



Implementing recommendations of the understanding anxiety and self-confidence in clinical decision-making project



Supporting paramedic students and newly qualified paramedics to gain confidence in clinical decision making.

Report Date: June 2023

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Background

The Impact of COVID-19 on Students Key Findings report 2020 indicated that the first wave of COVID-19 changed the student experiences of many Allied Health Professional (AHP) student learners. A review of the south west regional data from the associated survey 'The Impact of COVID-19 on Students Survey 1', indicated that paramedic students were feeling anxious and lacking confidence to enter the workplace as a graduate. A central recommendation from the Key Findings report was that Higher Education Institutes (HEIs) should ensure that students are confident that they will be able to achieve the necessary learning outcomes and be clinically competent and confident when they qualify.

Confidence and anxiety have been found to be attributed to attrition of students and newly qualified staff, and it is widely accepted that newly qualified paramedics (NQParas) need access to preceptorship programmes to support the transition from graduate to autonomous practitioner.

The understanding anxiety and self-confidence in clinical decision-making project was undertaken as a direct response to the Impact of COVID-19 on Students Survey 1, and has been delivered under the remit of the Health Education England (HEE) Reducing Pre-registration Attrition and Improving Retention (RePAIR) programme within the south west region.

The project focused on understanding anxiety and self-confidence in clinical decision making in final year paramedic students and NQParas affected by placement disruption during the COVID-19 pandemic through piloting of a modified version of a clinical confidence tool for nursing: The Nursing Anxiety and Self-Confidence with Clinical Decision-Making Scale (NASC-CDM©, White, 2014). Alongside this, a two-staged review of the paramedic preceptorship programme within South Western Ambulance Service NHS Foundation Trust (SWASFT) was undertaken to look at support available for these students when entering the workplace.

The original report including outcomes and suggested recommendations is available on the HEE webpage: <https://www.hee.nhs.uk/our-work/paramedics>

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Overview

This report summarises the work and actions taken in respect of the key findings and recommendations from the original report published in September 2021, as summarised in the infographic below:



NB: The term ‘supervisor’ has been used above and within this and the original report; within organisations and frameworks this person may also be referred to as the ‘practice educator’ ‘mentor’ or ‘preceptor’.

The original report identified nine recommendations, themed into three categories:

- Use of the Nursing Anxiety and Self-Confidence with Clinical Decision-Making Scale (NASC-CDM®, White, 2014)
- Improving confidence in clinical decision making
- Strengthening the Flaky Bridge – early clinical career support

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Use of the Nursing Anxiety and Self-Confidence with Clinical Decision-Making Scale (NASC-CDM©, White, 2014)

Recommendation 1: The Nursing Anxiety and Self-Confidence with Clinical Decision-Making Scale (NASC-CDM©, White, 2014) could be tested with broader AHP learners and newly qualified practitioners to support understanding regarding clinical decision making in wider professions to help build an evidence base. Health Education England should seek permission from the author Dr Krista White Ph.D., R.N., CCRN K, CNE to formally adapt the scale for use with Allied Health Professionals.

Recommendation 2: A modified version of the Nursing Anxiety and Self-Confidence with Clinical Decision-Making Scale (NASC-CDM©, White, 2014) could be made available to paramedic programmes of study, ambulance services, paramedic students and those newly qualified as a self-assessment tool to support preparation for practice and ongoing development, potentially adding value through early clinical career from year one of study to completion of preceptorship.

Recommendation 3: The paramedic preceptorship programme needs to include development and reflection of self-confidence and anxiety in clinical decision making. Recognising that individuals will experience anxiety and 'wobbles' in their confidence as part of normal skill development will help to reduce anxiety and promote continuous learning.

Response:

Engagement through appropriate channels is on-going regarding formal and wider adaptation and use of the NASC-CDM©

We have identified other published tools available which measure confidence in relation to attainment, development, and performance. Although not specific to paramedics, they can be utilised as part of a wider proactive and reflective approach to plan forward regarding learning and support needs in relation to achieving learning outcomes, for students and registered professionals (Appendix 1).

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Improving confidence in clinical decision making

Recommendation 4: Repeated exposure to, practice with, and rehearsal of making clinical decisions across a range of practice-based learning opportunities can help to improve confidence in decision making. Use of a range of practice-based learning mechanisms and approaches for example, clinical practice, use of simulation, virtual reality, peer support and collaborative learning approaches, should be explored to facilitate clinical decision making in high and low frequency clinical presentations/scenarios, assessments/decisions, complex/challenging situations and situations where decisions may lead to unintended outcomes.

