

Self-evaluation Report on Accreditation of Higher Educational Programs

> Educational Program of Certified Medical Doctor (e-PBL)

David Tvildiani Medical University

[08.05.2019]

# Information on Higher Education Institution

Name of the HEI	LLC David Tvildiani Medical University
Legal-organizational form	Limited Liability Company
Type of Institution	University
ID number	211360203

# Information on Higher Education Program

Name of the program	Educational Program of Certified Medical Doctor
	(e-PBL)
Level of Education	One-stage
Language of Instruction	Georgian
	(In the Program teaching and evaluation part, the English language components used)
Qualification Granted	Academic Degree of Medical Doctor
Direction	(09) Health Care
Field	Medicine
Sub-field	Medical Doctor (One-stage)
Qualification Code	90101
Number of Credits	376
Location the Programme is Carried out (street, city/municipality, campus, postal code, country)	city of Tbilisi, Lubliana Str. 13/ Chiaureli 6;
	Cityof Tbilisi. A. Tsereteli Avenue 117.

Program Status (new/authorized/accredited)	Accredited
In case the programme is authorized or accredited, please specify the date and the number of the decision	Educational Program Accreditation Council Decision N143, from July 01, 2014
Accreditation expiration date	01.07.2019

## **Contact Information**

HEI's Address (street, city/municipality, postal	Ljublana street 13/ Mikheil Chiaureli street 6, Tbilisi,
code, country)	0159, Georgia
Webpage	www.dtmu.edu.ge
E-mail Address	info@dtmu.edu.ge
Phone Number	2516898
The Head of the HEI	Levan Tvildiani
Mobile phone number	599 555 187
E-mail Address	rector@dtmu.edu.ge
The Dean of the Faculty/School	Nino Tabagari
Mobile Number	599 27 32 63
E-mail Address	dean@aieti.edu.ge
The Head of the Programme	
Mobile Number	
E-mail Address	
The Head(s) of the HEI/Faculty/School Quality Assurance Department	Tamar Talakvadze
Mobile Number	597 207 424
E-mail Address	quality@aieti.edu.ge

## Quantitative Indicators on a Program

231	
	231



## განათლების ხარისხის განვითარების ერთვნული ცენტრი NATIONAL CENTER FOR EDUCATIONAL QUALITY ENHANCEMENT

Total Number of Academic Staff	70
-Professor	19
- Associate Professor	39
-Assistant Professor	10
-Assistant	2
Scientific Staff	
- Scientist	3
- Postdoctoral Student	
TotalNumberofAffiliatedAcademicStaff	66
- Affiliated Professor	19
- Affiliated Associate Professor	36
- Affiliated Assistant professor	9
Affiliated Assistant	2
International Staff (If available)	
Number of International Academic/Invited Staff Involved in Teaching Process	
Number of International Academic/Scientific/Invited Staff Involved in Research	7
Number of Invited Staff Involved in Teaching Process	151
Ratios (in case of existing programmes)	
- Affiliated Staff – Students Ratio	0.7
- Academic/scientific/invited Staff – Students	2.5
- Academic/scientific Staff – Invited Staff Ratio	0.5

- Master's and Doctoral students – supervisors	The educational Program does not have supervisors						
Administrative and Support Staff		106					
Academic Personnel Turnover	The number of	of those w	ho left the ir	nstitution - 25	5		
Indicator (for the last 5 years) (e.g. the number of retirees,	Number of ne	ew personi	nel - 10				
the number of those who left, the number of new personnel. etc.)	Ratio -2.5						
Academic Staff Turnover Rate (for the last 5 years) (e.g. the number of retirees, the number of staffwho left the HEI, the number of new staff, etc.)	The number of	of those w	ho left the ii	nstitution - 48	8		
	Number of ne	aw nercon	nel - 45				
	Ratio - 1	ew person	15				
Invited Staff Turnover Rate (for the last 5 years) (e.g. the number of retirees, the number of staff who left the HEI, the number of new staff, etc.)							
Programme Staff Scientific/Research Output (for the							
last 5 years)¹							
Publications in Local Journals			175				
Publications in International Journals	105						
Local Conference Papers		21					
International Conference Papers	218						
Other Scientific/Research Output (Please specify)							
Places Announced for a Programme <sup>2</sup> (for the last 5 years)	33	88	67	70	56		
Data on Programme Applicants(for the last 5 years; in case of ongoing program)		l			I		

<sup>&</sup>lt;sup>1</sup>Staff CVs should include the list of publications

<sup>&</sup>lt;sup>2</sup>Through Unified National Exams/Joint Master Exams and Mobility



## განათლების ხარისხის განვითარების ერთვნული ცენტრი NATIONAL CENTER FOR EDUCATIONAL QUALITY ENHANCEMENT

-Total Number of Programme Applicants	13	42	13	50	43
-Number of Programme Applicants (First three choices on a Unified National Exam)	0	13	7	17	29
-Number of International Applicants (If available)	13	25	6	28	14

 $<sup>\</sup>scriptstyle\rm I$  Place and other details of publications shall be indicated in the CV of the personnel.

<sup>2</sup> Enrolled via unified national examinations/general Master's examination, as well as via mobility

Data on Admitted Students(for the last 5 years; in case of ongoing programme)										
-Number of Admitted Students	13		42		13		50		43	
-Number of International Students Admitted to the Programme (If available)	13		25		6		28		14	
Number of Students (who have active status)	90				1		1		1	
Students' Progression (for the last 5 years; in										
case of ongoing program) <sub>3</sub>	First Adn	nission	Seco Adn	ond nission	Thir Adn	rd nission	Four Adm	rth nission	Fifth Adm	ission
	n	%	n	%	N	%	n	%	n	%
-Number and Percentage of Students on First Year	0	0%	42	50%	13	19%	50	71%	43	77%
-Number and Percentage of Students on Second Year	13	39%	35	83%	11	85%	30	60%		
-Number and Percentage of Students on Third Year	8	62%	29	83%	9	82%				
-Number and Percentage of Students on Fourth Year	8	100%	21	83%						
-Number and Percentage of Students on Fifth Year	8	100%								
-Number and Percentage of Students on Sixth Year	7	88%								
-Number and Percentage of Students whose status is terminated	5	38%	16	38%	3	23%	34	68%	1	2%
-Number and Percentage of Suspended Students	1	8%	5	11%	1	7%	2	4%	3	6%
-Number and Percentage of graduates <sup>3</sup>	0	0	0	0	0	0	0	0	0	0
Data on Students' Involvement in Scientific-Research Projects (e.g. Scientific papers, conferences, exhibitions, practice, etc.) (During implementation of the program)	Participation in conferences - 38,  Practice - 9					<u> </u>				

<sup>&</sup>lt;sup>3</sup>What percentage of admitted students graduated from the programme within the time period specified for programme completion (taken into consideration programme level and duration)
7

- 3 The number of years to be indicated depends on a program level and duration.
- <sup>4</sup>The percentage of enrolled students having completed the program within the term envisaged by level and length of the program

Graduate Employment Rate (for the last 5 years)	The progra	m does not h	ave graduate	s		
Graduate Employment Rate According to Gained Qualification (for the last 5 years)	The program does not have graduates					
Data on Graduates Who Continued Their Studies to the Next Level of Education (for the last 5 years)	The progra	nm does not l	nave graduate	es		
Certifying Exam Results (for regulated professions; for the last 5 years)	The progra	m does not h	ave graduate	s		
-Percentage of Graduates who Took Certifying Exam	The progra	m does not h	ave graduate	es.		
-Percentage of Graduates who Passed Certifying Exam	The progra	m does not h	ave graduate	S		
Student Mobility (for the last 5 years)						
-External Mobility (outgoing)	0	3	2	4	9	
- Internal Mobility (outgoing)	3	0	2	15	11	
- External Mobility (incoming)	0	0	0	0	0	
- Internal Mobility (incoming)	13	25	6	30	14	
Students' Final Assessment Rate (for the last 5 years; in case of ongoing programmes) please indicate in percentages	The progra	 m does not h	 ave a graduat	e		
-Excellent						
-Very good						
-Good						
- Satisfactory						



## განათლების ხარისხის განვითარების ერთვნული ცენტრი NATIONAL CENTER FOR EDUCATIONAL QUALITY ENHANCEMENT

- Sufficient			

## Involvement of International Expert in an Expert Group

According to part 3 of article 20 of the HEI's Educational Programme Accreditation Decree, please tick the box(es) below in case you want an international expert(s) to be included in an accreditation expert group.

□□International Expert (Expert Group Chair)
□□International Expert (Expert Group Member)

### Brief Description of an Educational Programme

The Medical Doctor electronic problem-based learning (MD ePBL) educational program was developed in the framework of the project "530519-TEMPUS-1-2012-1-UK-TEMPUS-JPCR: ePBLnet – "Establishment of the Supra-Regional Network of the National Centres in Medical Education, focused on PBL and Virtual Patients" funded by EU. Development of the Medical Doctor e-PBL Program was also based on the DTMU experience in delivery of curriculum based on the learning/teaching and assessment integrated around organ systems (Medical Doctor Program has been functioning since 1992). Participation in e-PBL-net framework made it possible to implement problem-based learning (PBL) in the university, which was a significant step for either the program or professional (pedagogical) development of academic staff.

Through the clinical practice scenarios, the teaching process integrates solid knowledge and skills required for clinical activity. The recognized version of this style of medical training is problem-based learning (PBL) that links learning, to decision-making and problem-solving abilities. Students work step by step with the tutor, discuss the case, establish the possible diagnosis, examinations and treatment, outline learning objectives.

Together with patient's so-called Linear cases, so-called Branched cases, as well as interactive so-called Virtual Patient cases are delivered in the part of the program that enable students to check realistic decisions and decisions made by themselves without damage to the patient. The general purpose of the program is to offer more adapted to the real practice, personalized, competency-based teaching style.

During the reporting period, the problem-based learning was further developed by " technique of learning in small groups – interviewing skills," which also implies the introduction of clinical cases and clinical problems in small groups, interviewing a standardized patient, history taking, physical examination, developing preliminary diagnosis and patient management plan. Changes planned, evaluated and implemented in the pilot mode regarding the development of curriculum content, as well as changes in teaching, learning, and assessment by the University over the past five years are reflected in the revised Medical Doctor e-PBL Program document.

## Self-Evaluation Team and Description of Self-Evaluation Process

In the framework of the self-evaluation process for the purpose of re-accreditation of the Medical Doctor e-PBL Program (Accredited in 01.07.2014) of the Davit Tvildiani Medical University, first of all, relevant directions were defined:

#### 1. Situation analysis

David Tvildiani Medical University analyzed the updated accreditation standards and evaluated the current situation in the purpose of identifying compliance with requirements. Meetings were held with the University, Faculty departments, and relevant staff for the realization of above-mentioned. This process revealed the need for organizing and presenting data and information. Analysis and evaluation of the situation was discussed at the Rector's Council.

### 2. Creation of a self-evaluation process working group

In DTMU, a working group of self-evaluation process was formed, which included the Faculty Dean and Dean's Office members. As well as representatives of the following principal services and departments of the university:

Department for Educational Methodology

□□Quality Assurance Service

DDMedical Education Center

□□Proceeding and HR Department

IIIFinancial Department

IIILegal Department

□□Career Development Center

□□Daphne Hare Library

□□IT Department

According to the decision made by the group, the process continued in the format of thematic working groups, which prepared relevant information and data for the specific components of the accreditation standard that was discussed in the group format.

Standard	Responsible/group
	members
1. The purpose of the educational program, learning outcomes	N. Tabagari/
and program compliance with them	P. Tsagareishvili
1.1. Program Objectives	L. Nadashvili
1.2. Program Learning Outcomes	T. Talakvadze
	I. Nadareishvili
2. Methodology and organization of teaching, the Program	N. Tabagari/
mastering evaluation adequacy	T. Zurashvili

2.1. Program Admission Preconditions	P. Tsagareishvili
2.2. Education Program Structure and Content	L. Nadashvili
2.3. Academic Course	J. Bregvadze
2.4. Development of practical,	N. Giorgadze
scientific/research/creative/performance	N. Gugushvili
and transferable skills	A. Nadiradze
2.5. Teaching and learning methods	T. Ratishvili
2.6. Students Evaluation	I. Nadareishvili
	M. Togonidze
3. Students' achievements, individual work with them	E. Sanikidze/
	N. Japiashvili
3.1. Students Consulting Service	T. Kuchukhidze
3.2. Master's and PhD Students supervision	I. Migriauli
4. Provision of Teaching Resources	P. Tsagareishvili
4.1. Human resources	N. Giorgadze
4.2. professional development of	E. Zangaladze
academic/scientific/invited staff	N. Javrishvili
4.3. Material Resources	D. Demetrashvili
4.4. Program/faculty/school budget and	A. Demurishvili
financial sustainability of the program	N. Japiashvili
5. Teaching Quality Enhancement Opportunities	T. Talakvadze/
5.1. Evaluation of internal quality	A. Nadiradze
5.2. Evaluation of external quality	N. Japiashvili
5.3. Monitoring and periodic evaluation of the program	T. Kuchukhidze
	T. Ratishvili
	I. Nadareishvili
	L. Nadashvili

## 3. Preparation of the self-evaluation report

The following activities were carried out by the self-assessment group with the coordination of the Quality Assurance Service:

- □□Collecting quantitative data A large portion of the data needed for the selfevaluation process was available in DTMU, and no additional search and processing was required;
- □□**Data analysis** Data analysis process included both quantitative and qualitative analysis;
- □□**Drafting the self-evaluation report -** DTMU's self-evaluation report drafted according to revised standards of accreditation;
- □□Revision of the self-evaluation report editing

## **Evaluation of Compliance with Standards**

The self-evaluation form shall reflect institutions in-depth analysis and critical view-points of the educational program, as well as ways and means to improve the activity. A self-evaluation report should be stylistically well-organized and clear. Statements presented in the self-evaluation report must be properly argued and based on relevant evidence, quantitative and qualitative data. In order to present the statistical data and factual information in a clear manner, the HEI can include relevant graphic images in the text.

In order to recognize an institution as an applicant for accreditation, the self-evaluation form should be fully completed. The self-evaluation form will be considered complete if:

- Deach field provided in the self-evaluation form is completed (if for any reason the specific information is not available to the institution in relation to specific issue during self-evaluation, an explanation is given in the relevant field);
- □Information presented in the self-evaluation form directly responds to the requirements considered by the evaluation criteria of standard components;
- □Upon confirmation of the information, presented in the self-evaluation form, the list of respective documents and types of information is anticipated in the table standing for standards' documentary evidences/indicators;
- DStrengths and areas for improvement of an educational program are presented in relation to each standard, considering each component of the standard.

Please, note: Presenting an incomplete self-evaluation form shall serve as the basis to recognize the application as deficient!

#### 1. Educational program objectives, learning outcomes and their compliance with the programme

A programme has clearly established objectives and learning outcomes, which are logically connected to each other. Programme objectives are consistent with the mission, objectives and strategic plan of the uniersity. Programme learning outcomes are assessed on a regular basis in order to improve the programme.

#### 1.1. Program Objectives

➤ Programme objectives define the set of knowledge, skills and competences the programme aims to develop in graduate students. They also illustrate the contribution to the development of the field and the society.

#### **Description and Evaluation**

David Tvildiani Medical University (DTMU) Mission is - to ensure higher education based on science and best international experience in the field of medicine. The objective of the program is - organization of training courses content/volume, as well as a teaching and learning, which will promote: To achieve modern knowledge in basic medical and clinical sciences; To acquire the necessary clinical skills for the relevant level of teaching (I stage of medical teaching); To uphold significant ethical values for the profession; To be prepared for continuous learning and development during future professional activities. The possibility of the program development ("compliance with the objectives") is ensured by close connection with the research and academic activities (mission/goals).

The objectives of the program are in line with the Mission and what is essential are achievable by the principles governing the University. Considering the country's healthcare needs and at the same time based on the international standards of medical education, for graduates the University defined learning outcomes relevant to the Medical Doctor educational program. The learning outcomes with field and general competencies presented in the program describe what the graduates of the University have to know, what they must be able to do and what values should have after completing the program, which also are reflected in the program purpose and objectives (taking into account the scope of the format). The program also describes the graduate employment fields.

Orientation on the employment market in the field of medical education means orientation on quality within the framework of the Medical Doctor (MD) program. First of all, the quality means the opportunity of involvement in residency programs including outside the country, which is very important in the modern globalization era for the graduates and in the long term perspective - for the country too. The above-mentioned is also considered by the program goals (within the format), as it is focused mainly on teaching, learning, research, etc. quality and its development.

The Mission statement describes the objectives of the program (specialist - "with the fundamental knowledge and acknowledgment, skills and values required for medical practice"), which is ensured by the educational strategy that creates the foundation of the program and the teaching/learning methods used in it.

