

**M**edical  
**E****D**ucation  
**I****N** 2  
**E**urope

# **MEDICAL EDUCATION IN EUROPE 2**

Progress Report

Public Part

## Project information

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## Executive Summary

This is the public section of the Interim Progress Report for the MEDINE2 Erasmus Academic Network for Medical Education in Europe (2009-2012). It is intended for wide dissemination to the public and other interested parties. It will be placed on the project website ([www.medine2.com](http://www.medine2.com)) and be published by the EACEA.

The MEDINE2 Network comprises 92 medical schools and other associations involved with medical education. It builds on the work of the MEDINE Network, 2004-2007. First class education and training of medical doctors is critical to physical health, well-being, productivity and social cohesion in Europe. Mobility of medical students and doctors in Europe is relatively low, despite legislation designed to assist this. Particular issues affect mobility of medical students - inconsistency in medical education programmes, limited transparency and comparability of qualifications and incomplete application of the Bologna principles in medical education.

To respond to the changing needs of European society, medical education must be modernised and harmonised. Learning providers must know about recent developments in the field and increase cooperation between institutions. Medical research is essential for European competitiveness, sustainable economic growth, creativity and innovation, and technology transfer. Educational aspects of medical research are important to ensure that it is of high quality, effective, and accessible. The Network is therefore addressing a range of relevant issues.

**Mobility** – The Network is developing new products to assist with the teaching and learning of medical language to help overcome this barrier to mobility. A toolkit of information and resources is being developed to promote student mobility through the recognition and application of the ECTS credit transfer system in medicine.

**Comparability of Qualifications** – the successful work of the Tuning (medicine) task force of MEDINE ([www.tuning-medicine.com](http://www.tuning-medicine.com)) is being extended to develop core learning outcomes for 1<sup>st</sup> cycle medical degrees. A toolkit is being developed to allow medical schools to harmonise their teaching programmes by self-evaluating their teaching and assessment of the Tuning (medicine) graduate outcomes.

**Modern Curriculum Trends** – these are being investigated and promoted across Europe as an aid to curriculum development. Also, the ways in which the principles and practice enshrined in the Bologna Process apply to medical education are being explored as a tool for the enhancement of medical education across Europe.

**Medical/Biomedical Research** – a new online community for those interested in research in the context of medical education is studying the relationship between the education of medical doctors and medical/biomedical research. Tuning methodology is being used to develop learning outcomes for 3<sup>rd</sup> cycle Doctoral medical degrees.

The project website ([www.medine2.com](http://www.medine2.com)) holds information and communication tools for project participants and others, and links to other relevant sites.

Through these activities, the network aims to increase the consistency, transparency, quality and overall standing of medical education in Europe. This will enhance the confidence of employers, patients and society in the doctors who serve them; enhance the safety, health and productivity of patients across Europe; lead to a more satisfied medical workforce; and promote equality of access to good medical education and top-class medical care.

Table of Contents

|   |           |
|---|-----------|
| <b>1. PROJECT OBJECTIVES.....</b>             | <b>5</b>  |
| <b>2. PROJECT APPROACH.....</b>               | <b>7</b>  |
| <b>3. PROJECT OUTCOMES &amp; RESULTS.....</b> | <b>9</b>  |
| <b>4. PARTNERSHIPS .....</b>                  | <b>11</b> |
| <b>5. PLANS FOR THE FUTURE.....</b>           | <b>13</b> |
| <b>6. CONTRIBUTION TO EU POLICIES .....</b>   | <b>14</b> |

# 1. Project Objectives

The central aim of the MEDINE2 network is to promote the cause of excellence in medical education in Europe, by creating a community of practice for medical educators and associated authorities, with the ultimate aim of improving standards of health care delivered to patients by medical doctors. The MEDINE2 network has as its primary focus, undergraduate medical education, but is also addressing issues related to postgraduate study and research. It aims particularly to promote mobility of students and staff, to create a system of easily readable and comparable degrees in medical education which are based on the Bologna three cycle model, and to promote curriculum development and sharing of best practice. The network is approaching this task in a variety of ways.

