



FINNISH EDUCATION
EVALUATION CENTRE

Educating Doctors for the Future

Evaluation of Undergraduate Medical Education in Finland

SUMMARY



"Learning outcomes should be clear for students at the beginning of the course – in every course."

"I feel that our feedback is really listened to. The modules are genuinely modified according to the feedback."

– Examples of medical students' comments

INTRODUCTION

The aim of this summary report is to introduce shortly the context and the main results of the *Evaluation of undergraduate medical education in Finland* carried out by the Finnish Education Evaluation Centre FINEEC. The target groups of the report are, for example, Medical Schools, Finnish universities and universities of applied sciences, students and students' associations, medical associations, working life representatives and different decision makers connected to the themes of this evaluation, and the international education evaluation agencies and organisations.

The evaluation aimed at producing an overall picture of the current state, strengths and challenges of undergraduate medical education in Finland, and developing recommendations that reflect the changing competence requirements in doctors' work and their future operating environment.

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"At the moment, we receive no feedback on the encounters with patients, even though this is the most important experience offered by the training."

– Medical student





MEDICAL SCHOOLS IN THE EVALUATION

All Five Medical Schools Participated in the Evaluation

The first national evaluation of undergraduate medical education in Finland was carried out by FINEEC in 2016–2018.

The decision was based on a proposal submitted by the Ministry of Education and Culture.

The evaluation was conducted by an international evaluation team.

The evaluation covered all five universities that offer the Licentiate Degree in Medicine programme:

- **University of Eastern Finland**
- **University of Helsinki**
- **University of Oulu**
- **University of Tampere**
- **University of Turku**

THE MISSION STATEMENTS OF THE FIVE MEDICAL SCHOOLS

University of Tampere

The Medical School wants to produce the best physicians in Finland to benefit their stakeholders. The graduates should be active players in changing the society, with ability for lifelong learning. They should be ready for a variety of careers besides a traditional doctor or researcher, such as an administrator or a medical advisor working with industries other than medicine.

University of Turku

The overall philosophy of the programme is described as multidisciplinary based on context. The medical students are trained in evidence-based medicine to become good clinicians with a scientific attitude, ability for critical appraisal, and a sense of well-being. The University of Turku medical school is especially profited by the wide variety of electives and interprofessional education.

University of Oulu

The mission of the Medical School is to produce doctors able to work in Europe, capable of reacting to changing environments, and who also understand the context for conditions in the North of Finland with its dispersed, isolated, rural communities.

University of Eastern Finland

The medical school aims at educating top-level experts and professionals for the health and well-being sectors, and at being the best academic learning environment in Finland.

University of Helsinki

The Faculty of Medicine wants its doctors to be students for life. Medical practice is evidence based. Science is core to the academic part of the curriculum. Patient safety is an important part of education and integrated in clinical teaching.



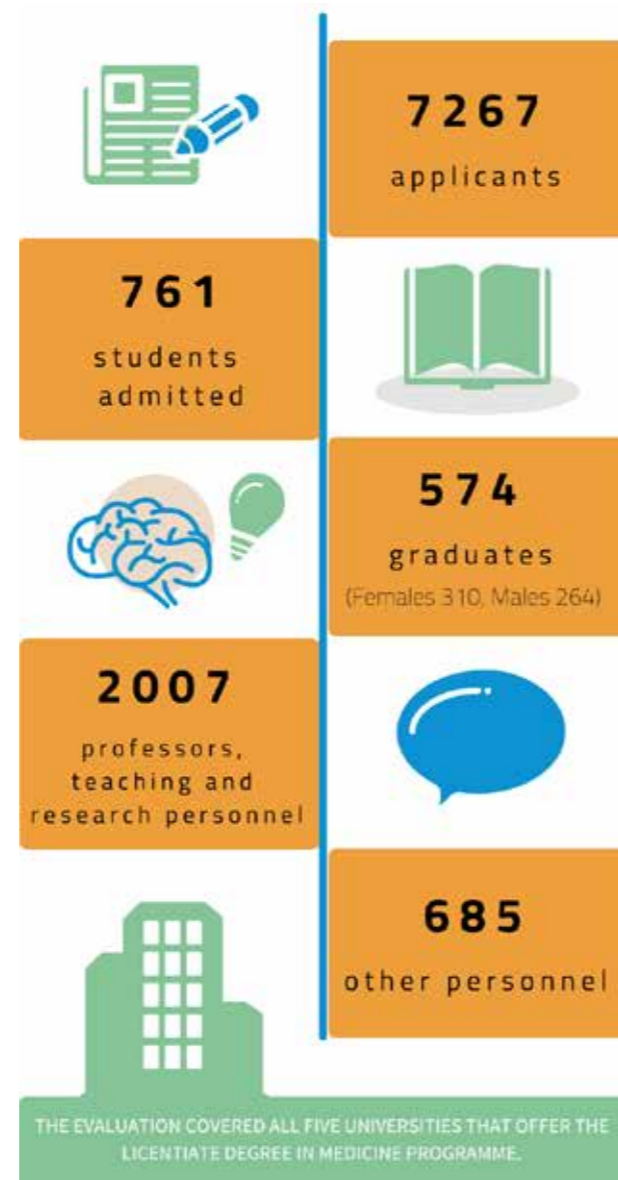
“I find that the tutorials are the best learning tool offered by the university, as solving problems and formulating the learning objectives lend excellent support to my studies.”

