

CENTER FOR QUALITY ASSESSMENT IN HIGHER EDUCATION

EVALUATION REPORT DENTAL HYGIENE STUDY FIELD AT LITHUANIAN UNIVERSITY OF HEALTH SCIENCE

Review' team:

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- 5. Meda Vaitonytė, students' representative.

Evaluation coordinator -

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Report language - English

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Study Field Data*

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Title of the study	Dental Hygiene	
programme		
State code	6121GX005	
Type of studies	University studies	
Cycle of studies	First cycle	
Mode of study and	Full-time - 4	
duration (in years)	years)	
Credit volume	Continuous (4	
	years)	
Qualification	Bachelor of Health	
degree and (or)	Sciences,	
professional	Dental Hygienist	
qualification		
Language of	Lithuania	
instruction		
	Lithuanian	
Minimum	Secondary	
education required	education	
Registration date of	29-06-2004	
the study		
programme		

st if there are **joint / two-fields / interdisciplinary** study programmes in the study field, please designate it in the foot-note

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I. INTRODUCTION

1.1. BACKGROUND OF THE EVALUATION PROCESS

The evaluation of study fields is based on the Methodology of External Evaluation of Study Fields approved by the Director of Centre for Quality Assessment in Higher Education (hereafter – SKVC) 31 December 2019 Order No. V-149.

The evaluation is intended to help higher education institutions to constantly improve their study process and to inform the public about the quality of studies.

The evaluation process consists of the main following stages: 1) self-evaluation and self-evaluation report prepared by Higher Education Institution (hereafter – HEI); 2) visit of the review team at the higher education institution; 3) production of the evaluation report by the review team and its publication; 4) follow-up activities.

On the basis of external evaluation report of the study field SKVC takes a decision to accredit study field either for 7 years or for 3 years. If the field evaluation is negative such study field is not accredited.

The study field is **accredited for 7 years** if all evaluation areas are evaluated as "exceptional" (5 points), "very good" (4 points) or "good" (3 points).

The study field is **accredited for 3 years** if one of the evaluation areas was evaluated as "satisfactory" (2 points).

The study field **is not accredited** if at least one of evaluation areas was evaluated as "unsatisfactory" (1 point).

1.2. THE REVIEW TEAM

The review team was completed according to the Experts Selection Procedure (hereinafter referred to as the Procedure) approved by the Director of Centre for Quality Assessment in Higher Education on 31 December 2019 <u>Order No. V-149</u>. The Review Visit to HEI was conducted by the team on 26/11/2020. The review visit was organised online using video-conferencing tool (MS Teams).

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- 2. Assistant Professor Sandra Ribeiro Graça Department of Dental Hygiene, School of Dental Medicine, University of Lisbon, Lisbon, Portugal;
- **3. Bo Danielsen,** School Director of School of Oral Health Sciences, Faculty of Health and Medical Sciences, University of Copenhagen, Denmark;
- **4. Prof. Dr. Vytautė Pečiulienė,** Director of the Hospital Žalgiris klinika of the Vilnius University, Lithuania:
- **5. Meda Vaitonytė**, student of Iscte University Institute of Lisbon, 1st-year student of the Second Cycle Study Programme Psychology of Intercultural Relations, Portugal.

1.3. GENERAL INFORMATION

The documentation submitted by the HEI follows the outline recommended by the SKVC. Along with the self-evaluation report and annexes, the following additional documents have been provided by the HEI before, during and/or after the site-visit:

No.	Name of the document
1.	

1.4. BACKGROUND OF STUDY FIELD/STUDY FIELD PLACE AND SIGNIFICANCE IN HEI

The Lithuanian University of Health Sciences, which is the largest provider of professional healthcare study programmes in Lithuania, was established in 2010 following the merger of the Lithuanian Veterinary Academy and Kaunas University of Medicine. The University has over 7000 students across 123 study programmes. The University Medical Academy consists of five faculties: Medicine, Pharmacy, Odontology, Nursing and Public Health. The Dental Hygiene (DH) programme was established in 1998, when it was part of the faculty of Public Health. The faculty of Odontology has two study programmes, Odontology and DH. The DH programme is a 4 year full-time Bachelor degree level programme consisting of 240 ECTS.

II. GENERAL ASSESSMENT

Dental Hygiene field and **first cycle** at Lithuanian university of health science is given **positive** evaluation.