MEDINE2 is applying the methodology of the Tuning Project to the Bologna three cycle degree model in medicine. This work is part of three of the project work packages. WP4 aims to generate an agreed set of learning outcomes/competences for first cycle Bachelor degrees in medicine. WP3 is producing a Tuning Toolkit so that medical schools can evaluate their learning outcomes against the existing Tuning framework for second cycle degrees ([www.tuning-medicine.com](http://www.tuning-medicine.com)). WP7 is examining third cycle, Doctoral medical degrees and how these can be harmonised using the Tuning methods.

The network is seeking to promote mobility of medical students and practitioners through the use of a credit transfer system (ECTS) and other instruments. Within the network, WP2 is promoting the ECTS system and producing materials that will assist students, academics and administrators to understand how the system works and how it can be implemented. The goal of this WP is to have ECTS implemented in at least 70% of medical faculties in the EU by 2012 and to increase student mobility by at least 10% within this period.

One of the barriers to mobility of medical students and practitioners is the use and knowledge of medical language. WP1 of the MEDINE2 network is developing an online medical language learning resource to help overcome this problem. It is gathering, referencing and packaging materials to assist with medical language learning in English, French, Spanish and German, with a view to presenting these in an online resource which can be easily accessed. Medical students and doctors wishing to study or work in other European countries, medical schools participating in exchanges and/or providing language training, and national/European student and doctor organisations will be able to access these resources.

MEDINE2 is promoting European co-operation in curriculum development in two work packages. WP5 is reviewing the curriculum trends in medical schools in the 21<sup>st</sup> Century and looking at how schools are addressing emergent themes. Many emergent themes in medical education are supported by national and European directives, such as Bologna, but concern has been raised about how these directives will fit into modern curricula. WP5 is searching to find the current position, aspirations and actions of European medical schools in relation to the current trends and emergent themes. WP6 specifically looks at the integration of the Bologna Process within medical schools in Bologna countries. The Bologna Process raises some issues for medical education, especially in relation to the proposal for a three cycle degree model. Those opposed to the implementation of Bologna believe this would

be a step backwards for curricula that have tried to integrate basic and clinical sciences in their teaching programmes. It is felt that there is a lack of clarity regarding the implications of the Bologna Process for medical education. Therefore, WP5 is gathering information on the state of the adoption of the Bologna Process in medical schools and how this can be integrated with desirable curriculum developments and the current trends and emergent themes.

The network is also investigating the integration of research in European medical education. Teaching and research provide the basis for evidence-based learning throughout the curriculum and are the foundation for life-long learning across the European Higher Education Area. However, the symbiosis between teaching and research is often not well translated in medical education as research is not well integrated into the learning goals of future medical doctors. WP7 are clarifying and promoting the integration of research in the medical curriculum, stimulating innovation through the enforcement of the links between medical education, research and industry and increasing medical students' motivation for research by providing a framework for research training.

Within the context of European medical education, we aim to foster creativity and innovation by creating a new community of practice for European medical educators, bringing them together to review and discuss emergent themes, and facilitating collaboration in new projects and developments through face-to-face and on-line interactions. The MEDINE2 network includes 92 organisations from across Europe including representatives of the students and professional bodies, who are involved in the work described here in a variety of ways. These individuals also form part of the target user group and so their involvement in the project should help to ensure their active participation and uptake of the outcomes and results of this network.

## 2. Project Approach

As a network with a large number of partners, MEDINE2 carried out an initial survey of partner organisations to determine which WP contained their main area of interest in the project. This allowed the partners to be organised into work package teams, to facilitate collaboration among groups interested in each subject area.

