

Original Article

Regional anaesthesia research priorities: a Regional Anaesthesia UK (RA-UK) priority setting partnership involving patients, carers and healthcare professionals

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Summary

Introduction Regional anaesthesia provides important clinical benefits to patients but is underutilised. A barrier to widespread adoption may be the focus of regional anaesthesia research on novel techniques rather than evaluating and optimising existing approaches. Research priorities in regional anaesthesia identified by anaesthetists have been published, but the views of patients, carers and other healthcare professionals have not been considered previously. Therefore, we launched a multidisciplinary research priority setting partnership aimed to establish key regional anaesthesia research priorities for the UK.

Methods Research suggestions from key stakeholders (defined by their interaction with regional anaesthesia) were gathered using an online survey. These suggestions were analysed to identify common themes and then combined to formulate indicative research questions. After an extensive literature review, unanswered and partially answered questions were prioritised via an interim online survey and then ranked as a top 10 list during a final live virtual multidisciplinary prioritisation workshop.

Results In total, 210 individuals completed the initial survey and suggested 518 research questions. Fifty-seven indicative questions were formed, of which three were considered fully answered after literature review and one not feasible. The interim online survey received 335 responses, which identified the 24 highest priority questions from the 53 presented. At the final live prioritisation workshop, through a nominal group process, we identified the top 10 regional anaesthesia research priorities. These aligned with three broad thematic areas: pain management (two questions); patient safety (six questions); and recovery from surgery (two questions).

Discussion This initiative has resulted in a list of research questions prioritised by patients, carers and a multidisciplinary group of healthcare professionals that should be used to inform and support future regional anaesthesia research in the UK.

Introduction

A large body of evidence supports the use of regional anaesthesia to improve pain management, reduce opioid use, shorten hospital duration of stay and enhance recovery following surgery [1-3]. Despite this, regional anaesthesia techniques are arguably underutilised, with reports suggesting use rates of only 3–40% in appropriate surgical cases and a notable lack of increase over the last 10 years [4-9]. Recent regional anaesthesia research has focused on technological developments and the description of new ultrasound-guided fascial plane blocks [10-16]. This has led to a vast array of procedures, not all of which have proven clinical benefit. There has been growing demand for patient-centred research in regional anaesthesia [17], but the emphasis on novelty may be hindering efforts to standardise existing regional anaesthesia techniques with the goal of increasing patient access, and to establish important patient-centred outcomes within routine data collection.

In 2020, it was suggested that “*the widespread implementation of a small number of versatile nerve blocks*” would increase consistency in training and clinical practice [14]. This philosophy has now been adopted widely and an increased focus on training in regional anaesthesia is reflected in the UK’s Royal College of Anaesthetists 2021 curriculum [18]. Subsequent recommendations to standardise regional anaesthesia nomenclature, image acquisition and documentation underscore this drive for clarity and consistency in clinical practice [19-23]. Within regional anaesthesia research similar efforts have just begun, with an international consensus on research priorities published recently [17]. However, while broad in scope, important limitations of this project were: the survey targeted anaesthesia societies with the goal of assessing the opinions of regional anaesthesia experts, so the perspectives of patients, carers and other healthcare professionals were not explicitly included; and a global list of regional anaesthesia research priorities would not be likely to reflect the innate differences between individual countries’ cultures, healthcare systems and availability of resources. To have meaningful research impact with the potential to change clinical practice, a country-specific approach with input from non-anaesthesia stakeholders, particularly patients and carers, is essential [24-26].

Therefore, with support from Regional Anaesthesia UK (RA-UK), we conducted a multidisciplinary research priority setting partnership using methodology established by the James Lind Alliance to ensure a transparent process and fair representation of patient, carer

and clinician groups [27]. The aim of this project was to identify uncertainties in the existing evidence and prioritise unanswered research questions in regional anaesthesia for the UK.

Methods

Research ethics committee approval was not required for this project. This was confirmed using the NHS Health Research Authority decision tool (online Supporting Information Figure S1) and is consistent with similar priority setting partnerships conducted using James Lind Alliance methodology [17, 28-30].

This project was launched by the RA-UK research network and managed by a team comprised of the project lead (JB), project co-ordinators (OL, JL, JF) and a multidisciplinary steering group. The formation of the steering group was led by key RA-UK research network contributors (AM, KE, RK, JB). Individuals were recruited to contribute based on methodological or other subject matter expertise and to ensure that patient and clinician groups were appropriately represented in the leadership of the project. No member of the steering group submitted research suggestions in the initial survey, nor did they rank questions in the interim survey or contribute any opinion on the final priority of the research questions.

Potential participants were first identified from individuals known to the RA-UK research network and subsequently from individuals known to steering group members or those nominated by partner organisations. All work was conducted according to the principles set out by the James Lind Alliance (Fig. 1) which give equal consideration to the views of patients, carers and healthcare professionals [27]. Given the potential difference in research priorities among individuals regarding regional anaesthesia, we selected the following stakeholder groups: 'regionalists' (physicians who perform regional anaesthesia, e.g. anaesthetist, emergency department physician); 'other healthcare professionals' (healthcare professionals who treat or care for patients who have undergone regional anaesthesia, e.g. surgeon, ward nurse, physiotherapist); and 'patients and carers' (individuals who have experienced regional anaesthesia or have cared in a non-professional capacity for someone who has undergone a regional anaesthesia procedure). If any potential participant belonged to more than one group, they were asked to choose the group they primarily represented. Partner organisations (online Supporting Information Appendix S1) were identified through a combination of online searches and steering group contacts. These organisations were approached by the steering group via

email and were asked to disseminate project surveys to their memberships via society mailing lists and social media platforms.

The scope of the project and the study protocol [31] were confirmed and ratified by the steering group in January 2022. As with previous priority setting partnerships in anaesthesia [28], the steering group felt that regional anaesthesia was not completely isolated from other aspects of the peri-operative care process. Therefore, the scope was defined as research priorities relating to “*all aspects of regional anaesthesia in the peri-operative setting, which we define as from the time of decision to proceed to surgery onwards*”. Questions regarding service organisation and training were deemed to be within the scope of this project.

All surveys were developed in accordance with the principles established by the James Lind Alliance [27], with an explanation of the aim to identify questions relating to regional anaesthesia which required further research. Surveys detailed how participant data would be used and that completion and submission of the survey implied consent. Pilot surveys were tested by members of the steering group, revised based on any feedback received and then further reviewed by a small sample of lay individuals known to steering group members. Surveys were reviewed by the NHS Greater Glasgow and Clyde patient experience and public involvement team to ensure clarity and ease of use.

The initial online survey sought suggestions for unanswered research questions in regional anaesthesia using Microsoft Forms (Microsoft Corporation, Redmond, WA, USA). The survey included a written explanation of the term ‘regional anaesthesia’, a link to a RA-UK video detailing the process of undergoing regional anaesthesia, and examples of questions identified by a previous priority setting partnership [28, 32]. Respondents were asked to submit up to three research questions via free text boxes, alongside basic demographic information. The survey was disseminated via partner organisations, social media and the RA-UK website. Responses were monitored regularly with further promotion targeted towards underrepresented stakeholder groups until the survey was closed after approximately three months.

Analysis of the initial survey data was performed in the same manner as the international consensus on regional anaesthesia research priorities [17] and previously published priority setting partnerships [28-30]. All submitted research questions were assessed by the project co-

ordinators first to determine if they were within the agreed-upon scope; if not, these questions were excluded after confirmation by the steering group.

To form the long list of indicative questions, all submitted research questions were grouped into themes based on content, and indicative questions were drafted according to these themes to account for each submitted research question (online Supporting Information Table S1). Broad themes were split into multiple indicative questions while a narrow theme could result in a single indicative question. Every in-scope research idea submitted was allocated to at least one indicative question [27,31].

A literature search was conducted by three medical librarians and two assistant medical librarians from Manchester University Foundation Trust Library Service for each indicative question to assess existing evidence. Searches were undertaken in MEDLINE (Ovid), Embase (Ovid), Cochrane Library, CINAHL (EBSCO) and PsycINFO (ProQuest), and were limited to systematic reviews, meta-analyses, publications in English and published within the preceding three years. In addition, guidelines from the National Institute for Health and Care Excellence (NICE), Scottish Intercollegiate Guidelines Network (SIGN) and relevant Royal Colleges and professional associations were reviewed. For indicative questions, if no systematic reviews or clinical guidelines were found, other sources of evidence were considered where appropriate.

In line with methodology used by the James Lind Alliance and Ferry et al. [17,27], an indicative question was deemed fully answered, partially answered or not answered by the project coordinators based on how completely the published literature addressed the question. The steering group reviewed and ratified these findings (online Supporting Information Table S2), and fully answered indicative questions were excluded from the interim survey.

A second online survey was used to rank the long list of indicative questions. This survey was disseminated using the same channels as the first, without directly targeting respondents from the first round. Each respondent was presented with the long list of indicative questions displayed in a random order and asked to select the 10 most important indicative questions. As with the initial survey, basic demographic data were collected. The survey was open for approximately three months. To ensure that questions important to each stakeholder group were included, the 10 questions selected most frequently by each group were identified and these formed a shortlist that was taken forward to the final priority setting workshop.

The live priority setting workshop aimed to rank the remaining indicative questions and prioritise the final top 10 research questions. Participants were recruited by the steering group from respondents who participated in the interim survey and had expressed interest in taking part, aiming for an equal number of participants from each stakeholder group. The workshop was conducted via the Zoom (Zoom Video Communications Inc, San Jose, CA, USA) using a modified nominal group methodology [27]. The chair of the final workshop (CS) was not involved in formation of the steering group. Project co-ordinators OL and JL crosschecked and aggregated results at the workshop, and AM, RK and JB attended as observers only. Participants were allocated to one of three small groups with representation from each stakeholder group. The workshop progressed through four phases (Box 1).

In keeping with previous James Lind Alliance exercises, we utilised a sample of convenience aiming to maximise responses via the distribution methods described. Data were collected and analysed using Microsoft Forms and Microsoft Excel, and results were presented using descriptive statistics.

Results

The initial survey was open from 25 February 2022 until 27 May 2022. A total of 210 individuals responded: 131 (62.1%) from the regionalists group; 51 (24.2%) from the other healthcare professionals group; 23 (10.9%) from the patients and carers group; and 6 (2.8%) did not self-identify a primary group. Further demographic data for respondents are available in online Supporting Information Table S3. Initial survey respondents proposed 518 research questions, of which 22 were considered out of scope. The remaining 496 were categorised into 35 broad themes, which generated 57 indicative questions. One question was rejected by the steering group due to not being feasible. Three questions were considered fully answered by available research, while 40 were considered partially answered and 13 unanswered. Therefore, 53 questions were included in the interim prioritisation survey (online Supporting Information Table S2).

The interim survey was open from 24 June 2023 until 27 September 2023. In total, 335 individuals responded: 230 (68.7%) from the regionalist group; 74 (22.1%) from the other healthcare professionals group; and 31 (9.3%) from the patients and carers group. Top 10 rankings from each stakeholder group were not weighted and the 10 indicative questions

selected most frequently by each stakeholder group were identified. In the patients and carers group, eight indicative questions were tied for 10th place, so 17 indicative questions were included from this group (online Supporting Information Table S4). The same 13 indicative questions were selected by more than one stakeholder group. Twenty-four unique indicative questions were taken forward to the final prioritisation workshop.

Seventeen participants attended the final prioritisation virtual workshop: six regionalists (two anaesthetists in training, one consultant anaesthetist and one specialist anaesthetist without a subspecialty interest in regional anaesthesia, and two consultant anaesthetists with subspecialty interest in regional anaesthesia); five other healthcare professionals (one surgeon in training, one physiotherapist, one recovery nurse and two operating department practitioners); and six patients and carers. All members of this latter group had undergone regional anaesthesia; two were also healthcare professionals but identified most closely with the patients and carers group.

The 24 presented indicative questions were ranked via the four-step process described above. In the final full group review, all participants agreed with the final ranking (online Supporting Information Table S5). The final top 10 research questions are shown in Table 1. This list included: four questions from the top 10 of the regionalists group; four from the top 10 of the other healthcare professionals group; and nine from the top 17 of the patients and carers group (online Supporting Information Table S6).

Discussion

Using established methodology from the James Lind Alliance, this UK-focused priority setting partnership involving clinicians, patients and carers identified the 10 highest priority research questions in regional anaesthesia. The top 10 regional anaesthesia research priorities from the UK cover three broad thematic areas: pain management (two questions); patient safety (six questions); and recovery from surgery (two questions).

Pain management was the subject of the top-ranked question from this project 'How can we best manage pain as regional anaesthesia wears off?'. This was consistent with the international Delphi consensus on regional anaesthesia research priorities [17]. The occurrence of significant pain when a regional block resolves, also referred to as 'rebound pain', affects nearly 50% of post-surgical patients, which hinders recovery and can be

challenging to treat [33-36]. While traditional regional anaesthesia research examining the impact of different block techniques or local anaesthetic drugs may still have some value, addressing the broader issues of peri-operative pain management and quality of recovery requires a shift in thinking towards multidisciplinary care advocated by the Royal College of Anaesthetists through the Centre for Peri-operative Care (CPOC) in the UK and the American Society of Anaesthesiologists' surgical home programme [37]. When measuring pain, an initiative to standardise endpoints in peri-operative medicine suggests pain at rest and with movement at 24 h plus at least one other time-point [38]; however, these measures alone neglect important domains related to pain such as interference with activity and sleep.

The second pain-related question relates to the potential for regional anaesthesia to reduce chronic post-surgical pain, which has been identified previously as a research priority in anaesthesia and peri-operative care [28]. Research addressing this question could focus on the incidence of chronic pain as well as its intensity following specific procedures. Using recommendations from the Initiative on Methods, Measurement, and Pain Assessment in Clinical Trials (IMMPACT) group, a pragmatic study design may offer the means to evaluate the impact of regional anaesthesia, if any, on this multifactorial problem [39].

Six of the top 10 research priorities are concerned with the safety of regional anaesthesia. In comparison, the previous anaesthetist-only priority setting partnership had a greater number of questions on conduct and efficacy of regional anaesthesia techniques, technology and equipment [17]. Anaesthetists are likely more confident in the safety profile of regional anaesthesia than the general population and even other healthcare professionals. While there have been relevant publications on this topic in addition to professional society guidelines and practice advisories [40-42], a common finding in these publications is the relative lack of data. Researchers should be mindful that typical studies of regional anaesthesia complications do not include cases in which regional anaesthesia is not used (i.e. the true denominator of total surgical cases), which prevents the ability to ascertain relative risk. In a single-centre 5-year retrospective cohort study of inpatient surgeries with and without regional anaesthesia, a notable finding is that nerve blocks were not independently associated with an increase in peri-operative neurologic complications [43]. As more data emerge, education of patients and colleagues regarding safety will be crucial to promoting increased utilisation of regional anaesthesia.

Randomised clinical trials alone will not be able to address all these safety-related questions. Methodologies such as retrospective cohort, quality improvement and implementation science involving initiatives such as the RA-UK and Safe Anaesthesia Liaison Group protocol ‘Prep, Stop, Block’ that change clinical care will generate useful information [40], as should the recently announced next Royal College of Anaesthetists National Audit Project, which will focus on studying complications of regional anaesthesia [44].

Consistent with the previous priority setting partnership in anaesthesia and peri-operative care [28], recovery after surgery was identified as a key research priority, ranking this question second overall: ‘How can regional anaesthesia improve recovery after surgery?’. Recovery from surgery is a complex multidimensional process that is inadequately captured in regional anaesthesia research. Six patient comfort-related outcome endpoints related to postoperative recovery have been identified for measurement in peri-operative research studies: pain intensity (at rest and during movement) 24 h postoperatively; postoperative nausea and vomiting (0–6 h, 6–24 h and overall); quality of recovery (QoR) (e.g. QoR-40, QoR-15); time to gastrointestinal recovery; time to mobilisation; and sleep disturbance using the Patient-Reported Outcomes Measurement Information System scale [38]. Rather than solely focusing on numeric rating scale pain scores and opioid dosages alone, routine collection of pain interference and quality of recovery measures as part of clinical care will enable future population-based observational studies assessing postoperative recovery.

A key principle of the James Lind Alliance's approach to setting research priorities is that a research agenda should be shaped by those who use or receive healthcare, participating alongside clinicians, academic researchers and funding organisations [27]. This method specifies a minimum of two stakeholder groups: patients and their carers and healthcare professionals. We chose to further divide the latter group into regionalists and other healthcare professionals who care for patients who have undergone regional anaesthesia, assuming that differences in perspective may exist. Interestingly, the top 10 priorities for the other healthcare professionals group are more aligned with the patient and carers group than the regionalists group, thus supporting our decision to separate regionalists from other healthcare professionals group (online Supporting Information Table S4).

There are limitations to this project and its results. The broad scope of the indicative questions arguably makes it difficult to directly address them through specific research projects, a point

made by some participants in the final workshop. This has been a common issue faced by all priority setting partnerships based on the methodology: soliciting and receiving a large number of free text research ideas; combining a wide range of ideas to produce a more manageable number of indicative questions; and proceeding to prioritise them [28-30]. The full 'raw' list of the originally submitted questions (online Supporting Information Table S1), and how these map to the indicative questions, may aid researchers when formulating specific hypotheses. The numbers of respondents and submitted questions in the present project are lower than many other priority setting partnerships [45], despite direct outreach to many partner organisations and the use of a range of online platforms for dissemination. The focus on a single subspecialty within anaesthesia as well as the geographic limitation to the UK likely influenced the number of responses. Like many previous priority setting partnerships [28-30], this project did not achieve perfect balance in the number of respondents from each stakeholder group, with the regionalists submitting the majority of responses in both surveys, which introduces potential bias. Moving the top 10 list of indicative questions from each group to the final ranking workshop, regardless of the number of actual respondents, was intended to mitigate any potential negative effects from the imbalanced groups. In the final top 10 list, more research questions came from the patients and carers than either of the other groups. The majority of respondents were aged < 50 y, which may reflect the use of online platforms for survey dissemination and the predominance of healthcare professionals [46], so we cannot be certain that the research priorities generated will be the same if a population with a broader age range is surveyed or if this project is repeated again years from now. Finally, despite this being one of the largest surveys of research priorities in regional anaesthesia to date, providing valuable guidance on potential topics for future studies, the present project was not designed to assess feasibility of or costs associated with each research question.

In summary, this priority setting partnership involving a multidisciplinary group of anaesthetists, other healthcare professionals, patients and carers identified the 10 most important research priorities in regional anaesthesia for the UK using established James Lind Alliance methodology. Building on ongoing efforts to improve the clinical practice of regional anaesthesia by focusing training on a small number of high-yield blocks, standardising nomenclature and documentation and establishing common processes for identifying sono-anatomical landmarks used for blocks [14,18-23], this project aims to move regional anaesthesia research efforts further forward. The results represent the shared views of patients, carers and healthcare professionals within the UK at this time and provide a set of

important questions to guide investigators engaged in regional anaesthesia research and the funding agencies that support them.

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Table 1. Top 10 research priority questions mapped to identified broad research themes

Rank	Question	Theme
1	How can we best manage pain as regional anaesthesia wears off?	Pain management
2	Can regional anaesthesia improve recovery after surgery?	Recovery from surgery
3	Can regional anaesthesia reduce chronic post-surgical pain?	Pain management
4	How do the risks and benefits of regional anaesthesia vary between different patient groups?	Patient safety
5	How can we improve the safety of regional anaesthesia	Patient safety
6	What factors increase the risk of harm from regional anaesthesia?	Patient safety
7	How do rates of complications vary between different regional anaesthetic techniques?	Patient safety
8	What are the risks and benefits of regional anaesthesia in children?	Patient safety
9	How should complications from regional anaesthesia be managed?	Patient safety
10	What affects how long regional anaesthesia takes to wear off?	Recovery from surgery

Figure legend

Figure 1. Overview of priority setting partnership methodology and timeline.

Online Supporting Information

Appendix S1. Partner organisations and organisations that assisted with dissemination of surveys for the priority setting partnership.

Table S1. Original submitted research ideas and allocation to indicative questions.

Table S2. Indicative question verification.

