General Medical Council

Physician associate and anaesthesia associate pre-qualification education framework: engagement report

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About the engagement

From September to November 2021 we sought feedback on the draft pre-qualification education framework for physician associates (PAs) and anaesthesia associates (AAs), which we had worked with others to develop, leading to a qualification and registration with the GMC.

The pre-qualification education framework includes:

- PA and AA generic and shared learning - an overarching learning outcomes document to ensure consistency, where appropriate, between the two curricula
- AA curriculum
- PA curriculum
- PA Registration Assessment (PARA) content map - outlines the areas of knowledge and skill that could be covered in the PARA knowledge test and OSCE.

We decided to co-ordinate a single engagement exercise, rather than have each contributing organisation attempt to engage on their document separately.

There was a total of 114 responses to the questionnaire, which included:

- 22 responses from organisations, including bodies representing PAs/AAs and PA educators, PA/AA education providers, medical schools and postgraduate medical institutions, and NHS/HSC organisations and arms-length bodies
- 62 responses from practising PAs and AAs, PA and medical educators, doctors, PA and AA students, other healthcare professionals, and other individuals.

Key findings

For the questions asking respondents whether they thought that each of the documents meets the given statement, there was overall support from those who expressed an opinion:

- Overarching outcomes document – 79% to 86% strongly agreed or agreed
- AA curriculum – 70% to 79% strongly agreed or agreed
- PA curriculum – 77% to 85% strongly agreed or agreed
- PARA content map – 76% to 83% strongly agreed or agreed.

Main themes raised across the different documents:

- Supervision – description too vague, needs further clarification
- Prescribing – wording needs to be made clearer about prescribing rights
- Course length and degree title – shouldn't be specified, thought two years isn't long enough
- HEIs may need support to implement new curriculum
- Management and leadership, and teaching – is important to include these skills
- ED&I – more specific learning outcomes needed, more integration throughout
- Placements (PA curriculum) – some welcomed more flexibility, others thought lack of stipulation about required hours and specialties could be problematic
- Primary care (PA curriculum) – more focus needed.

How we responded

We compiled all the comments and drafting suggestions from respondents, discussed them with the relevant development groups, and drafted new versions of the documents with suggested changes included.

Examples of changes made:

- Prescribing – the PA curriculum and Outcomes and Outcomes document were both updated to make it clear that students should know how to and be able to prepare a prescription for a prescriber in a *simulated environment*.
- Course length and award type – these were removed in the PA curriculum, giving HEIs the flexibility to define their own courses.
- Improved focus in primary care in the PA curriculum.
- ED&I was integrated more throughout the Outcomes document and the PA curriculum, and the key ED&I capability was adapted in the AA curriculum.

Introduction

From September to November 2021 we sought feedback on the draft pre-qualification education framework for physician associates (PAs) and anaesthesia associates (AAs), which we had worked with others to develop, leading to a qualification and registration with the GMC.

About the framework

The pre-qualification education framework includes:

- PA and AA generic and shared learning - an overarching learning outcomes document
- AA curriculum
- PA curriculum
- PA Registration Assessment (PARA) content map - outlines the areas of knowledge and skill that could be covered in the PARA knowledge test and OSCE.

The overarching document will ensure consistency, where it's appropriate, between the outcomes-based curricula. This will be especially relevant across professional capabilities such as teaching and leadership. Each curriculum sets out the profession-specific capabilities we'll expect students to learn.

Each draft was produced by a separate development group with contributors from relevant organisations, which met multiple time to shape the structure and content of the documents.

Course providers will use the relevant curriculum as a guide when designing their course. This would cover the syllabus and any assessments. Students joining courses from September 2023, or the first new cohort within the 2023/24 academic year, will need follow a course aligned to this framework.

See Annex A for details of the background to regulation of PAs and AAs, more about development of the education framework and implementation, and further details about the engagement.

Engagement overview

We decided to co-ordinate a single engagement exercise, rather than have each contributing organisation attempt to engage on their document separately. See Annex A for further details about why and how we consulted.

The questionnaire

We asked respondents to help make sure that the education framework for PAs and AAs:

- meets our standards
- ensures patient safety is the first priority
- helps to meet service, patient, and workforce needs
- is deliverable
- supports career flexibility and lifelong learning
- is high quality, clear and easy to use
- embeds fairness.

The respondents were asked to read the four documents of the framework, and then answer various questions detailed below about whether the content meets the factors listed above. Details of the questions are in Annex A, and responses and stats for each question in the main questionnaire is in Annex B.

Response overview

There was a total of 114 responses to the questionnaire.

This included 22 responses from organisations, including bodies representing PAs/AAs and PA educators, PA/AA education providers, medical schools and postgraduate medical institutions, and NHS/HSC organisations and arms-length bodies.

We also had 62 responses from practising PAs and AAs, PA and medical educators, doctors, PA and AA students, other healthcare professionals, and other individuals.

The remainder chose not to specify whether they were responding as an individual or on behalf of an organisation.

Responses were received from across the UK. Eight organisations said they were UK-wide, 11 from England and two from Northern Ireland. For individuals – England (50), Scotland (3), Wales (4), Northern Ireland (1), and other (3).

Five respondents identified as having a disability. Gender, where provided in individual responses, was male (25) and female (33). Ethic origin, where provided in individual responses, was White (37), Asian or Asian British (10), black or black British (2), Mixed or multiple ethnic groups (2), and other ethnic group (6).

Overall support for the framework

For the questions asking respondents whether they thought that each of the documents meets the given statement, there was overall support from those who expressed an opinion:

- Overarching outcomes document – 79% to 86% strongly agreed or agreed
- AA curriculum – 70% to 79% strongly agreed or agreed
- PA curriculum – 77% to 85% strongly agreed or agreed
- PARA content map – 76% to 83% strongly agreed or agreed

PA curriculum - feedback

Main themes

- Supervision:
  - Comments about the phrase 'supervising doctor or health professional' in the Outcomes document, PA curriculum and PARA content map (Q1 patient safety):
    - Too vague.
    - A named doctor should have overall supervision, while day-to-day supervision can be done by other healthcare professionals.
    - Doctors and experienced PAs/AAs can provide overall supervision, as these professionals will be held to the same standards (set by GMC).
  - More comments (Q15 omissions):
    - PA supervisors shouldn't be any healthcare professional. The supervisor should be responsible to same regulatory body as PAs and trained to practise medicine.
    - PAs are required to be under the supervision of a doctor, not other HCPs.
    - More detail is needed on the level of supervision. A doctor is a healthcare professional. If no consultant or senior medical personnel is available to supervise, without more detail on the level of supervision training could be compromised. A named medical supervisor is essential, and day to day mentoring could be delegated to someone appropriately trained eg PA, junior doctor, ACP.
    - Can non-regulated professionals supervise, and should it mention that supervision can be delegated.
    - Supervisor expectations should be included – there is already separate published Advice for doctors who supervise PAs and AAs - GMC (gmc-uk.org).
- Prescribing:
  - Content in Outcomes and PA curriculum (Q1 patient safety):
    - Pharmacokinetics of medications – how much are students expected to know, will there be a list of core drugs?
    - Deprescribing – can PAs do this, as they can't currently prescribe?
    - 'Writing a safe and legal prescription' wording (in PA curriculum) – implies PAs can do this once qualified, which they can't.

- Guidance on medications to be covered by PA students could simply state that the expectation would be that medications covered in pharmacology teaching would be those relevant to patient presentations and conditions outlined in the PARA (Q15 omissions).
- There is an inconsistency across the PA curriculum and Outcomes document – the former states in CCiP 2 'Writes a safe and legal prescription' with a caveat saying the law will need to change to allow for this but they should be able to teach the skills, whereas the latter says 'prepare for the supervising doctor or healthcare professional a safe and legal prescription'. The two should say the same (Q15 omissions).

- Course length (Q3 deliverability):
  - Two years isn't long enough to meet all the expectations, giving PAs and AAs the responsibility of life and death, and use of potent drugs and invasive equipment (also in Q15 omissions).
  - PA training may have to be lengthened to include prescribing training in the future.
  - Suggestion - add compulsory cardiology, respiratory and gastro placements to PA courses and possibly add a few additional weeks to the course length to make sure all students can equally cover these placements.
  - Concern that there is a lot to cover in the PA Curriculum and the levels are not clearly defined, eg how expert do they need to be in a particular clinical scenario.
  - Request that the text specifying course length is deleted as not all programmes are typically 2 years duration.
- HEIs need support (Q3 deliverability):
  - The new approach of outcomes based curricula means changes to documentation and training for placement providers. Time needs to be allowed for this to happen.
  - The PA curriculum is likely to be deliverable for most institutions, but minor revisions may be needed.
  - HEIs need guidance on how to deliver the programme.
  - Concern that not all course providers will meet the high standards required.
- Use of 'e-portfolio' (Q3 deliverability/Q15 omissions):
  - More guidance needed on e-portfolio content, and what it will be used for.
  - Medical students use different e-portfolios – this may cause difficulties for educators having to use different portfolios to sign off competencies.

- Is this something for all HEIs which will be rolled out in time? And will there be mandated dops/mini-cex/hours?
- Not all HEIs use an electronic version as this is not available, it should be amended to 'portfolio'.

- Placement issues:
  - More flexibility in areas of clinical experience could lead to possible issues securing placements (Q3 deliverability).
  - Placement hours are not stipulated in the curriculum, and some placements eg obs and gynae have been omitted. Whilst it allows for flexibility, it needs to be clearer as to which placement areas PAs should be going on, and particular hours in certain areas if required (Q4 flexibility).
  - If placement hours are included, it could give leverage to the HEI when negotiating placements. Add a statement added that it is down to the HEI to decide the number of hours required in each specialty (Q4 flexibility).
- Degree title (Q15 omissions):
  - The naming of degree title isn't necessary as there is variation between HEIs.
  - Remove detail of courses and qualifications, or alternatively add detail of other modes of programme delivery, eg 4-year integrated Masters pathway.
  - While the curriculum requires students to cover the same material but exit programmes with different awards, the MSc will have a research project but the MPAS does not.
  - It should be specified that the named degree titles are valid qualifications which enable admission to national PA examinations.
- Lack of focus on primary care (Q15 omissions):
  - There is no mention of primary care as an important placement learning site.
  - General practice has been completely omitted, and that as 50% of PAs working in general practice this is a major omission.

Other themes raised

- Concern re transition of PAs to a surgical care team (Q1 patient safety, Q15 omissions) – PA education is a medical model and does not achieve the surgical competencies gained by Surgical Care Practitioner MSc in Surgical Care Practice. PAs won't have any education that is delivered by the three current RCS accredited HEIs.

- Specific mention of Mental Capacity Act and assessment of a patient's capacity (Q1 patient safety) – concern that 'you can't decide if a deprivation of liberty authorisation is required if you haven't identified that they may lack capacity and you haven't assessed whether they lack capacity to consent to the restrictions they have been place under'.
- Too patient focussed – concern that the PA curriculum is very patient centred, maybe to the detriment of their wider role within the healthcare team (Q2 meets needs).
- Meets service need (Q2 meets needs):
    - Supportive - the framework supports service need, getting PAs into generalised work environments and the curriculum covers a large scope of conditions to identify and manage which makes this easier.
    - To look at - need to make sure the expectations of both a new graduate PA and the employer match up and that it is recognised that whilst the new grad PA can deliver service that they will require support and supervision as anyone else starting a new job.
- Management and leadership:
    - Is important for new graduates but needs to be carefully managed as it may take time to develop (Q2 meets needs).
    - Include professional development and preparing PA/AA students to take on management/leadership roles in the AA and PA curricula. This is lacking in most curricula (Q4 flexibility).
- Involve PAs in implementation (Q3 deliverability) – suggestion to involve advanced practising PAs to help implement curriculum.
- Minimum standards not clear (Q3 deliverability) – eg in CCiP 1 descriptors 2 and 5 the minimum standard is ambiguous.
- Teaching and learning (Q4 flexibility):
    - More emphasis needed on the PA/AA as a teacher as well as a learner – PAs and AAs are ideally placed as a 'constant' in the team to teach skills and procedures and model local protocols, policy and culture.
    - Preparedness to teach/give feedback - does the PA curriculum prepare student PAs to teach/give feedback.
- Scope for more specialising (Q4 flexibility) – the curriculum is quite generic, it would be good if PAs could specialise in specific areas.
- Link to career progression advice (Q4 flexibility) – add examples or links to career progression advice (possibly to FPA website).

