Theatre Laminates Project

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Introduction

- The 2021 RCoA Curriculum introduced the concept of "entrustment levels of supervision"
- These are a key standard for each supervised learning event (SLE)
- There is confusion and disagreement amongst learners and supervisors when completing SLEs

Question

Do visual aids in the theatre workplace facilitate completion of SLEs?

Project Objectives

- To identify both learner and supervisor **perspectives** on SLE completion
- To develop and promote theatre laminates which suggest **key capabilities** relevant to specific theatre lists
- To develop and promote **positive educational relationships** to improve curriculum comprehension and satisfactory SLE completion

See examples of theatre laminates (figure1; page 3)

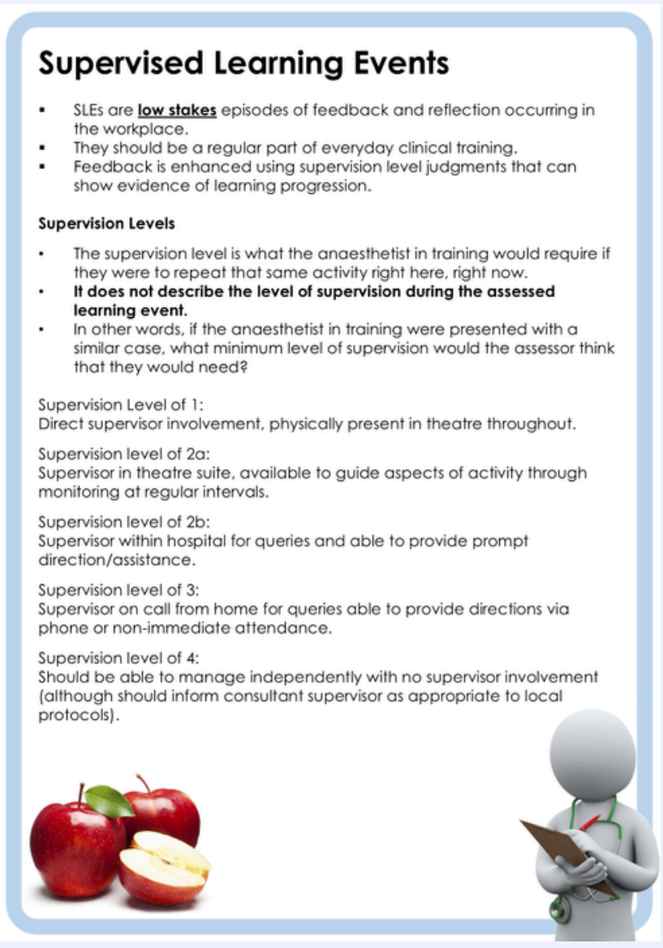


Figure 1: Laminated poster of supervision levels

Method

1. Initial survey to establish perspectives and experiences regarding SLE completion
2. Roll out of theatre laminates and presentation at departmental governance meeting
3. Repeat survey

Participants

- **Learners**: all resident doctors who use the Lifelong Learning Platform
- **Supervisors**: all supervising doctors (Consultants and Specialty/Specialist Doctors)

Survey Questions

- Establishing learning needs
- Requesting SLEs
- Establishing supervision level
- Disagreement with supervision levels given

Result & Discussion *See survey results (page 2)*

Planning

The majority of supervisors (70%) reported discussing **learning needs** at the beginning of the shift always or most of the time, which did not change after our implementation. Learners reported this less often.

Requesting **SLE completion** at the beginning of the shift was reported less frequently (11-30%) across both groups. This may reflect the dynamic nature of theatre workloads offering various opportunities.

We improved **establishment of supervision levels** when requesting SLE assessments from 23% to 59% amongst learners.

Disparity with given supervision level

>95% of learners had **disagreement** with supervision levels for SLEs, compared with 35% of supervisors. This has not changed with our implementation. This discrepancy is echoed in the free text comments - there is frustration within both groups.