Study field and cycle assessment in points by evaluation areas.

No.	Evaluation Area	Evaluation of an area in points*
1.	Study aims, outcomes and content	3
2.	Links between science (art) and study activities	4
3.	Student admission and support	4
4.	Studying, student performance and graduate employment	4
5.	Teaching staff	4
6.	Learning facilities and resources	3
7.	Study quality management and publicity	3
	Total:	25

^{*1 (}unsatisfactory) - there are essential shortcomings that must be eliminated;

^{2 (}satisfactory) - meets the established minimum requirements, needs improvement;

^{3 (}good) - the field develops systematically, has distinctive features;

^{4 (}very good) - the field is evaluated very well in the national and international context, without any deficiencies;

^{5 (}exceptional) - the field is exceptionally good in the national and international context/environment.

III. STUDY FIELD ANALYSIS

3.1. STUDY AIMS, OUTCOMES AND CONTENT

Study programmes' aims, outcomes and content shall be assessed in accordance with the following indicators:

3.1.1. Evaluation of the conformity of the aims and outcomes of the field and cycle study programmes to the needs of the society and/or the labour market (not applicable to HEIs operating in exile conditions);

In Lithuania public and private health care institutions provide a wide range of oral care services including oral hygiene procedures. Patients can freely choose the health care institutions. Among five faculties of the Lithuanian University of Health Sciences the Faculty of Odontology, offers two study programmes of which one is Dental Hygiene (DH). This is the only institution where dental hygienists are trained on a university basis alongside odontology students.

Since 1st January 2019 changes to the Law on Local Self-Government of the Republic of Lithuania (1994 / No I-533) were made, by which dental hygienists were included on the list of specialists providing primary health care services. This change has allowed dental hygienists to either work independently, in a team with odontologists or specialists in odontology, public health professionals and/or employed in Public Health Offices. They are formally part of the primary health care specialist's team and their work can be paid by the National Health Insurance Fund.

According to the data from the Lithuanian Dental Chamber, there are 1200 licensed dental hygienists. These numbers are comparable with the equivalent specialists in the Nordic countries. However, in these countries a higher percentage of dental hygienists are employed by the public institutions or have private independent practices. In Lithuania, mostly dental hygienists are employed in private practice and work not only as dental hygienists, but also as dental assistants. Only 9% of dental hygienists work in the public institutions and there is a need to increase this.

Discussion between the employers, alumni and the study committee members regarding the learning outcomes was found, but this communication must be more evident and strengthened.

3.1.2. Evaluation of the conformity of the field and cycle study programme aims and outcomes with the mission, objectives of activities and strategy of the HEI.

The declared mission of the Faculty of Odontology is to participate in the improvement of public health and the quality of life by ensuring high-quality oral health care by training odontologists and dental hygienists, and improving their qualifications through the provision of knowledge and development of professional skills. The aim of the study programme correlates with the mission and vision declared by the university. Six main objectives were listed and they reflect the purpose of the programme. The aim and the expected learning outcomes are well defined, as shown in Appendix 2.

According to "On the Approval of the Description of the General Requirements for First-Cycle and Integrated Degree-Awarding Study Programmes", 9 April 2010 5 Order No. V-1012 of the Minister of Education, Science and Sport of the Republic of Lithuania "On the Approval of the Description of the Study Cycles", 16 November 2016 the total volume of internships in university First-Cycle studies must be at least 15 credits. The study plan provides 2 Professional Oral Hygiene and clinical Practice placements during 3rd and 4th study year with volumes of 12 and 15 credits. The DH study programme plan includes the basics of the preparation of research work (3 ECTS) and at least 12 ECTS are devoted to the preparation and defence of the bachelor thesis.

3.1.3. Evaluation of the compliance of the field and cycle study programme with legal requirements;

According to the Order No. V-501 of the Minister of Education, Science and Sport of the Republic of Lithuania "On the Approval of the Description of the General Requirements for First-Cycle and Integrated Degree-Awarding Study Programmes", 9 April 2010 5 Order No. V-1012 of the Minister of Education, Science and Sport of the Republic of Lithuania "On the Approval of the Description of the Study Cycles", 16 November 2016 the study programme Oral hygiene meets the legal requirements for higher education study fields for first cycle studies obtaining Bachelor qualification degree.

