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Advanced Pharmacist Critical Care Curriculum Consultation

The consultation was open for four weeks from 14th February - 12th March 2024, to members and non-members of the RPS and UKCPA across the UK.

A separate EQIA workshop was held as part of the consultation.

Respondents were able to provide feedback either via a webform or by completing a word document template.

In total, the RPS received nineteen consultation responses.

- Seventeen individuals – fourteen England, one Scotland, Two Wales and two Other (India and Ecuador). (The T&F group suggested an action for future consultations – to make clear that feedback should be from the UK only)
- Two from organisations - Scottish Intensive Care Society and the Indian Sepsis forum.

The comments were reviewed by the critical care curriculum T&F group (April 2024).

Curriculum amendments recommended by the Critical Care Curriculum T&F group have been reviewed and approved by the RPS Advanced Pharmacist Assessment Panel (APAP), the Education and Standards Committee and RPS/UKCPA Joint Venture Board

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Advanced Pharmacist Critical Care Curriculum - Collated consultation feedback

Feedback	Proposed response	Actions
Document Section: Purpose statement		
Q. Is the purpose statement fit for purpose i.e. does it describe the driving forces for developing and assuring advanced critical care pharmacists (p12)?		
Yes (16) No (3) Responses for those who responded no: • There already is a way how to practice at this level - it is called graduate entry medical school • The premise that pharmacists should attain the title consultant is vexatious • Non-specific, open ended, vague, talks about autonomy but this is a team led by a physician risking too many cooks spoiling the broth	• The RPS Advanced Pharmacist Critical Care Curriculum introduction (section 1) and purpose (section 2) clearly states the role and scope of practice of an advanced pharmacist within the critical care setting • 'Consultant' is not a protected title and was first used in the context for pharmacists in an NHS Modernisation Agency's report in 2002, followed by specific guidance in 2005. This was reviewed in 2020. The use of a specific critical care curriculum within the NHS serves to give additional governance/ • The NHS guidance document clearly recognises and defines Consultant pharmacists NHS Consultant Pharmacist Guidance through the RPS Consultant Pharmacist Curriculum • The Core Advanced Curriculum clearly sets out the definition of the word autonomy within the	Reviewed by CC Curriculum T&F group Sign off by the RPS Advanced Pharmacist Assessment Panel (APAP) and the joint venture board.

	curriculum in section 2.2.1 and this is linked to the advanced pharmacist critical care curriculum (link) on page 15 • Learning outcome 2.4 Collaborates with the multi-professional team to improve the delivery of critical care for individuals and cohorts receiving care and the related descriptors within the programme of learning (Section 3) relates to the collaborative working of the advanced pharmacist as part of the multi-professional team.	
Q. Does the purpose statement define how the curriculum and associated assurance of advanced pharmacist practice will improve patient outcomes (p12)?		
Yes (14) No 4 Unsure 1 Responses for those who responded no: • Again, not proven, **experimental** • One **small sentence** inferring this but not directly stated • This is a lot of curriculum for what is basic pharmacovigilance on intensive care labelled "advanced". There is a risk of "advanced practice" meaning basic and fundamental work is beneath the practitioner. • Yet another attempted power grab from a non-medical group	• The curriculum introduction (section 1) links in references that evidence and support the need for advanced pharmacists within the critical care settings and the solid foundation on which the curriculum is based for example: - the UK wide guidelines for the provision of intensive care services GPICS - Adult critical care services https://www.england.nhs.uk/publication/adult-critical-care-services/ - The Protected Study showed the extent to which pharmacists were intercepting prescribing errors and in	Reviewed by CC Curriculum T&F group Sign off by the RPS Advanced Pharmacist Assessment Panel (APAP) and the joint venture board.