The educational strategy of Medical Doctor e-PBL Program is to provide a spiral curriculum based on integrated systems by using problem-based learning and outcomes-oriented education, curriculum core and selected by the student components.

During the last decade, according to the Mission Statement and program goals, the program has undergone significant evolution through the introduction of medical simulations and new methodologies for Case-based teaching/learning, as well as the development of a scientific component. New formats of teaching have been piloted and introduced for developing students' scientific skills. The program provides opportunities for more choice for student's interests and future career development. Innovative approaches to teaching/learning and assessment increases the reputation of the University at the national and international level; Provides the graduates with more choice opportunity for further studies and employment. Thus, the Mission of the institution, the purpose, and objectives of the Medical Doctor Program are shared by members of the academic community (staff, students) and implemented in the daily work of the University.

#### Evidences /indicators

- 1. Educational program (Appendix #1)
- 2. University Mission and Strategic Plan (Appendix #2)
- 3. Analysis of labor market and employers' demands (Appendix #3)
- 4. Internationalization Policy (appendix #4)
- 5. Results of personnel and students' surveys for study promotion of HEI international cooperation and internationalization (Appendix #5)
- 6. Web pagehttp://www.dtmu.ge/index.php?lang=2 (Appendix #6)

#### 1.2. Program Learning Outcomes

- > Programme learning outcomes describe knowledge, skills, and/or the sense of responsibility and autonomy, students gain upon completion of the programme.
- ➤ Programme learning outcomes assessment cycle consists of defining, collecting and analysing data needed for measuring the learning outcomes.
- Assessment results are used for the improvement of the programme.

## Description and Evaluation

The learning outcomes with field and general competencies presented in the DTMD e-PBL program describe what the graduates of the University have to know, what they must be able to do and what values should they have after completing the program, which also reflected in the program purpose and objectives (taking into account the scope of the format). The Quality Assurance (QA) Service

previous years study show that there is formal compliance of DTMU curriculum, objectives and learning outcomes with the requirements of national and European field documents. The program meets the requirements of enrollment in the US, England and other residency and post-graduate programs. The program does not have a graduate yet, but there is information that gives a high appraisal to the program, including the part of achieving the expected learning outcomes. Specifically, the relevant stakeholders were involved in the development of the program learning outcomes. This involvement meant different groups, discussions and analyzes, participation and recommendations of various formats, methods, and means.

The program, including its planned learning outcomes for graduates, discussed within the Tempus Project's framework on the workshop with partner organizations, colleagues, members of the project working group and also at the Georgian Medical Specialties Association meeting with other external evaluators (e.g. Erasmus + Georgian National Office (NEO) organized cluster monitoring meeting); Analysis of the critical aspects of the program, in particular, its outcomes and the ways to achieve these outcomes, also were discussed at a number of international and national conferences; The specific conference "Development of Academic Standards in Education" (ISE-2016) also was dedicated to it.

For the stakeholders (academic personnel, alumni, students, and employers) DTMU has developed questionnaires to evaluate field-specific and general competencies required for graduates of the Medical Doctor Program, which gives the opportunity to study the opinion of respondents on the valuable competencies and importance of the level of elaboration of this skill/competence within the university curriculum. Analysis of the employers survey results; Results of the survey for the evaluation of personnel activity and satisfaction and report on their application (Appendix #7, 7.1. 8).

The first survey of behaviors and characteristics systematization associated with the concept of professionalism was carried out. It meant finding out the practitioner doctors' opinion and requested the target audience to evaluate the characteristics of professionalism (85 elements); the types of professional conduct and obligations, the response on the situational tasks, as well as professional development, behavioral experiences, reaction on medical errors, etc. Study their experience in matters. The survey continues for the need to increase the number of respondents, but at this stage, it is possible to deem necessary of elaboration of a strategy for the development of professional identity and to continue research (Appendix #9).

One of the most critical aspects of program development is to consider the employer's demands. Also it's assumed that this improves the learning process and increases its adequacy to the labor market (Appendix #7, 7.1, 8). The data of all labor market research by authoritative state structures show that there are significant challenges regarding the

medical staff. ("Georgian Health Care State Strategy 2011-2015", Chapter 3.3). It is well known that an increased demand exists for high-quality medical staff, learning outcomes of which are recognized among other countries, as well. Accordingly, the Quality Assurance Service for the last few years has paid specific attention to the analyzes of employer's demands. It developed the questionnaire, conducts survey, analyzes results (the QA Service self-evaluation report for the 2012-2013 academic year); Interpretation and especially implementation of this analysis results requires notably careful and thoughtful actions due to a number of circumstances: Employers "diversity", the quite limited employment market in Georgia, orientation on the profit of large sections of the health sector within the reforms implemented in recent years, and other reasons.

Every component of the educational program aims at achieving the goals and competencies by graduates. The competencies in the context of the curriculum are described by the learning outcomes which can be observed and evaluated.

1. The academic program is one-stage, and integrated. Not less than 360 credits (MD- 360 credits; Most of credits include 30 hours: with 16 hours of contact work); 2. Programs (program content, including contents and volume of training courses, the organizational structure of programs, teaching and learning forms and methods) are directed towards the development of learning field outcomes that are compatible with the 2nd level of higher education; 3. In addition to learning field outcomes, the program ensures the achievement of the relevant level of general transferable skills (at the Master's level), that is reflected in the objectives and outcomes of each course of the program and matrix of competencies.

According to the World Federation of Medical Education (WFME) standards, the competence of basic medical education for the countries participating in the Bologna Process shall be determined on the basis of the competencies provided by the Tuning Project, which is in line with the European Qualifications Framework. The relevant competence for the field includes such components as:

- ☐ Knowledge and understanding of basic, clinical, behavioral and social sciences, including related to the medical practice fields such as public health and medical ethics;
- ☐ Clinical and other skills related to diagnostics, practical procedures, communications, treatment and prevention of diseases, health promotion and rehabilitation issues, clinical thought, problem-solving, etc.
- The opportunity of increasing life-long learning and professional qualification improvement;

Consequently, based on the country's health care requirements and the international standards of medical education, DTMU has defined the learning outcomes of the Medical Doctor Program for its graduates;

By field and general competencies the learning outcomes describe what a graduate should know, what they should be able to do, and what values DTMU graduates should possess after completing the program.

#### Compliance is ensured:

IIIBy the compliance of the program learning outcomes with competencies defined by a field (medicine) document [also relevant to the World Federation of Medical Education (WFME) standards]: a) Program training courses (topics) are relevant to the field knowledge and skills (first level/core competencies) required for achieving learning outcomes defined by the field document; b) In terms of teaching/learning and evaluation, the program is relevant to the characteristics of the core competencies (second level competencies) of the field document learning outcomes.

□□Are in compliance with the minimum requirement to the theoretical knowledge provided in the appendix of the document and training courses.

 $\square\square$ The field document envisages at least  $2^{nd}$  level of the integrated curriculum's 11-level scale: In this regard, the program is at a much higher level.

The program encompasses the course of scientific skills in the amount of 10 credits (required standard for all students; 30 credits - by student's choice) and no less than 26 credits for mastering clinical skills in simulated and 60 credits in the real clinical environment.

The general purpose of DTMU's Medical Doctor Program modernization (like every MD program) is to offer competency-based, personalized teaching style more adapted with the real medical practice. The modernization was **focused** on the essential (theoretic) level of the existing (current) program; the **content** (of modernization) implies structuring of learning material (modules and organized within them thematic blocks) on personalization (directing at particular case) according to human organ systems on, which facilitates the acquisition of knowledge in basic and clinical sciences and in particular - their awareness.

The new program also implies the introduction of such teaching/learning methods (PBL format) which serve to the further development of the student's intellectual (interdisciplinary analysis of the issue, analysis in the clinical context, interpretation, etc.), professional/practical skills, as well as general/transferable competencies. The above-mentioned is fully compatible with the content and direction of the quality educational program quality enhancement defined by the field document.

Evaluation of the program learning outcomes and its analysis are used for improving the program; In particular, the study of field specific and professional skills and the issue of program development (clinical skills) during the reporting period meant monitoring and evaluation of the course of "Clinical Skills 5" (CS-Clinical Skills 5) implemented during the reporting period. The course was completed by 6 groups of DTMU Medical Doctor Program students. Surveys were conducted among 2 groups of 6th-year students in 2014-2015 academic year and 4 groups of 6th-year students in 2015-2016 academic year. The study showed that students rate the program very highly; it also demonstrated that students expressed a desire to have this course available at the early (pre-clinical) stage. The Quality Assurance Service elaborated appropriate recommendations for the relevant structures. The course was developed for pre-clinical stage modules. Currently, this format is included from the 3rd semester to the 5th-semester in organ system diagnostics classes (6 modules); Students are mastering more complex cases and situations at the beginning of the clinical stage of teaching (6th semester); In the 11th and 12th semesters, the above-mentioned continue with more complex and complicated cases (Appendix # 10, 11).

Starting from the first semester of the 2016-2017 academic year, PBL-tutors developed specific forms for students self-evaluation and mutual-evaluation in group work; the initial results of the research were very important for the involved and the rest of the academic staff to understand the number of issues related to students' work in PBL format, including the importance of continuous professional development of future physicians (self-evaluation of the own capabilities and progress) (Appendix 12); Studies are essential, including the context of the recently processed national field document, which currently envisages the training and evaluation of professionalism in pre-diploma education programs.

The Medical Education Center for the members of the university academic community is the place where the new educational resources are "tested" with their participation, the possibilities for enrolment into the program and/or analyze the benefit for students' progress is discussed, e.g.: Standardized patient, Atlas of three-dimensional anatomy.

Thus, the compliance and development of the program to the constantly changeable environment, the University ensures based on own research results and the best international practices, that provides the opportunity for defining "correct targets" for correct changes and development; It facilitates program implementation with aim appropriate processes and activities (workshops, financial promotion, training, mutual education, teachers, students, and administration).

#### Evidences /indicators

- 1. Analysis of employer's survey results on field and general competencies valuable for the medical field (Appendix #7)
- 2. Analysis of employer's survey results and report on use of results (Appendix #7.1)

- 3. Employers opinion on field competencies of the Medical Doctor Program graduates (Appendix #8)
- 4. The characteristics of determining the professionalism identity and ability to reflect it in medical pre-diploma education (Appendix #9)
- 5. Results of DTMU Clinical Skills Course (CS Clinical Skills) Students survey (Attachment # 10)
- 6. Analysis of feedback on modules of Principles of clinical diagnosis with Clinical assessment of pathological processes (Appendix #11)
- 7. Students' self- and peer-evaluations in PBL: Comparative analysis of correspondence with tutors' assessment and their future professional progress benefit (Appendix #12)
- 8. Report of the Medical Education Center (Appendix #13)
- 9. Educational program (Appendix #1)
- 10. Analysis of labor market and employers' demands (Appendix #3)
- 11. Internationalization Policy (Appendix #4)
- 12. Results of staff and students' surveys for encouraging international cooperation and internationalization possibilities (Appendix #5)
- 13. Web page<a href="http://www.dtmu.ge/index.php?lang=2">http://www.dtmu.ge/index.php?lang=2</a> (Appendix #6)

#### □□Strengths and Areas for Improvement

Please, present strengths and areas for improvement of the Educational programme considering the requirements of each component of this standard

## Strengths

- DDThe program goal is in compliance with the University Mission and the main goals and priorities of the National and International Medical Education;
- □□A collaboration (involving stakeholders) is a guide to the adoption of program goals and program learning outcomes;
- IIIThere is a program planning, renewal and development policy and experience;
- IIIThere is a formal structure of the program (and courses) development; Stakeholders are involved in the process;
- □□The practice of reviewing the needs for the program development based on the national and international experience in medical education;
- DDProgram changes to achieve progress in clinical, professional, public health, and scientific research competencies.

#### Areas for improvement

- □□Further adaptation of program objectives and learning outcomes with community socio-economic and cultural development;
- IIIModification of graduates learning outcomes according to the documented requirement of the environment where they have to work;

DDCreating more opportunities for individualization of the learning path in the conditions of compulsory demand for standardization of the educational program learning outcomes.

#### 2. Teaching methodology and organization, adequacy of evaluation of Programme mastering

Programme admission preconditions, programme structure, content, teaching and learning methods, and student assessment ensure the achievement of programme objectives and intended learning outcomes.

## 2.1. Program Admission Preconditions

☐ Higher education institution has relevant, transparent, fair, public and accessible programme admission preconditions.

#### **Description and Evaluation**

The Medical School developed and implemented (for all stages of teaching, including a Medical Doctor Program) Regulation for obtaining student status in DTMU. The university has rules for obtaining, suspending and terminating the status of a student and mobility approved by the Rector's Council; As well as the regulation for learning process, which also reflects the procedures for enrollment in DTMU for the Georgian and foreign citizens, the rules of registration and mobility, awarding qualifications, students' rights and obligations, basics of completing or suspending study, forms of incentives (Appendix # 14, 15).

For obtaining students status through the Unified National Exams, as well as

without "such" - the citizens of Georgia who have received full general or equivalent education in a foreign country for the last 2 years, Foreign citizens who have received general or equivalent education in a foreign country –are enrolled in DTMU in full compliance with Georgian legislation; Admission related Communication and procedures with applicants who have a desire to study at DTMU are carried out in compliance with regulations in the university, which are developed in full compliance with Georgian legislation. Required for entrants specialization disciplines are Biology, Chemistry, Physics, and Mathematics, fluent knowledge of the English language is mandatory. In case of enrollment through the Unified National Exams this will be ensured by the National Assessment and Examination Center; The right to enroll other applicants (in case of education received abroad)is issued by the Special Administrative Act of the Minister of Education and Science of Georgia, Order

#224/n from December 29, 2011.

For the possibility (in case of education received abroad) of enrollment in DTMU, the Dean (or Vice Dean) assesses the candidate's achievements in general education

(and/or equivalent), in English language and some specialization disciplines: Biology, etc. and provides recommendation to the DTMU on determining possibilities for enrollment of him/her in Medical Doctor Program and in case of enrollment - recommendations on measures to facilitate his/her individual learning. Upon passing all the necessary procedures (Recognition of previous education and determination of conformity by the National Center for Educational Quality Enhancement, issuing Visa for Entrants, Paying Tuition Fee) the entrant is registered with DTMU student's active status.

In case of decision on enrollment, coming out of the specificity of the academic program and considering the duration of procedures independent from the university, the University determines when the student is allowed to start study, within the Fall or Spring semester of the academic year.

Enrollment through the mobility in DTMU is carried out according to the Georgian legislation, which implies the presence of appropriate places for mobility; and public statement of university willingness for enrollment of students; the procedure also implies the reviewing the information requested from mobility applicants.

By determining the conformity of the programs, the university defines in which semester of the program is possible to enroll the student; Also, taking into consideration the academic performance and motivation of the student (through interview), defines the possibility of continuation and / or start (from the first semester) of study by the students in DTMU; Provides the appropriate decision to the student until the completion of the mobility registration procedure. In case of approval on mobility, the applicant will pass the standard procedures for transferring to DTMU: Signing the Agreement, Registration, Individual Agreement on Financial Liabilities, etc.

Upon enrollment in the DTMU, the entrant is obliged to register for the student status activation, for which presents mandatory documents and passes appropriate procedure (Appendix # 21), after which the identification number will be assigned, will be included in the Unified Registry of Students of the National Center for Educational Quality Enhancement, and the document asserting the student's status will be issued.

There is a correlation between student selection the University Mission / Program objectives and the desired quality of the graduates. This correlation is ensured by the required specialization courses for enrollment (Mathematics, Chemistry, Physics, Biology).

At regular intervals the University examines the requirements of the enrollment procedure: Annually sets out and sends the National Examination Center the required level of knowledge in the specialization courses or changes it. Last changes was made for the entrants for the 2019-2020 academic year (in 2018). The changes were based on the analysis of the university research results conducted over the past two years. The enrollment decision-making appeal system currently is not used in Georgian universities: Enrollment is made by the decision of the National Exams Center and/or the Ministry of Education and Science (in case

of foreign citizens) and by choice of the entrant. In the case of the latter, there is the preliminary consent of the university on the possibility to enroll application at the program (Appendix # 16).