It is a 4 year full-time programme, consisting of 8 semesters, and equates to a total of 240 ECTS credits. Each semester amounts to 30 credits, of which, more than 50% is related to subjects directly related to the programme and 30% consists of independent work. 15 credits are allocated to the preparation of the final thesis and the final examination, with at least 15 credits being related to the practical placements. More than 50% of study field subjects are taught by scientists.

3.1.4. Evaluation of compatibility of aims, learning outcomes, teaching/learning and assessment methods of the field and cycle study programmes.

In the Self-Evaluation Report (SER) six objectives of the programme were stated: (i) to educate and train dental hygienists who meet the requirements recognised by the European Union; (ii) to create opportunities for the acquisition of the qualification of a dental hygienist, which allows for the provision of health care services; (iii) to develop a personality who is able to understand and accept the changes taking place in the society and is capable of acting in a democratic environment; (iv) to develop the need to be interested in innovations in the science and practice of oral health; (v) to develop creative, scientific and critical thinking, and a sense of satisfaction with studies and work; and (vi) to develop the ability to maintain the required professional competence through lifelong learning. It is evident that the listed objectives are directly related to the purpose of the programme. According to the programme study plan, DH graduates will be prepared for independent professional practice and for work in research institutions, state dental/health care institutions and in other health promotion areas related to odontology.

The aims of the programme and the expected learning outcomes correlate with the learning outcomes of the individual study subjects. Five learning outcomes: (i) knowledge and its application; (ii) ability to conduct research; (iii) social skills; (iv) personal skills and (v) special skills are clearly defined in the expected outcomes and in the related study subjects. In

the SER, there is a clear correlation between the study methods and the evaluation of student achievements, including the acquisition of all the required competences.

The DH programme equips the students with the competencies required to use a variety of periodontal instrumentation and provide professional care for different patient groups. Information regarding the marking criteria used to assess the student's clinical skills was provided in the descriptions. During practice placements, practice diaries/logbooks are used for assessment purposes.

3.1.5. Evaluation of the totality of the field and cycle study programme subjects/modules, which ensures consistent development of competencies of students.

According to the order No. V-501 of the Minister of Education, Science and Sport of the First-Cycle and Integrated Degree-Awarding Study Programmes", 9 April 2010 5 Order No. V-1012 of the Minister of Education, Science and Sport of the Republic of Lithuania "On the Approval of the Description of the Study Cycles", 16 November 2016 credits of the first-cycle study programme "Dental Hygiene" are composed in such a way as to achieve the learning outcomes. The study programme credits consist of 3 components: (i) general university study subjects, (ii) subjects relating to the study field and (iii) other subjects. In the SER it is stated that study subjects credits are reviewed annually, with the aim to continually enhance the quality of the programme. Work is on-going to increase the integration of teaching with the Odontology programme, for example, the modules in Foundations of Social Sciences and Humanities, Natural Sciences and Introduction to the Speciality have been developed for this purpose. However, there is currently no information on the website to indicate that there is a separate DH programme. Further changes to the programme have been made following feedback from the students and employers, with the inclusion of teaching on the "Psychology of Communication".

In the SER, it was mentioned that the DH Study Programme Committee (SPC) of the Professional Oral Hygiene field monitors the students' progress on a twice yearly basis. The committee reviews the student's average semester scores and meetings are arranged with the students to discuss their progress and resolve any problems. Also, it was stated that discussions take place with the students prior to making any changes to the study plan.

According to the LSMU Regulation of Studies, not less than 30% of the study programme must devoted to the independent work. It was stated that during independent work wide variety of possible methods are used, such as laboratory work, tests, perform individual and group independent tasks, prepare reports, bachelor's theses or projects, etc.

In Year 1, the modules "Introduction to the speciality" (3 credits) and "Oral health and personal oral hygiene" (5 credits) only amount to 8 credits out of 60. Consideration should be given to increasing the number of credits in Year 1 directly relating to the speciality.

In Year 2, 11 credits out of 60 are related to the speciality. Ideally the number of credits relating to the general disciplines should be revised to allow an increase in the numbers of credits for pre-clinical training – the current 3 credits appears too low to allow the students to move forwards into clinical training. The number of credits relating to Oral radiology could be increased to improve the graduates knowledge of radiology as a diagnostic tool. Also,

practical training could be implemented earlier by rearranging the timetabling of the general subjects.