Table S3. Baseline characteristics of survey respondents.

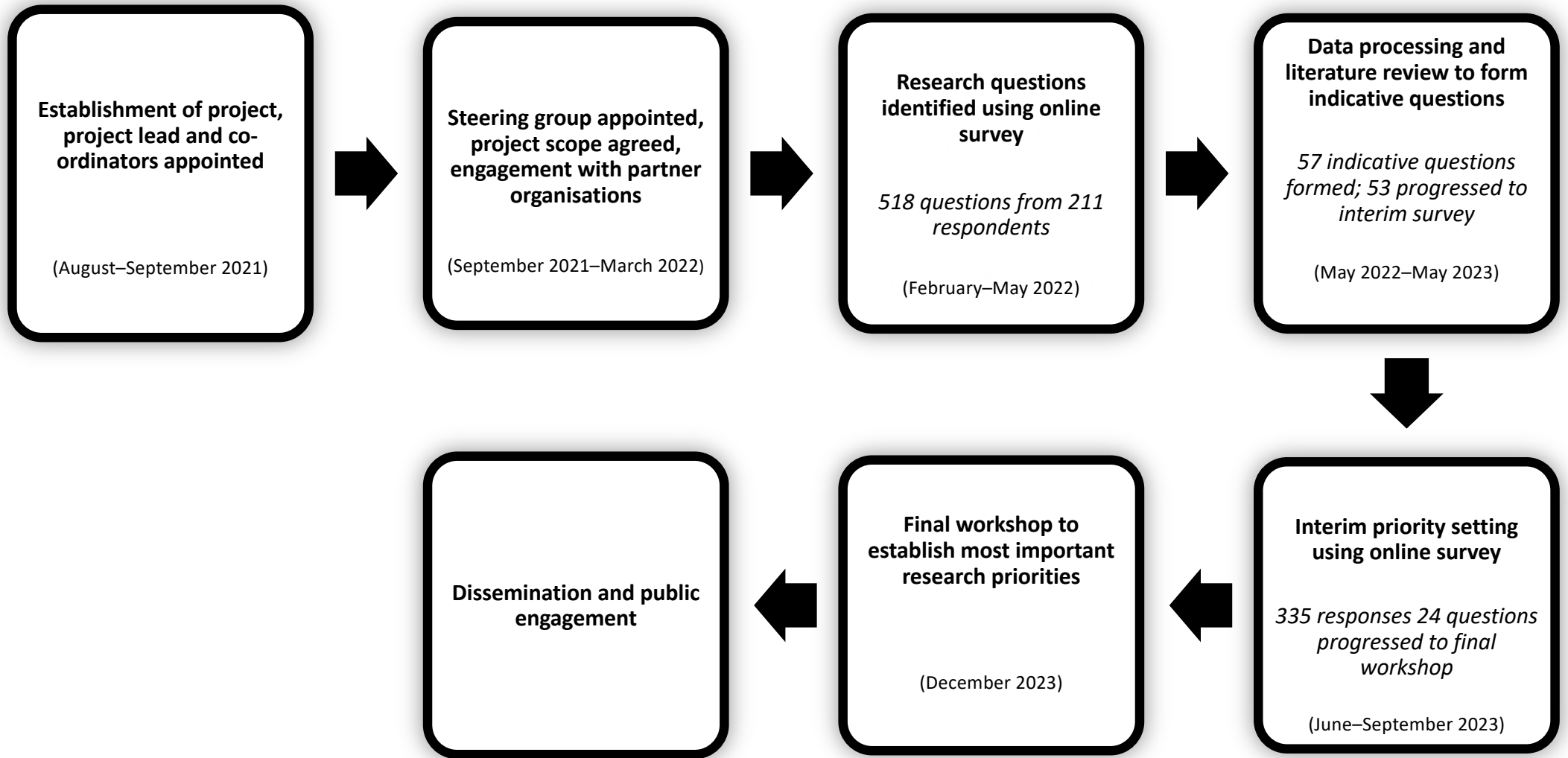
Table S4. Stakeholder group top 10 indicative questions after interim survey.

Table S5. Combined top 24 indicative questions after interim survey.

Table S6. Priority Setting Partnership top 10 indicative questions referenced to stakeholder group.

Box 1 The four phases of the priority setting workshop

1. Phase 1 (first round of small group discussions). Participants shared the three questions they considered most and least important. Following this the indicative questions were displayed on a virtual whiteboard (Miro Enterprise, Realtimeboard Inc., San Francisco, CA, USA), discussed within each small group, and ranked.
2. Phase 2 (full group review). The small group rankings were crosschecked by the project co-ordinators then aggregated to form an interim combined ranking. The combined ranking was presented to the full group of participants and further discussed.
3. Phase 3 (second round of small group discussions). New small groups were formed by the facilitators, maintaining a balance of participant backgrounds. Using the virtual whiteboard, these new groups discussed and revised the combined list.
4. Phase 4 (final full group review). The second set of rankings was crosschecked and aggregated to form a combined ranking. This new combined ranking was presented to the whole group using the virtual whiteboard. Discussion continued with the opportunity for changes in the order of research questions. Changes were accepted on the basis of majority vote and did not require unanimous agreement.



Appendix S1. Partner organisations and organisations that assisted with dissemination of surveys for the priority setting partnership.

Partner Organisations

- Obstetric Anaesthetists Association (OAA)
- The Society for Obesity and Bariatric Anaesthesia (SOBA)
- British Elbow and Shoulder Society (BESS)
- Association for Cardiothoracic Anaesthesia and Critical Care (ACTACC)
- Royal College of Surgeons (RCS) (Edinburgh)
- Association of Breast Surgery (ABS)
- British Orthopaedic Oncology Society (BOOS)
- British Orthopaedic Foot and Ankle Society (BOFAS)
- Society of British Neurological Surgeons (SBNS)
- Society for Cardiothoracic Surgery (SCTS)
- College of Operating Department Practitioners (CODP)
- British Trauma Society (BTS)
- British Anaesthetic and Recovery Nurse Association (BARNA)
- British Orthopaedic Trainees Association (BOTA)
- Open Arms
- British Association of Day Surgery (BADs)

Organisations that assisted with dissemination of surveys

- Association of Anaesthetists (AO)
- The Arthritis and Musculoskeletal Alliance (ARMA)
- Royal College of Nursing (RCN) Pain and Palliative care forum
- Patient Voice
- Royal College of Anaesthetists (RCOA) lay committee
- British Indian Orthopaedic Society (BIOS)
- British Association of Urological Surgeons (BAUS)
- United Kingdom Spine Societies Board (UKSSB)
- British Pain Society (BPS)
- Association of Orthopaedic and Trauma Physios
- Musculoskeletal Association of Physios
- Physiotherapy Pain Association
- Chelsea and Westminster Patient Advice and Liaison Service (PALS)
- Aneurin Bevan University Health Board Patient Advice and Liaison Service (PALS)
- Patients Association
- Airedale General Hospital Patient Advice and Liaison Service (PALS)
- British Hip Society (BHS)
- The Association for Perioperative Practice (AFPP)
- The Association for Cancer Surgery (BASO)

Table S1. Original submitted research ideas and allocation to indicative questions.

Regionalist = Healthcare professionals who perform regional anaesthesia

Other Healthcare professionals = Healthcare professionals who treat or care for patients who have had regional anaesthesia

Patients and carers = Anyone who has undergone regional anaesthesia or cares in a nonprofessional capacity for anyone who has undergone regional anaesthesia

Indicative question	Submission no.	Submission	Respondent group
How can we improve the consent process for regional anaesthesia?	16b	How can we make the maternity journey better for women undergoing emergency caesarean section? Should all patients be briefed on this and consented prior to labour? Is consent really valid for emergency caesarean section?	Other Healthcare professional
	72b	Consent: how much information do patients want to know before regional anaesthesia?	Regionalist
	91b	What other indicators do we have to confirm that patients and carers understood the procedures that they are about to undertake aside signatures.	Patient or carer
	131a	Do patients really understand the comparative risks and benefits of nerve blocks	no data
	136c	how will a patient know that the doctor administering the regional anaesthesia has experience of doing so?	Other Healthcare professional
	141b	Should there be formal signed consent?	Regionalist
	154a	Ethical approach to RA	Regionalist
	28c	Can we introduce an honest and balanced video to aid the consent process for all patients, including those with acute presentations?	Regionalist
	64a	In elective cases the optimal time prior to the actual procedure for maximal retention of the information in days/weeks/months.	Other Healthcare professional
	64b	In regional anaesthetics for each of the regions which are the main points which patients feel most important	Other Healthcare professional
	69a	how best to communicate the benefits versus risks of RA to patients	Other Healthcare professional
	85b	If there is a possibility of the regional anaesthetic not functioning what I can expect and if I do need a general anaesthetic what is the incidence of failed regional anaesthetic?	Other Healthcare professional
	212c	Do you provide a written consent for RA or verbal? Do you feel it should be written?	Other Healthcare professional

How can we involve patients more in decision making about regional anaesthesia?	9b	Why is there rarely any advance discussion of anaesthetic options? For example, those with extensive arthritis may not be able to take advantage of a spinal injection, but in my own case this was only discovered after several attempts.	Patient or carer
	9c	Why are anaesthetic procedures and options rarely explained in advance, in accessible language. Local anaesthesia, regional and sedation are ambiguous terms and do not describe the procedures involved.	Patient or carer
	12b	What is the best way to communicate to patients the possible range of sensations and effects of nerve block - and the likelihood of each - during the different stages of the nerve blocking process (so that patients know in advance what they might experience and can make an informed choice whether or not to have it and/or not be alarmed by some of the weird sensations and side effects it might cause)?	Patient or carer
	65b	Barriers to regional anaesthesia uptake? Many patients decline RA due to fear or risk discussion - is there a 'soft' research option to improve patient education and benefits to prevent fear causing a decline in RA. Does 'RA school' improve RA uptake?	Regionalist
	131b	Do patients understand the benefit of post op pain relief to optimise recovery and how a multimodal model including LA is often the better option	no data
	136b	What information are patients given about regional anaesthesia to enable them to make an informed choice as to whether they want to have this?	Other Healthcare professional
	137b	What are patients views about pain control versus functional aspects? Are there different views on this?	Regionalist
	150a	How can we improve patient awareness of regional anaesthesia as an option/better inform patients, before reaching hospital/when listed? (often sprung on them during the anaesthetic assessment and discussion on the morning of surgery) Would this improve patient acceptance/uptake of regional anaesthesia?	Regionalist
	164a	What to patients understand when we discuss a nerve block for analgesia or anaesthesia	Regionalist
	185b	How can we educate more patients on the benefits of nerve blocks?	Patient or carer
	185c	Do patients feel that they understand what a nerve block is before it happens?	Patient or carer
	197c	Improving patient knowledge and awareness of regional techniques as not only viable but sometimes preferable options	Regionalist
	131a	Do patients really understand the comparative risks and benefits of nerve blocks	no data
	136c	how will a patient know that the doctor administering the regional anaesthesia has experience of doing so?	Other Healthcare professional
	101b	How acceptable is RA to patients?	Regionalist

	211a	Understanding intra-oRegionalisttive pain and neuraxial anaesthesia failure for Caesarean section. A recent systematic review, by Patel et al (doi.org/10. 1111/anae.15657) found 14.6% required supplementary analgesia/anaesthesia, while conversion to general anaesthesia was 0.06%. However, the authors made a number of problematic assumptions: please refer to my editorial in Anaesthesia (doi:10.1111/anae.15723). Research on efficacy of region anaesthesia for Caesarean section has focussed on clinicians' actions, rather than patient experience. Moreover, variable definitions of 'genuine' failure of neuraxial anaesthesia, as well as variable rates of reported failure, mean there is potential to underestimate and normalise severity of harm for patients not converted to GA, while potentially providing false reassurance to clinicians. As importantly, the data being used in the provision of information to women during the Research into the efficacy of regional anaesthesia for Caesarean section with patient reported outcomes is necessary. consent process should be accurate, fairly representing the likelihood of block failure, so women are aware conversion to GA may be necessary.	Regionalist
	207a	Concrete risk factors for nerve damage Gradation of risk from no risk factors to many risk factors (these 2 questions to create bespoke risk profiles for pts)	Other Healthcare professional
How can we improve patients' experience of regional anaesthesia?	87a	Do patients who undergo a block have information to read after the procedure to reaffirm the information they are given before a block?	Other Healthcare professional
	16c	recovery- how can we better educate patients on what to expect post regional anaesthesia	Other Healthcare professional
	30c	What more could be done preoRegionalisttively to prepare patients (including psychologically) for RA? - sometimes it seems that it has not even been discussed by the preoRegionalisttve team.	Regionalist
	61c	What can I do to prepare?	Other Healthcare professional
	64c	Is there any evidence that patients find it useful to hear from persons (doctors and allied health workers) looking after the patients but not involved in giving regional anaesthetics. Patients have tremendous trust in their carers and may accept more easily the concepts of regional anaesthetics.	Other Healthcare professional
	91a	A better approach dealing with patients' anxiety and apprehension prior to emergency surgery.	Patient or carer
	143c	How to reassure the patient that it won't hurt and how anxious patients are managed.	Patient or carer
	143b	How is the patient prepared for the sounds smells experienced during the oRegionalistttion.	Regionalist
	180c	Has there been much work on patient experiences and expectations. Both before and experience of and after? If so could there be a systematic review to find themes and improve experience and pre/post education and support?	Regionalist

	173b	<p>Patient experiences of RA vs GA. Particularly low risk fit/well patients. Suspicion that occasionally RA is pushed because the anaesthetist wants to do it ('fun' or 'more interesting', almost like a hobby).</p> <p>But, actually what is the experience for the patient being needled (sometimes multiple times)? Did they benefit from not having a GA? Does a short post op course of simple oral analgesia cause demonstrable harm that RA could've avoided? Put another way, to what extent are SOME of the purported benefits of RA a 'self fulfilling prophecy'?</p>	Regionalist
	185a	How much does the doctors confidence impact the patients experience of regional blocks?	Patient or carer
	195a	What is the experience of patients managing a nerve block at home after a day case procedure?	Patient or carer
	45b	Improve intraoRegionalisttive patient experience of regional anaesthetic techniques - what to do when the block doesn't work as well as planned	Other Healthcare professional
	58c	How to best assess satisfaction with regional Anaesthesia?	Regionalist
	58b	What constitutes good recovery from regional anaesthesia?	Regionalist
	138b	How happy are patients with the anaesthetic they received 6 months after their oRegionalisttion? (control group: no block, intervention group: block) Since it is difficult to recall pain in the abstract, are the long-term benefits of regional anaesthesia outweighed by the risks?	Regionalist
What advice should patients be given regarding eating and drinking before and after regional anaesthesia?	85a	Why would I need to refrain from eating and drinking as I would for a general anaesthetic?	Other Healthcare professional
	88a	When can I have alcohol after this?	Other Healthcare professional
	168c	Should patients be allowed to eat/drink prior to an awake regional procedure?	Other Healthcare professional
How can we improve patient care through data collection in	182b	<p>Safety profile of peripheral nerve blocks in children.</p> <p>National audit with standardised method of data collection likely to be required</p>	Regionalist

regional anaesthesia?			
	188c	National database with automated patient feedback for regional anaesthesia, subscription based by anaesthetic directorate as an ACSA standard	Regionalist
	100c	Universal national Block database (like NELA, DAS airway)for audits	Regionalist
	150b	What are the (?updated) statistics for nerve injury (temporary and permanent) for A) upper limb blocks B) lower limb blocks C) neuraxial techniques D) trunk/chest wall blocks etc. Can we have an updated real-time database of blocks performed and appropriate follow up (?SNAP audit) to allow assessment of complications in the era of increased use and ultrasound etc?	Regionalist
	154c	Should there be a national standardised RA follow up form in UK?	Regionalist
	176a	Can we get accurate complication rates for peripheral nerve blocks in particular as this will help consent.	Regionalist
	65a	Updated information on regional anaesthesia complications. ?Real time database across the UK - for numbers of blocks completed and development of a follow up service for identification of complications to allow better informed consent for patients.	Regionalist
	194a	How should the outcomes of RA be gathered?	Regionalist
	211b	Just as research on efficacy of region anaesthesia for Caesarean section has focussed on clinicians' actions, rather than patient experience, it is conversion to general anaesthesia that is used as a target measure in the RCoA Quality Improvement Compendium. However, there could be unintended consequences of conversion rate being used as a quality target: it may discourage clinicians from converting to GA. For example, it might be perceived that a clinician's >1% conversion rate for Category 4 sections implies the clinician's practice is poor when that clinician may instead be providing excellent, patient-centred, safe care. Caesarean section rate targets have proven problematic in maternity services, leading to NHS England and NHS Improvement to as units to stop using CS rates as a means of performance management. Having a target for conversion of RA to GA has similar potential to undermine safe care. The question is what would be a better measure? Pain is in the experience of the patient: patient reported outcomes should be central to quality improvement measures. Research is needed to develop more meaningful measures. Background given in editorial in Anaesthesia is relevant here (doi:10.1111/anae.15723).	Regionalist
How can we improve the safety of regional anaesthesia?	15a	How do we establish unique syringe connections for regional anaesthesia cannula and connectors?	Other Healthcare professional
	42c	Can regional blocks for chronic pain patients be delivered in the community?	Regionalist

	83a	What is the optimum frequency of patient observations?	Other Healthcare professional
	84a	Is the procedure performed in a sterile environment?	Other Healthcare professional
	112a	How can we mitigate against potential risks of RA	Regionalist
	114a	Do we need to use sterile techniques while performing regional anaesthesia?	Other Healthcare professional
	157c	How can we make regional anaesthesia safer?	Regionalist
	161b	Are performing nerve blocks under GA any less safe than performing nerve blocks in awake patients?	Regionalist
	177a	Why is not safe to do blocks under GA? Will patients always complain when the needle is intraneural when awake?	Regionalist
	179b	Is the risk of nerve injury higher for blocks performed under ultrasound guidance asleep?	Regionalist
	179c	Does concurrent use of a nerve stimulator increase the safety of ultrasound guided nerve blocks?	Regionalist
	180a	Is there a way to improve safety of these blocks. Thinking of the risk of permanent damage	Patient or carer
	181b	What is the evidence on safety when siting regionals in awake patient compared to siting when patient under general ?	Regionalist
	181c	Using nerve stimulators instead of ultrasound machines is this technique still acceptable practice especially when siting the regional blocks in an awake patient ?	Regionalist
	183b	should we be using pressure monitoring when doing blocks	Regionalist
	187b	Is ultrasound-guided regional anaesthesia safe in the anaesthetised patient?	Regionalist
	203b	Does use of pressure monitoring devices lead to increased safety of blocks.	Regionalist
	204a	Can I do a thoracic epidural on an anaesthetised patient in the age of US?	Regionalist
	210a	How can you make regional anaesthesia safer?	Patient or carer
	213a	How can it be safer	Patient or carer
	94b	Image quality is highly variable with practitioner, patient and equipment variables. How often are we happy with image quality? Do better images translate into better blocks? If image quality is poor, should blocks be abandoned? Are the risks to patients higher with poorer image capture beyond simple block failure?	Other Healthcare professional
	154a	Ethical approach to RA	Regionalist
	148a	Who should inject the LA dying a regional block, the assistant or the anaesthetist?	Other Healthcare professional
	180b	What could be done to improve these regional blocks. Systematic review?	Regionalist

