CO-CREATION OF A VIRTUAL INTERACTIVE TEACHING PACKAGE FOR AUDITORS OF HEALTHCARE PLACEMENTS – TOWARDS ASSURANCE OF QUALITY OF HEALTH CARE TRAINEESHIPS

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Abstract

To provide medical and allied health professionals students with the best clinical learning environments, quality processes must be in place, and these require innovation to assure audit material resources that are fit for purpose, can work well within the situation and provide the correct teaching and learning to train auditors.

HEALINT4ALL ERASMUS+ Strategic partnership provides medical education and allied health professionals with an audit system to facilitate quality assurance of EU clinical learning environments by mapping and innovatively adapting a newly established audit protocol and support tools to suit the Higher Education needs for wider application to medicine and professionals allied to medicine. The project conducted a literature scoping review followed by interviews and focus groups across all 6 European partners of clinicians, students and educators of service needs and best practice, resulting to map standards and requirements for clinical learning environments and develop a protocol to assess the quality of placements. Next, it developed a digital interactive platform for European and national placements appraisal following user-centred design to allow the collaboration between Higher Education Institutions (HEIs), and HEIs and placements. In order the application of the HEALINT4ALL protocol within the digital interactive tool to be beneficial, the auditors of the healthcare placements should have the necessary competences to perform the audits utilising the HEALINT4ALL a digital interactive platform. An online or blended learning approach is preferred to fit with the clinical academics' needs that will undertake the role of auditor.

Thus, HEALINT4ALL co-created a Virtual Interactive Teaching Package for Training the Auditors of Healthcare Placements. It followed a modified ASPIRE framework to develop the package. The ASPIRE framework stands for Aims, Storyboarding, Population, Implementation, Release and Evaluation. This work describes the co-creation journey that engaged stakeholders in 6 different countries in order to co-design the resources, experts in the field that reviewed the content to ensure its high quality, the development that followed and the first pilot's evaluation from experts.

While some efforts have been made towards the standardisation of auditing clinical placements, to the best of our knowledge this is the first attempt to develop a short curriculum to training the auditors of healthcare placements and implemented as a virtual interactive teaching package.

Keywords: participatory design, ASPIRE, Train the trainers, elective placements, Quality assurance, nursing, medicine, physiotherapy, education.

1 INTRODUCTION

Health professionals who have transversal skills in communication and cultural sensitivity are vital to offer an inclusive service to patients and clients within local national, regional and global settings.

Culturally competent healthcare professionals are required by accreditation processes of global healthcare organizations [1], while intercultural sensitivity is continuously incorporated into educational programmes[1-3]. Student mobility offers means for future professionals to gain experiences of healthcare in different cultural settings, enhancing the developmental process through the stages of cultural awareness, knowledge, and sensitivity, contributing to the core values of for cultural competence of inclusivity, respect, valuing differences, equity, and commitment [2, 4].

Such experiences can build confidence for the learners and increase employability and career progression. Indeed, in building a more inclusive world, mobility also offers greatest benefits in terms of employability and transversal skills for those usually less able to participate. This also supports the desire of the EU commission to support embedded cultural learning across curriculum [5].

However, there are some caveats. In offering international mobility, universities must assure that learning environment standards are ethical, safe, and commensurate with their own quality assurance processes and those of professional regulators. This is especially where learning opportunities include clinical practice. For medical professions and allied health professions (AHPs), providing evidence of the quality of clinical practice internationally can be challenging, and there are significant ethical dilemma's associated in respect of students participation, a point recognised by the British Medical Association [6] and which has led to Watson et al [7] and Willott et al [8] among others recognising the need for a more structured and monitored experience to preserve safety and ensure that students receive well supported education in practice which is safe and suitable to their educational level.