Challenges Identified

- Feedback from some learners expressed **frustration** at the curriculum structure and assessment process itself
- Major **discrepancies** identified between learners and supervisors on their experience with SLEs
- The **educational relationship** will take time and effort to build: challenging with the rotational nature of training

Recommendations

- Ongoing communication, education, and reminders to both groups is required
- Supervisors and learners should have **open dialogues** regarding learning needs and assessment criteria
- Our theatre laminates detail how SLEs can be used to obtain **key capabilities** linked within the curriculum: they are easy-to-use frameworks to guide assessments

Conclusion

- Visual aids in the form of laminated theatre posters can prompt learning opportunities between learners and supervisors
- Mutually satisfactory completion of SLEs requires ongoing communication and discussion

References

Walwyn, S. et al. Trainees requiring extra support. *BJA Education*, Vol 22, Issue 2, 67 - 74

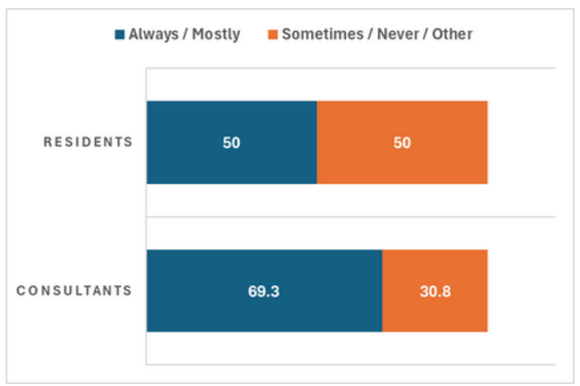
Hodgson, T et al. You are in charge now: exploration of educational relationships between anaesthetic trainees and their supervising specialists. *BJA Open*, Vol 6, 100137

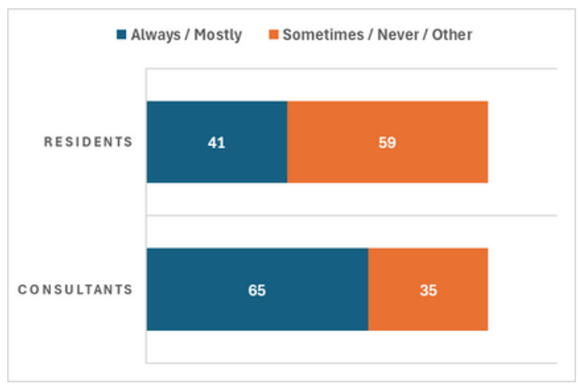
QR code link to full set of posters

Acknowledgements: Special thanks to **Dr Martin Minich** (Training Programme Director of WSOA) created and developed all theatre laminates to complement the full 2021 Anaesthetic Curriculum

Survey Results

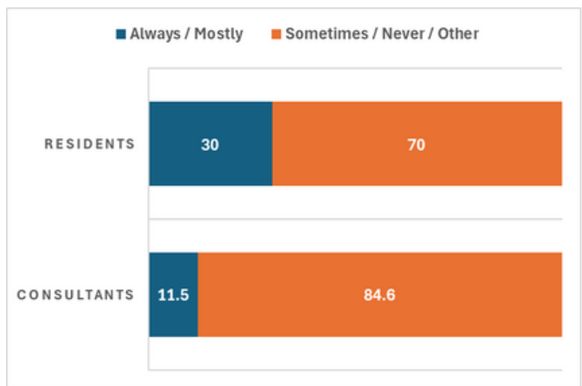
How often do you establish learning needs with your supervisor/learner at the beginning of theatre list/shift?

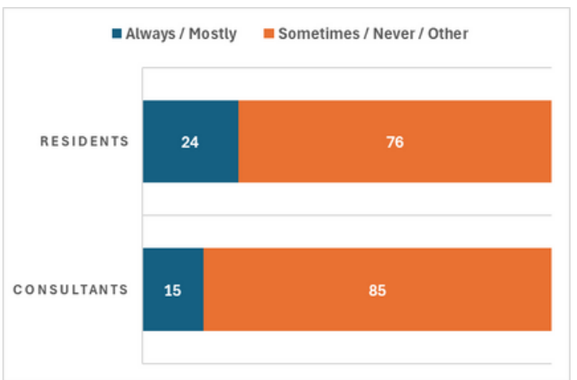




Pre-intervention -----> Post-intervention

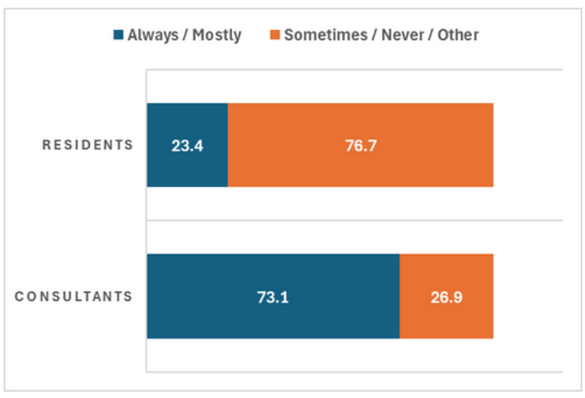
How often do you request /receive request for completion of an SLE at the beginning of the theatre list/shift?

