



**Assuring Quality Health Care Traineeships for Medical and Professionals Allied to Medicine through embedding and exploiting tools across Higher Education (HEALINT4ALL) Briefing paper.**

**IO1: Identification of needs through mapping best case examples and participatory (Protocol development) (Final)**

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This project has been funded with support from the European Commission. This publication reflects the views only of the authors, and the Commission cannot be held responsible for any use which may be made of the information contained therein.

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Co-funded by the  
Erasmus+ Programme  
of the European Union



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# 1 Introduction

## 1.1 Background

Exchange opportunities for healthcare students and staff significant benefits (HOPE, 2021). These include the ability to better understanding of the functioning of healthcare and hospital systems within the EU and neighbour countries and facilitate co-operation and exchange of best practices and ultimately better care practices and outcomes for patients. Programmes exist to enable exchanges for a wide variety of healthcare professionals such as the extensive Erasmus+ mobility programme, voluntary organisations (such as Work the World or charities) or partnerships focussing on multi-professional exchanges such as European Hospital and Healthcare Federation (HOPE) for clinical and non-clinical staff. Students’ personal accounts across the globe reflect how international placement exchange has transformed them both professionally and personally (Morley and Cunningham 2021). As with all placement experiences, the potential for growth is astonishing but the international context can accelerate this further through a ‘high stakes’ learning situation involving a greater connection with students’ affect (Morley and Cunningham 2021). Durations of international exchange vary and in the UK the UUKi Mobility Management (2018) survey found that short-term mobility was a growth area for universities and a key priority across all areas.

Whilst benefits of an international experience are acknowledged widely in literature (Brown and Fetherstone, 2018) engagement and uptake vary considerably. In the UK Medical student or physiotherapy experiential exchange experiences are termed electives, these vary from being optional or compulsory or within a certain part of the programme indicated in specific university curricula. Apart from individual university approval this can be under Erasmus+ partnerships or self-sourced (via organising companies or charities) and often self-funded (CSP, 2021; MDU, 2018). A major challenge is ensuring that medical and allied health professional students can have such rich experiences and the quality assuring of placement experiences for students. Quality assured clinical learning, including evidence shared across boundaries, will support a globally prepared Medical and allied health professional 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). The annual report from Erasmus+ points to benefits for

social inclusion as well as the development of the values and attitudes underlying active citizenship (European Commission, 2020). Participation in elective or exchange opportunities across these professions varies with students in Medicine and dentistry at 30.8%, subjects allied to medicine 2.7%, students within clinical medicine 33% , and the lowest is nursing at only 1.9% (CoD, 2017). Disparities are also evident across UK with the most mobile from northern Ireland (12.1%) followed by Scotland (10.4%). Furthermore European destinations account for 50.8% of all exchanges. The EU Regulated professions database (EU 2020) indicates the ranking for temporary mobility (pre-pandemic) which reports considerable variability with medical doctor 8th, radiographer 14th, physiotherapy 16th, pharmacists 32<sup>nd</sup>, nurses 38th, occupational therapists at 50<sup>th</sup>. This assisted with movement across boundaries post qualification in the recognition of professional qualifications in practice EU instrument (directive) (PQD) Directive 2005/36/EC.

Professional regulation however has evolved over centuries, some regulated professions have grown out of medieval guilds, whereas others have been regulated where a new profession (PSA, 2018) and subsequent differences in quality assurance processes. Medical doctors like many health professions are regulated by specific regulatory bodies in home countries setting specific guidance on education, preparation, practice and professional development (HCPC, ND).

Professions allied to medicine are also referred to in many countries as 'allied health professions' (AHPs) referring to all healthcare professions outside of medicine which are regulated. In the UK this key function is performed by Health and Care Professions Council (HCPC) <https://www.hcpc-uk.org/about-us/who-we-regulate/the-professions/> for 14 named professions. Not all of these professions are regulated in the same way across Europe or globally and terminologies or scope of professions may vary. It is with this caveat the allied health profession represented in this project are medicine and physiotherapy with the intention that the outputs are agile and adaptable to other healthcare professions.

Partnerships between home organisations and the partner institutions that students visit, are at the root of transcultural (Visovsky et al., 2016) and wider professional learning. However, variations occur across this relationship '*with no clear consensus ... on what structure, support and assessments lead to greater student learning*' (Browne and Fetherston, 2018, p.10). The challenges of partner universities to find regulatory, administrative and quality assurance mechanisms, that are both locally and internationally relevant are multiplied in their complexity due to the international context and professional regulatory requirements (Naidoo and Sibiya, 2018, p.356, Cunningham, 2017). Between 2017 and 2020 the EU funded HEALINT project, precursor to this HEALint4ALL project, worked with practitioners academics and students to develop an innovative suite of new tools for assuring the quality of clinical learning environments (CLE) for nursing students healthcare traineeships. The project represents a key instrument in the ongoing international enhancement of clinical learning environments. Throughout the HEALINT project partners extensively mapped evidence to establish conversancy across four partner countries and within Nursing and Midwifery settings and sector standards. Project partners also worked with clinical environments testing and developing quality audit tools in 'real time' settings and it also. Nonetheless, the tools have been dominantly located within Nursing and Midwifery rather

than health professionals more widely and are aimed at clinical areas determining the quality of international practice placements suited to these professions. However, HEALINT has shown how a common audit protocol and tools across countries can save on the costs and time of repeated audits by individual institutions and promote trust and confidence in placement and internship quality between partners.

## **1.2 The HEALINT4ALL project**

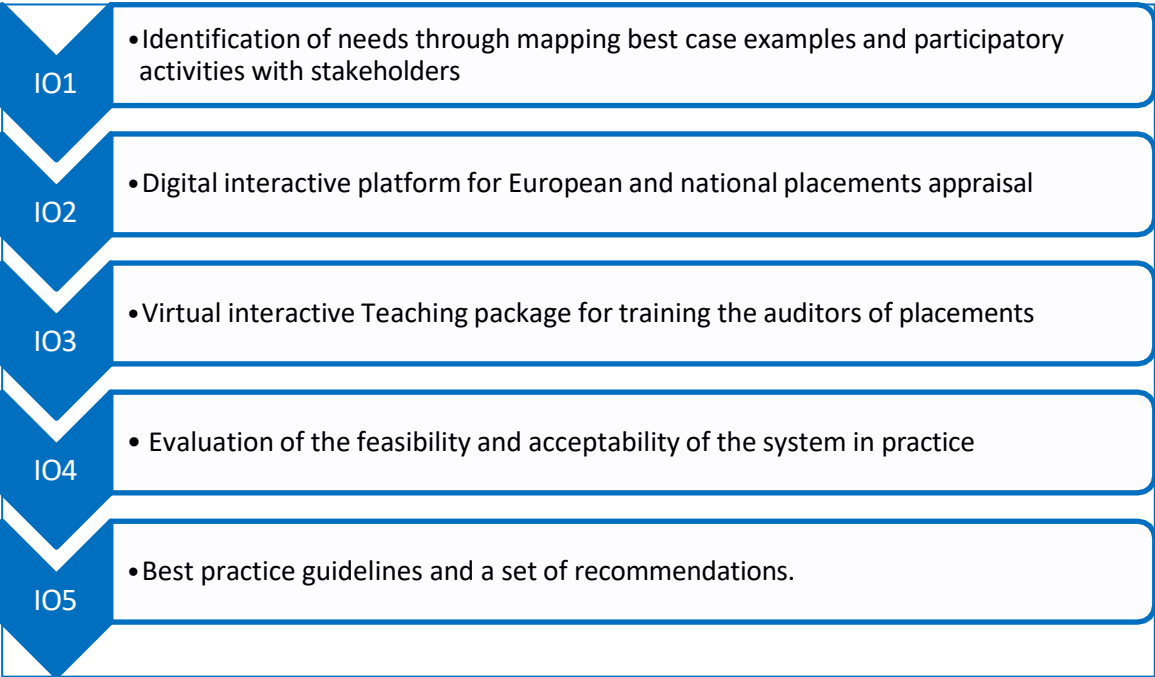
This innovative project aims to develop on from the successful HEALINT project which established an International Quality Audit System for nursing and healthcare institutions who want to exchange students which will map to national and international priorities and meet agreed requirements. The extension to medical and wider allied healthcare professionals HEALINT4ALL brings professionals and students from these areas together with experts in extending and further enhancing quality assurance standards for healthcare education. The partnership consortium comprises health education researchers and technologists from five countries and six sites of the project.

The primary aim of HEALint4ALL is to develop a robust mechanism, which uses well established metrics, to benchmark placement quality and support for a wider range of health professional students across health facilities and universities in different countries. Such benchmarking will offer confidence in placement quality and support the extension of placement choice for students, since partners signed up to the joint agreement could share trainee placements more easily. In developing a single robust mechanism which can be meet the needs of varied healthcare professional disciplines clinical learning environments this also potentially benefits shared learning and working and promoting interprofessional learning and collaboration. It will also mean that participants will be assured of an agreed standard of placement for practice and the sharing of quality assurance audits reducing the amount of time partner institutions previously spent undertaking individual quality assurance processes.