	optimising medication use. There was a correlation between the clinical impact rating of contributions and the experience/ level of advancement of the pharmacist. Clinical impact ratings were further validated by 10 ICU doctors, 10 ICU pharmacists and 10 ICU nurses (Reference: Reliability of clinical impact grading by healthcare professionals of common prescribing error and optimisation cases in critical care patients - PubMed (nih.gov)) • The curriculum purpose (section 2.1) with references and the scope of practice (Section 2.2) clearly sets out the scope of practice of the advanced pharmacist and the importance of pharmacists with the appropriate advanced level of expertise in the critical care setting • The curriculum sets to clarify in addition to the core advanced curriculum, the knowledge, skills, and behaviours that pharmacists need to function effectively as pharmacists in critical care. It is an education and governance tool, intended to set out expectations for advanced pharmacists
Q Does the scope of practice describe the correct level of performance for an entry-level advanced critical care pharmacists?	

Yes (15) No (4). • Experimental • Pharmacists can be useful, but not to direct care • Possibly overstates the role of advanced pharmacist within critical care with regards to numerous statements suggesting diagnosis, management, treatment plans. Input from pharmacy is valuable but these are more typically the role and responsibility of physicians.	• There is underpinning supporting data as detailed within the curriculum references as above. • Pharmacists work within a scope of practice and expertise and collaborate with multi-professional team as detailed in learning outcome 2.4.	Reviewed by CC Curriculum T&F group Sign off by the RPS Advanced Pharmacist Assessment Panel (APAP) and the joint venture board.
Document Section: Programme of learning		
Q Would a pharmacist achieving the curriculum capabilities and outcomes be able to safely and competently deliver the services and scope of practice in the purpose description?		
Yes (15) No (4) • How on earth can do that. This is role for medical doctors • If you want to run ICU, go to medical school • The curriculum is **very generic and basic**, covering only a small spectrum of critical care. If the intention is to provide advanced level input to the care of these patients, then the knowledge base is too restricted. • There is massive scope overlap with other professionals all trying to fly the plane.	• The curriculum is to inform and assure the capabilities of critical care pharmacists and not intended to intrude on the professional capability and autonomy of doctors. The curriculum does not intend, nor does it articulate a scope of practice where pharmacists 'run ICU', but to be competent pharmacists for critical care. • The knowledge and skills guide (section 4) gives further details of the knowledge base required of an advanced critical care pharmacist • The introduction (section 1) clearly states the advanced pharmacist critical care	Reviewed by CC Curriculum T&F group Sign off by the RPS Advanced Pharmacist Assessment Panel (APAP) and the joint venture board.

	curriculum is supplementary to the capabilities defined in the RPS core advanced curriculum and the two documents should be read in tandem. The completion of the advanced pharmacist critical care curriculum, in addition to the RPS core advanced curriculum, assures an individual's capability to practise as an advanced pharmacist in critical care • The level of practice described in this curriculum is the entry to advanced pharmacist critical care practice	
Q Are the curriculum outcomes and descriptors specific enough to avoid ambiguity but flexible enough to be applied to different areas of patient-focussed practice and geographies?		
Yes (15) No (4) • This is wrong. How can you set scope and then have it flexible enough • Specific but too narrow in scope for critical care population. Having a limited understanding of the limited number of conditions listed does not seem to demonstrate advanced level practice and is what would be the minimum expected knowledge to work within critical care. • so vague. Cannot have autonomous practice within complex patients. • If you want to be a Dr go to medical school, if not stick to your role	• Critical care has a broad case mix, and each unit tends to have a greater or lesser focus on certain case types. Pharmacists work in generalist or specialist critical care settings, and whilst most will work within a general unit, some will not, and thus flexibility is required. The curriculum sets out the entry level knowledge, skills and behaviours needed to assure the practice of an advanced critical care pharmacists.	Reviewed by CC Curriculum T&F group Sign off by the RPS Advanced Pharmacist Assessment Panel (APAP) and the joint venture board.