- Lack of detail (Q5/6 clear and easy to use):
  - No detail or hard clinical examples of what is expected.
  - A bit woolly - difficult to see from the curriculum proposed and the assessment map what to include or exclude. It would help HEIs if they could have greater clarity on what to include in the PA programme as it is only two years long, with little time for 'wriggle room'.
  - More streamlining needed – the curriculum feels like a pick and mix of descriptors, a more streamlined and logical order would be better.
- How is research assessed (Q5/6 clear and easy to use) – how should the application of research in GCiP 6 be assesse? If HEIs need to assess it, further guidance is needed.
- ED&I (Q7 ED&I content):
  - Law in Northern Ireland is different - the Equality Act 2010 does not apply to Northern Ireland.
  - Attainment gap not addressed - the framework does not discriminate against people with protected characteristics, but it doesn't seem to do anything to address the attainment gap either.
  - Lack of ED&I data available - it is difficult to address ED&I as there is no real data available to support the assumptions of the demographics engaged in these courses.
  - Specific ED&I learning outcomes – there should be specified learning outcomes relating to EDI. This can include correct behaviours and attitudes in the professional environment as well as towards patients.
  - Lacks evidence of positive impact – while the framework does not seem to negatively impact on people sharing protected characteristics, it does not evidence positive impact on such people.
  - Part time or LTFT training available? – are there any programmes offering part time or less than full time (LTFT) programmes.
  - Hard to achieve – some ED&I aspects may be hard to achieve depending on the placement area and physical population. Exposure to such diversity cannot be guaranteed.
  - Lacks section on older people – the lack of a section specifically on older people means that the framework is not adequately addressing the needs of those whose protected characteristic is age.

- Include 'listening' in sections about communication skills – 'listening' should be included, a skill especially relevant for PAs as they only have two years clinical training and have to take detailed patient histories as well as eliciting patient ideas, concerns and expectations.
- Reasonable adjustment – the framework should not impact on those with protected characteristics as long as there are provisions for HEIs to provide reasonable adjustments.
- ED&I training requirement for supervisors is unrealistic – the expectation on p.30 for HEIs to ensure that all workplace supervisors have had formal training within 3 years is unrealistic. It is difficult to assess whether placement trainers have completed ED&I training.
- More ED&I topics throughout – ED&I should be integrated more throughout the curriculum rather than just be stuck on at the end.

- Section on physical examinations (Q15 omissions) – there should be a section added which specifies the physical examinations (including intimate) that a student needs to know.
- Reference to 'trainee' (Q15 omissions) - describing PAs as trainees is not a common term and becomes confusing with medical trainees – PAs are either students or qualified.
- Template (Q15 omissions) - will there be a template for PA programmes to map their syllabus to the curriculum?
- End of life care (Q15 omissions) – include knowledge of the administrative processes that take place when a patient dies in a hospital, eg the death certification process, who to ask.

Comments out of scope

- Resources (Q3 deliverability):
  - There is nothing in the framework about increasing investment in training resources.
  - Clarity requested that courses should be adequately resourced, both in academic staffing and administration and in placement provision.
  - Staffing levels need to be monitored, and time allocated within job plans for clinical placement supervision.
  - The funding of PA programmes needs to sorted out to enable inclusivity, currently only those who can afford it undertake the course (Q7 ED&I).
- Prescribing rights (Q2 meets needs, Q5/6 clear and easy to use, Q15 omissions):
  - PAs need prescribing rights to ensure patient safety and maximum work results.

- A hope that prescribing could be integrated into the PA qualification, negating the need for PAs to do a prescribing course post qualification.

- Post qualification progression:
  - This is not included (Q2 meets needs).
  - PA career framework is required - a career framework mapped to clinical progression is needed, so experienced PAs can progress via a competency framework or membership exam to senior PA, which needs to be linked to advancement of pay bandings (Q4 flexibility).
  - Lacks detail on flexibility of career (Q4 flexibility).
  - Need experienced PA learning outcomes. Suggests a framework be developed for more advanced skills in each specialty (Q15 omissions).
- Time should be included in PA contracts for peer supported learning (Q4 flexibility).
- Lifelong learning (Q4 flexibility):
  - Clearer CPD outcomes are needed for PAs.
  - Funding for lifelong learning – LLL needs funding to support non medic learners.

Drafting suggestions for PA curriculum

Q1 – patient safety

- Throughout document – clarify 'supervision', by who and what level (also in Outcomes and PARA). FPA suggests PAs should have a named doctor supervisor, whilst day-to-day supervision can lie with doctors or other healthcare professionals.
- CCiP 2 - reword "write a safe and legal prescription", suggest 'Awareness of how to write...'
- CCiP 1 - consider adding mention of mental capacity act and the assessment of a patient's capacity. It already says:
  - Assesses a patient's capacity to understand and retain information and make decisions, and makes reasonable adjustments to support their decision making if necessary.
  - Safely and sensitively undertakes a mental and cognitive state examination, including establishing if the patient is a risk to themselves or others, seeking support and refers to senior colleagues and others as required.

Q2 meeting needs

- More detail needed about direction of travel for a newly qualified practitioner.
- CCiP 4 re end of life care needs amending - 'determining' is out of scope for most PAs, it is about identifying the need for EOLC and liaising with the appropriate team members.
- In PA curriculum or PARA as appropriate - add something on requesting ultrasound investigations as no ionising radiation involved.

Q3 deliverability

- P.6 – states that placements should be of appropriate duration in broad range of clinical contexts, focus should be on general medicine (general practice, acute and emergency medicine, general medical specialties). Consider adding something here about making cardiology, respiratory and gastro placements compulsory on PA courses.

Q4 flexibility

- Teaching/feedback:
  - Look at whether the curriculum prepares student adequately for this.
  - Should teaching be emphasised more (and in Outcomes)?
- Professional development and leadership - consider including professional development and preparing PA/AA students to take on management/leadership roles (and in AA curriculum).
- Placement areas and hours:
  - Consider making it clearer which placement areas PAs should be going on, and particular hours in certain areas if required.
  - Add that it is down to the HEI to decide the number of hours required in each specialty.
- Link to career progression advice –add examples or links to career progression advice (possibly to FPA website).

Q5/6 clear and easy to use

- Suggestion to mention specific examinations which a PA should be able to perform ie cardiovascular, speculum, or rectal.
- GCiP 6 – further guidance requested on how the application of research should be assessed.

Q7 ED&I

- P.30 and 31 - need to include footnote re Equality Act not applying in NI. Suggested text as per *Professional behaviour and fitness to practise: guidance for medical schools and their students*: 'The Equality Act 2010 (viewable at www.legislation.gov.uk/ukpga/2010/15/contents) does not apply to Northern Ireland. You can find more information about the equality legislation in Northern Ireland on the Equality Commission for Northern Ireland's website at www.equalityni.org.
- Consider if want to add learning outcomes specific to ED&I.
- Consider adding a statement about the mandatory requirement to undertake ED&I training in both primary and secondary care.
- Consider adding section on older people (is already included in GCiP 7 re safeguarding).
- CCiP 1 - include 'listening' or even 'listening to patients' experience, ideas, concerns and expectations' (also in Outcomes).

Q15 omissions

- Throughout document:
  - clarify 'supervision', by who and what level (also in Outcomes and PARA)
  - consider whether general practice has been sufficiently included (also in PARA).
- P.3 para 2 – is typo, should be 'through' in last sentence (not 'though').
- Possibly in point 6 on p.5 - include more about primary care re placement learning.
- p.6 - delete 1st sentence on page and para 1 of 'Educational approach'. Not all programmes are typically 2 years, and naming the degree title isn't needed and could be misleading as not all HEIs award the same qualification.
- P.6 para 2 – where degree titles are mentioned, consider changing text in view of different comments received:
  - delete - naming of degree title isn't necessary
  - add detail of other modes of programme delivery, eg 4-year integrated Masters pathway
  - observation that while students have to cover the same material but exit programmes with different awards, the MSc has a research project but the MPAS doesn't
  - add that they are valid qualifications which enable admission to national PA examinations.

- p.9 1st para - change 'trainees' to 'students'.
- Consider including a section on specific physical examinations (including intimate) required to be known by students?
- Use of 'e-portfolio' – change throughout to 'portfolio' as it appears not all HEIs use or have access to electronic portfolios.
- CCiP 2:
    - consider including/changing text to say that the expectation would be that medications covered in pharmacology teaching would be those relevant to patient presentations and conditions outlined in the PARA (also in Outcomes)
    - consider whether want to match what it says in Outcomes para 29j: 'prepare for the supervising doctor or healthcare professional a safe and legal prescription'. At the moment, CCiP 2 says: 'Writes a safe and legal prescription…' with a caveat saying the law will need to change to allow for this but they should be able to teach the skills. Is the text in the two docs inconsistent at the moment? (also in Outcomes).
- CCiP 5 – consider including the requirement to know the procedure for when a patient dies in hospital, ie administrative processes.
- Consider providing a template for PA programmes to map their syllabus to the curriculum.

Response to PA curriculum feedback

During 2020 and 2021, a PA curriculum development group was formed which met multiple times and gave valuable feedback to shape the structure and content of the curriculum. The group included representatives from the GMC, Royal College of Physicians (RCP), Faculty of Physician Associates (FPA) and PA Schools Council (PASC).

We compiled all the comments and drafting suggestions from respondents as detailed in the section above, and drafted a new version of the curriculum with suggested changes included. We discussed the comments and suggested changes with the PA curriculum development group. Examples of changes made:

- Supervision – the group agreed that when referring to supervision of qualified PAs, the wording should be 'dedicated medical supervisor' as per the FPA website. And when referring to PA students, it should be kept as 'supervising doctor or healthcare professional'.
- Prescribing – the curriculum and Outcomes document were both updated to make it clear that students should know how to and be able to prepare a prescription for a prescriber in a *simulated environment*.
- References to course length and award type were removed, giving HEIs the flexibility to define their own courses.
- All references to 'e-portfolio' were changed to 'portfolio' to give flexibility on how HEIs and students manage records.
- Placements:
    - Obstetrics and gynaecology was added to the list of example disciplines.
    - The group decided not to stipulate placement hours this is not something included in outcomes-based curricula. HEIs can do this in their syllabi, but it must be clearly an indicative expectation rather than an absolute requirement.
- Improved focus on primary care.
- ED&I integrated more throughout the curriculum – in response to feedback, we reviewed the curriculum in line with changes anticipated in the new version of *Good Medical Practice*, and research arising from the GMC's *Fair Training Cultures* work. Both these projects have included extensive engagement with protected groups, and we have the benefit of assurance that the language has been well tested. Examples of changes made:
    - Giving and receiving feedback becomes 'feedback dialogue'.
    - More inclusive language, eg:

- ‘Welcomes and supports diversity and values people as individuals, demonstrating an awareness of how their attitudes and behaviours may influence or affect others’ (General CiP 2)
- ‘Listens to patients, takes account of their views, and responds honestly and openly to their questions’ (General CiP 3)
- ‘Recognises the factors which cause inequality of opportunity and the importance of equality of access to learning opportunities, and ways to address these’ (General CiP 8).

AA curriculum - feedback

Main themes

- Supervision (Q1 patient safety/Q2 meets needs/Q3 deliverability):
  - Framework appears easy to embed regarding supervision for AAs within the current anaesthetic body, where an experienced AA may not be present, with sufficient alignment to the Anaesthetic Training curriculum 2020.
  - Level of supervision is too vague. 'Are AA expected to achieve the same level of competence for level 4 sign off (independent) for practical skills? This often takes anaesthetic trainees with medical backgrounds many years more than the duration of the suggested AA programme.'
  - Supervision levels for AAs are clear and should remain at these levels for newly qualified practitioners.
  - It needs to state clearly that there should be a nominated consultant anaesthetist responsible for AA training, and specifying that they need protected SPA time to deliver their role.
- Course length (Q3 deliverability):
  - Regional anaesthesia practice is not part of the original AA curriculum, but it has now been added and no extra time allowed for it.
  - There only seems to be one academic centre to deliver AA education and assessment.
  - Two years isn't long enough to meet all the expectations.
- HEIs need support (Q3 deliverability):
  - The existing AA PGDip programme will need some modification.
  - The new approach of outcomes-based curricula means changes to documentation and training for placement providers. Time needs to be allowed for this to happen.
- Management and leadership:
  - Is important for new graduates but needs to be carefully managed as it may take time to develop (Q2 meets needs).
  - Include professional development and preparing PA/AA students to take on management/leadership roles in the AA and PA curricula. This is lacking in most curricula (Q4 flexibility).

- Teaching and learning (Q4 flexibility):
  - More emphasis needed on the PA/AA as a teacher as well as a learner – PAs and AAs are ideally placed as a 'constant' in the team to teach skills and procedures and model local protocols, policy and culture.
  - Compatibility with lifelong learning platform for doctors - view that the Royal College of Anaesthetists' lifelong learning platform will support the AA programme.