3.1.6. Evaluation of opportunities for students to personalise the structure of field study programmes according to their personal learning objectives and intended learning outcomes.

According to the LSMU Regulation of Studies, students with a disability or special needs have the right to perform their work and assignments in alternative formats, as approved by the Dean. For instance, the nature of tasks or the format of assessments can be changed to an e-assessment or oral assessment, the font sizes be can increased, increased assessment times or changes to the location and physical environment of the assessments to improve access and lighting, etc. Also, the possibility for students to study foreign languages and to choose subjects freely from the list of the offered elective courses was described. However, it was not clear from the SER whether all students (i.e. those without a disability or special needs) can personalise the structure of their studies.

3.1.7. Evaluation of compliance of final thesis with the field and cycle requirements.

In the DH study programme 15 ECTS are devoted for the preparation and defence of the bachelor thesis. The possibility of choosing different themes in this subject is very important, which is helped by the programme being within the Faculty of Odontology where there is access to a large numbers of researchers working in different fields of Dentistry. The final theses for the last 3 years were made available to the review panel (Appendix 4). The final these are prepared during the 7th and 8th semesters. The student chooses and co-ordinates the topic of their final theses with the head of the assigned clinical department, within the Faculty of Odontology, and with the scientific supervisor. The scientific supervisor must be a qualified scientist. The main goal of the final theses is to reflect the student's ability to know how to implement the main stages of scientific work. For example, to analyse data, discuss the findings and to clearly formulate the conclusions of research work within the University requirements for thesis studies. The content of the final theses is in line with the field of studies.

The dates of defence and the defence commission is appointed by the Rector. The commission consists of competent specialists in the study field of Professional Oral Hygiene, scientists, practitioners, professionals, and representatives of the social partners.

Recommendations for this evaluation area:

Reinforce teamwork between the DH and dental students throughout the curriculum, especially in clinical practice. More integrated teaching of the dental and DH students, including the evaluation of work carried out on the same patient, would enhance the clinical understanding of more clinically complex patients.

Students should have more possibilities to personalise the structure of their study programmes.

There is the need for closer contact and systematic feedback between the university and employers from the public health care and private institutions, due to the fact that oral hygiene is a very important factor in promoting oral care among the general population. This would

promote the work of dental hygienists as a main speciality and differentiate it from the work of dental assistants.

It is recommended that there is an expansion in the number of credits for the Introduction to the basic research.

Implement a variety of methods to evaluate student's communication skills.

Expand the number of hours devoted to the learning of Oral radiology in order to enhance the knowledge of graduates in this field.

Make the visibility of the DH programme more prominent as separate programme within the Faculty of Odontology.

More clearly define the assessment methods used to assess the student's independent work.

3.2. LINKS BETWEEN SCIENCE (ART) AND STUDY ACTIVITIES

Links between science (art) and study activities shall be assessed in accordance with the following indicators:

3.2.1. Evaluation of the sufficiency of the science (applied science, art) activities implemented by the HEI for the field of research (art) related to the field of study.

LSMU is one of the largest higher education institutions for biomedical sciences in Lithuania with almost 100 years of academic experience. It is evident from the SER that substantial fundamental and applied research takes place at the Faculty of Odontology, where the DH study programme is based. Many aspects of this research is relevant to the DH study programme and is used to support the final thesis projects (Appendix 4). A very high proportion of the teachers (Appendix 5) have research backgrounds and are scientifically active. The study programme has two staff Dental Hygienists who have PhDs. The above information was confirmed by the teachers, students and social partners during the meetings with the expert panel. During the period 2017-2020, DH students published eight scientific papers in peer-reviewed scientific journals. Thus, it is the expert panel's opinion that one of LSMU's strengths is the relevance of the research to the DH study programme.

3.2.2. Evaluation of the link between the content of studies and the latest developments in science, art and technology.

The active participation of the teachers in research within their teaching fields allows them to convey this latest knowledge to the students. It is evident from the university's webpage that researchers in the Faculty of Odontology are active within their own field. In 2019 there were nine PhD students in the department. This year four PhDs were completed, three of which were by women. Several teachers are editorial board members and reviewers of Lithuanian and international scientific journals – this also adds to the efficient transfer of the latest knowledge from research into practise in the programme. According to the SER researchers from LSMU have expanded their commissioned research activity in recent years. During the meeting with management, it became clear that this has also been the case within Odontology. The employers and social partners reported that the DH graduates have sufficient up-to-date theoretical knowledge and that the newly qualified graduates bring new knowledge with

them into their workplace. They also recognise that the students are aware about the latest technologies. The graduates and students recognise that their teaching is based on up-to-date research evidence. Therefore, the expert panel can clearly see the effective transfer of knowledge and techniques from the latest developments in science, art and technology into the DH study programme.