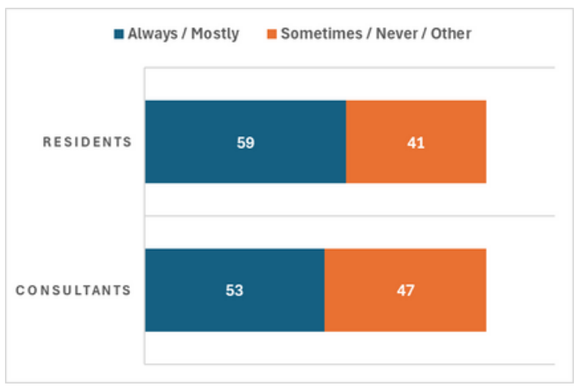




Pre-intervention -----> Post-intervention

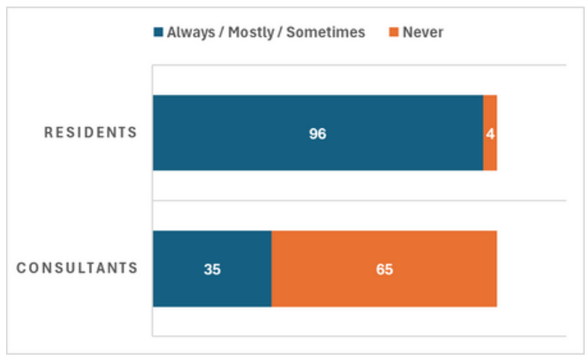
If requesting for an SLE, how often do you establish what supervision level you are likely to give/receive?

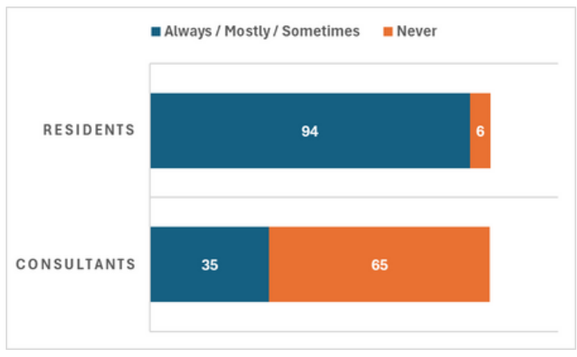




Pre-intervention -----> Post-intervention

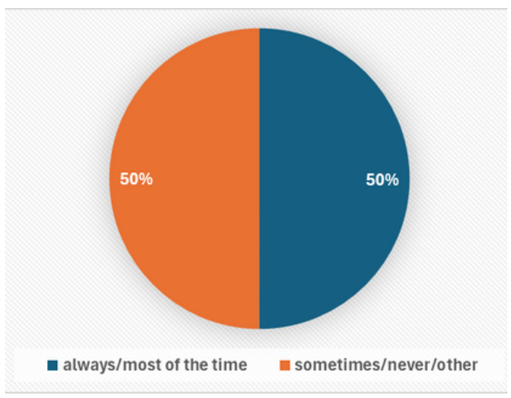
After completion of an SLE, how often is there disagreement on the supervision level?

