Supplemental Tables.

Table S1. Curriculum themed topics, listed by rank order

Ranking	Topics	Median (IQR)	Proportion Scored ≥ 6
3	Which RA blocks should be considered as a core minimum set for all trainees? Are there benefits in teaching a subset of blocks to competency versus broader exposure to all blocks?	8 (7 – 9)	87%
5	Does a rotation through a "block room" provide better learning than programs without a block room?	8 (6.25 – 8)	82%
8	What criteria should be used to evaluate the success of an UGRA residency training curriculum?	8 (6 – 8)	82%
9	What are the necessary components of a formal structured training programme?	8 (6 – 8)	82%
22	What is the best way to teach sonoanatomy in "difficult" patients (eg. in the morbidly obese, patients with previous surgery)	7 (6 – 8)	76%
27	What is the optimum mix of lectures, workshops, courses, simulation and direct supervision required to teach RA?	7 (5.25 – 8)	74%
29	What forms of instruction or strategies provide the most effective means of improving retention of sono-anatomy?	7 (5.25 – 8)	74%
34	What are the factors promoting, and inhibiting, access to RA training?	7 (5 – 8)	66%
36	In resource poor countries, what is the best combination of textbooks, accessible online modules and videos, telemedicine, and live model scanning, to deliver a RA curriculum?	7 (4 – 8)	63%
39	What standards of teaching should we expect faculty/tutors to attain? Should we assess the assessors for quality of teaching?	6.5 (5 – 8)	71%
41	Do 'teach the teacher' courses improve the ability to provide feedback and better assessment of RA procedural skills?	6.5 (4 – 7.75)	66%
49	Does provision of an "image bank" of sonoanatomy provide better learning than live model scanning?	6 (3.25 – 7)	63%
53	Does competency-based training improve patient outcomes compared to simulation-based training?	6 (5 – 8)	63%
56	What teaching tools or methodologies can be used to improve comprehension of sono-anatomy?	6 (5 – 8)	61%
61	How can we deliver teaching and support through the use of telemedicine technology? Can it be used as a follow-up for live-hands on sessions?	6 (5 – 7)	58%
71	What is the best way to teach neuraxial sonoanatomy?	5 (3.25 – 7)	47%
72	What is the best way to teach ergonomic principles and practices necessary for performing RA blocks?	5 (3 – 7)	47%

IQR; interquartile range

Table S2. Equipment themed topics, listed by rank order

Ranking	Topics	Median (IQR)	Proportion Scored ≥ 6
48	Which areas of teaching show no difference in learning outcome using cheaper low fidelity models, versus expensive high fidelity models? In what situations does higher fidelity models confer an advantage for learning?	6 (5 – 8)	63%
60	What are the roles of lower fidelity, versus higher fidelity, simulation practice in UGRA? Are higher fidelity models most appropriate when teaching difficult/complex blocks or when teaching advanced skills?	6 (5 – 8)	58%
62	Which models offer the best compromise between face validity, construct validity, availability, and cost, for ultrasound/fluoroscopy guided neuraxial/para-axial blocks?	6 (3 – 7)	55%
64	How does the use of eye tracking technology help in teaching RA?	6 (4 – 7)	55%
67	Can the use of hand motion technology help in teaching RA?	5.5 (4.25 – 7)	50%
68	Which echogenic needle technology provides the best visibility for UGRA procedures?	5.5 (3.25 – 7)	50%
69	Which blocks, or when, is neurostimulation best used to assist location of the needle tip?	5 (2.25 – 6)	47%
74	Does electromagnetic guidance modalities (radio-frequency tracking, needle magnetic currents) assist in needle tip and shaft localisation in UGRA?	5 (3 – 6.75)	42%
75	Which of the high fidelity cadaver models (ie. Thiel, fresh frozen, Batson, formalin) offer the best compromise between face validity, construct validity, availability, and cost?	5 (4 – 7)	42%
76	Which of the low fidelity phantoms (ie. gelatine, agar, tofu) offer the best compromise between face validity, construct validity, availability, and cost?	5 (4 – 7)	42%
77	Is there a role for a progression from low fidelity to high fidelity UGRA phantoms in teaching regional anaesthesia?	5 (3 – 7)	42%
78	Does 3D/4D ultrasound assist needle tip guidance in UGRA?	5 (2.25 – 6.75)	34%
80	Which of the meat-based models (eg. pork, beef, turkey) offer the best compromise between face validity, construct validity, availability, and cost?	4 (3 – 6)	32%
81	Do rigid needle trajectory guides (clip on accessory to transducers) assist in needle tip and shaft localisation in UGRA?	4 (3 – 6)	29%
82	Does robotic assistance aid needle tip positioning for	3 (2 –	26%