HEALINT4ALL recognises that wider adaptation of international placement audit and quality assurance tools to other professionals in medicine and allied to medicine is highly beneficial. HEALINT4ALL can assure the quality of international electives and increase quantity of high quality placements for Medicine and for allied health professions (AHPs). However, it is important to note that to transfer HEALINT tools across professions requires careful consideration and bespoke developments may be required. Medical and AHP students access clinical learning environments differently and it is expected that they may need different support in order to adopt and use the IWA gold standard audit tool and HEALINT resources. They have different regulators so the consistency of standards across countries will require a further mapping exercise to assure consistency, accuracy and relevance and make the material resources and quality standards acceptable and credible across the EU and Globally. There are also opportunities, as identified above, the HEALINT project completed all requirements to develop the audit protocol and associated tools within a digital platform and in four languages of the project, under the main reference groups of nurses and midwives.

Adaptation of an interactive platform for auditing and for student evaluation of the learning environment will serve to facilitate learning environment audit both for a new group of learners (Medicine and AHPs) and for those for whom the project has completed tools located in the digital space but not, as yet, interactively. As mentioned, this project aims to facilitate an existing gold standard audit benchmark for application with a new group of learners across a wider partnership. It will add to existing materials to enhance digital capability and portability.

Figure 1 Output processes for HEALInt4ALL project (overall)

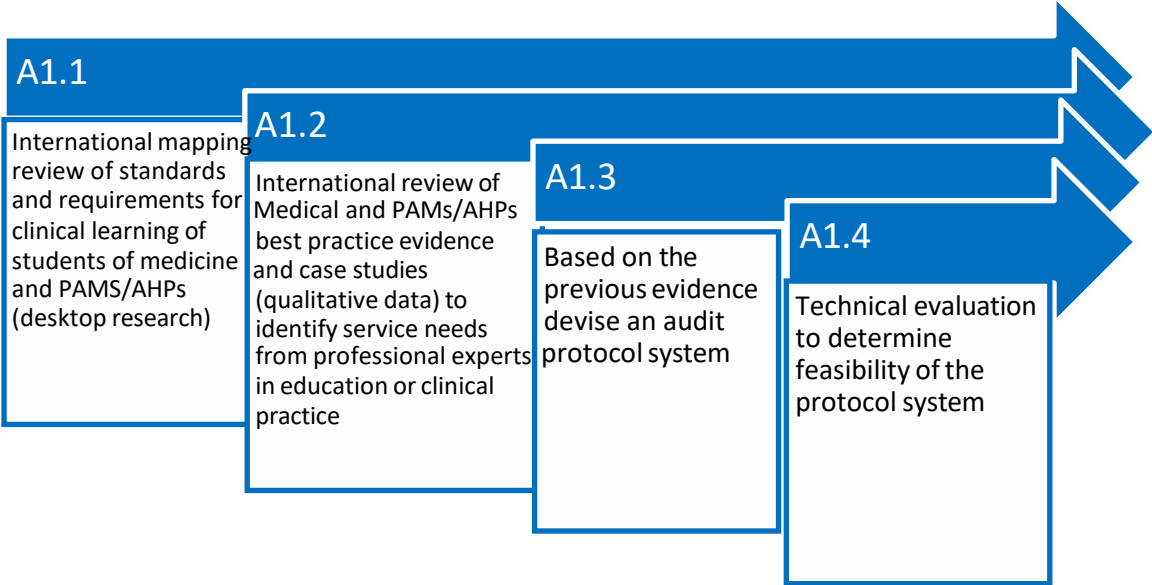


Promoting internationalisation is fundamental and core within the HEALINT4ALL because enabling students offers a sustainable means to consolidate and improve global evidence around best practice for clinical learning across the wider professional Medical and allied health sector. The assessment of clinical placements supporting international mobility by all healthcare. To provide Medical and AHP 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 AHP 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 a 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

provides Medical Education and AHP students an audit system to facilitate quality assurance of EU clinical learning environments. Students will be confident that they can obtain an increased number and variety of safe optimised learning placements through extensive partnerships developed, thus fostering inclusivity. Opportunity to increase high quality placements internationally through the wider application of the system to the International Standards Organisation, International Workshop Agreement will be explored, as quality assurance will be benchmarked to this standard. Development of the skills and knowledge of auditors and auditor trainees to undertake audit is also critical and will be enhanced using new and innovative digital interactive resources. An existing audit tool currently available as a pdf online version will be newly developed into a digital interactive resource for use electronically by auditors in the field. This project contributes to global citizenship as well as health and wellbeing supported by professionals in promoting high standards and best practice, which will be exported and disseminated widely across multiple professions and with capacity to be utilised across the world.

The first intellectual output (IO1) of the HEALINT4ALL was in four stages (A1.1, A1.2, A1.3, A1.4):

Figure 2 Stages of IO1



Current evidence points to the existence of national priorities and localised standards which provide guidance on how the quality of placement sites can, and should be, established by nursing and healthcare institutions (Hall et al, 2019). A review of this evidence was conducted by HEALINT partner sites, considering research, published discourse, policy literature and grey literature and evidence including existing tools. Using this collection, the following section of this briefing paper compares each of the collected standards, highlighting the main factors, similarities, differences, strengths and weaknesses of the different approaches. This exercise was important to review and appraise the existing standards in terms of how well they fulfilled their stated aims and objectives. Please see Section 2,



“Desktop review of national and international practices and standards for more details. In addition to this review of existing standards, the briefing paper will also outline the design choices involved in creating a tool with trans-national applicability across Europe and beyond.

As in the earlier iteration of this project (HEALint) in this current followup expanded project the outputs will meet ISO 2015 language standards and quality assurance requirements for the development of ISO standards. These will be accompanied by a mapping report identifying clinical learning environment requirements of medical education and AHPs education across the standards found within the evidence of global literature and across national standards and regulatory requirements of project partners.

All partners contributed to the output which was led and coordinated by Middlesex University. Specifically partners were tasked to:

- a. Undertake a national review of standards for the clinical learning of students of medicine and PAMS/AHPs including any translations to English as required.
- b. Middlesex University and University of Alicante reviewed evidence and mapped standards submitted by partners to create a core report providing the scientific basis for quality benchmarking within Medicine and PAMS/AHPs.
- c. Collate best practice evidence drawn from the field through interviews/focus group discussions with participants and stakeholders by all partner countries
- d. All partners except University of Middlesex and KIC Malta then will undertake a needs analysis within their own settings and 'dry test' review the draft protocol system with stakeholders and participants nationally and submit results to University of Middlesex,
- e. Design and development of a system protocol for the audit of clinical learning for Medicine and PAMS/AHPs followed by a 'dry test' of the protocol.
- f. KIC Malta led in the standardisation of the system protocol aligning with ISO terminology.
- g. SAMK, University of Alicante, Tarnow University of Applied Sciences and Aristotle University of Greece will facilitate translation of the system protocol into their national languages using approved back translation methods.(WHO 2015)
- h. KIC Malta evaluated the feasibility of the output for wider application internationally and across Europe.
- i. SAMK led dissemination of the output.

# **2. Desktop review of international standards and requirements for clinical learning of Medical and Professions Allied to Medicine (PAMS) students**

## **2.1 Aims and objectives**

The HEALINT partner sites of Finland, Poland, Spain and the UK undertook literature reviews of relevant material. These concerned standards and tools which were related to auditing/ appraisal systems and procedures for establishing the quality of student nurse placements within their respective countries. The searches were conducted using key search terms on internet search engines and literature were considered for inclusion if they were related to any aspect of auditing student nurse placements, including: guidance/ criteria for establishing quality; official policies and standard procedures for conducting auditing exercises; research studies which related to the auditing of placements; and any tools which were evidenced as being used for auditing placements. Retrieved papers included research papers, published discourse, policy literature and existing tools.

## **2.2 Methods**

Each partner was furnished with the scoping review protocol developed using the Joanna Briggs Institute Scoping review Guidance (Aromataris & Munn 2020) as determined from the range of review approaches outlined by Grant and Booth (2009). This approach was intended to clarify the core indicators of what constitutes quality in clinical learning environments within medicine and allied health professions.

### **2.2.1 Objectives:**

- To scope and determine the regulators within the UK and Europe with oversight and benchmarks for standards for clinical learning environments (support, position, opportunities, restrictions) across medicine and other healthcare practitioner students (AHPs)
- To elicit how medicine and AHP students access and use clinical placements and the purpose and outcomes of clinical placement experiences and any quality monitoring
- To elicit areas of uncertainty or lack of benchmark standards
- To compare and contrast benchmark standards in existence

### **2.2.2 Research question:**

- What standards or benchmarks exist to assure a quality clinical learning experience for students of medicine and allied healthcare profession?
- If present, are these profession specific or multi or cross-disciplinary and what process is used to determine the standards or benchmarks of a quality clinical learning experience?

Table 1: Population, Concept, Context (PCC) of scoping review.

<b>Population</b>	<b>Concept</b>	<b>Context</b>
(who/concerned parties)	(quality/measures)	(location/place/experience)
Medical and allied health professional students exemplified through principally physiotherapy and any other health student on a regulatory professional health related programme) and curriculum or professional requirements to undertake placement as part of professional (Undergraduate or post graduate) programme)	<p>Quality benchmarks, framework, protocols or indicators. Professional CLE quality benchmarks in existence (ie as in HEALINt - Nursing) and across international locations. Will include clinical areas and clinical education staff, professional bodies/organisations or regulatory bodies.</p> <p>Focus on planning, delivering, implementing, perspectives of regulatory bodies or professions.</p>	<p>Clinical or practice learning environments hosting aforementioned students in all partner countries and any other location across the globe with the intention of practice professional learning/achievement. Placements/internship areas designed or designated learning or education areas for professional preparation and/or assessment</p>

Subsidiary questions:

1. Are benchmarks/standards profession specific?
2. Are these standards or benchmarks local, national or international?
3. Does a clear process exist to determine the achievement of benchmarks or standards? If so what is it?
4. How is the process and benchmarks/standards reviewed or enhanced?
5. What examples are there of benchmarks/standards and processes in action?