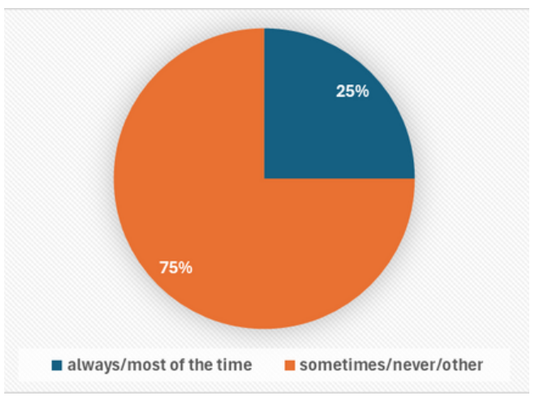




Pre-intervention -----> Post-intervention

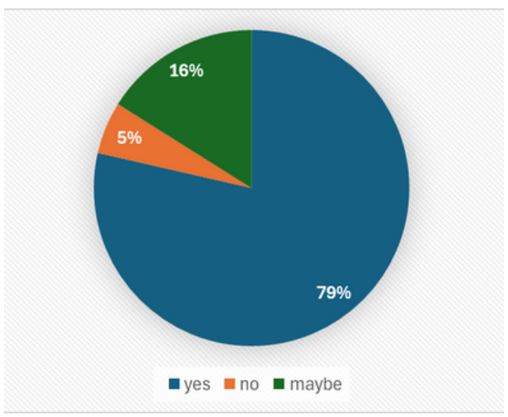
How confident are you of the HALO requirements for each of the Stages (1,2,3) of the curriculum?

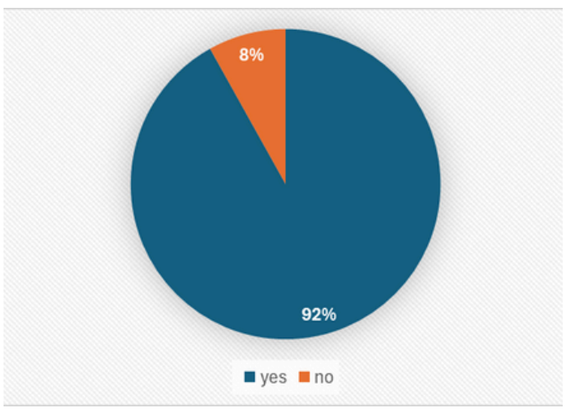




Pre-intervention -----> Post-intervention

Perception of laminated guides positively facilitating training assessments





Pre-intervention -----> Post-intervention

Learners

"Sometimes even after discussing supervision level at the time, the given level is less than discussed"

"Since consultants in teaching hospitals are also educators, I think it would be reasonable to expect that all of them are aware and comfortable with how to sign off trainees and also guide us instead the opposite"

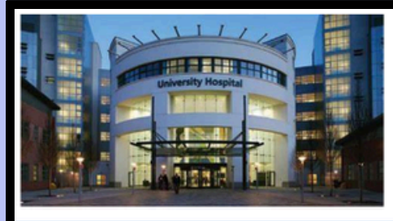
"Some consultants said that trainees can't have Level 4 because they're always being supervised."

"I think there is a hesitant/fear in the consultant body that if they sign off a level 4 supervision level that if anything goes wrong in the future by the trainee, they will get the blame."

Supervisors

"Often get SLE requests weeks after the event, difficult to sign off as I don't remember!"

Examples of Theatre Laminates for General Theatres, Paediatric Theatres and Regional Theatres



Main Theatres – Theatre 3, 4, 16, 19 and 21
General Surgical, Urology, Gynaecological and HPB Theatres

Below are examples of specific key capabilities relevant to the standard workload of these theatres.

Also consider more generic key capabilities from the curriculum along with the generic professional capabilities when deciding on the educational component of a list.

Stage One Training

General Anaesthesia Domain

H. Provides safe general anaesthesia with distant supervision for ASA 1- 3 adults undergoing non-complex elective and emergency surgery within the general theatre setting. [2b]
I. Describes the specific needs of the obese, frail and elderly patient undergoing general anaesthesia. [2b]
S. Describes the principles of total intravenous anaesthesia and uses it safely in clinical practice for non-complex cases. [2a]

Perioperative Medicine and Health Promotion Domain

B. Applies a structured approach to preoperative anaesthetic assessment of ASA 1-3 patients prior to surgery and recognises when further assessment and optimisation is required. [2b]
C. Explains the effect that co-existing disease, subsequent treatment and surgical procedure may have on the conduct of anaesthesia and plans perioperative management accordingly. [2b]
D. Explains individualised options and risks of anaesthesia and pain management to patients. [2b]
F. Recognises and acts on the specific perioperative care requirements in frail and elderly patients and those with cognitive impairment. [2b]
O. Liaises with critical care when appropriate for post–operative care. [2b]
Q. Safely prescribes and administers blood products. [3]

Stage Two Training

General Anaesthesia Domain

A. Explains the specific factors in providing safe anaesthetic care for patients at extremes of age, including neonates, children and older people with frailty, and implements these in practice. [n/a]
C. Describes the principles of intra-operative haemostasis and manages major haemorrhage. [2b]
G. Recognises, mitigates against risks and manages complications relating to patient positioning during surgery, including reference to the obese patient. [3]
K. Explains the problems associated with laparoscopic, endoscopic and open procedures, including those with major blood loss, and provides safe general anaesthesia for these procedures with distant supervision for ASA 1 to 3 adult patients. [3]
X. Uses total intravenous anaesthesia safely in all areas of clinical anaesthetic practice. [2b]