	RA?	5.75)	

IQR; interquartile range

Table S3. Assessment themed topics, listed by rank order

Ranking	Topics	Median (IQR)	Proportion Scored ≥ 6
6	Is there a minimum number of blocks to attain proficiency for each block or are the skills transferable?	8 (6.25 – 8)	82%
50	How do you identify the trainee with poor coordination and fine motor control?	6 (5 – 7)	63%
51	How do we best evaluate the non-technical skills of regional anaesthesia?	6 (5 – 7)	63%
52	Does using a didactic step-by-step checklist of sonoanatomical landmarks during scanning help novices learn sonoanatomy?	6 (4 – 7)	63%
55	What characteristics or attitudes do successful and unsuccessful UGRA performers possess?	6 (4 – 7.75)	61%
59	What is the role of the regional anaesthetists' teaching skill on residents performance?	6 (5 – 7)	58%
65	What characteristics or attitudes do effective teachers of UGRA possess?	6 (5 – 7)	55%
66	What is the role of coaches on improving the teachers of regional anaesthesia?	5.5 (3.25 – 7.75)	50%
73	In what situations is the learning outcomes from self-directed teaching no different from deliberate feedback?	5 (4 – 7)	45%
79	Should we screen for technical and non-technical qualities predisposing to procedural skills proficiency, when selecting residents during the employment process?	4 (2 – 7.75)	39%

IQR; interquartile range

Table S4. Knowledge translation themed topics, listed by rank order

Ranking	Topics	Median (IQR)	Proportion Scored ≥ 6
4	Is UGRA knowledge and technical skill generalisable: when does proficiency in one block type transfer to other blocks?	8 (7 – 8)	87%
11	What are the most efficacious means for practicing anesthesiologists (consultants) to learn blocks?	8 (6 – 9)	79%
13	How can trainees retain proficiency of knowledge and skills learnt after attending focused training (eg. RA rotation, simulation session, workshop)?	8 (4.25 – 8)	71%
15	How do you maintain or improve knowledge retention after a one-day workshop?	7.5 (6 – 8)	79%
17	Does short duration courses/workshops result in long term changes in clinical practice?	7 (6 – 8)	82%
20	Does pre-training (ie. Demonstrating competency of discrete tasks before further progression) result in improvement of RA knowledge and technical skills?	7 (6 – 8)	79%
24	How regularly does a trainee need to perform a block to be able to perform it independently after residency?	7 (6 – 8)	76%
32	Does pre-procedural knowledge or awareness of critical errors made by trainees, lead to a reduction in clinical errors by trainees?	7 (5 – 8)	71%
37	What are the contributing factors to the practice and impediment of trainees performing regional anaesthesia after residency training?	7 (4 – 8)	58%
57	What factors contribute to variability in understanding or identifying sono-anatomy?	6 (5 – 7)	61%

