Abstracts for Oral Presentations ISOA Meeting November 26th 2026

Presentation 1.

Title; Audit of publicly available obstetric anaesthesia information for caesarean delivery and survey of departmental anaesthetic consent processes

Category; Audit or Quality Improvement

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Background:
Pain during caesarean delivery is the most common cause of successful litigation against obstetric anaesthesiologists (1, 2), with up to 50% of claims relating to suboptimal consent(1). Consent remains challenging, as many caesarean deliveries occur emergently or intrapartum. Caesarean deliveries account for 42.3% of births in Ireland(3), and up to half are emergencies(4, 5).This audit assesses publicly available obstetric anaesthesia information on the Dublin maternity hospital and HSE websites.

Methods:
The Dublin maternity hospital and HSE websites were reviewed for anaesthesia information on caesarean delivery. Public information pertaining to neuraxial and general anaesthesia was collated. Departments were then contacted about their anaesthetic consent process for caesarean delivery.

Results:
Caesarean anaesthesia information was often difficult to locate. Detail on spinal anaesthesia risks varied, information on general anaesthesia was scarce, and both were overshadowed by information on epidural analgesia. Risk communication ranged from exact incidences to purely descriptive language. The HSE website inaccurately states “you will not feel pain during the procedure” during caesarean delivery(6).

Conclusion:
Publicly available obstetric anaesthesia information and risk communication differ greatly across Dublin maternity hospital websites. The HSE website presents medico-legally incorrect information. Consent processes vary but may include videos, online and in-person classes, and e-leaflets/booklets. Antenatal consent may be improved by coordinating caesarean-specific information on general anaesthesia and pain during caesarean delivery.

1. McCombe K, Bogod DG. Learning from the Law. A review of 21 years of litigation for pain during caesarean section. Anaesthesia. 2018;73(2):223-30.
2. Oglesby FC, Ray AG, Shurlock T, Mitra T, Cook TM. Litigation related to anaesthesia: analysis of claims against the NHS in England 2008–2018 and comparison against previous claim patterns. Anaesthesia. 2022;77(5):527-37.
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4. Ambia J, Alderdice F, Knight M, Rowe R, Sanders J, Carson C. Short Report: International comparison of caesarean birth rates, 2020 – 2025. National Perinatal Epidemiology Unit, Nuffield Department of Women's and Reproductive Health, University of Oxford.; 2026.
5. Hospital TNM. The National Maternity Hospital Annual Report. 2025.
6. Executive HS. What happens during a caesarean 2024 [Available from: https://www2.hse.ie/pregnancy-birth/birth/caesarean-birth/what-happens/.

Presentation 2

Title; Beyond Competence: Psychological Safety as an Unmet Need in Simulation Training for Emergency Front-of-Neck Access

Category; Research

Authors; Dr Conor Murray[1], Dr Sophie Shinners[2], Dr Eihab Elshabrawy[3], Dr Robert ffrench-O'Carroll[4]

Presenter; Dr Sophie Shinners

[1-4]*National Maternity Hospital, Holles Street, Dublin, Ireland*

Background; Emergency front-of-neck access (eFONA) is a rare, high-stakes procedure required after a 'cannot intubate, cannot oxygenate' scenario. Safe execution depends not only on a trained assistant with technical competence, but on psychological safety enabling team members to speak up.

Objective; To evaluate the impact of teaching and structured simulation on anaesthetic nurses' knowledge, skills, confidence, and psychological safety in eFONA scenarios over time.

Methods; A prospective, single-centre, repeated-measures study of 12 anaesthetic nurses assessed outcomes at baseline, immediately after teaching and simulation, and at 3-month follow-up. Outcomes measured: objective knowledge (MCQ); simulation performance (checklist); subjective familiarity, confidence recognising need, confidence assisting, and likelihood to prompt (Likert scales); and subjective psychological safety (Edmondson's scale, range 7–35).

Results; Objective knowledge rose from 69% pre-intervention to 83% post-intervention, and was sustained at 82% at follow-up. Simulation performance improved from 56% to 90% immediately post-intervention, but declined to 78% at follow-up. Subjective confidence and familiarity scores increased and were maintained at follow-up. Psychological safety scale scores remained essentially unchanged throughout (median 26 pre-intervention, 28 post-intervention, 26 follow-up; indicating moderate psychological safety).