Other themes raised

- Selection to AA course for biomedical scientists (Q2 meets needs) - there is no need for clinical experience, just an interest in healthcare. This group would not have gained sufficient experience during the two-year AA programme without prior knowledge. Suggest that experience in a healthcare setting and/or work experience is included in the selection criteria.
- Scope of practice:
  - The AA curriculum is vague regarding scope practice expected on completion of the curriculum (Q2 meets needs).
  - The extended scope of practice to be developed throughout an AA's career is not specific enough and poorly guidanced (Q4 flexibility).
- Procedures of competence (Q2 meets needs) – good that spinal anaesthesia and regional block training has been included, as previously it has been at local governance level only.
- Improved flexibility (Q4 flexibility) - flexibility will improve for AAs with the new national curriculum as skills will be recognised as standardised and transferrable across NHS Trusts.
- Lack of detail (Q5/6 clear and easy to use):
  - No detail or hard clinical examples of what is expected.
  - It is too high level with not enough detail. The curriculum needs to be more specific about knowledge and skills, and assessment needs to specify to what standard. Eg 'to provide safe general anaesthesia' lacks any specific detail about suitability of any given case to be managed with or without direct/local/distant supervision.
- ED&I (Q7 ED&I content):
  - Law in Northern Ireland is different - the Equality Act 2010 does not apply to Northern Ireland.
  - Specific ED&I learning outcomes – there should be specified learning outcomes relating to EDI. This can include correct behaviours and attitudes in the professional environment as well as towards patients.

- Reasonable adjustment – the framework should not impact on those with protected characteristics as long as there are provisions for HEIs to provide reasonable adjustments.

- Table on programme of assessment (Q15 omissions) - the table on programme of assessment (p.27 figure 8) lacks clarity on the assessments.

Comments out of scope

- Workforce (Q2 meets needs):
  - remodelling in Trusts should happen to use PAs/AAs to fill doctor gaps
  - costing should be done of using PAs/AAs v locums
  - it would be better to expand medical student numbers – they are higher quality, more versatile employees.
- Resources (Q3 deliverability):
  - There is nothing in the framework about increasing investment in training resources.
  - Staffing levels need to be monitored, and time allocated within job plans for clinical placement supervision.
- Prescribing rights (Q15 omissions):
  - Address prescribing rights at an early stage.
- Post qualification progression:
  - This is not included (Q2 meets needs).
  - Lacks detail on flexibility of career (Q4 flexibility).
- Lifelong learning (Q4 flexibility):
  - Funding for lifelong learning – LLL needs funding to support non medic learners.

Drafting suggestions for AA curriculum

Q1 – patient safety

- P.61 - need clarity regarding "simple peripheral nerve block"; a better definition of this will improve understanding of what is expected.

Q2 meeting needs

- Needs to be a bit more specific in medicines management especially if as planned there is a move to independent prescribing.
- Annex C - add Peripheral cannulation using ultrasound, insertion of arterial lines and urinary catheterisation.

Q3 deliverability

None.

Q4 flexibility

- Consider including professional development and preparing PA/AA students to take on management/leadership roles (and in PA curriculum).

Q5/6 clear and easy to use

- Duties outside operating theatre - specify basic set of conditions that are imperative to identify on pre-op screening of patient.

Q7 ED&I

- P.33 - need to include footnote re Equality Act not applying in NI.
  Suggested text as per *Professional behaviour and fitness to practise: guidance for medical schools and their students:* 'The Equality Act 2010 (viewable at www.legislation.gov.uk/ukpga/2010/15/contents) does not apply to Northern Ireland. You can find more information about the equality legislation in Northern Ireland on the Equality Commission for Northern Ireland's website at www.equalityni.org.
- Consider if want to add learning outcomes specific to ED&I.

Q15 omissions

- p.27 figure 8 – more clarity needed on assessments.

Response to AA curriculum feedback

During 2020 and 2021, an AA curriculum development group was formed which met multiple times and gave valuable feedback to shape the structure and content of the curriculum. The group included representatives from the Royal College of Anaesthetists (RCoA), GMC, University of Birmingham and University College London. The RCoA also incorporated feedback on an earlier draft from members of various anaesthesia networks, including the Association of Anaesthesia Associates and the Association of Anaesthetists.

We compiled all the comments and drafting suggestions from respondents as detailed in the section above and passed this to the RCoA, who drafted a new version of the curriculum with suggested changes included.

Examples of changes made:

- Further clarity given regarding simple peripheral nerve block given under regional anaesthesia learning outcomes to improve understanding of what is expected.
- Reference to the Lifelong Learning Platform has been removed.
- ED&I - key capability has been updated to 'Understands equality and diversity legislation, and applies this in their professional practice'.
- Clarification that the Equality Act does not apply in Northern Ireland.
- Competencies moved as per suggestions on practical procedure grid (Urinary catheterisation and Ultrasound guided peripheral venous cannulation).

Annex A - background, development of education framework, and engagement

Background

Our regulatory responsibilities are to:

- make sure doctors in the UK are properly trained, qualified and able to work to high standards throughout their careers
- keep our guidance on these standards (which we publish on our website) up to date and relevant to medical practice across the UK
- register doctors who meet our requirements and investigate complaints that a doctor has not followed our guidance.

In July 2019, the Department of Health and Social Care (DHSC), with the support of the four UK governments, asked us to regulate two groups of medical associate professions (MAPs) – PAs and AAs. When our new regulatory duties begin, our role will extend to PAs and AAs as well as doctors.

Patient safety is our first concern as a regulator, and we believe it is inseparable from high quality education and training for healthcare professionals. Promoting high standards for the education and training of PAs and AAs will be one of our responsibilities.

We will set the standards for the design, development and delivery of the education and training for PAs and AAs. We will ensure education outcomes are appropriate through our approval of the curricula, and we will check that students are receiving the best possible training through our quality assurance of courses.

Development

The pre-qualification education framework includes:

- PA and AA generic and shared learning - an overarching learning outcomes document
- AA curriculum
- PA curriculum
- PA Registration Assessment (PARA) content map - outlines the areas of knowledge and skill that could be covered in the PARA knowledge test and OSCE.

The overarching document will ensure consistency, where it's appropriate, between the outcomes-based curricula. This will be especially relevant across professional capabilities such as teaching and leadership. Each curriculum sets out the profession-specific capabilities we'll expect students to learn.

Each of these drafts has been developed during 2020 and 2021 by development groups with contributors from relevant organisations. Each group met multiple times and gave valuable feedback that has helped to shape the structure and content of the documents.

The PA curriculum development group included representatives from the GMC, Royal College of Physicians (RCP), Faculty of Physician Associates (FPA) and PA Schools Council (PASC).

The AA curriculum development group included representatives from the RCoA, GMC, University of Birmingham and University College London. The RCoA also incorporated feedback on an earlier draft from members of various anaesthesia networks, including the Association of Anaesthesia Associates and the Association of Anaesthetists.

The PA and AA generic and shared learning outcomes document was developed by the GMC and we have sought and incorporated feedback from the groups mentioned above.

The PARA development group included representatives from GMC, RCP, FPA and PASC.

Implementation

Course providers will use the relevant curriculum as a guide when designing their course. This would cover the syllabus and any assessments. We'll check that they've done this appropriately through our quality assurance activities.

Course providers will need to make sure that any students joining from September 2023, or the first new cohort within the 2023/24 academic year, follow a course aligned to this framework. The updated PARA will need to be implemented in summer 2025, when the first cohort of students following this framework begin to graduate.

About the engagement

Why engage?

We are working to our standards for the design and maintenance of postgraduate medical curricula *Excellence by Design* (EBD). One of the requirements of EBD is that the developer of the

curriculum being presented can demonstrate that they have sought feedback on their curriculum from key stakeholders.

The stakeholders for each of the components of the framework are the same. Therefore, we took the decision that, to reduce the pressure on the stakeholders we want to engage on these documents, we would co-ordinate a single feedback gathering exercise, rather than have each contributing organisation attempt to engage on their document separately.

The feedback is not just a requirement of the standards, but also an essential step in developing the product, and towards achieving buy-in for the framework.

Who did we engage with?

Medical education organisations have an interest in PA and AA education: the four departments of health, other UK healthcare regulators, the four statutory education bodies, postgraduate training organisations, medical royal colleges, medical schools and PA and AA course providers. Also interested are organisations representing employers, trainers, doctors, PAs and AAs, patients, nurses and other healthcare professionals.

We drew up a list of these organisations with contacts – see Annex C.

How did we engage?

a Email the contacts in the identified organisations listed above.

b Encourage recipients to share the link to the survey.

c Target generic inboxes at the organisations listed.

d Promote the survey on the GMC website.

e Ask collaborative partner organisations to promote the survey on their websites.

f Promote the survey through the MAPs Community of Interest.

The questionnaire

We asked respondents to help make sure that the education framework for PAs and AAs:

- meets our standards
- ensures patient safety is the first priority
- helps to meet service, patient, and workforce needs
- is deliverable

- supports career flexibility and lifelong learning
- is high quality, clear and easy to use
- embeds fairness.

The respondents were asked to read the four documents of the framework, and then answer various questions detailed below about whether the content meets the factors listed above. Details of responses and stats for each question in the main questionnaire is in Annex B.

The questions in the main questionnaire were:

- Q1: Patient safety - Upon satisfactory completion of a course that follows this framework, newly qualified PAs and AAs will be able to work safely and competently in their defined area of practice and be able to manage or mitigate relevant risks effectively (state to what extent agree or disagree for all four documents, with comments).
- Q2: meeting service, patient, and workforce needs - Overall, this framework will help ensure that the PAs and AAs of the future can fulfil service, patient and workforce needs appropriate to their professions (state to what extent agree or disagree for all four documents, with comments).
- Q3: deliverability - Course providers will be able to meet all the expectations set out in this framework in a high-quality, two-year training programme (state to what extent agree or disagree for all four documents, with comments).
- Q4: Flexibility and lifelong learning - This framework will help prepare newly qualified PAs and AAs for a flexible career that supports lifelong learning (state to what extent agree or disagree for Outcomes, PA and AA curricula, with comments).
- Q5 and 6: Quality, clarity, and ease of use (state to what extent agree or disagree for all four documents, with comments)
    - Each document is clear and easy to use
    - It is clear what students need to achieve to satisfy the requirements of the framework.
- Q7: Equality, diversity, and inclusion - We'd like your views on the potential impact of this framework on people who share protected characteristics under the Equality Act 2010 (comments only).
- Q15: Coverage and omissions - Please let us know if there are any areas of learning missing from the draft framework, and which part of the framework you would expect to see it in (comments only).

Respondents were also asked if they wanted to complete an additional section on the PA Registration Assessment content map (questions 8-14). The feedback for these questions has been passed on to the team handling its development, and is not covered in this report.

Annex B – responses and statistics for each question

Note about statistics for each question

Before reading the statistics below about opinion ratings on the individual documents for each question (where it is asked for), please note these observations about those who selected the same response throughout the questionnaire.

Agree/strongly agree

- 27 respondents selected 'agree' or 'strongly agree' to every question. Of these, 13 also left comments, five said they were practising/student AAs, ten were practising/student PAs, and four were doctors.
- 19 respondents agreed or strongly agreed to all, but had no opinion on the AA curriculum. 13 of these also left comments, 12 said they were practising/student PAs and two were doctors.
- Four respondents agreed or strongly agreed to all Outcomes and AA curriculum, but had no opinion on the PA curriculum and PARA. Three of these also left comments, three were practising AAs and one was a doctor.
- Ten respondents agreed or strongly agreed to the first few questions, then left the rest of the questionnaire blank.

Disagree/strongly disagree

- Five respondents disagreed or strongly disagreed throughout all the questions where there was an option for this, three out of the five said they were doctors and the other two did not declare a category.
- Two respondents either disagreed or neither agreed/disagreed to all questions about the PA curriculum and PARA content map, apart from Q2.
- One respondent disagreed or strongly disagreed about the PARA in each question, and mainly agreed/strongly agreed about the other documents.
- One respondent disagreed or strongly disagreed throughout all the questions about the AA curriculum with negative comments, and gave no opinion about the other documents.
- One respondent disagreed, strongly disagreed or neither agreed/disagreed to all in Q1-3 and 6, with no accompanying comments.
- Two respondents disagreed or strongly disagreed to all in the opening questions, then left the rest of the questionnaire blank.

Question 1: patient safety

Upon satisfactory completion of a course that follows this framework, newly qualified PAs and AAs will be able to **work safely and competently** in their defined area of practice and be able to manage or mitigate relevant risks effectively.

Findings

Introduction

Respondents stated to what extent they agreed or disagreed with the above statement with respect to the four documents of the framework. 114 respondents answered this question, and 28 respondents provided comments.

Respondents were given the option of selecting 'no opinion/don't know' to avoid forcing them to answer questions about a document they hadn't read or weren't interested in. Percentages shown below will exclude 'no opinion/don't know' totals from the responses for each document.

Statistics

The overarching outcomes document

95 (86%) strongly agreed or agreed that the overarching outcomes document would enable newly qualified PAs and AAs to work safely and competently in their defined area of practice. Ten (9%) disagreed or strongly disagreed and five (5%) neither agreed nor disagreed. Four respondents had no opinion/didn't know.