The project website is a key communication tool for the project; all project partners have access to the Members Area for the purpose of sharing documents, having discussions and following project activities. Each individual in the project is able to 'tag' subject areas of interest so that they are kept updated, and this is specifically used for WP communication. By entering information on the website and tagging it appropriately, an update email is sent out to all those who follow the tags.

Each work package team met initially at the General Partners Meeting in May 2010 to set out their work plans and decide on how deliverables should be progressed. This first meeting was followed up by individual WP meetings in the second half of 2010. These meetings allow active discussion and work towards the achievement of the deliverables of each work package.

A number of the work packages are developing surveys as part of their work plans. The details of these are given below:

WP2 – A survey is being developed to gauge the current state and the evolution of European medical mobility. This survey will be delivered via an online survey tool, and will be carried out twice to see how these issues progress throughout the lifetime of the project. The results of this survey will be registered in a continually up-dated interactive database through the project website so that trends over time can be identified.

WP3 – This work package is developing a toolkit to assist medical schools to carry out self evaluation of their teaching and learning provision in relation to the Tuning (medicine) second-cycle outcomes. This includes a survey to help with the self evaluation, in conjunction with supplementary materials to explain the process.

WP4 – A survey is being designed to rank the importance of learning outcomes for first cycle degree programmes. Medical teachers will be asked what a medical student who has completed three years of medical school should be able to do, in order to define what the learning outcomes for a first cycle degree should be. The survey will again be delivered via an online survey tool and the results will be subjected to detailed statistical analysis to inform the decisions of a consensus conference and final report.

WP5 – This work package has identified those curricular trends in medicine that have been suggested through various consultations. They are now preparing a survey asking students, teachers and other stakeholders to examine each of these trends and rate its perceived importance, the current position of their medical school, and the position they would like to arrive at over the next 3-5 years. The results of this online survey will be analysed and placed on the project website for public access.

WP6 – A survey has been prepared to ask medical schools about their current position with regard to the implementation of the Bologna Process. This online survey will build on previous work, and the results will be widely distributed both on the project website and through other networks such as AMEE.

WP7 – This work package is developing an online survey to identify level 1 and 2 learning outcomes for medical graduates undertaking a third cycle (doctoral) research degree. This will be linked with the work of WP 3 and 4. The results will be statistically analysed and will be published in a brochure and on the project website.

The dissemination and exploitation of results and outcomes from the MEDINE2 project is an important task. The project website is one of the main tools for these tasks and already contains a number of resources. All project partners have signed up to the 'Members Area' of the website and so receive regular email updates from the project and its various work packages. The project has produced biannual newsletters which have been placed onto the website and emailed out to participants to update them on relevant activities and ways in which they can become involved. The project organises a variety of meetings for project partners to attend. These are advertised on the website, with relevant documents such as agendas being added for information. The next planned project meeting is the General Partners Meeting in May 2011 which will take place in Budapest. Each partner is invited to send a representative to this meeting. Work packages have held their first yearly meetings in 2010 and will be planning their next round of meetings in 2011. These dissemination activities help to involve partners in the project tasks and inform them of how work is progressing, as well as spreading the news of the network to a wider audience. As products and outputs become available they are reported on the website, in newsletters, presentations at events and through a variety of publications. These activities contribute to the sustainability of the project results to ensure that they are widely available and can form the basis of future work.

### 3. Project Outcomes & Results

As this is the interim progress report for the project, there are few finalised results and reports. There has however been a large amount of activity in the project, and a number of the results are nearing completion. Details of these are given below.

#### Events

There have been a number of events held for the MEDINE2 project so far. The main event was the General Partners Meeting in May 2010 at the Royal College of Physicians in Edinburgh, organised by the coordinating office. This meeting was the first opportunity for all project partners to come together and discuss the work plan and to decide how best to deal with the task in hand. A total of 66 partner organisations were represented by 96 delegates at the meeting. Additionally, the coordinating office has organised 3 Executive Board meetings to discuss the process of the project activities and ensure that quality assurance of work takes place. All the developmental work packages from 1 to 7 have organised an independent work package meeting to discuss their own work plans in more detail and to carry out activities.