Each partner was asked to focus on Medicine and Physiotherapy (or synonym) professions within their country or language

Key words/terms: MeSH term – to include: Students, learner, Medic\*, Physiotherap\*, Health occupation\* PLUS combinations of the following:

Clinical terminology (select appropriate or identify own terms):

Clinical learning environment  
Clinical practice  
Internships (medical), and  
Internship programs  
Clinical clerkship

Quality terminology (as above, select own or form this example)

Accreditation,  
Quality management  
Quality assurance  
Quality control  
Audit  
Monitoring

**Search engines:**

Partner to select and determine search engines from their own country using their own language as appropriate. Other search engines may include: Google scholar, PubMed, MedlinePlus, Web of Science, Science Direct, EMBASE, PsycINFO, CINHALL, Cochrane Database of Systematic Reviews (CDSR), Scopus and local sources + Proquest/Ovid, ERIC or EMBASE.

1. ***Inclusion & eligibility criteria:*** professional quality documents, audits, measures, evaluations, statements, questionnaires, curriculum approval statements, clinical/service statements or policies on quality for student support, learning, assessing or practice within the field of the professional area in the 'field'
  - a. **Date limits:** 2005 to present day (date selected due to Directive 2005/36/EC of the European Parliament and of the Council).
  - b. **Inclusion** if they were related to any aspect of auditing student placements, including: guidance/ criteria for establishing quality; official policies and standard procedures for conducting auditing exercises; research studies which related to the auditing of placements; and any tools which were evidenced as being used for auditing placements.
  - c. **Exclusion:** not in Healthcare professions, professions unregulated (accredited eg. Music therapy, unqualified care assistant roles), Nursing and items before 2005,

## 2.3 Results

### 2.3.1 Literature:

	Middlesex University	University of Nottingham	Tarnow	SAMK	AUTH	KIC	University of Alicante
Literature extracted (n=127)	40	6	2	8	42	3	1
Relevant (n=24)	14	2	2	3	6	3	1

In total 127 literatures were selected by partners. Of these 24 pertained to benchmark standards for clinical placement quality learning environments. An overview of these 24 can be found in the appendix.

Table 2: Quality monitoring standards:

COUNTRY	SOURCE	PROFESSION	
UK	General Medical Council	Medicine	Post experience evaluation of quality of CLE
	College of Radiographers	Radiography	Post experience evaluation of quality of CLE
	North of England Allied Health Professions tool	AHP	Post experience evaluation of quality of CLE

	Health Education England	AHP/Nursing	Post experience evaluation of quality of CLE
	Chartered Institute of Physiotherapists	Physiotherapists	Post experience evaluation of quality of CLE
	NHS Scotland	All	Post experience evaluation of quality of CLE
	Manchester Clinical Placement Index (MCPI)	Medicine	Post experience evaluation of quality of CLE (student perspective based on experiential learning theory)
	Dundee Ready Educational Environment Measure (DREEM)	Medicine	Post experience evaluation of quality of CLE (student perspective)

The literature is more comprehensive for nursing students whereas in relation to medical, physiotherapy or other healthcare students this is more equivocal. Guidance and expectations for some countries derive from government legislation or decree, professional regulatory bodies and local institution or research.

Health Workforce Australia commissioned a report in 2021 promoting quality in clinical placements across healthcare professions. The report sourced 23 frameworks (ten international and 13 Australian) which offered guidelines and standards for clinical learning environments. This illustrates the range which exists and to date no one single cohesive framework (Hills et al, 2019) but does provide a lens to view shared elements and core considerations pertinent to the HEALint4ALL protocol.

## 2.3.2 Audit tool examples:

Several audit tool were found which addressed clinical learning environments locally but addressed shared elements of CLE for student learning these are outlined in the table 2.

Table 3: Audit tools

COUNTRY	TOOL	PROFESSIONS
UK	University of Cumbria: Education Audit of Practice placement area	Nurses Midwives Allied health professionals
UK	Canterbury Christchurch university: Practice learning environment audit tool	Allied health professionals (9 groups – not named)
UK	NHS Scotland Quality standards for Practice Placements Audit tool	Nursing and midwifery students Students under HCPC regulation
UK	Coventry University Quality standards to monitor environment for student practice placements	Nursing, Midwifery and Operating department practitioners
UK	University of the West of England: Quality assurance of pre-registration practice learning environments	Nursing, midwifery and students under HCPC regulations
UK	Central Manchester University Hospital: Multiprofessional audit document of practice placements	Nursing, midwifery and students under HCPC regulations



# 3. International review of Medical and AHPs best practice evidence and case studies

## 3.1 Methods:

This was an online qualitative study to explore stakeholders needs from those who are experts within their field of education or clinical practice. The views of from specific stakeholders and students will be gathered focusing their perceptions of the best of current practice and their vision for future developments.

### Objectives:

1. To gather evidence of best practice case studies within international literature of how clinical learning environments are audited.
2. To identify the perspectives of stakeholders (academics, clinical academics, students) for auditing clinical learning environments.

Following ethical approval (University of Nottingham Faculty of Medicine and Research Sciences ethics committee FMHS 217-0321: 09/04/21). HEALINT4ALL project partners individually recruited participants from their own organisation or their professional networks (for participants from professional associations). Each project partner conducted their own interviews and the focus group discussions (FGDs) online, using MS TEAMS to record the session. Participants were informed their contribution was entirely voluntary, they could leave from the study at any point without giving a reason and without any negative consequences. A signed consent was then obtained.

Participants included qualified professionals (academics, clinical academics, professionals) and students (medical students, physiotherapy and nursing students. For professional stakeholders (academics, clinical academics, clinical facilitators, members of professional associations, etc.) the inclusion criteria involve to be aware of clinical learning placements either at local/national or European and international level. All participants are aged 18 and above. The participant sample size intended to be 80. Recorded interviews/FGDs were stored in MS TEAMS, transcribed and anonymised by the research team. Partners institutions conducted their own interviews and FGDs and transcribing. Analysis was via

thematic analysis, “a method for identifying, analysing and reporting patterns (themes) within data” using the six step approach by Braun and Clarke (2006). This was done locally and checked and rechecked by each partner within their project teams for consistency.

### 3.2 Results:

In Table 3 the participating countries’ data on those who participated are given, excluding Greece. Five countries participated and there were 64 participants in all from two disciplines, physiotherapy and medicine; although medicine was represented in two countries only. Students and teachers/academics and clinicians are represented in the data.

Table 4: Participants

		INDIVIDUAL INTERVIEWS			FOCUS GROUP DISCUSSIONS (FGD)					
		Students	Clinical Academics	Total Interviews	Student only	Academics Only	Mixed	Professional bodies/wider collaborators	Total number FGD	Total number FGD participants
<b>UON (UK)</b>	Physio			5			5		1	5
	Med	3	2				1			
<b>SAMK (FINLAND)</b>	Physio	3		3			1		1	5
<b>AUTH (GREECE)</b>	Med	2		2		4			1	4
<b>PWSZ (POLAND)</b>	Physio	1	2	3	15	4			2	19
<b>UA (SPAIN)</b>	Physio / Med	4	2	6	2	2	2	1	7	13
<b>TOTAL</b>				19	Total				16	<b>64</b>

### 3.3 Data management

Data were analysed as a whole data set by Professor Helen Allan, Middlesex University. Raw data extracts are presented in this document to illustrate the four themes from the analysis as findings:

- Clinical placements are not learning organisations
- Experiences of learning
- Organisation of learning
- Making things better

### **Theme 1: clinical placements are not learning organisations**

This theme describes the tension between the role of the clinical placement in professional programmes of learning where students learn in the workplace. A feature of the clinical placement for HCPs and HCP students is that it is also a workplace across the five partner countries. Hospitals struggle to be learning organisations because they need to balance work demands (based on patient need) with teaching and learning requirements (Melia, 2006).

In Greece, this was described as:

*The rotation is based on the needs of the clinics, not on knowledge needs (Greece)*

One Finnish student echoed this view:

*The student [should be] given enough time to plan and reflect. The student should be given enough responsibility. A proper caseload (can be a challenge for an international student).*

*For Greek participants, a good placement depends on:*

- *access to patients,*
- *number of patients in clinic,*
- *time to observe examination,*
- *time allocated to students by the chief of the clinic. (Greece)*

Polish students agreed that a good placement required a balance of positive attitude from placement staff and opportunities for learning:

- *cooperative and friendly personnel*
- *positive attitude towards students*
- *possibility to participate in / carry out hands-on tasks*
- *access to patients' medical records (Poland)*

In Spain, a good placement depended on the mentor who supported their learning students had access to

- *Physio Students highlighted: a good mentor understood as well trained, with specific training as mentor, able to connect with the latest professional information and evidence published, able to motivate students, proficient at Communication with students, with skills to transmit his/her knowledge.*
- *Medical Students highlighted: mentor's constant [involvement] with the student learning, environments with the capacity to be inclusive for students and boosting the active participation of the students in internal clinical sessions and seminars, environments with a clear induction process (Spain)*

## **Theme 2: Learning**

While the context of learning was frequently commented on in the data across all five countries, learning strategies and methods were only commented on in the UK and Spain.