#### **Evidences/indicators**

- 1. Rule of Recognition, Suspension, Termination, Restoration of Student Status, Mobility, and Recognition of education received during the study period (Appendix # 14)
- 2. Rule of Regulation of the Study Process (Appendix # 15)
- 3. Analysis of the first-year students' academic performance in the context of Unified National Examinations results (Appendix #16)
- 4. Rules and Conditions of Registration (Appendix #21)
- 5. Educational program (Appendix #1)
- 6. Web site <a href="http://www.dtmu.ge/index.php?lang=2">http://www.dtmu.ge/index.php?lang=2</a> (Appendix #6)

## 2.2 Educational Program Structure and Content

Programme is designed according to HEI's methodology for planning, designing and developing educational programmes. Programme content takes into account programme admission preconditions and programme learning outcomes. Programme structure is sequential and logical. The content and structure ensure the achievement of programme learning outcomes. Qualification to be granted is consistent with programme content and learning outcomes.

## Description and Evaluation

Approval and changes to programs are carried out according to legislation applicable to the University. The Quality Assurance of programs is carried out according to process and procedures relevant for universities: Planning/approval of program initiation and/or changes; evaluation and development of educational programs. Members of the University academic community (teachers and students), various structures, special target groups (created for fulfillment of particular tasks), Medical Education Center (MEC), representatives of the administration and other bodies are involved in this processes.

The existence of such rules and procedures in the university formally confirms the necessity of university cooperation in planning, development and improvement of educational programs (Appendix # 17); In addition, this also is confirmed by the existing practice in the university; Quality Assurance Group is constantly involved In the evaluation of process planning, implementation, received product (program, new course, new educational resource, method, etc.), which consistently evaluates all these stages, reflecting it in the self-evaluation reports.

The University has a methodology for planning, elaborating and developing educational programs based on the planning, implementation, and transmission of the Tuning Project Curriculum ("Tuning Quality Development Cycle") and describes the guidelines for planning the development of the educational program; Further it explains such issues as program profile description, defining program objectives and description of the expected learning outcomes with

knowledge, general and field-specific components; Formation and description of academic content (topics) and structure (modules and credits); Determining the types of educational units and activities aimed at achieving the agreed outcomes; Establishing teaching, learning and evaluation methods corresponding to the outcomes. The methodology also discusses two equally important issues for the modernization of the curriculum: Preparation process for the modernization and defines what curriculum changes mean (Appendix #18)

The Curriculum Committee and the DTMU Medical Education Center (MEC) are taking care of the defining possibilities for the development of the Medical Doctor program. The Medical Education Center is an important facilitator of the process; updating existing curriculum and promoting new curriculum development is among its goals; ensuring "co-participation" of interested thematic groups; assistance of academic groups (across our University and other universities) interested in developing and/or modifying the curriculum, support in creating and/or offering new educational resources, etc. which is also a part of the existing policy in DTMU; MEC delivers training course "Modern medical curriculum", other courses to interested staff, teachers, students, that together with the rules and experience of the University facilitates the implementation and development of the policy.

DTMU regularly works on program development; Following instruments are used for the evaluation:

- o Main Stakeholders (Student, Teacher, Employer, Graduate) surveys.
- o Analysis of students' academic performance
- o Analysis of the results of surveys of people involved in the program
- Analysis of Material-technical base improvement
- o Analysis of integration of survey results in the academic process

During the reporting period, in addition to a new MD e-PBL program, the revision of curriculum academic modules and courses was conducted using disciplinary approaches by joint organization of the Curriculum Committee and MEC (Appendix # 13).

The meetings had a formulated agenda with the facilitator (for promoting questions and discussions), the secretary (to record focus group opinions and demands in the report and the action plan) that enabled the workshops to generate effective use of time (60 to 120 minutes). The group was homogeneous in disciplinary terms, including students and administration members.

It was important and useful that the group had different status participants, such as young and experienced teachers, dean, coordinator, students.

The number of participants was enough (from 7 to 15) to get a broad list of opinions and at the same time very convenient for discussions that gave everyone a chance to talk.

The workshops enabled us to make the right planning (semi-structured survey, the participation of students, teachers, and administration) and the proper organization of meetings (form, etc.) to achieve qualitative feedback on program design, learning and teaching quality issues. Part of decisions are already implemented, the work continues; determination and conduction of the corresponding format for revision of clinical and practice (sixth year) courses of the curriculum are planned.

It is important that the university "discovered" the new partner (EBMA-European Board of Medical Assessors), which enables it to evaluate own program. University students (100 students) participated online, the so-called, Progress-test in the provided by Maastricht University, which in addition to students' individual assessment, gives the opportunity to reveal "problematic" areas of the program. The piloting of the test has been conducted, Work on "problematic" modules has been started. DTMU is the participant of this format (EBMA) and will continue to work in a permanent co-operation with it; Cooperation results will be used to improve programs.

In the development of the program, the University administration and academic community pay great attention to focusing on student's research and professional skills competencies. In this regard, the university used the initiatives of own academic staff, the possibilities of analysis of own and international research, as well as opportunities provided by international projects (project Actors Capacity Training in the Caucasus).

The program is described in the standard form of the University, which aims at the program's objectives, program learning outcomes, duration of the study and the volume of credits, general structure of the program, program content, description and organization, teaching and learning strategy, assessment strategy.

Each component of the MD program aims at achieving by graduates the goals and competencies envisaged by the educational program. The competencies in the context of the curriculum are described by the learning outcomes which can be observed and evaluated. Teaching/learning forms as well as assessment methods are pertinent to the subject. 95% of the curriculum courses are obligatory and serve to achieve the objectives by ensuring relevant competencies. The program envisages electronic academic courses in volume of only 10 credits. Additionally, there is a link between basic and special courses. In this regard, the choice considered (1 month) in the 6th-year program can be considered as the strength of the program, enabling students to plan academic course according to their wish / choice together with the Institution and go through the transparency of choice of clinical training bases.

The 6-year period of study includes 3 stages: I - basic medical and clinical science course; II - clinical medicine course; III - Clinical Clerkship course. The Program is integrated educational course (Horizontal integration with elements of vertical integration on the basic level; such integration is reflected in the assessment system; there is a link between the academic levels), which means that one course or discipline serves to strengthen the knowledge received from another course and also reflects the diversity and depth of the courses; the levels of teaching are organized so that the basic course is the basis for the next level of study (clinical medicine course), both of which are precursors to the Clinical Clerkship course, and ultimately providing adequate knowledge, skills for the qualification of Medical Doctor (defined by the national qualification framework and field document).

In addition to the general part of the subjects on the first year they study material that is the basis for studying human systems on II year; teaching basic medicine from the II year is horizontally integrated, is linked to the study of principles of clinical diagnosis and the pharmacology (the element of vertical learning) and creates the modules of organ systems: The teaching starts with embryology, the structure of the constituent organs at macroscopic and microscopic levels; normal functioning concepts, etiology and pathogenesis of the diseases, clinical assessment of pathological processes, clinical picture of the typical forms of diseases, diagnostics and medicines. Clinical courses are taught in stages, for example: The teaching of internal diseases is compounded vertically from bottom to top: Principles of Clinical Diagnosis (II-III year), special pathology (III-IV year), deepdiagnostics of internal diseases, treatment (V year), syndromal differential-diagnostics and urgent therapy (VI year). The program is based on the spiral curriculum model. The cycle makes 3 spirals: The I cycle of the spiral is the stage of basic and clinical sciences; Where in the modules based on human organ systems an explanation of mechanisms of system norm and pathological processes, clinical (significance) assessment of pathological processes are provided; Typical clinical picture of diseases, the principles of diagnostics, development of patient management plan, communication with the patient, etc. The II spiral is based on the first one and is organized at the stage of teaching clinical medicine. Represents the so-called transitional between directed study at the first stage and the self-directed study at the 3rd stage. at the 2nd stage training in knowledge and skills is held in the framework of medical specializations, involves more in-depth revision by working at the cases of real patients, with more focus on the medical and social and health care problems of patients, the peculiarities of communication with them; Spiral III is a clinical clerkship based on the previous experience of the student (I, II spiral) in the purpose of consolidation and preparation for future clinical practice (residency program).

The so-called PBL and CBL are involved in each of the above modules in the MD program, which increases focus of the study material (fundamental and clinical sciences) on the clinical importance of the issue and the benefit for the patient.

The III year (VI Semester) is organized in the course of the interdisciplinary teaching of basic and clinical sciences (based on the main functions of the human body) and is the preparation stage for further, teaching at clinical stage. This course also is organized around PBL-weeks (and by using it).

The tasks of this phase are to cover the core areas of the curriculum (phase of its basic medical and clinical sciences), mainly with a modular approach; It aims to focus on the most important (basic) issues related to human health and disease, such as human structure, function, life cycle and its support, saving and protection. The teaching is mainly based on modular approach and using PBL and includes the following 6 modules: Life cycle, protection of life, life support, life expectancy, life structure, life control, that continues with clinical medicine (fourth-fifth years) and Clinical Clerkship (sixth year) (appendix #1.

#### Evidences /indicators

- 1. Rule and procedures for the development, approval, modification and cancellation of an education program (Appendix #17)
- 2. Policy of planning, elaborating and development of programs at the David Tvildiani Medical University (Appendix #18)
- 3. Program syllabi (Appendix 19)
- 4. Report of the Medical Education Center (Appendix #13)
- 5. Educational program (Appendix #1)
- 6. Web page<a href="http://www.dtmu.ge/index.php?lang=2">http://www.dtmu.ge/index.php?lang=2</a> (Appendix #6)

#### 2.3. Academic Course

- ➤ Learning outcomes of each academic course are in line with programme learning outcomes; Moreover, each course content and number of credits correspond to course learning outcomes.
- > Teaching materials listed in syllabi are based on the core achievements in the field and ensure the achievement of intended programme learning outcomes.

### **Description and Evaluation**

The program, curriculum and course (module) syllabi are defined and approved by the Curriculum Committee. The study plan describes in details the courses, the volume and the sequence of providing them to students. Syllabi of courses describe the subject blocks and themes in the module, what tasks are required from students, what is the learning and assessment format, etc.

The study plan and syllabi are also available for students, including explanation of the content of the Syllabus is provided by the teacher at the beginning of the course. In the effective implementation of the study plan, students are also supported by the regulation of academic process, which describes the rules for enrollment and registration at the program (including electives and scientific project),

regulation of tasks and exams, information on teaching methods and formats, disciplinary issues, etc..

#### **Basic Biomedical Sciences**

Basic and Biomedical Sciences is the main component of the first theme "Basic and clinical sciences" from the 4 basic themes of the curriculum; In the DTMU MD e-PBL program they are integrated with each other and clinical sciences mainly around the human organ system.

The programs of I year academic courses are organized in such a way that (i) in most cases supports a better understanding of the thematic blocks involved in them and also (ii) in addition to the general part of each discipline, there is taught the material which is required basis for studying human organ systems in the II year.

II year totally and Fall semester of III year (III-V semesters) are dedicated to studying human organ systems, and basic and clinical sciences academic courses programs are integrated with each other horizontally, linked to the diagnostics of internal diseases and the study of pharmacology (element of vertical learning) and creates 9 modules of organ systems;

At the stage of basic and clinical sciences, the study of the system begins with Embryology, then the structure of its constituent organs at macroscopic (anatomy), microscopic (histology) levels and normal functioning appropriateness (Physiology and Biochemistry) considered. After that, the etiology and pathogenesis of each system are studied (Microbiology, Pathology - Pathanatomy, and Pathophysiology), clinical assessment of pathologic processes, typical clinical picture of the disease, the basis for diagnostics, communication with the patient, development of the management plan, and means of treatment (Pharmacology).

The "share" of Basic Medical Sciences (I-V semesters) at this stage of learning is important (about 118 credits from 150); in addition to their integration with diagnostics of internal medicine and clinical assessment of pathological processes in module, as well as lectures and practices, material delivering in PBL and CBL formats, as well as discussion of scientific achievements in the format of the Journal Club, encourages deep understanding of modern knowledge in basic sciences and focuses on the clinical significance of this knowledge. At the stage of clinical medicine and period of Clinical Clerkship, a number of sessions discuss the concept of basic sciences and most of them focus on clinical use in basic sciences. At this stage of curriculum (clinical medicine and Clinical Clerkship) students have an opportunity to use this knowledge in the conditions of ambulatory and hospital practice for a wide range of clinical situations.

#### Behavioral Science, Social Science and Medical Ethics

The key element of the 21st-century modern medical education is that students are prepared not only for the treatment of individual patients but also for the care of the whole population and society. The majority of students choosing their profession because they desire: to change the world for better, respond to the public health needs, promote the quality of life, use scientific achievements to solve difficult problems, use leadership opportunities and many other reasons, which are in the competence of educated public health professional. The disciplines that are taught in DTMU and which cover the wide range of the Population Health include the Biomedical Ethics (first year), Public Health and Epidemiology (third year), Preventive Medicine (fifth year), Behavioral Sciences (second and third years), Bio-statistics (second year) and Legal Aspects of Medical Practice (Third year). These disciplines in DTMU are administered by the Department of Social and Behavioral Sciences. The related educational content is also provided during PBL sessions or within disciplines such as Microbiology or Pathology. These courses discuss important issues of public health, at the same time, they help students learn about impacting the health systems and environmental acknowledgment, as well as the realization of the own role in the full spectrum of medical professional competencies.

This part of the curriculum is a significant part of 2 themes from 4 ("Public and Population Health", "Personal and Professional Development") of DTMU MD Program. Community and Population Health topics throughout the vertical of the entire curriculum according to the stages of the study are organized as follows: At the basic and clinical level, students have the opportunity to examine these topics in the PBL classes (problem-based teaching) in the patient-centered context. Through an integrated way, they have an opportunity to study public health and social issues having health impacts. Significant issues are also provided at the Clinical Medicine stage in the format of lectures and seminars considering relevant cases; the important content of Behavioral Science, Social Sciences and Medical Ethics are also provided for the study of Psychiatry, Obstetrics, Gynecology, Pediatrics, Family Doctor courses.

Personal and professional development issues include ethics seminars and forums at the basic and clinical sciences level; Presentations and discussions on ethical issues of real situations; the aspects of this theme are included in the PBL scenarios. The PBL sessions play an essential role in presenting different aspects of personal development through group dynamics, practice, and critical feedback. In clinical medicine and Clinical Clerkship stage, students have the opportunity to practice these skills in dealing with patients and colleagues.

## Clinical Sciences and Clinical and Professional Skills

Clinical Sciences and Clinical and Professional skills are distributed 2 out of 4 themes (conditionally) in DTMU MD Program: Basic and Clinical Sciences and Clinical and Communication Skills (Appendix # 1).

The study of clinical sciences begins at the first stage of the curriculum - Basic and Clinical Sciences. At this stage, training in clinical sciences and clinical-professional skills begins with the course of "Principles of Clinical Diagnosis with Clinical Assessment of Pathological Processes" included in the module organized around Human Organism Systems.

Clinical training courses (disciplines) are taught step by step, in order to improve medical activity practice, timely diagnostics of the patient's situational clinical condition and rational treatment, For example: The training for internal diseases is compounded vertically from bottom to top: Principles of Clinical Diagnosis with Clinical Assessment of Pathological Processes (Diagnostics Methods, II - III years), special pathology (Etiology of Nosology, pathogenesis, clinic, diagnostics, prevention, treatment principles) III-IV years, Differential diagnostics and treatment of internal diseases - V year, Syndromal differential diagnostics of internal diseases and urgent therapy - VI year.

Thus, the clinical themes starting on the basic stage within the spiral curriculum are revised (3 times) based on organized (mainly) systems in the course of clinical medicine (VI-X semester) and consolidated in Clinical Clerkship (XI-XII semester).

The healthcare and preventive medicine topics are discussed and studied by students as studying particular diseases (including PBL formats, in clinical skills training, e.g. Patient education, standardized patient, lecture, seminar), as well as clinical rotations and practice. Besides the specific course "Preventive Medicine and Health Maintenance", the attention is paid to these issues in family medicine courses.

The lectures, seminars, PBL, and CBL scenarios, as well as the materials provided by the Journal Club; this topic has many learning opportunities in clinical rotations (VI-X Semester) and specialization (XI-XII semester). Students are able to use the knowledge obtained in clinical sciences for a wide range of clinical situations in the conditions of ambulatory and hospital practice.

The part of the curriculum clinical and communicative skills implies the development of clinical and communication skills necessary for medical practice throughout the course of the study. It involves communication with patients and colleagues, history taking and

clinical tests, basic training skills in primary and basic life support, trauma management, various manipulations, etc..

At the basic and clinical level, students have an opportunity to work in small groups in PBL and clinical skills classes (the course of diagnostics of internal diseases by the clinical evaluation of pathological processes); Role-playing and standardized patient's communication form, clinical skills in training formats; At clinical medicine stage, the clinical and communicative skills are perfected with working at the ambulatory/hospital patient bedside in the conditions of a wide variety of diseases.

Thus, during the entire period of the delivery of the MD program, students acquire sufficient knowledge (for MD program graduate) in clinical sciences and skills.