To provide medical and allied health professionals students with the best clinical learning environments, quality processes must be in place, and these require innovation to assure audit material resources that are fit for purpose, can work well within the situation, and provide the correct teaching and learning to train auditors. This is essential to facilitate consistency and assure confidence for all stakeholders in the audit process and its outcomes. Quality assured clinical learning, including evidence shared across boundaries, will support a globally prepared medical and AHPs international workforce able to transfer skills and practice and offer best interventions to enhance patient treatment. Shared evidence is also essential within the EU, due to benefits of free movement, of health professionals across borders (EC/36/2005 amendment EU/55/2013) and cross border healthcare, which includes movement of patients to receive treatment (2011/24/EU). Both directives include requirements to ensure parity of competence and standards of professional proficiency, and their very presence points to the necessity of cultural appreciation and understanding of the needs of patients across borders.

HEALINT4ALL ERASMUS+ Strategic partnership provides medical education and allied health professionals with an audit system to facilitate quality assurance of EU clinical learning environments by mapping and innovatively adapting a newly established audit protocol and support tools to suit the Higher Education needs for wider application to medicine and professionals allied to medicine. The project conducted a literature scoping review followed by interviews and focus groups across all 6 European partners of clinicians, students and educators of service needs and best practice, resulting to map standards and requirements for clinical learning environments and develop a protocol to assess the quality of placements. Next, it developed a digital interactive platform for European and national placements appraisal following user-centred design to allow the collaboration between Higher Education Institutions (HEIs), and HEIs and placements [9]. In order the application of the HEALINT4ALL protocol within the digital interactive tool to be beneficial, the auditors of the healthcare placements should have the necessary competences to perform the audits utilising the HEALINT4ALL a digital interactive platform. An online or blended learning approach is preferred to fit with the clinical academics' needs that will undertake the role of auditor. Thus, the HEALINT4ALL co-created a Virtual Interactive Teaching Package for Training the Auditors of Healthcare Placements. This work describes the co-creation journey that engaged stakeholders in 6 different countries in order to co-design the resources, experts in the field that reviewed the content to ensure its high quality, the development that followed and the first pilot's evaluation from experts.

2 METHODOLOGY

HEALINT4ALL co-created a Virtual Interactive Teaching Package for Training the Auditors of Healthcare Placements, following a modified ASPIRE framework to develop the package.

2.1 The ASPIRE Framework

There are multiple frameworks for co-creation of digital resources [10], but the ASPIRE framework [11], which stands for Aims, Storyboarding, Population, Implementation, Release and Evaluation, has been widely and effectively used on the development of healthcare open education resources small in size aiming to fulfil one learning objective [12-14]. Furthermore, it has been modified to accommodate the co-creation innovative resources, such as Virtual Reality [15, 16] and Chatbots [17] and adjusted to fit larger resources such as Virtual Teaching Packages that address more than one objective [18].

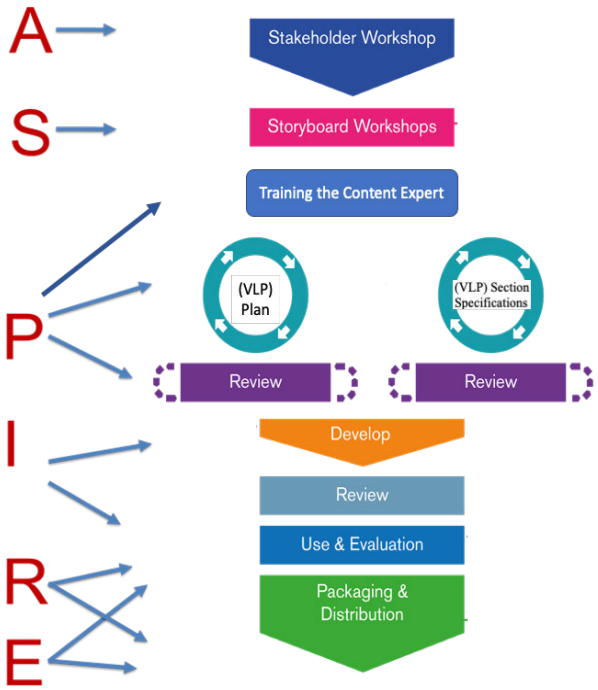

Figure 1. The modified ASPIRE framework for Virtual Teaching packages.