	161c	What is the rate of infection complications in performing nerve blocks without using full sterile precautions (sterile gowns, gloves, drapes and ultrasound barriers)?	Regionalist
	67b	How can we reliably monitor for any adverse sequelae?	Regionalist
	177b	What will be the long term consequences of ultrasound guided blocks causing nerve injury? Can degree of injury prevented after using pressure monitors and/or nerve stimulators?	Regionalist
	29c	Peripheral nerve blocks are best for the morbidly obese patients, how to deal if any complication occurred. Should while putting the block , a ramp position is to be maintained	Regionalist
	120a	What are the reasons why regional anaesthesia fails and what are the best solutions?	Regionalist
	51b	Is there a gold standard technique with regards to complication rate, ie in plane, out of plane, with or without nerve stimulator.	Regionalist
	180b	What could be done to improve these regional blocks. Systematic review?	Regionalist
	97b	Attitudes to specific block rooms or anaesthetic rooms versus theatre and reasons why if theatre preferred	Other Healthcare professional
	153a	How can we do more blocks in areas that are outside of theatres, for non surgical patients? Or at least patients who aren't for surgery now.	Regionalist
	42b	What are the most accurate methods for placing regional anaesthetics? Eg use of imaging to guide	Regionalist
	70a	How can we ensure the reliability of regional anaesthesia?	Regionalist
	113c	For a technique which was based on anatomical landmarks and to be away from significant vessels and nerves is an ultrasound necessary for all FI blocks and the time that goes along with that	Regionalist
	169b	Advantages ofU/S vs nerve stimulation or a mix	Other Healthcare professional
	181c	Using nerve stimulators instead of ultrasound machines is this technique still acceptable practice especially when siting the regional blocks in an awake patient ?	Regionalist
	179c	Does concurrent use of a nerve stimulator increase the safety of ultrasound guided nerve blocks?	Regionalist
	51b	Is there a gold standard technique with regards to complication rate, ie in plane, out of plane, with or without nerve stimulator.	Regionalist
	97b	Attitudes to specific block rooms or anaesthetic rooms versus theatre and reasons why if theatre preferred	Other Healthcare professional
	113a	should regional anaesthesia (blocks) be given before or after surgery completed (assuming pt has GA or spinal)? What's the evidence?	Other Healthcare professional
	181a	In combined cases (regional with general anaesthetic) Should all regionals be sited before the general anaesthetic ?	Regionalist
	161b	Are performing nerve blocks under GA any less safe than performing nerve blocks in awake patients?	Regionalist

	177a	Why is not safe to do blocks under GA? Will patients always complain when the needle is intraneural when awake?	Regionalist
	179b	Is the risk of nerve injury higher for blocks performed under ultrasound guidance asleep?	Regionalist
	181b	What is the evidence on safety when siting regionals in awake patient compared to siting when patient under general ?	Regionalist
	189a	Does ultrasound reduce the incidence of nerve Injury in usgra?	Regionalist
	29c	Peripheral nerve blocks are best for the morbidly obese patients, how to deal if any complication occurred. Should while putting the block , a ramp position is to be maintained	Regionalist
	187b	Is ultrasound-guided regional anaesthesia safe in the anaesthetised patient?	Regionalist
How can we minimise the risk of regional anaesthesia in patients with altered coagulation?			
	171b	How can we perform regional anaesthesia safely in patients who are taking blood thinners (eg antiplatelets, DOAC) and it is deemed high risk to stop them?	Regionalist
	204b	Can I use post of care coagulation testing to make a decision on sitting a nerve block/epidural?	Regionalist
	97c	Science (real risk) around risk of spinal haematoma and anti- platelet drugs / DOACs after 24 hr abstinence	Other Healthcare professional
How do the risks and benefits of regional anaesthesia vary between different patient groups?			
	7b	Is regional suitable for all patients	Patient or carer
	67c	Which patients benefit most from regional anaesthesia?	Regionalist
	162a	How do we select patients for epidural	Regionalist
	8a	the relationship between being hypermobile and responses to anaesthesia	Patient or carer
	11a	I have had polio and been advised that I can't have another General anaesthetic.I need a hip oRegionalisttion - could this be done with a regional anarsthetic?	Patient or carer
	29a	Is central neuraxial block (spinal) safe for morbidly obese patient. If the effect does not come and a repeat spinal is planned, are the chances of high spinal anesthesia are 80-90%	Regionalist

	29b	Some of the nerve blocks are volume dependent, so does the weight of patient has any effect on its efficacy	Regionalist
	45c	Regional anaesthesia for urological stone surgery in patients with neurological conditions - what is safe and appropriate	Other Healthcare professional
	124c	Established peripheral neuropathy are we justified for using regional anesthesia.. medico legal implications	Regionalist
	8b	the relationship between having red hair and responses to anaesthesia	Patient or carer
	8c	the relationship between gender and responses to anaesthesia	Patient or carer
	79a	Is regional anaesthesia known to be better for patients who have cardiac or respiratory disease?	Patient or carer
	154a	Ethical approach to RA	Regionalist
	162b	Do socioeconomic status and race affect how frequently we offer general and regional analgesia to patients	Regionalist
	78c	Ethnic differences in Nerve injury rates	Regionalist
	217b	Is it safe for my patients?	Other Healthcare professional
	96c	Could this type of anaesthetic help people who are at risk from general anaesthesia due to health issues.?	Patient or carer
	26c	Effectiveness of regional anaesthesia on ICU	Regionalist
	71b	How do we individualise anaesthesia and postoperative pain treatment?	Regionalist
	110a	What would be the cut off maximum blood sugar level for patients undergoing surgery under subtenons/peribulbar anaesthesia (to block the optic nerve), if an anaesthetist is not present?	Other Healthcare professional
How do rates of complications vary between different regional anaesthetic techniques?	152a	Do the conclusions of NAP3 still stand?	Regionalist
	34a	The incident of wrong-sided nerve block.	Regionalist
	28a	What is the true incidence of significant peripheral regional anaesthesia complications? Eg neuropraxias, chronic pain related to blocks.	Other Healthcare professional
	161c	What is the rate of infection complications in performing nerve blocks without using full sterile precautions (sterile gowns, gloves, drapes and ultrasound barriers)?	Regionalist
	53c	What are the real complication rates of contemporary peripheral regional anaesthesia under ultrasound?	Regionalist
	51a	What is the up to date incidence of complications, including nerve damage, and does this vary with technique and particular block?	Regionalist

	73c	What is the incidence of harm due to blocks?	Regionalist
	78b	Risk of Nerve injury post blocks in Paediatric population	Regionalist
	82b	How frequent are complications due to regional anaesthesia?	Regionalist
	84b	What is the likely hood (as a percentage) of failure, necessitating the requirement for a general anaesthetic?	Regionalist
	85b	If there is a possibility of the regional anaesthetic not functioning what I can expect and if I do need a general anaesthetic what is the incidence of failed regional anaesthetic?	Other Healthcare professional
	92c	What is the incidence of anaphylaxis during regional anaesthesia.	Other Healthcare professional
	95b	Incidence of peripheral nerve injury (temporary and permanent) following peripheral blockade and the risk factors for its occurrence.	Regionalist
	98b	What are the block specific complications rates and incidence?	Patient or carer
	103a	What is the incidence and severity of medium and long term complications of different regional anaesthesia techniques?	Regionalist
	105a	Whats the Incident of local anaesthetic toxicity in children	Regionalist
	106a	What is the incidence of LA toxicity in paediatrics	Other Healthcare professional
	132a	When esp catheters are used, what is the incidence of issues post use, I.e back pain etc post esp catheter?	Other Healthcare professional
	132b	What's the incidence of nerve damage after blocks	Other Healthcare professional
	140a	What is the incidence of nerve damage post block	Other Healthcare professional
	140b	Which block has the highest rates of complications	Regionalist
	150b	What are the (?updated) statistics for nerve injury (temporary and permanent) for A) upper limb blocks B) lower limb blocks C) neuraxial techniques D) trunk/chest wall blocks etc. Can we have an updated real-time database of blocks performed and appropriate follow up (?SNAP audit) to allow assessment of complications in the era of increased use and ultrasound etc?	Regionalist
	159a	What is the incidence of meaningful nerve damage after a block?	Regionalist
	159b	How many blocks fail, and require GA?	Other Healthcare professional
	163a	What's the real incidence of post block neurological injury	Patient or carer
	155a	What is the safety of regional anaesthesia? What are the complications that occur, their severity and frequency - ideally stratified broadly by type of block?	Regionalist

	81a	What is the incidence and severity of nerve damage after RA- especially the peripheral/major plexus blocks?	Regionalist
	166c	What is the incidence of complications in RA?	Patient or carer
	169a	Dangers of nerve damage	Regionalist
	175c	What is the exact risk associated with specific blocks ?	Regionalist
	176a	Can we get accurate complication rates for peripheral nerve blocks in particular as this will help consent.	Regionalist
	187a	What is the incidence of nerve injury after blocks?	Regionalist
	189a	Does ultrasound reduce the incidence of nerve Injury in usgra?	Regionalist
	191a	True incidence of neuropraxia/ nerve damage following peripheral nerve blocks and risk factors.	Other Healthcare professional
	205b	What is the incidence of complications/failed blocks for non-physician anaesthesia providers who have gone through a standardised training program in the UK?	Regionalist
	214a	What is the "true" success rate of US Guided RA blocks?	Regionalist
	95b	Incidence of peripheral nerve injury (temporary and permanent) following peripheral blockade and the risk factors for its occurrence.	Regionalist
	214c	What is the different complications and rates of complications from different blocks in the UK?	Regionalist
	149a	What percentage of spinals fail?	Other Healthcare professional
	149b	What percentage of spinals have partial blocks?	Other Healthcare professional
Does the use of regional anaesthesia increase the risk of harm from compartment syndrome?	89a	Are regional techniques safe in trauma at risk of compartment syndrome?	Regionalist
	179a	Does regional analgesia increase the risk of undetected compartment syndrome (of the tibial compartments)?	Regionalist
	200a	Lower limb blocks and risk of compartment syndrome	Regionalist
	208a	Regional blocks and compartment syndrome	Regionalist

What factors increase the risk of harm from regional anaesthesia?	207a	Concrete risk factors for nerve damage Gradation of risk from no risk factors to many risk factors (these 2 questions to create bespoke risk profiles for pts)	Other Healthcare professional
	95b	Incidence of peripheral nerve injury (temporary and permanent) following peripheral blockade and the risk factors for its occurrence.	Regionalist
	207b	Gradation of risk from no risk factors to many risk factors (these 2 questions to create bespoke risk profiles for pts)	Regionalist
	191a	True incidence of neuropraxia/ nerve damage following peripheral nerve blocks and risk factors.	Other Healthcare professional
Which complications can occur as a result of regional anaesthesia?	128b	What are common side-effects of local anaesthetics?	Other Healthcare professional
	160c	Is Anesthesia have long time effect on my body	Patient or carer
	60c	Could Regional anaesthesia increase perioperative bleeding and thus duration of bariatric or regionalisttive procedures	Regionalist
	92b	What are the side effects of having a regional anaesthetic.	Other Healthcare professional
	96a	How much clinical info is available on long lasting after effects of nerve block drugs used for regional anaesthesia if any ?	Regionalist
	160c	Is Anesthesia have long time effect on my body	Patient or carer
	165a	Which long-term outcomes will I have in the future? 5-years, 10- Years,20-years after anesthesia (for example, headache, difficulties with sleep)	Regionalist
	165b	Does Anesthesia cause memory loss?	Patient or carer
	177b	What will be the long term consequences of ultrasound guided blocks causing nerve injury? Can degree of injury prevented after using pressure monitors and/or nerve stimulators?	Regionalist
	13a	Does an epidural for caesarean birth cause back problems several years later?	Patient or carer
	165c	Will baby be harmed if I have Anesthesia?	Patient or carer
	58a	What are the Long term complications of dural puncture?	Regionalist
	80b	Further insight into pathology of post dural puncture headache	Regionalist

How should complications from regional anaesthesia be managed?	29c	Peripheral nerve blocks are best for the morbidly obese patients, how to deal if any complication occurred. Should while putting the block , a ramp position is to be maintained	Regionalist
	211c	Clinical decision making around conversion of regional anaesthesia to general anaesthesia. Has progress in the safety of GA been assimilated into clinicians' decision making? Do anaesthetists have differing thresholds at which to consider conversion from RA to GA? Are there situations where an anaesthetist's threshold for conversion may differ? How does this impact care and patient experience?	Regionalist
	190b	What happen if the nerve block doesn't wear off	Other Healthcare professional
	45b	Improve intraoRegionalisttive patient experience of regional anaesthetic techniques - what to do when the block doesn't work as well as planned	Other Healthcare professional
	54b	Is there any benefit of GON block in PDPH?	Regionalist
Is regional anaesthesia safer than general anaesthesia?	101a	What are the relative risks of RA vs GA in contemporary practice.	Regionalist
	216a	Is regional anaesthesia safer than general anaesthesia ?	Patient or carer
	82c	Is the regional anaesthesia safer than GA?	Regionalist
	7a	Which is the most risk to the patient - regional or general	Patient or carer
	39a	Patient outcomes of regional vs general for bladder outflow procedures and TURBT	Other Healthcare professional
	40a	Is spinal anaesthesia the safest option for TURBT?	Other Healthcare professional
	82c	Is the regional anaesthesia safer than GA?	no data
	96c	Could this type of anaesthetic help people who are at risk from general anaesthesia due to health issues.?	Patient or carer
	216a	Is regional anaesthesia safer than general anaesthesia ?	Patient or carer

How can we improve the effectiveness of regional anaesthesia?	42c	Can regional blocks for chronic pain patients be delivered in the community?	Regionalist
	181c	Using nerve stimulators instead of ultrasound machines is this technique still acceptable practice especially when siting the regional blocks in an awake patient ?	Regionalist
	94b	Image quality is highly variable with practitioner, patient and equipment variables. How often are we happy with image quality? Do better images translate into better blocks? If image quality is poor, should blocks be abandoned? Are the risks to patients higher with poorer image capture beyond simple block failure?	Other Healthcare professional
	148a	Who should inject the LA during a regional block, the assistant or the anaesthetist?	Other Healthcare professional
	180b	What could be done to improve these regional blocks. Systematic review?	Regionalist
	70a	How can we ensure the reliability of regional anaesthesia?	Regionalist
	70b	How can we increase the speed of regional anaesthesia?	Regionalist
	120a	What are the reasons why regional anaesthesia fails and what are the best solutions?	Regionalist
	145a	How do you determine the amount of local anaesthesia surrounding peripheral nerves to be sufficient for surgery?	Regionalist
	120a	What are the reasons why regional anaesthesia fails and what are the best solutions?	Regionalist
	113a	should regional anaesthesia (blocks) be given before or after surgery completed (assuming pt has GA or spinal)? What's the evidence?	Other Healthcare professional
	164b	Does the timing of a nerve block affect the outcome/efficacy?	Regionalist
	181a	In combined cases (regional with general anaesthetic) Should all regionals be sited before the general anaesthetic ?	Regionalist
	120c	What is the best wound infusion catheter to use for effective analgesia for young children?	Regionalist
	73b	Is doing a block better than infiltration by a surgeon?	Regionalist
	127c	Which blocks are most effective for the commonest oRegionalisttions eg hernia TAP/QL eg RO fem blade plate ant QL, IF plus morphine, single shot epidural	Regionalist
	190a	In which situation does regional anaesthesia is useful	Regionalist
	199a	Which oRegionalisttions absolutely MUST have a regional technique included as part of standard care, unless contraindicated?	Regionalist
	27b	Differences between various blocks and techniques?	Regionalist

	96b	What type of oRegionalisttions could these nerve blocks be used for ?	Regionalist
	22b	Do fascial plane blocks have any real clinical benefit?	Regionalist
	20b	Does the use of spinal ultrasound improve epidural or spinal anaesthesia/analgesia sucess in difficult (particularly high BMI) patients (particularly obstetrics).	Regionalist
	32a	Role of ultrasound in bariatrics for RA	Regionalist
	142b	Can this be used for eye surgery eg cataract removal?	no data
	120a	What are the reasons why regional anaesthesia fails and what are the best solutions?	Regionalist
	74c	How effective are wound infiltration catheter techniques?	Other Healthcare professional
Can regional anaesthesia improve recovery after surgery?	103b	What are the benefits of regional anaesthesia in terms of analgesia/ avoidance of chronic pain, mobilisation and return to baseline QoL; either as combined with GA or standalone RA	Other Healthcare professional
	76a	Do post-op (non-obstetric) continuous regional analgesia infusions reduce hospital stay when compared to opioid based analgesia techniques?	Other Healthcare professional
	102b	Length of stay regional Vs non regional	Other Healthcare professional
	60a	Short-term and long-term outcome from oRegionalisttive procedures with or without regional anaesthesia	Other Healthcare professional
	136a	How does the administration of regional anaesthesia speed up post oRegionalisttive recovery time ?	Other Healthcare professional
	10b	How does regional anaesthesia help with post oRegionalisttive recovery	Patient or carer
	56a	What is the evidence for regional anaesthesia techniques in enhanced recovery?	Regionalist
	62b	WILL IT IMPACT ON OUTCOMES SUCH AS REDUCED VENTILATORY TIME POST SURGERY	Regionalist
	175a	Can blocks help outcomes in ICU eg weaning from ventilation in abdominal surgery	Regionalist
	7c	Which has the best recovery time	Patient or carer
	117b	What are the outcomes in terms of patients' early mobilisation for the use of regional versus general anesthesia?	Patient or carer
	142a	What are the differences in recovery time between regional anaesthesia and general?	no data
	203c	Does the use of motor sparing blocks improve quality of recovery compared with multimodal analgesia/LIA in arthroplasty.	Regionalist

	22c	What outcomes does regional anaesthesia really influence?	Regionalist
	88c	If have this done this way what is the befit?	Regionalist
	162c	Are patient outcomes improved using regional analgesia	Regionalist
Can regional anaesthesia improve long term outcomes after surgery?	74b	Does regional anaesthesia reduce the spread of breast cancer?	Other Healthcare professional
	215a	Role of regional anaesthesia in cancer recurrence	Other Healthcare professional
	22c	What outcomes does regional anaesthesia really influence?	Regionalist
	60a	Short-term and long-term outcome from oRegionalisttive procedures with or without regional anaesthesia	Other Healthcare professional
	88c	If have this done this way what is the befit?	Regionalist
	162c	Are patient outcomes improved using regional analgesia	Regionalist
	170a	What are the impacts on use of regional anesthesia and functional outcomes after surgery	Regionalist
	53a	Can regional anaesthesia affect long term outcomes after surgery?	Other Healthcare professional
	171a	What are the long term patient-centred benefits, it any, associated with regional anaesthesia?	Regionalist
	157b	Can regional improve long term outcomes in some surgeries?	Regionalist
	170a	What are the impacts on use of regional anesthesia and functional outcomes after surgery	Regionalist
	206b	Blocks which are proven to change patients' long term outcomes (QOL, chronic pain, disease-free years)	Regionalist
	215c	Patient outcomes with block only awake surgery	Regionalist
	204c	Do elderly people who have regional only techniques have better cognitive outcomes?	Regionalist
	170c	How do regional techniques impact multidimensional patient reported outcomes	Regionalist
	103b	What are the benefits of regional anaesthesia in terms of analgesia/ avoidance of chronic pain, mobilisation and return to baseline QoL; either as combined with GA or standalone RA	Other Healthcare professional
	22c	What outcomes does regional anaesthesia really influence?	Regionalist
	138b	How happy are patients with the anaesthetic they received 6 months after their oRegionalisttion? (control group: no block, intervention group: block) Since it is difficult to recall pain in the abstract, are the long-term benefits of regional anaesthesia outweighed by the risks?	Regionalist

	88c	If have this done this way what is the benefit?	Regionalist
Can regional anaesthesia improve the management of pain after surgery?	158a	Does RA affect consumption (amount and duration) of oral analgesia in the first 1/2 weeks post-op.	Regionalist
	161a	How much do nerve blocks reduce the amount of other analgesia used in the immediate days after surgery?	Regionalist
	56b	Do regional anaesthetic techniques give better analgesia than opiates/other medications?	Regionalist
	62c	Will there be a significant reduction in opioid usage post surgery	Regionalist
	105c	Is using regional analgesia opioid sparing	Other Healthcare professional
	205a	Does central neuraxial anaesthesia reduce pain in the immediate post-operative period than general anaesthesia alone?	Other Healthcare professional
	137a	To what extent regional techniques should be recommended to be combined with other opioid sparing approaches.	Regionalist
	137c	What is the specific added value of intrathecal opioids, if any, when, locoregional techniques, among others, may render them useless?	Regionalist
	71b	How do we individualise anaesthesia and postoperative pain treatment?	Regionalist
	202c	Post-op and chronic pain outcomes RA versus GA	Regionalist
Do patients prefer surgery under general or regional anaesthesia?	166b	Is RA associated with higher/lower patient satisfaction?	Patient or carer
	173b	Patient experiences of RA vs GA. Particularly low risk fit/well patients. Suspicion that occasionally RA is pushed because the anaesthetist wants to do it ('fun' or 'more interesting', almost like a hobby). But, actually what is the experience for the patient being needed (sometimes multiple times)? Did they benefit from not having a GA? Does a short post op course of simple oral analgesia cause demonstrable harm that RA could've avoided? Put another way, to what extent are SOME of the purported benefits of RA a 'self fulfilling prophecy'?	Regionalist

