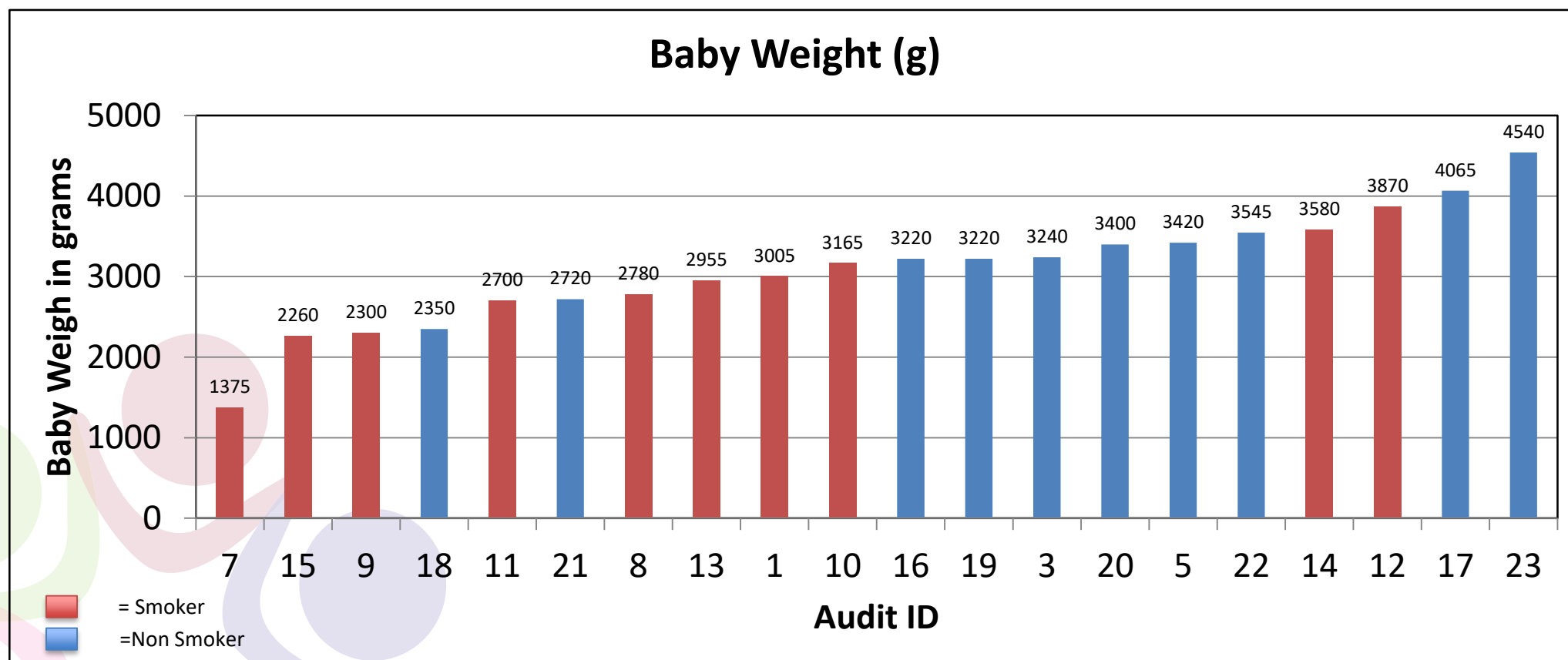
Non smoker		Smoker	
ID	Complications (3/10 Women)	ID	Complications (6/10 Women)
5	Fetal distress in 2 nd stage of labour	1	Continuous monitoring, FSE applied, fetal distress, meconium, cord bloods
18	Pre-term SROM/breech presentation	7	Emergency C-section due to SGA
20	Raised Blood Pressure	9	Acceleration due to pre-term SROM
		11	Fetal distress, pyrexia, offensive amniotic fluid
		14	Induced due to reduced growth
		15	Induced due to reduced growth

