National Institute of Academic Anaesthesia research priority setting exercise

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Editor’s key points
- Description of the process used in the UK to set research priorities in anaesthesia.
- Two questionnaires with wide input followed by expert panel assessment.
- Five research areas prioritized, and nine more identified.
- This process could form a template for other specialties or countries embarking on this process.

Background. Formal research priority setting is a recognized way of identifying important clinical research questions and promoting these as topics for commissioned research. This paper describes a research priority setting exercise conducted by the National Institute of Academic Anaesthesia (NIAA).

Methods. Possible research questions were identified from a questionnaire sent to holders of the Final Fellowship in Anaesthesia in Great Britain and Ireland and to lay representatives. The responses to the first questionnaire were collated to produce a list of potential research questions which were then sent to the same constituency for scoring. The results of this scoring process were considered by an expert panel and statements of research need generated for selected questions. The questions from the first round were also reviewed with the help of representatives of NIHR Evaluation, Trials and Studies Coordinating Centre (NETSCC).

Results. For the first questionnaire, 308 responses with 447 suggestions for research were received. A total of 15 questions were included in the second questionnaire, for which 2226 responses were received. The expert panel identified five questions for prioritization. A further nine were identified from discussions with representatives of NETSCC.

Conclusions. A total of 14 research priorities were identified by the exercise, two of which have been submitted to the NIHR Health Technology Assessment (HTA) programme as statements of research need. Potential funding streams for the remaining questions are being sought. We discuss some implications of this exercise for research strategy in the speciality.

Keywords: anaesthesia; perioperative medicine; research priority setting

Accepted for publication: 6 October 2011
of the Service are being asked to identify important issues which confront them...4 5

Many major clinical research-funding schemes such as those administered by the National Institute for Health Research (NIHR) Evaluation, Trials and Studies Coordinating Centre (NETSCC) now operate commissioned research-funding schemes. Formal research priority setting is an effective way of making the case to these bodies for commissioned research on a particular clinical question. A number of professional groups use formal processes to identify and propose topics for commissioned clinical research.6 7

This paper describes the Research Priority Setting Exercise undertaken in the fields of anaesthesia and perioperative medicine by the Research Council of the National Institute of Academic Anaesthesia (NIAA) with the aim of identifying research priorities for which funding for commissioned research should be actively sought.

Methods
In 1999–2000, the Intensive Care Society (ICS) undertook a research priority setting exercise on behalf of the UK intensive care community. The methods of the first NIAA research priority setting exercise were modelled on (but not identical to) the initial ICS exercise and the authors received considerable help and advice from the clinician who led the ICS exercise (Dr J.D. Young, Oxford, UK).

The priority setting exercise was conducted in five stages (Fig. 1):

(1) the gathering of research questions from anaesthetists and lay representatives,
(2) the checking and collating of submitted questions to produce a long list for further prioritization,
(3) the scoring of the long list of questions by clinical anaesthetists and lay representatives,
(4) the preparation of brief vignettes outlining the current state-of-the-art regarding each question,
(5) the review of the questionnaire results and vignettes and the identification of priorities by an expert panel.

To address concerns about the loss of potentially important questions during the second stage, the full list of questions submitted in the first stage was also reviewed with the help of representatives of NETSCC to advise how each question fitted the remit of the different NIHR research programmes managed by NETSCC and their available funding streams. The results of this review were combined with the research priorities identified by the expert panel to produce a final list of research priorities.

Gathering clinical questions
A pilot questionnaire was tested in teaching hospitals in Leeds and Oxford before the national exercise was conducted. The pilot questionnaire asked respondents to suggest research questions and for each question to suggest the primary outcome measure and patient group to be studied. A total of 32 responses were received (21 Leeds, 11 Oxford) and the suggestions made were included in the full priority setting exercise. The authors (S.J.H. and J.J.P.) sought feedback on the questionnaire and both received comments that the form was too complex and demanding. A number of clinicians felt that they could suggest research questions they felt to be important but that the request for an outcome measure and suggested study population for each question made the form unduly onerous. On the basis of these comments, the form was revised (Fig. 2) to ask respondents to list one or more research questions that they believed needed addressing by clinical research in anaesthesia or related specialities.