Some of the work packages have also held events as part of their activities:

- WP2: Have held the first of their annual meetings regarding ECTS MA and mobility and are currently planning their second meeting for May 2011.
- WP4: Have held a Tuning Outcomes drafting workshop to generate a first draft of the 1<sup>st</sup> cycle learning outcomes framework.
- WP5: 130 people attended a Symposium on Curriculum Trends as part of the AMEE 2010 conference in Glasgow in September 2010. The work package team are currently organising their next seminar as part of AMEE 2011.

#### Products

A number of the products from the network are in the final stages of development and will be delivered in the coming months. Many of these products will be delivered online, with the gateway to the product being the project website ([www.medine2.com](http://www.medine2.com)). The project website in itself is one of the first products to come from the network, and although it is currently working well and contains large amounts of information, it will change over the coming months to highlight and disseminate the products of other work packages.

WP1 are developing an online learning and teaching resource for medical language training. The work package team are constructing a database of medical vocabulary and terms in different languages which will be delivered online to include graphics, audio files and text. This will allow students and language teachers to visit the site to hear and see medical language and to also download information as a learning resource. This resource is currently being developed and will be integrated to the main project website.

WP2 will also be developing a section of the website to provide information about the ECTS system for mobility in Europe as it relates to medical education. This will deal

with how the ECTS system works and will promote the mobility of medical students and practitioners. A template for this section of the website is currently available and the work package team are now working to build up the other information and publicity materials for the site.

A number of online surveys are being produced by the network, and these will all also be delivered through the MEDINE2 website. WP3 and 4 will shortly be executing online surveys relating to Tuning. The survey from WP3 will allow medical schools to think about how they are developing their curriculum in relation to the Tuning guidelines developed for 2<sup>nd</sup> cycle degrees. Meanwhile, the survey from WP4 will ask medical schools about the skills and competencies their medical students would be expected to have after the first 3 years of medical school (1<sup>st</sup> cycle learning outcomes). Additionally, WP6 will ask medical schools further questions with regard to the Bologna Process and the stage of implementation of this in their organisation. The final questionnaire which is nearing completion at the moment is the one being carried out by WP5 with regard to current curriculum trends, and how important each one is perceived to be now and in the coming years.

In addition to these items, other products nearing completion are:

- An expanded guide to the existing Tuning (medicine) second cycle learning outcomes, together with supplementary materials to assist medical schools in incorporating these into their teaching and assessment programmes.
- Posters to publicise the ECTS system for medical education
- Posters to promote research and teaching linkages from WP7
- WP2 has completed two group visits to Ljubljana and Berlin to discuss mobility opportunities and the use of the ECTS system.

## 4. Partnerships

The MEDINE2 network has 92 partners across a wide geographic area and so partnership working is vital to ensure the project progresses. The project consortium is of a high quality, with good leadership in the work packages and an effective governance structure in place.



Medical education is very diverse in terms of its structure, duration, nomenclature, content and educational philosophy throughout the countries of Europe, as it is generally treated as a national issue by member states. Therefore, the fact that MEDINE2 has partners from 31 different European countries is extremely important in order to gain a valuable insight into the issues across the whole geographic area. Member states have implemented the Bologna Process to varying degrees, and this has led to further divergence in medical education and training programmes. While some degree of diversity is justifiable, the societal expectations of medical doctors, the requirements of medical practice, and the needs of healthcare employers are similar across Europe. Despite this divergence, there has been a clear desire among European medical schools and other relevant bodies to work together towards harmonisation, standardisation and enhanced quality of medical education and training, shown through the work of MEDINE1 and the Tuning (medicine) project. The active involvement of the MEDINE2 project partners in the work on student mobility, Tuning, curriculum trends and the Bologna Process creates a cohesive, European wide approach to addressing these issues. The work of the project is relevant and applicable in all European countries (and will have relevance outside of Europe). As such there will be clear benefits in terms of a better educated and more consistently competent medical workforce. The geographical coverage of the partnership will also ensure that the work on mobility and medical language effectively addresses cultural and linguistic issues.