Of the 22 responses from organisations, all strongly agreed or agreed with the question. This included seven medical schools and postgraduate medical institutions, seven PA or AA bodies and education providers, and four NHS organisations.

Of the 62 individual respondents - 52 strongly agreed or agreed with the question, five disagreed, three neither agreed nor disagreed and two had no opinion/didn't know. Regarding the category that best described them, this was a 'select as many as apply' question – those that strongly agreed or agreed included 15 practising PAs and five practising AAs, ten medical educators, 11 PA educators and nine PA and AA students.

The AA curriculum

49 (78%) strongly agreed or agreed that the AA curriculum would enable newly qualified AAs to work safely and competently in their defined area of practice. Eight (13%) disagreed and 6 (9%) neither agreed nor disagreed. 51 respondents had no opinion/didn't know.

Of the 22 responses from organisations, nine strongly agreed or agreed with the question and 13 had no opinion/didn't know. Those that strongly agreed or agreed included two medical schools and postgraduate medical institutions, two PA or AA bodies and education providers, and one NHS organisation.

Of the 62 individual respondents - 28 strongly agreed or agreed with the question, four disagreed, 3 neither agreed nor disagreed and 27 had no opinion/didn't know. Regarding the category that best described them, this was a 'select as many as apply' question – those that strongly agreed or agreed included six practising AAs and one AA student. None in these categories disagreed.

The PA curriculum

87 (84%) strongly agreed or agreed that the PA curriculum would enable newly qualified PAs to work safely and competently in their defined area of practice. Nine (9%) disagreed or strongly disagreed and seven (7%) neither agreed nor disagreed. 11 respondents had no opinion/didn't know.

Of the 22 responses from organisations, 19 strongly agreed or agreed with the question, one disagreed and two had no opinion/didn't know. Those that strongly agreed or agreed included four medical schools and postgraduate medical institutions, seven PA or AA bodies and education providers, and four NHS organisations.

Of the 62 individual respondents - 46 strongly agreed or agreed with the question, five disagreed, three neither agreed nor disagreed and eight had no opinion/didn't know. Regarding the category that best described them, this was a 'select as many as apply' question – those that strongly agreed or agreed included 16 practising PAs, 12 PA educators and eight PA students.

The PARA content map

86 (83%) strongly agreed or agreed that the PARA content map would enable newly qualified PAs to work safely and competently in their defined area of practice. 11 (11%) disagreed or strongly disagreed and six (6%) neither agreed nor disagreed. 11 respondents had no opinion/didn't know.

Of the 22 responses from organisations, 20 strongly agreed or agreed with the question, one disagreed and one had no opinion/didn't know. Those that strongly agreed or agreed included five medical schools and postgraduate medical institutions, seven PA or AA bodies and education providers, and four NHS organisations.

Of the 62 individual respondents - 44 strongly agreed or agreed with the question, seven disagreed or strongly disagreed, three neither agreed nor disagreed and eight had no opinion/didn't know. Regarding the category that best described them, this was a 'select as many

as apply' question – those that strongly agreed or agreed included 16 practising PAs, 11 PA educators and eight PA students.

Comments

- 16 of the 28 comments included words of general support. Examples:
  - 'All documents reviewed assure patient safety' (53 Perioperative Care Collaborative).
  - 'There are large sections dedicated to patient safety and it is very clear what is expected of a PA' (35 individual).
  - 'Patient safety is clearly covered in all documents. HEIs and PAs would be clear from reading the documents that this is of paramount importance and that it should be covered in the course syllabus' (82 PA Schools Council).
  - 'Overall I think the content is extensive enough and now more focused and realistic of potential PA practice' (50 individual).
  - 'The education framework set out by the GMC (Outcomes for Graduates, Excellence by Design etc.) makes patient safety a key expectation and forms the basis of this document. The high level and generic learning outcomes in PA curriculum when met will ensure patient safety'. (80 Course Director Physician Associate Studies, Ulster University).
  - 'Overarching outcomes and AA curriculum read very well' (16 University of Birmingham AA programme).
- Patient safety - two respondents had concerns:
  - 'Neither outcomes or (PA) curriculum give logical or balanced details to specific knowledge items required for patient safety. We suspect this is because if being viewed from the postgraduate perspective, basic knowledge is assumed, however with the heterogenous group of applicants/students, more detailed information would be helpful especially if our syllabus is to be mapped to the two documents' (250 individual and 63 medical school).
- Supervision arrangements - five respondents raised concern. General sentiment was that they felt that the phrase 'supervising doctor or health professional' in the Outcomes document and the PA curriculum is too vague, and clarification is needed about the level of healthcare professional other than doctor that can supervise PAs.
  - 'The supervision question needs to be properly answered. A supervising doctor or healthcare profession is too vague. At what level are we expecting people to supervise students (and practicing PAs). This is especially relevant if a PA has crossed specialties

and whilst they may be experienced in one area they may not be in another' (82 PA Schools Council).

- One respondent felt that only doctors and 'as appropriate experienced PA/AAs can provide overall formal clinical supervision to PAs/AAs as with statutory regulation doctors and associates will be held to the same standards' (17 individual).
- The FPA (118) went further, suggesting that a named doctor should have overall supervision of a PA, whilst day-to-day supervision can be done by doctors or other healthcare professionals. 'The FPA feel strongly that Physician Associates should be supervised by a named medical doctor. We feel that the document needs to offer more clarity around supervision - clearly distinguishing that whilst day-to-day supervision may lie with doctors or other health care professionals, PAs should have a named supervisor who should be a medical practitioner. To have PAs only supervised by other healthcare professionals (an option, considering the wording) would have the potential to raise patient safety concerns'.

- Prescribing - three respondents made comments:
  - The PA Schools Council (82) and a PA course director (66) asked to what extent students are expected to understand the pharmacokinetics of medications (Outcomes Theme 3 29c) and will there be a list of core drugs that PAs are expected to know the pharmacokinetics for? Also, they felt that caution is needed with the wording 'taking action to deprescribe unnecessary medications' (Outcomes Theme 3 30e) as PAs currently do no not prescribe so is it safe to allow them to make a decision to deprescribe a drug?
  - The PA Schools Council (82) and a different PA course director (57) queried the wording in the PA curriculum about writing a safe and legal prescription (CCiP 2) as 'it implies that PAs can do this once qualified and actually they cannot'. They offer alternative wording, see the drafting section below.

Other comments:

- One respondent (53 Perioperative Care Collaborative) raised concern about the transition of PAs into a surgical care team. 'Their education is a medical model and does not achieve the surgical competencies gained by Surgical Care Practitioner MSc in Surgical Care Practice.'
- One respondent (38 individual) wanted specific mention of the Mental Capacity Act and assessment of a patient's capacity in the framework, as 'you can't decide if a deprivation of liberty authorisation is required if you haven't identified that they may lack capacity and you haven't assessed whether they lack capacity to consent to the restrictions they have been place under'. See drafting suggestions.

Comments specific to the different documents

AA curriculum

- Supervision:
  - 'Framework appears to be easy to embed with respect to initiating supervision for AA within the current anaesthetic body where experienced AA may not be present, with sufficient alignment to Anaesthetic Training curriculum 2020' (60 individual).
  - The level of supervision is too vague. 'Are AA expected to achieve the same level of competence for level 4 sign off (independent) for practical skills? This often takes anaesthetic trainees with medical backgrounds many years more than the duration of the suggested AA programme.' (214 individual)

PARA content map

- The registration document (PARA) fails to assess key behaviours necessary to work safely and competently in their area of practise for example those only assigned to HEI (250 individual and 63 medical school).

ED&I issues

There were no ED&I issues raised.

Drafting suggestions

Outcomes

- Throughout document – clarify 'supervision', by who and what level (also in PA curriculum and PARA). FPA suggests PAs should have a named doctor supervisor, whilst day-to-day supervision can lie with doctors or other healthcare professionals.
- Prescribing:
  - 29c – query level of understanding of pharmacokinetics.
  - 30e - should students be allowed to decide deprescribe drugs? Reword this, perhaps re doing this under the supervision of a doctor.

AA curriculum

- P.61 - need clarity regarding "simple peripheral nerve block"; a better definition of this will improve understanding of what is expected.

PA curriculum

- Throughout document – clarify ‘supervision’, by who and what level (also in Outcomes and PARA). FPA suggests PAs should have a named doctor supervisor, whilst day-to-day supervision can lie with doctors or other healthcare professionals.
- CCiP 2 - reword "write a safe and legal prescription", suggest 'Awareness of how to write...'
- CCiP 1 - consider adding mention of mental capacity act and the assessment of a patient's capacity. It already says:
    - Assesses a patient’s capacity to understand and retain information and make decisions, and makes reasonable adjustments to support their decision making if necessary.
    - Safely and sensitively undertakes a mental and cognitive state examination, including establishing if the patient is a risk to themselves or others, seeking support and refers to senior colleagues and others as required.

PARA content map

- Throughout document – clarify ‘supervision’, by who and what level (also in Outcomes and PA curriculum). FPA suggests PAs should have a named doctor supervisor, whilst day-to-day supervision can lie with doctors or other healthcare professionals.
- Domain 1 personal conduct – ‘demonstrating openness and honesty in their interaction with patients’ – this should be assessed in the PARA OSCE.
- Give an idea of what a sampling grid would include.
- Consider adding mention of mental capacity act and the assessment of a patient's capacity. It already says 'Mental capacity concerns' in Mental health presentations.

Question 2: meeting service, patient, and workforce needs

Overall, this framework will help ensure that the PAs and AAs of the future can fulfil service, patient and workforce needs appropriate to their professions.

Findings

Introduction

Respondents stated to what extent they agreed or disagreed with the above statement with respect to the four documents of the framework. 114 respondents answered this question, and 27 respondents provided comments.

Respondents were given the option of selecting 'no opinion/don't know' to avoid forcing them to answer questions about a document they hadn't read or weren't interested in. Percentages shown below will exclude 'no opinion/don't know' totals from the responses for each document.

Statistics

The overarching outcomes document

96 (86%) strongly agreed or agreed that the overarching outcomes document would fulfil service, patient and workforce needs appropriate to their professions. Seven (6%) disagreed or strongly disagreed and nine (8%) neither agreed nor disagreed. Two respondents had no opinion/didn't know.

Of the 22 responses from organisations, all strongly agreed or agreed with the question. This included seven medical schools and postgraduate medical institutions, seven PA or AA bodies and education providers, and four NHS organisations.

Of the 62 individual respondents - 52 strongly agreed or agreed with the question, four disagreed, five neither agreed nor disagreed and one had no opinion/didn't know. Regarding the category that best described them, this was a 'select as many as apply' question – those that strongly agreed or agreed included ten practising PAs and three practising AAs, five doctors, two medical educators, four PA educators and seven PA and AA students.

The AA curriculum

49 (78%) strongly agreed or agreed that the AA curriculum would enable newly qualified AAs to work safely and competently in their defined area of practice. Eight (13%) disagreed and six (9%) neither agreed nor disagreed. 51 respondents had no opinion/didn't know.

Of the 22 responses from organisations, nine strongly agreed or agreed with the question and 13 had no opinion/didn't know. Those that strongly agreed or agreed included two medical schools and postgraduate medical institutions, two PA or AA bodies and education providers, and one NHS organisation.

Of the 62 individual respondents - 29 strongly agreed or agreed with the question, four disagreed, two neither agreed nor disagreed and 27 had no opinion/didn't know. Regarding the category that best described them, this was a 'select as many as apply' question – those that strongly agreed or agreed included six practising AAs and one AA student.

The PA curriculum

88 (85%) strongly agreed or agreed that the PA curriculum would enable newly qualified PAs to work safely and competently in their defined area of practice. Eight (8%) disagreed or strongly disagreed and eight (8%) neither agreed nor disagreed. Ten respondents had no opinion/didn't know.

Of the 22 responses from organisations, 21 strongly agreed or agreed with the question and one had no opinion/didn't know. Those that strongly agreed or agreed included six medical schools and postgraduate medical institutions, seven PA or AA bodies and education providers, and four NHS organisations.

Of the 62 individual respondents - 47 strongly agreed or agreed with the question, three disagreed, four neither agreed nor disagreed and eight had no opinion/didn't know. Regarding the category that best described them, this was a 'select as many as apply' question – those that strongly agreed or agreed included 16 practising PAs, 12 PA educators and eight PA students.

The PARA content map

85 (83%) strongly agreed or agreed that the PARA content map would enable newly qualified PAs to work safely and competently in their defined area of practice. Ten (10%) disagreed or strongly disagreed and eight (8%) neither agreed nor disagreed. 11 respondents had no opinion/didn't know.

Of the 22 responses from organisations, 19 strongly agreed or agreed with the question, two neither agreed nor disagreed and one had no opinion/didn't know. Those that strongly agreed or agreed included five medical schools and postgraduate medical institutions, six PA or AA bodies and education providers, and four NHS organisations.