Perioperative Medicine and Health Promotion Domain

A. Delivers high quality, individualised perioperative care to ASA 1-4 patients for elective surgery and ASA 1-3 emergency patients, focusing on optimising patient experience and outcome. [3]
B. Liaises appropriately with other healthcare professionals to optimise patient care. [3]
C. Explains the principles of shared decision making. [3]
D. Makes appropriate plans to mitigate co-morbidities and their treatment in the perioperative period, with particular reference to less common cardiovascular, neurological, respiratory, endocrine, haematological and rheumatological diseases. [3]
G. Recognises when advanced physiological testing is indicated, interpreting the data to help stratify risk. [3]
O. Explains and acts on the importance of perioperative management of haematological conditions including anaemia and coagulopathy. [2b]
Q. Applies adjustments required that co-existing disease and surgical complexity have on the conduct of anaesthesia and perioperative care, including frailty, cognitive impairment and the impact of substance abuse or obesity. [2b]

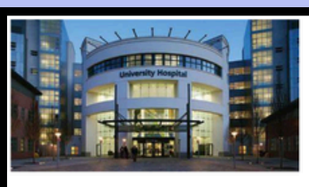
Stage Three Training

General Anaesthesia Domain

A. Provides general anaesthesia for all patients undergoing elective and emergency surgery in general settings including maternity units for common complex surgical procedures. [4]
B. Demonstrates the decision making and organisational skills required to manage operating sessions independently ensuring that the care delivered to patients is safe, effective and efficient. [4]
C. Applies understanding of co-morbidities in patients requiring general anaesthesia and delivers management strategies to offer individualised care. [4]
J. Provides safe and effective perioperative anaesthetic care to all high-risk surgical patients with significant co-morbidities and the potential for massive haemorrhage. [4]
K. Manages the anaesthetic implications of previous neurosurgery and/or intracranial pathology in patients presenting for co-incidental surgery. [3]
L. Manages the anaesthetic implications of congenital or acquired heart disease in patients presenting for co-incidental surgery including referral to a specialist centre when appropriate. [3]

Intensive Care Medicine Domain

A. Recognises the limitations of intensive care; employs appropriate admission criteria.
C. Recognises and manages the surgical patient who would benefit form pre and/or post-operative critical care.



Paediatric Anaesthesia

Paediatric cases occur across a range of specialties in several theatres at UHCW.

This theatre commonly looks after paediatric patients.

The following key capabilities should be considered when paediatric learning opportunities are available.

Stage One Triple-C in Paediatric Anaesthesia

General Anaesthesia Domain

O. Explains the principles of paediatric anaesthesia taking into account the anatomical, physiological, psychological and pharmacological differences from adults and their implications for safe anaesthetic practice.
P. Provides safe general anaesthesia for ASA 1- 2 children 5 years and over with local supervision and 10 years with distant supervision undergoing non-complex elective and emergency surgery.

Supervision level 2a for ASA 1-2 children aged 5-10.
Supervision level 2b for ASA 1-2 children aged over 10.

Perioperative Medicine and Health Promotion Domain

M. Explains the specific perioperative care requirements of children including anxiety management. [2a]

Stage Two Triple-C in Paediatric Anaesthesia

General Anaesthesia Domain

U. Provides safe general anaesthesia for ASA 1-3 children undergoing non-complex elective and emergency surgery aged 1- 5 years with direct supervision, and 5 years and above with distant supervision.
V. Explains the principles of anaesthetic care for children of all ages with complex medical problems and/or requiring complex surgical procedures.
W. Explains the principles of the general anaesthetic care of neonates.

Supervision level 2a for ASA 1-3 children aged 1-5.
Supervision level 2b for ASA 1-3 children aged over 5.

Perioperative Medicine and Health Promotion Domain

R. Demonstrates adjustments in perioperative care for children with co-morbidity.

Supervision level 2a for ASA 1-3 children aged 1-5.
Supervision level 2b for ASA 1-3 children aged 5 and over.