Response:

Use of Simulation and Virtual Reality

A literature review was carried out regarding use of virtual reality (VR) and simulation (SIM) in paramedic training. VR is an emerging educational tool with the potential to enhance paramedic skills development and maintenance. It is widely acknowledged and accepted that VR can enable exposure to and replication of low frequency situations e.g. paediatric resuscitation, assessing and managing burns victims, and mass casualty/dangerous incidents.

There is growing evidence that the use of SIM in teaching is a key means of improving learning, skills, and outcomes, particularly for practical skills; use of high-fidelity task trainers has been shown to be particularly fitting for reducing cognitive load and leading to enhanced learning outcomes. VR is useful to target identified gaps, weaknesses, inadequate skills, and knowledge, for skill consolidation, assessing competence and for maintenance of skills. It is cost effective, complements existing approaches, enhances the learning process, increases self-confidence, and facilitates a 'safe place to fail'.

Barriers and limitations to be considered may include paramedic programmes having access to diverse simulation resources, including physical resources and staff with appropriate skills and knowledge to facilitate.

Related articles and information can be found in Appendix 2.

Peer Support and collaborative learning approaches

Collaborative and peer focused learning approaches can enable additional, rich, and meaningful learning over and above what is anticipated or expected in relation to learning outcomes, through enabling experience and learning opportunities in a psychologically safe learning environment. Much like simulation, these approaches are considered particularly useful for targeting specific learning outcomes and practice of clinical decision making. There is also application for preceptorship. Within the project we have completed a review of a range of approaches that would support the implementation of this recommendation.

A collection of peer support and collaborative learning approaches can be found in Appendix 3.

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Strengthening the Flaky Bridge – early clinical career support

Recommendation 5: Learners should have a designated named supervisor during practice-based learning activities and a designated named preceptor for the duration of their preceptorship programme.

Recommendation 6: A preceptorship offer needs to be flexible and respond to individual learning and support needs.

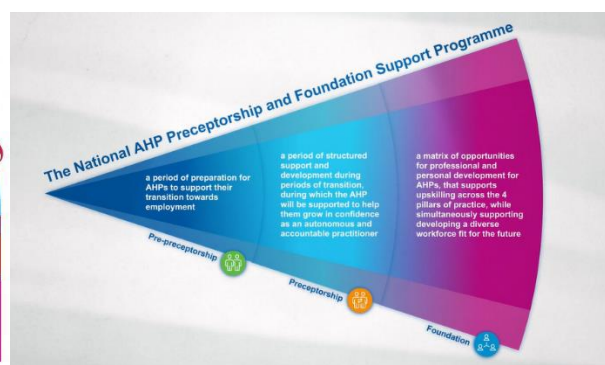
Recommendation 7: Placement and preceptorship programmes should ensure quality facilitated time between practice supervisor/educator and student, preceptor and preceptee.

Recommendation 8: The preceptorship programme should be supported and delivered within a wider learning culture where continuous learning and psychological safety is valued.

Recommendation 9: Ambulance Services should provide a structured programme to prepare and support paramedics to take on the preceptor role.

Response: Alignment to the National AHP Preceptorship and Foundation Support Programme

The recently developed National AHP Preceptorship and Foundation Support Programme recognises the following key points which are closely aligned with the learning and recommendations from our project:



Further information on the National AHP Preceptorship and Foundation Support Programme can be found in Appendix 4.

Between October and December 2022 the Health and Care Professions Council (HCPC) completed a consultation on a set of draft **principles for preceptorship**. A final version is expected to be published in Summer 2023. It will be supported by an implementation framework for preceptorship that is being developed in partnership with Health Education England. Our project findings and recommendations align with wider feedback shared in the consultation process.

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Preceptorship within SWASFT

As part of the original project, a two-stage review of the existing SWASFT preceptorship programme was completed and direct actions identified aligned to recommendations 5-9 listed above. These actions have resulted in the production of:

- A preceptorship strategy and implementation plan
- An NQP framework and preceptorship policy with supporting frequently asked questions (FAQ) document.

Within SWASFT preceptorship is now part of the Trust wide strategy. It was clear from the review that to ensure consistency of approach, across a large geographical footprint, there needed to be some elements of the framework that were very structured, but also the flexibility to respond to individual needs.