Conclusion; Teaching and simulation improved knowledge, skills, and confidence. Self-reported confidence in assisting with eFONA was sustained, despite declining objective simulation performance, suggesting a possible confidence-competence gap. Subjective psychological safety did not meaningfully change, indicating the need for specific engagement with staff around factors that enhance or reduce psychological safety as part of structured training. Improvements in this domain could empower staff to not only apply their knowledge and speak up in practice, but also voice concerns around competence and seek further training and support if needed.

Presentation 3

Title; Construct Validity of a Proficiency-Based Training Metric for Handover in Emergency Caesarean Delivery

Category; Research

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Presenter; Dr Saboor Ahmed

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Background: Effective handover is essential for safe and timely emergency caesarean delivery. Proficiency-based training (PBT) methodology has been shown to reduce errors when compared to conventional simulation.[1] Use of PBT requires valid assessment metrics that can distinguish different levels of performance. This study aimed to evaluate the construct validity of a previously developed metric (figure 1) for use in emergency caesarean delivery handover.

Methods: Following ethical approval, medical students without previous qualifications in other healthcare professions were recruited as novices. Clinical experts included anaesthesiologists, obstetricians and senior midwives with relevant clinical experience and recent information on the national ISBAR handover framework. Participants received standardised clinical information about a fictitious patient requiring emergency caesarean delivery, reviewed the information for 15 minutes and recorded a simulated telephone handover. Two independent researchers scored each recording using the sender metric, with a third researcher consulted when scoring was uncertain. Group scores were compared using the Mann–Whitney U test. Results are reported as median and interquartile range (IQR).

Results: Thirteen novices and 12 experts participated. Experts achieved higher sender metric scores than novices (median 13.5, IQR 11.75–16.25, versus 11, IQR 9–13; $p = 0.04$). No expert scored below 10 points, although only three scored above 17. Recording duration did not differ significantly between groups (115 seconds for novices versus 93 seconds for experts; $p = 0.14$). Both groups showed low completion of recommendation-related items. Identification-related omissions were also observed, particularly failure to identify the recipient of the call and their professional role.

Conclusions: The metric demonstrated evidence of construct validity by discriminating between novice participants and experienced clinicians. However, the overlap in scores and omissions in recommendation-related behaviours indicate that further evaluation is needed in these areas.

ISBAR3 – Emergency CS Metric – Anaesthetic + theatre notification

An error will be awarded for ***each missed step*** in the performance, **and** for each specifically identified error item.

ISBAR3	Item	Step	Error (if unticked)	SE (if unticked)
I	Identifies self. (First Name or Surname)			
I	Identifies own role.			
I	Identifies recipient of phonecall. (First name or Surname)			
I	Identifies recipient role.			
I	Identifies patient. First name and Surname			
I	States Location of patient.			
I	Completes Identification steps before proceeding to Situation.			
S	States the situation, including: "Emergency caesarean section"			
S	States Lucas category of caesarean section			
S	States indication for caesarean section			
S	Completes Situation steps before proceeding to Background.			
B	Provides ***relevant*** obstetric history			
B	Provides ***relevant*** medical history			
B	Provides ***relevant*** surgical history			
B	Provides relevant medication history (oxytocin, anticoagulants, PET treatment, Insulin, Allergies)			
B	Includes information about labour analgesia. (presence or absence of epidural)			
B	Completes Background steps before proceeding to confirm details with recipient.			
R1	Closes communication loop (seeks confirmation of details from recipient)			
R2	States any tasks outstanding before transfer to OT			
R2	Provides estimate of when patient will be ready for OT			
R3	Seeks information about readiness of theatre (consider requesting emergency theatre)			
R3	Provides opportunity for recipient to ask questions or give recommendations.			

Figure 1; Emergency Caesarean section Sender Metric

1. Mazzone E, Puliatti S, Amato M, et al. A Systematic Review and Meta-analysis on the Impact of Proficiency-based Progression Simulation Training on Performance Outcomes. *Annals of Surgery*. 2020/12/22 2021;274(2):281–289. doi:10.1097/SLA.0000000000004650

Presentation 4

Title; General anaesthesia for emergency caesarean delivery: A secondary analysis of prospective collected data according to the Intrapartum Caesarean Delivery Classification System (ICDCS)

Category; Research

Authors; Dr Marc Lincoln,[1] Dr Augusto Rolle,[2] Dr Robert ffrench-O'Carroll[3]

Presenter; Dr Marc Lincoln

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Background: General anaesthesia (GA) for caesarean delivery (CD) may be associated with adverse neonatal outcomes, although distinguishing the effects of anaesthetic technique from those of the underlying obstetric indication remains challenging. The Intrapartum Caesarean Delivery Classification System (ICDCS) is a means to classify CD according to indication (Figure 1).[1,2] This study aimed to describe GA use according to the ICDCS and assess its association with short-term neonatal outcomes.