	168a	From a patient experience perspective, do patients prefer regional anaesthesia compared to general anaesthesia?	Other Healthcare professional
	102a	Patient satisfaction of regional Vs not regional	Regionalist
	104b	Can the use of regional anaesthesia in children be shown to improve satisfaction with hospital admission?	Regionalist
	47a	Do patients prefer surgery under general or regional anaesthesia	Regionalist
	122a	(Any positive) Psychological impact or PROMS of awake arthroscopic shoulder surgery where patient witnesses his / her oRegionalisttion compared with under GA (+/- block)	Regionalist
	141a	Do patients really prefer being awake?	Regionalist
	30b	What are patient's dominant perceptions of oRegionalisttions under RA vs GA?	Regionalist
	40c	What anaesthetic technique would the surgeon/patient/anaesthetist prefer?	Other Healthcare professional
	182a	Methods to quantify Quality of analgesia provided by regional anaesthesia compared to more conventional analgesic techniques. This is a central topic as often anaesthetists struggle to bring evidence supported by numbers to what they generally experienced in their practice. Lack of evidence generates also scepticism among surgeons.	Regionalist
Can regional anaesthesia improve outcomes after chest trauma?	22b	Do fascial plane blocks have any real clinical benefit?	Regionalist
	111a	What is the effectiveness of RA (ie PVB) on LOS and Mortality in rib # patients.	Regionalist
	156b	Optimal analgesia for rib fractures	Regionalist
	184b	Are thoracic epidurals more superior to paravertebral blocks and PCA for major chest injuries?	Regionalist
	129a	What is the best form of regional anaesthesia, as part of an integrated pathway, to help improve outcomes following rib fracture?	Other Healthcare professional
	135a	We do a lot of bolus infusions for rib # and would like to know if we could develop guidance on when and when not to insert catheters for same.	Regionalist
	23b	Which is most effective regional block for chest wall trauma?	Regionalist
	155c	Which is the optimal block - for patients and staff - for fractured ribs?	Other Healthcare professional
	178c	Are thoracic epidurals better than intermittent-bolus erector spinae blocks for patients with multiple unilateral rib fractures?	Regionalist

	147a	What outcomes matter to patients with rib fractures?	Regionalist
	190a	In which situation does regional anaesthesia is useful	Regionalist
	190a	In which situation does regional anaesthesia is useful	Regionalist
	89b	Do ESP catheters improve outcomes vs lignocaine patches & PCA?	Regionalist
	63a	length of stay comparison for patients with 3 or less rib #'s regional block v oral analgesia.	Regionalist
	63b	Readmission rates for patients regional block v oral analgesia following discharge specifically for patients with 3 or less rib #'s	Other Healthcare professional
Can regional anaesthesia improve outcomes in genitourinary procedures?	37b	How can we better provide pain control during transperineal prostate biopsy - patients find the rectal probe uncomfortable	Regionalist
	38a	What parts of Genito-urinary system are amenable to regional anaesthesia?	Other Healthcare professional
	39b	Indications for regional techniques in penoscrotal surgery	Regionalist
	44b	Nerve blocks for prevention of obturator nerve reflex induced bladder injury. These are not widely practiced in spite of this being a common problem in urology practice.	Regionalist
	45a	Assess the safety and feasibility of percutaneous renal stone surgery (PCNL) under local/regional anaesthesia rather than general anaesthesia	Regionalist
	41b	Optimising regional and local anaesthesia for bladder outlet obstruction surgery	Regionalist
	37a	Is the a regional anaesthetic option for chronic prostatitis	Regionalist
	44c	The role of spermatic cord blocks for chronic testicular pain - bot diagnostic and therapeutic - is another topic that is poorly defined in guidelines and is witness to wide variation in practice.	Regionalist
	44a	The role of nerve blocks for various forms of chronic pelvic pain could do with better definition. Conditions such as myofascial pain, pudendal neuralgia etc fall in-between the realms of urologists, gynaecologists and pain specialists.	Regionalist
Can regional anaesthesia improve outcomes in	35c	Can ESP block catheter save failed analgesia by epidural in liver surgery ?	Regionalist

abdominal surgery?			
	50a	Is TAP block useful?	Regionalist
	50c	Is spinal anaesthesia useful in laparoscopic surgery?	Regionalist
	108a	Are epidurals still relevant for abdominal/thoracic surgery?	Regionalist
	155b	Does epidural anaesthesia and analgesia reduce complications after emergency laparotomy? Like FLOELA to be conducted within the NELA framework.	Regionalist
	163c	Is the TAP block after ga caesarean defunct?	Regionalist
	184a	Do epidurals or spinal with opiates & rectus sheath catheters lead to better outcomes and less complications following major abdominal surgery? I would separate these to upper abdominal (e.g. HPB, upper GI) and lower abdomen surgery.	Regionalist
	192a	Rectus Sheath catheters in emergency laparotomy; enough evidence yet to make them a standard of care?	Regionalist
	129c	Are rectus sheath catheters equianalgesic to epidurals in elective colorectal surgery patients?	Regionalist
	22b	Do fascial plane blocks have any real clinical benefit?	Regionalist
	33b	nerve blocks for laparoscopic surgery (by surgeons / anaesthetists) - are they useful?	Regionalist
	124b	Segmental spinal are we arriving towards an amicable legal alternative for GA for thoracic and abdominal surgeries?	Regionalist
	18b	Which patients benefit from an epidural in major body cavity surgery in terms of hard morbidity and mortality outcomes?	Regionalist
	99b	What is the place for regional anaesthesia in laparoscopic surgery e.g Colorectal, Oncogynae, Plastics - combined with ERAS protocols	Regionalist
Can regional anaesthesia improve outcomes after elective hip surgery?	35a	Is USS guided fascia iliaca block superior to landmark for pain and patient experience outcome?	Regionalist
	123c	Comparison of PENG block in elective THR compared to LIA (pain scores, use of opioids, PONV, mobility & length of stay. To have a good comparison at the start the study could be limited to ASA 1&2 patients only.	Regionalist
	201b	Does the PENG block add anything to LIA?	Regionalist

	148b	Does regional anaesthesia benefit patient outcomes on orthopaedic surgery?	Regionalist
	34b	Regional anaesthesia (nerve block) + local infiltration in day case joint replacement.	Regionalist
Can regional anaesthesia improve outcomes for patients with a fractured neck of femur?	66a	Does RA reduce mortality in fracture NOF	Other Healthcare professional
	66b	Does RA reduce delirium in fracture NOF	Other Healthcare professional
	66c	Does RA reduce hospital stay in fracture NOF	Other Healthcare professional
	129b	Can we improve outcomes with the use of sensory selective blocks in hip fracture patients?	Regionalist
	156c	Optimal analgesia for fractured neck of femur	Regionalist
	186c	Should patients with neck of femur fractures have a fascia iliaca catheter inserted for regular top ups as opposed to a single shot nerve block in ED?	Regionalist
	148b	Does regional anaesthesia benefit patient outcomes on orthopaedic surgery?	Regionalist
	35a	Is USS guided fascia iliaca block superior to landmark for pain and patient experience outcome?	Regionalist
Can regional anaesthesia improve outcomes after knee surgery?	19a	Are adductor canal blocks of any value in total knee replacement ?	Regionalist
	156a	Optimal analgesia for knee surgery	Regionalist
	200b	Best anaesthesia/analgesia for knee surgery	Other Healthcare professional
	172b	Spinal vs block for Tkr	Regionalist
	201a	Critical evaluation of the IPACK block?	Regionalist
	148b	Does regional anaesthesia benefit patient outcomes on orthopaedic surgery?	Regionalist
	34b	Regional anaesthesia (nerve block) + local infiltration in day case joint replacement.	Regionalist

Can regional anaesthesia improve outcomes after amputation surgery?	36b	Do aka and bka patients with sciatic catheters have a difference in their post op pain scores i.e. suggesting that omitting a femoral perineural catheter for aka results in higher pain compared to bka?	Regionalist
	36c	Do aka patients with sciatic AND femoral perineural catheters and post op infusions have better post op pain scores than those with sciatic only?	Regionalist
	36b	Do aka patients with sciatic AND femoral perineural catheters and post op infusions have better post op pain scores than those with sciatic only?	Regionalist
Can regional anaesthesia techniques improve outcomes after shoulder procedures?	186a	Can interscalene blocks be used for shoulder manipulation? (Could be useful for patients who aren't fasted for sedation)	Regionalist
	198b	Could ambulatory catheters help earlier discharge in shoulder surgery ?	Regionalist
	148b	Does regional anaesthesia benefit patient outcomes on orthopaedic surgery?	Regionalist
	33a	best blocks for shoulder surgery	Regionalist
Can regional anaesthesia techniques improve outcomes after elbow surgery?	148b	Does regional anaesthesia benefit patient outcomes on orthopaedic surgery?	Regionalist
	199b	What is the best brachial plexus block to use for elbow surgery?	Regionalist

Can regional anaesthesia improve outcomes in cardiac surgery?	62a	Can a bilateral pecs 2 block help improve pain relief in cardiac surgery	Other Healthcare professional
	26a	Are there effective regional adjuncts for cardiac anaesthesia?	Regionalist
	27c	Regional techniques for advanced cardiothoracic procedures (cardiac on CPB, transplant, etc.)	Regionalist
	77b	what is the best option of regional analgesia technic for cardiac surgeries?	Regionalist
	18b	Which patients benefit from an epidural in major body cavity surgery in terms of hard morbidity and mortality outcomes?	Regionalist
	133a	is esp or sa or PIFB blocks better to cover sternal pain?	Regionalist
Can regional anaesthesia improve outcomes in thoracic surgery?	27c	Regional techniques for advanced cardiothoracic procedures (cardiac on CPB, transplant, etc.)	Regionalist
	52a	Is regional anaesthesia feasible in thoracic surgery?	Regionalist
	52b	Which kind of oRegionalisttions can be performed in the thorax under regional anaesthesia?	Regionalist
	52c	Uniportal VATS is the best approach to perform oRegionalisttions in the chest under regional anaesthesia?	Regionalist
	108a	Are epidurals still relevant for abdominal/thoracic surgery?	Regionalist
	23a	Are extrapleural (paravertebral) blocks more effective vs Erector spinae or Serratus blocks in thoracic surgery?	Regionalist
	90b	Is the use of truncal blocks (e.g., erector spinae plane block and serratus anterior plane block) non-inferior to paravertebral block for thoracoscopic surgery in terms of more important clinical outcomes (e.g. postoperative pulmonary complications, need for planned and unplanned admission to the ICU, the length of ICU and hospital stays)?	Regionalist
	18b	Which patients benefit from an epidural in major body cavity surgery in terms of hard morbidity and mortality outcomes?	Regionalist
	124b	Segmental spinal are we arriving towards an amicable legal alternative for GA for thoracic and abdominal surgeries?	Regionalist

Can regional anaesthesia improve outcomes in breast surgery?	68a	What is the best regional anaesthesia technique for breast surgery? Could this be used effectively and consistently as the only anaesthetic modality?	Other Healthcare professional
Can regional anaesthesia improve outcomes in spinal surgery?	148b	Does regional anaesthesia benefit patient outcomes on orthopaedic surgery?	Regionalist
	201c	What is the role of trunk blocks for major spinal surgery?	Other Healthcare professional
How can we best manage pain as regional anaesthesia wears off?	12a	What is the best way (specific drugs, route, regime) to provide continual pain control as the effect of the nerve block wears off?	Patient or carer
	28b	What is the experience of patients when blocks wear off at home and are we taking appropriate steps to manage this pain?	Regionalist
	48a	How is it best to deal with severe post-op pain when a regional block wears off (both at home and in hospital)?	Regionalist
	67a	How can we tailor pain relief for when a block wears off?	Regionalist
	82a	How do we provide post-operative analgesia and support to discharged patients when the block wears off?	Regionalist
	85c	How long following the administration will the anaesthetic keep me pain free and at what point should I take pain relief to prevent breakthrough pain?	Other Healthcare professional
	100a	Rebound pain and solutions	Regionalist
	71c	Can post-operative pain be prevented? In other words how long does pain relief need to last, such that when regional anaesthesia wears off, sensitisation of the central nervous system is less than it otherwise would have been, if no RA or RA of lesser duration had been given.	Regionalist

	138a	How do patients rate their pain relief in the 72 hours post-regional. (Is there a risk that people who have a regional block and are pain free in recovery receive less strong TTOs and are therefore in more pain at home?)	Regionalist
	143a	How is the transfer from regional anaesthesia to post-operative analgesia managed. Several people I know have had very successful regional anaesthesia but great difficulty controlling the pain when the anaesthesia wears off.	Patient or carer
	145b	How variable is post-operative analgesia timing and why?	Other Healthcare professional
	195a	What is the experience of patients managing a nerve block at home after a day case procedure?	Patient or carer
Can regional anaesthesia reduce chronic post surgical pain?	18a	Does Regional Anaesthesia reliably reduce chronic post surgical pain?	Regionalist
	25b	Does RA prevent chronic pain?	Regionalist
	27a	Regional anaesthetic techniques and chronic pain incidence?	Regionalist
	71a	Does regional anaesthesia alter pain trajectories and the incidence of chronic pain after surgery?	Other Healthcare professional
	74a	Does regional anaesthesia reduce post-operative chronic pain?	Regionalist
	86c	How can we reduce/eliminate chronic pain?	Regionalist
	122b	Incidence of chronic pain in hand surgery done under RA / GA vs GA only	Regionalist
	122c	Incidence of chronic pain in foot surgery done under RA / GA vs GA only	Other Healthcare professional
	133b	do nerve block techniques reduce phantom pain post amputation	Regionalist
	139c	Association of surgery under block & development of chronic pain. Particularly CRPS in foot/ankle surgery	Regionalist
	158b	Could RA prevent post-operative opioid addiction?	Regionalist
	166a	Does RA decrease likelihood of chronic pain?	Other Healthcare professional
	168b	Does awake regional anaesthesia reduce the incidence of post-operative CRPS?	Regionalist
	178a	Do regional blocks reduce the incidence of chronic pain after surgery? (Surgery and block-specific data in a large, well designed, multi centre Bayesian trial).	Regionalist
	182c	More research in basic science of regional anaesthesia such as: Does R.A. and local anaesthetic use prevent at cellular level prevent mechanism of chronic pain?	Regionalist

	103b	What are the benefits of regional anaesthesia in terms of analgesia/ avoidance of chronic pain, mobilisation and return to baseline QoL; either as combined with GA or standalone RA	Other Healthcare professional
	86a	How to manage transitional pain?	Regionalist
	202c	Post-op and chronic pain outcomes RA versus GA	Regionalist
	103b	What are the benefits of regional anaesthesia in terms of analgesia/ avoidance of chronic pain, mobilisation and return to baseline QoL; either as combined with GA or standalone RA	Other Healthcare professional
What are the risks and benefits of regional anaesthesia in children?	182b	Safety profile of peripheral nerve blocks in children. National audit with standardised method of data collection likely to be required	Regionalist
	78b	Risk of Nerve injury post blocks in Paediatric population	Regionalist
	105a	What's the Incident of toxicity in children	Regionalist
	106a	What is the incidence of LA toxicity in paediatrics	Other Healthcare professional
	160a	Does Epidural have an effect on children	Patient or carer
	104a	Can the combined use of regional and general anaesthesia in early childhood be shown to improve Neurocognitive outcomes in later life?	Regionalist
	104b	Can the use of regional anaesthesia in children be shown to improve satisfaction with hospital admission?	Regionalist
	142c	How successful is regional anaesthesia in children? Is it tolerated?	no data
	106c	In paediatric trauma patients does the use of LA blocks reduce opiate consumption, time to first mobilising and reduce side effects	Other Healthcare professional
	120b	What is the best epidural solution for children with cerebral palsy having multi-level surgery requiring an epidural?	Regionalist
	208b	best LA and dose that can be used in paediatric patients with peripheral nerve catheters to give good analgesia	Regionalist
	142c	How successful is regional anaesthesia in children? Is it tolerated?	no data
	106b	From what age is it deemed 'safe' (and what drug, concentration and dose)	Other Healthcare professional
	120c	What is the best wound infusion catheter to use for effective analgesia for young children?	Regionalist

What training and clinical opportunities in regional anaesthesia are currently available?	49b	RA training: Are all UK trainees getting adequate exposure?	Other Healthcare professional
	212b	Where can individuals receive training outside their normal base hospital? How are these courses advertised?	Other Healthcare professional
	94a	What are the current training and practical opportunities in regional techniques locally, regionally and nationally? How do we assess practitioner competency?	Regionalist
How should non anaesthetic healthcare professionals be trained to support patients having regional anaesthesia?	75c	Can you include the training of non-anaesthetic theatre staff on how to behave when a patient is awake in theatre having surgery under a regional anaesthesia block- especially in (anonymised)	Regionalist
	212a	What training have nurses received to care for patients who have a continuous RA?	Regionalist
	154a	Ethical approach to RA	Regionalist
	87b	are there formal education courses for allied health staff who work with RA Blocks set as the minimum standard to assist with Blocks?	Other Healthcare professional
	69b	what improvements are required to train HCPs to do blocks across various areas of practice not just anaesthetics	Other Healthcare professional
How can training in regional anaesthesia be delivered most effectively?	32b	Training in the use of ultrasound	Regionalist
	39c	Training needs in regional techniques	Regionalist
	55a	How can we train anaesthetists to be competent in eg 7 blocks before CCT?	Regionalist

	86b	What is the role of high fidelity simulation in regional anesthesia training?	Other Healthcare professional
	89c	What is the most effective way of training people to be competent at performing regional techniques?	Regionalist
	99a	What are the best learning strategies for regional anaesthesia - how can these be applied to different learning styles	Regionalist
	112b	How do we improve training/teaching of RA, especially of senior colleagues for whom it was not a requirement when they were in training.	Regionalist
	116b	What tools do we need to train the next generation of regional anaesthetists?	Regionalist
	119b	How can we improve simulation and education in core basic blocks?	Patient or carer
	127b	Assess VR training for block insertion	Patient or carer
	144b	Simulation training (low or high fidelity) to gain block competency	Regionalist
	147c	How do we teach technical skills in regional anaesthesia	Regionalist
	154b	Basic vs Advanced blocks. What should we teach in the curriculum?	Regionalist
	170b	How can a curriculum of Plan A blocks be effectively taught to trainees in anesthesia	Regionalist
	174c	How do we train more consultants in RA?	Regionalist
	186b	What is the best method to teach trainees to provide regional anaesthesia?	Regionalist
	188a	How to validate and drive forward training and simulation in regional anaesthesia teaching to ensure safety for patients and maximum benefit from each clinical interaction for trainees and consultants	Regionalist
	197b	Increasing regional anaesthesia training in the curriculum for FRCA trainees - I have found it to be a relatively inaccessible area with lots of detailed anatomical knowledge as a barrier to getting hands on and practically involved - how can regional be made more accessible for trainees?	Regionalist
	154a	Ethical approach to RA	Regionalist
	126a	How can more anaesthetists carry out regional anaesthesia as part of their standard clinical practice	Patient or carer
	180b	What could be done to improve these regional blocks. Systematic review?	Regionalist
What defines competence in regional anaesthesia?	55a	How can we train anaesthetists to be competent in eg 7 blocks before CCT?	Regionalist
	76b	Are anaesthetist sufficiently trained for regional techniques (excluding epidurals)?	Regionalist
	89c	What is the most effective way of training people to be competent at performing regional techniques?	Regionalist