- The level of practice described in this curriculum is the entry to advanced pharmacist critical care practice.
- The introduction (section 1) clearly states the advanced pharmacist critical care curriculum is *supplementary* to the capabilities defined in the RPS core advanced curriculum and the two documents should be read in tandem. The completion of the Advanced pharmacist critical care curriculum, in addition to the RPS core advanced curriculum, assures an individual's capability to practise as an advanced pharmacist in critical care
- The Core Advanced Curriculum clearly sets out the definition of the word autonomy within section 2.2.1, and this is linked to the advanced pharmacist critical care curriculum (link) on page 15
- Pharmacists are autonomous healthcare professionals accountable for their practice, even when working as part of a larger multi-professional team
- The curriculum is describing the knowledge, skills and behaviours required by advanced

	pharmacists to work effectively in critical care • As above	
Q Do the descriptors help you understand the level of performance needed to demonstrate the outcomes?		
Yes (16) No (3) • I honestly don't know what day to day practice will look like • You are not interested in my views	• This is described within other guidance such as GPICS, NHSE service specification, NHS Scotland's Quality Indicators, etc as referenced within the curriculum purpose. This curriculum is intended to ensure that pharmacists can meet the requirements of the job at different levels of advancement / practice. • A UK wide consultation has been undertaken against the curriculum and feedback will be considered and responses / actions formulated accordingly. The RPS and UKCPA are interested in all responses to the consultation.	Reviewed by CC Curriculum T&F group Sign off by the RPS Advanced Pharmacist Assessment Panel (APAP) and the joint venture board.
Q The outcomes, provide the knowledge, skills and behaviours required of advanced Critical care pharmacists to meet current and future NHS service needs and deliver improved patient care across a range of settings?		
Strongly disagree (5) Disagree () Not sure( ) agree (11) Strongly agree(3) • NHS needs leaders and doctors. Not half cooked alternatives. Pharmacists are indispensable as pharmacists. • As stated, this is an opportunity being seized by non-doctors in the face of weak government • As already described	• The curriculum sets out to describe the additional knowledge required by pharmacists working in critical care to facilitate them working effectively in critical care. Pharmacists working in critical	Reviewed by CC Curriculum T&F group Sign off by the RPS Advanced Pharmacist Assessment Panel (APAP) and the joint venture board.

	care, but without the relevant knowledge, skills and behaviours of critical care, would not be indispensable, but would be ineffective • The curriculum sets out to ensure that pharmacists working in critical care have the competencies / knowledge to work in critical care by clearly articulating these within the programme of learning in a fair and transparent way. The curriculum is supplementary to the core curriculum, because the core curriculum does not contain some elements that are required by pharmacists to work effectively in critical care settings • The 'as already described' response does not indicate which comment this new comment is linked to and as such we are unable to respond	
Q Do you think the suggested educational and vocational activities are appropriate to allow individuals to meet the curriculum outcomes (p25)?		
Yes (13) No (3) Not sure (3) • Scope and curriculum needs to be **set firmly** • The document is very limited in scope for advanced practice	• The T&F group reviewed whether the 'scope and curriculum' were set firmly, and the group were	Reviewed by CC Curriculum T&F group

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• Should involve an understanding of pharmacist activities in critical care **outside direct clinical setting** that help well-rounded development e.g. medicines safety and governance activity awareness, guideline development, teaching etc.	unable to determine what was missing. • The introduction (section 1) states the advanced pharmacist critical care curriculum is *supplementary* to the capabilities defined in the RPS core advanced curriculum and the two documents should be read in tandem. The completion of the Advanced pharmacist critical care curriculum, in addition to the RPS core advanced curriculum, assures an individual's capability to practise as an advanced pharmacist in critical care	Sign off by the RPS Advanced Pharmacist Assessment Panel (APAP) and the joint venture board.
Document Section: Support and learning		
Q Do you think the roles of the educational supervisor, practice supervisor and mentor(s) as described will provide the level of support required by individuals to meet the curriculum outcomes?		
Yes (11) No (5) Unsure (3) • Again, the answer is graduate entry medical school • It is not clear how these three roles differ at all • The roles are not explicitly defined. • I'm unclear who the educational supervisor/practice supervisor will be. Will this be a Consultant Critical Care Pharmacist assigned through the RPS e-portfolio or someone within the local Trust (I cannot think of anyone who would do this in my Trust). • Unsure of how this will work without more senior pharmacist support on site. Recognise the proposal includes remote but I am not sure this would work practically	• Both doctors and pharmacists are essential to deliver high quality and safe care to patients. The curriculum sets out to describe the additional knowledge, skills and behaviours required by pharmacists working in critical care to facilitate them working effectively in critical care • Details regarding the role of the educational supervisor, practice supervisor and mentors can be found within the core advanced curriculum in section 4.3.	Reviewed by CC Curriculum T&F group Sign off by the RPS Advanced Pharmacist Assessment Panel (APAP) and the joint venture board.