The ASPIRE Framework corresponds to specific steps (Figure 1): Storyboarding Workshop; Specifications development; Peer Review 1; Development; Peer-Review 2; Evaluation and Distribution.

Storyboarding Workshop: The first steps in this process brings all participants together in a workshop to scope the project and then, once the resource learning outcomes have been defined, they storyboard the resource to be created. Storyboarding involves the use of either large A0 laminated sheet or a virtual platform like Mural, where the team's creativity draws out what they envisage as the content sequence and learning resources used to meet the learning outcomes of the Virtual Teaching Package (VTP). Team members are encouraged to imagine and draw their ideas and the type of learning they want to impact.

Specifications development: Following the co-creation of the storyboards content experts define the abstract structure of the VTP. VTP session specifications include the actual content of the resource, but also the indication of the multimedia assets that may accompany it.

Peer Review 1: Once the specifications finalised, a peer -review of the specification focusing on the content is taking place. Experts in the field are invited to review the VTP and the specification are adjusted based on the review in an iterative process.

Development: Development of the VTP starts, by creating all the artifacts needed, such as videos, vodcasts, images, interactive activities, etc. All those come together from Learning Technologist to form the VTP.

Peer Review 2: Once the development finishes a second peer-review of the developed VTP take place. The emphasis is on the technological accuracy of the developed content.

Evaluation: Before the VTP released, a pilot evaluation is taking place to ensure that the resource meets the needs of the learners.

Distribution: A successful evaluation allow the Distribution of the VTP, usually under Creative Common licenses through relevant database or virtual learning environments.

3 RESULTS

Following the ASPIRE framework HEALNINT4ALL ERASMUS+ partners engaged in a co-creation journey to develop a Virtual Interactive Teaching Package for training the auditors of healthcare placements.

3.1 Aim & Storyboarding

Partners from UK, Greece, Poland, Spain, Finland and Malta as stakeholders from multiple disciplines (nurses, medical doctors, physiotherapists, lecturers, auditors, phycologists and learning technologists among other) came together and defined the overall aim of the Virtual Interactive Teaching Package defining the different also its session. Partners agreed that the resource is targeting personnel that needs to do an audit and usually they don't have an audit experience. The package aims to make its participants competent to conduct an audit of a clinical placement. Partners identified 6 sessions/modules to be developed namely:

- Introduction to the training
- Qualities and ethical values of an auditor
- Basic audit concepts and techniques
- Understanding the protocol and its criteria
- Clinical learning environment assessments
- Using the auditing platform

A lead partner was agreed to each module, and further storyboarding workshops organized for each module lasted between two to three hours. Figure 2 depicts storyboard examples.

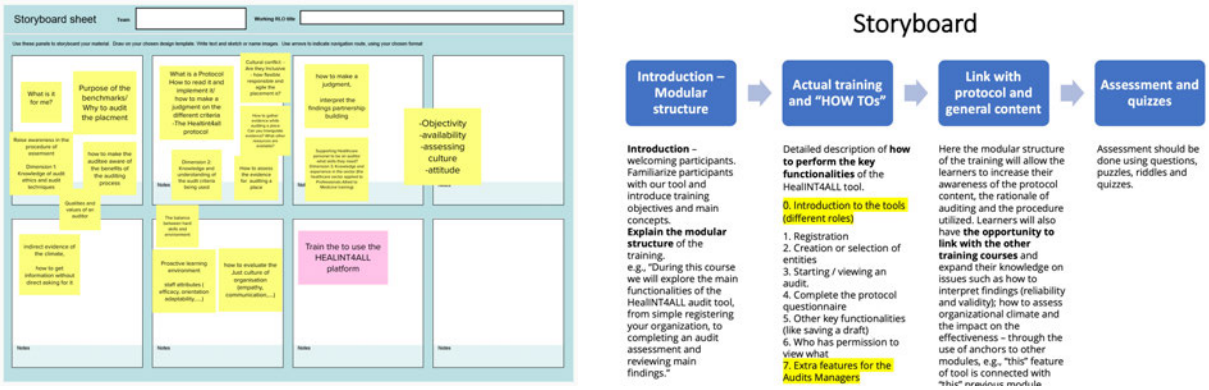

Figure 2. Storyboard examples of the HEALINT4ALL Virtual Interactive Teaching Package.