“The group assignments often provide you with a practical perspective to the theory to be learned, which helps you understand the topic and assimilate the knowledge.”

“There should be more OSCE style tests, more evaluation on how you treat the patient, more hands-on practices – to help students to feel safe when they move to the working life.”

– Examples of medical students' comments

The Medicine Programmes in 2017



Degree Structure Displayed as Ects Credits in Medical Schools 2017

	University of Eastern Finland	University of Helsinki	University of Oulu	University of Tampere	University of Turku
Basic studies	~40	274	81	293	267
Intermediate studies	~205		152	-	
Advanced studies	~70	85	60	20	60
Language and communication studies	~10	15	6	8	
Other studies	0-15	2	37	15	
Internship	24-30	24	24	24	33
In total	360	360	360	360	360

EVALUATION DESIGN



The Areas of Evaluation

The undergraduate medical education was evaluated on the following areas:

- 1 Planning of the education**
e.g. information about the pedagogic framework of the education and the curriculum preparation process, and the objectives laid out for the education and the degree structure
- 2 Implementation of the education**
e.g. the learning environments, teaching and supervision methods, assessment of learning and learning outcomes, teacher competence and its development, and the well-being of the university community
- 3 Competence and working-life skills produced by the education**
e.g. internship, career guidance and career paths, cooperation with working life
- 4 Continuous development and renewal of education**
e.g. information about forecasting competence and renewal needs, and the use of evaluation and feedback information as well as cooperation between universities

Evaluation Process

The evaluation included the following methods and data:



Enhancement-Led Evaluation

The evaluation was based on the principles of enhancement-led evaluation.

The emphasis was on considering the views of units providing medical education, medical students as well as different stakeholders from working life including service users and encouraging interaction between the different parties.

Both the process and its results are intended to help the Medical Schools to identify the strengths, good practices and areas in need of development in undergraduate medical education.



RESULTS

Strengths

The evaluation team identified the following areas as strengths that apply to all five Medical Schools:

- 1 Continuous development of medical education**
Undergraduate medical education programmes are regularly reviewed and developed. Various drivers for changes have been identified and processes of quality management exist. The Medical Schools seem committed to improving their education continuously.
- 2 Many good practices that others can share**
Each Medical School has many good practices of education planning and implementation that others can share.
- 3 Increasing national collaboration**
National collaboration between the Medical Schools is increasing. Joint analyses of core learning contents have started.
- 4 Strong student engagement**
Student engagement is particularly strong. The students are involved in the development of education in all five Medical Schools at different levels of studies through feedback and student representatives.
- 5 Good collaboration with teaching units outside the university**
All Medical Schools provide decentralised clinical placements outside the university hospital and early patient contact, often in primary care. There is good collaboration with teaching units outside the university, especially in primary health care featuring enthusiastic teachers as role models.

Recommendations

The core recommendations to support the development of undergraduate medical education are:

- 1 Defining the Finnish Doctor**

To engage effectively with the forthcoming health and social care (SOTE) reforms, there must be a consensus on the skills, attitudes and role of a newly-graduating doctor. Currently there is no national consensus about what is a 'Finnish Doctor' – how they are educated and what they should master at graduation. The structure of the medical curriculum varies between universities. Medical Schools need to take more of a leadership role in defining the 'Finnish Doctor' and involve a range of stakeholders (patients, students, other health professions, employers) to develop a shared vision and agree on key curricular outcomes.
- 2 Curriculum mapping and alignment**

Curriculum mapping – displaying the key elements of curriculum and the relationship between them – can make curriculum planning more effective, the scope and sequence of student learning explicit, and the result more transparent to all stakeholders. Medical Schools could then continue collaboration to align the curricula so that shared national programme outcomes can be taught, learnt and assessed with certainty.
- 3 Development of key skills**

A doctor's key task is diagnostic work with patients. Particularly important for learning is assessment of clinical skills and reasoning in patient encounters with constructive feedback. Readiness to apply new technologies with a critical attitude, teamworking skills, and ability to manage difficult situations constructively are also core competencies to be facilitated throughout undergraduate learning.