On the I stage of the "theoretical (basic) medicine course" classroom / lab / virtual teaching and learning format is high in teaching / learning / assessment and is based on acknowledgement of the issues and examples associated with human health and pathological conditions(a valuable example of understanding clinical importance, identification and resolution of medical problem, clinical case and scenario, etc.) initiation of correct approaches and skills to communicate with the patient, including the simulated patient; besides, it also involves access to clinical practice (basics of diagnostics), clinical skills training; Start development of scientific research skills and discuss important ethical values for medical professionalism.

II stage - In "Clinical Medicine course" teaching / learning / evaluation is practically part of every course on clinical bases, where the program goal is the diagnostics and management principles of typical clinical picture, as well as rare and / or atypical cases, judging – understanding determinant of the basic sciences in the clinical context and the individual Patient example; Besides the clinical session, it involves bedside studying and teaching, including taking care of individual patient (including the possibility of treatment and management results), through the communication and consultation with the patient and other professionals (other doctors of the clinic, nurses, other members of the medical team) understanding the whole picture of clinical activity (management protocols, communication with the patient and his family, ethical issues, problems and values, etc.); Clinical rotations include ambulatory and as well as hospital patients, of all ages (and age peculiarities) in the fields of specialization in main medical fields (patient with neurology, cardiology, oncology, surgery, etc. problem).

III Clinical Clerkship Course is a clinical practice oriented course: Here the formal theoretical lessons are minimal and the student's medical knowledge (received in 1-5 years) is "tested" and is developed for the purpose of determining and solving the individual patient's needs. The student performs doctors

(licensed) tasks and / or acts for the patient (at patient's bedside) under the supervision of the teacher and / or department doctor, helps in performing manipulations, takes duties (assistant on duty), etc. In Clinical Clerkship courses it is necessary for student to practice in internal diseases and surgery, obstetrics, gynecology, pediatrics, infectious diseases in neurology.

#### Evidences /indicators

- 1. Program syllabi (Appendix 19)
- 2. Educational program (Appendix #1);

## 2.4. The Development of practical, scientific/research/creative/performance and transferable skills

□Programme ensures the development of students' practical, scientific/research/creative/performance and transferable skills and/or their involvement in research projects, in accordance with the programme learning outcomes.

#### **Description and Evaluation**

The science-based teaching in the DTMU MD program is carried out in two ways: Through obligatory (for every student) and Elective courses.

Obligatory: Scientific skills are developed through 5 academic courses, the total volume of which is equivalent to 10 ECTS credits. The three courses out of the above 10 ECTS credits are Basics of Scientific Research 1, 2 and 3 are 6 credits and the remaining 4 credits are Biostatistics and Epidemiology courses. Also, students have the opportunity to take the course of the project development (2 ECTS credits) and if the project is developed, submitted and approved by the Scientific-Research Department, the student will additionally receive 8 ECTS credits. In the event that the project will be successfully completed (implemented) and the student will defend the relevant scientific paper - he/she will, in addition, to receive 10 ECTS credits, that will eventually enable the accumulation of total 30 credits in science.

Currently, the course Principles of Scientific Research is organized in the so-called "Journal Club" format, where 2 students on each seminar will present a 15-minute presentation on the previously defined issue, after which a general discussion is held. The reporters prepare the conclusion and share with all members of the group in the "handout" form. The final version of the conclusion is formed in the result of the discussion. The reporters, in relation to scientific publications, review the following aspects: Introduction, Hypothesis formation, Research design and logic, Research methodology, Detailed analysis of results using publication illustrations. Accordingly, understanding of the scientific research process in the clinical context by students is promoted through:

- 1. Training Courses of "Principles of Scientific Research"
- 2. Training Course of "Scientific Project Development Basics"
- 3. Understanding the clinical context of basic medical sciences:

- a) Teaching, learning and assessment within the module based on the organs system
- b) Literature used for learning.
- c) Formats used in the teaching, problem-based teaching and case-based teaching elements
- 4. Specific units in students pre-diploma education
- 5. The requirement to present the results of scientific research

The student also has the chance to choose an elective course (and realize the opportunity for future career growth) in practice within the country and/or abroad at university partner hospitals and clinical bases; Reinforce clinical skills and develop scientific competencies; Practically realize the legal aspects of health care and management, medical activity. At this stage training in professional practice is provided in the form of controlled self-learning.

#### **Evidences /indicators**

- 1. Educational program (Appendix #1)
- 2. Program syllabi (Appendix #19)
- 3. Agreements/Memorandums concluded with practice/research institutions (Appendix 20)

#### 2.5. Teaching and learning methods

Program is implemented by using student centered teaching and learning (SCL) methods. Teaching and learning methods correspond to the level of education, course content, learning outcomes and ensure their achievement.

## **Description and Evaluation**

Methods of teaching, learning, and evaluation used in the program are relevant for achieving the set learning outcomes. The learning methodology is based on the integrated teaching and assessment of the human organ system; In addition to lectures, practical exercises, and seminars, training in medical simulations is used for the development of students' clinical skills: safe for "Patient" training in trauma management, injections, life-saving basic skills and other manipulations. The program is implemented in the PBL format of teaching / learning methodology, which led to the focus on using theoretical knowledge in practice, group work, clinical judgment and professionalism aspects. The aforementioned approach reduced teacher-centered teaching and facilitated student-centered learning and research in basic sciences.

This format of teaching and learning (as well as the Journal Club provided for training in scientific skills) facilitates students to understand the principles of evidence-based medicine, because it helps students to ask questions, to find the best scientific evidence available, critically (in respect of the case) evaluate it.

Teaching and learning by "learning in small groups —with technique of interviewing skills," which also implies the introduction of clinical cases and clinical problems in small groups, interviewing a standardized patient, history taking, physical examination, developing preliminary diagnosis and patient management plan. At the basic level of learning it is included in the organ system diagnostics classes (in 6 modules); Students are mastering more complex cases and situations at the beginning of the clinical stage of teaching that further continue with more complex and complicated cases in the Clinical Clerkship course.

New formats of teaching have been piloted and introduced for developing students' scientific skills. The program provides opportunities for more student's interests and choice of future career development.

Used in the curriculum teaching and learning methods stimulate and promote readiness for the lifelong learning. For example: planned and implemented research with the purpose to analyze PBL format at DTMU reveal, that: While working in PBL format (maybe other formats too), students' "experience" (meaning students' involvement length in PBL) does not impact a student's understanding of contribution, adaptation and qualitative discussion, responsibility for preparation for PBL (group work); This is one of the most important characteristics for a doctor's professional activities. Professional associations all over the world regard self-reflection, self-regulation and self-monitoring as one of the most important issues for life-long professional development of doctors. Life-long learning requires that an individual should not only work independently, but also be able to assess own capabilities and progress. Consequently, from pre-diploma medical education some kind of "training" in a self-assessment and development of self-regulatory behavior and self-monitoring abilities in students' learning "are expected", which according to our survey data (the results of the first survey, it continues) is supported by teaching in the PBL format.

#### Evidences /indicators

- 1. Educational program (Appendix #1)
- 2. Methodology for Development of an Individual Curriculum (Appendix #22);

#### 2.6. Students Assessment

> Student assessment is conducted in accordance with established procedures. It is transparent and complies with existing legislation.

## Description and Evaluation

Principles and methods used for DTMU MD program student's assessment are defined, approved and published. The document on the DTMU MD e-PBL educational program describes (and clarifies) the objectives of the assessment, the key principles of assessment, the purpose of assessment in curricula themes,

the general criteria of assessment according to the stages of teaching. As well as evaluation methods used by academic personnel within the program. Various methods and forms are used to evaluate knowledge, skills, and habits, and, in particular, multiple-choice-questions (MCQ), Mini-cases, questions for analysis of the problem, Objectively structured clinical exam (OSCE); Clinical cases - Mini-CEXs (standardized and/or real patient relationship), Direct observation of procedural skills (DOPS), Case-based Discussions (CBD), Portfolios, oral presentations or posters, Critical assessment of the journal's article, Scientific research project, interpretation of patient data, Use of electronic prescription form. For each course, the relevant form of evaluation is defined. Assessment methods, as well as the criteria required to pass the course, are provided by each thematic block of the module syllabus (also described in the rule of the study process regulation) and explained by the teacher.

Points (and relevant grades) shall be granted at the end of the semester according to all academic courses and modules that took place during the semester. Awarded points (grades) are no longer altered except for the case of a technical error detection; Also, when there is re-examination of failed oral or written examination, the student receives positive assessment in the exam (s); As well as re-studying in the semester when it completely repeats the semester program module, academic course and receives relevant assessments and credits that will be reflected in the Diploma Supplement.

Points (grades) assigned to the student (MD) who satisfactorily completed work in the training course or module are the following:

- a) Five types of positive assessments:
- a) (A) Excellent 91% and more of maximum grade;
- b) (B) Very good 81-90% of maximum grade;
- c) (C) Good 71-80% of maximum grade;
- (D) Satisfactory 61% -70% of maximum grade;
- (E) Sufficient- 51% -60% of maximum grade.

In unsatisfactory assessment, the student is not eligible for the credits in the respective module and this implies the following assessments

- B) two types of negative evaluations:
- (FX) Did not pass 41% -50% of the maximum grade, meaning that a student requires some more work before passing and with independent work is given the right to retake additional exam once again.

b.b) (F) Fail -40 and less of maximum point, which means that the work carried out by the student is not enough and he/she has to retake the course.

The final examination of the semester examination does not mean that the student has progressed unsatisfactorily during the course, had absents (and required recovery of the course) or did not perform the tasks or "did not appear" on the oral examination or both. That is, all pre-requisites (before the final semester exam) require at least the minimum level to be admitted to a semester examination. During the semester, unsatisfactory learning due to the absence (which has not been recovered, could not manage to be recovered in the semester) will be written (registered) as F.

The first year coordinator after 3 weeks (starting from the first module), after 4 weeks (from the beginning of the second module) and after 3 weeks (from the beginning of the third module) shall provide to the Deans assistant first year (freshman) students list who are under the risk of receiving negative assessment in the module. The copy is supplied to the Dean. Coordinator and Dean's Assistant (if needed) initiate meeting with each student for the purpose of discussion on his/her performance (to identify weaknesses and strength) and offer support.

The student has the opportunity to appeal the exam result (written, oral) and his examination interview (verbal or thesis, e.g. the test) carried out by the Commission. The student can retake any exam at the time of the semester (according to the relevant examination and re-examination chart). The right to retake the semester for eradicating the backlog can only be allowed through 2 additional semesters (Appendix # 14). The mechanism of compliance with scores of examinations (oral) by the different examiners is the practice of co-operation of the involved teachers in the examination issues, forms, and formats, and attending one another's exams and tests (Appendix # 23).

Assessment methods (objective methods such as: MCQ or psychometric assessment, other forms of complicated assessment) the credibility and validity are documented and checked by: quantitative and qualitative approaches. The difficulty of examination questions, homogeneity, and heterogeneity of issues, etc. are checked and evaluated

In the course of "Basic Medical and Clinical Sciences" of the first stage of DTMU MD Program the progress assessment in the development of students' knowledge and professional skills is continuing (current and final assessments, evaluation oral, written formats, group activity and communication skills, judgment and decision making, analysis and synthesis, etc. skills (see MD programs, "learning outcomes", as well as syllabi); Consequently, the student receives an assessment each semester as well as the feedback from the teachers on medical knowledge and clinical skills, including required for the progress recommendations, which is also a prerequisite for

admission to the landmark examination (Summarizing Landmark Exam in Basic Medicine), after which student continues to study at the next stage of the program.

Evaluation of progress in the development of students' knowledge and professional skills is underway in all principal medical specializations (Appendix 1), which reflected in the current and final assessments, and carried out by oral and written formats, portfolio analysis, assessment at the patient's bedside, in a medical knowledge, as well as professional and practical skills; Consequently, access to the summarizing landmark examination in clinical medicine and "satisfactory" evaluation of knowledge and skills is the prerequisite for admission to the 3rd stage of the program.

At this stage training in professional practice is provided in the form of controlled self-learning;

The document describing the Medical Doctor program also provides general criteria for assessing each of the four themes of the curriculum ("Basic and Clinical Sciences", "Clinical and Communication Skills", "Public and Population Health"

and "Personal and Professional Development") and provides descriptors for each level of study.

A midterm evaluation of the thematic block in the module (pre-quiz points) composes no more than 60% of the final assessment and represents the sum of the points of its separate components. Midterm evaluation in the module of Basic Medical and Clinical Sciences, midterm evaluation in clinical disciplines by evaluation forms and ratio (percentage), as well as the final, summarizing evaluation forms of the module and their ratio (percentage) are reflected in educational programs and syllabi.

Thus, assessment methods are adequate to the intended learning outcomes. In general the assessment system implies:

- 1. The existence of the combined system (current and summarizing) of evaluation;
- 2. Different methods of evaluation are used: Written (MCQ), Oral, evaluation of activity in PBL, Mini CEXs based exam, evaluation at "patient bedside", the portfolio, abstracts / scientific work evaluation;
- 3. Assessments and examinations cover the course content and program (topics and modules) in full;
- 4. There is a possibility to evaluate all study topics/components through the current or summarizing exams (in oral and written form);
- 5. Appropriate evaluation of teaching stages: Detection of students who are able to move over the next stage of the study (according to the achieved level) or who needs to repeat the program;
- 6. In the student's assessment a teacher, PBL tutor, program-director, examination center, external expert (6th-year summarizing examination) are involved;
- 7. Assessments and examinations cover the overall goals / tasks of the program.

#### format

The balance between formative and summative assessments is appropriate for the decision-making on the study and academic progress (with the preference of the formative one). For the decision-making on the study results (with the preference of the formative one). The student can receive such feedback on the study on a daily basis: In a daily practice (practical training, Mini CESx, etc.) Weekly when working in PBL format, in each subject block (oral test) included in the module, the final examination of the module and the discussion of the result (by student's desire), simulation, analyzing the portfolio, after the communication with the standardized and/ or real patient.

A semester examination for each student (group) is conducted after completion of the module; reexamination is possible at the end of the semester; between examination and re-examination 10 days (no less) interval is kept for student's proper preparation.

## **Evidences /indicators**

- 1. Educational program (Appendix #1);
- 2. Rule of Regulation of the Study Process (Appendix # 15)
- 3. Provision On pedagogical staff workload at David Tvildiani Medical University (Appendix # 23)

# □□Strengths and Areas for Improvement

Please, present strengths and areas for improvement of the Educational programme considering the requirements of each component of this standard.

## Strengths

- IIIThe curriculum model provides the opportunity to achieve the objectives and learning outcomes of the program and is relevant to national and international requirements;
- IIIThe spiral organization of the whole curriculum vertical (modules) focuses on the 4 most important topics for medical education: (i) basic and clinical sciences, (ii) clinical and communication skills, (iii) public and population health and (iv) professional development;
- □□The program ensures the provision of relevant teaching, learning, and assessment for the competence generation;
- □□The program offers such PBL format that is required from the students to perform such tasks (primarily to solve the patient's problems) which are related to knowledge in basic and clinical sciences, clinical and communicative skills and their development in issues of public health and professionalism;
- □□The existence of the combined system (formative and summative) of evaluation;

DDThe program has defined, piloted and/or implemented the assessment methods relevant for competency: Written (MCQ), Oral, evaluation of activity in PBL, exam on CS (in case of a standardized patient), OSCE; evaluation at "patient bedside", the portfolio, scientific work evaluation:

DDAssessments and exams cover courses and overall volume of the program (themes and modules);

□□A teacher, PBL tutor, program-director, examination center, external expert (6th-year summarizing examination) are involved in the student's assessment;

DDThe student has the possibility to receive a feedback (practically uninterrupted): At daily practice (practical sessions, Mini CS, etc.), weekly in PBL format, in each thematic block (oral exam), simulation session, after communication with standardized and/or real patient, portfolio analysis.

# Areas for Improvement

DDTo develop and implement the objective assessment methods of clinical judgment ability;

□□Expansion and further development of OSCE cases bank;

IDDevelopment of training and assessment system in professionalism skills;

Ill Elaborating the software for development and efficient use of curriculum maps, and more opportunities for the "benchmarking".

# 3. Student achievements and individual work with them

HEI creates student-centered environment by providing students with relevant services; programme staff ensures students' familiarity with the named services, organizes various events and fosters students' involvement in local and/or international projects.

# 3.1. Students Consulting Services

> Students receive appropriate consultations and support regarding the planning of learning process, improvement of academic achievement, employment and professional development.