In Spain, among medical participants, while learning was the basis of how the clinic was organised, it was traditional and emphasised the transmission of knowledge rather than students learning about the patient in their social and cultural context.

*Medical Students said that the focus is always on the clinical/medical contents and clinical cases they worked on (medical knowledge) [and] no importance is given to human values, communication skills among students and with the professional team, compassion (Spain)*

Another response under this theme is that learning can be enhanced through the setting of clear expectations and boundaries so that students understand their role. This included good induction to the placement area at start of placement including:

- *Introductions – “knowing who is who helps you know who to speak to”*
- *Setting objectives – set by placement provider or by student*
- *Opportunity to discuss preferred learning styles*

## **Theme 3: Organisation of learning**

As can be seen under Theme 1, the organisation of learning was foremost in students' minds when they described good and poor clinical learning environments. This then covers the more structural elements of clinical placements. Some partners' had well defined and established organisation models for clinical learning for students. In Spain, this involved *practicums*:

*Clinical Academics referred to VERIFICA which is a source of the Ministry of Education in Spain that establishes the general and specific competencies for the PRACTICUMS (which is the period of time in which one student stays in one clinical environment towards achieving*

*the learning goals). The concept PRACTICUM connects the theoretical knowledge with the practice and is regulated for all the Health Professions in practice.*

The Finnish focus group which included academics, teachers and clinicians, had a positive view of the organisation of learning:

*The learning possibilities provided by the placement are diverse enough and according to the students goals. (Finland)*

In Poland there were also positive comments and a sense of a systematic and system approach to clinical placements and their role in the programme (physiotherapy):

- *all students are informed about the standards for practice in physiotherapy at university;*
- *placements can be chosen and suggested by students*

Polish academics and teachers in a focus group described the relationship between sites of learning as requiring:

- *detailed information about the facility, tutor assessment, facility assessment, personal agreement on the implementation of the placement,*

*recognition of the placement is based on the placement journal*

The British academics and teachers repeated that communication across sites of learning was essential. Good communication recognised as important for a good placement experience:

*any breakdown in communication is normally the reason for any problems on placement (UK)*

This communication rested upon:

*'educational agreements between HEI and placement providers (UK)'*

In Greece, participants did not refer to such organisation of learning:

*'the school secretariat is not involved in the rotation of placements, students need to arrange directly their presence times etc between clinics. They are being informed on their first day on where they have to go, no previous communication'. (Greece)*

In Finland, where physiotherapy is taught in English and therefore international students were accepted onto programmes, students emphasised the particular difficulties international students faced in clinical placement without prior knowledge of the organisation of the health:

*'Greater possibility for clinical experience in the home countries of international students ... international students might struggle with the system'*

*'In exchange there can be completely different tasks required than in your own university and it can be difficult for a student, requires organising' (Finland)*

Among British academics and teachers who participated in focus groups, the needs of international students were also emphasised. Students needed to be made aware of local culture, customs and practice:

*'... how to address people and how to be in the hospital environment'*

And international students needed to know the expectations of a student in that country:

*'...educators may have a very different understanding of learning...'*

#### **Theme 4: Quality assurance/regulation**

Again, while this theme has less data extracts, it is key to provision, audit and regulation both within countries and across the EU. All partners' data shows that there were evaluations of clinical placement either through students using the university evaluation systems (Greece) or in evaluation practices involving all stakeholders in learning:

*'evaluation tools used at each clinical setting by all the stakeholders in their learning process (the student, the mentor, the clinical adjunct teacher/professor)' (Physiotherapy), (Spain)*

Medical students emphasised that evaluation focused on students' learning and achievement not on the quality of the clinical placement:

*'Medical Students perceived differences depending on the specialty and pointed out that the evaluation tools (whether online or not) only give feedback about the Clinical placement'*

In the U.K., academics had mixed views some believed that there was good regulation by professional bodies although the ... *General Medical Council [was] not as explicit in role as the Health Care Professions Council (HCPC) and the Chartered Society of Physiotherapy (CSP).*

However they described quality assurance and regulation as contingent upon

*'Local quality processes [and] evaluation of placements and audit and Local practices' (UK)*

### **3.4 Overall key themes:**

- learning environment and cultures,
- educational governance and leadership/organisation values
- supporting learners/wellbeing
- outcomes/goal oriented learning

- supporting educators/team supervision
- developing and implementing curricula and assessments.
- High quality patient care and safety/best practice
- Sustainable workforce

### 3.5 Discussion

As found in the previous project (HEALINT) Spain has specific legislation around student training namely the "Spanish Royal Decree 1558/1986- Order of 31st July 1987" and the Spanish Royal Decree 529/2014 of 11th July. The VERIFICA Programme conducts assessment or proposed Programme degrees designed in agreement with the European Higher Education Area (EHEA). Organic Law 4/2007, of 12 April, which modifies Organic Law 6/2001, of 21 December, on Universities, establishes a new structure for Spanish university education and degrees in line with the targets set for building the European Higher Education Area. Royal Decree 1393/2007, of 29 October, lays down the organization of official university Programme degrees and establishes the legal framework for planning and verification of official undergraduate and graduate studies. This law establishes that degree programmes may be assessed by the Spanish Agency for Quality Assessment and Accreditation (ANECA) or other assessment bodies, that comply with the quality criteria and standards established by the European Higher Education Area. Such bodies will be required to pass an external screening authorising them to become full members of the European Association for Quality Assurance in Higher Education (ENQA) and entered in the European Quality Assurance Register (EQAR). The content of these specified information, such as what institutions needed to have in place to host student placements and some focus on academic practices of university students in general. In addition, the legal documents did not appear to specifically cover the topic of international student placements, but were aimed at setting standards for professional healthcare students more generally, e.g. ensuring that student nurses do not compromise patients' privacy.

Polish partners extracted 28 documents in the search of which only one pertained to Poland specifically: The Polish Chamber of Physiotherapists which functions under the legislation of the 'Act on the Profession of Physiotherapy'. This professional organisation advises the number of clinical hours (1560h), the scope of physiotherapeutic practices (assistant practice; practice in the field of kinesiotherapy, physical therapy and massage; practice in the field of clinical physiotherapy for children and adults, including the elderly; professional practice), number of ECTS points under the EHEA framework. It also details specific knowledge, skills and competences that students are to acquire for professional practice. This also does not specific international placements whilst studying physiotherapy nor the conditions of clinical placement support rather the range of specialisms to effectively practice.

Policy documents pertinent to Finland include VALVIRA the Finnish National Supervisory authority for Welfare and Health National licensing body for health and welfare professions, the National network of student guidance (2017) and World Physiotherapy Network WCPT World Confederation for Physical Therapy previously). VALVIRA asserts guidelines for professional practice" when arranging and accepting physiotherapy clinical practice carried out in another EU-country or "third" country under the auspices of the EU Directive 2005/36/EC for recognition of professional qualifications. Supervision and mentorship is specific to the profession (qualified physiotherapist) whilst other qualified personnel can participate in the guidance. A range of practice learning areas are identified as appropriate so long as the quality of clinical practice is always "goal-oriented, guided/mentored, and evaluated". In regards to international placement specific arrangements and requirements are expected: partnership and training agreements, approval processes based on an evaluation of suitability of practice, qualifications of the mentor(s) and eg language requirements. The National network of student guidance (2017) proposes a formal contract outlining tasks, duties and responsibilities between healthcare environment and higher education institutions and the use of quality monitoring such as the CLES-T evaluation tool.

World Physiotherapy (including the European region arm) is cited as a key international benchmark organisation supporting and guiding regional and national physiotherapy organisations. Examples of guidance includes the qualifications required for an education supervisor or mentor to be a "physical therapist"; "... practising in clinical placements sites" and " licensed /registered physical therapists or if licensure does not exist then clinical faculty must be a member of the professional organisation". Furthermore the governance requirements and expectations such as "A formal contract between the higher/tertiary institution and the clinical site should be established". With a "detailed list of expectations from clinical education co-ordinator and clinical education site instructors as well as from students" (section 2.2 to 2.4). Increasingly physiotherapy students are exposed to a diverse range of settings in response to the rapidly changing healthcare environment (CSP, 2020). Thus this offers flexibility but also challenges to assure quality. Since accruing placement hours and proficiencies is key it is suggested some non- clinical areas can offer valuable learning experiences (research, policy etc) this opens up possibilities with exchange opportunities (CSP, 2020).