- 4 Valuing teacher skills**

Medical School teachers balance between demands from teaching, clinic, research, and private life. Finnish Medical Schools should explore ways of appreciating teaching and consider creating tenure tracks in medical teaching. Centres of excellence in medical education could support systematic provision of pedagogical training for all who teach medical students.
- 5 Learning environment**

Increased medical student intake has coincided with organisational and budget changes, affecting student and staff well-being. Larger groups especially in the clinics increase teacher workload and decrease opportunities for hands-on experience and personal feedback. Medical Schools' approaches to preventing, identifying and managing problems in student and staff well-being should be developed.

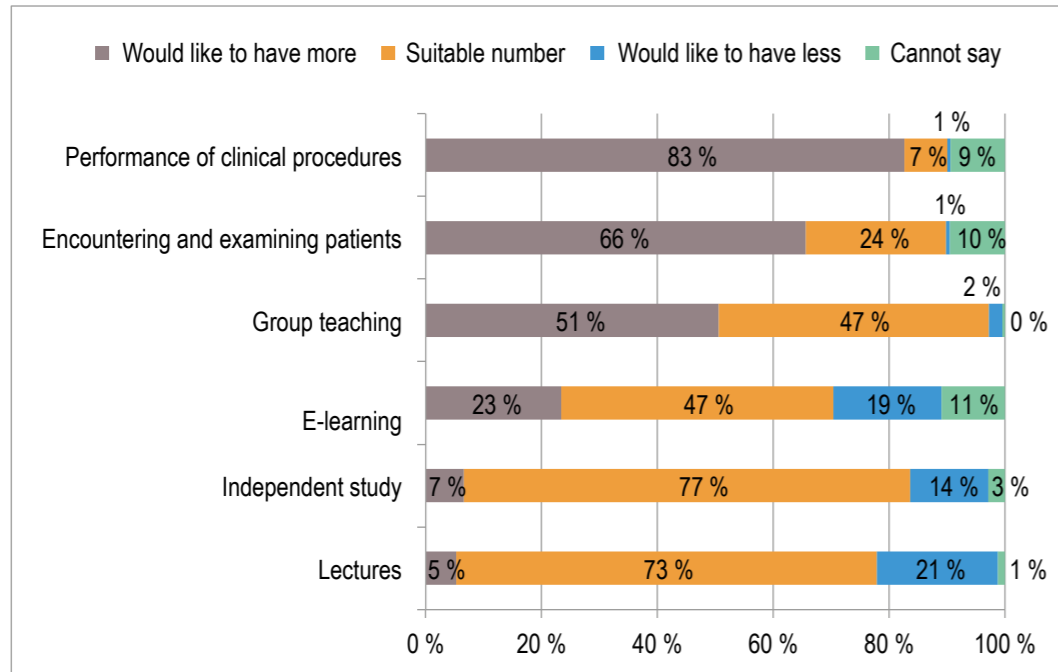
NEXT STEPS

Achieving changes required by the rapidly changing operating environment can be done while protecting the unique flavours of the five Medical Schools. The Medical Schools can collaborate to ensure that graduates are trained in the skills they need as fledgling practitioners, in further speciality training, when taking on roles in research, management, education or health policy, and for lifelong learning.