The first stage of the national exercise was conducted between June and September 2008. The final questionnaire was sent by post to Fellows of the RCoA; of whom, there were ~11,200 at the time of the survey. It was also sent to members of the AAGBI who had not been identified through their College membership. It was promoted at the AAGBI Annual Congress and through links on both the RCoA and AAGBI websites. Reply paid envelopes were supplied for responses to be posted back to the NIAA. A facility to respond electronically was offered through the NIAA website. Respondents were invited to give their name, contact details, and specialist interests, but it was stated clearly on the covering letter that this information was not essential and the respondent could remain anonymous if they wished.
RESEARCH IN ANAESTHESIA

WHAT QUESTIONS NEED ANSWERING?

What research projects will lead to improvements in patient care, patient safety and outcome? The Institute for Academic Anaesthesia is using a priority-setting exercise to find areas where clinical anaesthetists believe that large-scale clinical research would substantially advance patient care.

We are contacting all the Fellows of the College asking them what research topics they feel are important. When all the replies are collated we will have a list of research areas that practicing clinicians feel are important. Armed with this information the Institute will be in a powerful position to win one or more major grants to carry out the “top” projects. We would be grateful for your help!

HOW TO TAKE PART

Please could you give us your answer to the question:

“What do you think are the important questions for clinical research in anaesthesia?”

We would like you to list on the attached sheet questions for which new or further research could make a real difference to patient outcomes.

For example:

“Would prescribing statins to all surgical patients with cardiovascular risk factors reduce the incidence of perioperative myocardial infarction?”

Or

“Does the use of ultrasound improve the safety of peripheral nerve blocks?”

OTHER INFORMATION (NON-ESSENTIAL)

We have asked you to give your name, e-mail address and specialist interests. This allows us both to confirm that this is a representative survey and to contact you for clarification if need be. This Information is not essential and you may reply anonymously if you prefer.

Please use the reply paid envelope enclosed to return the questionnaire sheet to the Institute for Academic Anaesthesia at the Royal College of Anaesthetists.

FURTHER INFORMATION

If you require more information please contact Simon Howell or Jaideep Pandit at s.howell@leeds.ac.uk or jaideep.pandit@dpag.ox.ac.uk.

Fig 2 The questionnaire circulated in the first round of the NIAA National Anaesthetic research priority setting exercise. (Figure continued on next page.)

The questionnaire was sent to the 14 lay members of the Patient Liaison Group (PLG) of the RCoA who submitted responses by post or e-mail in the same way as clinicians. One of the authors (S.J.H.) presented the project to the PLG and a member of the group represented the PLG on the NIAA Research Council. Patient suggestions for research were also gathered from a survey of patients’ experiences of anaesthetic care conducted by the PLG.

Checking and sorting submitted questions

The results of the postal and e-mail surveys were collated by NIAA administrative staff. All returns were numbered and photocopied and the photocopies stored in a secure office.

The submitted questions were sorted and collated by two people (S.J.H. and J.J.P.) over 2 days. As many of the returns suggested two or three unrelated research topics, the forms were cut into slips each of which described one research question. The questions were first put into categories by theme (e.g. pain, airway). The question slips in each category were then grouped by research question. During this process, every effort was made to extract the respondent’s intended research question where this was not clear. Where a question slip could belong in more than one question group, a judgement was made as to the respondent’s intended primary question. This process identified a number of research themes and questions within these themes. Each question slip was reviewed to confirm that it had been correctly classified. At the end of this second sort, a long list of questions was agreed to go forward to the next stage of the process on the basis of two criteria. (i) Both sorters (S.J.H. and J.J.P.) had to agree the final research question articulated by the sorters was a true reflection of the question intended by the respondents and the question had to have been proposed in some form by at least 10 respondents. If there was not consensus on this point, then the question was reformulated. (ii) The research question had to have been asked in some form by a number of respondents.
Scoring of the long list of questions

A second questionnaire was sent out using the same mailing lists as the first stage of the exercise. This questionnaire listed the research questions identified during the checking as sorting stage and asked respondents to indicate their level of support for each question on a scale of 1–10. Respondents were asked to consider each question on its merits and not to rank questions against each other. Again results were returned electronically or by post to the NIAA Administrator.