#### **Description and Evaluation**

Existing at DTMU organization and practice of the learning process ensure students with the support in planning their own learning process and improving academic achievements. The above-mentioned exists since medical school "AIETI" foundation. Currently, the process has evolved and become more formalized; In particular, the student's assistance from academic staff (which is always recognized as an organic and integral part of academic activity) involves calculation of pedagogical norms: Specifically, consultations in the group of up to 20% of students' independent work, prior to exam (oral) consultations - 2 hours, Prior to attestation in professional skills progress - 2 hours per

group, prior to qualification exam - 2 hours per group; Consultation for individual student - up to 10% of students' independent work; Supervising students independent work including consulting purpose - up to 20% of students' independent work. As well as advice on preparation of summaries and research projects (Appendix # 23).

Faculty (university) structures are within the scope of their authority to assist students: In particular, the Dean's office, including for the response on students' individual needs and their support:

Study of the students' personal issues for the purpose of discussion and responding them (delivery of information or decision), preparing documentation for students, characteristics for the recommendation purposes (financial aid, career growth, continuation of studies, etc.).

Facilitate visas and insurance related issues to foreign students, Communicate with students on any topic (related to the educational process and / or personal problems), promote students in the program and / or extracurricular activities: Individual training, clinical (mainly) and other format learning, elective courses, etc.

To care for the career growth of the graduates, provide appropriate/relevant documents, transcript, diploma supplement, recommendation - verification, etc.

All staff members of the dean's office are involved in student support; In addition, the most frequent and close communication students have a course coordinator, which is usually "the first" to whom the student askes for help; The coordinator shall provide him with assistance / counseling under his / her authority or address the Dean's office other member or the Dean on student's problem.

The student is assisted by the Vice Dean in the field of research and consulting in scientific activities, as well as the scientific-research department providing individual counseling services to the Doctoral students and the Faculty of Medicine students. In particular:

Ш	Development of grant application;
	To develop a research protocol;
	Development of study data collection tools;
	In statistics analysis of study data;
	Preparation and publication of scientific article;
	Searching and processing scientific literature;
	Assessment of scientific work to eliminate plagiarism;

☐ Facilitate participation of staff, doctoral and medical faculty participation in scientific conferences.

Students can apply to the Dean's office and get appropriate individual or group assistance in the form of additional academic courses to eliminate academic backwardness; And / or relevant consultations to facilitate the preparation of the Residency Examination (Appendix # 15). This kind of assistance is provided to students by DTMU graduates too who are currently working abroad.

The University has a "Peer Support Center", which exists in such form for many years: Clinical course students are assisting freshmen in the field of basic medical science issues elaboration: "They remember how hard it was for them and how they handle with it." Currently this format is expanded: The University has created a student and young scientists scientific association, which organizes conferences and "newcomer" applicants in consultation with them about the presentation of scientific thesis.

The University recognizes that the issue (promotion of students in career growth) is much more complex than encouraging communication with the employer (and also important) for their "job vacancies" (and also important) in the course of their studies in the field of professional associations that are interesting to them. In addition, as a medical student's career choice, in the majority of cases establishes in the course of study, as a "rule" it should be affected (right and relative to right choice), not only by "interest" (an example of emotional factor) and / or for ex: "Revenue" is an example of a rational approach to surgery, but a number of other factors: Professional and lifestyle expectations, and a number of aspects, goals, desirable jobs (geographical, big / small town, etc.) etc. in the context of "goals", "expectations" and "desires". The correct approach to helping in the career choice in the medical field should take into account the joint (adviser-student) focus on the matter. Consequently, the Center for Promotion of Career Development (Annex # 23), which in its work considers, plans and implements individual work with students in the context of the above-mentioned context.

The university envisages the student's socio-economic condition and has developed flexible grinding system for studying; the student is given the opportunity to pay the tuition fee per semester (usually 3 times in a semester) or according the individual schedule (in certain cases). Over the past two years, concessions for the Medical Doctor program students in modular payment of tuition fee increased 2 times.

At the University there is financial support to facilitate students' academic progress, good faith, extracurricular and social activities. In particular:

(I) Personal Scholarship: Davit Tvildiani monthly Scholarship for 2-6 year students (one student per year)

According to the transparent and fair rule of allocation and issuance of scholarship, the decision made by the Joint Commission (procedures, deadlines, application documents to be in compliance with the relevant rule) (Appendix # 24, 25);

- (II) Rector's Scholarship (will be awarded to the Best Graduate)
- (III) benefits for excellent students (benefits of study cost) (Appendix # 19):
  - III in amount of 25% of the tuition fee for the next year;
  - III in amount of 50% of the tuition fee for the next year;
  - III in amount of 100% of the tuition fee for the next year;
- (IV) Funding of US Medical Certificate Exams (USMLE); Also,
- (V) granting status of the Best Student of the year (Appendix # 24);
- (VI) Appreciation for various activities in the personal case (Appendix # 26);
- (VII) Scholarships for the students of Davit Tvildiani Medical University specially established by partner organizations and clinics (Appendix # 26).

The University seeks to encourage interested students to participate in interesting student and professional activities. DTMU students' participation has become a tradition in the:

- summer school of University of Antwerp (Belgium) in the Vaccinology annually (since 2014);
- annual symposium of the Molecular Biology, Cologne (Germany) since 2016;
- As well as participation in a number of international student and professional conferences;
- ☐ For 10 years DTMU students participate in the exchange program (70 students involved in the program during the last six years) have been traveling to Klaipeda University Hospital in different directions of medicine (chosen by desire, according to the future career interests);
- The Cooperation with Graduates Service in partnership with USA-based DTMU alumni implemented the specific project enabling 20 sixth-year students to practice in different clinics of USA;
- DTMU students (based on their desire) have the opportunity to practice in the Center of Metabolism and Hormones of German city of Mainzs, Germany;

- ☐ The University also promotes individually regained by students opportunity to practice on the basis of a one-time training agreement in Europe, USA and India clinics.
- ☐ The university supports its students (including financially) in raising professionalism through their involvement in student professional organizations,
- © cooperation of DTMU Students' with Georgian International Medical and Public Health Association (GIMPHA) and involvement in their activities,
- 1 to the European MD / PhD Association membership and active participation;
- ☐ Facilitation of university students in meetings and workshops of International Federation of Medical Students' Associations (IFMSA) [including the support of its "subsidiary" Georgian Medical Students Association (GMSA) in Georgia).
- Participation in the American Surgeons Association clinical congress;
- It is noteworthy that most students use these opportunities to share experiences with other peers. Such student initiative (which is fully supported by the University) is the foundation of the Group of Interest (SIGA) in the Basic Skills of Surgery by DTMU students, which joined by 45 students. Developed so-called Peer-course for those students who plan to choose career of surgeon. 4 student-tutors and 3 student-tutor assistants were trained to conduct training; The results of the student survey revealed that the group's training (i) is of interest and benefit students; (ii) Course is useful for student career choices and growth; (iii) The financial and administrative promotion of the work of this group should be maintained by the University. Also recommendations have been developed for the course development purposes.
- In this specialty of medicine (surgical skills), the following factors of student collaboration and assistance interesting to underline: Quality Assessment Group has conducted a survey of senior students, where students who are already in their career choices point of "specializing in surgeon", which is yet another confirmation that this form of students' interaction with the university will need more support in the future. This type of extracurricular form of relationship is just one example, there are other examples (GIGA), Neurological Interest Group (SIGN).

A good tradition of cooperation has been formed between students and the university's Public Relations and Marketing Department. This structure of the university promotes students involvement in its events, as well as students' initiatives (sports, arts, cognition, etc.), Joint tours, social activities and involvement in sports events.

#### Evidences /indicators

- 1. Provision On pedagogical staff workload at David Tvildiani Medical University (Appendix # 23)
- 2. Rule of Regulation of the Study Process (Appendix # 15)
- 3. Student Internal Regulations (Appendix # 24)
- 4. Provision of Davit Tvildiani Scholarship (Appendix # 25)
- 5. Rule for allocating Individual scholarship of MediClub Georgia (Appendix # 26)

## 3.2. Master's and Doctoral Student supervision

☐Master's and Doctoral students have qualified thesis supervisors.

## **Description and Evaluation**

The Certified Medical Doctor program is equal to the degree of Master, but it does not require the processing and defense of the master's thesis; However, such a choice and planning and/or implementation of scientific research projects in general, other scientific approaches, are essential for future physicians, for which they are able to get advice in scientific activities, supervision, which is also described in the DTMU academic personnel workload document.

#### **Evidences /indicators**

#### □□Strengths and Areas for Improvement

Please, present strengths and areas for improvement of the Educational programme considering the requirements of each component of this standard.

#### Strengths

- 1. The organization and practice of learning process in DTMU ensure the protection of students' rights and interests;
- 2. Existing system of financial support in learning;
- 3. The scholarship fund organized by DTMU to motivate student learning;
- 4. Organizational, academic and financial promotion practice of student initiatives;
- 5. "Equity Support Center" and supporting student mutual assistance;
- 6. Creating a special service for promoting career growth;
- 7. Promoting students' public relations;

- 8. Good collaborative experience with students' Public Relations and Marketing Department;
- 9. Student Development through financial support of participation in the national and international conferences;
- 10. Supporting Conferences and Involvement of International Participants, established by the Young Scientists and Students of the DTMU Young Student Scientific Association SYSSA;
- 11. Development of the Academic Standards for the new Conference of the University (ISE) establishing the format.

#### Areas for Improvement

- 1. Introduction of an efficient system for career growth in the university;
- 2. Encourage student initiatives and create more financial capabilities for their support;
- 3. Complete "acquisition" and practical realization of collaboration with DTMU's partner scientific Institutions;
- 4. Initiate and develop cooperation with Georgian universities (including student participation);
- 5. More support in projects preparation and participation in research and development oriented grant competitions.

# 4. Providing teaching resources

Programme human, material, information and financial resources ensure programme sustainability, its effective and efficient functioning, and achievement of intended objectives.

#### 4.1 Human Resources

- > Programme staff consists of qualified people who have necessary competences in order to help students achieve programme learning outcomes.
- > The number and workload of programme academic/scientific and invited staff ensures the sustainable running of the educational process and also, proper execution of their research/creative/performance activities and other assigned duties. Balance between academic and invited staff ensures programme sustainability.
- The Head of the Programme possesses necessary knowledge and experience required for programme elaboration. He/she is personally involved in programme implementation.
- > Programme students are provided with an adequate number of administrative and support staff of appropriate competence.

## **Description and Evaluation**

DTMU (David Tvildiani Medical University) has formulated and implemented the rule of attraction and selection of academic staff. The rule is fully compatible with the Georgian Law on Higher Education. At the University the procedure of holding an academic position is conducted according to the law of Georgia on Higher Education, provision of the institution, internal regulations, and requirements of the present Rule, through the open and public competition, the principles of transparency, equality and fair competition. The rule describes the academic positions in the University, their duties (respectively to positions), terms and conditions of the election (respectively to position), criteria for evaluating the contestants (Appendix # 27, 28). Before the announcement of the competition, the staff nomenclature draft of academic personnel is compiled (presented by the vice-rector in the academic field); Staff units are defined by departments and directions (basic medical sciences: Directions of the Department of Human Morphology and Pathology; Directions of the Department of the Human Cellular and Molecular Basis of Normal and Pathological Processes; Directions of Internal Medicine Department; Directions of the Department of Social and Behavioral Sciences) to provide a curriculum for adequate delivery. The rule also stipulates the rule for drafting and activity of the Competition Committee.

Apart from the selected academic staff, the teachers are invited to the University. The documentations submitted by the invited lecturer candidates are evaluated by the DTMU Educational Department with the supervisor of the course (courses) and by his/her (their) consent, in which the participation of the invited teacher is planned; The Educational Department (in case of positive conclusion) submits the candidacy to the Rector's Council. On the basis of sharing the positive acknowledgment, the labor agreement is signed, where the rights and obligations of the parties are regulated by the Georgian legislation, the University statutes and regulations.

The rule of attraction and selection of the staff stipulates the experience, competence and merit of the person's pedagogical, scientific and clinical activities in the relevant field; As well as participation in professional and social life, it is adequate with the public responsibility related to the university mission and the preparation of young competitive staff.

It should be noted that the academic qualifications and competences meet the requirements of the Georgian higher education system and the requirements of the Georgian legislation on higher education. The program overall, its learning courses / directions are fully staffed by academic staff; The number, qualification and competences of the selected academic staff meet the requirements set out by the Higher Education Institution and Georgian legislation; teachers' assessment by the student survey is positive;

The number of academic staff selected for implementation of the basic learning component of the certified of physicians' programs is 70. Out of these 19 Professors, 39 Associate, 10 Assistant Professors, 2 Assistants, 152 invited teachers.

The Department of Education determines the prediction and planning of the requirements for academic staff specialty and level of qualifications; The criteria and requirements for selection of candidates of the academic degree are determined by the Academic Council; The competition is held by the competent Commission (approved by the Rector Council); The protocol of the decision is submitted to the Rector's Council.

The Rule of staff activity and development (Appendix # 23) is formulated and implemented in a medical school.

The document reflects the norms of calculation and use of workload of professors and teachers in DTMU: Norms for academic and non-academic work, academic workload norms for additional (hourly) work payments, which will also be important for analyzing the teachers' and students ratios for future calculation of quality assurance services (QA), for analyzing legitimate planning for future development.

The document describes what it represents (what it should represent) for the working class economy and the public at DTMU; How can be measured the subjective-creative impact on University teachers' work, provides analysis and research to determine what legitimate grounds are defined by the pedagogic labor standards.

The document defines qualification of the working norms; Describes the types of work of the teachers, specifies these types, it is useful to calculate the work experience and the volume of its specific characteristics; for planning, reporting and controlling the training and individual curriculum for educational department and teacher.

Teachers' annual working period is considered to be the academic year, including winter and summer holidays, which do not coincide with the next holiday. The total budget allocated for all types of pedagogic work is calculated by 1500 hrs. per year. In case of illness, business trip, or other reasonable circumstances, the workload is performed by another teacher (or invited teacher) by the hourly pay. Upon returning to work, before completing the academic year, it is necessary to adjust the individual pedagogical workload plan.

The academic workload of higher education level educational programs in DTMU is differentiated according to the positions of professors and teachers no more than 900 hours (and not less than 200 hours). During the academic year, the following academic workload is established for the composition DTMU professors:

Professor: 650 (within the framework of non-auditorium studies) - 300 (auditorium work);

Associate Professor: 750 (within the framework of non-auditorium studies) - 400 (auditorium work); Assistant professor: 850 (non-auditorium studies) - 500 (auditorium work).

Assistant: 350 (non-auditorium studies) - 220 (auditorium work).

Specific capacity of the working load of the teacher is determined by taking into consideration the occupied position (duties), which is stipulated by a labor agreement among them, with individual, scientific-research, other pedagogical work, which are envisaged by labor obligations and (or) individual plans, methodological, preparatory, organizational, diagnostic, monitoring, and other types of activities which are conducted with students; as well as working with PhD students, residents, within frames of continuous professional advancement (Annex # 23).

In certain cases, a particular teacher's workload can be defined by the Vice-Rector in Academic field

through the recommendation of the Academic Council of the University, below the minimum defined above, for the representatives of the professors and teachers staff, who are engaged (or instructed) to perform the additional organizational and methodical activities for the University interests.

Training work involves contact hour with a student (also resident, doctoral student) of a teacher, including electronic and distance learning technologies.

Contact hours can be conducted in both non-classroom and class-based. The auditorium-based contact hours can be presented in its traditional forms: Lectures, practices, workshops, laboratory work, and etc. also it can be presented in an electronic learning form by using of distance learning technologies. According to internal regulation of DTMU, their use may be based on and without the auditorium load replacement. In the course of replacement of auditorium trainings, contact hours are included in the teaching workload. With the supervision of the lecturer while using electronic and distance technologies for organizing and controlling students' independent work, training load is planned as

"Independent work control".

All types of activities and time norms of academic activities are defined: Auditorium trainings, consultations, control, practice, management, preparation of scientific-pedagogic staff, margin norms of other training workshops in the framework of the CPD.

The types and norms of training methodical, scientific-research and organizational / methodical work are established; Which implies preparation for lectures, for other work, organizational-methodical work for scientific-research work, as well as norms of medical activities (for clinical direction teachers), which can be calculated as teacher's annual workload.

In planning the individual workload of teachers, by the agreement with the Vice-Rector in the educational field it is possible to increase the training load above 1, 5% rate, but not more than 300 hours load per hour in a year.

Invited teacher - is invited to participate in lecture, practical training, other study and / or scientific-research process and / or to conduct this process by agreement with the head of the course and the Educational Department, the labor contract is concluded; His/her training workload is determined by a semester-renewed load scheme: 50 hours - up to 1000 hours - based on the courses provided by the training course.