	94a	What are the current training and practical opportunities in regional techniques locally, regionally and nationally? How do we assess practitioner competency?	Regionalist
	144b	Simulation training (low or high fidelity) to gain block competency	Regionalist
	15b	Establish a minimum standard for ultrasound competence for anaesthetist and trained registered assistant	Other Healthcare professional
	15c	To what standard are current anaesthetic assistants trained?	Other Healthcare professional
	70c	How many procedures are necessary to become competent in regional anaesthesia and should all anaesthetists be allowed to undertake these procedures?	Other Healthcare professional
	97a	Relation between no of blocks / year and effectiveness speed and safety, rather as surgeons have to undergo. Differentiate between different sites	Other Healthcare professional
	140c	How many blocks on average enables a clinician to be competent at doing a successful block safely	Regionalist
	214b	What is the "learning curve" for development of competence in RA?	Regionalist
	48c	Should most nerve blocks be done by a "core" group of specialist anaesthetists, rather than occasional practitioners doing their best?	Regionalist
	189c	Is it safe for non anaesthetists be performing ultrasound guided regional anaesthesia?	Regionalist
Who should perform regional anaesthetic techniques?			
	149c	Is there any where in the U. K, that Nurses/O. D. P. 's perform spinal /other regional blocks?	Other Healthcare professional
	57a	Non physicians doing RA eg AAs are they safe, efficient and effective?	Regionalist
	69b	what improvements are required to train HCPs to do blocks across various areas of practice not just anaesthetics	Other Healthcare professional
What are the risks and benefits of mixing local anaesthetics?			
	98a	What are the safe dose limits of mixed local anaesthetic agents?	Regionalist
	78a	Efficacy and risks associated with Local Anaesthetic mixture solutions.	Regionalist
	124a	Do I mix or keep it Neat??? Mixing of short acting with long acting local anesthetic. I have searched and searched but no clear cut RCTs or reviews about this topic..	Other Healthcare professional

	139b	To mix or not? Mixtures of LA in blocks, yes, no, maybe - lots of opinions out there. If mixing is ok, how does toxicity work (is it additive, or can we give 2 separate drugs at high doses)	Regionalist
	163b	Is mixing local anaesthetics really that bad??	Regionalist
	175b	Does mixing locals improve onset time ?	Regionalist
	206c	Best admixtures of LAs / which additives are worth it?	Regionalist
	158c	What are the best combinations of LA for analgesia lasting post op	Regionalist
Does the safe dose of local anaesthetic vary between different regional anaesthetic techniques?	72a	How can local anaesthetic toxicities be individualised for a given patient?	Regionalist
	145c	How much local anaesthesia injected causes toxicity and require treatment?	Other Healthcare professional
	172a	Safety of doses of bupivacaine above the BNF recommendations	Regionalist
	189b	Are the blanket toxic doses of LA the same regardless of site of block?	Regionalist
	177c	What is ideal concentration of LA to prevent nerve injury and LA volume to limit pressure injury?	Regionalist
	151a	How can we clarify the doses and volumes of LA that can be used? We have fixed maximum doses per kg of various LA agents but they're generally treated as being the maximum dose "per oRegionalisttion" - but how long needs to pass before that initial dose is considered to be "past" and another dose can be given (including infiltration of other areas outside the block by surgeons at the end)? This will help particularly with multiple blocks or where the extent of surgery changes intra-op and the block performed at the start may need unplanned augmentation with another block or a repeat block at the end of the oRegionalisttion	Regionalist
What is the most effective dose and type of local anaesthetic for each regional anaesthetic technique?	70a	How can we ensure the reliability of regional anaesthesia?	Regionalist
	70b	How can we increase the speed of regional anaesthesia?	Regionalist

	93b	What are the recommended volumes and concentrations for various nerve blocks?	Other Healthcare professional
	144a	Procedure specific dose, volume and concentration of local anaesthetic for maximum analgesia and patient satisfaction.	Patient or carer
	46a	What are the differences between bupivacaine/levobupivacaine/ropivacaine/lidocaine in outcomes for plan A blocks.	Regionalist
	152b	Does 0.5% bupivacaine add anything to blocks except motor block	Regionalist
	183a	What is the dose, % we should be using to provide anaesthesia or analgesia blocks	Regionalist
	26b	New local anaesthetic agents	Regionalist
	99c	How do we work to develop new pharmacological components to prolong the duration of regional anaesthesia	Regionalist
	196a	What is the optimal dosage for spinal anaesthesia in obstetric patients?	Regionalist
What are the risks and benefits of using adjuncts to local anaesthetics?	148c	How can we prolong the duration of single shot blocks?	Patient or carer
	158c	What are the best combinations of LA for analgesia lasting post op	Regionalist
	206c	Best admixtures of LAs / which additives are worth it?	Regionalist
	31b	what is the true benefit of PNB infusions versus liposomal bupivacaine?	Regionalist
	188b	Research to push forward or right off the use of Liposomal bupivacaine, so many applications the risks, skill and time required for catheter placement avoided... can we use it - ESP, QLB FICB, Adductor, Ankle	Regionalist
	69c	how might innovations like liposomal bupivacaine be best deployed	Regionalist
	26b	New local anaesthetic agents	Regionalist
	99c	How do we work to develop new pharmacological components to prolong the duration of regional anaesthesia	Regionalist
	123b	High dose vs standard dose of intra-thecal diamorphine in open colorectal / gynae surgery (duration of pain relief & side effect profile)	Other Healthcare professional
	118b	Is keterolac a better option for blocks to reduce acute post-op pain ? and what are the downside to using this medicine? (does it work too well? Does this type of block interfere with muscle strength ?	Regionalist
	49a	Adjuncts with LA: what to use?	Regionalist
	95a	Relative effects of peri-neural and IV alpha-2 agonists for prolonging/enhancing peripheral nerve blocks.	Regionalist

	127a	Duration of block when no adjunct, vs with dex PN/IV, with dexmedetomidine PN/IV, with both. Aim to prolong analgesia for daycase and avoid secondary access to eg GP post discharge for analgesia issues.	Regionalist
	172c	Clonidine as an adjunct for neuraxial vs placebo	Regionalist
	42a	How can regional anaesthetics be optimised? I have heard of bicarbonate being used in it to make it sting less and temRegionalisttture control	Other Healthcare professional
	99c	How do we work to develop new pharmacological components to prolong the duration of regional anaesthesia	Regionalist
	60b	Effect of large dose spinal opioid and postoRegionalistttive patient satisfaction	Regionalist
	95c	Optimum dosing of intra-theal diamorphine for various procedures e.g. lower limb arthroplasty, total abdominal hysterectomy, hemicolectomy, HPB procedures.	Other Healthcare professional
What is the optimum duration of regional anaesthesia?	92a	How long does the regional anaesthetic last for after surgery.	Regionalist
	84c	How long will the loss of feeling last for?	Regionalist
	105b	Duration of single blocks	Other Healthcare professional
	128a	how long after administration does local anaesthetic take to wear off?	Other Healthcare professional
	102c	What duration of block is best for patient satisfaction	Regionalist
	83b	What is the safe maximum duration of a continuous thoracic block for fractured ribs?	Other Healthcare professional
	195b	Does longer duration of nerve block correlate with increased patient satisfaction?	Regionalist
	58b	What constitutes good recovery from regional anaesthesia?	Regionalist
	125a	How long can a local anesthetic infusion be left in situ?	Other Healthcare professional
What effects how long regional anaesthesia takes to wear off?	77a	How to control the time duration of nerve block?	Other Healthcare professional
	84c	How long will the loss of feeling last for?	Regionalist

	87c	What factors affect the duration of blocks in the different patient age groups.	Other Healthcare professional
	203a	What factors affect duration of block, & can we predict this with any accuracy to tailor to period of post-operative pain.	Regionalist
	183c	how could we prolong the duration of the sensory block on single shot blocks	Other Healthcare professional
	128a	how long after administration does local anaesthetic take to wear off?	Other Healthcare professional
What is the optimal infusion regime for regional anaesthesia catheter techniques?	83c	What is the optimum combination for TEA?	Regionalist
	120b	What is the best epidural solution for children with cerebral palsy having multi-level surgery requiring an epidural?	Regionalist
	98c	Are pulsed boluses or continual infusions superior for fascist plane blocks?	Regionalist
	120a	What are the reasons why regional anaesthesia fails and what are the best solutions?	Regionalist
	132c	Which is more effective, intermittent bolus (e.g 40ml/4hours) or continuous infusion	Other Healthcare professional
	139a	Optimal dosing for nerve catheters in plane blocks (continuous or intermittent bolus)	Other Healthcare professional
	208b	best LA and dose that can be used in paediatric patients with peripheral nerve catheters to give good analgesia	Regionalist
	133c	are there any long term complications from erector spinae blocks, ie from putting 200+ mls /24 hours into the potential space	Other Healthcare professional
	215b	Fascial plane continuous infusions compared with programmed intermittent bolus on analgesic outcomes.	Regionalist
Does regional anaesthesia provide a benefit over IV local anaesthetic?	17c	Do regional anaesthesia techniques improve outcomes from surgery when compared with IV local anaesthetic.	Regionalist

	31a	how much better is peripheral nerve blockade when compared with IVI lidocaine, as RCTs favouring PNB do not take into consideration systemic absorption of LA which has anti-nociceptive effect	Regionalist
	53b	Are the effects of many modern fascial plane blocks simply due to systemic local anaesthetic absorption?	Regionalist
	50b	Is peridural infusion of lidocaine better than IV infusion?	Patient or carer
	176b	Are fascial plane blocks better than IV lidocaine and multimodal analgesia	Regionalist
When does using a regional anaesthesia catheter technique provide benefit compared to a single injection technique?	23c	Are single shot RA blocks pre surgery as effective as continuous infusion postoperatively?	Regionalist
	186c	Should patients with neck of femur fractures have a fascia iliaca catheter inserted for regular top ups as opposed to a single shot nerve block in ED?	Regionalist
	198b	Could ambulatory catheters help earlier discharge in shoulder surgery ?	Regionalist
	117a	What are the risks and benefits of using a regional anesthesia catheter instead of a one-shot delivery?	Patient or carer
	31b	what is the true benefit of PNB infusions versus liposomal bupivacaine?	Regionalist
	188b	Research to push forward or right off the use of Liposomal bupivacaine, so many applications the risks, skill and time required for catheter placement avoided... can we use it - ESP, QLB FICB, Adductor, Ankle	Regionalist
What is the best way to organise regional anaesthesia services to ensure optimal theatre efficiency?	17b	How can we use regional anaesthesia to help tackle the backlog of elective surgery caused by the pandemic.	Regionalist
	30a	How can the efficiency of regional anaesthesia waiting lists be improved?	Regionalist
	35b	How much additional theatre time does an USS guided fascia iliaca block add on average ?	Regionalist

	40b	Does spinal anaesthesia take longer than a general anaesthetic?	Other Healthcare professional
	73a	How much time does conducting blocks add to an oRegionalistting list?	Regionalist
	75a	Can you ensure that the use of regional anaesthesia does not slow a theatre list progression?	Regionalist
	75b	Can you teach anaesthetists how to organise their lists so that performing the block and waiting for it to work does not take up more time than induction of general anaesthesia would	Regionalist
	100b	Block rooms and theatre productivity	Regionalist
	113b	Does a block room help theatre flow	Other Healthcare professional
	121a	Can regional anaesthesia be used to improve efficiency in healthcare?	Other Healthcare professional
	153b	How can we utilise theatre time more efficiently with regard to blocks? Eg. Centralising blocks within the department for the day, use of block rooms, reorganisation of staffing.	Other Healthcare professional
	198a	Could a block room improve theatre efficiency ?	Other Healthcare professional
	200c	Health economics modelling of nerve blocks v not blocking to increase theatre throughput	Regionalist
	217a	Can regional anaesthesia improve efficiency?	Other Healthcare professional
	97b	Attitudes to specific block rooms or anaesthetic rooms versus theatre and reasons why if theatre preferred	Other Healthcare professional
	197a	How can regional blocks be incorporated into UK practice - ie giving time for blocks to come on ("cook") with dedicated block rooms in theatres - would this be a viable model for UK practice	Regionalist
Is regional anaesthesia more cost effective than alternatives?	22a	What is the cost-effectiveness of regional anaesthesia?	Regionalist
	20a	Is providing a "block room" cost effective (or brings other patient benefits) for a surgical service?	Regionalist
	25a	Does RA save money?	Regionalist
	68b	What would be the economic implications of performing breast surgery with regional anesthesia alone?	Regionalist
	76c	Thoracic/lumbar regional analgesia vs placebo for chronic back pain. Is RA cost-effective?	Other Healthcare professional
	178b	What is the life-cycle cost effect of regional anaesthesia/analgesia? Does it cost more money overall, save money overall or make no difference?	Regionalist

	187c	Can regional anaesthesia be used to improve the cost-effectiveness of surgical care?	Regionalist
	202b	Overall cost of procedure from admission to discharge versus GA	Regionalist
	200c	Health economics modelling of nerve blocks v not blocking to increase theatre throughput	Regionalist
	119a	Which nerve blocks provide the highest value?	Regionalist
	70b	How can we increase the speed of regional anaesthesia?	Regionalist
How can we improve access to regional anaesthesia?	162b	Do socioeconomic status and race affect how frequently we offer general and regional analgesia to patients	Regionalist
	59a	How can we improve access to regional anaesthesia in trauma patients (particularly in the DGH environment)?	Regionalist
	68c	What is the best strategy to increase the number of patients receiving regional anaesthesia?	Other Healthcare professional
	101c	Should hospitals have 24/7 access to those with skills in RA (e.g awake surgery if needed)?	Other Healthcare professional
	153a	How can we do more blocks in areas that are outside of theatres, for non surgical patients? Or at least patients who aren't for surgery now.	Regionalist
	164c	What resources are need to upskill an anaesthetic department to provide regional anaesthesia as first line?	Other Healthcare professional
	174a	How can we engage other specialties in the benefits if RA and embed in our practice when shown to be advantageous?	Regionalist
	174b	How do we change the culture of GA for everything?	Regionalist
	154a	Ethical approach to RA	Regionalist
	41a	Standard procedures to incorporate spinal anaesthetic for flexible ureteroscopy	Regionalist
	36a	What percentage of patients undergoing above knee or below knee amputations in the UK receive a sciatic perineural catheter for post-op infusion regional analgesia?	Other Healthcare professional
	126a	How can more anaesthetists carry out regional anaesthesia as part of their standard clinical practice	Patient or carer
	111b	What proportion of senior Emergency Department clinicians (registrar and above) are comfortable performing RA in children (eg femoral nerve blocks for femoral fracture.	Regionalist
	90a	What is the extent of daily use of truncal blocks for cardiac surgery?	Regionalist

How does the environmental impact of regional anaesthesia compare to alternatives?	17a	Is regional anaesthesia more sustainable/environmentally friendly than general anaesthesia?	Regionalist
	25c	Does RA have less carbon footprint?	Regionalist
	157a	Is regional greener than general anaesthesia?	Regionalist
	171c	What is the environmental impact of regional anaesthesia when compared with general anaesthesia?	Regionalist
	176c	Is RA environmentally superior to other techniques	Regionalist
	154a	Ethical approach to RA	Regionalist
	202a	Environmental impact RA versus GA?	Regionalist
How can novel technologies be used to improve regional anaesthesia?	14a	How can artificial intelligence be used to improve UGRA access and performance?	Regionalist
	14b	Can robotics be used to improve the practical conduct of UGRA?	Regionalist
	14c	What other technological advances can be applied to move forward the field of UGRA?	Regionalist
	72c	How can use of artificial intelligence decrease training time and promote skill retention?	Regionalist
	77c	is it possible to perform a nerve block by AI robot?	Regionalist
	80a	Develop imaging that can support insertion of epidural catheter	Regionalist
	115a	How could advances in technology be used to improve patient outcomes?	Patient or carer
	115b	Can AI be used to improve regional anaesthesia?	Patient or carer
	116a	How can regional anaesthetists make use of advances in AI technology to improve patient outcomes?	Patient or carer
	117c	Might A.I. be used in the delivery of regional anesthesia to increase the duration of analgesia and improve patients' pain scores post-operatively?	Patient or carer
	121b	What are the new frontiers for regional anaesthesia?	Other Healthcare professional

	121c	How can new technologies be used in regional anaesthesia?	Other Healthcare professional
	126b	How can technology be used to improve patient access to regional anaesthesia	Patient or carer
	126c	How can practitioners use technology to confirm their clinical judgement when carrying out blocks that they have less familiarity with	Patient or carer
How can we best deliver sedation with regional anaesthesia?			
	48b	What sedation techniques are optimal if required intra-regionally?	Regionalist
	93a	What is the safest sedation option to be offered to patients getting regional anaesthesia who we are concerned about the risk of delirium?	Regionalist
	32c	Sedation and regional anaesthesia In bariatrics	Regionalist
What are the best research methods for comparing regional anaesthetic techniques?			
	94c	How do we benchmark new blocks if there is no proven advantage for existing techniques? What is our comparator?	Regionalist
	119c	How do we measure value of a nerve block? And how do we compare value of different nerve blocks?	Regionalist
	180b	What could be done to improve these regional blocks. Systematic review?	Regionalist
	182a	Methods to quantify Quality of analgesia provided by regional anaesthesia compared to more conventional analgesic techniques. This is a central topic as often anaesthetists struggle to bring evidence supported by numbers to what they generally experienced in their practice. Lack of evidence generates also scepticism among surgeons.	Regionalist
	147b	Is cadaveric dissection and spread of injectate an accurate surrogate for clinically effective spread of local anaesthetic spread in a live human	Regionalist

How can we improve regional anaesthesia for obstetric patients?	211c	Clinical decision making around conversion of regional anaesthesia to general anaesthesia. Has progress in the safety of GA been assimilated into clinicians' decision making? Do anaesthetists have differing thresholds at which to consider conversion from RA to GA? Are there situations where an anaesthetist's threshold for conversion may differ? How does this impact care and patient experience?	Regionalist
	163c	Is the TAP block after GA caesarean defunct?	Regionalist
	196a	What is the optimal dosage for spinal anaesthesia in obstetric patients?	Regionalist
	16b	How can we make the maternity journey better for women undergoing emergency Caesarean section? Should all patients be briefed on this and consented prior to labour? Is consent really valid for emergency caesareans?	Other Healthcare professional
	211b	Just as research on efficacy of region anaesthesia for caesarean section has focussed on clinicians' actions, rather than patient experience, it is conversion to general anaesthesia that is used as a target measure in the RCoA Quality Improvement Compendium. However, there could be unintended consequences of conversion rate being used as a quality target: it may discourage clinicians from converting to GA. For example, it might be perceived that a clinician's >1% conversion rate for Category 4 sections implies the clinician's practice is poor when that clinician may instead be providing excellent, patient-centred, safe care. Caesarean section rate targets have proven problematic in maternity services, leading to NHS England and NHS Improvement to as units to stop using CS rates as a means of performance management. Having a target for conversion of RA to GA has similar potential to undermine safe care. The question is what would be a better measure? Pain is in the experience of the patient: patient reported outcomes should be central to quality improvement measures. Research is needed to develop more meaningful measures. Background given in editorial in Anaesthesia is relevant here (doi:10.1111/anae.15723).	Regionalist
	13a	Does an epidural for caesarean birth cause back problems several years later?	Patient or carer
	211a	Understanding intra-oRegionalisttive pain and neuraxial anaesthesia failure for Caesarean section. A recent systematic review, by Patel et al (doi.org/10.1111/anae.15657) found 14.6% required supplementary analgesia/anaesthesia, while conversion to general anaesthesia was 0.06%. However, the authors made a number of problematic assumptions: please refer to my editorial in Anaesthesia (doi:10.1111/anae.15723). Research on efficacy of regional anaesthesia for Caesarean section has focussed on clinicians' actions, rather than patient experience. Moreover, variable definitions of 'genuine' failure of neuraxial anaesthesia, as well as variable rates of reported failure, mean there is potential to underestimate and normalise severity of harm for patients not converted to GA, while potentially providing false reassurance to clinicians. As importantly, the data being used in the provision of information to women during the Research into the efficacy of regional anaesthesia for Caesarean section with patient reported outcomes is necessary. Consent process should be accurate, fairly representing the likelihood of block failure, so women are aware conversion to GA may be necessary.	Regionalist
	54a	Is DPE superior to CSE or epidural for labour?	Regionalist

	165c	Will baby be harmed if I have Anesthesia?	Patient or carer
Excluded submissions	9a	Why is post-operative anaesthesia never considered for out patients?	Patient or carer
	10a	How does "healthy eating" or special diets help the effect and recovery after anaesthesia?	Patient or carer
	11b	I had to have an operation for Breast Cancer; although I distinctly remember telling the anaesthetist twice that I had had polio, she took no account of this, and I ended up very sick from the anaesthetic which required me spending more time in hospital. How can we ensure that anaesthetists take account of polio?	Patient or carer
	11c	Why do those of us who have had polio have to fight for the anaesthetic care we need. The Assessment Nurse told me "you will see the anaesthetist when you do in to theatre. I knew I needed a full anaesthetic assessment before I had my shoulder op., so had to go privately to be sure of proper care.	Patient or carer
	16a	Why do we seldom use interpreters in the post op recovery setting? How does this impact on care?	Other Healthcare professional
	21a	Is it essential to apply lubricant to an ET tube or LMA before insertion, or is there risk of the lubricant entering the lungs and causing damage? How much lubricant is a safe amount?	Other Healthcare professional
	24a	Whether there is additional value, at the time of Surgical Stabilisation of Rib Fractures, to the cryoablation of intercostal nerves, in the control of acute and chronic pain	Regionalist
	61a	Do I have choice re type of anaesthesia?	Other Healthcare professional
	61b	What are the benefits &/or drawbacks of surgeon's preferred choice?	Other Healthcare professional
	118a	Do isometric exercises pre-operatively for THR improve patients function post-operatively?	Other Healthcare professional
	38b	Is there a need to re-visit Sedo-analgesia? i.e. Sedation+ Analgesia & Anaesthesia (I think there is)	Regionalist
	43a	can jet insufflation be used for patients undergoing ureterorenoscopy and laser treatment of stones or calyceal tumours	Other Healthcare professional
	88b	If this is so good why haven't we always do it this way ?	Other Healthcare professional
	123a	Does the use of cerebral oximetry in beach chair position (mostly shoulder surgery) have any impact on immediate recovery (PONV, cognitive dysfunction) and reduction in the incidence of major complications like CVA's (like stroke)	Regionalist
	131c	Pain assessment can it really just be reduced to a number?	no data
	134a	Why is local infiltrate anaesthesia not routinely used in all hospital settings for THR and TKR - I work at 2 hospitals Elective Ortho. One uses local the other not and the patients have much less symptoms (nausea, vomiting, low BP, pain) with the local infiltrate so are up and mobile much sooner	Other Healthcare professional

	135b	I would like to see more research on validating a score for rib#	Patient or carer
	160b	Does first dose cause that I need more next time	Patient or carer
	173a	Main interest is obstetric	Regionalist
	199c	Is ropivacaine available to use in this trust?	Regionalist
	206a	Best (evidence based) way to teach POCUS to trainees	Regionalist
	208c	national wide guidelines for paediatric pain departments	Regionalist

Table S2. Indicative question verification.