Responses were collected over 2 months (April–May 2009 inclusive). The number of responses and the median and average rating for each question were then calculated.

Preparation of vignettes

A brief vignette, one to two pages in length, was prepared for each question in the second survey by two of the authors (S.J.H. and J.J.P.). Sources consulted in preparing the vignettes included Bandolier (a newsletter on evidence-based healthcare), the Cochrane Library Database of Systematic Reviews, the Database of Abstracts of Reviews of Effects (DARE), NHS Economic Evaluation Database (NHS EED), and the Health Technology Assessment (HTA) Database. Searches for current clinical trials were conducted using the Meta-Register of Controlled Trials (http://www.controlled-trials.com/mrct/). The vignettes are available as Supplementary material.

Priority setting by expert panel

An expert panel was convened by the NIAA at the RCoA in June 2009 to review the long list of research questions, vignettes summarizing each question, and the scores from the second questionnaire and to produce a short list of research priorities. The Panel was chaired by one of the authors (S.J.H.) and met for 1 day. Its membership included 16 clinical anaesthetists chosen to encompass the breadth of clinical research in anaesthesia and its related specialities and identified by the authors or by the Research Council of the NIAA as having appropriate experience of clinical research. The panel included three lay representatives drawn from the RCoA PLG. Also on the panel was the clinician who led
the ICS Priority Setting Exercise, a health economist, and an expert in qualitative research.

The research questions were first reviewed by the panel as a whole. The Chairman presented the average and median scores and the brief vignette for each question. Questions given limited support in the second questionnaire round of scoring and by the panel were not considered further. Questions where relevant studies were already in progress to address the research question were also excluded from further consideration. The remaining questions were then considered in three breakout groups, each of which included a lay member. The remit of the groups was to articulate for each of the questions that they considered as a brief statement of research need using the EPICOT format (Evidence, Population, Intervention, Comparison, Outcome, Timestamp). Where the question was broad, the group was asked to identify and frame a more specific research question addressing a specific group of patients. For example, ‘Does a brief period of preoperative exercise training improve outcomes after major surgery?’ was addressed with an EPICOT statement ‘Would a preoperative exercise programme improve outcome in patients planned for elective open aortic aneurysm surgery?’

The full list of questions suggested in the first stage of the priority setting process attained its objectives. Two of the EPICOT statements developed from the priority setting exercise were submitted to the NIHR HTA programme for consideration for commissioned research (Fig. 3). Fifteen questions were identified for inclusion in the second questionnaire (Fig. 3).

Checking and sorting submitted questions
Questions that were proposed by five people or fewer were sifted out at this stage of the process, but were subsequently considered in discussions with funding body representatives. Questions that were being addressed by a current study known to the sorters were also removed from the process at this stage (e.g. the question ‘are epidurals dangerous’ was considered to be the subject of the NAP3 audit). Fifteen questions were identified for the development of a full EPICOT statement (Table 2).

Scoring of the long list of questions
The second questionnaire yielded 2226 responses. Not all respondents scored all questions. The number of responses for each question and the mean and median rating for each question is shown in Table 1.

Priority setting by expert panel
The expert panel identified five questions for prioritization. In each case, the research question contained in the second questionnaire was refined to a more specific research question for the development of a full EPICOT statement (Table 2).

Discussion with funding body representatives and final priority list
The full list of questions suggested in the first stage of the priority setting process was discussed with staff at NETSCC. This identified a number of questions which appeared appropriate to available funding streams. These were combined with the questions selected by the expert panel to give a list of 14 research priority questions for anaesthesia and perioperative medicine (Table 3).

Discussion
This priority setting exercise was conducted in order to identify research questions in anaesthesia and perioperative medicine that are important to both clinicians and patients and to present these in a coherent format to major funding bodies in order to elicit calls for commissioned research on the questions. Several questions are pertinent. First, did the exercise reach its objectives? Secondly, were the methods valid? Thirdly, are there any risks to such priority setting? And finally, how will this affect future research strategy in our specialty?

The distillation of suggested topics into 14 questions (Table 3) and the practical help of NETSCC is evidence that the process attained its objectives. Two of the EPICOT statements developed from the priority setting exercise were submitted to the NIHR HTA programme for consideration for calls for commissioned research. Potential funding options are being considered for commissioned research for the other priorities identified.
Were the methods of priority setting valid?