3.2.3. Evaluation of conditions for students to get involved in scientific (applied science, art) activities consistent with their study cycle.

It is clear that the DH students are involved in very high quality scientific activity during their final thesis projects (appendix 4). During the years 2017-2020 eight student theses were published in peer-reviewed scientific journals. The students who met the expert panel were unaware of the possibilities of carrying out research prior to their final thesis projects. It was clear to the expert panel that students are very involved in the research in connection with their final thesis, however, it was less certain to what extent students have opportunities to participate in research during their studies.

Recommendations for this evaluation area:

No recommendations

3.3. STUDENT ADMISSION AND SUPPORT

Student admission and support shall be evaluated according to the following indicators:

3.3.1. Evaluation of the suitability and publicity of student selection and admission criteria and process.

The Association of Lithuanian Higher Education Institutions for Centralised Admissions (LAMABPO) carries it out the selection of students. It is evident from the LSMU SER and the webpage of the Association of Lithuanian Higher Education Institutions for Centralised Admissions (LAMABPO) that this procedure guarantees the selection of the best candidates and that the student admission is carried out according to the provisions of the Republic of Lithuania Law on Higher Education and Research, the Order of the Minister of Education, Science and Sport of the Republic of Lithuania and the rules on student admission approved at the LSMU Senate. Applications and documents are only submitted electronically. The competition is open to entrants with at least secondary or equivalent education level and with a score of at least 5.4. Each year, the University Council, on the proposal of the deans, approves the total number of students planned to be admitted to specific study programmes, and the preliminary number of state funded places is approved by the order of the Minister of Education, Science and Sport of the Republic of Lithuania. It makes the criteria for selection clear and the student selection process transparent. According to the webpage LAMABPO, they provide consultations with the applicants. In addition, LAMABPO gather and disseminate information on the admission process, admission requirements and results to the public and to the applicants. The LAMABPO online application system allows students to apply for both state funded and paid studies. Despite the declining number of applicants in the period (2017-2019), the mean competitive score for the admitted students increased and are very high.

The students confirmed the above during their meeting with the expert panel. Comprehensive information on admissions for entrants is available in the section "For Entrants" on LSMU's website. Here information about study programmes, admission rules, tuition fees, the competitive score calculator, competitive subjects, admission results, a link to the LAMA BPO website, descriptions of Faculty Departments, and contact information are available. Extensive information on the study programme DH is available from the LSMU career Centre and the faculty. LSMU holds "Open days" and "Career Days" for the potential applicants. It is, therefore, evident to the expert panel that the admission criteria and students selection process is suitable, fair, transparent and published with easy access for the public.

3.3.2. Evaluation of the procedure of recognition of foreign qualifications, partial studies and prior non-formal and informal learning and its application.

The procedures for the recognition of foreign qualifications, partial studies and prior nonformal and informal learning and its application are well described in the SER. Qualifications acquired abroad are evaluated and recognised in accordance with the Order No V-185 "On Granting the Right to Execute Academic Recognition of Education and Qualifications Related to Higher Education and Acquired under the Educational Programmes of Foreign States and International Organisations to the Lithuanian University of Health Sciences" of the Minister of Education, Science and Sport of the Republic of Lithuania passed on 14 March 2016. Qualifications are recognised according to the procedures prepared by the Centre for Quality Assessment in Higher Education (SKVC). If there are no general recommendations for the recognition of the qualification, the SKVC is consulted. Entrants may apply to the SKVC concerning the recognition of education acquired in foreign institutions and the determination of subject equivalence. Credits for partial studies are given in accordance with the provisions outlined in Chapters XI – XII of the LSMU Regulation of Studies. The criteria and system for evaluation recognition of foreign qualifications, partial studies and prior nonformal and informal learning are in place. Nevertheless, during the analysed period (2017-2020) no students applied for the recognition of prior learning. The expert panel was unable to find information on how information is given to applicants regarding having credit for foreign qualifications, partial studies and prior non-formal and informal learning. It might, therefore, be relevant for the department to consider how this information could be brought to the attention of applicants.