IQ No	Indicative Question	Original submission from indicative question	Evidence - any systematic review or relevant professional body guideline that addresses the question (within the last 5 years). NB - if more than 2 most relevant article included	Is the uncertainty answered, partially answered or not answered
1	How can we improve the consent process for regional anaesthesia?	" Do patients really understand the comparative risks and benefits of nerve blocks"	<p>RAUK patient consent for peripheral nerve blocks - https://www.ra-uk.org/index.php/guidelines-standards/5-guidelines/detail/255-patient-consent-for-peripheral-nerve-blocks#:~:text=Consent%20for%20the%20procedure%20may,(e.g.%20patient%20controlled%20analgesia).</p> <p>Yentis SM, Hartle AJ, Barker IR, Barker P, Bogod DG, Clutton-Brock TH, Ruck Keene A, Leifer S, Naughton A, Plunkett E. AAGBI: Consent for anaesthesia 2017: Association of Anaesthetists of Great Britain and Ireland. <i>Anaesthesia</i>. 2017 Jan;72(1):93-105. doi: 10.1111/anae.13762. PMID: 27988961; PMCID: PMC6680217.</p>	Partially answered
2	How can we involve patients more in decision making about regional anaesthesia?	" What are patients views about pain control versus functional aspects? Are there different views on this? "	<p>Yentis SM, Hartle AJ, Barker IR, Barker P, Bogod DG, Clutton-Brock TH, Ruck Keene A, Leifer S, Naughton A, Plunkett E. AAGBI: Consent for anaesthesia 2017: Association of Anaesthetists of Great Britain and Ireland. <i>Anaesthesia</i>. 2017 Jan;72(1):93-105. doi: 10.1111/anae.13762. PMID: 27988961; PMCID: PMC6680217.</p> <p>RAUK patient consent for peripheral nerve blocks - https://www.ra-uk.org/index.php/guidelines-standards/5-guidelines/detail/255-patient-consent-for-peripheral-nerve-blocks#:~:text=Consent%20for%20the%20procedure%20may,(e.g.%20patient%20controlled%20analgesia).</p>	Partially answered

3	How can we improve patients' experience of regional anaesthesia?	. " Has there been much work on patient experiences and expectations. Both before and expietence of and after? If so could there be a systematic review to find themes and improve experience and pre/post education and support? "	<p>Dahshan D, Kuzbel J, Verma V. A role for music in cataract surgery: a systematic review. Int Ophthalmol. 2021 Dec;41(12):4209-4215. doi: 10.1007/s10792-021-01986-9. Epub 2021 Jul 26. PMID: 34312781</p> <p>Virtual Reality can be a Part of The Surgical Journey from The PreoRegionalisttive Perioduntil Home Recovery: A Concept to be Applied in The Future.Gendia A., Rottenburg H., Tam A., Cota A., Clark J.Surgical Endoscopy. Conference: 29th International Congress of the European for Endoscopic Surgery, EAES 2021. Barcelona Spain. 36(2Supplement) (pp S437), 2022. Date of Publication: July 2022.</p>	Partially answered
4	What advice should patients be given regarding eating and drinking before and after regional anaesthesia?	"Why would I need to refrain from eating and drinking as I would for a general anaesthetic?"	No evidence in the past 5 years	not answered
5	How can we improve patient care through data collection in regional anaesthesia?	"Can we get accurate complication rates for peripheral nerve blocks in particular as this will help consent."	No evidence in the past 5 years	not answered

6	How can we improve the safety of regional anaesthesia?	"How can we mitigate against potential risks of RA"	<p>Ecoffey C, Bosenberg A, Lonnqvist PA, Suresh S, Delbos A, Ivani G. Practice advisory on the prevention and management of complications of pediatric regional anesthesia. <i>J Clin Anesth.</i> 2022 Aug;79:110725. doi: 10.1016/j.jclinane.2022.110725. Epub 2022 Mar 18. PMID: 35313269.</p> <p>Azi LM, Fonseca NM, Linard LG. SBA 2020: Atualização das recomendações para segurança em anestesia regional [SBA 2020: Regional anesthesia safety recommendations update]. <i>Braz J Anesthesiol.</i> 2020 Jul-Aug;70(4):398-418. doi: 10.1016/j.bjan.2020.02.005. Epub 2020 May 12. PMID: 32636024; PMCID: PMC9373527.</p>	partially answered
7	How can we minimise the risk of regional anaesthesia in patients with altered coagulation?	"How can we perform regional anaesthesia safely in patients who are taking blood thinners (eg antiplatelets, DOAC) and it is deemed high risk to stop them?"	<p>Kietaibl S, Ferrandis R, Godier A, Llau J, Lobo C, Macfarlane AJ, Schlimp CJ, Vandermeulen E, Volk T, von Heymann C, Wolmarans M, Afshari A. Regional anaesthesia in patients on antithrombotic drugs: Joint ESAIC/ESRA guidelines. <i>Eur J Anaesthesiol.</i> 2022 Feb 1;39(2):100-132. doi: 10.1097/EJA.0000000000001600. PMID: 34980845.</p>	partially answered
8	How do the risks and benefits of regional anaesthesia vary between different patient groups?	"Which patients benefit most from regional anaesthesia?"	<p>Bhushan S, Huang X, Duan Y, Xiao Z. The impact of regional versus general anesthesia on postoperative neurocognitive outcomes in elderly patients undergoing hip fracture surgery: A systematic review and meta-analysis. <i>Int J Surg.</i> 2022 Sep;105:106854. doi: 10.1016/j.ijsu.2022.106854. Epub 2022 Aug 27. PMID: 36031067.</p> <p>Földi M, Soós A, Hegyi P, Kiss S, Szakács Z, Solymár M, Pétervári E, Balaskó M, Kusza K, Molnár Z. Transversus Abdominis Plane Block Appears to Be Effective and Safe as a Part of Multimodal Analgesia in Bariatric Surgery: a Meta-analysis and Systematic Review of Randomized Controlled Trials. <i>Obes Surg.</i> 2021 Feb;31(2):531-543. doi: 10.1007/s11695-020-04973-8. Epub 2020 Oct 21. PMID: 33083978; PMCID: PMC7847866.</p>	partially answered

9	How do rates of complications vary between different regional anaesthetic techniques?	"What is the up to date incidence of complications, including nerve damage, and does this vary with technique and particular block?"	<p>Albaum JM, Abdallah FW, Ahmed MM, Siddiqui U, Brull R. What Is the Risk of PostRegionalisttive Neurologic Symptoms After Regional Anesthesia in Upper Extremity Surgery? A Systematic Review and Meta-analysis of Randomized Trials. Clin Orthop Relat Res. 2022 Dec 1;480(12):2374-2389. doi: 10.1097/CORR.0000000000002367. Epub 2022 Sep 9. PMID: 36083846; PMCID: PMC10538904..</p> <p>Fillingham YA, Hannon CP, Kopp SL, Austin MS, Sershon RA, Stronach BM, Meneghini RM, Abdel MP, Griesemer ME, Woznica A, Casambre FD, Nelson N, Hamilton WG, Della Valle CJ. The Efficacy and Safety of Regional Nerve Blocks in Total Knee Arthroplasty: Systematic Review and Direct Meta-Analysis. J Arthroplasty. 2022 Oct;37(10):1906-1921.e2. doi: 10.1016/j.arth.2022.03.078. PMID: 36162923.</p>	partially answered
10	Does the use of regional anaesthesia increase the risk of harm from compartment syndrome?	Are regional techniques safe in trauma at risk of compartment syndrome?	<p>Nathanson MH, Harrop-Griffiths W, Aldington DJ, Forward D, Mannion S, Kinnear-Mellor RGM, Miller KL, Ratnayake B, Wiles MD, Wolmarans MR. Regional analgesia for lower leg trauma and the risk of acute compartment syndrome: Guideline from the Association of Anaesthetists. Anaesthesia. 2021 Nov;76(11):1518-1525. doi: 10.1111/anae.15504. Epub 2021 Jun 6. PMID: 34096035; PMCID: PMC9292897.</p> <p>Tran AA, Lee D, Fassihi SC, Smith E, Lee R, Siram G. A systematic review of the effect of regional anesthesia on diagnosis and management of acute compartment syndrome in long bone fractures. Eur J Trauma Emerg Surg. 2020 Dec;46(6):1281-1290. doi: 10.1007/s00068-020-01320-5. Epub 2020 Feb 18. PMID: 32072224.</p>	partially answered

11	What factors increase the risk of harm from regional anaesthesia?	"Incidence of peripheral nerve injury (temporary and permanent) following peripheral blockade and the risk factors for its occurrence."	Pozza DH, Tavares I, Cruz CD, Fonseca S. Spinal Cord Injury and Complications Related to Neuraxial Anaesthesia Procedures: A Systematic Review. <i>Int J Mol Sci.</i> 2023 Feb 28;24(5):4665. doi: 10.3390/ijms24054665. PMID: 36902095; PMCID: PMC10003521.	partially answered
12	Which complications can occur as a result of regional anaesthesia?	"What are the side effects of having a regional anaesthetic. "	<p>Patel R, Kua J, Sharawi N, Bauer ME, Blake L, Moonesinghe SR, Sultan P. Inadequate neuraxial anaesthesia in patients undergoing elective caesarean section: a systematic review. <i>Anaesthesia.</i> 2022 May;77(5):598-604. doi: 10.1111/anae.15657. Epub 2022 Jan 22. PMID: 35064923</p> <p>Grabowski J, Goldin A, Arthur LG, Beres AL, Guner YS, Hu YY, Kawaguchi AL, Kelley-Quon LI, McAteer JP, Miniati D, Renaud EJ, Ricca R, Slidell MB, Smith CA, Sola JE, Sømme S, Downard CD, Gosain A, Valusek P, St Peter SD, Jagannathan N', Dasgupta R. The effects of early anesthesia on neurodevelopment: A systematic review. <i>J Pediatr Surg.</i> 2021 May;56(5):851-861. doi: 10.1016/j.jpedsurg.2021.01.002. Epub 2021 Jan 19. PMID: 33509654</p>	Fully answered
13	How should complications from regional anaesthesia be managed?	"What happen if the nerve block doesn't wear off"	<p>Brenna CT, Khan S, Katznelson R, Brull R. The role of hyperbaric oxygen therapy in the management of periorRegionalisttive peripheral nerve injury: a scoping review of the literature. <i>Reg Anesth Pain Med.</i> 2023 Sep;48(9):443-453. doi: 10.1136/rapm-2022-104113. Epub 2022 Nov 23. PMID: 36418044.</p> <p>Management of nerve injury associated with regional anaesthesia. RA-UK and BOA 2021 http://ra-uk.org/images/Documents/DEFINITIVE_RAUK_BOA_guidelines.pdf</p>	partially answered

14	Is regional anaesthesia safer than general anaesthesia?	"What are the relative risks of RA vs GA in contemporary practice."	<p>Della Corte L, Mercurio A, Morra I, Riemma G, De Franciscis P, Palumbo M, Viciglione F, Borrelli D, Laganà AS, Vizzielli G, Bifulco G, Giampaolino P. Spinal Anesthesia versus General Anesthesia in Gynecological Laparoscopic Surgery: A Systematic Review and Meta-Analysis. <i>Gynecol Obstet Invest.</i> 2022;87(1):1-11. doi: 10.1159/000521364. Epub 2021 Dec 16. PMID: 34915508.</p> <p>Kunutsor SK, Hamal PB, Tomassini S, Yeung J, Whitehouse MR, Matharu GS. Clinical effectiveness and safety of spinal anaesthesia compared with general anaesthesia in patients undergoing hip fracture surgery using a consensus-based core outcome set and patient-and public-informed outcomes: a systematic review and meta-analysis of randomised controlled trials. <i>Br J Anaesth.</i> 2022 Nov;129(5):788-800. doi: 10.1016/j.bja.2022.07.031. Epub 2022 Sep 28. PMID: 36270701; PMCID: PMC9642835.</p>	partially answered
15	How can we improve the effectiveness of regional anaesthesia?	"What are the reasons why regional anaesthesia fails and what are the best solutions?"	<p>Gianakos AL, Romanelli F, Rao N, Badri M, Lubberts B, Guss D, DiGiovanni CW. Combination Lower Extremity Nerve Blocks and Their Effect on Postoperative Pain and Opioid Consumption: A Systematic Review. <i>J Foot Ankle Surg.</i> 2021 Jan-Feb;60(1):121-131. doi: 10.1053/j.jfas.2020.08.026. Epub 2020 Sep 3. PMID: 33168443.</p> <p>Moorthy A, Ní Eochagáin A, Dempsey E, Wall V, Marsh H, Murphy T, Fitzmaurice GJ, Naughton RA, Buggy DJ. Postoperative recovery with continuous erector spinae plane block or video-assisted paravertebral block after minimally invasive thoracic surgery: a prospective, randomised controlled trial. <i>Br J Anaesth.</i> 2023 Jan;130(1):e137-e147. doi: 10.1016/j.bja.2022.07.051. Epub 2022 Sep 13. PMID: 36109206.</p>	partially answered

16	Can regional anaesthesia improve recovery after surgery?	"How does regional anaesthesia help with postoperative recovery?"	<p>El-Boghdady K, Jack JM, Heaney A, Black ND, Englesakis MF, Kehlet H, Chan VWS. Role of regional anesthesia and analgesia in enhanced recovery after colorectal surgery: a systematic review of randomized controlled trials. <i>Reg Anesth Pain Med.</i> 2022 May;47(5):282-292. doi: 10.1136/rapm-2021-103256. Epub 2022 Mar 9. PMID: 35264431.</p> <p>Improved Recovery Times and Postoperative Outcomes After Cardiac Surgery Done Under Thoracic Epidural Anaesthesia: A Systematic Review, Meta-Analysis, With Trial Sequential Analysis. Chiew J.K., Low C.J., Zeng K., Goh Z.J., Ling R.R., Chen Y., Ti L.K., Ramanathan K. <i>Circulation. Conference: American Heart Association's 2022 Scientific Sessions and the American Heart Association's 2022 Resuscitation Science Symposium.</i> Chicago, IL United States. 146(Supplement 1) (no pagination), 2022. Date of Publication: November 2022</p>	partially answered
17	Can regional anaesthesia improve long term outcomes after surgery?	"What are the impacts on use of regional anesthesia and functional outcomes after surgery"	<p>Rahman SN, Cao DJ, Flores VX, Monaghan TF, Weiss JP, McNeil BK, Lazar JM, Dimaculangan D, Winer AG. Impact of neuraxial analgesia on outcomes following radical cystectomy: A systematic review. <i>Urol Oncol.</i> 2021 Feb;39(2):100-108. doi: 10.1016/j.urolonc.2020.10.073. Epub 2020 Nov 11. PMID: 33189531.</p> <p>Singh NP, Makkar JK, Borle A, Singh PM. Role of supplemental regional blocks on postoperative neurocognitive dysfunction after major non-cardiac surgeries: a systematic review and meta-analysis of randomized controlled trials. <i>Reg Anesth Pain Med.</i> 2024 Jan 11;49(1):49-58. doi: 10.1136/rapm-2022-104095. PMID: 36535728.</p>	partially answered

18	Can regional anaesthesia improve the management of pain after surgery?	Do regional anaesthetic techniques give better analgesia than opiates/other medications?	<p>Gianakos AL, Romanelli F, Rao N, Badri M, Lubberts B, Guss D, DiGiovanni CW. Combination Lower Extremity Nerve Blocks and Their Effect on Postoperative Pain and Opioid Consumption: A Systematic Review. <i>J Foot Ankle Surg.</i> 2021 Jan-Feb;60(1):121-131. doi: 10.1053/j.jfas.2020.08.026. Epub 2020 Sep 3. PMID: 33168443.</p> <p>Dieu A, Huynen P, Lavand'homme P, Beloeil H, Freys SM, Pogatzki-Zahn EM, Joshi GP, Van de Velde M; PROSPECT Working Group of the European Society of Regional Anaesthesia and Pain Therapy (ESRA). Pain management after open liver resection: Procedure-Specific Postoperative Pain Management (PROSPECT) recommendations. <i>Reg Anesth Pain Med.</i> 2021 May;46(5):433-445. doi: 10.1136/rapm-2020-101933. Epub 2021 Jan 12. PMID: 33436442; PMCID: PMC8070600.</p>	Partially answered
19	Do patients prefer surgery under general or regional anaesthesia?	"From a patient experience perspective, do patients prefer regional anaesthesia compared to general anaesthesia?"	No evidence in past 5 years	not answered
20	Can regional anaesthesia improve outcomes after chest trauma?	"Which is most effective regional block for chest wall trauma?"	Jack JM, McLellan E, Versyck B, Englesakis MF, Chin KJ. The role of serratus anterior plane and pectoral nerves blocks in cardiac surgery, thoracic surgery and trauma: a qualitative systematic review. <i>Anaesthesia.</i> 2020 Oct;75(10):1372-1385. doi: 10.1111/anae.15000. Epub 2020 Feb 16. PMID: 32062870.	partially answered