Thus, in DTMU, for the academic staff a reduced duration of working hours not exceeding 36 hours per week has been established; The pedagogical workload consists of training load (supposedly one-half of the day) and also training-methodical and / or clinical work (supposedly the second half of the working day); Which is adequate to the functions assigned to him/her by the University (as well as society), as far as he/she is possible to help the student's benefit, other professional and community activities. Planning and implementation of human resource management in DTMU is considered and is based mainly on promoting staff development.

Professional development hours are required for a selected teacher (approximately 90-100 hours a year) and are recorded according to the time spent actually; he/she is deemed to be in training-methodical work and is assigned to the Department of Education.

Certification of internships, qualification raising, protocols for attendance / reviewing lectures are used for control; Other relevant evidence.

The DTMU Medical Educational Center is also preparing and providing the teachers for pedagogic development courses / trainings elaborated for the development of medical education.

#### **Evidences /indicators**

- 1. The procedure for hiring the staff (Appendix # 27)
- 2. The rule and conditions of the academic staff affiliation Annex 28;
- 3. The provision On pedagogical staff workload at David Tvildiani Medical University (Appendix # 23)
- 4. The Provision of the Dean's office (Annex #31)
- 5. Job Descriptions (Appendix # 34)

# 4.2. Professional development of academic, scientific and invited staff

- ➤ HEI conducts the evaluation of programme academic, scientific and invited staff and analysis evaluation results on a regular basis.
- ➤ HEI fosters professional development of the academic, scientific and invited staff. Moreover, it fosters their scientific and research work.

# **Description and Evaluation**

For the purpose of professional and pedagogical development, the University finances PhD students, students and also professors for medical education conferences and scientific forums (including: AMEE, AMSE).

"The institution (its academic staff) should have the opportunity to acquire new / modern approaches to learning and teaching": With the support of Tempus project and partners, as well as based on DTMU's strategic plan (is read in almost every target of this plan, as well as targeted strategies and targets), DTMU has founded the Medical Education Center (MEC), which promotes existing and new staff in introduction and implementing the new learning and teaching approaches and technologies.

The Medical Education Center has been founded (within the Project # 530519-TEMPUS-1-2012-1-UK-TEMPUS-JPCR-ePBLnet) to facilitate Georgia's integration into a common European sphere of higher education; as well as establishing a quality education system and maintaining the continuously updated and continuous processes of its development; to conduct and promote scientific research in the field of medical education;

The DTMU professor assessment system is currently based on student' assessments for which the so-called "DREEM (Dundee Ready Education Environment Measure) questionnaire is used, the important part of which is the teacher's assessment by the student's. This is the internationally recognized tool of medical education in the field of education that the university uses and the experience has demonstrated (a number of activities based on student estimates) that their assessment rate has improved in specific issues (compared with previous academic years). The last Survey Results

show that the overall DREEM score of teachers is 35/44, which is identical to "ideal teacher".

However, there are a number of "persistent issues", such as: "Teachers are authoritarian", "Adequate feedback ability", "ability to criticize students in a constructive manner";

In addition, exactly in the part of the teachers' assessment, it is clear that in recent years the improvement of teachers (Appendix # 54) has been achieved.

In the context of pedagogical development, it is important to participate in international grant competitions, as well as research and development projects in order to deepen the involvement of the University in international educational collaboration.

The University has successfully implemented the following projects:

- ✓ e-PBL net: 530519-TEMPUS-1-2012-1-UKTEMPUS-JPC "Establishment of the Supra-Regional Network of the National Centers in Medical Education, focused on PBL and Virtual Patients"
- ✓ PACT: 544047-TEMPUS-1-2013-1-GE-TEMPUS-JPGR "Project Actor Capacity Training in Caucasus"
- ✓ #G-2094 "Elaboration of a universal test on magneto sensitivity"

Currently, the University participates in the projects:

- ✓ "Academic Integrity for Quality Teaching and Learning in Higher Education Institutions in Georgia" (Coordinator: Ilia State University)
- ✓ "Raising Research Capacity of Georgian HEIs through Developing R&D Units" (Coordinator: IV. Javakhishvili Tbilisi State University)
- ✓ "Doctors' Education, Empowerment of Patients, Regarding Atrial Fibrillation and venous Thromboembolism" (Call Pfizer-RFP-2018CV2)

David Tvildiani Medical University is a member of the European Association of Universities (EUA), member of the Medical Education Association of Europe (AMEE), member of the European Council for Medical Education (EBMA).

Member of the two European organizations (also representative of the Executive Committee): ORPHEUS in the Medical Schools Association in Europe (AMSE) and the European System of Biomedicine and Health Sciences (ORPHEUS).

It participates in all these formats, including the development of expertise in the field of medical education in its staff. For example, in the framework of the e-PBL were conducted the DTMU PBL tutors tests, who assessed their own experience in the following issues:

- Does PBL curriculum have impact the skills required for academic staff?
- □ Was the academic staff prepared / trained sufficiently?

- Does PBL curriculum have impact on the facilitator skills of the academic staff?
- Do PBL tutors have sufficient technological skills?

The results showed that PBL tutors have the necessary resources and sufficient training in respect with PBL's conduct. It also confirms that the technologies used, including interactive PBL, are effective, relevant and easy to use. PBL tutors have confirmed the high involvement of students at PBL sessions, which facilitates the development of high quality discussions. The tutors emphasized the fact that conducting of PBL will need the skills that are less common in "traditional" formats.

Davit Tvildiani Medical University is a profiled University in which the work of a fully defined interests ("medical surveys"); Besides, "medical surveys" (including the use of this text) are intended for a wide range of research activities and medical knowledge. Consequently, the academic interest of the university professor is focused on a wide range of "diverse" medical problems (meaning in terms of medical specialization of disease: Diabetes, Infectious Disease and etc.) In addition, the above activity can include both the molecular, cell levels, and the level of single models (experimental animals), clinical studies and observation of population and sub-population levels, more analysis, focus group discussions, interviewing and other research (Annex # 30).

The University has a system of research development and creative activity support; Which aims at finding new knowledge, visions, approaches and perspectives (including further studies), including support in new research findings (Appendix #32). Systematization of the above mentioned is conditionally as follows: (i) Support for providing relevant services, including individual needs (ii) Knowledge of the relevant educational formats; (iii) Sending researchers and students (in accordance with their interests) for the purpose of reporting, participation and new interesting collaborative capabilities at the international forums and etc.

#### Evidences /indicators

- 1. DREEM survey and analysis of results (Appendix # 54)
- 2. Information regarding DTMU academic and scientific personnel scientific activities (Appendix # 30)
- 3. Support mechanisms for Research activities (Appendix # 32)

## 4.3. Material Resources

□Programme is provided by necessary infrastructure and technical equipment required for achieving programme learning outcomes.

## **Description and Evaluation**

DTMU (as of February 28, 2018) holds 2 space (one entitlement, second right to use) and non-study [(student ownership) space (ownership) for 369 students] (Appendix # 33). Real estate is registered by the National Agency of Public Registry and has been assigned relevant cadastral codes. Measurement drawings are prepared, in which the study and supporting spaces are separated from each other. In the last years, reconstructing facilities (training auditoriums, foyers) have been renovated and equipped with renovated technique, furniture and equipment. (See Annex 33). The number of auditoriums at this stage are enough for the number of students in the university. The University has also signed agreements with clinical, scientific research and other institutions for students' learning, research and professional skills (Annex # 20), which confirms the authorization decision # 65 (10.09.2018): "To grant the status of a Higher Education Institution (University) Ltd Davit Tvildiani Medical University (I / C 211360203) for a term of 6 years and to limit the number of student seats by 1000." There is an approved project for construction of a new hospital (Appendix # 37).

Didube training base (on the basis of a lease agreement) is also provided with educational auditoriums equipped with appropriate inventory; Including foyer, library reading room, simulator room, teacher room, auxiliary area, bathroom, spaces for research blocks. Educational auditors have natural and artificial lighting, continuous system of electronic energy supply. Bathrooms are adapted for people with special needs. Space is provided with the central heating system and air conditioning.

Results of Student Survey on Material Resources are Satisfactory (Appendix # 38).

DTMU - Daphne Hare Medical Library (hereinafter Library) is a part of the university education process, which defines the specificity of its working regime (adjusted to the needs of the students at the first place), which is reflected in the provisions of the library and the library's rules and is available to all readers. The University Library works from Monday to Saturday from 9:00 to 20:00 (Appendix # 39).

<u>The library's environment includes the following spaces:</u> Bookshop, reading hall, information-technology equipment space, group work space, working space for the staff working in the library.

<u>Equipment</u>: The library is equipped with appropriate inventory: 17 personal computers connected to the Internet, 1 laptop, printer, wireless internet.

#### Print and electronic information resources in the library

The foundation currently in the DTMU library is sufficiently diverse and for any level (diploma, post-graduate) and continuous professional development (Appendix # 40).

variety: In the field of teaching and learning in the sector due to the specifics of the basic medical sciences, clinical sciences and social and behavioral sciences in an extensive and diverse list, including the requested program level, and textbooks and other publications (among them periodicals, scientific journals) Form; Which is one of the most important resources for the learning outcomes of the educational process and the existing programs. Diversity also implies diversity of resources / sources: New generation of students are increasingly using electronic books; Accordingly, along with printed versions of the book fund there are electronic versions of the textbooks at the university; As well as other electronic learning tools; For example: In the current academic year, the Atlas of 3-dimensional human anatomy has been acquired, interpreted for interactive teaching with radiological images; Also a virtual patient (VP) simulator (VP) - (https://bodyinteract.com) - VP simulator is based on realistic physiological algorithms, resulting in the answer to each virtual patient's interventions is almost identical to the real patient. The simulator allows interactivity with a virtual patient (conducting anamnesis, conducting physiological examination, prescribing and administering medication (s), prescribing medical examinations and receiving relevant response, different types of interventions), that provide dynamic response in real mode. The mentioned gives the possibility to focus on the patient's health condition.

The system allows the patient management process to be evaluated at the end of the Case and its results, as well as to compare current and recommended standards.

### Renewal:

The University periodically updates the library fund with new editions of manuals and other literature (is reflected in quality assurance annual reports of);

DTMU Library is a member of the Georgian Library Association and the Georgian Library Consortium of Georgia and a member of the consortium of the project "Electronic Information Libraries - eIFL", which has access to the following electronic resources and bases (available for academic composition ,as well as students) (Annex # 41):

- BioOne Complete,
- The New England Journal of Medicine,

- Royal Society Journals Collection,
- Edward Elgar Publishing Journals and Development Studies e-books.
- SagePremier,
- <u>Cambridge Journals Online</u>,
- e-Duke Journals Scholarly Collection,
- Openedition Journals.

The university also has access to HINARI, AGORA and OARE bases. In addition, the use of e-base use statistics is low (Appendix # 42).

Thus, there is a useful and interesting resource for academic development of students, teachers, university institutions affiliated to the library.

The literature indicated in the Syllabus is available in the library.

Currently in the library according to the inventory materials are 5454 books; 1678 periodic editions; Audio & Video Products: Video 165, audio 408. CD 121; The University Library also has a database of electronic textbooks includes 167 textbooks.

In 2011-2017, the Daphne Hare Medical Library was filled with 753 units, among them 621 books, 114 periodical publications, 11 compact discs, 11 thesis / 11 auto-abstract;

Electronic Library Bases (IMF e Library) has expanded in recent years; the electronic catalog of the library, electronic databases are located on the school's website (Annex # 33).

The University has begun to purchase and take care of the effective e-educational resources for learning and learning in medicine (atlas of 3-dimensional human anatomy, a virtual patient (VP) simulator).

At the same time, still not enough (electronic bases usage statistics) implementing this resource (in the area of "Interesting") in the University, more work with the members of the academic community in the daily practice of these resources. In addition to increasing the awareness of more books, magazines and other resources with participation, meetings and other events through the library and academic staff, students, staff, residents, schoolchildren and other target groups.

In the library there are alphabetical, subjective and electronic catalogs in the working mode. The detailed provision of the library's activities can be taken from the library for a long period of time (but no more than 3 days) and for a short period of time. The literature taken for long-term is registered on a reader's card by reader's signature. The literature taken for short-term is registered with the reader's signature on the book formula. The mentioned change

is introduced due to very rapid turnover of literature (each handbook / copies are 5 times more and rotates during the working day) and to save time for readers.

The library has the following documentation confirming the library fund: Inventory book of the book fund (Georgian, English, Russian and Russian Fund), Periodic, Audio, Video and Electronic carriers (CD). Books of the library are processed in accordance to the library regulations;

The "Information Day" is set up in the library, which is given one day a week during the entire working day. The reader has the opportunity to receive any important information, including access to the electronic databases and the use of electronic catalog. New information is also collected on information boards as well as on the library's Facebook page, where all current information is available on the library's new books, conducted scheduled meetings, consultations and other events.

There are also library resource and reading halls available for teachers and students at the Didube Training Base, equipped with the necessary equipment.

The work was conducted by students' survey (Annex # 43), which aimed to assess the library's and identify the weaknesses that are problematic and need to be corrected. As a result of analysis of the results, the strengths and weaknesses of the libraries have been identified;

The University has taken into consideration the best practices of the university, including (i) the objective of the student's library resources to make the environment more comfortable and to increase access to eBooks and other e-resources individually for use in the library currently 18 computers for 34 seats in the reading room. (ii)Also, the existing practices are described in the "Library Resource Development and Renewal Mechanism" (Annex # 44).

Davit Tvildiani Medical University is increasingly focusing on the use of information technologies for the purpose of supporting and strengthening academic processes. The university has a well-organized information technology infrastructure, as equipment (computers, projectors, etc.), as well as communication means (internal network, wireless internet, etc.). DTMU secures protection of the local network from outside the illegal actions using physical firewall.

Through the DTMU server is secured the proper functioning of information resources, such as, e.g. Openlabyrinth3 (Electronic platform, which provides cases of virtual patients for students and modeling and review of patient's management and clinical judgment skills in the form of problem-based learning).

Also, the university is actively using the interactive electronic simulation of patients in the study process, namely Body Interact Cases.

The University has its own internal electronic platform (LMS.AIETI.GE), through which is conducted the management of semester, management of groups, student management, entering of evaluations in the electronic journal. The existing base registers the student's attendance, activity and oral assessment. The electronic database can calculate the pre-quiz points so that to determine the issue of admission to the final quiz for the module.

The University also has a student portal (http://db.dtmu.ge) - a student portal by using of which students are informed about their assessment - attendance, activity, oral exam, quiz assessment; Also, the above-mentioned portal is used for communication with students.

The student only sees their own personal details on the portals, based on individual courses.

The University also possesses the following electronic resources (teaching, learning, evaluation) for academic activities:

http://www.anatomy.tv - The University has purchased ANATOMY.TV license. This electronic resource allows users to get acquainted with a detailed analysis of the human anatomy of 3D technology. Except learning pages the aforementioned resource also has its own testing function. Access to this resource is freely available from the university territory (when the license is purchased by DTMU's external IP address), and if the student or lecturer wants to access the resource from the university's territory, it can be accessed by user name and password.

http://moodle.dtmu.ge - The University has a Moodle platform, the automatic updating module is automatically enabled on the server, which means that Moodle's official updates are automatically available on our server. At this point, version 3.4.1+ of Moodle is used.

The university has a quiz program which is a specially designed program in 2015 and has been developed in close cooperation with the Programmer's State to maximize the DTMU needs (Appendix # 40). All the exam materials are loaded into the existing program. The internal network of the quiz room is isolated from all other virtual networks connected to the server, with which only 2 responsible persons of the Educational Department have the access. The student's examination or quiz data is stored on the above mentioned server and the data is processed by the Department of Education. Counted data is available in lms.aieti.ge database.

In order to implement the clinical part provided by the departments, DTMU has signed agreements on cooperation with leading clinics of the country and university international partners (Annex # 20).

The teaching/ learning / assessment of the Program II ("Clinical Medicine Course") and III stages (clinical clerkship) within each course is practiced on the clinical bases. Through these databases they have access to the patients of various ages (children, teenagers, adult, older) on an outpatient basis and hospital-based patients, master to manage urgent situations and manage a chronic patient's management, the mentioned they have in a wide range of medical specialties (provided by the DM program), Contracts with bases are available, where the selected and invited teachers of the University work. Specifications of the clinics, profile, number of beds and etc. is provided and is relevant to the number of students determined by the tables.

The clinical learning environment is evaluated by the DREEM questionnaire, as well as its improvement and etc., as well as other questionnaires about the training in clinical skills (appendix #54).

At this stage professional training is provided in the format of controlled self-education; Applying skills in the practice of student knowledge and skills in professional skills is also evaluated by analysis of job conducted (portfolio / log-book analysis), communication with patients and colleagues and other skills assessment reports; Its current assessments are positive for the final (qualifying exam).