	Additional wording and a link to this has been added to the advanced pharmacist critical care curriculum as follows 'Three broad types of support are recommended and further details on each role can be found in section 4.3 of the RPS Core Advanced curriculum' • Access to RPS mentor support is signposted within the core advanced curriculum in section 4.3 of the RPS Core Advanced curriculum • Webinars will be provided which will signpost to peer support networks, for example, within the UKCPA critical care group and FICM • A full equality impact assessment has been undertaken for this curriculum and will be linked to the curriculum	
Document Section: Assessment programme		
Q Do you think the programmatic assessment programme allows pharmacists to effectively demonstrate their ability to practise safely and effectively at this level (p28)?		
Yes (12) No (4) unsure (3) • Section 4 - knowledge and skills guide - includes activities that will not be possible to undertake at non specialist Trusts ie at DGHs (eg head and spinal injuries, Pulmonary HTN, Transplant, GvHD etc) and therefore is not providing equal opportunities to pharmacists working in DGHs. • Have concerns about expectations of assessors from large teaching hospitals compared to those of us that practice in a DGH	• A full equality impact assessment has been undertaken for this curriculum and will be linked to the curriculum • Quality assurance mechanisms (section 6.14) are in place to ensure the continued quality of the programme of assessment to ensure assessment outcomes are	Reviewed by CC Curriculum T&F group Sign off by the RPS Advanced Pharmacist Assessment Panel (APAP) and the joint venture board.

where you do not have peer support and largely practice on your own • Not without comprehensive training assessment like FICM	fair and valid. The curriculum states that robust operational processes are in place to ensure consistency and fairness in the running of the APCCs and members of the APCC pool will be subjected to mandatory training prior to reviewing live portfolios. Guidance which is available on the RPS website is provided to supervisors and collaborators to ensure they understand their roles and responsibilities and to improve the quality of the support and feedback provided during the programme. • Representation from FICM formed part of the advanced pharmacist critical care curriculum task and finish group.	
Q Do you think the range of supervised learning events (SLEs) available, as well as the ability to provide any other supporting evidence of learning, is sufficient to allow individuals to demonstrate achievement of the curriculum outcomes p.29-30)?		
Yes (12) No (5) unsure (2) • Individual **SLEs mean nothing** • Evidence-based medicine, trial or critical analysis to be included • As above. DGHs are generally not commissioned to provide care to pts with **pulmonary HTN** and therefore pharmacists will not have the opportunity to manage these pt groups. This puts them at a disadvantage. • Seems unachievable for the majority of critical care services	• **There is a need to make clearer within the curriculum knowledge and skills section that pulmonary hypertension refers to secondary pulmonary hypertension** which occurs in all ICUs to some degree, and this item is not about primary pulmonary hypertension managed in commissioned	Reviewed by CC Curriculum T&F group Sign off by the RPS Advanced Pharmacist Assessment Panel (APAP) and the joint venture board.

centres **(the word 'secondary' pulmonary hypertension has been added to the clinical knowledge guide section 4, page 22)**