The Greek partners cite three guidelines the key of which for medicine is 'Ministerial Decision' (2019): Education in the Medical Specialty of General Medicine which sets out the curricula for medical doctor training programmes (specialist and duration of education)/. This does not address clinical learning environment or supervision but rather pathological conditions and decision making processes. Three other papers were included which address research focussing on validation and adoption of evaluation tools measuring the clinical learning environment in Greece. These include: Postgraduate Hospital Educational Environment Measure (PHEEM) (Koutsogiannou, et al, 2015; (Karathanos et al, 2015) and clinical learning environment for undergraduate dental students (DECLI) (Kossioni, et al. 2013). They also collated a number of Greek university internship guidelines to address local arrangements (Universities of Patras, Thessaly, Western Macedonia, Epirus and Cyprus). Other internship guidance existed for differing allied health professionals from these universities also. Several research papers not specifically located within Greece also



address elements of placement to internship satisfaction namely students or trainer views, skills acquisition, learning opportunities, speciality exposure and achievement.

A range of professional body guidance exists for healthcare professionals within the United Kingdom (UK) which address curricula but not in the quality of the learning environment in a shared cohesive manner. Neither do any address specifically the quality of CLE on exchange or international placement nationally. Medical education guidance (undergraduate and post graduate) is addressed through General Medical Council (GMC, 2016a and b) guidance such that the CLE is 'safe for patients and supportive for learners and educators. The culture is caring, compassionate and provides a good standard of care' (GMC 2016a: 9). Health Education England (2017) commissioning body asserts a quality framework addressing indicators of a quality clinical learning environments against which providers are required to provide evidence (ibid: 9) which is across healthcare profession students. In the UK medical students term periods abroad as 'electives' in the clinical phase of the programme and are chosen and often arranged by an individual medical student. Other opportunities which may be present or 'exchanges' are mediated mainly by academics in many universities. GMC (2016) acknowledge the challenges to apply to student electives the requirements set out in Tomorrow's Doctors (2009) in relation to clinical placements thus electives are organised locally - follow legislation in host country and principles of practice set out in UK. Similarly Health and Care Professions Council (HCPC) (2017) published its Standards of Education and Training addressing quality indicators for clinical learning environments for its 15 regulated healthcare professionals but not specially addressing international placements or clinical learning periods however there is an expectation these UK guidelines do apply overseas (Council of Deans, 2017). The Chartered Society of Physiotherapists (CSP, 2020) offers guidance (not a framework) on insurance and support for placements outside clinical locations including overseas suggesting liability cover and the provision of a suitable supervisor but not specifically the quality for the learning environment. The HCPC (2020) advocate that all students must have an HCPC registered similar allied health professional as a named educator on each placement; the clinical/practice educator. The role of the clinical educator is the facilitation of learning opportunities via supporting the student through their placement and exposing the student to as much clinical experience as possible within their scope of practice (HCPC, 2019). In addition, the educator must be seen to be adaptable to the student's style of learning in order to progress knowledge and understanding for the duration of the placement (CSP, 2020). Internationally the US and Australian address clinical learning environment quality. Victoria Department of Health (2008) commissioned a review of best practice clinical learning environments resulting in the BPCLE framework which elicited six key elements that are the underpinnings of high quality clinical learning environments. These are generic across healthcare professions and address national needs and issues. In the US the 'CLER Pathways to Excellence' sets out the expectations for an optimal clinical learning environment which aims to achieve safe and high-quality patient care. This accreditation framework (ACGME, 2019) for medical education assures quality CLE within the US not outside eg. internships or electives however offers comprehensive approaches to supporting learning on an accredited clinical environment.

Several international and one European (EU) Directive provided support and guidance (Directive 2005/36/EC of the European Parliament and of the Council), focusses on

Recognition of Professional Qualifications applicable to EU nations. This standard sets out minimum training requirements for professional recognition across the EU however is not exclusive covering: doctors with basic medical training, general practitioners and doctors with medical specialisation, nurses responsible for general care, dental practitioners and dental specialists, veterinary surgeons, pharmacists and architects. The requirements for clinical learning environments do not feature. A further document identified by Spanish partners was Standards and Guidelines for Quality Assurance in the European Higher Education Area (ESG, 2015) which proposed guidelines of quality assurance for higher education programmes and learning environments across Europe. ESG (2015: 7) assert the principles of quality assurance if not specifically pertaining to any one disciplinary area 'quality assurance should ensure a learning environment in which the content of programmes, learning opportunities and facilities are fit for purpose'. These broad standards focus on Bologna and EHEA principles: qualifications frameworks, recognition and the promotion of the use of learning outcomes and was endorsed by the Bologna Follow-Up Group (BFUG) in September 2014 (SRWG, 2016). More relevant documents include the International Standards ISO 21001 pertaining to Management Systems for Education Organisations (competence, training, resources etc), ISO/FDIS 22956: Healthcare organization management — Requirements for patient-centred staffing (not yet complete), ISO 9001: Quality management systems focussing on broad areas of provision of training and mentoring however are not specifically healthcare professional related. Finally IWA 35: Quality Environments for students in healthcare professions addresses several areas of clinical learning environments emerging from the first HEALINT project around quality clinical learning for nurses and midwives. This however does provide a platform to expand to other professions and specially which areas need revising, updating or reformulating to ensure usefulness.

Research papers which were reviewed covered a range of topics including medical and physiotherapy students experiences, planning, satisfaction and supervision. The papers retrieved by the Middlesex team were largely survey studies focused on students' perceptions and experiences of the training experience, evaluation and evaluation tools such as: Dundee Ready Education Environment Measure (DREEM), Avenues Framework, Undergraduate Clinical Education Environment Measure (UCEEM), Manchester Clinical Placement Index (MCPI), D-RECT tool: physicians learning climate. Similarly, the Finnish team also retrieved studies focusing on the learners experience, such as evaluation and innovative varied learning 'spaces' For physiotherapy students there was wide spread use of CLES+T scales for international students' clinical learning environments. As in nursing this scale helps identify issues that may be impacting on the learning experience and supervision of international nursing students (Mikkonen et al 2017). However, as addressed in the earlier HEALINT project and within this paper the evaluation instruments are profession specific in the main and rely completion of placement reflection and evaluation retrospectively.

McAllistair et al (2018) point out that traditionally, measures of clinical placement quality have been either unidisciplinary (e.g. Saarikoski et al. 2008, Salamonson et al. 2011, Walters et al. 2011), or focused on a single stakeholder perspective: as examples, students (e.g., Dunn and Burnett 1995, Eley et al. 2015), junior medical staff (e.g., Boor et al. 2007), or supervisors (e.g., Sheils et al. 2016). Contemporary healthcare is increasingly acknowledges

the impact of inter-professional working and learning in improving the quality of patient care however no single quality monitoring tool for these environments appears to exist (Hills et al, 2019).

In conclusion, the desktop review has revealed that despite abundant standards, tools, guidance documents and legislation around the medical or allied health or healthcare professional student clinical learning experience and quality is country-specific not shared resources between countries. Moreover, each country relied on a mixture of legislative and guidance documents to inform how placements should be organised and managed. From the literature identified by the desktop review, the specific areas of international clinical placement, internships or exchanges for healthcare students given less attention, including within published research. A few are international (eg. Physiotherapy and occupational therapy) offering broad guidance. Moreover, apart from nursing and podiatry within one country, there was not one singular resource that was influential in setting standards for assessing placements. Each country relied on a mixture of legislative and guidance documents or post placement evaluation of satisfaction to inform how placements should be supported and managed. As emerged within the earlier HEALInt project audit tools were not widely used across Europe or internationally. There was evidence of them identified in Poland, but these were developed for a specific department within a particular institution, therefore limiting their use as general resources applicable internationally. In addition, from the literature identified by the desktop review, there exists broader generic standards (ISO 21001:2018 Educational organizations — Management systems for educational organizations) which usefully guide quality processes but do not specifically focus on the healthcare professions

## 4. Development of the audit protocol system

### 4.1 Aims:

The aim of the developing the protocol was to expand and build upon the original HEALInt mapping to the relevant benchmarks for medical and allied health students to support the quality assurance of the clinical learning environment. The main objectives of the protocol were as follows:

- To be part of an international quality audit system for medical and PAM/AHP institutions who want to exchange students which will map to national and international priorities and meet agreed requirements.

- To expand and offer an audit tool that auditors will take with them to placement sites to evaluate the clinical learning environment.
- To establish criteria for the selection of placements for trainees and enable a review of these placements.
- To have transversal and trans-national applicability across Europe and beyond.

## **4.2 Design meeting:**

The design workshop brought together all project partners for a one-day workshop-style meeting. During the meeting, design specifications for the protocol were established. The main considerations were to determine the relative importance of features, to group them logically and to identify omissions and duplications.

## **4.3 Authoring the protocol**

In authoring the protocol it emerged there was some similarity to the IWA 35: 2020 which developed from the original HEALInt protocol. This necessitated approaching the International Standards organisation (ISO) with a view to optimising the opportunity to revise and update the IWA 35: 2020 to ensure compatibility with wider healthcare professional students (medical and PAM/AHP). Communication through the official process is underway via the British sponsor (British Standards) to survey the healthcare community which reviewed the original IWA standard prior to ratification for support in reviewing and revising the standard for wider healthcare professions. This outcome of this is awaited.

## **4.4 Feasibility of Protocol- next stages**

The next stage is to finalise the protocol and to develop a digital interactive platform for European and national placements appraisal. It is intended to be an interactive audit tool, which can be used in situ via ipads etc, supported by access to a central database, which can be easily managed by a provider and suit multi-professions. This will be led by the Greek partner (University of Aristotelio Panepistimio Thessalonikis) (AUTH)

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## 6. Appendix

### 7.1 Professional guidance

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## Appendix 1: Data Extraction Grid (JBI format)

Data extraction

Selection of sources and evidence:



- a. Quality process – team (minimum of two people) then check using the following process
  - i. The team screens these using the eligibility criteria and definitions/elaboration document
  - ii. Team meets to discuss discrepancies and make modifications to the eligibility criteria and definitions/elaboration document

Data extraction & charting:

- b. Record data from sources on excel spreadsheet
- c. Member check across the team to validate the extracted data.