A key partner in the network is the Association for Medical Education in Europe (AMEE). AMEE is a worldwide organisation with members in 90 countries on five continents, including educators, researchers, administrators, curriculum developers, assessors and students in medicine and healthcare professions. The annual AMEE conference attracts over 2000 delegates. They deliver courses for teachers and produce the journal "Medical Teacher" amongst other resources. The link between AMEE and MEDINE2 will be vital to the sustainability of the network and will ensure that project results are well disseminated.

The European Medical Students' Association (EMSA) is also a key partner in the network, in order to establish good links with European student organisations and bodies. EMSA currently has active faculty member organizations in 24 countries throughout Europe. EMSA also has a regional European partnership with IFMSA (International Federation of Medical Students Associations) and has formed a student team with them to participate in MEDINE2 activities. This student team has been represented at MEDINE2 meetings and has fed information to the student associations about the work of the network. They will be holding a joint student workshop in 2011 on the MEDINE2 project and the Bologna Process.

## 5. Plans for the Future

MEDINE2 is at the half way point of the project and plans for the next period are well advanced. The work package teams will meet at the upcoming General Partners Meeting in May 2011 and will focus on the tasks required to complete the deliverables.

The work of WP1 on MEDINElingua will continue to develop the vocabulary and resources to place online as part of the learning and teaching resource. Once this is established online, there will also be the opportunity for users of the resource to provide feedback on what has been provided and how it could be improved. Therefore, there will be improvements to the resource throughout the project lifetime.

WP2 will continue their work to develop an online resource to publicise the ECTS system and promote mobility for medical students and practitioners. The addition of the feedback questionnaire to accompany the online resource will mean that it can be fine tuned as time progresses.

WP 3 and 4, which both address aspects of the Tuning (medicine) process, are about to launch their Tuning opinion surveys through the Project website. They are on track to establish consensus on the use of learning outcomes for medical degrees, and promote their application in the interests of harmonisation.

The survey regarding curriculum trends (WP5) will be launched online in the forthcoming weeks. This survey will be made available in English, German, Spanish and French and will gather views on current and future curriculum trends in medical education. A follow-up questionnaire asking for more information on the trends will help identify barriers of facilitators of change.

WP6 will soon be delivering the online survey regarding the Bologna Process and its implementation in European medical schools in English, German, Spanish and French. The results of this survey will be discussed at a symposium as part of the AMEE2011 conference in September. They will also develop and produce case studies of medical schools who have implemented the Bologna Process in their curriculum.

WP7 will continue to develop the taxonomy of terms relating to the interface of medical education and research which will be placed on the MedEdCentral website ([www.mededcentral.com](http://www.mededcentral.com)). In addition, the focus of the work for this WP will move progressively towards the dissemination of items such as the Tuning learning outcomes for 3<sup>rd</sup> cycle degrees, promotion of research and teaching linkages and the organisation of workshops on emerging themes interfacing medical education and medical research.

These developmental work packages will continue to be supported by the coordinating office. Dissemination, exploitation and quality assurance will be driven and monitored in the central office at the University of Edinburgh with the assistance of the local steering group, Executive Board and the WP groups. The network website will be continually updated and developed to ensure that project results and products can be delivered and disseminated.

## 6. Contribution to EU policies

The MEDINE2 network is contributing to a variety of EU policies, the majority of which are part of the Lifelong Learning Programme (LLP) Objectives and Priorities.