Stage Three Triple-C in Paediatric Anaesthesia

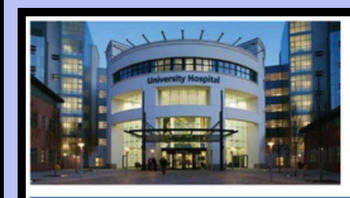
General Anaesthesia Domain

N. Provides safe anaesthetic care for common non-complex elective and emergency surgical procedures in children aged one year and over.

Supervision level 2b for children aged 1-3.
Supervision level 3 for children aged 3 and over.

O. Provides emergency anaesthetic care for paediatric patients pending inter-hospital transfer to a tertiary unit. [3]

QR code link to full set of posters - modifiable to individual Trusts



Regional Anaesthesia

Regional anaesthesia occurs across a range of specialties in several theatres at UHCW.

This theatre commonly looks after patients receiving regional anaesthetic techniques.

The following key capabilities should be considered when regional learning opportunities are available.

Stage One Regional Anaesthesia Domain

A. Explains clearly to patients the risks and benefits of regional anaesthesia. [3]
B. Describes the indications and contraindications to regional anaesthetic techniques. [3]
C. Practices measures to avoid wrong-site blocks. [3]
D. Performs spinal anaesthesia for ASA 1-3 surgical patients independently. [3]
E. Performs simple peripheral nerve blocks with ultrasound [see practical procedures grid].
F. Performs ultrasound-guided femoral or fascia iliaca blocks independently. [2b]
G. Identifies and initiates initial management of complications of regional anaesthesia including systemic local anaesthetic toxicity, high spinal and dural puncture headache. [3]
H. Provides epidural or combined spinal-epidural analgesia for labour in the ASA 1-3 obstetric patient and offers other forms of pain relief when neuraxial analgesia is contraindicated. [3]
I. Provides neuraxial anaesthesia for operative delivery and other obstetric procedures in ASA 1-3 patients and manages the inadequate neuraxial block. [3]
J. Discusses the scientific basis of ultrasound and the generation of ultrasound images. [n/a]
K. Discusses drugs and equipment used in regional anaesthesia. [n/a]

Practical Procedures Grid
[stage 1, stage 2, stage 3]

- Lumbar epidural [3, 3, 4]
- Low thoracic epidural [1, 2b, 3]
- Spinal anaesthesia [3, 3, 4]
- Combined spinal/epidural [2b, 3, 4]
- Simple peripheral nerve block [2b, 3, 4]
- Ultrasound guided chest wall plane block [2a, 3, 4]
- Ultrasound guided abdominal wall plane block [2a, 3, 4]
- Ultrasound guided lower limb block including femoral nerve block and fascia iliaca block [2a, 3, 4]
- Ultrasound guided upper limb block including brachial plexus block [2a, 3, 4]

Stage Two Regional Anaesthesia Domain

A. Performs ultrasound-guided brachial plexus blocks. [3]
B. Performs ultrasound-guided fascial plane blocks for the chest or abdominal wall. [3]
C. Demonstrates how to achieve an optimal ultrasound image and recognises common ultrasound artefact. [3]
D. Describes ophthalmic blocks for patients undergoing awake ophthalmic surgery. [n/a]
E. Involves the patient in planning and understanding potential complications of regional anaesthesia. [3]
F. Assesses when a regional technique is not appropriate. [3]
G. Manages inadequate block in the awake patient and in recovery if used as an adjunct to general anaesthesia. [3]
H. Describes the longer-term management of complications of regional anaesthesia. [3]
I. Discusses the use of regional anaesthesia in the presence of abnormalities of coagulation. [n/a]

Stage Three Regional Anaesthesia Domain

A. Tailors regional anaesthesia techniques to patients undergoing day surgery. [4]
B. Manages regional anaesthesia and analgesia safely in the perioperative period in all settings. [4]
C. Performs ultrasound-guided regional anaesthesia for the chest wall independently. [4]
D. Performs ultrasound-guided regional anaesthesia for the abdominal wall independently. [4]
E. Performs ultrasound-guided nerve blocks for lower limb surgery independently. [4]
F. Performs ultrasound-guided brachial plexus block independently. [4]

An SLE a day keeps the ARCP panel at bay

DECIDE
after team brief what the educational opportunities are on the list.

DO
the appropriate activities during the course of the list.

DISCUSS
together at the end of the session and provide feedback.

DOCUMENT
the assessment on the LLP with an appropriate reflection.

Scan the QR code to access the electronic hyperlinked version of the curriculum