- The T&F group will review the knowledge guide again through the prism of district general hospitals (DGHs) and think about the difference between primary presentation, initial management prior to transfer to a specialist unit, and management in tertiary services.
- The curriculum uses a programmatic approach to assessment. In this approach, any individual assessment (each SLE) represents only a single data point with limited utility, like a singular pixel not being truly representative of the full image. However, when multiple assessments are carried out over time, a clearer picture emerges of a learner's true ability. Programmatic approach provides a more effective way of assessing individuals rather than more traditional assessment approaches. Programmatic assessment principles are listed

	in the RPS Core Advanced curriculum section 5.2 • The introduction (section 1) states the advanced pharmacist critical care curriculum is **supplementary** to the capabilities defined in the RPS core advanced curriculum and the two documents should be read in tandem. The completion of the Advanced pharmacist critical care curriculum, in addition to the RPS core advanced curriculum, assures an individual's capability to practise as an advanced pharmacist in critical care • A full equality impact assessment has been undertaken for this curriculum and will be linked to the curriculum	
Q Do you think the 'stakes' rating of each of the curriculum outcomes is appropriate (p33)?		
Yes (11) No (2) unsure (5) • As above, difficult to demonstrate in the absence of seeing some of the patient groups. • Seem reasonable for the ones listed but all shown marked as H in the doc though. No M or L are listed, even though in the key it notes H,M,L. If all the Crit care LOs are H then prob no point in applying a stakes rating for the crit care LO. • Not sure how the "stakes" correlate. • I agree they're all high, but it seems redundant to have this column.	• Note that section 6.9 of the curriculum sets out how the knowledge elements and practical skills will be assessed. ○ The advanced pharmacist critical care assessment will not assess the entirety of the knowledge guide. Through the portfolio review, assurance will be provided that the advanced critical care pharmacist can:	Reviewed by CC Curriculum T&F group Sign off by the RPS Advanced Pharmacist Assessment Panel (APAP) and the joint venture board.

  - Provide care for critically unwell patients, competently and autonomously, managing complex situations related to analgesia-sedation, shock and the PK/PD changes experienced in the critically unwell patient.
  - They will also demonstrate their broader capability to manage other presentations in the critical care environment and importantly their ability to manage potentially unfamiliar situations, identifying, utilising and applying appropriate resources, including in the absence of clear guidance and/or where there is conflicting or ambiguous evidence.

- The assessment blueprint details mandatory knowledge and clinical skills evidence requirement
- Section 6.7 of the curriculum gives clarity on the outcome stakes ratings and what these mean in terms of evidence requirements
- The curriculum section 6.15 sets out the principles of how recognition of prior certified learning is recognised and notes that APCL is not awarded to high stakes outcomes, and this is reflective within all the RPS curricula

Q Do you think the use of an Advanced Pharmacist Competency Committee (APCC) is an appropriate mechanism to make the final summative assessment outcome decision (p36)?		
Yes (12) No (3) unsure (3) • Again, how can pharmacist committee decide essentially on sign off for competency equating to medical practice • Like previous answer - I fear their expectations are too high for someone who works largely on their own • It is not appropriate to have an ACCP in lieu of a senior intensive care physician to assess a pharmacist for advanced practice in critical care. The ACCP curriculum is already of limited scope and seriously limits the validity of the assessment. • Unsure as assessors tend to be ones working in large healthcare institutes and may be biased against staff working in smaller sites.	• The APCC is not signing off medical practice. The APCC are signing off competency against a set of advanced pharmacist learning outcomes • A full equality impact assessment has been undertaken for this curriculum and will be linked to the curriculum • The curriculum section 6.12 sets out how the submitted portfolio will be assessed by an RPS Advanced Pharmacist Competency Committees (APCCs) which are based on the concept of clinical competency committees which are recognised in the literature as an effective approach to reaching final decisions on individuals' progression through a programmatic approach to learning and assessment. The committee makeup is set out within the curriculum. No individual assessor alone makes the final assessment decision. The committee comes to a **group** final assessment decision.	Reviewed by CC Curriculum T&F group Sign off by the RPS Advanced Pharmacist Assessment Panel (APAP) and the joint venture board.