3.2 Specifications & Review

For each Virtual Interactive Teaching Package, a detailed specification for each section were developed by the HEALINT4ALL lead partner of the module. Specifications were developed in consultation with online pedagogists and learning technologist from the HELM Team of the University of Nottingham. Once the specifications finalised, they were sent to external experts to peer-review the quality of the content of the specifications. Specifications revised as per reviewers' comments following an iterative process.

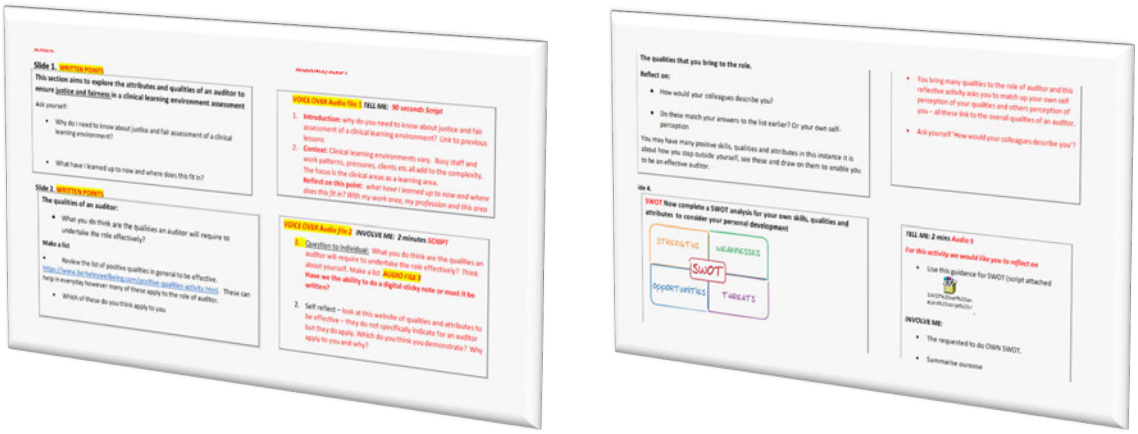

Figure 3. Specifications Example of the HEALINT4ALL Virtual Interactive Teaching Package.

3.3 Development

First the different assets (videos, images, etc.) created both by all the partners and the HELM team. Then Learning technologists brought together all the assets and developed the HEALINT4ALL Virtual Interactive Teaching Package. It deployed into a moodle learning management system as agreed beforehand by the project consortium. The following figure (Figure 4) depicts screenshots from the package.