Our objective was not novel and research priority setting has been undertaken in a number of clinical arenas. Our approach of collecting as broad a range of clinical research questions as possible, producing an interim list of questions, and then refining this as a short list of priorities has been followed to develop research priorities in areas, including intensive care, asthma, and urinary incontinence.6 7

The first questionnaire calling for research questions received fewer responses than the second questionnaire in which respondents rated a list of questions. This reflects the undoubted difficulty of formulating the initial research questions. In a future exercise, it would be appropriate to offer support with doing this to both clinicians and lay contributors. One possible way of doing this is discussed below.

We used an expert panel to arrive at a final list of priorities. Expert panels are used in the HTA Programme to prioritize and refine research questions.10 Other methods that have been used to achieve consensus on research priorities include the nominal group technique,11 the Delphi technique,12 consensus development conferences,13 interactive research agenda setting,14 and focus groups.15 A semi-quantitative method using the scoring of research questions by an expert panel has been described. To our knowledge,
this has so far only been deployed at a global level. The drivers for our choice were the potential to achieve a rapid result from a single panel meeting and the availability of advice and support from a senior researcher with experience of the approach from the ICS priority setting exercise. Expert panels may be dominated by forceful personalities. We were able to obviate this by splitting the full panel into three predetermined and moderated groups, so allowing small group discussion before the final meeting of the full panel.

Each research question was introduced to the panel by means of a vignette. Vignettes are also a feature of the HTA approach to research priority setting. It has been suggested that a more informative discussion is achieved if the vignette is introduced by a non-expert on the topic under discussion. All of the vignettes were presented to the panel by the chairman who was not expert on the vast majority of the topics under discussion. However, this was onerous for the chairman (and perhaps for the panel) and in a future exercise, it would be appropriate to divide the labour between several panel members.

We were fortunate to have support from highly informed and articulate members of the public who were drawn from the RCoA PLG. Members of the PLG play a very active role in the life of the RCoA, contribute to many aspects of

<table>
<thead>
<tr>
<th>QUESTION 8</th>
<th>Does tight glycaemic control improve perioperative outcome?</th>
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<tr>
<td>1 2 3 4 5 6 7 8 9 10</td>
<td></td>
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<tr>
<th>QUESTION 9</th>
<th>What is the best arrangement for a preoperative assessment clinic?</th>
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<td>1 2 3 4 5 6 7 8 9 10</td>
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<tr>
<th>QUESTION 10</th>
<th>Does an enhanced perioperative care package improve outcomes?</th>
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<td>1 2 3 4 5 6 7 8 9 10</td>
<td></td>
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<tr>
<th>QUESTION 11</th>
<th>Does a brief period of preoperative exercise training improve outcomes after major surgery?</th>
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<td>1 2 3 4 5 6 7 8 9 10</td>
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<th>QUESTION 12</th>
<th>Does regional anaesthesia reduce the risk of cancer recurrence?</th>
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<td>1 2 3 4 5 6 7 8 9 10</td>
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<th>QUESTION 13</th>
<th>Does maintaining perioperative blood pressure at preoperative levels improve outcome in hypertensive patients?</th>
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<td>1 2 3 4 5 6 7 8 9 10</td>
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<th>QUESTION 14</th>
<th>Does hypotensive resuscitation improve outcome in active haemorrhage?</th>
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<tr>
<td>1 2 3 4 5 6 7 8 9 10</td>
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<tr>
<th>QUESTION 15</th>
<th>What perioperative management strategies improve outcome in head injury, e.g. hyperoxia?</th>
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<td>1 2 3 4 5 6 7 8 9 10</td>
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</table>
Table 1 Questions circulated in the second NIAA questionnaire, number of responses for each question, and mean and median rating for each question