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	A suitably trained ACCP appointed by the RPS may be one of the advanced critical care professional members of the APCC panel. All APCC will have at least one advanced critical care pharmacist on the panel. • Section 3.2 and 6.16 of the curriculum sets out how the RPS ensures the final credentialing assessment will be inclusive and how potential bias will be mitigates. These include: - Ensuring assessment panels have undertaken mandatory training, including around conscious and unconscious bias. - Tasking our assessment panels and overarching quality governance board with monitoring and addressing differential attainment in our assessment programmes. - Collating and transparently publishing equality and diversity data related to assessment performance in addition to anonymised candidate and assessor data.	
Q Do you think that the accreditation of prior certified learning (APCL) process is fair and an appropriate balance between protecting patient safety and avoiding assessment duplication p.38?		
Yes (9) No (3) unsure (5)	• University course outputs demonstrating the learning	Reviewed by CC Curriculum T&F group

• Agree that steps should not be missed as part of credentialling. I would appreciate clarification on submitting university work as evidence e.g. I have completed detailed case-based reviews as part of university work for MSc. • As all outcomes are defined as high stakes, which they should be, how does it allow individuals to use pre-existing events to show these capabilities? There may be good examples of this, but these will not be allowed under the current structure. Would use of APCL's be considered for all the high stakes only when used in conjunction with current learning events? May be missing the point but this confuses me to what exactly an APCL is and what its role is in the framework as they are not to be used for all high-stake outcomes. • all I can see are 'high' which means APCL not valid, but I may be misreading it • no APCL, unable to comment	outcomes at an advanced level of practice can be uploaded onto the eportfolio and mapped to relevant learning outcomes. • The curriculum section 6.15 sets out the principles of how recognition of prior certified learning is recognised and notes that APCL is not awarded for high stakes. However, evidence can be recycled and reuploaded for assessment.	Sign off by the RPS Advanced Pharmacist Assessment Panel (APAP) and the joint venture board.
Document Section: Inclusivity & flexibility		
Q Do you think that the curriculum, including its programme of assessment, is inclusive to pharmacists working within all settings of patient focussed practice? Do the capabilities, outcomes and descriptors allow learners across the UK countries to demonstrate their abilities?		
Yes (12) No (3) unsure (4) • Depends on your definition of inclusivity. Inclusivity should not be an aim, but rather a measure used to assess the impact of a change. • Regional variations in advanced pharmacist presence may prove very difficult to allow time for portfolio completion and assessment. • How would a lone critical care pharmacist achieve all the necessary competencies and evidence with purely remote support	• A full equality impact assessment has been undertaken for this curriculum and will be linked to the curriculum • Section 3.2 and 6.16 of the curriculum sets out how the RPS ensures the final credentialing assessment will be inclusive and how potential bias will be mitigated.	Reviewed by CC Curriculum T&F group Sign off by the RPS Advanced Pharmacist Assessment Panel (APAP) and the joint venture board.

	• Collating and transparently publishing equality and diversity data related to assessment performance in addition to anonymised candidate and assessor data. • Access to resources - RPS mentorship, FICM, ICS, UKCPA, ODN) for remote, and for physical in-person help there is the wider multi-professional team. GPICS does refers to peer-visits "A peer-to-peer practitioner visit should occur at least once a year to ensure training issues are identified and to help maintain the competence of small teams and sole workers. This supports General Pharmaceutical Council (GPhC) revalidation"	
Q We also want to understand if there are any parts of our curriculum which may impact –positively or negatively -on individuals or groups sharing any protected characteristics (including, but not limited to, age, disability, pregnancy and family-friendly leave, those working less than full time, race, religion or belief, sex, sexual orientation) . If you think this might be the case, please describe the impact.		
• The proposal does not include a time frame. I feel this should be open-ended (if not already) to allow for a leave of absence e.g. maternity leave/sickness • I would strongly suggest you review Section 3.2 in which you undertake to do a full EQIA of the curriculum and then proceed to list groups for consultation while completely ignoring the 9 protected characteristics under the Equality Act! Gender is NOT a	• Individuals can submit their advanced pharmacist critical care e-portfolio for a final assessment when they believe they have compiled sufficient evidence of learning against the outcomes. They can choose to do this at the same time as submitting their evidence for RPS core advanced credentialing or	Reviewed by CC Curriculum T&F group Sign off by the RPS Advanced Pharmacist Assessment Panel (APAP) and the joint venture board.