Methods: A secondary analysis of prospectively collected data including 10,010 CDs was conducted between 2022-2025. GA incidence was analysed across ICDCS groups. Neonatal outcomes were 5-min Apgar scores and neonatal intensive care unit (NICU) admission exceeding one day. Multivariable logistic regression and propensity score matching were used to assess associations between anaesthetic technique and neonatal outcomes while accounting for relevant clinical and obstetric factors.

Results: GA was used in 311 (3.1%) CDs. Its incidence differed significantly across ICDCS groups ($p<0.001$), reaching 10.7% in cases involving fetal indications without oxytocin use, compared with approximately 2–4% in other groups. Among 297 matched pairs, GA was significantly associated with 5-min Apgar scores below 7 (odds ratio [OR] 3.89, 95% confidence interval [CI] 1.86–8.09). The association between GA and NICU stay exceeding one day was not statistically significant (OR 1.50, 95% CI 0.988–2.32).

Conclusion: GA use varied according to the indication for intrapartum caesarean delivery and was associated with lower Apgar scores after propensity score matching. These findings highlight the importance of considering obstetric indications and clinical urgency when evaluating neonatal outcomes and support structured classification systems in obstetric anaesthesia audit and quality improvement.

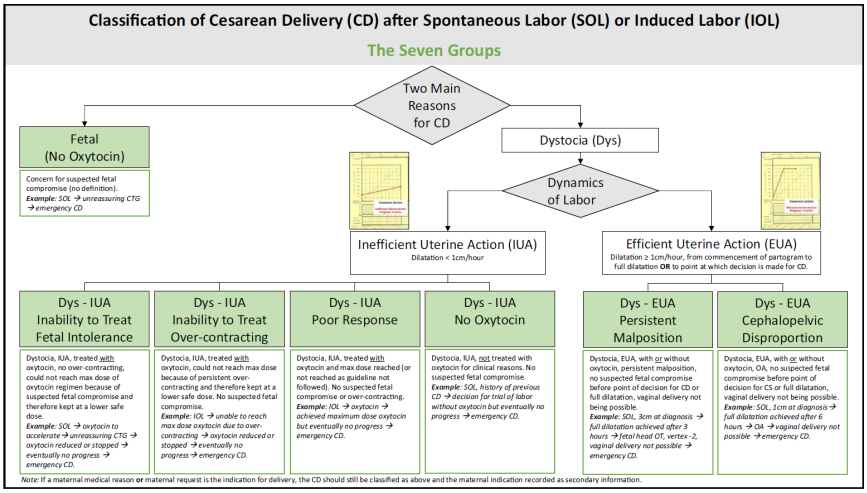

Figure 1. Schematic view of the Intrapartum caesarean delivery classification system

1. Robson M, Corbett GA, Kessler J, et al. An Intrapartum Cesarean Delivery Classification System; a prospective eighteen year longitudinal cohort study. *Am J Obstet Gynecol*. 2026;233(6):S616–S626.e8. doi:10.1016/j.ajog.2025.01.033

2. Kessler J, Tappert C, Rossen J, Macsali F, Robson M. Implementation of the Intrapartum Cesarean Delivery Classification System: a prospective observational study. *Am J Obstet Gynecol*. 2026;233(6):S627–S629.e2. doi:10.1016/j.ajog.2025.02.042

Presentation 5

Title; Breakthrough Pain and Rescue Top-ups Predict Labour Epidural Failure at Intrapartum Caesarean Delivery: A Retrospective Audit

Category; Audit or Quality Improvement

Authors; Dr Gareth Stephan Stott, Dr Syeda Farwa Zaidi, Dr Thomas Drew

Presenter; Dr Gareth Stephan Stott

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Background: Failed extension of labour epidural analgesia exposes women to intraoperative pain and risk of general anaesthesia (GA), with reported GA rates of 6–7.8% [1,2]. The RCoA and ESAIC recommend structured guidance for managing inadequate regional anaesthesia [3,4]. This retrospective review evaluated practice at the Rotunda Hospital.

Methods: Records of 89 women with labour neuraxial analgesia who underwent caesarean delivery in August 2026 were reviewed. The primary outcome was epidural failure, defined as intraoperative pain, intravenous supplementation, or conversion to spinal anaesthesia or GA. Women without a catheter, or with category 1 GA without a top-up attempt, were excluded.