Of the 62 individual respondents - 45 strongly agreed or agreed with the question, six disagreed or strongly disagreed, three neither agreed nor disagreed and eight had no opinion/didn't know. Regarding the category that best described them, this was a 'select as many as apply' question –

those that strongly agreed or agreed included 16 practising PAs, 11 PA educators and eight PA students.

Comments

- Nine of the 27 comments included words of general support. Examples:
  - 'PAs will be an essential part of the future NHS, and will provide a high level of continuity of care to patients in both the primary and hospital based sectors' (71 individual).
  - 'Across the suite of documents level of supervision, capability in practice, core conditions (PARA) and scope of practice for PA/AA clearly set out.' (80 Ulster University).
  - 'I think they incorporate a view of a practitioner that is newly qualified and a direction of travel' (81 Association of Anaesthesia Associates).
  - 'PA/AA are great for the workforce especially in filling doctor gaps in allocations' (70 NAMEM).
- Patient focus - two respondents had concerns that the PA curriculum is very patient centred, maybe to the detriment of their wider role within the healthcare team.
- Employer expectations – two respondents (82 PA Schools Council and 57 PA course director) felt that we 'need to make sure that the expectations of both a new graduate PA and the employer match up and that it is recognised that whilst the new grad PA can deliver service that they will require support and supervision as anyone else starting a new job. They will take time to grow in competence and confidence and to get up to speed to fully deliver the service required'.
- Management and leadership (Outcomes para 18) – the same two respondents also felt that this is important for new graduates but needs to be carefully managed as it may take time to develop.
- Supervision – one respondent felt that 'Supervision levels for AAs are clear and should remain at these levels for newly qualified practitioners' (81 Association of Anaesthesia Associates).
- A few respondents raised issues which are out of scope for this framework:
  - Workforce:
    - remodelling in Trusts should happen to use PAs/AAs to fill doctor gaps
    - costing should be done of using PAs/AAs v locums
    - it would be better to expand medical student numbers – they are higher quality, more versatile employees.

- PAs need prescribing rights to ensure patient safety and maximum work results.
- Scope for post qualification progression is not included.

Comments specific to the different documents

AA curriculum

- Selection to AA course – one respondent raised concern about selection to the AA course for biomedical scientists. There is no need for clinical experience, just an interest in healthcare. The respondent felt that this group would not have gained sufficient experience during the two-year AA programme without prior knowledge. They suggest that experience in a healthcare setting and/or work experience is included in the selection criteria.
- Scope of practice – one respondent felt that the AA curriculum is vague regarding scope practice expected on completion of the curriculum.
- Procedures of competence – one respondent was pleased to see that spinal anaesthesia and regional block training has been included, as previously it has been at local governance level only.

PA curriculum

- One respondent agreed that the framework supports service need, getting PAs into generalised work environments and the curriculum covers a large scope of conditions to identify and manage which makes this easier.

PARA content map

- One respondent thought the OSCE examinations are set too low for how much independent practice they have when they first qualify. It also doesn't fully reflect the different practices - most of the exam is placed in GP, but PAs work in more diverse settings.

ED&I issues

There were no ED&I issues raised.

Drafting suggestions

Outcomes

- Service delivery para in Principles - adapt to say 'They are trained to clinically diagnose and manage patients'.

- Throughout document - emphasise the importance of primary care, integrated care services and mental health settings to highlight that they should be utilised, rather than just acute trusts, particularly in light of the developing apprenticeships and concerns around funding.
- Prescribing:
    - 30e - reword to 'recommend the deprescribing of appropriate medications' as deprescribing is the same as prescribing, and PAs/AAs won't be able to do this until they gain prescribing rights.

AA curriculum

- Needs to be a bit more specific in medicines management especially if as planned there is a move to independent prescribing.
- Annex C - add Peripheral cannulation using ultrasound, insertion of arterial lines and urinary catheterisation.

PA curriculum

- More detail needed about direction of travel for a newly qualified practitioner.
- CCiP 4 re end of life care needs amending - 'determining' is out of scope for most PAs, it is about identifying the need for EOLC and liaising with the appropriate team members.
- In PA curriculum or PARA as appropriate - add something on requesting ultrasound investigations as no ionising radiation involved.

PARA content map

- Add in skills area that PAs should be able to administer medications and assist in surgery.
- Review specialty areas, such as including stroke in acute presentations, squamous cell carcinomas in dermatology and reviewing overlap such as myeloma and haematological malignancies.
- Needs to mention general practice or community-based medicine as a specialty. There is concern that this needs to be explicitly mentioned in order to ensure a balanced distribution of placements across both primary and secondary care services.
- Consider adding a section in Domain 3 on older people.
- In PA curriculum or PARA as appropriate - add something on requesting ultrasound investigations as no ionising radiation involved.

Question 3: deliverability

Course providers will be able to meet all the expectations set out in this framework in a high-quality, two-year training programme.

Findings

Introduction

Respondents stated to what extent they agreed or disagreed with the above statement with respect to the four documents of the framework. 107 respondents answered this question, and 33 respondents provided comments.

Respondents were given the option of selecting 'no opinion/don't know' to avoid forcing them to answer questions about a document they hadn't read or weren't interested in. Percentages shown below will exclude 'no opinion/don't know' totals from the responses for each document.

Statistics

The overarching outcomes document

83 (79%) strongly agreed or agreed that the overarching outcomes document would enable course providers to deliver the framework. Eight (8%) disagreed or strongly disagreed and 14 (13%) neither agreed nor disagreed. Two respondents had no opinion/didn't know.

Of the 22 responses from organisations, 14 strongly agreed or agreed with the question. This included six medical schools and postgraduate medical institutions, seven PA or AA bodies and education providers, and four NHS organisations. One organisation disagreed, and two neither agreed nor disagreed.

Of the 62 individual respondents - 49 strongly agreed or agreed with the question, four disagreed or strongly disagreed, eight neither agreed nor disagreed and one had no opinion/didn't know. Regarding the category that best described them, this was a 'select as many as apply' question – those that strongly agreed or agreed included 14 practising PAs and six practising AAs, 11 doctors, ten medical educators, ten PA educators and nine PA and AA students.

The AA curriculum

42 (70%) strongly agreed or agreed that the AA curriculum would enable course providers to deliver the framework. Eight (13%) disagreed and ten (17%) neither agreed nor disagreed. 47 respondents had no opinion/didn't know.

Of the 22 responses from organisations, ten strongly agreed or agreed with the question, two neither agreed nor disagreed and ten had no opinion/didn't know. Those that strongly agreed or agreed included three medical schools and postgraduate medical institutions, two PA or AA bodies and education providers, and three NHS organisations.

Of the 62 individual respondents - 24 strongly agreed or agreed with the question, four disagreed or strongly disagreed, five neither agreed nor disagreed and 29 had no opinion/didn't know. Regarding the category that best described them, this was a 'select as many as apply' question – those that strongly agreed or agreed included six practising AAs and one AA student.

The PA curriculum

74 (77%) strongly agreed or agreed that the PA curriculum would enable course providers to deliver the framework. Seven (7%) disagreed or strongly disagreed and 15 (16%) neither agreed nor disagreed. 11 respondents had no opinion/didn't know.

Of the 22 responses from organisations, 19 strongly agreed or agreed with the question, one disagreed and two had no opinion/didn't know. Those that strongly agreed or agreed included four medical schools and postgraduate medical institutions, seven PA or AA bodies and education providers, and four NHS organisations.

Of the 62 individual respondents - 45 strongly agreed or agreed with the question, three disagreed or strongly disagreed, six neither agreed nor disagreed and eight had no opinion/didn't know. Regarding the category that best described them, this was a 'select as many as apply' question – those that strongly agreed or agreed included 14 practising PAs, 10 PA educators and eight PA students.

The PARA content map

77 (79%) strongly agreed or agreed that the PARA content map would enable course providers to deliver the framework. Eight (8%) disagreed or strongly disagreed and 12 (12%) neither agreed nor disagreed. Ten respondents had no opinion/didn't know.

Of the 22 responses from organisations, 16 strongly agreed or agreed with the question, one disagreed, four neither agreed nor disagreed and one had no opinion/didn't know. Those that strongly agreed or agreed included four medical schools and postgraduate medical institutions, six PA or AA bodies and education providers, and four NHS organisations.

Of the 62 individual respondents - 46 strongly agreed or agreed with the question, four disagreed or strongly disagreed, four neither agreed nor disagreed and eight had no opinion/didn't know. Regarding the category that best described them, this was a 'select as many as apply' question – those that strongly agreed or agreed included 16 practising PAs, 12 PA educators and eight PA students.

Comments

- 12 of the 33 comments included words of general support. Examples:
  - ‘All documents clearly mapped, generic and shared learning outcomes achievable and the procedures/ conditions appropriate as outlined in PARA (though may need some minor amendments)’ (80 Ulster University).
  - ‘The framework aligns with established systems for undergraduate and postgraduate medical training and most healthcare providers will be able to adapt these to meet the needs of PAs’ (38 individual).
  - ‘From my experience on a PA course, the curriculum set out in the documents is achievable as it is very similar to my educational experience’ (34 individual).
  - ‘HEIs may need support whilst getting used to a high-level outcomes curriculum, rather than a more granular document however the documents are deliverable’ (118 Faculty of Physician Associates).
  - ‘It acknowledges that it is purposefully generic to allow flexibility and innovation in how it is delivered. This is welcomed’ (82 PA Schools Council and 57 PA course provider).
- Course length issues – some respondents raised concerns about course providers being able to deliver course content within the current two-year timeframe:
  - Regional anaesthesia practice is not p art of the original AA curriculum, but it has now been added and no extra time allowed for it.
  - There only seems to be one academic centre to deliver AA education and assessment.
  - Two years isn't long enough to meet all the expectations (four comments).
  - PA training may have to be lengthened to include prescribing training in the future (two comments).
  - Suggestion - add compulsory cardiology, respiratory and gastro placements to PA courses and possibly add a few additional weeks to the course length to make sure all students can equally cover these placements.
- HEI support – several respondents raised issues about course providers requiring support to deliver the framework:
  - The University of Birmingham AA programme (16) said that the existing AA PGDip programme will need some modification.
  - The new approach of outcomes based curricula means changes to documentation and training for placement providers. Time needs to be allowed for this to happen.

- The PA curriculum is likely to be deliverable for most institutions, but minor revisions may be needed.
- HEIs need guidance on how to deliver the programme.
- Concern that not all course providers will meet the high standards required.

- Involve PAs in implementation – one respondent suggested involving advanced practising PAs to help implementation.
- A few respondents raised issues which are out of scope for this framework:
  - There is nothing in the framework about increasing investment in training resources.
  - The PA Schools Council (82) and a course provider asked for clarity that courses should be adequately resourced, both in academic staffing and administration and in placement provision.
  - Staffing levels need to be monitored, and time allocated within job plans for clinical placement supervision.

Comments specific to the different documents

AA curriculum

- It needs to state clearly that there should be a nominated consultant anaesthetist responsible for AA training, and specifying that they need protected SPA time to deliver their role.

PA curriculum

- Two respondents (comment duplicated) felt that minimum standards aren't all clear, for example in CCiP 1 descriptors 2 and 5 the minimum standard is ambiguous.
- E-portfolio:
  - The PA Schools Council (82) and a course provider asked for more guidance on e-portfolio content, and what it will be used for.
  - The National Association of Medical Education Management (70) pointed out that medical students use different e-portfolios – this may cause difficulties for educators having to use different portfolios to sign off competencies.
- A course provider was concerned that there is a lot to cover in the PA Curriculum and the levels are not clearly defined, eg how expert do they need to be in a particular clinical scenario.
- Another course provider felt that more flexibility in areas of clinical experience will lead to possible issues securing placements.

PARA content map

- Too much content in the PARA – one PA course provider thought it wouldn't be possible to deliver teaching on all the presentations/conditions mentioned in the PARA content map, but that this was the case previously for most PA courses.

ED&I issues

There were no ED&I issues raised.

Drafting suggestions

PA curriculum

- P.6 – states that placements should be of appropriate duration in broad range of clinical contexts, focus should be on general medicine (general practice, acute and emergency medicine, general medical specialties). Consider adding something here about making cardiology, respiratory and gastro placements compulsory on PA courses.

Question 4: Flexibility and lifelong learning

This framework will help prepare newly qualified PAs and AAs for a flexible career that supports lifelong learning.

Findings

Introduction

Respondents stated to what extent they agreed or disagreed with the above statement with respect to the overarching outcomes document, the AA curriculum and the PA curriculum. 107 respondents answered this question, and 28 respondents provided comments.

Respondents were given the option of selecting 'no opinion/don't know' to avoid forcing them to answer questions about a document they hadn't read or weren't interested in. Percentages shown below will exclude 'no opinion/don't know' totals from the responses for each document.