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protected characteristic and is an ideology. Sex is the protected characteristic! There is no mention of obtaining views from pharmacists with different religious backgrounds, which would be extremely relevant given the diversity of the patients we treat. Frankly I fail to understand what impact the views of pharmacists with various sexual orientations can possibly have on a Crit Care curriculum. Section 3.2 at the very least needs to reflect the law. • I think this is a great effort to provide structured learning and a formal way of recognition for critical care pharmacists. However once established UK wide there is a risk this could have a negative impact on pharmacists who have limited time outside work. (i.e parents or those with carer responsibilities). With current NHS funding and recruitment challenges finding time in work for the assessments and portfolio requirements will be tough for many. Funding and protected time will be crucial. Support to find and spend time with mentors etc outside may also be an issue for practitioners working in small ICUs where they may be the only formal cover. Part time staff may also be negatively affected due to time in work. It will be important to avoid a two-tier system where there may be pharmacists with years of advanced/expert practice but who have not been able to complete credentialing due to local restraints, who then become less employable by default. • Availability of drugs in different countries specially antimicrobials Different strength of drugs • Very important	separately. There are no set timescales to submission and the decision to submit is up to the candidate • A full equality impact assessment has been undertaken against the protected characteristics as detailed in the equality act 2010 for this curriculum as well as other characteristics that may be linked to differential attainment. • The critical care curriculum is for pharmacists based in the UK. Availability of drugs is part of every pharmacist's role and where a drug is imported for specific use, there are information resources and other departments (e.g. medicines information) that pharmacists can refer to, in order to validate.

Q Do you think that the curriculum allows sufficient flexibility for employers, statutory education bodies, HEIs and other training providers in how they support pharmacists to develop towards and advanced level of practice?

Yes (12) No (2) unsure (5) • As above, very difficult for pharmacists in DGHs to have access to some of the patient groups etc. • Unclear what support there is from HEI. Employers focus on pre-reg and diploma pharmacists with less resources to release those beyond this (especially given training burden that will increase with uni student placements). On-line learning will be good that can be done in own time	• The T&F group will review the knowledge guide again through the prism of DGHs and think about difference between primary presentation, initial management prior to transfer to a specialist unit, and management in tertiary services. • UCL SoP was successful for the NHSE commission for developing and delivering the national level 7 programme to support critical care pharmacist advanced credentialling (via RPS). https://www.ucl.ac.uk/pharmacy/study/professional-development/pg-certificate-advanced-pharmacy-practice-critical-care This course is funded by NHS England for pharmacists working in a substantive role in adult critical care in an NHS hospital in England. UKCPA also deliver critical care modules • FICM, UKCPA & RPS can signpost training provision and support networks to this curriculum	Reviewed by CC Curriculum T&F group Sign off by the RPS Advanced Pharmacist Assessment Panel (APAP) and the joint venture board.

Q Do you think there will be any practical difficulties in supporting pharmacists to achieve the curriculum outcomes from an operational / logistical perspective?