#### **Evidences /indicators**

- 1. Extracts from the public registry and Drawings (Appendix # 33)
- 2. Agreements / Memorandums concluded with the Practice Research Objects (Appendix # 20)
- 3. Project for new hospital (Appendix # 37)
- 4. Information on the results of the material resource survey (Appendix # 38)
- 5. Rules, instructions of using library, organized meetings (Appendix # 39)
- 6. Daphne Hare Medical Library Inventory (Appendix # 40)
- 7. Documents confirming involvement in the international electronic library network (Appendix 41);
- 8. Statistics of Electronic Library Bases (Appendix # 42)
- 9. Results of students' surveys \_ evaluation of library environment (Appendix #43)
  - 10. Mechanisms for the development and renewal of library resources and services (Appendix #44)
    - 11. Agreements / Memorandums concluded with the Practice Research Objects (Appendix #20)
  - 12. DREEM survey and analysis of results (Appendix # 54)

#### 4.4. Programme/faculty/school budget and programme financial sustainability

The allocation of financial resources stipulated in programme/faculty/school budget is economically feasible and corresponds to programme needs.

#### **Description and Evaluation**

The financial state of the University is stable, increasing and ensures the implementation of the activities implied in the Strategic Development Plan.

In order to implement these events, after analyzing the information provided by the structural units of university during the formation of the 2018 budget, it was envisaged in the expenditure portion of the budget in accordance with the requirements of the Economic Classifier.

Planning of expenditure is planned in parallel with DTMU budget revenue planning. In planning the cost of expenditure, it is important to first take into consideration the funding of all necessary expenses, which are entrusted to the university as an entrepreneurial entity, in accordance with the normative acts adopted by the applicable legislation in the country and the authorized bodies of the university. Such expenses include state taxes and fees, execution of salary liabilities undertaken by the staff timetables and contracts, granting scholarships, settlement with valuables and services suppliers, payment of membership fees, student mobility, research financing etc.

In DTMU the workload of the pedagogical composition is determined by the provision (Annex # 23) the document reflects the norms of calculation and use of workloads of professors and teachers in DTMU: Norms for teaching and non-teaching work, training norms for additional (hourly) work payments.

The university management team approved budget priorities of Davit Tvildiani Medical University:

- ☐ Educational and informational, development of library resources (for promoting teaching, learning and research processes);
- ☐ Intensifying Cooperation with leading European Universities (exchange student programs, business trips, student conferences, internships etc.)
- Scientific research activities (scientific trips and conferences, research financing, internationalization)
- Implementation of infrastructural projects (completion of existing construction, current and capital repair of building facilities)
- Improvement and development of the learning environment
- ☐ Improvement of staff qualification, retraining (organizing various training courses, teaching foreign language)
- ☐ Support various initiatives (funding of nominative scholarships, encouraging employees, supporting student initiatives, etc.)

The system's financial management and control is newly developed, and at this stage it is implemented and tested in practice. In the future, the establishment of a functional assessment document actually implemented by the financial management control system and the relevant recommendations are taken into consideration.

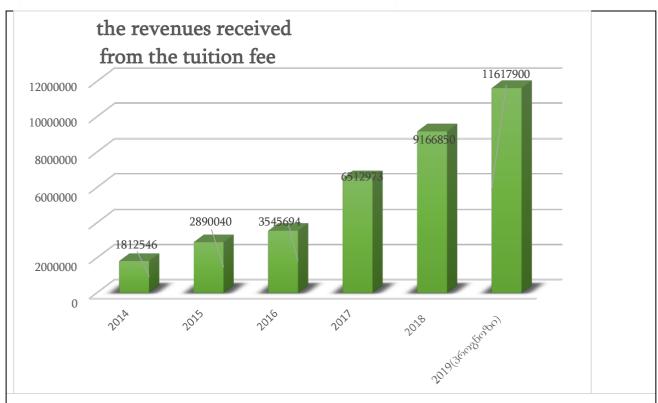
The managerial accountability, financial management and control mechanism at the university is developed by the institution's charter. Specifically, only to the President has right to be the managerial ruler of the LLC. Besides, in accordance with the Law of Georgia "On Higher Education", the appointment of the Rector by the president authorizes to delegate the management authority. The President is involved in the control of budgeting and execution through the management group. The institution analyzes economic and accounting politics, also performs accounting in accordance with the financial and fiscal policies recognized in accordance with the provisions of the financial department. The financial department and its representatives are responsible for the reporting and accounting of the institution's internal or state budget within the framework of the approved budget by the rector (taking into consideration the involvement of strategic development and management department and providing target marks).

In order to improve the financial management and control system, as well as to allocate and increase the efficiency and use of resources, as well as avoidance of misuse or waste of resources, the University has developed a document that will be implemented in university, in accordance with the Universal Charter, other Rules of Activity, Regulations and DTMU in Conceptual Documents of Human Resources Management (appendix #45).

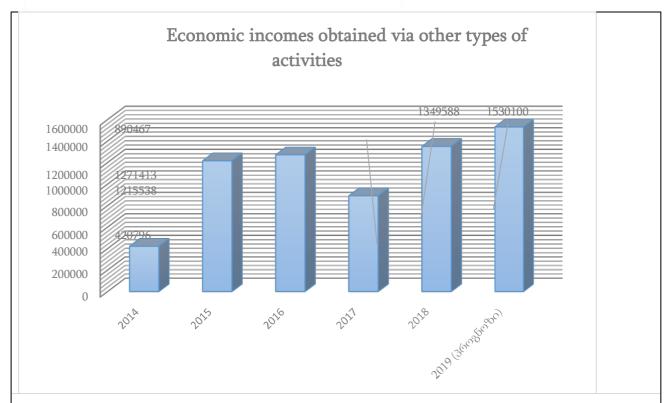
DTMU Budget is a financial document created by high engagement of the structural subdivisions of the University. The financial resources provided by the budget of the Institution are economically viable. The key sources of financing are:

- 1. Tuition fee of educational programs;
- 2. Grants of national and international foundations;
- 3. Other permitted incomes got via economic activity.
- 4. Dividends earned via involvement in different enterprises.

The main source of funding the University is the revenues received from the tuition fee from certified medic, (E-PBL) Medical Doctor, Doctoral and Resident Educational Programs, the volume of which is growing annually from 2014 to 2019:



The volume of other incomes received from different sources of financing also is increasing every year, which in its turn consists of property leasing incomes, interest incomes obtained from the issued loans free finances, different commission-administrative incomes, dividends received via involvement in different enterprises and other activities allowed by the Legislation of Georgia.



Davit Tvildiani Medical University has not received funding from the state budget throughout the whole period of functioning.

The revenue portion of the University budget plan is allocated for all possible revenues

that the university can receive during the year. The complexity of the planning process is that the budget (calendar) year does not coincide with the academic year (period), therefore, the revenue receipts

from student tuition fees will be taken into consideration by the places allocated for the next academic year. As the existing practice shows,

the number of seats and the number of students enrolled to the program is mostly sufficient to provide financial support to the program and, taking into consideration the revenues from the rest of activity, allows the University to reinvest

as an implementation of educational programs

quality improvement, and other goals that create more solid and long-term guarantees of financial security in the future.

Analyzing the revenues of recent years shows that the existence of financing diversified sources allows for risk management and ensures efficient distribution of finances. Expressing of the mentioned opinion allows us the fact that the University budget

has increased six times and more over the last five years. Naturally, this is not a maximum of financial resources that is achievable The University continues to work towards finding diversified sources of financing both in Georgia and abroad and attempts to maximally utilize human or material resources to increase the budget.

The financial state of the University is stable and increases the implementation of the activities reflected in the Strategic Development Plan.

Planning expenses are planned in parallel with budget revenue planning of Davit Tvildiani Medical University. In planning the cost of expenditure, it is important to first take into consideration the funding of all necessary expenses, which are entrusted to the university as an entrepreneurial entity, in accordance with the normative acts adopted by the applicable legislation in the country and the authorized bodies of the university. Such expenses include state taxes and fees, execution of salary liabilities undertaken by the staff timetables and contracts, granting scholarships, settlement with valuables and services suppliers, payment of membership fees, student mobility, research financing etc.

For the purpose of rational and efficient use of free amounts in planning the budget, the University subdivisions have recently been allocated spending limits within the framework of the Annual Action Plan document. In the expenditure portion of the current year, the strategic plan of the university development is to determine what decisions should be taken in the conditions of limited financial resources (if any) to effectively implement these plans.

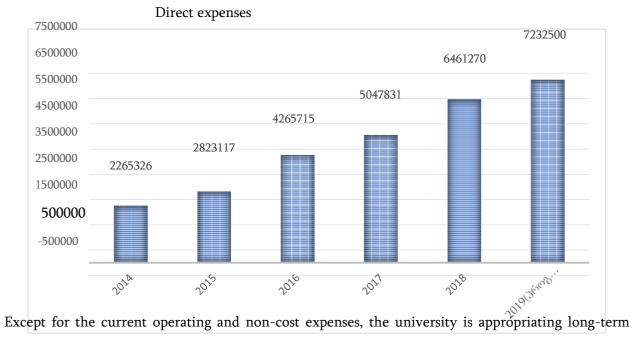
Administrative expenses within the total budget represent 6-15%. It includes both pay and material as well as other expenses. By the years decrease trend is noticeable in dynamics.

The university is providing financial resources, which ensures sustainable development of teaching process, research, other university activities, as well as sports activities and infrastructure, as in the current period, as well as in the future. The ruling group discussed and approved the budgetary priorities of Davit Tvildiani Medical University 2019:

- 1. **Educational and informational, development of library resource**s (for promoting learning and research processes);
- 2. **Intensifying Cooperation with leading European Universities** (exchange student programs, business trips, student conferences, Internationalization and etc.)
- 3. **Scientific-research activities** (scientific trips and conferences, internationalization);
- 4. **Implementation of infrastructural projects** (completion of existing construction, current and capital repair of building facilities)
- 5. Improvement and development of the learning environment
- 6. **Improvement of staff qualification, retraining** (organizing various training courses, teaching foreign language)
- 7. **Support various initiatives** (funding of scholarship scholarships, encouraging employees, supporting student initiatives, etc.)

The mentioned priorities will be updated annually proceeding from the needs of the relevant periods.

The volume of expenses as well as incomes grow according to the budget through the years. Within the period of the University functioning the annual budget is mainly preferential and all expenses are financed in time. Founder partners' interests are taken into account as well. The operational and non-operational expenses dynamic in the years of 2014-2018:



Except for the current operating and non-cost expenses, the university is appropriating long-term assets and thus funding, in particular, fixed assets and intangible assets, financed investment in the enterprise, and the library fund is completed. The purpose of the all aforementioned is that the University should have a sustainable and stable material and financial base for the main activity in current and also in upcoming periods.

For the purpose of accomplishing and control the planned budget, the financial management system introduced in the University that allows efficient management of financial resources. The Department of Strategic Management and Development conducts controlling the budget execution in compliance with state legislation and regulations in the University. In order to receive planned income, systematically conducts administering events on inventory of students and other receivables and in respect of timely repayment; Based on the analysis of the cost of documentation, determines the conformance of the expenses incurred with the articles of the economic classifier of the planned budget, after which the amount of expenditures is reflected in the expenditure portion of the budget, according to sources of financing and expenditure categories.

#### Evidences/indicators

- 1. The provision on pedagogical staff workload at David Tvildiani Medical University (Appendix # 23)
- 2. Financial Management and Control System in DTMU (appendix #45)

# □□Strengths and Areas for Improvement

Please, present strengths and areas for improvement of the Educational programme considering the requirements of each component of this standard.

# Strengths

- IIIThe University has developed and approved a pedagogical document that is oriented on the development of academic personnel;
- Delagogical workload, its types and etc. are shared by the DTMU academic community and approved by the Academic Council.
- DDThe document is useful for calculating the volume of training and its specific characteristics for planning, reporting and controlling of the curriculum, individual curriculum;
- DDProjects developed and implemented for the growth of professional staff; Policy and practices in the existing university in terms of the issue;
- DDSupporting University and stimulating the development of new, development oriented projects;
- □□Allocation of financial resources described in the budget of HEI is economically achievable;
- DDGeorgian Library Association also has a consortium membership, joint training, training and participation in workshops;
- DDWork done by the university to improve the library environment; also caring about providing book and other educational resources;
- Development of the document for financial management and control system;
- DDExpenditure on infrastructure and / or other projects for renewal and development of educational resources (Body Interact, Open Labyrinth, Moodle, 3D Anatomy Atlas, Progress Testing, Turnitin;
- Development of resources and staff to providing clinical training;
- IllEstablishment of the Central Scientific Research Laboratory to facilitate research based research.

#### Areas for Improvement

- IIIMonitoring assessment report on actual performance and control mechanisms by Quality Assurance Service;
- IIIPlanning and conducting scientific research of professional pedagogical labor expenses;
- DD Permanent work on growth of budget allocated by DTMU;
- DDCare for further development of existing electronic learning resources;

DDFocusing more on the preparation and implementation of grants, establishing long-term and short-term financial strategies for the basic activities (academic and research) of university.

DDEffective implementation of correctly defined strategies (correct distribution of financial resources, determining academic and infrastructural priorities and constant revision).

# 5. Teaching Quality Enhancement Opportunities

In order to enhance teaching quality, programme utilizes internal and external quality assurance services and also periodically conducts programme monitoring and programme review. Relevant data is collected, analysed and utilized for informed decision making and programme development on a regular basis.

# 5.1. Internal quality

Programme staff collaborates with internal quality assurance service(s) available at the higher education institution when planning the process of programme quality assurance, creating assessment instruments, and analysing assessment results. Programme staff utilizes quality assurance results for programme improvement.

## **Description and Evaluation**

Based on the University's educational mission, programs and their provision are one of the most important targets in quality assessment and development; Consequently, defining the aspects of teaching and learning quality programs (for guarantees to standards) that require attention, monitoring and evaluation are the main target of DTMU quality assessment.

Also, the important place in Quality Assurance takes place the information needed for strategic planning, specific actions for identification of problems and communication with academic community; Plan-Implementation / Evaluation / inspection/ Development / Improvement - for assurance of continuous development of Quality Assessment Processes based on Work Cycle. Program evaluation aspects:

□□Employer Requirements;

IIILearning expected Outcomes;

The Program Description;

□□Content of the program curriculum;

□□Organization of the program;

□□Teaching / Learning Strategy, Didactic Concept;

□□Student evaluation system;

□ academic staff quality;

□□Quality of support staff;

□□Promotion and consulting of students;

□□Infrastructure and environment;

□□Students assessment (Student opinion survey);

□□Curriculum design and evaluation;

□□Staff development activities;

□□Graduates achievements.

The curriculum development is a key element of persuasion in the system of knowledge and consciousness. Important elements of internal assessment of quality for its continuous development are:

- Define the goals of the program and learning outcomes; to specify what should a student learn and what to achieve;
- Determining content, selecting important (large) topics and defining the program's structure;
- Delection and Development of Teaching methods and technique;
- □□Selection of literature and other educational materials;
- DDHow (in what way) students will be evaluated in order to assess the learning outcomes;

For Quality Assessment Methodology is used the description of the situation according to the Quality Assessment Purpose, Quality Indicators, Performed Works and Evidence (Appendix # 47).

The University has a database system and information that is constantly updated / filled and contains a "long" list of data: For example, student progress (transfer from semester to semester) indicator, teacher / student ratio, number of alumni, etc. It is also known that their (most part of these indicators) capabilities are quite limited, and for other purposes, is often "added" to collection information; in quality assessment the University uses indicators: (i) for legitimization (reports on activities), (ii) for evaluation (for monitoring the results), (iii) for discussion/review (Interactive use of data) and (iv) for decision making (for data usage process changes).

The official structures and bodies of the University provide the format of cooperation with the QAS service in the process; the Service creates the Quality Assessment Group for the annual self-assessment planning, monitoring and evaluation by compulsory engagement of academic staff and students. The experience of the QA Service (including this rule) has shown that the involvement of academic community members in the quality assurance team brings additional benefits to improving learning and teaching processes.

Furthermore, development in this direction requires further steps in particular, more dialogue with the staff to develop their individual role in quality development, readiness to work on his/her own the job quality.

The size of the University, oriented only on the medical field, structure created in centralized form (university level) gives the opportunity to use the strengths that characterize this kind of (centralized) structure; For example, the unified approach to quality assessment is easy to connect with the overall institutional strategy; In addition, focusing on the need for faculty ("decentralized") facilitates communication with the university staff, protects the risk of duplication of duties in the university and different approaches. Accordingly, the service has external and internal university responsibilities. Its responsibility for external evaluation is the relationship with the Ministry of Education and Science of Georgia and the National Center

for Educational Quality Enhancement. It also cares about the University image at international and national level (see Reports for the purpose of external evaluation submitted by the Quality Assurance Service)

Collection of feedback is the main element of quality assurance for continuous development and is designed to measure a number of standards; in addition, it is important that gathering feedback is conducted by different mechanisms and questionnaires are the only one method.