Statistics

The overarching outcomes document

84 (82%) strongly agreed or agreed that the overarching outcomes document would help prepare newly qualified PAs and AAs for a flexible career that supports lifelong learning. Seven (7%) disagreed and 12 (12%) neither agreed nor disagreed. Four respondents had no opinion/didn't know.

Of the 22 responses from organisations, 19 strongly agreed or agreed with the question. This included four medical schools and postgraduate medical institutions, seven PA or AA bodies and education providers, and four NHS organisations. One organisation disagreed, and two neither agreed nor disagreed.

Of the 62 individual respondents - 48 strongly agreed or agreed with the question, five disagreed, seven neither agreed nor disagreed and two had no opinion/didn't know. Regarding the category that best described them, this was a 'select as many as apply' question – those that strongly agreed or agreed included 11 practising PAs and five practising AAs, 14 doctors, ten medical educators, ten PA educators and nine PA and AA students.

The AA curriculum

44 (79%) strongly agreed or agreed that the AA curriculum would help prepare newly qualified PAs and AAs for a flexible career that supports lifelong learning. Five (9%) disagreed and seven (12%) neither agreed nor disagreed. 50 respondents had no opinion/didn't know.

Of the 22 responses from organisations, nine strongly agreed or agreed with the question, one neither agreed nor disagreed and 12 had no opinion/didn't know. Those that strongly agreed or agreed included two medical schools and postgraduate medical institutions, two PA or AA bodies and education providers, and one NHS organisation.

Of the 62 individual respondents - 26 strongly agreed or agreed with the question, three disagreed, four neither agreed nor disagreed and 29 had no opinion/didn't know. Regarding the category that best described them, this was a 'select as many as apply' question – those that strongly agreed or agreed included five practising AAs and one AA student.

The PA curriculum

77 (80%) strongly agreed or agreed that the PA curriculum would help prepare newly qualified PAs and AAs for a flexible career that supports lifelong learning. Seven (7%) disagreed and 12 (13%) neither agreed nor disagreed. 11 respondents had no opinion/didn't know.

Of the 22 responses from organisations, 18 strongly agreed or agreed with the question, one disagreed, two neither agreed nor disagreed and one had no opinion/didn't know. Those that strongly agreed or agreed included three medical schools and postgraduate medical institutions, seven PA or AA bodies and education providers, and four NHS organisations.

Of the 62 individual respondents - 43 strongly agreed or agreed with the question, four disagreed, seven neither agreed nor disagreed and eight had no opinion/didn't know. Regarding the category that best described them, this was a 'select as many as apply' question – those that strongly agreed or agreed included 12 practising PAs, nine PA educators and eight PA students.

Comments

- Nine of the 28 comments included words of general support. Examples:
  - 'There is a good emphasis of the importance of this throughout all of the documents' (81 Association of Anaesthesia Associates).
  - 'The documents make clear what is expected of a PA throughout their career' (35 individual).
  - 'It provides a good basis for future learning and allows individuals to develop their skills and scope of practice' (55 individual).
  - 'Once in a job you are always learning and with the additional of e-portfolios for easing tracking of CPD this makes this easier.' (34 individual).
- How much flexibility will the framework allow:

- An individual and an organisation (response duplicated) thought the values and behaviours included will help, but they are reflective of the NHS which may impact on a truly flexible career.

- Teaching and learning content in the framework:
  - One course provider (74) felt a strong aspiration from the framework, though they weren't sure if it will translate into practice. They wanted more emphasis on the PA/AA as a teacher as well as a learner – PAs and AAs are ideally placed as a 'constant' in the team to teach skills and procedures and model local protocols, policy and culture.
  - NAMEM (70) suggested including professional development and preparing PA/AA students to take on management/leadership roles in the AA and PA curricula. This is lacking in most curricula.
- A few respondents raised issues which are out of scope for this framework:
  - Time should be included in PA contracts for peer supported learning (2 comments).
  - PA career framework is required - a career framework mapped to clinical progression is needed, so experienced PAs can progress via a competency framework or membership exam to senior PA, which needs to be linked to advancement of pay bandings (5 comments).
  - Clearer CPD outcomes are needed for PAs.
  - Funding for lifelong learning – LLL needs funding to support non medic learners.

Comments specific to the different documents

Outcomes

- Teaching and learning section (para 35): the PA Schools Council (82) and a course provider felt that it puts the onus on the PA to take responsibility for their own learning. There is no recognition that the employer should be part of this – the PA needs to be equipped to deliver teaching and training.

AA curriculum

- Compatibility with lifelong learning platform for doctors - the University of Birmingham AA course provider (16) thought that the Royal College of Anaesthetists' lifelong learning platform will support the AA programme.
- Improved flexibility - one individual felt that flexibility will improve for AAs with the new national curriculum as skills will be recognised as standardised and transferrable across NHS Trusts.

- Extended scope of practice is lacking - one individual felt that the extended scope of practice to be developed throughout an AA's career is not specific enough and poorly guidanced.

PA curriculum

- Preparedness to teach/give feedback - the PA Schools Council (82) and two course providers asked whether the PA curriculum prepares student PAs to teach/give feedback.
- Placement hours not specified:
    - the PA Schools Council also felt that placement hours are not stipulated in the curriculum and some placements eg obs and gynae have been omitted. Whilst it allows for flexibility, they thought it needs to be clearer as to which placement areas PAs should be going on, and particular hours in certain areas if required.
    - A course provider (61) also thought that the hours in clinical placement are not specified. If included, it could give leverage to the HEI when negotiating placements. They wanted a statement added that it is down to the HEI to decide the number of hours required in each specialty (see Drafting).
- Specialising - one individual felt that the programme was quite generic, and 'it would be good if PAs could specialise in specific areas'.
- Flexibility lacks detail - an individual thought the PA curriculum supported lifelong learning but lacked detail on flexibility of career.
- Link to career progression advice – an individual suggested adding examples or links to career progression advice (possibly to FPA website) – see Drafting.

PARA content map

- Assessing reflection and lifelong learning - the PA Schools Council (82) and a course provider were unsure how reflection and lifelong learning can be assessed effectively.

ED&I issues

There were no ED&I issues raised.

Drafting suggestions

Outcomes

- Para 1i - consider adding 'FPA guidance' along with GMC guidance.
- Para 35 teaching and learning:

- Consider including that the employer should be part of this process, the PA needs to be enabled to deliver teaching and training.
- Should teaching be emphasised more (and in PA curriculum)?

AA curriculum

- Consider including professional development and preparing PA/AA students to take on management/leadership roles (and in PA curriculum).

PA curriculum

- Teaching/feedback:
  - Look at whether the curriculum prepares student adequately for this.
  - Should teaching be emphasised more (and in Outcomes)?
- Professional development and leadership - consider including professional development and preparing PA/AA students to take on management/leadership roles (and in AA curriculum).
- Placement areas and hours:
  - Consider making it clearer which placement areas PAs should be going on, and particular hours in certain areas if required.
  - Add that it is down to the HEI to decide the number of hours required in each specialty.
- Link to career progression advice –add examples or links to career progression advice (possibly to FPA website).

Questions 5 and 6: Quality, clarity, and ease of use

5. The education framework documents are clear and easy to use.

6. It is clear what students need to achieve to satisfy the requirements of the framework.

Findings

Introduction

Respondents stated to what extent they agreed or disagreed with the above statements with respect to the four documents of the framework. 100 respondents answered this question, and 28 respondents provided comments.

Respondents were given the option of selecting 'no opinion/don't know' to avoid forcing them to answer questions about a document they hadn't read or weren't interested in. Percentages shown below will exclude 'no opinion/don't know' totals from the responses for each document.

Statistics

5. The education framework documents are clear and easy to use.

The overarching outcomes document

83 (86%) strongly agreed or agreed that the overarching outcomes document is clear and easy to use. Four (4%) disagreed or strongly disagreed and nine (9%) neither agreed nor disagreed. Four respondents had no opinion/didn't know.

Of the 22 responses from organisations, all strongly agreed or agreed with the question. This included seven medical schools and postgraduate medical institutions, seven PA or AA bodies and education providers, and four NHS organisations.

Of the 62 individual respondents - 51 strongly agreed or agreed with the question, three disagreed or strongly disagreed, five neither agreed nor disagreed and three had no opinion/didn't know. Regarding the category that best described them, this was a 'select as many as apply' question – those that strongly agreed or agreed included 16 practising PAs and five practising AAs, 12 doctors, 10 medical educators, 11 PA educators and nine PA and AA students.

The AA curriculum

40 (77%) strongly agreed or agreed that the AA curriculum is clear and easy to use. Five (10%) disagreed or strongly disagreed and seven (13%) neither agreed nor disagreed. 48 respondents had no opinion/didn't know.

Of the 22 responses from organisations, 10 strongly agreed or agreed with the question and 12 had no opinion/didn't know. Those that strongly agreed or agreed included two medical schools and postgraduate medical institutions, two PA or AA bodies and education providers, and two NHS organisations.

Of the 62 individual respondents - 25 strongly agreed or agreed with the question, three disagreed or strongly disagreed, three neither agreed nor disagreed and 31 had no opinion/didn't know. Regarding the category that best described them, this was a 'select as many as apply' question – those that strongly agreed or agreed included five practising AAs and one AA student.

The PA curriculum

72 (81%) strongly agreed or agreed that the PA curriculum is clear and easy to use. Five (6%) disagreed or strongly disagreed and 12 (13%) neither agreed nor disagreed. 11 respondents had no opinion/didn't know.

Of the 22 responses from organisations, 19 strongly agreed or agreed with the question, one strongly disagreed, one neither agreed nor disagreed and one had no opinion/didn't know. Those that strongly agreed or agreed included five medical schools and postgraduate medical institutions, six PA or AA bodies and education providers, and four NHS organisations.

Of the 62 individual respondents - 44 strongly agreed or agreed with the question, three disagreed or strongly disagreed, six neither agreed nor disagreed and nine had no opinion/didn't know. Regarding the category that best described them, this was a 'select as many as apply' question – those that strongly agreed or agreed included 16 practising PAs, ten PA educators and eight PA students.

The PARA content map

68 (76%) strongly agreed or agreed that the PARA content map is clear and easy to use. Five (6%) disagreed or strongly disagreed and 16 (18%) neither agreed nor disagreed. 11 respondents had no opinion/didn't know.

Of the 22 responses from organisations, 19 strongly agreed or agreed with the question, two neither agreed nor disagreed and one had no opinion/didn't know. Those that strongly agreed or agreed included five medical schools and postgraduate medical institutions, six PA or AA bodies and education providers, and four NHS organisations.

Of the 62 individual respondents - 40 strongly agreed or agreed with the question, four disagreed or strongly disagreed, nine neither agreed nor disagreed and nine had no opinion/didn't know. Regarding the category that best described them, this was a 'select as many as apply' question – those that strongly agreed or agreed included 16 practising PAs, eight PA educators and eight PA students.

6. It is clear what students need to achieve to satisfy the requirements of the framework.

The overarching outcomes document

80 (82%) strongly agreed or agreed that it is clear what students need to achieve to satisfy the requirements of the overarching outcomes document. Six (6%) disagreed or strongly disagreed and 11 (11%) neither agreed nor disagreed. Three respondents had no opinion/didn't know.

Of the 22 responses from organisations, 21 strongly agreed or agreed with the question and one disagreed. Those that strongly agreed or agreed included six medical schools and postgraduate medical institutions, seven PA or AA bodies and education providers, and four NHS organisations.

Of the 62 individual respondents – 50 strongly agreed or agreed with the question, four disagreed or strongly disagreed, six neither agreed nor disagreed and two had no opinion/didn't know. Regarding the category that best described them, this was a 'select as many as apply' question – those that strongly agreed or agreed included 16 practising PAs and five practising AAs, 11 doctors, nine medical educators, ten PA educators and nine PA and AA students.

The AA curriculum

41 (76%) strongly agreed or agreed that it is clear what students need to achieve to satisfy the requirements of the AA curriculum. Five (9%) disagreed or strongly disagreed and eight (15%) neither agreed nor disagreed. 46 respondents had no opinion/didn't know.

Of the 22 responses from organisations, 10 strongly agreed or agreed with the question and 12 had no opinion/didn't know. Those that strongly agreed or agreed included two medical schools and postgraduate medical institutions, two PA or AA bodies and education providers, and two NHS organisations.

Of the 62 individual respondents - 26 strongly agreed or agreed with the question, two disagreed or strongly disagreed, five neither agreed nor disagreed and 29 had no opinion/didn't know. Regarding the category that best described them, this was a 'select as many as apply' question – those that strongly agreed or agreed included five practising AAs and one AA student.

The PA curriculum

73 (81%) strongly agreed or agreed that it is clear what students need to achieve to satisfy the requirements of the PA curriculum. Nine (10%) disagreed or strongly disagreed and eight (9%) neither agreed nor disagreed. Ten respondents had no opinion/didn't know.