3.3.3. Evaluation of conditions for ensuring academic mobility of students.

It is clear from the SER that the study programme offers students opportunities to study at foreign educational institutions through Erasmus+ partnerships. The relevant information is available on the LSMU website and according to the students interviewed, the staff administrating the Erasmus programmes are very visible to the students when appropriate. Over the last three years, eight DH students have participated in the *Erasmus+* exchange programme, seven students went for *Erasmus+* studies and one student had *Erasmus+* training. No exchange DH students (incoming students) visited LSMU from foreign institutions. In addition to the Erasmus activity, all the DH students, including some teachers, participated in a virtual learning community with peers from the Nordic and Baltic countries. This was used to achieve some of the learning outcomes and was perceived to be very beneficial to the students. This kind of virtual activity worked particular well during the Covid-19 pandemic where physical exchange activities could not be carried out.

It is clear to the expert panel that LSMU has well organised processes for the management of students, including students of the DH programme, who wish to undergo an Erasmus exchange. For the DH students who do not wish to undertake an Erasmus exchange, the programme has a good range of study activities which promote internationalization. These students might also benefit tremendously by spending time with incoming Erasmus students from abroad. Therefore, the expert panel recommend that the DH study programme work on attracting foreign students to study at LSMU.

3.3.4. Assessment of the suitability, adequacy and effectiveness of the academic, financial, social, psychological and personal support provided to the students of the field.

It was evident from the SER that new students on the DH programme are well supported to help them transition into student life e.g. introduction week, freshman camp, assignment of a mentor, etc. In addition, the study programme has the subject "Introduction to the Speciality", which is taught during the first year (Appendix 1), and is designed to help the students become familiar with the programme and their future profession.

Detailed information about the aims and objectives of the study subjects are provided in subject descriptions published on the LSMU study information website. Information about student support is provided on the virtual learning environment (VLE) Moodle and the students are also informed about sources by the teachers. The LSMU ensures that information is appropriately disseminated to the students who need it e.g. via the mentors, members of the DH study committee and by student surveys.

Various activities are available on the LSMU campus to promote wellbeing, such as the Student Scientific Society, various sport activities and voluntary work. Students have access to psychological support either from experienced psychologists or from participating in "The LSMU Model of Psychological Counselling and Emotional Support for Students". Financial support is available through social scholarships. Student accommodation is granted in accordance with the LSMU student dormitory regulations. Access to different kinds of support was confirmed during the expert panel's meetings with the staff and students. The students confirmed that they were aware of the different kinds of support and how to seek it, although they had not done so themselves. The teachers reported on how they support student learning, using feedback and guidance, to help student progression in the programme. LSMU and the DH programme appear to have suitable, adequate and effective support (academic, financial, social, psychological and personal) in place for their students in order to support them to fulfill the requirements of the DH study.

3.3.5. Evaluation of the sufficiency of study information and student counselling.

LSMU and the DH programme provide study information via several channels – on the faculty website, on the DH programme VLE (Moodle), during the introduction week, via the subject "Introduction to the Speciality" in first year, via the student mentors (a senior student), via teachers giving feedback to the students and via LSMUs Study Centre. During the expert panel's meeting with the teachers, the teachers outlined the additional support provided to students who are struggling to achieving the required learning goals, which included feedback and various extra activities. During the meeting with the students, they confirmed that they were very satisfied with the support and counselling available to them. Therefore, the expert

panel conclude that the study information and student counselling for the DH programme is sufficient.

Recommendations for this evaluation area:

No recommendations

3.4. STUDYING, STUDENT PERFORMANCE AND GRADUATE EMPLOYMENT

Studying, student performance and graduate employment shall be evaluated according to the following indicators:

3.4.1. Evaluation of the teaching and learning process that enables to take into account the needs of the students and enable them to achieve the intended learning outcomes.