IQR; interquartile range

Table S5. Methodology themed topics, listed by rank order

Ranking	Topics	Median (IQR)	Proportion Scored ≥ 6
10	What should be consensus assessment tools to standardise RA education research?	8 (6 – 8)	82%
14	What should be consensus clinical endpoints to standardise RA education study endpoints?	7.5 (6 – 9)	87%
18	What is the best way to establish multicentre collaborative studies in RA education?	7 (6 – 8)	79%
19	How can cusum methodology be used to track and provide quality assurance of RA clinical performance?	7 (6 – 8)	79%
21	What should be consensus simulation/laboratory endpoints to standardise RA education study endpoints?	7 (6 – 8)	79%
26	How can we best use web based/online resources (viewable content, social media, online assessments, video calls) to deliver teaching?	7 (6 – 8)	76%
33	Which tasks in UGRA require more resources, effort, and practice to gain competency?	7 (5 – 8)	71%
43	What are the influences of the wide inter-individual learning curve in RA? Are any of these factors amenable to intervention?	6 (5 – 8)	68%
45	Should hierarchical task analysis be used to deconstruct and analyse each RA block for error rates?	6 (5 – 7)	63%
46	Would determining the learning style of trainees be helpful to assist in matching trainees to how best they learn content and type of content delivery?	6 (5 – 7.75)	63%
58	What is the best way to teach non-technical skills in RA, for example communication, professionalism, and resource management?	6 (4 – 7)	58%

IQR; interquartile range

Table S6. Motor skills themed topics, listed by rank order

Ranking	Topics	Median (IQR)	Proportion Scored ≥ 6
23	What factors influence the common and recurring quality compromising behaviours observed in novices performing UGRA? What type of training is useful to remedy this behaviour?	7 (6 – 8)	76%
28	How do you improve pre-clinical visuo-spatial skill (assuming that visuo-spatial skill is correlated with UGRA motor skills)?	7 (5.25 – 8)	74%
30	Does greater technical ability (proficiency) lead to better outcomes?	7 (5 – 8)	71%
31	How do you improve poor coordination and fine motor control prior to clinical exposure?	7 (5 – 8)	71%
42	Does a didactic step-by-step checklist, or proscribed method of transducer/needling technique, improve the quality of needle guidance?	6.5 (4.25 – 7)	58%
44	What is the importance of psychometric ability (visuospatial and psychomotor ability) on UGRA skills?	6 (5 – 7.75)	66%
47	What is the best way to teach out-of-plane needle approaches?	6 (5 – 8)	63%
54	What is the best way to teach needle guidance for neuraxial procedures?	6 (5 – 7)	61%

IQR; interquartile range

Table S7. Simulation themed topics, listed by rank order

Ranking	Topics	Median (IQR)	Proportion Scored ≥ 6
1	What endpoints/milestones should be achieved on a simulator prior to clinical performance of UGRA?	8 (7 – 9)	89%
2	Does simulation training show an improvement in clinical outcomes such as improved efficacy, time taken, and less errors?	8 (6 – 9)	89%
7	Does simulation training bestow a safety advantage compared to proceeding directly to supervised practice in real patients?	8 (6 – 9)	82%
12	Does deliberate practice in simulation improve RA proficiency?	8 (5 – 8.75)	71%
16	Does the type and quality of feedback provided by faculty/tutors have an impact on learning outcomes?	7 (6 – 8)	87%
25	Is simulation training a cost-effective method of teaching, versus less resource-intensive alternatives?	7 (6 – 8)	76%
35	Is simulation training more effective in some areas of RA education (eg. Knowledge retention versus technical skills) than in other areas?	7 (5 – 8)	63%
38	What is the best way to use augmented or virtual reality devices in RA simulation training?	6.5 (5.25 – 8)	74%
40	What is the best way to debrief using video recordings of trainee performance during simulation training?	6.5 (5 – 8)	68%
63	When is the best time during training to introduce simulation to novices learning RA?	6 (4 – 8)	55%
70	Does simulation training show an improvement in non-technical attributes such as communication, team work, professionalism and resource management?	5 (3 – 7)	47%

IQR; interquartile range