Results: Fourteen of 86 women (16.3%; 95% CI 10.0–25.5%) experienced epidural failure. Nine (10.5%) converted to GA, exceeding the 5% reported by Bauer et al. [5] (p = 0.04) but not the 6% pooled estimate (p = 0.10) (Figure 1). Breakthrough pain, rescue top-ups and catheter resiting or withdrawal each conferred a three- to fourfold risk of failure (Table 1). The association with breakthrough pain persisted after adjustment for epidural duration (OR 5.08, 95% CI 1.25–20.6). Six failures (43%) had no preceding warning; four were category 1 or sited <2 h before delivery. A block test was documented after 56% of rescue top-ups. Out-of-hours insertion (p=1.0), BMI (p=0.54), induction of labour (p=0.48) or a CSE technique (p=0.58) were not associated with failure.

Conclusions: One in six labour epidurals failed at caesarean. Breakthrough pain and rescue top-ups identified women at threefold risk. Rescue top-ups should trigger structured block assessment and consideration of early catheter replacement.

Table 1. Labour factors and epidural failure at caesarean delivery (n = 86). Fisher exact test; risk ratios with 95% CI.

Labour factor	Failure if present, n/N (%)	Failure if absent, n/N (%)	Risk ratio (95% CI)	p
Breakthrough pain in labour	8/24 (33.3)	6/62 (9.7)	3.44 (1.33–8.89)	0.018*
Rescue top-up in labour	6/17 (35.3)	8/69 (11.6)	3.04 (1.22–7.61)	0.028*
Two or more rescue top-ups	2/4 (50.0)	12/82 (14.6)	3.42 (1.13–10.4)	0.12
Catheter resited or withdrawn	4/8 (50.0)	10/78 (12.8)	3.90 (1.58–9.62)	0.022*

Presentation 6

Title; Compliance with antibiotic redosing after major haemorrhage at caesarean section: a single-centre audit

Category; Audit and Quality Improvement

Authors; Aldo Francis[1], Dr Marc Lincoln[2], Dr Thomas McGimsey[2], Dr Ingrid Browne[2], Dr Robert Ffrench-O'Carroll[2,3]

Presenter; Aldo Francis

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Background: NICE recommends prophylactic antibiotics before skin incision for all caesarean births (1), and UK surgical prophylaxis guidance advises a second dose when estimated blood loss (EBL) exceeds 1,500 mL (2). This is reflected in our hospital's antibiotic guideline, and a prompt on the intraoperative record asks clinicians to confirm a second dose once EBL exceeds 1,500mL. We audited compliance with this standard at the National Maternity Hospital, Dublin.

Methods: We did a retrospective review of all caesarean deliveries with EBL >1,500 mL between November 2024 and December 2025. The primary outcome was administration of a second prophylactic antibiotic dose. Secondary outcomes were concordance between the prompt response and the antibiotic actually given, and postoperative surgical site infection (SSI).

Results: We included 91 women. Mean age was 35.3 years and median EBL was 1,840 mL (IQR 1,637–2,300). 52 deliveries (57%) were pre-labour and 39 (43%) were intrapartum. Despite the prompt, only 31 of 91 women (34.1%) received a second dose. Compliance remained below 50% at all levels of blood loss (1,500–1,999 mL: 25.9%; 2,000–2,999 mL: 50.0%; ≥3,000 mL: 44.4%). Rates were similar for pre-labour (34.6%) and intrapartum (33.3%) sections. The prompt response matched the antibiotic actually given in 85 of 91 cases (93.4%). There were 4 redoses where the prompt was not completed and 2 where a redose was recorded but not given. SSI occurred in 5 women (5.5%): 2 of 31 who were redosed and 3 of 60 who were not (p=1.0). The audit was not powered for this outcome.

Conclusion: Even with a dedicated prompt in place, two-thirds of women with major obstetric haemorrhage at caesarean did not receive guideline-recommended antibiotic redosing. Options include a hard-stop prompt requiring a reason when the dose is not given, a verbal cue at the 1.5 L threshold during haemorrhage management, and targeted education for anaesthetic and obstetric staff, followed by a re-audit. The poor compliance despite the prompt may partly reflect its recent introduction, and we will re-audit the most recent 12 months to assess whether compliance has improved.

References

1. National Institute for Health and Care Excellence. Caesarean birth (NICE guideline NG192). London: NICE; 2021.
2. Scottish Antimicrobial Prescribing Group. Good practice recommendations for re-dosing antibiotics for surgical prophylaxis in adults. SAPG; 2022.