Of the 22 responses from organisations, 19 strongly agreed or agreed with the question, two disagreed, and one had no opinion/didn't know. Those that strongly agreed or agreed included four medical schools and postgraduate medical institutions, seven PA or AA bodies and education providers, and four NHS organisations.

Of the 62 individual respondents - 46 strongly agreed or agreed with the question, four disagreed or strongly disagreed, four neither agreed nor disagreed and eight had no opinion/didn't know. Regarding the category that best described them, this was a 'select as many as apply' question – those that strongly agreed or agreed included 17 practising PAs, ten PA educators and eight PA students.

The PARA content map

70 (78%) strongly agreed or agreed that it is clear what students need to achieve to satisfy the requirements of the PARA content map. Nine (10%) disagreed or strongly disagreed and 11 (12%) neither agreed nor disagreed. Ten respondents had no opinion/didn't know.

Of the 22 responses from organisations, 18 strongly agreed or agreed with the question, two disagreed, one neither agreed nor disagreed and one had no opinion/didn't know. Those that strongly agreed or agreed included four medical schools and postgraduate medical institutions, six PA or AA bodies and education providers, and four NHS organisations.

Of the 62 individual respondents - 43 strongly agreed or agreed with the question, six disagreed or strongly disagreed, five neither agreed nor disagreed and eight had no opinion/didn't know. Regarding the category that best described them, this was a 'select as many as apply' question – those that strongly agreed or agreed included 15 practising PAs, nine PA educators and eight PA students.

Comments

- Nine of the 28 comments included words of general support. Examples:
  - 'Framework used in overarching outcomes document similar to existing GMC education framework which will make transition for clinical supervisors easier, will help patients, doctors and employers of PAs/AAs understand scope of practice and capabilities expected of a newly qualified PA and the training programme they have completed' (80 Ulster University).
  - 'It is clear what will be assessed, what the outcomes should be and the expectations of a new grad PA are' (57 St George's University of London).
  - 'The PA curriculum is clear in its aims. I feel that the registration document is a much better and clearer layout than the previous matrix and OSCE blueprint. I like how the clinical knowledge section is set out.' (35 individual).
- A couple of comments were about the lack of detail throughout:
  - 'No detail or hard clinical examples of what is expected' (54 individual).

- ‘Everything is a bit woolly. It is very difficult to see from the curriculum proposed and the assessment map what to include or exclude’ (65 individual). It would help if HEIs could have greater clarity on what to include in the PA programme as it is only two years long, with little time for ‘wriggle room’.

- A few respondents raised issues which are out of scope for this framework:
  - Recertification examination – the PARA doesn't include anything about the PAKT examination.
  - PAs need prescribing rights by time GMC registration happens.

Comments specific to the different documents

Outcomes

- Sign off – one respondent asked for clarity on who can conduct sign offs for PA students on placement. They also wanted more clarity on how experienced PAs need to be in order to conduct placement sign offs, DOPS, mini cex and CBDs.

AA curriculum

- Too high level – one respondent felt that it was too high level with not enough detail. The curriculum needs to be more specific about knowledge and skills, and assessment needs to specify to what standard. Another respondent agreed, giving the example 'to provide safe general anaesthesia'.

PA curriculum

- More streamlining needed – two respondents felt like the curriculum was a pick and mix of descriptors, a more streamlined and logical order would be better.
- How is research assessed – one respondent asked how the application of research GCiP 6 should be assessed. If HEIs need to assess it, further guidance is needed.

PARA content map

- PARA KT - one respondent didn’t understand what it stands for.
- List of conditions and presentations – one respondent thought this was a good improvement on the current matrix of conditions, but suggested it would be more useful to specify learning outcomes here.
- Reorganise area of clinical practice – one respondent suggested splitting this into ‘Presentations’, ‘Core conditions’ and ‘Uncommon but critical conditions’, as it will be easier to use and transfer to their syllabus than the current 1A, 1B, 2A and 2C format of the matrix. Another suggested moving away from presentations, core conditions and uncommon but

critical conditions as it is too tick list and doesn't encourage learning in an integrated, holistic way.

- Application of local anaesthetics – one respondent asked whether, as application of local anaesthetic has been included, they can assume that PA students can now do this as it has been a problem for some students across different courses.
- Some omissions for core conditions – one respondent pointed out that they had made suggestions for core conditions to include in the PARA questions.
- Common and uncommon list of conditions (Domain 3):
    - One respondent raised concern about this list being exhaustive. Students can get anxious when given a list of conditions, and shocked when presented with a condition not on the list. If there is concern that the HEIs may not be teaching certain conditions, they suggest a separate document that is not for the public domain for the purpose of curriculum/syllabi development.
    - The FPA (68) felt that students would be likely to question the difference between core and uncommon conditions about the amount they need to know, and if they will be assessed differently. This will be addressed in HEI syllabi, but it may be open to variation which will cause concern across student networks.
- Why the need for the PARA – one respondent asked why PA students have to do two separate exams, one in PA school and also a national exam? They did support the content of the documents.

ED&I issues

There were no ED&I issues raised.

Drafting suggestions

Outcomes

- 1i - consider including FPA guidance here.
- 13b - need clarity on whether "describe the health of a population using basic epidemiological techniques and measurements" means incidence and prevalence of disease.
- 18 - perhaps add examples somewhere regarding appropriate levels of leadership for Year 1 and 2 students.

- 26f - the proposed plan of management - add in collaboration with patients as well as HCPs. Consider adding this in para header text too.
- 27c – suggestion to use wording from PA curric: "Able to give immediate care to adults, children and young people in clinical emergencies and seeks support from their supervising doctor or healthcare professional where necessary. To the level of Immediate Life Support (ILS)." Also add that PAs should be aware of pharmacological management in these situations.
- 28c - add 'polypharmacy' as a recognised burden for patients.
- 29c - suggest 'antimicrobial stewardship' is made into a separate point, linking to safe and appropriate antibiotic use.
- 29c - is a lot included in this point - how in-depth should knowledge of each item be?
- 31b - add 'transferring' and recording when considering transitions of care and moving notes around etc.
- 31d - not sure how 'reflect on' can be assessed as an outcome. Perhaps use 'explain/describe/recognise' instead.

AA curriculum

- Duties outside operating theatre - specify basic set of conditions that are imperative to identify on pre-op screening of patient.

PA curriculum

- Suggestion to mention specific examinations which a PA should be able to perform ie cardiovascular, speculum, or rectal.
- GCiP 6 – further guidance requested on how the application of research should be assessed.

PARA content map

- Consider making it clearer what PARA KT stands for (it is already defined on page 1).
- Consider specifying list of patient presentations as learning outcomes.
- Baseline physiological observations (p.17) - add more specific detail: Temp/ pulse/ O2 sats/ respiratory rate / manual BP
- Clarify why nasogastric tube placement is in simulation only (p.17)

- Add DOPS 'Commence and manage nebulised therapy, Speculum examination for cultures for HVS etc and assessment of hydration status/ Prepare and administer IV injections' (assume in Core procedures)
- Clarify if PAs can now give local anaesthetics as it has been a problem for some PA students being allowed to do it.
- Consider splitting area of clinical practice into 'Presentations', 'Core conditions' and 'Uncommon but critical conditions' as it may be easier for HEIs to use and transfer to their syllabi. Alternatively, move away from this approach as it could be seen as too tick list.
- Domain 3:
    - more clarity needed regarding the indicative list of conditions, it is not a comprehensive list.
    - Consider either making the list more detailed, or removed in place of a list of symptoms. Possibly produce separate document for HEIs re curricula development.
- Consider having something similar to the structure of Domain 4 for the other conditions that would be expected to come up in the SBA exam.

Question 7: Equality, diversity, and inclusion

We'd like your views on the potential impact of this framework on people who share protected characteristics under the Equality Act 2010 (the protected characteristics are race, disability, age, sex, gender reassignment, sexual orientation, religion and belief, pregnancy and maternity and marriage and civil partnership).

Findings

This was a comments only question – 38 respondents provided comments on the potential impact of this framework on people who share protected characteristics.

Comments

- 25 of the 38 comments included words of general support. Examples:
  - 'These seem to be inclusive documents which should promote inclusive care' (72 individual).
  - 'Don't see any reason why current framework would not comply with Equality Act or deter any inclusion' (40 individual).
  - 'We did not find anything specific to suggest the impact of the framework would be negative. It reads well with respect to an inclusive approach' (63 PA lecturer).
- Law in Northern Ireland is different - one respondent pointed out that the Equality Act 2010 does not apply to Northern Ireland (see Drafting for updates required to the documents in this regard).
- Attainment gap not addressed - one respondent felt that 'the framework does not discriminate against people with protected characteristics, but it doesn't seem to do anything to address the attainment gap either'.
- Lack of ED&I data available - a respondent did agree that ED&I concerns have been addressed, but thought it was difficult to do this as there is no real data available to support the assumptions of the demographics engaged in these courses.
- Specific ED&I learning outcomes – one respondent suggested whether 'there should be specified learning outcomes relating to EDI. This can include correct behaviours and attitudes in the professional environment as well as towards patients' (37 individual).
- Lacks evidence of positive impact – one respondent felt that while the framework does not seem to negatively impact on people sharing protected characteristics, it does not evidence positive impact on such people.

- Part time or LTFT training available? – one respondent asked if there are any programmes offering part time or less than full time (LTFT) programmes.
- Hard to achieve – one respondent thought that some of the ED&I aspects may be hard to achieve depending on the placement area and physical population. Exposure to such diversity cannot be guaranteed.
- Lacks section on older people – one respondent felt that the lack of a section specifically on older people means that the framework is not adequately addressing the needs of those whose protected characteristic is age (see Drafting).
- Include 'listening' in sections about communication skills – one respondent asked for 'listening' to be included, a skill especially relevant for PAs as they only have two years clinical training and have to take detailed patient histories as well as eliciting patient ideas, concerns and expectations.
- Reasonable adjustment – one respondent said the framework should not impact on those with protected characteristics as long as there are provisions for HEIs to provide reasonable adjustments.
- Comments raising issues which are out of scope for this framework:
    - The funding of PA programmes needs to sorted out to enable inclusivity, currently only those who can afford it undertake the course.

Comments specific to the different documents

PA curriculum

- ED&I training requirement for supervisors is unrealistic – a few respondents thought that the expectation on p.30 for HEIs to ensure that all workplace supervisors have had formal training within 3 years is unrealistic. And others felt that it is difficult to assess whether placement trainers have completed ED&I training.
- More ED&I topics throughout – one respondent felt that ED&I should be integrated more throughout the curriculum rather than just be stuck on at the end.

Drafting suggestions

Outcomes

- Consider if want to add learning outcomes specific to ED&I.
- 1g - can it be more explicit with regard to signposting this as ED&I criteria.

- Consider adding section on older people (is already included in Para 15 re safeguarding).
- Para 14 - include 'listening' or even 'listening to patients' experience, ideas, concerns and expectations' (also in PA curriculum).

AA curriculum

- P.33 - need to include footnote re Equality Act not applying in NI.
  Suggested text as per *Professional behaviour and fitness to practise: guidance for medical schools and their students*: 'The Equality Act 2010 (viewable at www.legislation.gov.uk/ukpga/2010/15/contents) does not apply to Northern Ireland. You can find more information about the equality legislation in Northern Ireland on the Equality Commission for Northern Ireland's website at www.equalityni.org.
- Consider if want to add learning outcomes specific to ED&I.

PA curriculum

- P.30 and 31 - need to include footnote re Equality Act not applying in NI.
  Suggested text as per *Professional behaviour and fitness to practise: guidance for medical schools and their students*: 'The Equality Act 2010 (viewable at www.legislation.gov.uk/ukpga/2010/15/contents) does not apply to Northern Ireland. You can find more information about the equality legislation in Northern Ireland on the Equality Commission for Northern Ireland's website at www.equalityni.org.
- Consider if want to add learning outcomes specific to ED&I.
- Consider adding a statement about the mandatory requirement to undertake ED&I training in both primary and secondary care.
- Consider adding section on older people (is already included in GCiP 7 re safeguarding).
- CCiP 1 - include 'listening' or even 'listening to patients' experience, ideas, concerns and expectations' (also in Outcomes).

Question 15: Coverage and omissions

Please let us know if there are any areas of learning missing from the draft framework, and which part of the framework you would expect to see it in.

Findings

This was a comments only question – 28 respondents provided comments on areas of learning missing from this framework.