The self-assessment results help us to get valuable information about the perception of the people concerned and combining them with other data helps us to understand the overall picture of the institution. In learning and teaching issues, feedback is gathered by everyone who has the influence on the process including of students, teachers and administrations. In our experience, "the hardest gathering" is information from the teachers; at the same time necessary; such questionnaire covers issues ranging from the daily working environment, promoting, and etc. Including the mission of the university and the goals of the faculty; any good material about the responsibilities, the positions of the staff to "hear their opinion" and etc.

Students' involvement should not be limited to the delivery of the feedback and receiving the information. They are involved in quality assurance (such involvement should continue and be strengthened):

- By providing feedback (for example: Surveys.
- Preparation of self-assessment reports and
- with involvement in management of the institute (membership in decision-making committees).

Consequently students are participants of the process (the development of the quality assurance) as equal partners, contributing to the sharing of responsibility for the quality of their education.

To get feedback, the University more frequently uses the survey of external assessors, alumni. From the graduates is received feedback in the improvement of the training program; as they may be potential assessors of their training program on career achievements. The university is trying to maintain the connections with the former students' through the creation of university's meetings, joint work and continuous professional education opportunities.

In such case their contribution increases, e.g. Growing answers to graduate surveys.

The medical school conducts analysis of students' progress, researches the reasons for "success" or "failure" for the purpose of curriculum planning, student selection and / or advice.

In the context of the results of the Unified National Examinations, the aim of which was to improve the enrollment requirements / criteria in the DTMU (Annex # 16) was conducted in the context of the results of the Unified National Examinations in 2016-2017 and 2017-2018. The following indicators have been used for describing learning progress within the frame of the report: A)

"Quiz -admission" indicator- checks and summarizes a student's every-day/ongoing work; B) "Quiz-passing" indicator- summarizing

evaluation, checking and reflecting that results, planned by the University educational module are accomplished at minimal level. The following was used for the preparation of the report: 1. The information published by the National Assessment and Evaluation Center (amount of a grant, obtained by a school-leaver, which option he/she was enrolled at, fresh/scale and competition points, which subject was the key for an enrollment); 2. The points obtained after passing a test-examination of the module, learned by them at DTMU. The research has made some practical recommendations that the University will take into consideration when planning the student contingent and inquiry. Analysis of students' enrollment criteria by the UNE and the mentioned criteria were changed. Quality Assurance Service conducts a periodic study of the students' opinion about teachers (reflected in the present document 4.2).

Quality internal assessment reports are discussed at the Strategic Development and Management Committee; Reports, reports and approvals are made at the Rector's Board. Quality assessment results are reflected in the University Action Plans (for the purpose of planning, adjusting, and / or new activities), which will ensure the improvement and development of the University's further activities based on the assessment results.

Interesting researches are conducted by Quality Assurance Service (in collaboration with PBL Tutors) to determine how students can self-evaluate their performance and how this evaluation is relevant to the evaluation of the faculty (see 1.2 in this document).

Evaluation results are reflected in the action plan and / or university (7 year) targets, including internal data collections in focus groups.

The possibility of development of internal culture is reflected in the strategic plan (12th goal); Important Principles for Implementation are given in the Annex to this Self-Assessment Report # 47; DTMU Significant Characteristics of Quality Assurance and Important Principles of Development; Quality Assessment procedure and the report of the results carried out during the reporting period are reflected in Appendix # 48 (pg.3): The procedure of quality assessment results and report the use of results.

The above-mentioned Survey (appendix #23) was also important in terms of planning the contingency, the limits of which is generally established by the state through the authorization mechanism. Planning is carried out by human, financial resources and infrastructure, the scope of the academic workload of teachers (Appendix # 23) and accordingly taking into consideration the "norm" of student-teachers. As well as the actual number of students enrolled in the Annual Situation Program (on the workload of the pedagogical composition at David Tvildiani Medical University (DTMU) and DTMU in accordance with the student contingency planning mechanism (Annex # 49).

#### Evidences /indicators

- 1. Important Characteristics of DTMU Quality Assurance and Important Principles of Development (Appendix # 47)
- 2. Analysis of the academic performance of freshmen students in the context of the results of UNE 2017-2018 (Appendix # 16)
- 3. The procedure for use of quality assessment results and the report on the use of results Annex 48;
- 4. The provision on pedagogical staff workload at David Tvildiani Medical University (Appendix # 23)
- 5. the methodology for determining the student contingent (Appendix # 49)

# 5.2 External quality

Programme utilizes the results of external quality assurance on a regular basis.

# **Description and Evaluation**

For the purpose of accreditation the external evaluation of the program quality was conducted in July 2014; Since then, the reports on the progress of the program development are annually submitted to the National Center for Educational Quality Enhancement. In addition, the educational program of electronic problems based Leaching for Certified Medical doctor( E-PBL) was developed by the EU funded

"530519-TEMPUS-1-2012-1-UK-TEMPUS-JPCR: within the frames of Establishment of the Supra-Regional Network of the National Centers in Medical Education, focused on PBL and Virtual Patients (ePBLnet). Consequently, each stage and component of the mentioned process was evaluated, on the one hand, by the Coordination Council composed of the members of the Consortium of the Project within the framework of the project, and on the other hand, the members of the relevant EU team at the end of the project.

During the project (refer to the Accreditation Report period of the Program Certified Medical doctor( E-PBL), at the David Tvildiani Medical University was conducted provision of adapted PBL cases for students and their survey (Karaganda University) for the purpose of assessing these cases (see Appendix "D3.3 Repurposed PBL cases evaluated and implemented" ). After completion of the PBL week, e.g. after full coverage of PBL case, 25 students of 2nd and 3rd courses were interviewed. The purpose of the survey was to study their assessment and opinion about the virtual patient and the benefit of the experience. The assessment of a virtual patient by the students was positive and was expressed high interest towards it. Also, their assessment towards the benefits of learning and training of basic and clinical sciences was positive, however, it was difficult for students to assess whether the **PBL** relevant quality their case was training. The mentioned research was based on the Medical Education Center and the Adaptation Team for relevant allocation in the case Program. Example: PBL case "S.T" by 58% of students was evaluated, as very difficult compared to their level of preparation, accordingly the Center for Medical Education informed

the Adaptation Group and the Tutors and by consulting with them the mentioned Case was reallocated in the table.

Under the supervision of the Ukrainian partner of the project (Sumy State University) the framework approach for the Study Program (PBL Case and Week) has been developed for adaptation of educational resources, within the framework of which was conducted the comparative analysis of the necessary resources with the existing resources and the available resources were shared to the consortium (see appendix "D4.1 Adaptation of the existing resources"), based on the mentioned the database was developed for supporting each PBL Case (see appendix "WP4.1 GE").

The possibilities of using a virtual patient (VP) evaluation were studied. For this purpose, by the Ukrainian partners have made the assessment-VP content and technical elaboration and then by using it a pilot was tested online. 23 students from Davit Tvildiani Medical University participated in the testing (see **appendix "D4.3 Trial of online summative VP-based assessment).** All students passed the test in allocated time and the process took an average of 43.2 minutes. They took an average of 41.7 seconds to analyze the page / information for each "decision making" case. The scores of final results were distributed within 30-73 (only 2 students resulted in 20-27 points). Presumably, on the navigation of students in OpenLabyrinth3 Interface more focused instruction was needed.

Project Leader Partner, London St. George University has undertaken a detailed survey of the process (see Annex "D5.4 Evaluation Report") within which the following groups were identified as categories of stakeholders:

Students;
PBL tutors;
Persons involved in the curriculum adaptation;
Persons involved in the cases adaptation;
Heads of Medical Education Center;

The targeted survey of the relevant persons was held from each identified group.

For example, from the students' group 24 students were interviewed from Davit Tvildiani Medical University, who evaluated their experience in the following issues:

	Does PBL increase their motivation and involvement
	Does PBL increase or reduce their "load"?
П	Does PRI influence their "achievements"?

### Does the use of technologies in the process influence their experience?

The results showed that PBL's implementation significantly improved students' motivation and engagement in the learning process. Students have confirmed that interactive cases have increased their involvement and increase motivation to find additional information for the purpose of "solving" the case and making the diagnosis. Part of the students noted that PBL increased their "workload". They also pointed out that interactive cases helped them to be more prepared for real clinical situations, namely, improved the ability to diagnose and care for the patient in the clinical environment. The students positively evaluated the technologies used for PBL implementation.

Within the frames of the above-mentioned project, the quality of the project was evaluated within the scope of the program preparation (first of all E-PBL curriculum elaborated in the University of 6 Partner Countries) in particular:

- A) Development of Project Quality Assessment Plan; B) Production of quality assessment process; C) Project Quality Assessment Report.
- A) Quality Assessment criteria and aspects, as well as aspects of self-assessment aspects of new programs (including DTMU E-PBL program) have been announced at the early stage of the project planning, however, its development and monitoring process also included a reporting period to the National Center for Educational Quality Enhancement (2015-2016 academic Year) The document describes the quality control objectives (including within the frames of the new certified MD e-PBL), the quality management organizational issues, determining the roles and responsibilities of partners (and / or contribution) in it; Includes selected approach (logical structural approach) and methodology of quality assessment, as well as methods and means for quality control; Determines "Quality Assessment Targets"; among them, the new program curriculum evaluation section plans the program self-assessment in 14 aspects of the assessment. The document also includes a guideline for each above-mentioned quality aspect description / analysis, formulation of the research / analysis of the strengths / weaknesses, research / analysis of evidence and improvement plan.
- (C) a quality assessment report document fully reflects the quality monitoring results (see above-mentioned B) in the performance of the project (including the period of the reporting) (including in respect of the new E-PBL programs) in terms of quality / expected results; Describes (and represents) quality standards for referencing documents, quality measurement indicators, relevant methods, research design (first part of the document).

The second part of the document (in respect with curriculum assessment)

(i) describes and evaluates the plan of modernization (including DTMU certified Medic Program) – based on analysis, determines the strengths / weaknesses and develops a further development plan; ii) describes the results of the assessment reports (strengths, weaknesses, action plan) including programs (among them DTMU) of the Programs (including DTMU certified Medic E-PBL Program) with respect to the planned aspects of Quality Assessment

(see Quality Assessment Plan) and summarizes the results of the survey; The document also presents (iii) the results of analyzing the quality of adaptation of educational material (cases); (iv) assesses the quality of human resources development / training (including DTMU) process involved in the program; (v) describes the results of the improvement / adaptation assessment of the learning environment, other related issues (dissemination, medical education center), which is important for sustainability and development of the program.

Planning, conducting and evaluating of the above-mentioned assessment of the quality was an important experience:

- 1) In terms of monitoring of quality of the E-PBL Program of certified Medic, its academic aspects (level of integration, types, etc.) and further improvement;
- 2) In terms of the revision in the international context the Certified Medic E-PBL Program of DTMU: New Programs of certified Medic of 6 Universities of 3 countries (Georgia, Ukraine, Kazakhstan) were compared and were evaluated in terms of the best international experience in medical education:
- 3) DTMU program quality self-assessment criteria was "Tested" (International Context) in relation to other programs;
- 4) DTMU Quality Assurance team obtained "new" knowledge / experience for medical education;
- 5) DTMU Academic Society (Academic Staff, Students) and Administrative Staff have developed research skills in different fields (program development, teaching / learning / evaluation, quality assurance, control etc.) of medical education (see on the website of the project in the final report of the dissemination, DTMU presentations, publications).

#### **Evidences /indicators**

- 1. <a href="http://epblnet.eu">http://epblnet.eu</a>
- 2. <a href="http://epblnet.eu/content/quality-control-plan">http://epblnet.eu/content/quality-control-plan</a>
- 3. http://epblnet.eu/content/quality-control-report
- 4. <a href="http://epblnet.eu/content/dissemination-final-report">http://epblnet.eu/content/dissemination-final-report</a>

#### 5.3. Programme monitoring and periodic review

Programme monitoring and periodic review is conducted with the involvement of academic, scientific, invited, administrative staff, students, graduates, employers and other stakeholders through systematically collecting and analysing information. Assessment results are utilized for programme improvement.

## **Description and Evaluation**

Academic staff, students are involved in quality assurance self-assessment groups. As well as in committees and councils for planning, implementing, management and managing training programs (e.g. the Rector's

Council, Curriculum Committee, Faculty Council); It is also important and very useful for their curriculum revision and / or participation in working groups created for other special (specific) purposes. For the purpose to provide a "quality" feedback from the employer's on program, learning outcomes, and other issues, the University invites employer's (potential) in faculty activities including career days; Student conferences, formal and informal meetings, with the purpose of joint work and feedback. The University facilitates the invitation of employers to participate in lectures and seminars and discuss real situations; which creates the preconditions for their informed participation and quality feedback in the development of the program.

Monitoring and periodic evaluation of programs is also continuously implemented, see Annex 50 and Appendix 51.

## Evidences /indicators

- 1. Self-Assessment Report 2015\_2016 (Appendix # 50)
- 2. Self-Assessment Report 2016\_2017 (Appendix # 51)

# □□Strengths and Areas for Improvement

Please, present strengths and areas for improvement of the Educational programme considering the requirements of each component of this standard.

#### Strengths

- IIIn order to ensure the quality of the program, a key issue at the DTMU is the development of curriculum in systemic and knowledgeable ways;
- DDQuality Assessment Methodology reviews the description of the current situation in terms of quality assessment targets, evaluation of of implemented quality and evidences based on quality indicators;
- DDFormation of quality assessment groups with the mandatory participation of academic staff and students.

# Areas for Improvement

- DDFurther steps in quality assessment, namely, more dialogue with the staff in the quality assessment processes on their individual role and readiness to self-assessment of the quality of their work;
- DDFinding and researching new methods and means based on scientific evidence to improve monitoring and evaluation processes on the quality of the program;
- □□Promotion of introduction of quality culture Preparation and providing a special training course within the continuous professional development of teachers.

The list of Documents <sup>4</sup>	Annex
□Educational Programme and Syllabi	Appendix 1, Appendix 19
□ Documentation/information certifying the involvement of programme stakeholders in the process of programme creation and development	Appendix 13, Appendix
	52
Diplomas, CVs and agreement templates of academic, invited and scientific staff (CVs should include the list of scientific publications for the last 10 years)	Appendix 35, Appendix
	36
☐ Functions and responsibilities of Programme head(s), Master and Doctoral student supervisor(s) and administrative staff	Appendix 31, Appendix
	34
☐The list of programme staff indicating the course(s) they teach	Annex 46
	Annex 55
☐ Methodology of determining the number of academic, scientific, and	
☐ The list of MA theses and doctoral dissertations defended during the last 5 years (in case of Master and Doctoral programmes) (Please indicate title, defense year, supervisor, and grade of a thesis/dissertation). (Expert group chair will require several papers before the site-visit. The HEI should provide the papers upon request)	Annex 17, Annex
	18
☑ Methodology for planning, designing and developing an educational	Annex 53

Note: If an international expert participates in the evaluation process, the HEI has to present the self-assessment report along with the documents marked with sign -  $\boxtimes$  in English;

©Programme Learning Outcomes Assessment Mechanism	Annex 3, Annex 7,
	Annex 7.1, Annex
	8
☐ A document on labour market research and analysis of employers' demands	Annex 20
☐ Relevant agreements/memoranda with economic agents and practical training facilities	Annex 4, Annex 5

 $<sup>5~\</sup>mathrm{noteIn}$  case of the participation of an international expert in accreditation evaluation it is necessary to have all documents marked with  $\boxtimes$  sign in English along with the filled evaluation form.

	□Programme internationalization strategy (if available)	Annex 20
	Documentation certifying international collaboration (international researches, publications, international mobility rate, exchange and/or joint programmes, bilateral agreements, memoranda, etc. )	Annex 56
	Programme/faculty/school budget	
	Master and/or Doctoral and Dissertation Committee Decree (if	Annex 58
Ec	<ul> <li>aucational programme Quality Assurance mechanisms (internal and external)</li> <li>Assessment results</li> <li>Student/graduate/employer/staff survey forms, results and utilisation of these results</li> <li>Progarmme learning outcomes assessment report (if available)</li> <li>Evaluation of staff performance (quality of teaching and research, international mobility rate, etc.) The utilization of evaluation results for staff professional development</li> </ul>	Annex 47, Annex 48, Annex 50,
		Annex 51, Annex 54, Annex 57, Annex 5, Annex 7, Annex 7.1, Annex 8, Annex 9, Annex 10, Annex 11, Annex 12, Annex 43