

Reducing Stillbirth in Leeds - Working as a Multidisciplinary Team

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On behalf of Maternity Services, Leeds Teaching Hospitals NHS Trust

Background - Where We Were

- Leeds Teaching Hospitals is a tertiary unit over two geographical sites – Approximately 10,000 births a year - Diverse population - Regional fetal medicine unit – Level 3 Neonatal unit
- In 2012 we were identified as an outlier in relation to perinatal mortality with an increased stillbirth rate of 7.24:1000* (* denominator = all babies born >24+0 weeks gestation excluding terminations of pregnancy)
- Increased rate of stillbirth during Oct, Nov and Dec 2012
- 9 Intrapartum stillbirth cases reported in 2012 (16% of all stillbirth)
- 2012 - 9 cases of stillbirth at 40 weeks or over (16%) – including 3 Intrapartum stillbirths at 41 weeks gestation and over

Aims

- To identify themes and recurring trends
- To implement recommendations and actions to support reduction in stillbirth

Methods Used - What We Applied

- Multidisciplinary retrospective case note review of all Intrapartum stillbirth and all antepartum stillbirth over 34+0 weeks gestation in 2012 – to identify themes, trends and recommendations for practice
 - Total 55 cases / 29 met the criteria / 4 further cases excluded (expected poor outcomes) / 25 case notes requested / 22 cases reviewed (4 x Intrapartum / 18 x Antepartum). Demographic data also collated
- Triennium review and overview of all 177 cases of stillbirth in 2010 / 2011 / 2012 – rates per year / stillbirth by ethnicity / Age / Postcode / demographics such as BMI, smoking status, parity, gestation at delivery
- Development of the Women's CSU Stillbirth Database – continuous rolling data collection and review of all stillbirth cases: demographics, critical review of antenatal and intrapartum care, Post Mortem results, Bereavement care

Findings - What We Identified

- Higher number of unidentified small for gestational age (SGA) babies
- Women with ethnicity of Pakistani, Black African, Bangladeshi, any other black background were found to have an increased risk of stillbirth
- Reduced Fetal Movements - Inconsistent information giving and documentation
- Smoking in pregnancy
- Several post dates stillbirths (Local guidance - admission at 42+0 weeks gestation for post dates admission)
- Increased rate of teenage pregnancy in 2012 (n=9)
- Inconsistent management of women with static fundal height measurements
- 'Looking at the whole picture' – women who had attended ANDU and MAC on several occasions - stepping back and identifying maternal and fetal warnings/ changes - inconsistent information and advice
- Lack of clarity around fetal monitoring during latent phase of labour on antenatal ward