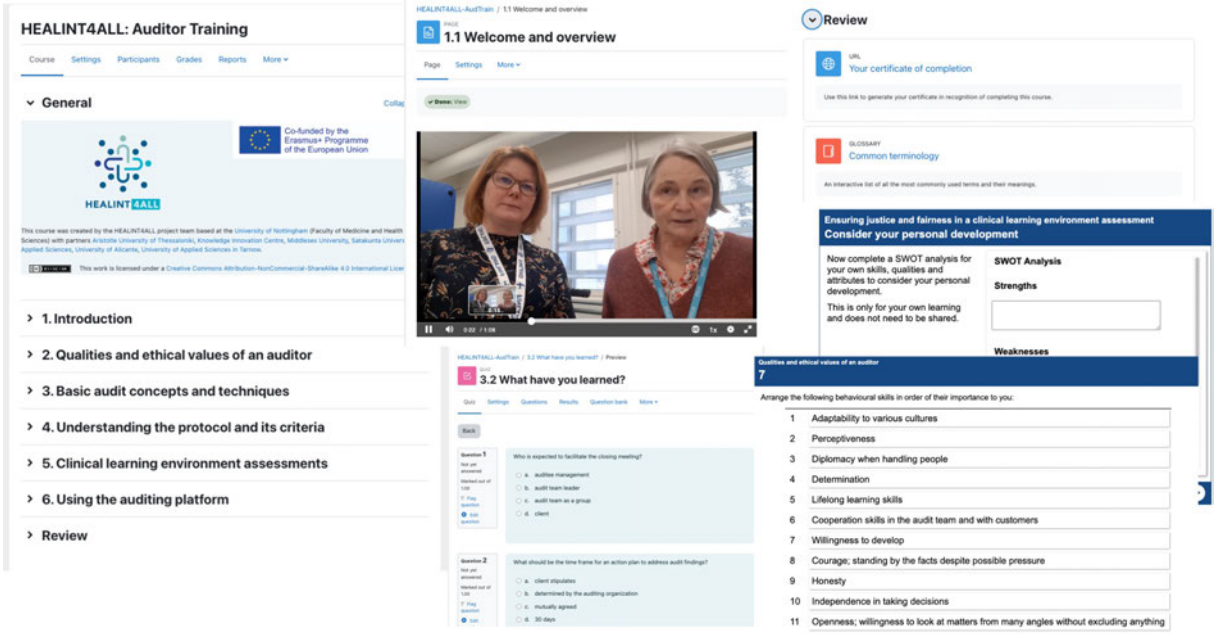

Figure 4. Screenshots from the HEALINT4ALL Virtual Interactive Teaching Package.

3.4 Review and Revisions

An internal review to ensure that each HEALINT4ALL Virtual Interactive Teaching Package is technically accurate conducted within the HELM Team and then all the partners reviewed the VTP, and any suggested minor revisions incorporated to the final package.

3.5 Evaluation and Distribution

Currently the package is evaluated with stakeholders across the 6 countries and additional associated partners of the HEALINT4ALL project. The VTP is currently released under creative common licenses.

4 DISCUSSION AND CONCLUSIONS

The HEALINT4ALL ERASMUS+ Strategic partnership provides medical education and allied health professionals with an audit system to facilitate quality assurance of EU clinical learning environments. This work focuses on the co-creation journey that engaged stakeholders in 6 different countries in order to co-design the resources, experts in the field that reviewed the content to ensure its high quality, the development that followed and the first pilot's evaluation from experts. Partners identified strengths and challenges within the application of ASPIRE framework into the development process. Partners that were not familiar with the process required further training apart from the initial train the trainers' workshop, while all partners identified further potential opportunities of applying the process to develop modern curricula encompassing new teaching methods, which is in agreement with previous findings from Brown et al [19].

In 2013, The European higher education in the world strategy (p11) [20] declared that "*If internationalisation is to increase quality in higher education, it requires closer cooperation with equivalent systems in other regions of the world on quality assurance, covering quality of services offered to mobile learners, quality assurance of the academic content of their courses, and quality assurance of joint projects and programmes*". While the aforementioned strategy is now ten years old, the message remains highly pertinent especially within the clinical learning environment. HEALINT4ALL mapped standards and reviewed best evidence, which, combined with the extraction of cases from within Medical and AHP professions, underpinned the development not only of an audit system but also the HEALINT4ALL Virtual Interactive Teaching Package to meet the needs of professionals.

HEALINT4ALL developed new digital resources that can be used globally (anytime and anyplace) to undertake a standardised audit of a clinical learning placement for the acceptance of international students in Medicine and AHPs. The digital innovations are highly practical and designed by this working within the context of medical and AHPs education across the partnership to enable best fitness for purpose.

While some efforts have been made towards the standardisation of auditing clinical placements, to the best of our knowledge this is the first attempt to develop a short curriculum to training the auditors of healthcare placements and implemented as a virtual interactive teaching package.

ACKNOWLEDGEMENTS

This work is supported by the ERASMUS+ Strategic Partnership in Higher Education "Assuring Quality Health Care Traineeships for Medical and Professionals Allied to Medicine through embedding and exploiting tools across Higher Education (HEALINT4ALL)" (www.healint.eu) (2020-1-UK01-KA203-079155) project of the European Union.

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