Yes (12) No (2) unsure (5) • Addition of extra modules to already existing ones will increase workload. In Wales getting sufficient time to do the standard portfolio can be a big challenge due to pharmacist numbers with little accreditation being undertaken in the country and no consultant pharmacist. Whilst the document supports ongoing advanced practice development, there are already embedded logistic and operational challenges that may limit the ability to complete it in this nation. • as above • There are always challenges supporting pharmacists who work by themselves in critical care, particularly in the early stages of their career. Although support can be provided remotely, physical observation of practice and an understanding of the pharmacist's set up and support on site can make a significant difference to them achieving the necessary knowledge and skills relating to curriculum outcomes. This is not something that the curriculum can address and will be up to the individuals to request from peers (and the critical care pharmacy groups to offer out).	• Pharmacists job plans, protected time and funding is a matter for statutory educational bodies and employer organisations and therefore is beyond the scope of this curricula	Reviewed by CC Curriculum T&F group Sign off by the RPS Advanced Pharmacist Assessment Panel (APAP) and the joint venture board.
Document Section: Additional comments		
• As previously stated, concerned about "remote" reviews and attempting to complete supervised learning events without availability of more senior pharmacists. • The assessment blueprint on page 33 is confusing and could be better clarified, especially the numbers. • Does state that you do not need to be a RPS member for the critical care curriculum but does not spell out if need to be for the core advanced. I would assume not as can apply at the same time.	• Pharmacists job plans, protected time and funding is a matter for statutory educational bodies and employer organisations and therefore is beyond the scope of this curricula • Blueprint: The numbers refer to the critical care specific learning outcomes. The superscript numbers refer to the referenced mandatory evidence requirements	Reviewed by CC Curriculum T&F group Sign off by the RPS Advanced Pharmacist Assessment Panel (APAP) and the joint venture board.

Also is there a cost for the credentialing? if expensive and not funded then could be a barrier.	• A Pharmacists does not need to be a member of the RPS to undertake credentialing assessment against any of the RPS curricula • Fees for credentialing will be clearly set out on the RPS website. Statutory educational bodies and employer organisations may wish to consider funding of credentialing. This is beyond the scope of this curriculum
• This is an excellent piece of work and useful to have the knowledge base incorporated into the document. Please ensure that acronyms have their full name during first use (I noticed this particularly with the clinical and assessment skills section).	• Acronyms in the knowledge and skills guide will be updated
• As a potential candidate currently working only in critical care completing the advanced core credentialing, I would appreciate some clarity/guidance within the portfolio regarding the degree of overlap between evidence I submit for domain 1 and 2 in the core advanced and the advanced critical care portfolio. Would it be appropriate/expected for someone in my position to map clinical evidence that demonstrated both core advanced and advanced critical care outcomes to both curricula or should different evidence be submitted to each? A statement surrounding this would be useful. All my other questions regarding how this would work in practice have been covered throughout the document - great work all involved!	• Yes, evidence can be mapped to both the core advanced clinical domain learning outcomes as well as the critical care learning outcomes as long as the evidence demonstrates the learning outcomes. A statement will be added to the programme of assessment section 6.5.
• LMIC discounted rates Focus on antimicrobials Faculty LMIC Crash cart drugs focus	• Unable to respond to the feedback on the 'LMIC discounted rates…'
• Good Notes doctors	Unable to respond to the feedback on the 'Good notes doctors'
• All my training is in my own time - my post far from meets GPICs staffing time and often guidelines etc written at home so I have concern about how I will achieve this (plus have been out of education for a long time). I have concerns about level of knowledge needed - I can apply knowledge to make clinical decisions but at times the theoretical knowledge in the questions at the end of the advanced courses is beyond me. I see this working well for pharmacists new into ICU who can document their learning	• Pharmacists job plans, protected time and funding is a matter for statutory educational bodies and employer organisations and therefore is beyond the scope of this curricula

as they go but for someone on their own in a DGH who was largely self-taught I have concerns (especially as I read this on the same day as RPD email says 85% pharmacists at risk of burnout)

- As above, for smaller services, the expectation seems very unmanageable without greater support

- lack of staff meaning day to day work is not even covered so that impacts on training time, also lack of opportunities in a struggling department in general means there is push to get credentialed but with no real support.

- There is currently no funding source to support this development in Scotland

- Resources and time are increasingly constrained in the NHS at the moment. Service needs may pull educators away. Clinically, I note one reference to delirium - I wonder whether a little more should be said about this, along with the management of patients withdrawing from sedation (although, I note mention is made of iatrogenic harm).

- Peer support provision - UKCPA and FICM are considering the provision of peer support for critical care pharmacists in DGH's and at regional levels.
  RPS mentorship is available.
  Individual pharmacists are encouraged to take some responsibility in seeking out support locally and regionally from fellow critical care pharmacists and multi-professional colleagues to expand their practice and self-development