Gestation at Birth

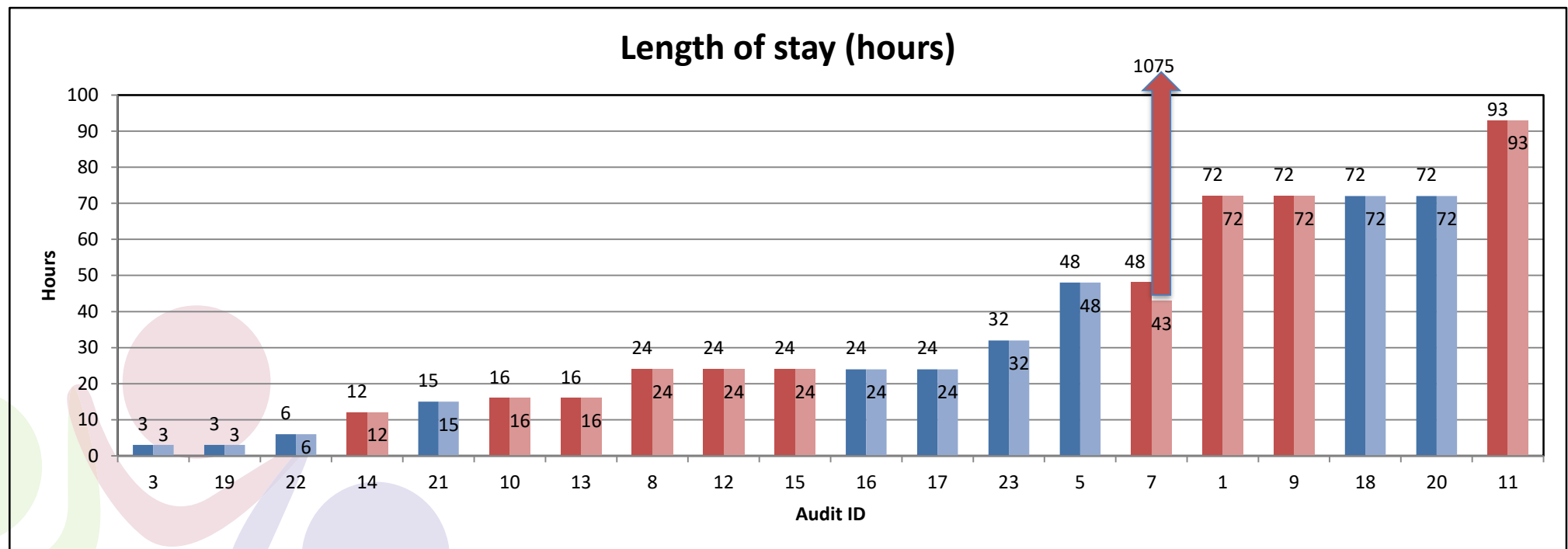






Red = Smoker
Blue = Non Smoker

Weight of Baby




Mother and baby length of stay



-  = Mother LOS (non smoker)
-  = Baby LOS
-  = Mother LOS (smoker)
-  = Baby LOS