The SER describes how the DH programme at LSMU is well planned and structured in a clear rational sequence (Appendix 1). The relationship between the expected programme learning outcomes, study subjects and their learnings outcomes, methods of learning and teaching, and the assessments are logical, coherent and support students learning. This information is summarized in Appendix 3. A broad variety of both physical and virtual methods are used for creating learnings opportunities. Almost $^{1}/_{3}^{rd}$ of the study programme is devoted to independent work. As stated in section 3.1.5., students have the right to perform their work and assignments in alternative ways if they have a disability or special needs. Students receive regular feedback and they have a diary/logbook for their practical work. The DH programme at LSMU has a system in place to give students feedback on their achievements. If needed, students are provided with additional support so they can adjust their learning and catch-up if they are behind with regards to the learning schedule. The effectiveness of these activities were confirmed during the meetings with both the students and staff. Thus, LSMU appear to be successful in providing the students with the teaching and learning required for the students to achieve the intended learning outcomes.

3.4.2. Evaluation of conditions ensuring access to study for socially vulnerable groups and students with special needs.

The DH programme follows the LSMUs regulations that allows students to perform their work and assignments in alternative ways if they have a disability or special needs. For instance, the nature of tasks or the assessment type can be changed by using e-assessment or oral assessments, the time for the assessment may be extended, or the physical environment of the assessments can be adapted to ensure good lighting and accessibility to the exam location, etc. Since there are very high demands on the physical ability of the students and graduates, few students have been subject to the disability regulations. Thus, there was no mention about socially vulnerable groups and students with special needs in the panel meetings with the teachers and students. The expert panel are satisfied that the supportive processes described in the SER are sufficient to support socially vulnerable groups and students with special needs, when the need occurs.

3.4.3. Evaluation of the systematic nature of the monitoring of student study progress and feedback to students to promote self-assessment and subsequent planning of study progress.

The DH programme at LSMU has a system in place to provide students with feedback on their achievements. The students receive assessment feedback via the LSMU study information

system online database and on Moodle (VLE). The DH programme teachers meet with the students to discuss their individual progress, to solve any problems and to discuss the results of practical work. Assessments relating to clinical practice are recorded in practice diaries/logbooks. If needed, discussions take place with the students to ensure they can adjust their learning and catch-up if they are behind the learning schedule. The effectiveness of these activities was confirmed during the meetings with both students and staff. Thus, LSMU appear to have successful systems in place to monitor student progress (including additional support) and provide feedback to students.

3.4.4. Evaluation of the feedback provided to students in the course of the studies to promote self-assessment and subsequent planning of study progress.

Teachers and students reported that feedback is given as described in section 3.4.3. However, the expert panel did not find much evidence that students understood how to utilise feedback in terms of their self-assessment, including assessing their progress. The expert panel were unable to identify activity or information on how feedback is specifically evaluated and developed beside from what is happening during the handling of the regular student questionnaires. No data or examples of action taken regarding his topic were given to the expert panel in either the SER or during the virtual site visit. The expert panel recommend that special awareness be given to student feedback and how students could be assisted in utilising their feedback for self-assessment, in order make any required adjustments to their learning to help subsequent progress. Many students may benefit from a higher awareness of their own learning processes.

3.4.5. Evaluation of employability of graduates and graduate career tracking in the study field.

LSMU have established both subjective and objective career monitoring of their DH graduates. Subjective surveys are designed to learn how LSMU graduates manage to establish themselves in the labour market and whether they are satisfied with their completed studies, work, and career. The graduates participate in four surveys. The first two surveys (carried out at 6 months and 12 months after graduation) aim to clarify how the graduates succeed in finding employment and adapting to the labour market. The aim of the third survey (carried out at 3 years after graduation) is to obtain information on how the graduates succeed in establishing themselves in the labour market. The aim of the fourth survey (carried out at 5 years after graduation) is to obtain information on how the graduates are succeeding in pursuing their career. Objective career monitoring data is obtained from state information systems and state or departmental registers. Information is collected from the Government Strategic Analysis Centre and the Employment Services under the Ministry of Social Security and Labour of the Republic of Lithuania. Data shows that 70-75% of the graduates are employed and 10-20% of the graduates pursue further studies. In recent years, the monthly salary of the employed graduates has increased. The LSMU and the study programme seems to collect a lot of data from the employers, but it is not clear how this information is used to improve the quality of the DH programme. Employers interviewed by the expert panel were not aware that the LSMU gathers such data and they expressed that they would like to be more involved in the development of the study programme.