Data analysis: this is descriptive and in extension of the table in the excel spreadsheet focussing on *concepts, characteristics, populations*. Key areas are:

- d. Definitions of quality, CLE or clinical learning
- e. Tools to measure or evidence of the above (quality, learning etc)
- f. Documents/schedules

<b>Scoping Review Details</b>	
Scoping Review title:	<b>International mapping review of standards and requirements for clinical learning of students of medicine and PAMS /AHPs</b>
Review objective/s:	<ul style="list-style-type: none"> <li>• To scope and determine the regulators within the Uk and Europe with oversight and benchmarks for standards for clinical learning environments (support, position, opportunities, restrictions) across medicine and other healthcare practitioner students (AHPs/PAMs)</li> <li>• To elicit how medicine and AHP/PAMs students access and use clinical placements and the purpose and outcomes of clinical placement experiences and any quality monitoring</li> <li>• To elicit areas of uncertainty or lack of benchmark standards</li> </ul>

	<ul style="list-style-type: none"> <li>To compare and contrast benchmark standards in existence</li> </ul>
Review question/s:	<ul style="list-style-type: none"> <li>What standards or benchmarks exist to assure a quality clinical learning experience for students of medicine and allied healthcare profession?</li> <li>If present, are these profession specific or multi or cross-disciplinary and what process is used to determine the standards or benchmarks of a quality clinical learning experience?</li> </ul>
<b>Inclusion/Exclusion Criteria</b>	
Population	
Concept	
Context	
Types of evidence source	
<b>Evidence source Details and Characteristics</b>	
Citation details (e.g. author/s, date, title, journal, volume, issue, pages)	
Country	
Context	

Participants (details e.g. age/sex and number)	
<b>Details/Results extracted from source of evidence</b> (in relation to the concept of the scoping review)	
E.g. Placement access and use for education/learning (home and abroad)	
E.g. Presence and examples of quality indicators/statements/benchmarks	
E.g. details of any statements/tools used to determine quality in placement	
Eg. Operational aspects to benchmarks ie are they measured, reviewed, prospective or retrospective, student led or clinician/HEi led.	
Eg. Cases/examples/	

## Appendix 2: Clinical Learning Environment – Benchmark Frameworks, Research and Grey literature.

Key themes:

1. Partnerships, roles and responsibilities (governance and leadership)
2. Supervision, support and professionalism
3. Learning culture and opportunities
4. Physical environment and wellbeing
5. Evidence based and safe patient care
6. Resources and continual development

### A: Frameworks (Interprofessional or uni professional)

#### FRAME-WORKS

<b>GREECE</b>	Ministerial Decision	2019	Education in the Medical Specialty of General Medicine.	This document sets out specific curricula study areas and experiences required to graduate in the speciality of medicine.
<b>UK</b>	General Medical Council	2016a	Standards for postgraduate curricula and regulated credentials	<p>This document sets out our standards and requirements that will be applied to all postgraduate curricula* and credentials that must be approved by the GMC, including any changes or revisions. They may be applied to other learning, assessment frameworks or tests of competence and training approval processes where appropriate.</p> <p>These standards are to be used in conjunction with our Promoting excellence: standards for medical education and training. Together they provide an integrated standards framework for the</p>

approval and provision of postgraduate medical education and training.

<p><b>UK</b></p>	<p>General Medical Council (GMC)</p>	<p>2016b</p>	<p>Promoting excellence: standards for medical education and training (UG)</p>	<p>Specific ones of importance: S1.1 The learning environment is safe for patients and supportive for learners and educators. The culture is caring, compassionate and provides a good standard of care and experience for patients, carers and families. S1.2 The learning environment and organisational culture value and support education and training so that learners are able to demonstrate what is expected in Good medical practice and to achieve the learning outcomes required by their curriculum</p>
<p><b>UK</b></p>	<p>North West MMU/University of Health Education England (HEE)</p>	<p>ND</p>	<p>The North West Learning Environment Educational Audit/Multi prof - HCPC regs</p>	<p>The Learning Environment Educational Audit Standards are organised around Health Education England's Quality Framework with patient safety at the core. 1. Learning Environment and Culture. 2. Educational Governance. 5. Developing and Implementing Curricula and Assessments</p>
<p><b>UK</b></p>	<p>HEE Royal College of Midwives</p>		<p>HEE Quality Framework 2019-2020</p>	<p>Multiprofessional context with 6 quality domains:</p> <ol style="list-style-type: none"> <li>1. Learning environment and culture</li> <li>2. Educational governance and leadership</li> <li>3. Supporting and empowering learners</li> <li>4. Supporting and empowering educators</li> <li>5. Delivering curricula and assessments</li> <li>6. Developing a Sustainable Workforce</li> </ol> <p>Outlines partnership roles and responsibilities (placement providers, education providers and HEE) – essentially</p>

supervision, learning opportunities and support.

Evidence or markers of quality and adherence also indicated ie policies etc.

<https://www.rcm.org.uk/media/4909/hee-quality-framework2.pdf#:~:text=The%202019%2F20%20HEE%20Quality%20Framework%20isintended%20to%20be,quality%20of%20education%20and%20training%20for%20a%20healthcare%20learners.>

<b>EUROPE</b>	Europe Region World Physiotherapy	2018	AUDIT TOOLS – for use with the Quality Assurance Standards of Physiotherapy Practice and Delivery Adopted at the GM 2018	<p>Physiotherapists who offer clinical education opportunities for students provide an appropriate learning environment. Standard 20 Clinical Education of Students</p> <p>Physiotherapists who offer clinical education opportunities for students provide an appropriate learning environment</p> <p>Physiotherapists:</p> <ul style="list-style-type: none"> <li>• Work in partnership with Higher Education providers and clinical educators</li> <li>• Ensure that documentation is available detailing arrangements for placements</li> <li>• Provide information and preparation material for the students prior to the start of the placement</li> <li>• Create an atmosphere that is conducive to a positive learning experience</li> <li>• Agree learning goals at the start of the placement</li> </ul>
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- Provide feedback at agreed points throughout and at the end of the placement
- Evaluate the student's learning experience at the end of the placement
- Seek feedback from the student regarding their learning experience
- Respond to the student's evaluation of their learning experience

**Physiotherapy Service Managers:**

- Make provision for student placements in workforce planning
- Ensure that Physiotherapy students are supernumerary to the workforce
- Monitor the workload balance of any clinical educators to ensure that patient care is maintained
- Work with Higher Education providers to ensure that clinical educators are supported
- Respond to the student's evaluation of their learning experience where applicable

UK	Social Work England	2021	Qualifying education and training standards guidance	UK centric - No exchange but UK standards are: 2.1: Ensure that students spend at least 200 days (including up to 30 skills days) gaining different experiences and learning in practice settings 2.2: Provide practice learning opportunities that enable students to gain the knowledge and skills necessary to develop and meet the professional standards 2.3: Ensure that while on placements, students have appropriate induction, supervision, support, access to resources and a realistic workload 2.4: Ensure that on placements, students' responsibilities are appropriate
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				<p>for their stage of education and training</p> <p>2.5: Ensure that students undergo assessed preparation for direct practice to make sure they are safe to carry out practice learning in a service delivery setting</p> <p>2.6: Ensure that practice educators are on the register and that they have the relevant and current knowledge, skills and experience to support safe and effective learning</p> <p>2.7: Ensure that policies and processes, including for whistleblowing, are in place for students to challenge unsafe behaviours and cultures and organisational wrongdoing, and report concerns openly and safely without fear of adverse consequences</p>
<b>UK</b>	Health Education England	2017	HEE Quality Framework Handbook 2017-2018	<p>The Framework is based on six domains comprising 27 quality standards. These reflect the key components for quality in work-based placements for all learner groups. Enable HEE to identify high quality learning environments as well as identifying where quality is poor or declining. Learning environments and culture</p> <ul style="list-style-type: none"> <li>• Educational Governance and Leadership</li> <li>• Supporting and Empowering learners</li> <li>• Supporting and Empowering Educators</li> <li>• Delivering Curricula and Assessments</li> <li>• Developing a sustainable workforce</li> </ul>
<b>UK</b>	NHS Scotland	2017	Quality standards for practice placements	<p>Section 1 -Learners on Practice Placements</p> <p>Section 2 -Individuals Supporting Learners in the Workplace</p> <p>Section 3 -Managers and Facilitators Supporting Education in Practice</p> <p>Section 4 -Organisations Providing Practice Placements</p>