21	Can regional anaesthesia improve outcomes in genitourinary procedures?	"What parts of Genito-urinary system are amenable to regional anaesthesia?"	<p>Cai Q, Liu G, Liu Z, Gao M, Huang L, He F, Liu S, Lin Y, Wei H, Dou Z, Liu D, Hu Y, Gong X. Efficacy of quadratus lumborum block on postoperative pain and side effects in patients who underwent urological surgery: A meta-analysis. <i>Pain Pract.</i> 2023 Jan;23(1):70-82. doi: 10.1111/papr.13140. Epub 2022 Jul 10. PMID: 35726437.</p> <p>Della Corte L, Mercurio A, Morra I, Riemma G, De Francis P, Palumbo M, Viciglione F, Borrelli D, Laganà AS, Vizzielli G, Bifulco G, Giampaolino P. Spinal Anesthesia versus General Anesthesia in Gynecological Laparoscopic Surgery: A Systematic Review and Meta-Analysis. <i>Gynecol Obstet Invest.</i> 2022;87(1):1-11. doi: 10.1159/000521364. Epub 2021 Dec 16. PMID: 34915508.</p>	partially answered
22	Can regional anaesthesia improve outcomes in abdominal surgery?	"Are epidurals still relevant for abdominal/thoracic surgery?"	<p>Claxton HL, Nevins EJ, McCallum I. Comparison of the effectiveness of thoracic epidural and rectus sheath catheter as analgesic modalities following laparotomy: A systematic review and meta-analysis. <i>J Perioper Pract.</i> 2023 Nov;33(11):332-341. doi: 10.1177/17504589221086130. Epub 2022 Mar 17. PMID: 35297287.</p> <p>El-Boghdadly K, Jack JM, Heaney A, Black ND, Englesakis MF, Kehlet H, Chan VWS. Role of regional anesthesia and analgesia in enhanced recovery after colorectal surgery: a systematic review of randomized controlled trials. <i>Reg Anesth Pain Med.</i> 2022 May;47(5):282-292. doi: 10.1136/rapm-2021-103256. Epub 2022 Mar 9. PMID: 35264431.</p>	partially answered

23	Can regional anaesthesia improve outcomes in elective hip surgery?	"Comparison of PENG block in elective THR compared to LIA (pain scores, use of opioids, PONV, mobility & length of stay. To have a good comparison at the start the study could be limited to ASA 1&2 patients only. "	<p>Memtsoudis SG, Cozowicz C, Bekeris J, Bekere D, Liu J, Soffin EM, Mariano ER, Johnson RL, Go G, Hargett MJ, Lee BH, Wendel P, Brouillette M, Kim SJ, Baaklini L, Wetmore DS, Hong G, Goto R, Jivanelli B, Athanassoglou V, Argyra E, Barrington MJ, Borgeat A, De Andres J, El-Boghdadly K, Elkassabany NM, Gautier P, Gerner P, Gonzalez Della Valle A, Goytizolo E, Guo Z, Hogg R, Kehlet H, Kessler P, Kopp S, Lavand'homme P, Macfarlane A, MacLean C, Mantilla C, Mclsaac D, McLawhorn A, Neal JM, Parks M, Parvizi J, Peng P, Pichler L, Poeran J, Poultides L, Schwenk ES, Sites BD, Stundner O, Sun EC, Viscusi E, Votta-Velis EG, Wu CL, YaDeau J, Sharrock NE.</p> <p>Peripheral nerve block anesthesia/analgesia for patients undergoing primary hip and knee arthroplasty: recommendations from the International Consensus on Anesthesia-Related Outcomes after Surgery (ICAROS) group based on a systematic review and meta-analysis of current literature. <i>Reg Anesth Pain Med.</i> 2021 Nov;46(11):971-985. doi: 10.1136/rapm-2021-102750. Epub 2021 Aug 25. PMID: 34433647.</p> <p>Anger M, Valovska T, Beloeil H, Lirk P, Joshi GP, Van de Velde M, Raeder J; PROSPECT Working Group* and the European Society of Regional Anaesthesia and Pain Therapy. PROSPECT guideline for total hip arthroplasty: a systematic review and procedure-specific postoperative pain management recommendations. <i>Anaesthesia.</i> 2021 Aug;76(8):1082-1097. doi: 10.1111/anae.15498. Epub 2021 May 20. PMID: 34015859.</p>	partially answered
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24	Can regional anaesthesia improve outcomes for patients with a fractured neck of femur?	"Does RA reduce hospital stay in fracture NOF"	<p>Kunutsor SK, Hamal PB, Tomassini S, Yeung J, Whitehouse MR, Matharu GS. Clinical effectiveness and safety of spinal anaesthesia compared with general anaesthesia in patients undergoing hip fracture surgery using a consensus-based core outcome set and patient-and public-informed outcomes: a systematic review and meta-analysis of randomised controlled trials. <i>Br J Anaesth</i>. 2022 Nov;129(5):788-800. doi: 10.1016/j.bja.2022.07.031. Epub 2022 Sep 28. PMID: 36270701; PMCID: PMC9642835.</p> <p>Tarazona-Santabalbina FJ, Ojeda-Thies C, Figueroa Rodríguez J, Cassinello-Ogea C, Caeiro JR. Orthogeriatric Management: Improvements in Outcomes during Hospital Admission Due to Hip Fracture. <i>Int J Environ Res Public Health</i>. 2021 Mar 16;18(6):3049. doi: 10.3390/ijerph18063049. PMID: 33809573; PMCID: PMC7999190.</p> <p>S. Pissens, L. Cavens, G. P. Joshi, M.P. Bonnet, A. Sauter, J. Raeder, M. Van de Velde, on behalf of the PROSPECT Working Group of the European Society of Regional Anaesthesia and Pain Therapy (ESRA). Pain management after hip fracture repair surgery: a systematic review and procedure-specific postoperative pain management (PROSPECT) recommendations. <u><i>Acta Anaesth Bel</i> 2024;75:15–31.</u></p>	Fully answered
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25	Can regional anaesthesia improve outcomes in knee surgery?	"Are adductor canal blocks of any value in total knee replacement?"	<p>Lavand'homme PM, Kehlet H, Rawal N, Joshi GP; PROSPECT Working Group of the European Society of Regional Anaesthesia and Pain Therapy (ESRA). Pain management after total knee arthroplasty: PROcedure SPECific PostoRegionalisttive Pain ManagementT recommendations. Eur J Anaesthesiol. 2022 Sep 1;39(9):743-757. doi: 10.1097/EJA.0000000000001691. Epub 2022 Jul 20. PMID: 35852550; PMCID: PMC9891300.</p> <p>Memtsoudis SG, Cozowicz C, Bekeris J, Bekere D, Liu J, Soffin EM, Mariano ER, Johnson RL, Go G, Hargett MJ, Lee BH, Wendel P, Brouillette M, Kim SJ, Baaklini L, Wetmore DS, Hong G, Goto R, Jivanelli B, Athanassoglou V, Argyra E, Barrington MJ, Borgeat A, De Andres J, El-Boghdadly K, Elkassabany NM, Gautier P, Gerner P, Gonzalez Della Valle A, Goytizolo E, Guo Z, Hogg R, Kehlet H, Kessler P, Kopp S, Lavand'homme P, Macfarlane A, MacLean C, Mantilla C, McIsaac D, McLawhorn A, Neal JM, Parks M, Parvizi J, Peng P, Pichler L, Poeran J, Poultsides L, Schwenk ES, Sites BD, Stundner O, Sun EC, Viscusi E, Votta-Velis EG, Wu CL, YaDeau J, Sharrock NE.</p> <p>Peripheral nerve block anesthesia/analgesia for patients undergoing primary hip and knee arthroplasty: recommendations from the International Consensus on Anesthesia-Related Outcomes after Surgery (ICAROS) group based on a systematic review and meta-analysis of current literature. Reg Anesth Pain Med. 2021 Nov;46(11):971-985. doi: 10.1136/rapm-2021-102750. Epub 2021 Aug 25. PMID: 34433647.</p>	partially answered
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26	Can regional anaesthesia improve outcomes in amputation surgery?	"Do aka patients with sciatic AND femoral perineural catheters and post op infusions have better post op pain scores than those with sciatic only?"	<p>Laloo R, Ambler GK, Locker D, Twine CP, Bosanquet DC. Systematic Review and Meta-Analysis of the Effect of Perineural Catheters in Major Lower Limb Amputations. <i>Eur J Vasc Endovasc Surg.</i> 2021 Aug;62(2):295-303. doi: 10.1016/j.ejvs.2021.03.008. Epub 2021 Jun 2. PMID: 34088614.</p> <p>Mufarrih SH, Qureshi NQ, Yunus RA, Katsiampoura A, Quraishi I, Sharkey A, Mahmood F, Matyal R. A systematic review and meta-analysis of general versus regional anesthesia for lower extremity amputation. <i>J Vasc Surg.</i> 2023 May;77(5):1542-1552.e9. doi: 10.1016/j.jvs.2022.10.005. Epub 2022 Oct 13. PMID: 36243265.</p>	partially answered
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27	Can regional anaesthesia improve outcomes in shoulder procedures?	"best blocks for shoulder surgery"	<p>Kalthoff A, Sanda M, Tate P, Evanson K, Pederson JM, Paranjape GS, Patel PD, Sheffels E, Miller R, Gupta A. Peripheral Nerve Blocks Outperform General Anesthesia for Pain Control in Arthroscopic Rotator Cuff Repair: A Systematic Review and Meta-analysis. <i>Arthroscopy</i>. 2022 May;38(5):1627-1641. doi: 10.1016/j.arthro.2021.11.054. Epub 2021 Dec 21. PMID: 34952185.</p> <p>White L, Reardon D, Davis K, Velli G, Bright M. Anterior suprascapular nerve block versus interscalene brachial plexus block for arthroscopic shoulder surgery: a systematic review and meta-analysis of randomized controlled trials. <i>J Anesth</i>. 2022 Feb;36(1):17-25. doi: 10.1007/s00540-021-03000-z. Epub 2021 Sep 17. PMID: 34533639.</p> <p>Toma O, Persoons B, Pogatzki-Zahn E, Van de Velde M, Joshi GP; PROSPECT Working Group collaborators. PROSPECT guideline for rotator cuff repair surgery: systematic review and procedure-specific postoperative pain management recommendations. <i>Anaesthesia</i>. 2019 Oct;74(10):1320-1331. doi: 10.1111/anae.14796. Epub 2019 Aug 7. PMID: 31392721; PMCID: PMC6771830.</p>	partially answered
28	Can regional anaesthesia improve outcomes in elbow surgery?	What is the best brachial plexus block to use for elbow surgery?	No evidence in the past 5 years	not answered

29	Can regional anaesthesia improve outcomes in cardiac surgery?	"Are there effective regional adjuncts for cardiac anaesthesia?"	<p>Dost B, De Cassai A, Balzani E, Tulgar S, Ahiskalioglu A. Effects of ultrasound-guided regional anesthesia in cardiac surgery: a systematic review and network meta-analysis. <i>BMC Anesthesiol.</i> 2022 Dec 29;22(1):409. doi: 10.1186/s12871-022-01952-7. PMID: 36581838; PMCID: PMC9798577.</p> <p>King M, Stambulic T, Hassan SMA, Norman PA, Derry K, Payne DM, El Diasty M. Median sternotomy pain after cardiac surgery: To block, or not? A systematic review and meta-analysis. <i>J Card Surg.</i> 2022 Nov;37(11):3729-3742. doi: 10.1111/jocs.16882. Epub 2022 Sep 13. PMID: 36098374.</p>	partially answered
30	Can regional anaesthesia improve outcomes in thoracic surgery?	"Is regional anaesthesia feasible in thoracic surgery?"	<p>Balzani E, Rosboch GL, Ceraolo E, Lyberis P, Filippini C, Piccioni F, Guerrera F, Ruffini E, Pedoto A, Brazzi L. The effect of peripheral regional analgesia in thoracic surgery: a systematic review and a meta-analysis of randomized-controlled trials. <i>Tumori.</i> 2023 Feb;109(1):6-18. doi: 10.1177/03008916221081891. Epub 2022 Mar 31. PMID: 35361015.</p> <p>Guerra-Londono CE, Privorotskiy A, Cozowicz C, Hicklen RS, Memtsoudis SG, Mariano ER, Cata JP. Assessment of Intercostal Nerve Block Analgesia for Thoracic Surgery: A Systematic Review and Meta-analysis. <i>JAMA Netw Open.</i> 2021 Nov 1;4(11):e2133394. doi: 10.1001/jamanetworkopen.2021.33394. PMID: 34779845; PMCID: PMC8593761.</p>	partially answered

31	Can regional anaesthesia improve outcomes in breast surgery?	"What is the best regional anaesthesia technique for breast surgery? Could this be used effectively and consistently as the only anaesthetic modality?"	<p>Wong HY, Pilling R, Young BWM, Owolabi AA, Onwochei DN, Desai N. Comparison of local and regional anesthesia modalities in breast surgery: A systematic review and network meta-analysis. <i>J Clin Anesth.</i> 2021 Sep;72:110274. doi: 10.1016/j.jclinane.2021.110274. Epub 2021 Apr 16. Erratum in: <i>J Clin Anesth.</i> 2021 Dec;75:110491. PMID: 33873002.</p> <p>Chhabra A, Roy Chowdhury A, Prabhakar H, Subramaniam R, Arora MK, Srivastava A, Kalaivani M. Paravertebral anaesthesia with or without sedation versus general anaesthesia for women undergoing breast cancer surgery. <i>Cochrane Database Syst Rev.</i> 2021 Feb 25;2(2):CD012968. doi: 10.1002/14651858.CD012968.pub2. PMID: 33629404; PMCID: PMC8521097.</p>	partially answered
32	Can regional anaesthesia improve outcomes in spinal surgery?	"What is the role of trunk blocks for major spinal surgery?"	<p>Liu H, Zhu J, Wen J, Fu Q. Ultrasound-guided erector spinae plane block for postoperative short-term outcomes in lumbar spine surgery: A meta-analysis and systematic review. <i>Medicine (Baltimore).</i> 2023 Feb 17;102(7):e32981. doi: 10.1097/MD.00000000000032981. PMID: 36800574; PMCID: PMC9936003.</p> <p>De Cassai A, Geraldini F, Boscolo A, Pasin L, Pettenuzzo T, Persona P, Munari M, Navalesi P. General Anesthesia Compared to Spinal Anesthesia for Patients Undergoing Lumbar Vertebral Surgery: A Meta-Analysis of Randomized Controlled Trials. <i>J Clin Med.</i> 2020 Dec 30;10(1):102. doi: 10.3390/jcm10010102. PMID: 33396744; PMCID: PMC7796239.</p>	partially answered
33	How can we best manage pain as regional anaesthesia wears off?	"What is the best way (specific drugs, route, regime) to provide continual pain control as	No evidence in the past 5 years	not answered

		the effect of the nerve block wears off?"		
34	Can regional anaesthesia reduce chronic post surgical pain?	Can the use of regional anaesthesia how often or how severely patients experience ongoing pain related to their surgery?	Lepot A, Elia N, Tramèr MR, Rehberg B. Preventing pain after breast surgery: A systematic review with meta-analyses and trial-sequential analyses. <i>Eur J Pain</i> . 2021 Jan;25(1):5-22. doi: 10.1002/ejp.1648. Epub 2020 Oct 4. PMID: 32816362.	not answered
35	What are the risks and benefits of regional anaesthesia in children?	"How successful is regional anaesthesia in children? Is it tolerated?"	Heydinger G, Tobias J, Veneziano G. Fundamentals and innovations in regional anaesthesia for infants and children. <i>Anaesthesia</i> . 2021 Jan;76 Suppl 1:74-88. doi: 10.1111/anae.15283. PMID: 33426659. Singaravelu Ramesh A, Boretsky K. Local anesthetic systemic toxicity in children: a review of recent case reports and current literature. <i>Reg Anesth Pain Med</i> . 2021 Oct;46(10):909-914. doi: 10.1136/rapm-2021-102529. Epub 2021 Jun 7. PMID: 34099573. Hung TY, Bai GH, Tsai MC, Lin YC. Analgesic Effects of Regional Analgesic Techniques in Pediatric Inguinal Surgeries: A Systematic Review and Network Meta-Analysis of Randomized Controlled Trials. <i>Anesth Analg</i> . 2024 Jan 1;138(1):108-122. doi: 10.1213/ANE.0000000000006341. Epub 2023 Dec 15. PMID: 36571797.	Partially answered
36	What training and clinical opportunities in regional anaesthesia are currently available?	"RA training: Are all UK trainees getting adequate exposure?"	Bellew B, St-Laurent DB, Shaw M, Ashken T, Womack J, Debenham J, Getty M, Kajal S, Verma N, Samuel K, Macfarlane AJR, Kearns RJ; Regional Anaesthesia UK Research Network. Regional anaesthesia training in the UK - a national survey. <i>BJA Open</i> . 2023 Dec 5;8:100241. doi: 10.1016/j.bjao.2023.100241. PMID: 38089849; PMCID: PMC10714329.	Question not feasible

37	How should non anaesthetic healthcare professionals be trained to support patients having regional anaesthesia?	"what improvements are required to train HCPs to do blocks across various areas of practice not just anaesthetics"	No evidence in the past 5 years	not answered
38	How can training in regional anaesthesia be delivered most effectively?	"What is the most effective way of training people to be competent at performing regional techniques?"	<p>Cevik J, Hunter-Smith DJ, Rozen WM. Anatomical differences in the abdominal wall between animal species with implications for the transversus abdominis plane block: a systematic review. <i>Surg Radiol Anat.</i> 2022 Aug;44(8):1171-1180. doi: 10.1007/s00276-022-02991-y. Epub 2022 Jul 22. PMID: 35864247.</p> <p>McLeod G, Zihang S, Sadler A, Chandra A, Qiao P, Huang Z, Demore C. Validation of the soft-embalmed Thiel cadaver as a high-fidelity simulator of pressure during targeted nerve injection. <i>Reg Anesth Pain Med.</i> 2021 Jun;46(6):540-548. doi: 10.1136/rapm-2020-102132. Epub 2021 Apr 27. PMID: 33906953.</p>	partially answered

39	What defines competence in regional anaesthesia?	"How many procedures are necessary to become competent in regional anaesthesia and should all anaesthetists be allowed to undertake these procedures?"	<p>Boselli E, Hopkins P, Lamperti M, Estèbe JP, Fuzier R, Biasucci DG, Disma N, Pittiruti M, Traškaitė V, Macas A, Breschan C, Vailati D, Subert M. European Society of Anaesthesiology and Intensive Care Guidelines on peri-oRegionalisttive use of ultrasound for regional anaesthesia (PERSEUS regional anesthesia): Peripheral nerves blocks and neuraxial anaesthesia. Eur J Anaesthesiol. 2021 Mar 1;38(3):219-250. doi: 10.1097/EJA.0000000000001383. PMID: 33186303.</p> <p>Lamperti M, Biasucci DG, Disma N, Pittiruti M, Breschan C, Vailati D, Subert M, Traškaitė V, Macas A, Estebe JP, Fuzier R, Boselli E, Hopkins P. European Society of Anaesthesiology guidelines on peri-oRegionalisttive use of ultrasound-guided for vascular access (PERSEUS vascular access). Eur J Anaesthesiol. 2020 May;37(5):344-376. doi: 10.1097/EJA.0000000000001180. Erratum in: Eur J Anaesthesiol. 2020 Jul;37(7):623. PMID: 32265391.</p>	Fully answered
40	Who should perform regional anaesthetic techniques?	"Non physicians doing RA eg AAs are they safe, efficient and effective?"	Fascia Iliaca blocks and non-physician practitioners: https://anaesthetists.org/Home/News-opinion/News/Fascia-Iliaca-blocks-and-non-physician-practitioners	partially answered
41	What are the risks and benefits of mixing local anaesthetics?	"Does mixing locals improve onset time?"	No evidence in the past 5 years	not answered
42	Does the safe dose of local anaesthetic vary between different regional anaesthetic techniques?	"Are the blanket toxic doses of LA the same regardless of site of block?"	No evidence in the past 5 years	not answered