Audit ID: 7 - Baby was admitted to SCBU
for a further 1032 hours

 Total 1075 hours

Postnatal Complications

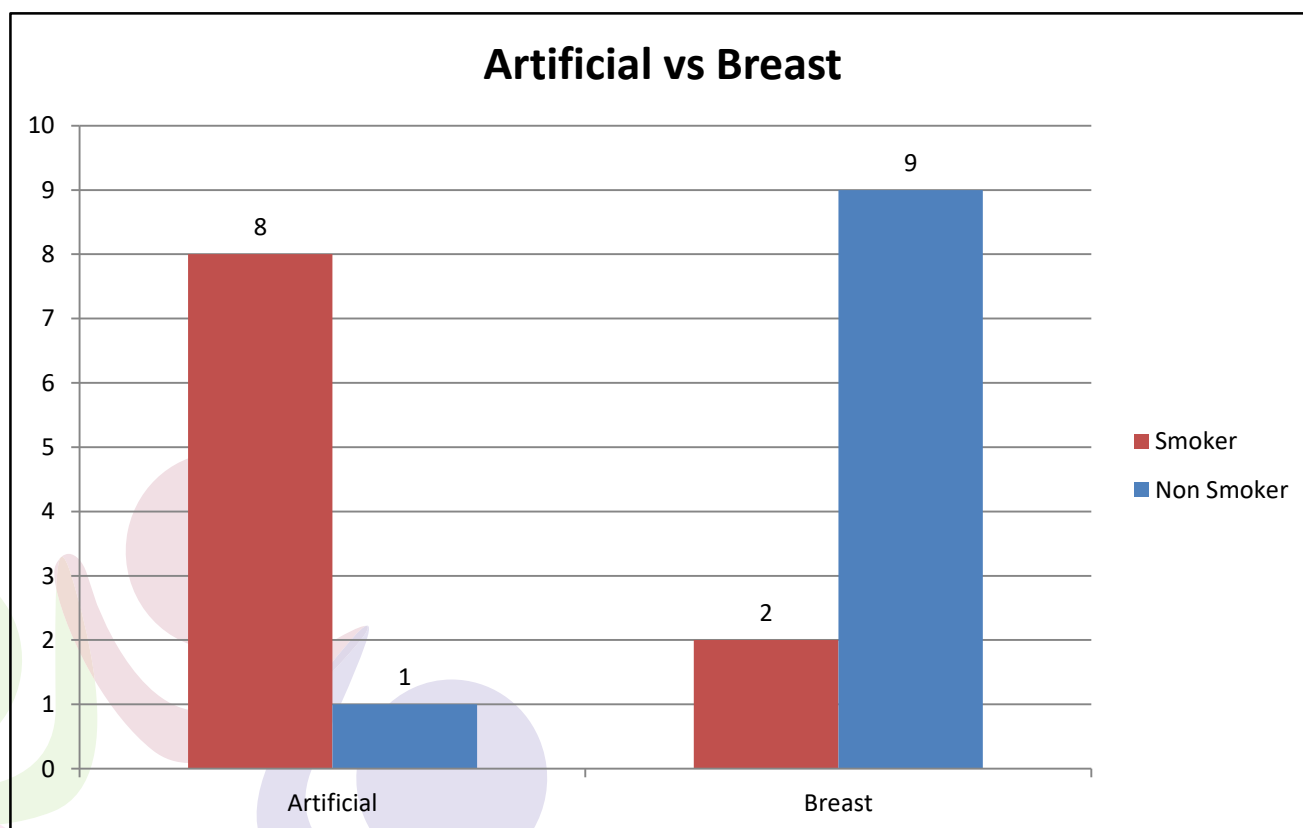
Non Smoker		
ID	Mother	Baby
5	Antibiotics prescribed for infected perineum	No problems
18	No problems	prescribed Iron and vitamins due to prematurity
20	Mum on antibiotics	Baby on antibiotics due to maternal infection