The infographic details the clear structure of NQP preceptorship within SWASFT following initial induction. The essential elements ensure a designated, appropriately trained preceptor is assigned and build in 're-call' face-to-face days where quality facilitated time is set aside for preceptees and preceptors to learn through clinical supervision, case-based reviews, and revisit 'skills and drills'.

The approach is being embraced by SWASFT in its desire to thrive, with continued attention to developing a learning culture supporting both preceptees and preceptors. The next step action is to embed the principles for preceptorship for all staff new to role.



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Conclusion

The outcomes and learning from this project have contributed additional information and intelligence about student and newly qualified paramedic confidence and anxiety in clinical decision making and the support required to maintain confidence and manage/reduce anxiety expected during times of transition. This learning can be applied to wider healthcare professionals in training and when new to role requiring transitional support.

Our findings align with wider feedback shared in the [consultation on principles for preceptorship](#) by the HCPC published in February 2023.

Support for pre-registration students and newly qualified paramedics that is informed and responds to their learning needs, inclusive of confidence and capabilities remains a key priority. The context in which this happens with regards to the learning and workplace culture is also important, as is the training and support for the mentors, supervisors and practice educators who have the responsibility to support learners and preceptees. This will require ongoing interventions from HEIs, employers and professional bodies.

Acknowledgements

Throughout the project we have had good engagement from a range of key stakeholders who have either shared their intelligence with us or been interested in our outputs. We would like to acknowledge the time and commitment of the SWASFT Learning and Development Team and the paramedic programmes at the University of Gloucestershire, University of Bournemouth, University of Plymouth, and the University of the West of England Bristol throughout this project which have helped to provide useful signposting and examples included in the report.

Project Team

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Appendix 1

Published tools to measure effectiveness

Alongside the NASC-CDM©, White, 2014, there are other tools focussed on measuring confidence in relation to attainment, development and performance. Although not specific to paramedics, these can be utilised as part of a wider proactive and reflective approach to plan forward regarding learning and support needs in relation to achieving learning outcomes, both at a student and graduate level.

The Confidence Scale (C-Scale):

Developing confidence is an important component of clinical nursing practice. The author discusses the C-Scale as a valid and reliable instrument to measure confidence:

https://journals.lww.com/nurseeducatoronline/abstract/1993/01000/the_confidence_scale__development_and_psychometric.4.aspx

Clinical Skills Self Efficacy Scale:

Student self-efficacy related to clinical skills is important to successful performance in the clinical setting. This pilot study was designed to evaluate the confidence levels of junior and senior nursing students in performing selected nursing skills, using the Clinical Skills Self-Efficacy Scale: <https://pubmed.ncbi.nlm.nih.gov/28590956/>

Confidence in Managing Challenging Situations Scale:

Self-confidence and self-efficacy have been reported as vital psychological constructs that can affect a student's performance. The Confidence in Managing Challenging Situations Scale can be used to measure the level of confidence in nursing students in managing challenging situations in clinical practice settings and can be applied in alternative healthcare settings for the identification of confidence levels in those student nurses learning in care settings: <https://journals.sagepub.com/doi/pdf/10.1177/1744987120979272>

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Appendix 2

Johnson, S., Strong, G., and Knowles, S (2022) *Virtual reality: the future or a COVID-era plaster?* Journal of Paramedic Practice featured article:

<https://www.paramedicpractice.com/features/article/virtual-reality-the-future-or-a-covid-era-plaster>

Conclusion: overall, the use of VR during scenarios for undergraduate paramedic students appears to be a useful and acceptable adjunct to traditional ambulance shifts. It seems particularly useful for supporting the affective domain of learning with students reporting increased self-confidence, positive interactions with course facilitators, and the opportunity to put classroom knowledge into practice. VR was a useful training aid for supporting placement gaps during COVID-19 physical distancing measures. However, VR would also be a useful addition to ambulance training programmes to supplement future learning, development, and improve the confidence of paramedic students in a safe and controlled environment. The next steps for VR in paramedic undergraduate learning should focus on improving the quality of scenarios and the equipment used. Research is recommended to identify which areas of paramedic training would most benefit from a VR adjunct and what equipment would optimise student experience and learning.