Comments

- Supervision wording was raised by several respondents, as covered in Question 1.
    - One disagreed with PA supervisors being any healthcare professional. The supervisor should be responsible to same regulatory body as PAs and trained to practise medicine. Another said PAs are required to be under the supervision of a doctor, not other HCPs.
    - One thought more detail is needed on the level of supervision. A doctor is a healthcare professional. If no consultant or senior medical personnel is available to supervise, without more detail on the level of supervision training could be compromised. They felt a named medical supervisor is essential, and day to day mentoring could be delegated to someone appropriately trained eg PA, junior doctor, ACP. (See drafting suggestion in Q1).
    - One wondered whether other non-regulated professionals can supervise, and whether it should mention that supervision can be delegated.
    - One asked for supervisor expectations to be included – there is already separate published Advice for doctors who supervise PAs and AAs - GMC (gmc-uk.org).
- Prescribing:
    - The PA Schools Council (82) and one other suggested that guidance on medications to be covered by PA students could simply state that the expectation would be that medications covered in pharmacology teaching would be those relevant to patient presentations and conditions outlined in the PARA.
    - One respondent noted an inconsistency across the PA curriculum and Outcomes document – the former states in CCiP 2 'Writes a safe and legal prescription' with a caveat saying the law will need to change to allow for this but they should be able to teach the skills, whereas the latter says 'prepare for the supervising doctor or healthcare professional a safe and legal prescription'. They thought the two should say the same.

- General comments (some already addressed in earlier questions):
  - Concern about PAs joining surgical care teams – they won't have any education that is delivered by the three current RCS accredited HEIs. Also disparity between cardiac SCP Cohort and rest of the SCP cohort with regards to education outcomes.
  - The framework lacks specific inclusion of older people, particularly those living with frailty (covered in Q7 with drafting suggestions).
  - There could be more on the Mental Capacity Act and assessment of capacity (covered in Q1 with drafting suggestions).
  - Include 'listening' as part of communication skills (covered in Q7 with drafting suggestions).
  - More emphasis on the PA/AA as a teacher as well as a learner (covered in Q4 with drafting suggestions).
  - Add something in PA curriculum or PARA as appropriate on requesting ultrasound investigations to make it easy for governance issues (covered in Q2 with drafting suggestions).
  - Course length - two years isn't long enough to give PAs and AAs the responsibility of life and death, and use potent drugs and invasive equipment (raised in Q3).

Comments out of scope for this framework:

- Address prescribing rights at an early stage (3 comments).
- A hope that prescribing could be integrated into the PA qualification, negating the need for PAs to do a prescribing course post qualification (2 comments).
- Look at funding streams.
- Need experienced PA learning outcomes. Suggests a framework be developed for more advanced skills in each specialty.

Comments specific to the different documents

Outcomes

- One respondent found the Outcomes very text heavy, and suggested some 'diagrammatic and pictorial representation of the content to promote inclusivity' (250 individual).
- One respondent had various points about content in different sections:
  - Consent and Mental Capacity - patients may not necessarily make 'good clinical decisions' despite having all the relevant information.

- Diagnosis and effective consultations – don't understand the context of 'understand' in para 24d.
- Communication - could add something here on information giving and appropriate safety netting. There are some references to this in the managing medications safely section (para 29) but this could apply to any discussion around managing a medical condition or management plan. Also add something about patient-centred communication e.g. appropriately exploring the patient perspective.
- Managing prescribed medicines safely - potentially need to add something on evidence-based practice within this point (but acknowledges that it does overlap with para 33).
- Teaching and Learning - potentially add something about continuous professional development.

AA curriculum

- One respondent felt that the table on programme of assessment (p.27 figure 8) lacked clarity on the assessments.

PA curriculum

- Programme duration – one respondent requested that the text specifying course length is deleted as 'not all programmes are typically 2 years duration' (63 PA lead).
- Degree title:
  - One respondent thought the naming of degree title isn't necessary as there is variation between HEIs.
  - Another agreed with removing detail of courses and qualifications, or alternatively add detail of other modes of programme delivery, eg 4-year integrated Masters pathway.
  - One noted that while the curriculum requires students to cover the same material but exit programmes with different awards, the MSc will have a research project but the MPAS does not.
  - Another respondent suggested that it should be specified that the named degree titles are valid qualifications which enable admission to national PA examinations.
- Section on physical examinations – one respondent wondered whether there should be a section added which specifies the physical examinations (including intimate) that a trainee needs to know.
- Lack of focus on primary care:
  - one respondent noted that there was no mention of primary care as an important placement learning site

- another felt that general practice had been completely omitted, and that as 50% of PAs working in general practice this was a major omission.

- E-portfolio:
  - one respondent questioned whether this is something for all HEIs which will be rolled out in time. They also asked whether there will be mandated dops/mini-cex/hours
  - another pointed out that not all HEIs use an electronic version as this is not available, and it should be amended to 'portfolio'.
- Reference to 'trainee' – the PA Schools Council (82) pointed out that describing PAs as trainees 'is not common term and becomes confusing with medical trainees – PAs are either students or qualified'.
- Template - one respondent asked whether there will be a template for PA programmes to map their syllabus to the curriculum.
- End of life care – one respondent asked for inclusion of knowledge of the administrative processes that take place when a patient dies in a hospital, eg the death certification process, who to ask.

PARA content map

- Conditions missing – one respondent referred to her comment in Q11, which said: 'There are further conditions that would be expected to come up in the SBA exam (e.g. 2a and 2b conditions from the matrix) and I would like to see a these added on in the same layout with a description of how much is expected of the PA to know'.
- Query the name – one respondent didn't agree that it should be called 'content map', they thought 'curriculum' would be more appropriate. It would reflect the content better, and the term 'content map' isn't familiar with supervisors.
- Refer to extended skills in Core procedures section – one respondent thought this was needed, for example training in lumbar puncture and ascitic drains. This may be out of scope.
- Adopt the MLA model instead – one respondent believed that, in the intermediate term, the MLA model should be adopted in preference to the existing assessments for the purpose of assessing competence of new PA graduates. It would reduce costs for graduates and ensure better standardisation.

Drafting suggestions

Outcomes

- Throughout document – clarify 'supervision', by who and what level (also in PA curriculum and PARA).
- Consider producing a diagram of content as it is very text heavy, to promote inclusivity.
- Para 7 header - consider rewording 'Newly qualified PAs and AAs must work in partnership with patients to make good clinical decisions' as patients may not necessarily make good clinical decisions despite having all relevant information.
- Para 14 – consider adding something about information giving and appropriate safety netting. Also about patient centred communication, eg appropriately exploring the patient perspective.
- Para 24:
  - c - could change 'understand' to 'demonstrate'.
  - d – consider rewording 'understand' here as context isn't understood.
- Para 29:
  - consider including/changing text to say that the expectation would be that medications covered in pharmacology teaching would be those relevant to patient presentations and conditions outlined in the PARA (also in PA curriculum)
  - j – consider whether want to match what it says in PA curriculum CCiP 2 about this: 'Writes a safe and legal prescription…' with a caveat saying the law will need to change to allow for this but they should be able to teach the skills. Is the text in the two docs inconsistent at the moment? (also in PA curriculum).
  - potentially add something on evidence-based practice within this point - but does overlap with section 33.
- Para 35 - consider adding something about continuous professional development.

AA curriculum

- p.27 figure 8 – more clarity needed on assessments.

PA curriculum

- Throughout document:

- clarify ‘supervision’, by who and what level (also in Outcomes and PARA)
- consider whether general practice has been sufficiently included (also in PARA).

- P.3 para 2 – is typo, should be ‘through’ in last sentence (not ‘though’).
- Possibly in point 6 on p.5 - include more about primary care re placement learning.
- p.6 - delete 1st sentence on page and para 1 of 'Educational approach'. Not all programmes are typically 2 years, and naming the degree title isn't needed and could be misleading as not all HEIs award the same qualification.
- P.6 para 2 – where degree titles are mentioned, consider changing text in view of different comments received:
  - delete - naming of degree title isn’t necessary
  - add detail of other modes of programme delivery, eg 4-year integrated Masters pathway
  - observation that while students have to cover the same material but exit programmes with different awards, the MSc has a research project but the MPAS doesn’t
  - add that they are valid qualifications which enable admission to national PA examinations.
- p.9 1st para - change 'trainees' to 'students'.
- Consider including a section on specific physical examinations (including intimate) required to be known by students?
- Use of ‘e-portfolio’ – change throughout to ‘portfolio’ as it appears not all HEIs use or have access to electronic portfolios.
- CCiP 2:
  - consider including/changing text to say that the expectation would be that medications covered in pharmacology teaching would be those relevant to patient presentations and conditions outlined in the PARA (also in Outcomes)
  - consider whether want to match what it says in Outcomes para 29j: ‘prepare for the supervising doctor or healthcare professional a safe and legal prescription’. At the moment, CCiP 2 says: ‘Writes a safe and legal prescription…’ with a caveat saying the law will need to change to allow for this but they should be able to teach the skills. Is the text in the two docs inconsistent at the moment? (also in Outcomes).
- CCiP 5 – consider including the requirement to know the procedure for when a patient dies in hospital, ie administrative processes.
- Consider providing a template for PA programmes to map their syllabus to the curriculum.

PARA content map

Throughout document:

- clarify 'supervision', by who and what level (also in Outcomes and PA curriculum)
- consider whether general practice has been sufficiently included (also in PA curriculum).
- Conditions missing from Domain 3 (as per Q11) – consider adding further conditions (eg from 2a and 2b conditions) to areas of clinical practice listed in Domain 3.
- Consider changing name from 'PARA content map' to 'PARA curriculum'.
- Core procedures - consider whether should refer to extended skills eg lumbar puncture, ascitic drains. This may be out of scope.

Annex C - contact list for PA and AA pre-qualification education framework engagement

Primary representative group	Secondary representative group	Representing (organisation)	Country	Source of contact and action
Employers	Other individual employers		UK-wide	We included a short article and a link to the survey in a newsletter to the **GMC MAPs community of interest**. This is a group of over 2,000 members who signed up for updates as we progress towards regulation. It includes individuals from a variety of professional backgrounds.
Trainers/educators	Individual trainers	None	UK-wide	
Doctors	Individual doctors	None	UK-wide	
Doctors	Individual students	None	UK-wide	
PAs	Individual PAs	None	UK-wide	
PAs	Individual PA students	None	UK-wide	
AAs	Individual AAs	None	UK-wide	
AAs	Individual AA students	None	UK-wide	
Other interested party	None	None	UK-wide	
Doctors	Collective medical students	BMA medical students committee	UK-wide	We emailed a survey link to all members of the **GMC education advisory forum**.
Doctors	Collective trainee doctors	BMA junior doctors committee	UK-wide	
SEBs	English SEB	HEE	England	We emailed a survey link, and a further reminder to all members of the **GMC MAPs external advisory group**.
SEBs	Welsh SEB	HEIW	Wales	
SEBs	Scottish SEB	NES	Scotland	
Departments of health	English government	England	England	
Departments of health	Welsh government	Wales	Wales	
Departments of health	Northern Irish government	Northern Ireland	Northern Ireland	
Departments of health	Scottish government	Scotland	Scotland	
Course providers	Collective course providers	PASC	UK-wide	
Employers	Collective employers	NHS employers	England	
Doctors	Collective doctors	BMA	UK-wide	
PAs	Collective PAs	FPA	UK-wide	
AAs	Collective AAs	AAA	UK-wide	
Patients	Various patient groups		UK-wide	The RCP and RCOA both sent a survey link to members of their patient committees.

Primary representative group	Secondary representative group	Representing (organisation)	Country	Source of contact and action
SEBs	Northern Irish SEB	NIMDTA	Northern Ireland	For each of these organisations, we identified a specific individual and emailed them directly, asking them to respond to the survey and to share it with relevant colleagues and other contacts.
Royal colleges	College representing PAs	RCP	England	
Royal colleges	College representing AAs	RCOA	UK-wide	
Royal colleges	Collective colleges	AoMRC	UK-wide	
Regional training administrations	HEE regional offices	Each individual regional office	UK-wide	
Course providers	Individual course providers	Each individual course provider	UK-wide	
Healthcare regulators	Nurses	NMC	UK-wide	
Healthcare regulators	Pharmacists	GPhC	UK-wide	
Healthcare regulators	Allied healthcare professionals	HCPC	UK-wide	
Medical schools	Collective medical schools	MSC	UK-wide	
Trainers/educators	Clinical tutors	NACT	UK-wide	
Trainers/educators	Medical educators	NAMEM	UK-wide	
Doctors	Collective SAS doctors		UK-wide	
Doctors	Collective LED doctors		UK-wide	
AAs	Collective AAs/anaesthetists	AoA	UK-wide	
Other interested party	Interest groups	BEAT, Mencap	UK-wide	
Medical schools	Individual medical schools		UK-wide	
Royal colleges	Other individual colleges		UK-wide	AoMRC sent a survey link to all their members on our behalf.
PAs	Collective PA students		UK-wide	The FPA sent a survey link to their student members.
AAs	Collective AA students		UK-wide	UoB and UCL sent a survey link to all their students
Other healthcare professionals	Nurses		UK-wide	We asked the NMC to share the survey link with their networks
Other healthcare professionals	Pharmacists		UK-wide	We asked the GPhC to share the survey link with their networks
Other healthcare professionals	Allied healthcare professionals		UK-wide	We asked the HCPC to share the survey link with their networks