Postnatal Complications

Smokers

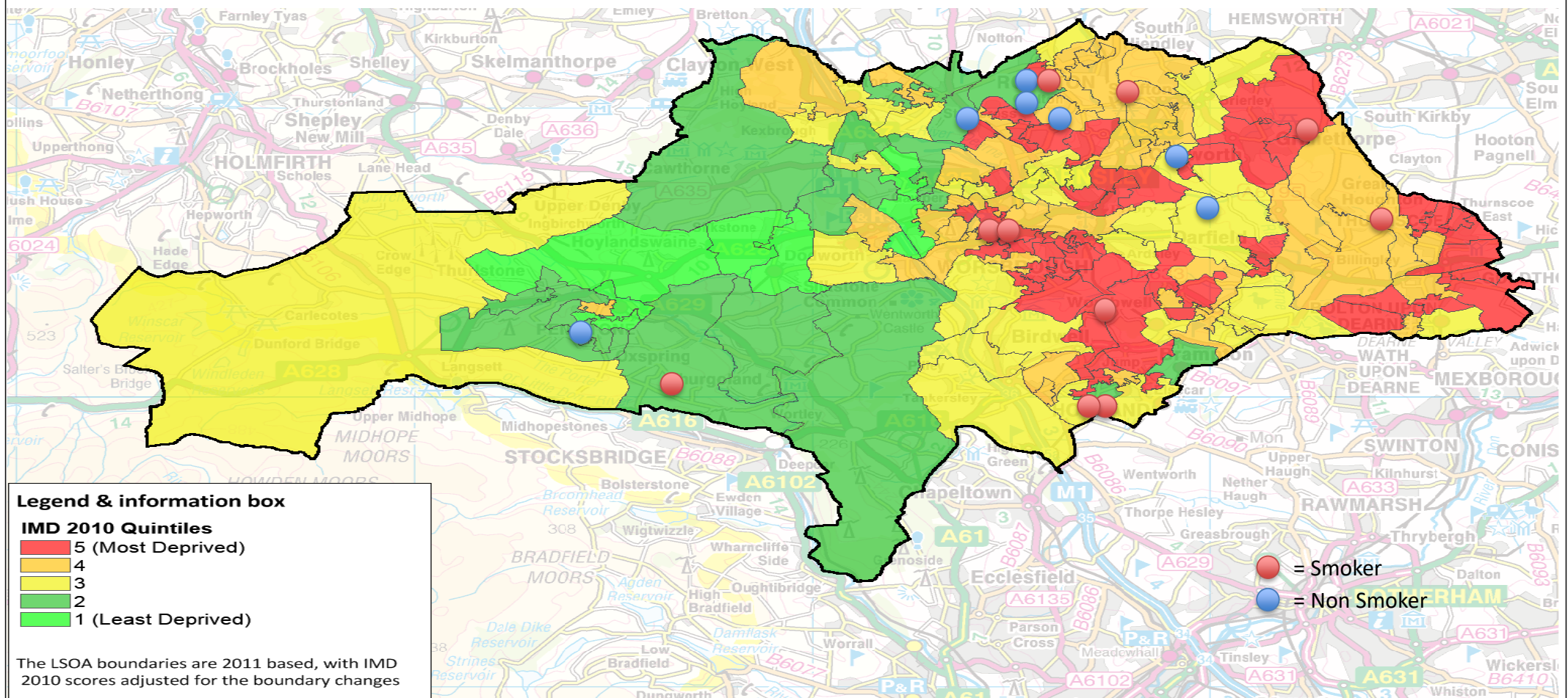
ID	Mother	Baby
1	No problems	Jittery - paediatric review
7	Postnatal notes not available to review the postnatal care of mother	On SCBU for 43 days, PDA repair
8	No problems	Tongue tie, poor feeder, oral thrush
9	IV antibiotics	Hypothermic and Hypoglycaemic, IV antibiotics, Phototherapy, Vitamins due to prematurity
11	Daltaparin for 10 days postnatal	Cannulated - IV antibiotics
14	Clexane prescribed but refused	Poor respiratory effort at birth, stimulated and taken to resuscitaire, hypothermic - incubator
15	Daltaparin for 10 days postnatal	Required 1 round of inflation breaths at birth, iron and vitamins for home

Method of Feeding



Areas of Deprivation

Index of Multiple Deprivation 2010 in Barnsley: Lower Super Output Areas (LSOAs) ranked relative to England



