

**Objectives**

(1) To establish a cost consequence evaluation following introduction of routine use of carbetocin for all Caesarean Sections (CS) at Southmead Hospital.

**Methods** Following routine introduction of carbetocin for all CS (elective and emergency) at Southmead Hospital in April 2012 we have demonstrated a reduction in theatre recovery time and also need for additional 3<sup>rd</sup> stage management compared with historical data from pre-carbetocin (Abstract No: PL.16).

We have economically modelled the financial cost of introducing carbetocin, using estimated costs as indicated (table 1).

**Conclusion** Using real life data following routine introduction of carbetocin, economic modelling demonstrates only a small increase in drug cost per patient (carbetocin £7.78 v syntocinon £6.37). In addition reduced theatre recovery time has potential midwifery staffing cost efficiencies of up to £189,000 pa.

**PL.20 PERINEAL ASSESSMENT AND REPAIR E-LEARNING SYSTEM (EPEARLS): AN E-LEARNING TRAINING PACKAGE TO IMPROVE CLINICAL MANAGEMENT OF PERINEAL TRAUMA FOLLOWING CHILDBIRTH**

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**Background** Birth related perineal trauma can have a major impact on women's health. The correct assessment and repair of perineal injuries are procedures that require knowledge and skill. Currently, there is no agreement as to what constitutes an effective training programme. We produced and tested an interactive distance learning multi-professional training package called ePEARLS. This was developed as a tool for the delivery and assessment of perineal repair training in line with UK evidence based practise.

**Methods** The main aim of this project was to develop, refine and assess ePEARLS as a tool for the assimilation of knowledge and skill to clinicians involved in Intrapartum care. Using pre and post-training

objective assessments for both knowledge and skill, we compared the effect of delivering training using ePEARLS compared to other training models in three independent multi-professional groups from three different maternity units.

**Results** Thirty-eight participants were involved in the study. Improvements in knowledge scores were marginally significant in all three groups. However, more marked improvements in skill scores were noted in response to the different training models.

**Conclusion** ePEARLS is the first multi-professional interactive perineal trauma management e-learning package that has been formally tested against other training models. The potential cost effectiveness of this package makes it far superior to other methods of delivering training and maintaining competency.

**PL.21 DELIVERY OUTCOMES FOR NULLIPAROUS WOMEN AT THE EXTREMES OF MATERNAL AGE – A COHORT STUDY**

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**Objective** To examine the associations between extremes of maternal age (≤ 17 years or ≥ 40 years) and delivery outcomes.

**Design** Retrospective cohort study.

**Setting** Urban maternity hospital in Ireland.

**Population** A total of 36,916 nulliparous women with singleton pregnancies who delivered between 2000 and 2011.

**Methods** The study population was subdivided into five maternal age groups based on age at first booking visit: ≤ 17 years, 18–19 years, 20–34 years, 35–39 years and women aged ≥ 40 years. Logistic regression analyses were performed to examine the associations between extremes of maternal age and delivery outcomes, adjusting for potential confounding factors.

**Main Outcome Measures** Preterm birth, low birth weight, admission to the neonatal unit, congenital anomaly, caesarean section.

**Results** Compared to maternal age 20–34 years, age ≤ 17 years was a risk factor for preterm birth (adjOR 1.83, 95% CI 1.33–2.52). Babies born to mothers ≥ 40 years were more likely to require

Abstract PL.19 Table 1

		Carbetocin 5u	Syntocinon 5u	Unit costs	CS (pa)	Carbetocin	Syntocinon
Index costs		£7.78	£6.75		1800	£12,600	£11,950
Additional syntocinon		7.52%	39.40%	£9.78		£162.87	£338.99
40u Syntocinon infusion		4.10%	39.00%				
	Drug costs			£3.44		£247.68	£2,414.85
	TV costs (cannula infusion set/ 200ml saline)			£6.66		£483.92	£4,815.77
Syntocinon		6.78%	15.20%				
	Drug costs			£1.35		£164.27	£368.36
Maenabate		1.20%	0%				
	Drug costs			£18.2 (per 200mg)		£368.32	£1,965.60
Total annual drug costs						£14,062	£11,473
Drug cost per CS						£7.78	£6.37
Additional theatre recovery time	Band 6 M/W staff cost		£100/min	£53 per hour	40		£189,000

1: South West Obstetric Network drug cost; 2: Unit drug cost, 3: NHS supply chain unit cost, 4:PSSRU 2010 Unit Health Care cost