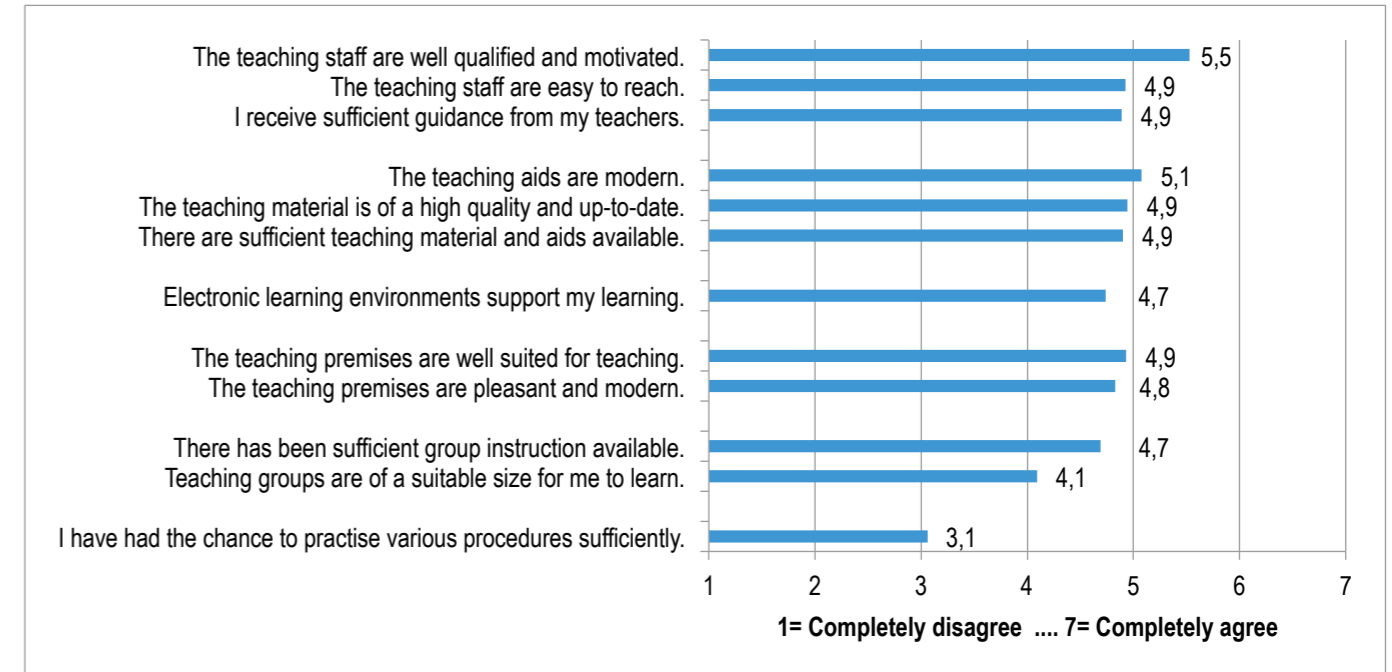
Ultimately the changes will improve the quality of graduates, increase patient safety, and result in better medical care in Finland.

Statistics of the Finnish Medical Association Student Survey

According to the Finnish Medical Association Student Survey 2017 (n=2873, response rate 53 %), most of the 2nd to 6th year medical students would like to study more about taking action, meeting and examining the patients, and group teaching.



According to the Finnish Medical Association Student Survey 2017 (n=2873, response rate 53 %), 2nd to 6th year students hope for more practical training and smaller groups of lessons in their studies.



CORE METHODOLOGICAL CONCEPTS

Assessment blueprinting: A blueprint is a map and specification for an assessment, which ensures that all aspects of the curriculum and educational domains are covered by assessments over a specified period. A blueprint links assessment to learning objectives.

Collaborative learning: An educational approach in which groups of students learn together, in an active process, for example by solving problems or completing a task.

Constructive alignment: The underpinning theory of outcomes-based education; a method of devising teaching activities that directly address learning outcomes. Defined as continuity and similarity between learning outcomes, teaching and learning activities, and assessments.

Core curriculum: A set of learning outcomes from courses and modules required from a student before graduation. There are several definitions of curriculum in medical education literature.

Curriculum mapping: The process of indexing or diagramming a curriculum to ensure that curriculum outcomes are achieved and that academic gaps, redundancies, and misalignments are identified and addressed, to improve the overall coherence of a course of study and its effectiveness.

Digital learning or e-learning: Learning facilitated by digital technologies enabling access to learning materials at any time, often including collaboration outside the traditional classroom.

Flipped classroom: A blended learning strategy activating students. Changes traditional learning by delivering some classroom content (e.g. by videos and other digital material) for students before teaching sessions, so active participation in a classroom situation is facilitated.

Interprofessional learning (IPL) has been described as when two or more professions learn with, from, and about each other, to improve collaboration and the quality of care.

Mini-CEX (Mini Clinical Evaluation Exercise): A learning event with direct observation of doctor (student) - patient encounter by a teacher or clinical supervisor.

OSCE (Objective Structured Clinical Examination): A practical assessment comprising several stations in which practical procedures and clinical skills including communication are assessed, often by observation.

Outcomes-based education: By the end of each module or course, students should have achieved predefined learning outcomes. Different teaching and learning activities may be blended and used to facilitate achievement of the learning outcomes, and many types of assessment can be used.

Problem-based learning: A student activating learning method where authentic patient related problems are solved, often as a group, with the support of an experienced supervisor.

Programme outcomes: Outcomes (knowledge, skills and attitudes) defining what students should have attained when they graduate from a programme.

Systems-based curriculum: An integrated curriculum that combines different disciplines, often both basic sciences and clinical sciences, around an organ or system of the body.

This summary report is based on:

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