43	What is the most effective dose and type of local anaesthetic for each regional anaesthetic technique?	"Procedure specific dose, volume and concentration of local anaesthetic for maximum analgesia and patient satisfaction."	<p>Yung EM, Abdallah FW, Todaro C, Spence E, Grant A, Brull R. Optimal local anesthetic regimen for saddle block in ambulatory anorectal surgery: an evidence-based systematic review. <i>Reg Anesth Pain Med.</i> 2020 Sep;45(9):733-739. doi: 10.1136/rapm-2020-101603. Epub 2020 Jul 22. PMID: 32699103.</p> <p>Halliday L, Kinsella M, Shaw M, Cheyne J, Nelson SM, Kearns RJ. Comparison of ultra-low, low and high concentration local anaesthetic for labour epidural analgesia: a systematic review and network meta-analysis. <i>Anaesthesia.</i> 2022 Aug;77(8):910-918. doi: 10.1111/anae.15756. Epub 2022 May 24. PMID: 35607864; PMCID: PMC9543867.</p>	partially answered
44	What are the risks and benefits of using adjuncts to local anaesthetics?	"how might innovations like liposomal bupivacaine be best deployed"	<p>Pan L, Wu H, Liu H, Yang X, Meng Z, Cao Y. Dexmedetomidine as an adjunct to local anesthetics in nerve block relieved pain more effectively after TKA: a meta-analysis of randomized controlled trials. <i>J Orthop Surg Res.</i> 2020 Dec 1;15(1):577. doi: 10.1186/s13018-020-02105-7. PMID: 33261646; PMCID: PMC7709255.</p> <p>Alaqaili, S. I.;Al-Saati, M.;Alyousef, M. Y.;Alzayer, M. A.;Alsultan, A. S.;Alzahrani, M. M. and Alqahtani, Efficacy of Liposomal Bupivacaine in Arthroscopic Rotator Cuff Repair: a Systematic Review and Meta-Analysis of Randomized Controlled Trial. <i>M. M. and Alqahtani, S. M. Muscles, Ligaments & Tendons Journal (MLTJ)</i> 12(4), pp. 511-521. 2022</p>	partially answered
45	What is the optimum duration of regional anaesthesia?	"What duration of block is best for patient satisfaction"	No evidence in the past 5 years	not answered

46	What effects how long regional anaesthesia takes to wear off?	"What factors affect the duration of blocks in the different patient age groups."	<p>Sohnen S, Dowling O, Shore-Lesserson L. Single dose perioRegionalisttive intrathecal ketamine as an adjuvant to intrathecal bupivacaine: A systematic review and meta-analysis of adult human randomized controlled trials. <i>J Clin Anesth.</i> 2021 Oct;73:110331. doi: 10.1016/j.jclinane.2021.110331. Epub 2021 May 5. PMID: 33962333.</p> <p>Xiong C, Han CP, Zhao D, Tang ZH, Zhang YF, Wang J. Comparing the effects of dexmedetomidine and dexamethasone as perineural adjuvants on peripheral nerve block: A PRISMA-compliant systematic review and meta-analysis. <i>Medicine (Baltimore).</i> 2021 Aug 27;100(34):e27064. doi: 10.1097/MD.0000000000027064. PMID: 34449500; PMCID: PMC10545042.</p>	partially answered
47	What is the optimal infusion regime for regional anaesthesia catheter techiques?	"Optimal dosing for nerve catheters in plane blocks (continuous or intermittent bolus)"	<p>Wydall S, Zolger D, Owolabi A, Nzekwu B, Onwochei D, Desai N. Comparison of different delivery modalities of epidural analgesia and intravenous analgesia in labour: a systematic review and network meta-analysis. <i>Can J Anaesth.</i> 2023 Mar;70(3):406-442. English. doi: 10.1007/s12630-022-02389-9. Epub 2023 Jan 31. PMID: 36720838.</p> <p>Law WZW, Sara RA, Cameron AJD, Lightfoot NJ. Local anaesthetic delivery regimens for peripheral nerve catheters: a systematic review and network meta-analysis. <i>Anaesthesia.</i> 2020 Mar;75(3):395-405. doi: 10.1111/anae.14864. Epub 2019 Oct 14. PMID: 31612480.</p>	partially answered

48	Does regional anaesthesia provide a benefit over IV local anaesthetic?	"Do regional anaesthesia techniques improve outcomes from surgery when compared with IV local anaesthetic."	Tsai SHL, Yolcu YU, Hung SW, Kurian SJ, Alvi MA, Fu TS, Bydon M. The analgesic effect of intravenous lidocaine versus intrawound or epidural bupivacaine for postoperative opioid reduction in spine surgery: A systematic review and meta-analysis. <i>Clin Neurool Neurosurg.</i> 2021 Feb;201:106438. doi: 10.1016/j.clineuro.2020.106438. Epub 2020 Dec 28. PMID: 33385933.	partially answered
49	When does using a regional anaesthesia catheter technique provide benefit compared to a single injection technique?	"What are the risks and benefits of using a regional anaesthesia catheter instead of a one-shot delivery?"	<p>Sercia QP, Bergeron JJ, Pelet S, Belzile ÉL. Continuous vs. single-shot adductor canal block for pain management following primary total knee arthroplasty: A systematic review and meta-analysis of randomized controlled trials. <i>Orthop Traumatol Surg Res.</i> 2022 Dec;108(8):103290. doi: 10.1016/j.otsr.2022.103290. Epub 2022 Apr 22. PMID: 35470114.</p> <p>Howle R, Ng SC, Wong HY, Onwochei D, Desai N. Comparison of analgesic modalities for patients undergoing midline laparotomy: a systematic review and network meta-analysis. <i>Can J Anaesth.</i> 2022 Jan;69(1):140-176. English. doi: 10.1007/s12630-021-02128-6. Epub 2021 Nov 5. PMID: 34739706.</p>	partially answered
50	What is the best way to organise regional anaesthesia services to ensure optimal theatre efficiency?	"How can the efficiency of regional anaesthesia services be improved?"	El-Boghdadly K, Nair G, Pawa A, Onwochei DN. Impact of parallel processing of regional anaesthesia with block rooms on resource utilization and clinical outcomes: a systematic review and meta-analysis. <i>Reg Anesth Pain Med.</i> 2020 Sep;45(9):720-726. doi: 10.1136/rapm-2020-101397. Epub 2020 Jul 22. PMID: 32699101.	partially answered

51	Is regional anaesthesia more cost effective than alternatives?	"Can regional anaesthesia be used to improve the cost-effectiveness of surgical care?"	Graff V, Gabutti L, Treglia G, Pascale M, Anselmi L, Cafarotti S, La Regina D, Mongelli F, Saporito A. PeriRegionalisttive costs of local or regional anesthesia versus general anesthesia in the outpatient setting: a systematic review of recent literature. <i>Braz J Anesthesiol.</i> 2023 May-Jun;73(3):316-339. doi: 10.1016/j.bjane.2021.09.012. Epub 2021 Oct 7. PMID: 34627828; PMCID: PMC10240220.	partially answered
52	How can we improve access to regional anaesthesia?	"What is the best strategy to increase the number of patients receiving regional anaesthesia?"	No evidence in the past 5 years	not answered
53	How does the environmental impact of regional anaesthesia compare to alternatives?	"What is the environmental impact of regional anaesthesia when compared with general anaesthesia?"	No evidence in the past 5 years	not answered
54	How can novel technologies be used to improve regional anaesthesia?	"How can use of artificial intelligence decrease training time and promote skill retention?"	Singh M, Nath G. Artificial intelligence and anesthesia: A narrative review. <i>Saudi J Anaesth.</i> 2022 Jan-Mar;16(1):86-93. doi: 10.4103/sja.sja_669_21. Epub 2022 Jan 4. PMID: 35261595; PMCID: PMC8846233. Bowness JS, Burckett-St Laurent D, Hernandez N, Keane PA, Lobo C, Margetts S, Moka E, Pawa A, Rosenblatt M, Sleep N, Taylor A, Woodworth G, Vasalauskaite A, Noble JA, Higham H. Assistive artificial intelligence for ultrasound image interpretation in regional anaesthesia: an external validation study. <i>Br J Anaesth.</i> 2023 Feb;130(2):217-225. doi: 10.1016/j.bja.2022.06.031. Epub 2022 Aug 18. PMID: 35987706; PMCID: PMC9900723.	partially answered

55	How can we best deliver sedation with regional anaesthesia?	"What sedation techniques are optimal if required intra-Regionalisttively?"	<p>Academy of Medical Royal Colleges. Safe sedation practice for healthcare procedures standards and guidance. https://www.aomrc.org.uk/wp-content/uploads/2021/02/Safe_sedation_practice_for_healthcare_procedures_update_0521.pdf</p> <p>Fonseca FJ, Ferreira L, Rouxinol-Dias AL, Mourão J. Effects of dexmedetomidine in non-Regionalistting room anesthesia in adults: a systematic review with meta-analysis. <i>Braz J Anesthesiol.</i> 2023 Sep-Oct;73(5):641-664. doi: 10.1016/j.bjane.2021.12.002. Epub 2021 Dec 20. PMID: 34933035; PMCID: PMC10533981.</p>	partially answered
56	What are the best research methods for comparing regional anaesthetic techniques?	"How do we measure value of a nerve block? And how do we compare value of different nerve blocks?"	No evidence in the past 5 years	not answered
57	How can we improve regional anaesthesia for obstetric patients?	Is the TAP block after ga caesarean defunct?	<p>Hussain N, Brull R, Weaver T, Zhou M, Essandoh M, Abdallah FW. PostoRegionalisttive Analgesic Effectiveness of Quadratus Lumborum Block for Cesarean Delivery under Spinal Anesthesia. <i>Anesthesiology.</i> 2021 Jan 1;134(1):72-87. doi: 10.1097/ALN.0000000000003611. PMID: 33206131.</p> <p>Roofthoof E, Joshi GP, Rawal N, Van de Velde M; PROSPECT Working Group* of the European Society of Regional Anaesthesia and Pain Therapy and supported by the Obstetric Anaesthetists' Association. PROSPECT guideline for elective caesarean section: updated systematic review and procedure-specific postoRegionalisttive pain management recommendations. <i>Anaesthesia.</i> 2021 May;76(5):665-680. doi: 10.1111/anae.15339. Epub 2020 Dec 28. PMID: 33370462; PMCID: PMC8048441.</p>	Partially answered

Table S3. Baseline characteristics of survey respondents.

	Initial Survey	Interim Survey
Gender		
Male	130 (61.6%)	177 (52.8%)
Female	66 (31.3%)	156 (46.6%)
Other	15 (7.1%)	2 (0.6%)
Age		
18-30	10 (4.7%)	26 (7.8%)
31-40	63 (29.9%)	140 (41.8%)
41-50	66 (31.3%)	99 (29.6%)
51-60	47 (22.3%)	50 (14.9%)
61 or over	21 (10%)	20 (6.0%)
No response	4 (1.9%)	0 (0%)
Ethnicity		
White	156 (73.9%)	244 (72.8%)
Asian	35 (16.6%)	62 (18.5%)
Black	2 (0.9%)	7 (2.1%)
Mixed	7 (3.3%)	8 (2.4%)
Other	6 (2.8%)	14 (4.2%)
No response	5 (2.4%)	0 (0%)

Table S4. Stakeholder group top 10 indicative questions after interim survey.

Regionalists = Healthcare professionals who perform regional anaesthesia

Other Healthcare professionals = Healthcare professionals who treat or care for patients who have had regional anaesthesia

Patient and Carers = Anyone who has undergone regional anaesthesia or cares in a nonprofessional capacity for anyone who has undergone regional anaesthesia

Regionalist Group

Rank	Question
1	How can we best manage pain as regional anaesthesia wears off?
2	Does the use of regional anaesthesia increase the risk of harm from compartment syndrome?
3	Can regional anaesthesia reduce chronic post-surgical pain?
4	How can training in regional anaesthesia be delivered most effectively?
5	Can regional anaesthesia improve long term outcomes after surgery?
6	How should complications from regional anaesthesia be managed?
7	Can regional anaesthesia improve recovery after surgery?
8	How can we improve the consent process for regional anaesthesia?
9	What is the best way to organise regional anaesthesia services to ensure optimal theatre efficiency?
10	What are the risks and benefits of mixing local anaesthetics?

Other Healthcare Professionals Group

Rank	Question
1*	How can we best manage pain as regional anaesthesia wears off?
1*	What is the best way to organise regional anaesthesia services to ensure optimal theatre efficiency?
3	Can regional anaesthesia improve the management of pain after surgery?
4*	Do patients prefer surgery under general or regional anaesthesia?
4*	What factors increase the risk of harm from regional anaesthesia?
6*	Can regional anaesthesia improve long term outcomes after surgery?
6*	How should non anaesthetic healthcare professionals be trained to support patients having regional anaesthesia?
8*	Can regional anaesthesia improve recovery after surgery?
8*	How do the risks and benefits of regional anaesthesia vary between different patient groups?
8*	How can we improve patients experience of regional anaesthesia?

Patient and Carers Group

Rank	Question
1	Is regional anaesthesia safer than general anaesthesia?
2*	Can regional anaesthesia improve recovery after surgery?
2*	Is regional anaesthesia more cost effective than alternatives?
4*	What factors increase the risk of harm from regional anaesthesia?
4*	What are the risks and benefits of regional anaesthesia in children?
6	How do rates of complications vary between different regional anaesthetic techniques?
7*	Can regional anaesthesia improve long term outcomes after surgery?
7*	Can regional anaesthesia improve the management of pain after surgery?
9	Do patients prefer surgery under general or regional anaesthesia?

10*	How can we improve access to regional anaesthesia?
10*	What effects how long regional anaesthesia takes to wear off?
10*	How can we improve the safety of regional anaesthesia?
10*	How do the risks and benefits of regional anaesthesia vary between different patient groups?
10*	Can regional anaesthesia reduce chronic post surgical pain?
10*	How can we best manage pain as regional anaesthesia wears off?
10*	How can we improve patients experience of regional anaesthesia?
10*	How can we involve patients more in decision making about regional anaesthesia?

* Questions ranked jointly

Table S5. Combined top 24 indicative questions after interim survey.

1	How can we best manage pain as regional anaesthesia wears off?
2*	Can regional anaesthesia improve long term outcomes after surgery?
2*	Can regional anaesthesia improve recovery after surgery?
4	What factors increase the risk of harm from regional anaesthesia?
5	Can regional anaesthesia improve the management of pain after surgery?
6	Do patients prefer surgery under general or regional anaesthesia?
7*	What is the best way to organise regional anaesthesia services to ensure optimal theatre efficiency?
7*	Can regional anaesthesia reduce chronic post surgical pain?
9*	How do the risks and benefits of regional anaesthesia vary between different patient groups?
9*	How can we improve patients experience of regional anaesthesia?
9*	Is regional anaesthesia safer than general anaesthesia?
12	Is regional anaesthesia more cost effective than alternatives?
12*	Does the use of regional anaesthesia increase the risk of harm from compartment syndrome?
14	What are the risks and benefits of regional anaesthesia in children?
15*	How do rates of complications vary between different regional anaesthetic techniques?
15*	How should non anaesthetic healthcare professionals be trained to support patients having regional anaesthesia?
15*	How can training in regional anaesthesia be delivered most effectively?
18	How should complications from regional anaesthesia be managed?
19*	How can we improve access to regional anaesthesia?
19*	What effects how long regional anaesthesia takes to wear off?
19*	How can we improve the safety of regional anaesthesia?
19*	How can we involve patients more in decision making about regional anaesthesia?
23	How can we improve the consent process for regional anaesthesia?
24	What are the risks and benefits of mixing local anaesthetics?

* Questions ranked jointly

Table S6. Priority Setting Partnership top 10 indicative questions referenced to stakeholder group.

Regionalists = Healthcare professionals who perform regional anaesthesia

Other Healthcare professionals = Healthcare professionals who treat or care for patients who have had regional anaesthesia

Patient and Carers = Anyone who has undergone regional anaesthesia or cares in a nonprofessional capacity for anyone who has undergone regional anaesthesia

Rank	Indicative Question	Stakeholder group top 10
1	How can we best manage pain as regional anaesthesia wears off?	Regionalists, Other Healthcare professionals, Patients and Carers
2	Can regional anaesthesia improve recovery after surgery?	Regionalists, Other Healthcare professionals, Patients and Carers
3	Can regional anaesthesia reduce chronic post-surgical pain?	Regionalists, Patients and Carers
4	How do the risks and benefits of regional anaesthesia vary between different patient groups?	Patients and Carers, Other Healthcare professionals
5	How can we improve the safety of regional anaesthesia?	Patients and Carers
6	What factors increase the risk of harm from regional anaesthesia?	Patients and Carers, Other Healthcare professionals
7	How do rates of complications vary between different regional anaesthetic techniques?	Patients and Carers
8	What are the risks and benefits of regional anaesthesia in children?	Patients and Carers
9	How should complications from regional anaesthesia be managed?	Regionalists
10	What effects how long regional anaesthesia takes to wear off?	Patients and Carers

Key

Colour	Present in stakeholder group top 10s
	Regionalists, Other Healthcare professionals, Patients and Carers
	Regionalists, Patients and Carers
	Patients and Carers, Other Healthcare professionals
	Regionalists
	Patients and Carers

Figure S1. NHS Health Research Authority decision tool.

UKRI Medical Research Council

NHS Health Research Authority

Do I need NHS REC review?

I To print your result with title and IRAS Project ID please enter your details below:

Title of your research:
Regional Anaesthesia Research Priorities: A Regional Anaesthesia UK (RA-UK) priority setting partnership of patients and healthcare professionals

IRAS Project ID (if available):

Your answers to the following questions indicate that **you do not need NH REC review for sites in England.**

This tool only considers whether NHS REC review is required, it does not consider whether other approvals are needed. You should check what other approvals are required for your research.

You have answered **'YES'** to: Is your study research?

You answered **'NO'** to all of these questions:

Question Set 1

- Is your study a clinical trial of an investigational medicinal product?
- Is your study one or more of the following: A non-CE marked medical device, or a device which has been modified or is being used outside of its CE mark intended purpose, and the study is conducted by or with the support of the manufacturer or another commercial company (including university spin-out company) to provide data for CE marking purposes?
- Does your study involve exposure to any ionising radiation?
- Does your study involve the processing of disclosable protected information on the Register of the Human Fertilisation and Embryology Authority by researchers, without consent?

Question Set 2

- Will your study involve potential research participants identified in the context of, or in connection with, their past or present use of services (NHS and adult social care), including participants recruited through these services as healthy controls?
- Will your research involve prospective collection of tissue (i.e. any material consisting of or including human cells) from any past or present users of these services (NHS and adult social care)?
- Will your research involve prospective collection of information from any past or present users of these services (NHS and adult social care)?
- Will your research involve the use of previously collected tissue and/or information from which individual past or present users of these services (NHS and adult social care), are likely to be identified by the researchers either directly from that tissue or information, or from its combination with other tissue or information likely to come into their possession?
- Will your research involve potential research participants identified because of their status as relatives or carers of past or present users of these services (NHS and adult social care)?

Question Set 3

- Will your research involve the storage of relevant material from the living or the deceased on premises in England, Wales or Northern Ireland without a storage licence from the Human Tissue Authority (HTA)?
- Will your research involve storage or use of relevant material from the living, collected on or after 1st September 2006, and the research is not within the terms of consent for research from the donors?
- Will your research involve the analysis of human DNA in cellular material (relevant material), collected on or after 1st September 2006, and this analysis is not within the terms of consent for research from the donor? And/or: Will your research involve the analysis of human DNA from materials that do not contain cells (for example: serum or processed bodily fluids such as plasma and semen) and this analysis is not within the terms of consent for research from the donor?

Question Set 4

- Will your research involve at any stage procedures (including use of identifiable tissue samples or personal information) involving adults who lack capacity to consent for themselves, including participants retained in study following the loss of capacity?
- Is your research health-related and involving offenders?
- Does your research involve xenotransplantation?
- Is your research a social care project funded by the Department of Health and Social Care (England)?
- Will the research involve processing confidential information of patients or service users outside of the care team without consent? And/ or: Does your research have Section 251 Support or will you be making an application to the Confidentiality Advisory Committee (CAG) for Section 251 Support?

All participants in this study were contacted via partner organisations and not identified in the context of their past or present use of NHS services. No confidential information was collected or stored during this project.