<b>UK</b>	Health and Care Professions Council (HCPC)	2017	Standards of Education and Training	16 health and social care professions (not social work). Standards and requirements for education and support. Section 5 is practice Based learning
				<p>5.1 Practice-based learning must be integral to the programme.</p> <p>5.2 The structure, duration and range of practice-based learning must support the achievement of the learning outcomes and the standards of proficiency.</p> <p>5.3 The education provider must maintain a thorough and effective system for approving and ensuring the quality of practice-based learning.</p> <p>5.4 Practice-based learning must take place in an environment that is safe and supportive for learners and service users.</p> <p>5.5 There must be an adequate number of appropriately qualified and experienced staff involved in practice-based learning.</p> <p>5.6 Practice educators must have relevant knowledge, skills and experience to support safe and effective learning and, unless other arrangements are appropriate, must be on the relevant part of the Register.</p> <p>5.7 Practice educators must undertake regular training which is appropriate to their role, learners' needs and the delivery of the learning outcomes of the programme.</p> <p>5.8 Learners and practice educators must have the information they need in a timely manner in order to be prepared for practice-based learning.</p>
<b>USA</b>	Accreditation Council for Graduate Medical Education	2019	Guidance & Criteria. CLER Evaluation Committee. CLER Pathways to Excellence: Expectations for an Optimal Clinical Learning Environment to	<p>Six Focus Areas for clinical learning environment: Patient Safety; Health Care Quality; Care Transitions; Supervision; Well-Being; and Professionalism. CLER site visit every 24 months (+/-6) to maintain accreditation</p> <p><a href="https://www.acgme.org/What-We-Do/Initiatives/Clinical-Learning-Environment-Review-CLER/">https://www.acgme.org/What-We-Do/Initiatives/Clinical-Learning-Environment-Review-CLER/</a></p>

	(AGCM E)		Achieve Safe and High-Quality Patient Care, Version 2.0.	
<b>AUSTRALIA</b>	Siggins Miller	2012	Promoting quality in clinical placements: literature review and national stakeholder consultation.	<p>Victorian Department of Health's Best Practice Clinical Learning Environments (BPCLE) was identified as an evidence-based, piloted, and evaluated framework suitable for adaptation to the Australian context. It features six elements: (1) organisational culture, (2) best-practice clinical practice, (3) a positive learning environment, (4) an effective health service-training provider relationship, (5) effective communication, and (6) appropriate resources and facilities</p> <p><a href="https://www.adea.com.au/wp-content/uploads/2013/08/Promoting-quality-in-clinical-placements-report-20130408.pdf">https://www.adea.com.au/wp-content/uploads/2013/08/Promoting-quality-in-clinical-placements-report-20130408.pdf</a></p>
<b>INTERNATIONAL</b>	World Federation of Occupational Therapists	2016	Minimum Standards for Education of Occupational Therapists..	<p>Standards document Internationally for approval of education of OTs</p> <p>Each student will complete sufficient hours of practice placements to ensure integration of theory to practice. A minimum of 1,000 hours is expected.</p> <p>Practice placements are of sufficient duration to allow integration of theory to practice</p> <p>To ensure a depth of learning, supervisor(s) and student(s) are encouraged to consider a range of tools to support the students to</p> <p>embrace how to practice in that specific environment. Practice placements are guided by learning objectives and supervised and assessed by an occupational therapist. There is no requirement for the supervisor to be on site. The practice and academic environments work collaboratively to</p>

				<p>ensure mutually beneficial and quality experiences for all involved.</p> <p>Online:  <a href="https://wfot.org/assets/resources/COPYRIGHTED-World-Federation-of-Occupational-Therapists-Minimum-Standards-for-the-Education-of-Occupational-Therapists-2016a.pdf">https://wfot.org/assets/resources/COPYRIGHTED-World-Federation-of-Occupational-Therapists-Minimum-Standards-for-the-Education-of-Occupational-Therapists-2016a.pdf</a></p>
<b>UK</b>	Royal College of Surgeons	2014	Postgraduate programme accreditation standards	<p>Guidelines:</p> <p>providing assurance that surgical education is developed and delivered to the standards expected by the Royal College of Surgeons of England; » ensuring that the content of any educational provision is evidence-based, up-to-date and is relevant to its target audience and the development of competent surgeons; » ensuring that any educational provision is well constructed, free from bias, and has appropriate evaluation to ensure constructive improvement; » ensuring that the infrastructure and supporting frameworks around any educational provision are of the highest quality</p>
<b>UK</b>	The Academy of Royal Colleges Foundation Training in the UK	2019	Guide for Foundation Training in the UK	<p>Supervisor Governance 2.54 Healthcare organisations that provide training placements should explicitly recognise that supervised training is a core responsibility,</p> <p>The commissioning arrangements and educational contracts developed between HEE, NES, HEIW or NIMDTA and educational providers should be based on these principles, and should apply to all healthcare organisations that are commissioned to provide postgraduate medical education. 2.55 have the required knowledge, skills and behaviours.</p>
<b>INTERNATIONAL</b>	World Physiotherapy	2011	Clinical education component of physical therapist	<p>Section 2 Guideline. 2.1 "A formal contract between the higher/tertiary institution and the clinical site should be established". Paragraph 2.1 also states what the</p>

professional entry level education,

contract should include. A detailed list of expectations from clinical education co-ordinator and clinical education site instructors as well as from students are presented in paragraph 2.2 and 2.3 and 2.4

<https://world.physio/sites/default/files/2020-06/G-2011-Clinical-education.pdf>

<b>FINLAND</b>	Network of Health Care education in Finnish Universities of Applied Sciences.	2020.	Quality recommendations for health care clinical practice for Universities of Applied Sciences .	<p>Clinical practice abroad is allowed if the below mentioned conditions are fulfilled: Guided/mentored by a qualified physiotherapist . “Other qualified personnel can participate in the guidance” Location: in hospitals, care-giving organisations or in other units Quality of clinical practice : It is always “ goal-oriented, guided/mentored, and evaluated” There are prospective benchmarks which related to Practical Training agreements is a student-led process ( variety exists in Finland regarding the procedure): The degree programme approves /disapproves the international placement based on an evaluation if the aims for the practice are achievable in the organisation ; if the mentor(s) is/are properly qualified/licensed and eg the presence/absence of a common language of communication between university representative and clinical</p> <p><a href="https://amkterveysala.wordpress.com/harjoittelun-laatusuositukset/">https://amkterveysala.wordpress.com/harjoittelun-laatusuositukset/</a></p>
<b>FINLAND</b>	National network of student guidance.	2017.	Quality recommendations for student guidance.	<p>National Guidance:</p> <p>A formal contract between the higher/tertiary institution and the clinical site should be established. CLES + T-tool is used</p> <p><a href="https://www.satasairaala.fi/ammattilaisille/oppetussairaala/sosiaali-ja-terveysalan-opiskelijat">https://www.satasairaala.fi/ammattilaisille/oppetussairaala/sosiaali-ja-terveysalan-opiskelijat</a></p>

<b>INTERAN TIONAL</b>	IWA 35	2020	Quality Environments for students in healthcare professions	<p>Requirements for healthcare education providers in care settings.</p> <ul style="list-style-type: none"> <li>• Governance (risk, policies, organisation culture)</li> <li>• Resources (human and physical)</li> <li>• Planning and control (partnership, learning environment, assessing, recognition etc).</li> </ul>
<b>INTERNA TIONAL</b>	ISO 9001:	2008	Quality management systems — Requirements	<p>The organization shall:</p> <p>a) determine the necessary competence of person(s) doing work under its control that affects the performance and effectiveness of the quality management system;</p> <p>b) ensure that these persons are competent on the basis of appropriate education, training, or experience;</p> <p>c) where applicable, take actions to acquire the necessary competence, and evaluate the effectiveness of the actions taken;</p> <p>d) retain appropriate documented information as evidence of competence.</p> <p>NOTE Applicable actions can include, for example, the provision of training to, the mentoring of, or the reassignment of currently employed persons; or the hiring or contracting of competent person</p>
	ISO 21001:	2018	Educational organizations — Management systems for educational organizations — Requirements with guidance for use	<p>Section 7.1 contains requirements regarding resources facilities and learning environment.</p> <p>Section 7.2 and 7.3 contain requirements for competence and awareness that are applicable to apprentices/interns/trainees</p>

				<p>Sections 7.4 and 7.5 contain requirements related with communication and documentation.</p> <p>Section 8 contains requirements that apply to all phases of the learning process, from curricula design to assessment of learning, and includes workbased learning, such as what it is done during apprenticeships/traineeships/internships.</p> <p>Sections 9 and 10 contain requirements related with monitoring, evaluation and continual improvement.</p>
<b>RESEARCH</b>				
<b>GREECE</b>	<p>University of Western Macedonia, Cyprus University of Technology, TEI Of Epirus, University of Thessaly, University of Patras</p>	<p>2016-2020</p>	<p>University Curriculum guides to practice placements</p>	<p>Physiotherapy, midwifery, speech and language therapy, occupational therapy, anaesthesiology.</p> <p>Nor framework but examples of placements and of learning to be achieved.</p>
<b>AUSTRALIA</b>	<p>Victoria Department of Health/ Darcy Associates</p>	<p>2008 revised 2013</p>	<p>The Best Practice Clinical Learning Environment Framework Quality (BPCLE) Clinical Education in Victoria</p>	<p>BPCLE - six elements: an organisational culture that values learning, best -practice clinical practice, a positive learning environment, an effective health service-education provider relationship, effective communication processes, and appropriate resources and facilities.</p> <p>Available from</p>