Lessons Learned

- Smoking in pregnancy not only has huge implications for the outcome for mum and baby but also on the resources of the Maternity Unit
- Stopping smoking early in pregnancy can almost completely prevent damage to your baby
- Training is essential to give staff the skills to support a woman to stop smoking
- Investing in the Maternity Stop Smoking Service would categorically save the hospital money

Conclusions

- Early referral for support to stop smoking is essential.
- Every contact counts, whether this is a midwife, doctor, health care, sonographer, anaesthetist etc.
- All staff should use every opportunity to raise the issue, have the conversation and refer. It is never too late to stop smoking and it is imperative that we all work together.
- CO testing is an important tool to use to raise the issue and should be used appropriately.
- Due to the small sample size a more in depth audit would be ideal.
- This audit will be shared with Maternity staff and will be presented at the Smoking in Pregnancy Task and Finish Group and at the Tobacco Control Alliance.

What are we doing now?

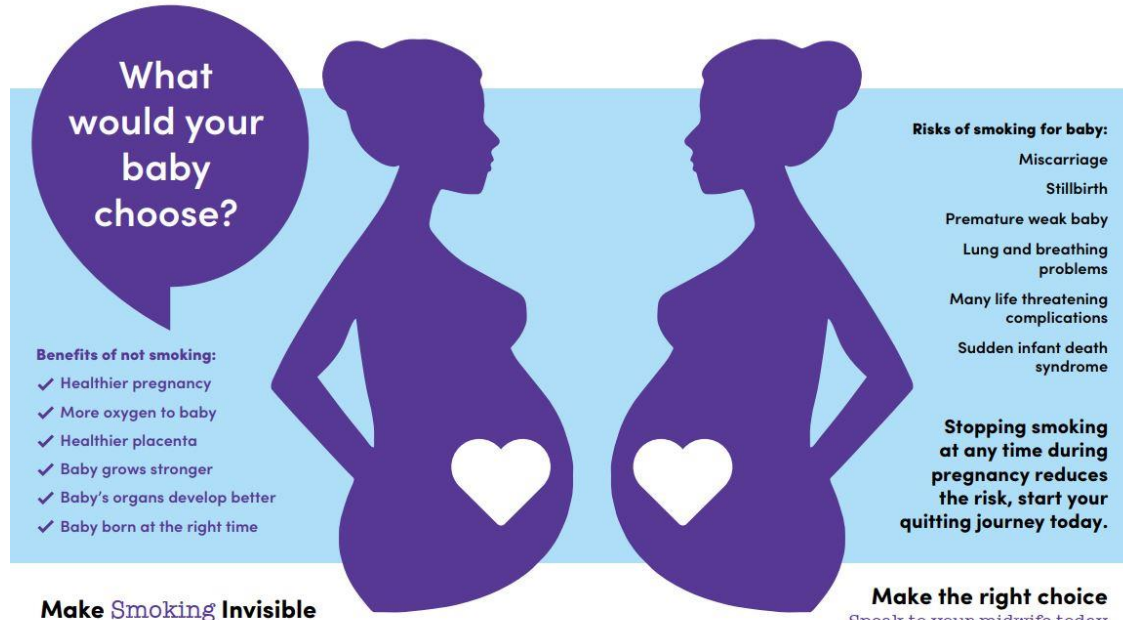
- As a Maternity Stop Smoking Service we have just secured funding for a further 5 years
- Continuity of care pathway – the team are trained to advisor level
- Planned scans for smokers 'Saving Babies Lives V2'



Hospital QUIT campaign



Floor Splats



What would your baby choose?

Benefits of not smoking:

- ✓ Healthier pregnancy
- ✓ More oxygen to baby
- ✓ Healthier placenta
- ✓ Baby grows stronger
- ✓ Baby's organs develop better
- ✓ Baby born at the right time


Risks of smoking for baby:

- Miscarriage
- Stillbirth
- Premature weak baby
- Lung and breathing problems
- Many life threatening complications
- Sudden infant death syndrome

Stopping smoking at any time during pregnancy reduces the risk, start your quitting journey today.