Johnson, S., Strong, G., and Knowles, S (2022) *PP41 Simulated ambulance shifts using virtual reality: a service evaluation.* BMJ Journals Emergency Medicine Journal Vol 39 Issue 9 <https://emj.bmj.com/content/39/9/e5.36>

Conclusions Overall, the utilisation of VR during simulated scenarios for undergraduate paramedic students appears to be a useful and acceptable adjunct to traditional ambulance shifts. The VR approach appears to be particularly useful for supporting the affective domain of learning with several students reporting increased self-confidence, positive interactions with course facilitators and the opportunity to put classroom knowledge into practice. We recommend that future use of VR should pay particular attention to the quality of simulations and the equipment used.

Silva, G et al (2022) *Effect of simulation on stress, anxiety, and self-confidence in nursing students: Systematic review with meta-analysis and meta-regression.* International Journal of Nursing Studies <https://pubmed.ncbi.nlm.nih.gov/35679634/>

Conclusion Simulation is an effective strategy for reducing anxiety and increasing self-confidence compared to conventional teaching strategies. Results are still inconclusive for stress. The use of simulation-based experiences in nursing education obtains positive results on anxiety and self-confidence in students, providing support for its implementation in undergraduate curricula to improve the education of qualified nurses.

The ‘**Operation Jackscrew**’ webinar provides an insight into planning, delivery and outcomes of a mass casualty simulation exercise hosted by UWE (University of the West of England) Bristol, as well as an overview of simulation learning in the paramedicine space with consideration of themes resonant in the literature review. Webinar recording accessible via: placements.sw@hee.nhs.uk

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Appendix 3

Collaborative learning approaches

Collaborative, peer focused and coaching model learning approaches can enable additional, rich, and meaningful learning over and above what is anticipated or expected in relation to learning outcomes through enabling experience and learning opportunities in a psychologically safe learning environment. Much like simulation, these approaches are considered particularly useful for targeting specific learning outcomes and enable attainment of competency and proficiency through practice of clinical decision making. There is definite application for use of these approaches in the preceptorship space.

Peer Enhanced E-Placements (PEEP): virtual peer placements with a focus on agility and flexibility – ability to target, model and adapt ‘situations’ to specific learning outcomes - collaboration through group learning and in-depth discussion, and strong theory to practice emphasis in ‘failure free’ environment. This [webpage](#) on peer enhanced e-placements ‘unblocking the log jam with sustainable approaches provides further insights on PEEP.

Collaborative Learning in Practice (CLiP): coaching style model to support students in the workplace with focus on support and ‘coaching’ from a ‘team’ of mentors and assessors and daily planning of learning outcomes. Enables greater learning opportunities, more time and access to various mentors and educators:

<https://www.hee.nhs.uk/our-work/allied-health-professions/helping-ensure-essential-supply-ahps/placement-expansion-innovation/resources>

In the south west region there is a CLiP Community of Practice. Further details can be accessed by contacting placements.sw@hee.nhs.uk for information.

Reflections and considerations regarding use of PEEP and CLiP from those that have used these approaches:

- Requires planning, preparation, and project management
- Structure, focus and containment is essential to realise the benefits
- Significant skilled facilitation and input from educator / practice supervisor
- Useful approaches to maximise the time in the learning environment, for example, bite-sized chunks of learning / scenarios that students can access as appropriate.

These approaches can provide valuable practice learning experiences to enhance placement capacity, focus on specific learning outcomes and as an adjunct to traditional placements.

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Appendix 4

National AHP Preceptorship and Foundation Support

The AHP programme team at NHS England workforce, training and education directorate (formerly Health Education England) is currently leading a national review of paramedic preceptorship with the following key aims:

- To develop a paramedic preceptorship offering that encompasses the 4 pillars of practice and aligns to the AHP framework to promote continued development and learning
- To support confidence and competence in newly registered and new practice paramedics
- To develop a paramedic preceptorship programme
- Improve staff retention
- Improve staff wellbeing
- Provide workforce stabilisation
- Reduce Fitness to Practice cases for new paramedics.

This work aligns to wider work ongoing regarding AHP preceptorship:

<https://www.hee.nhs.uk/our-work/allied-health-professions/education-employment/national-ahp-preceptorship-foundation-support>

The 'Step to Work' package is available as a national accessible online programme to support transition of student AHPs into the workplace:

<https://www.e-lfh.org.uk/programmes/step-to-work/>

The Step to Work package aims to provide AHPs who are 'new to role' with guidance, support, and practical tools to help them reflect on the experiences and knowledge they have already gained to support development in future roles, complimenting but not replacing the need for high-quality preceptorship.