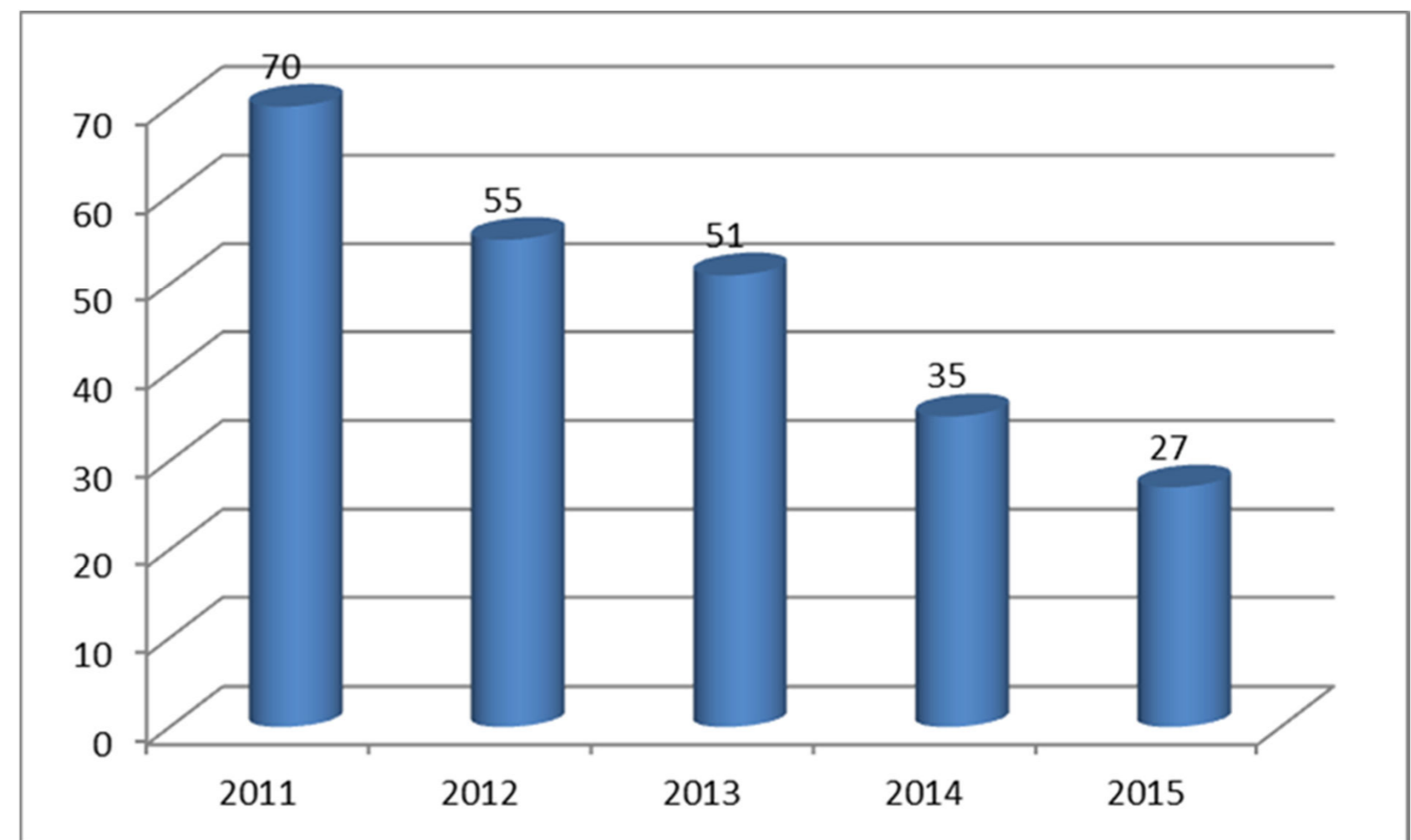
Interventions & Actions - What We Did

- Introduction of customised growth charts (late 2012)
- Fundal height training for all staff
- Adoption of RCOG SGA guideline - focus on both early and late onset growth restriction
- Change to the post dates induction gestation to offer IOL from 41 weeks in keeping with NICE
- MAC Triage work including flowcharts / MAC proforma adapted
- MAC / ANDU stamp to be used in the hand held notes at each MAC / ANDU attendance
- Better networking and sharing locally and regionally
- Review of all teenage pregnancy - findings showed no issues in the care pathway - 2012 was a year with a high number but this returned to low the next year
- Introducing an 'opt out' rather than 'opt in' to smoking cessation support - CO Monitoring introduced 2013
- Introduction of regular multidisciplinary review of all stillbirth - applying the NPSA toolkit to all intrapartum and antepartum stillbirth (excluding expected poor outcomes)
- Reduced fetal movement leaflet for all women