<https://www.bpcletool.net.au/bpcle-framework/>

<p><b>AUSTRALIA</b></p>	<p>McAllister. L., Nagarajan. S., Scott. L., Smith. L., Thomson. K</p>	<p>Developing Measures of Placement Quality in Allied Health, Dentistry, Medicine, and Pharmacy.</p>	<p>Best Practice Clinical Learning Environment (BPCLE) framework  (Darcy Associates 2013), which includes six elements: an organisational culture that values learning, best -practice clinical practice, a positive learning environment, an effective health service- education provider relationship, effective communication processes, and appropriate resources and facilities.  International Journal of Practice-based Learning in Health and Social Care Vol. 6 No 2 pages 31-47</p>
	<p>Joanna Beveridge, Duncan Pentland</p>	<p>2020  A mapping review of models of practice education in allied health and social care professions</p>	<p>Review of lit: Introduction: Practice education is fundamental to pre-registration learning for many health and social care professions, yet finding sufficient opportunities for students is challenging. One-to-one student–educator pairings are common, and while different models could increase placement opportunities, the associated terminology is inconsistent and an overview of advantages, challenges and available evidence is missing. This mapping review identifies, categorises and critically considers the evidence for different models of practice education used by health and social care professions.</p>
<p><b>NETHERLANDS</b></p>	<p>Silkens, Milou E. W. M.;Smirnova,Alina; Stalmeijer, Renee</p>	<p>2016  Revisiting the D-RECT tool: Validation of an instrument measuring residents' learning climate</p>	<p>Dutch Residency Educational Climate Test (D-RECT)  In total, 2306 evaluations and 291 departments were included. Exploratory factor analysis showed a 9-factor structure containing 35 items: teamwork, role of specialty tutor, coaching and assessment,</p>

	E.;Arah, Onyebu chi A.;Scherpbier, Albert J. J. A.;Van Der Vleuten, Cees P. M.;Lombarts, Kiki M. J. M. H.		perceptions. Medical Teacher	formal education, resident peer collaboration, work is adapted to residents' competence, patient sign-out, educational atmosphere, and accessibility of supervisors.
<b>UK</b>	Price, N. Hopwood, N. Pierce. V	2000	Auditing the clinical placement experience.	An audit process was developed to enable the evaluation of clinical education in undergraduate radiography. The audit tools were designed to evaluate the delivery of clinical education against identified standards and criteria that evolved from a framework of generic quality measures. Tools were developed to: evaluate and monitor students' experience and satisfaction with the clinical education component of the course; ii. evaluate and monitor the clinical staffs' satisfaction with the clinical education component of the course ;iii. update the information held about clinical sites. Radiography. 6 (3) 151 - 159
<b>UK</b>	Wiskin, C. Barrett. M., Fruhstorfer. B., Schmid. M. L.	2017	Recommendations for undergraduate medical electives: a UK consensus statement.	Approval for optimising learning, not Quality assurance framework
<b>USA</b>	Thrush, Carol R.;Spollen,John J.;Tariq, Sara	2011	Evidence for validity of a survey to measure the learning environment for	Validating an instrument to identify clinical learning environments for professionalism that represent either best practices or areas in need of improvement, assess the impact of professionalism initiatives, and help satisfy accreditation requirement.



	G.; Williams, D. K.; Jeaquette M. Shorey		professionalism. Medical teacher	Learning environment for professionalism (LEP) survey
<b>USA</b>	Betsy B. Kennedy, Regina G. Russell, William Martinez, Catherine Isabelle Gigante, Cody H. Penrod, Jesse M. Ehrenfeld, Kimberly N. Vinson, Rebecca Swan, Mavis N. Schorn, Donald W. Brady, Bonnie Miller	2019	Development of an interprofessional clinical learning environment report card. (Medical students)	Interprofessional Clinical Learning Environment Report Card (I-CLERC) at one U.S. academic medical center. The I-CLERC offers a process and a product for institutionalizing a shared assessment tool to inform improvement efforts, track progress and promote accountability. In addition, it enhances interprofessional collaboration, with students and faculty from both nursing and medicine working together to define excellence, monitor performance, and identify areas for improvement in the shared clinical learning environment. Evaluation of the shared clinical learning environment (nursing & medic)
<b>UK</b>	Miles S., Swift. L., Leinster. S.	2012	The Dundee Ready Education Environment Measure (DREEM): A review of its adoption	Some indicators but student questionnaire mostly: perception of Learning (PoA), Academic Self- Perception (ASP), Perception of learning (PoL) and Social Self-perception (SSP) Perception of Teaching (PoT)

and use.

<b>IRELAND</b>	Caroline Hills, Duana Quigley, Annemarie E. Bennett, Fiona Haughey, Sinead McMahon	2019	Core indicators of quality in practice education placements in allied health and social care professions: a scoping review protocol.	Scoping view of CLE quality frameworks for AHPs
<b>SWEDEN</b>	Strand. O., Sjöborg. K., Stalmeijer. R., Wichmann-Hansen. G., Jakobsson. U., Edgren. G.	2013	Development and psychometric evaluation of the Undergraduate Clinical Education Environment Measure (UCEEM).	develop and psychometrically evaluate an instrument to measure how undergraduate medical students perceive the clinical workplace environment, based on workplace learning theories
<b>GREECE</b>	P. Koutsogiannou, I.D.K. Dimoliatis, D. Mavridis, S. Bellos, V. Karathanos, E. Jelastopulu	2015	Validation of the Postgraduate Hospital Educational Environment Measure (PHEEM) in a sample of 731 Greek residents	Evaluation questionnaire to doctors for measuring the quality of medical residency programs.

<b>GREECE</b>	A. E. Kossioni, G. Lyrakos, I. Ntinalexi, R. Varela, I. Economou	2013	The development and validation of a questionnaire to measure the clinical learning environment for undergraduate dental students (DECLEI)	Evaluation questionnaire. The final instrument included 24 items divided into three subscales: (i) organisation and learning opportunities, (ii) professionalism and communication and (iii) satisfaction and commitment to the dental studies.
<b>SAUDI ARABIA</b>	Alhaqwi, A.I., van der Molen, H. T., Schmidt, H. G., Magzoub, M.E.	2010	Determinants of effective clinical learning: a student and teacher perspective in Saudi Arabia.	Students identified five main themes of factors perceived to affect their clinical learning: (1) the provision of authentic clinical learning experiences, (2) good organization of the clinical sessions, (3) issues related to clinical cases, (4) good supervision and (5) students' own learning skills. These themes were further subdivided into 18 sub-themes. Teachers identified three principal themes: (1) organizational issues, (2) appropriate supervision and (3) providing authentic experiences.
<b>CANADA, SWEDEN, USA</b>	Jonas Nordquist, Jena Hall, Kelly Caverza, Linda Snelle, Ming-Ka Chan, Brent Thoma, Saleem Razack, and Ingrid Philibert	2019	Clinical learning environment - Avenues framework	Lit Review & Theorising: Areas (from lit) appear to be: Architectural Digital Diversity and Inclusion Education and Measurement Psychological Socio-cultural Public Trust Concerns

**B. International Standards Frameworks of relevance:**

<p>IWA 35 (QUALITY OF LEARNING ENVIRONMENTS FOR STUDENTS IN HEALTHCARE PROFESSIONS)</p>	<p>ISO 9001:2008 QUALITY MANAGEMENT SYSTEMS — REQUIREMENTS</p>	<p>ISO 21001:2018 EDUCATIONAL ORGANIZATIONS — MANAGEMENT SYSTEMS FOR EDUCATIONAL ORGANIZATIONS — REQUIREMENTS WITH GUIDANCE FOR USE</p>	<p>ISO/FDIS 22956 HEALTHCARE ORGANIZATION MANAGEMENT — REQUIREMENTS FOR PATIENT-CENTRED STAFFING</p>
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<p><b>GOVERNANCE (CULTURE, POLICY, LEGAL REQUIREMENTS, RISK MANAGEMENT, NON CONFORMITIES AND INCIDENTS, DOCUMENTATION)</b></p>	<p>Competence/awareness to apprentices/interns (Assessment)</p>	<p>Governance, Leadership, strategy.</p>	<p>Competence requirements/components of interns/apprentices</p>
<p><b>RESOURCES (HUMAN, FINANCIAL, INFRASTRUCTURE,</b></p>	<p>Resources: documentation of means/processes for educational opportunities</p>	<p>Learning process/support</p>	<p>Supervision, learning process, mentoring, coaching</p>
<p><b>PLANNING AND CONTROL (PARTNERSHIPS, LEARNING ENVIRONMENT, SUPERVISION/ALLOCATION, ASSESSMENT OF LEARNING,</b></p>	<p>monitoring and evaluation/ongoing development (intern)</p>		
		<p>Learning journey, process and participants within.</p>	



### **About the HEALINT4ALL Project and this publication**

Quality assured clinical learning environments, including evidence shared across boundaries, will support a globally prepared Medical and Allied Health Professionals (AHP) international workforce to transfer skills and practice to enhance patient treatment.

HEALINT4ALL provides Medical and AHP educators, clinician and students an audit system to assure and determine quality of EU clinical learning environments. Students can be confident that they will obtain an increased number and varied safe learning placements through extensive partnerships whilst fostering inclusivity. This project additionally contributes to global citizenship, professional health and well-being through promoting optimal standards and best practice.

This publication summarises and presents project progress around completion of the first output (IO1).



Co-funded by the  
Erasmus+ Programme  
of the European Union