<table>
<thead>
<tr>
<th>Question</th>
<th>No. of responses</th>
<th>Median</th>
<th>Mean</th>
</tr>
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<tbody>
<tr>
<td>What interventions prevent the development of chronic pain after surgery?</td>
<td>2195</td>
<td>7</td>
<td>6.4</td>
</tr>
<tr>
<td>Does epidural anaesthesia improve long-term outcomes after major elective surgery?</td>
<td>2226</td>
<td>8</td>
<td>7.5</td>
</tr>
<tr>
<td>Does regional anaesthesia improve long-term outcomes after surgery?</td>
<td>2224</td>
<td>8</td>
<td>7.4</td>
</tr>
<tr>
<td>What is the best management strategy for fractured neck or femur?</td>
<td>2203</td>
<td>8</td>
<td>7.1</td>
</tr>
<tr>
<td>Can perioperative interventions prevent postoperative cognitive impairment?</td>
<td>2220</td>
<td>7</td>
<td>6.9</td>
</tr>
<tr>
<td>What preoperative tests can be used to modify patient care and improve outcome?</td>
<td>2190</td>
<td>6</td>
<td>7.0</td>
</tr>
<tr>
<td>What interventions can prevent perioperative cardiac complications?</td>
<td>2197</td>
<td>8</td>
<td>7.6</td>
</tr>
<tr>
<td>Does tight glycaemic control improve perioperative outcome?</td>
<td>2180</td>
<td>6</td>
<td>5.8</td>
</tr>
<tr>
<td>What is the best arrangement for a preoperative assessment clinic?</td>
<td>2174</td>
<td>6</td>
<td>5.9</td>
</tr>
<tr>
<td>Does an enhanced perioperative care package improve outcomes?</td>
<td>2175</td>
<td>7</td>
<td>6.8</td>
</tr>
<tr>
<td>Does a brief period of preoperative exercise training improve outcomes after major surgery?</td>
<td>2179</td>
<td>6</td>
<td>6.2</td>
</tr>
<tr>
<td>Does regional anaesthesia reduce the risk of cancer recurrence?</td>
<td>2179</td>
<td>5</td>
<td>4.8</td>
</tr>
<tr>
<td>Does maintaining perioperative blood pressure at preoperative levels improve outcome in hypertensive patients?</td>
<td>2179</td>
<td>7</td>
<td>6.8</td>
</tr>
<tr>
<td>Does hypotensive resuscitation improve outcome in active haemorrhage?</td>
<td>2179</td>
<td>7</td>
<td>6.8</td>
</tr>
<tr>
<td>What perioperative management strategies improve outcome in head injury, e.g. hyperoxia?</td>
<td>2167</td>
<td>7</td>
<td>6.9</td>
</tr>
</tbody>
</table>

Table 2 Questions selected by the expert panel as research priorities and associated questions for development into EPICOT statements

<table>
<thead>
<tr>
<th>Initial question for prioritization</th>
<th>Question for EPICOT statement</th>
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<tbody>
<tr>
<td>What interventions can prevent perioperative cardiac complications?</td>
<td>What is the incidence and prognosis of perioperative myocardial injury identified by cardiac biomarker elevation and how should it be managed?</td>
</tr>
<tr>
<td>Does a brief period of preoperative exercise training improve outcomes after major surgery?</td>
<td>Would a preoperative exercise programme improve outcome in patients planned for elective open aortic aneurysm surgery?</td>
</tr>
<tr>
<td>What perioperative management strategies improve outcome in head injury?</td>
<td>Does therapeutic hyperoxia improve in traumatic brain injury?</td>
</tr>
<tr>
<td>What interventions prevent the development of chronic pain after surgery?</td>
<td>Does epidural or paravertebral block improve long-term outcome in thoracic surgical patients?</td>
</tr>
<tr>
<td>Does an enhanced perioperative care package improve outcomes?</td>
<td>Would a 96 h enhanced recovery programme improve outcome in patients undergoing surgery for fractured neck of femur</td>
</tr>
</tbody>
</table>

Table 3 The final list of research priorities for anaesthesia and perioperative medicine