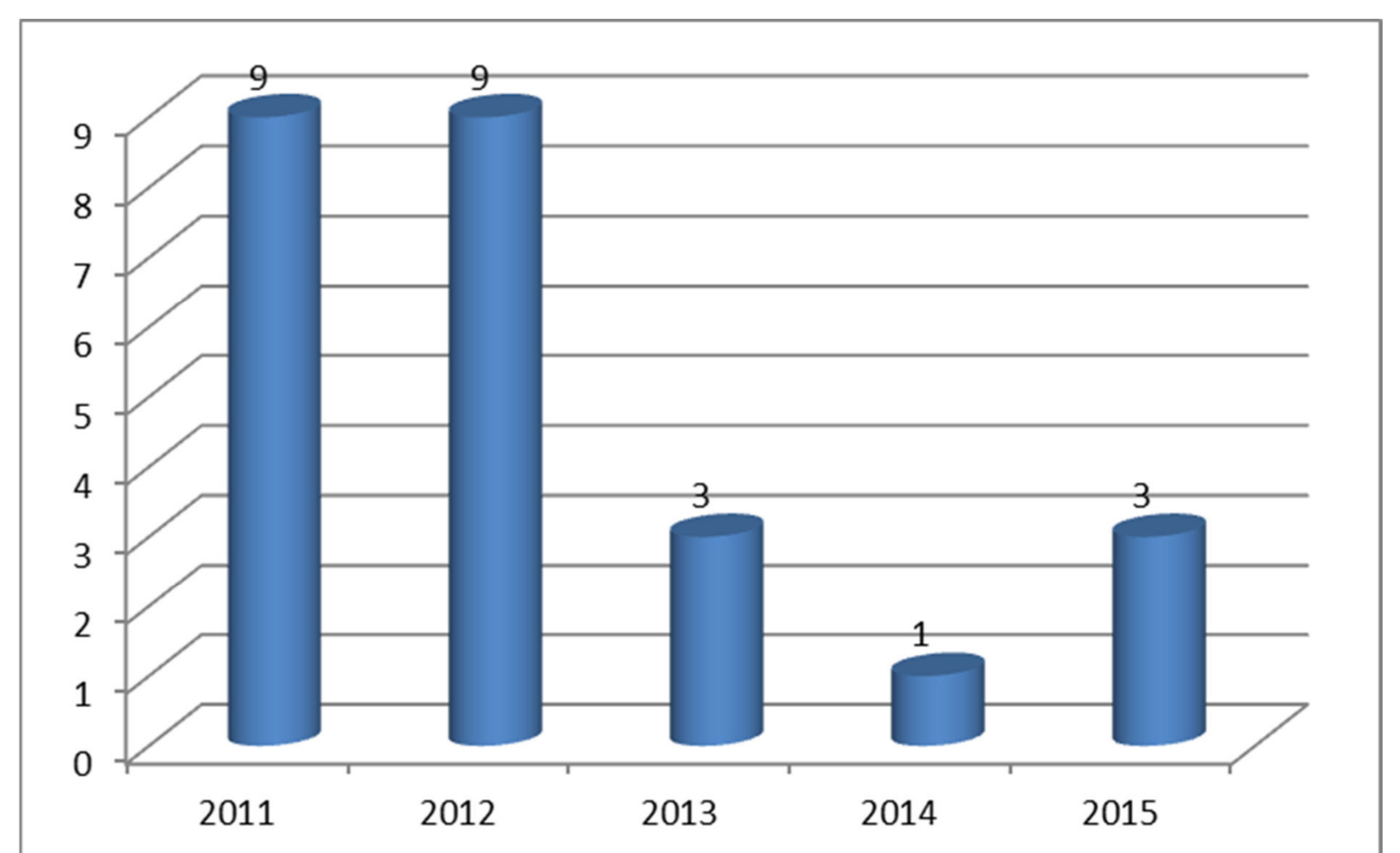
Intrapartum Care - Actions

- 'Taking the numbers out' - Changes to the latent phase of labour / active labour definitions and management looking at cervical changes and contraction pattern. Focus on the woman's perceptions and choices
- All core midwifery and medical staff attended CTG Masterclass
- Reinforce fresh eyes/"buddying"
- Coordinator supernumerary