### **LLP Objectives and Priorities addressed:**

The network promotes quality lifelong learning in the field of medicine whilst promoting a European dimension through the work on Tuning and the Bologna Process. The knowledge triangle of education, research and innovation is being addressed, with the aim of producing better-educated and trained doctors in Europe to aid competitiveness, employability and the growth of an entrepreneurial spirit (particularly by the work package on research in medical education).

By promoting mobility and developing resources for medical language training the network is supporting the realisation of a European area for lifelong learning. This is further enhanced through the harmonisation and convergence of educational principles and practice.

The quality, attractiveness and accessibility of medical life-long learning in Europe is enhanced by the work of the Network in linking up and connecting learning communities (within medicine and outside); promoting mobility of students and staff; fostering creativity and innovation; enhancing the education and engagement of medical teachers; and dissemination of studies and reference material regarding current developments in medical life-long learning.

The right to access high quality health care delivered by well educated motivated health professionals is an important aspect of European citizenship. Historically the medical profession has championed the cause of tolerance, respect, cultural awareness and human rights. We seek to make these priorities more explicit and transparent in medical education and training through our work on medical curriculum development. Ensuring that medical schools in Europe produce graduates who have been taught and assessed in key areas of competence, are equipped for employment and practice in European health care, and have experience and awareness of European medical systems through mobility, are key aspects of quality enhancement and a basis for quality assurance.

One of the key tools for addressing these priorities is the network website which features tools for communication and collaboration and educational packages such as MEDINElingua (WP1). The network website will be used to disseminate and exploit the outcomes and result of the project activities, especially those focussing on mobility, transparency and implementation of the Bologna Process.

The number of partners and the geographical coverage of this Network exemplify a high degree of multilateral collaboration between Higher Education institutions. The work plan and work packages have been selected specifically to allow joint working on a number of key issues in European medical education. Although certain partners are identified with each work package, the teams have “soft edges”, and an open, inclusive approach is taken to participation by partners. This cooperation and collaboration between the project partners is built upon the consensus within the Network in support of the Bologna process and the Tuning approach to harmonisation and transparency.

### **LLP Horizontal Policies Addressed:**

The work of the MEDINElingua work package is helping to overcome language barriers in relation to medical education and mobility. Increased mobility of medical students and staff as a result of the work of the Network will promote awareness of cultural and linguistic diversity.

The Tuning (medicine) outcomes for European medical graduates emphasise the humanistic aspects of medical education, including ethical awareness, cultural sensitivity, and personal and professional development. Promoting the use of these outcomes in European medical schools will help to produce doctors with awareness of equality and diversity, racial and cultural issues, special needs, and that they must not discriminate against patients on grounds of race, gender, age, disability, or religion.

### **Complementarities with other EU Policies:**

The main focus of our work is the Bologna Process in relation to Higher Education, but this links with various other policies as outlined on the EC Europa website, including the Lisbon Strategy and the Education and Training 2010 Work Programme.

The network complements the policy on co-operation with third countries and the competent international organisations. We have associated partners in a number of candidate member states, and they participate actively in the work of the Network. The network has formalised links with projects directed at curriculum development in non-European countries, such as the MUMEENA project.

The network notes the expanded role and funding of the Erasmus Mundus programme. The groups working on mobility (WP1 and WP2) are discussing how the work of the network can best align with those opportunities. The group working on research in medical education (WP7) are considering how opportunities for medical students from outside the EU to undertake research within the Community can best be advertised and supported.

Work packages 1, 3, 4 and 7 in particular are directly related to the employability of medical graduates in Europe and their ability to integrate and work effectively in a range of health care systems.

Medicine is regulated by the Directive 2005/36 on the recognition of professional qualifications. We have already had discussions with the DG Internal Market & Services about how the work of the Tuning (medicine) Project could be of relevance and potential benefit to the Directive. The network has made a formal submission to the current consultation on the review of the Directive (February 2011). This is accessible through the MEDINE2 website.