- What interventions can prevent perioperative cardiac complications?
- Does a brief period of preoperative exercise training improve outcomes after major surgery?
- What perioperative management strategies improve outcome in head injury?
- What interventions prevent the development of chronic pain after surgery?
- Does an enhanced perioperative care package improve outcomes?
- Under what circumstances should aspirin be discontinued in the postoperative period?
- Would actively targeting perioperative blood pressure in the intraoperative period reduce the incidence of postoperative complications?
- Does conventional (as opposed to tight) glycaemic control improve perioperative outcome?
- What is the place of ‘anti-neuropathic’ pain medications in the treatment of postoperative pain?
- What are the best arrangements for the preoperative assessment of elective surgical patients?
- Would higher nurse to patient ratios during the first 48 h after operation reduce the complication rate after major abdominal surgery?
- What is the impact of same day surgery on primary care?
- How should patients for day surgery and 23 h surgery be selected?
- Does the use of locoregional anaesthesia prevent cancer recurrence?
College policy, and have a much more detailed understanding of anaesthesia and perioperative care than many other members of the public. The lay members of our panel made a substantial contribution to the exercise. Nevertheless, the lay members of the panel stated that they found the work challenging. A possible approach to supporting lay members and achieving wider public engagement is discussed below.

The respondents to our pilot questionnaire found it onerous and inhibiting to be asked to formulate research questions in such a way that they could be tested in a study. As a result of this, we asked for suggestions for research topics only in more general terms. This facilitated completion of the forms, but it was often left to the authors’ discretion in interpreting what the respondents meant by their response. It also led to the second questionnaire asking questions about research themes, rather than specific research questions, e.g. ‘what is the best management strategy for fractured neck of femur?’. The priorities identified by the expert panel where then developed into specific research questions (e.g. ‘Would a 96 h enhanced recovery programme improve outcome in patients undergoing surgery for fractured neck of femur?’). The value of articulating very specific research questions has been recognized in the development of the UK Database of Uncertainties about the Effects of Treatments (UK DUETs) (http://www.library.nhs.uk/duets/). This is an NHS database of specific treatment uncertainties. While anyone may submit a treatment uncertainty, these are carefully vetted before they appear in the database.

Where specific research questions were suggested, the sorting and collating of the responses to the first questionnaire resulted in considerable data reduction with similar questions being pooled. There was also a voting effect, in that potentially important questions identified by only a few people tended to be lost. This was addressed in this exercise by discussing the full list of questions with staff from NETSCC.

We do not know if some anaesthetists did not respond to the questionnaires, for fear that their research ideas would be appropriated by others or by the NIAA. The issue of ‘ownership’ of the output from the priority setting exercise was discussed both by members of the expert panel and the NIAA Research Council. The consensus was that the output from the exercise is a common resource and not the intellectual property of any individual. It is probably rare for a research question to be novel; more usually, it is the manner of answering a self-evident research question (e.g. by using special equipment or study design) that is unique. Individuals did put ideas from their current research into the process and this should not preclude them from continuing their work on their ideas.

Two of the EPICOT statements developed from the priority setting exercise have been submitted to the NIHR HTA programme for consideration for calls for commissioned research. Potential funding options are being considered for commissioned research for the other priorities identified.

A guide to clinical research priority setting which draws on the experience of a number of groups was published online in May 2010 by the James Lind Alliance (JLA). This publication provides a comprehensive overview of priority setting and the approach that we adopted is broadly similar to that recommended by the JLA. The JLA receives funding from the UK Department of Health and the UK Medical Research Council and exists to bring patients and clinicians together in research priority setting partnerships (http://www.lindalliance.org/). The JLA endeavour is directed specifically towards treatment uncertainties. The aim of the JLA priority setting process is to produce a list of 10 research priorities. A question must be in the UK-DUETs database to be considered as a potential priority and the JLA process begins with developing a partnership to submit DUETs. The process is rigorous and provides a strong framework for public involvement but can be protracted. The process for developing research priorities in asthma took 3 years from inception to delivery. We did not work with the JLA on the current exercise because of our desire to consider questions apart from therapeutic uncertainties and to complete our initial priority setting exercise relatively quickly. However, collaboration with the JLA to develop DUETs in anaesthesia and perioperative medicine for a future priority setting exercise may be an option for the NIAA.

Are there risks to priority setting in this manner?

It is inevitable that some research groups will be working in fields not listed in Table 3. The objective of the exercise is to identify areas in which responsive funding for commissioned research may be of value, not to discourage research in non-prioritized areas.

The list of priorities may be inherently plausible, but if in fact it transpires that few or no anaesthetic research groups currently have expertise in these fields, then there may be a risk that funding bodies call for research proposals and none will be forthcoming. The representativeness of the process and the experience of the expert panel make this unlikely.