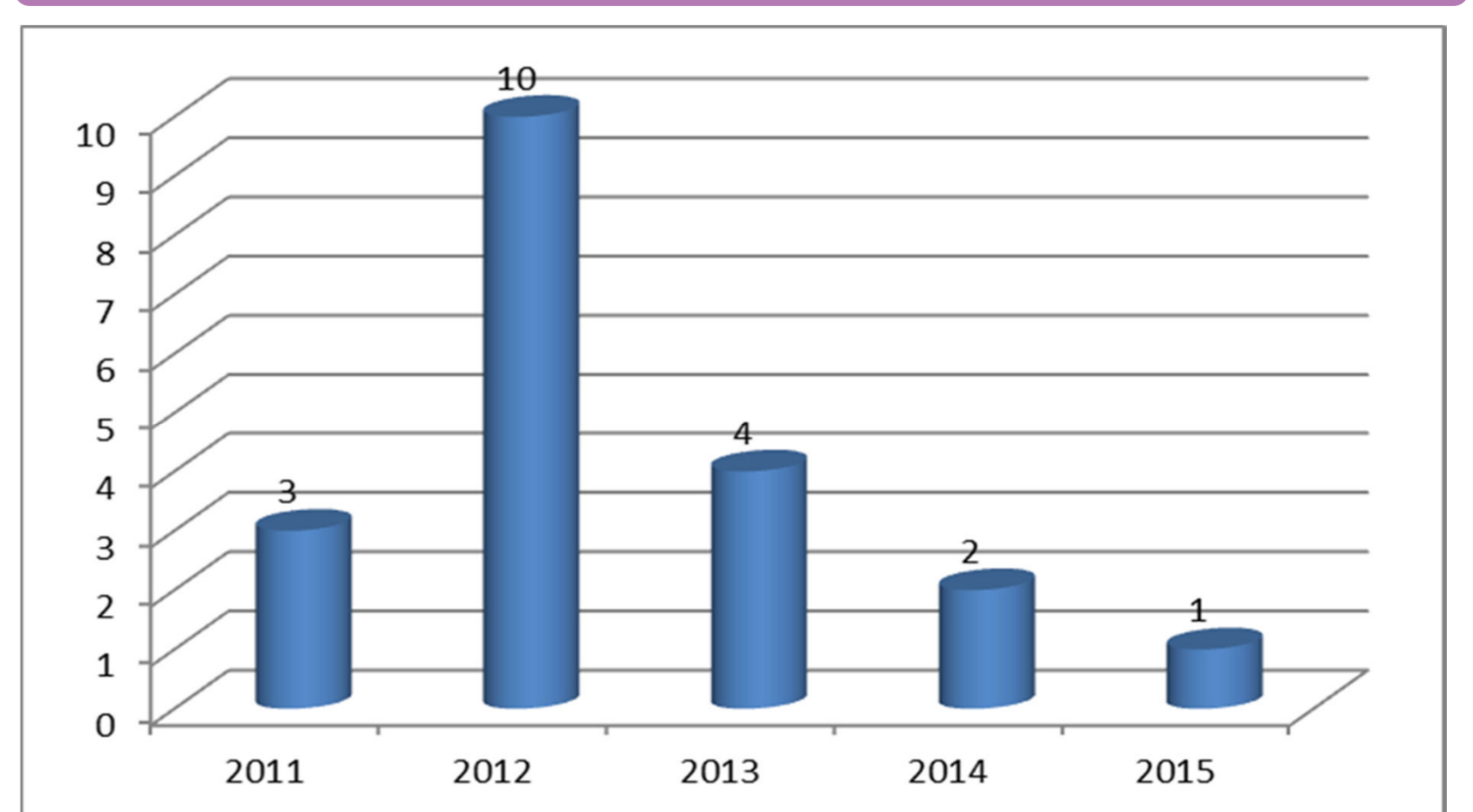
60% Reduction in Total Stillbirth over 5 Years



Total Intrapartum Stillbirth over 5 Years



Total Teenage Stillbirth over 5 Years



The Way Forward

- Continuous multidisciplinary review including perinatal pathologist
- Growth scans for smokers
- Improve access to smoking cessation
- Development and introduction of CTG training including human factor training
- Bereavement midwife to focus on postnatal care and support

Year	Total babies born *	Total Stillbirth	Stillbirth Rate (total) +	Stillbirth Rate (adjusted) -	Antepartum	Intrapartum	TOPs
2011	9671	70	7.24 : 1000	unknown	61	9 (Unknown)	6
2012	10071	56	5.56 : 1000	4.77 : 1000	46	8 (4 Expected)	0
2013	9827	53	5.39 : 1000	4.27 : 1000	50	3 (2 Expected)	4
2014	9850	35	3.55 : 1000	2.64 : 1000	34	1 (1 Expected)	3
2015	9860	27	2.74 : 1000	2.13 : 1000	24	3 (1 Expected)	6

* Total babies born per year ≥24+0 weeks gestation, excluding terminations of pregnancy
+ Rate per thousand babies born including expected poor outcomes and excluding TOP
- Rate per thousand babies born excluding expected poor outcomes and TOP