Make Smoking Invisible

Make the right choice
Speak to your midwife today



Quitting Smoking in Pregnancy

Start your quit today

You are 4 times more likely to quit with treatment and support

BUT stopping at any time reduces the risks

Smokefree mum and baby

Risks of smoking for baby:

- Miscarriage
- Stillbirth
- Premature weak baby
- Lung and breathing problems
- Many life threatening complications
- Sudden infant death syndrome

Quitting can be hard but we can help you

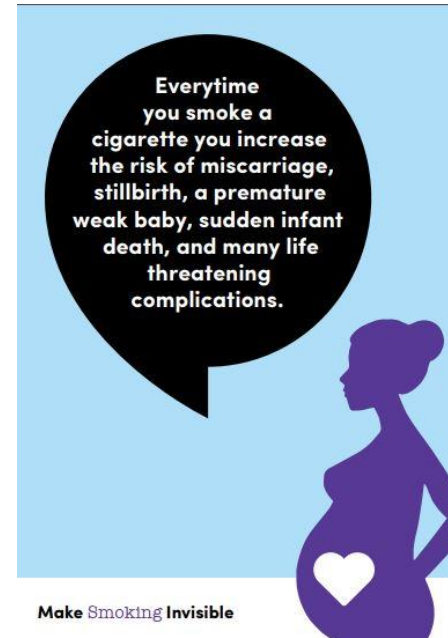
Benefits of not smoking:

- ✓ Healthier pregnancy
- ✓ More oxygen to baby
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- ✓ Baby grows stronger
- ✓ Baby's organs develop better
- ✓ Baby born at the right time

Make the right choice, speak to your midwife today

Make Smoking Invisible

Stopping smoking will help both you and your baby immediately. Harmful gases, such as carbon monoxide, and other damaging chemicals will clear from your body.



Everytime you smoke a cigarette you increase the risk of miscarriage, stillbirth, a premature weak baby, sudden infant death, and many life threatening complications.

Make Smoking Invisible

Safe Sleeping

 **Healthy Mum Healthy Baby**
Maternity Stop Smoking Team

Barnsley Hospital 
NHS Foundation Trust

Protect Your Baby

- Give your baby the best start in life: **QUIT** smoking
- Ensure your home and car are smoke free
- Reduce the risk of sudden infant death by following safe sleep advice




sleepsafe

The Maternity Stop Smoking Team would like to offer you support and treatment.
Call us today on 01226 431621
or email maternity.stopsmoking@nhs.net



Safer sleep for babies

Things you can do

- ✓ Always place your baby on their back to sleep
- ✓ Keep your baby smoke free during pregnancy and after birth
- ✓ Place your baby to sleep in a separate cot or Moses basket in the same room as you for the first 6 months
- ✓ Breastfeed your baby
- ✓ Use a firm, flat, waterproof mattress in good condition



Things to avoid

- ✗ Never sleep on a sofa or in an armchair with your baby
- ✗ Don't sleep in the same bed as your baby if you smoke, drink or take drugs or if your baby was born prematurely or was of low birth weight
- ✗ Avoid letting your baby get too hot
- ✗ Don't cover your baby's face or head while sleeping or use loose bedding

You should follow the advice for all naps, not just for night time sleep

Sudden Infant Death Syndrome (SIDS) is the sudden and unexpected death of a baby for no obvious reason and although we don't yet know how to completely prevent SIDS, it is possible to significantly lower the chances of it happening by following the advice.

Some parents choose to share a bed with their baby; this can be dangerous. Information on safer co-sleeping is available to help you make an informed decision.

You can also talk to your midwife or health visitor if you have any questions or concerns or get in touch with us
Email: info@lullabytrust.org.uk
Telephone: 0808 802 6869
Website: www.lullabytrust.org.uk

Thank you

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