The priority setting exercise is strictly limited to clinical research and moreover, to questions whose answers will likely have an immediate impact on healthcare outcomes. It is important that the exercise does not inhibit the funding of basic science research that underpins many of the identified clinical research priorities. Since the main aim of the exercise is to inform commissioned clinical research, we do not anticipate such conflicts with basic science work.

The current exercise focused on research priorities for Great Britain and Ireland. Research priority setting may be carried out at an international level, a national level, or a local level. Examples of international priority setting include the Global Forum for Health Research mental health research priority setting exercise and the Child Health and Nutrition and Health Initiative on topics to reduce the mortality rate by two-thirds among children under five by 2015. Examples of national research priority setting include the ICS
exercise and the exercise to prioritize uncertainties chronic obstructive pulmonary disease and asthma in the Netherlands.\(^\text{14}\) Local priority setting in the UK is exemplified by individual NHS Trust research strategies. The exercise described in this paper was carried out as one of the initial projects of the NIAA and was informed by the document ‘National Strategy for Academic Anaesthesia’ published by the Royal College of Anaesthetists in 2005.\(^\text{1}\) The similarities and differences between the Royal College strategy and proposals for Academic Anaesthesia in the USA have been discussed by one of the authors (J.J.P.) elsewhere.\(^\text{19, 20}\) The authors of the current report are aware of the challenge presented by the ‘10/90’ gap (i.e. only 10% of global spending on health research is directed towards the problems that primarily affect the poorest 90% of the world’s population).\(^\text{18}\) There is undoubtedly a case for a global priority setting exercise in perioperative care. However, this did not fall within the remit of the current exercise.

**How will priority setting change academic strategy in the future?**

The exercise supports rather than detracts from the changes set in motion by the RCoA’s Academic Strategy Report 2006.\(^\text{3}\) A key theme of that Report was greater engagement of the specialty with outside agencies and funding bodies, with the public, and greater cohesion within the specialty itself. The priority setting exercise clearly fulfils the first two. Because many of the research questions listed in Table 3 are best answered by multi-centre studies, or by the coordinating activities of one or more specialist societies, it will assist the process of collaboration across geographical regions and disciplines within the specialty. It was recommended that the Academic Strategy exercise be repeated in ~2011 and we anticipate that priority setting and models to create national networks to underpin the identified studies will become key themes of that report.

**Supplementary material**

Supplementary material is available at *British Journal of Anaesthesia* online.

**Declaration of interest**

D.J.R. is a member of the Board of the NIAA. S.J.H. and J.J.P. are members of the Research Council of the NIAA.

**Funding**

The *British Journal of Anaesthesia* funded the direct costs of this work. The Royal College of Anaesthetists provided the administrative infrastructure for this study. Additional administrative resources were provided by the Association of Anaesthetists of Great Britain and Ireland. S.J.H. was supported by funding from the *British Journal of Anaesthesia* and the Leeds Teaching Hospitals Trust.

**Appendix**

**Members of expert panel**

Duncan Young (Lead for the first ICS Research Priority Setting Exercise, Oxford, UK); Chris McCabe (Professor of Health Economics, Leeds, UK); Maureen Twiddy (NHIR Yorkshire and Humber Research Design Service, Qualitative Methods, Leeds, UK), Anne Murray (Chair PLG, RCoA); Richard Young (PLG, RCoA); David Whitfield (PLG, RCoA); Gerry Danjoux (Middlesex, UK); Roshan Fernando (London, UK); Irwin Foo (Edinburgh, UK); Arun Gupta (Cambridge, UK); Jonathan Hardman (Nottingham, UK); Simon Howell (Chairman of panel, Leeds, UK); David Lambert (Leicester, UK); Richard Langford (London, UK); Martin Leuwer (Liverpool, UK); Mervyn Maze (London, UK); Ian Moppett (Nottingham, UK); William Notcutt (Great Yarmouth, UK); David Rowbotham (Leicester, UK); Fang Gao Smith (Birmingham, UK); Jonathan Thompson (Leicester, UK); Howard Wakeling (Worthing, UK); Nigel Webster (Aberdeen, UK); Steve Yentis (London, UK).

**NETSCC (Southampton, UK)**

Pamela Young, Nick Hicks.

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