Employers interviewed by the expert panel expressed high levels of satisfaction with the competences of the new DH graduates. The employers recognise that the graduates bring

valuable new theoretical knowledge to the clinics. The employers have experienced a significant improvement in the graduate's competences over the last few years. Alumni and employers agreed that graduate's weakest point are their clinical skills. Both the alumni and employers agreed that there are jobs available for dental hygienists, however, many employers would like the graduates to work as both dental hygienists and dental assistants. Some of the Alumni suggested that DH graduates can benefit from assisting different specialists and suggested that this was an important learning opportunity for new graduates. Several of the graduates would like to pursue masters or PhD-degrees later in their career. Therefore, the expert panel can confirm the high levels of employment amongst the LSMU DH graduates, although some were also acting as dental assistants, especially early in their careers. The expert panel recommends that the DH programme develops a more systematic approach to allow employers and social partners to have a greater input into the development of the programme, to ensure it caters for the needs of the new graduates. It might be worth considering how this is done and how the information collected results in changes to the learning outcomes, learning activities and the evaluation of student achievement.

3.4.6. Evaluation of the implementation of policies to ensure academic integrity, tolerance and non-discrimination.

The principles of academic honesty are very clearly defined in the LSMU Regulation of Studies. Prior to each final assessment, students sign an academic honesty consent form. Over the last three years, there have been no cases of breach of academic honesty amongst the DH students. Thus, the procedures and teaching at LSMU make the students aware of the policies to ensure academic integrity. The Senate of LSMU have approved a resolution on prevention of harassment, sexual harassment, persecution, and violence at LSMU. The students the expert panel interviewed, however, were not aware how they should react and report cases of sexual and other types of harassments. The expert group finds that the described systems seem to be adequate but recommend that the study programme or LMSU focus on how to better communicate to the students the reporting procedures for incidents of sexual and other types of harassments.

3.4.7. Evaluation of the effectiveness of the application of procedures for the submission and examination of appeals and complaints regarding the study process within the field studies.

The SER clearly described the processes for the submission and examination of appeals and complaints relevant to the DH programme. There have been no appeals or complaints from DH students over the last 3 years. Students and staff expressed awareness of these rights and procedures during the meetings with the expert panel. The students were not aware of any cases of injustice done to a fellow student. The expert panel is satisfied with the present processes for handling appeals and complaints regarding the DH programme study processes and assessments.

Recommendations for this evaluation area:

No recommendations

3.5. TEACHING STAFF

Study field teaching shall be evaluated in accordance with the following indicators:

3.5.1. Evaluation of the adequacy of the number, qualification and competence (scientific, didactic, professional) of teaching staff within a field study programme(s) at the HEI in order to achieve the learning outcomes.

The recruitment of teachers is based on their competencies in their respective field of dentistry, which allows the programme to achieve its objectives and learning outcomes. The quality of the teaching staff and their competencies are the main factors in the continuous development and enhancement of the quality of the programme. Students have the opportunity to assess the quality of their teaching and this is included in the evaluation of their teachers.

Teachers are hired by competition on a five-year fixed term in accordance with the requirements of the legal acts. Every five years, employed teachers are evaluated during the certification process in terms of their pedagogical, scientific and practical experience.

The DH programme teaching staff includes 18 professors, 23 associate professors, 22 lecturers and 5 clinical instructors. More than 50% of the teachers have a doctoral degree. Data relating to the DH programme teachers is shown in Appendix 5. The data shows that the study programme ensures a staff-student ratio of 1:5-6 during practical classes and a maximum staff-student ratio of 1:4 for the supervision of the final theses. Furthermore, 92.6% of the DH programme teachers are researchers.

The Covid-19 pandemic created both challenges and opportunities. For example, it was evident to the expert panel that the teachers had increased their use of new technology in their teaching, improved their inter-collaboration with other departments and between faculties, and applied various of new methodological approaches (e.g. on-line assessments).

3.5.2. Evaluation of conditions for ensuring teaching staffs' academic mobility (not applicable to studies carried out by HEIs operating under the conditions of exile).

Opportunities for the academic mobility are shown on the University website. It is stated in the SER that over the last 3 years, 8 foreign teachers had 2 weeks visits via the Erasmus+exchange programme. 36 teachers from the DH programme improved their skills at foreign universities.

3.5.3. Evaluation of the conditions to improve the competences of the teaching staff.

In the SER, it was stated that the DH programme teachers continually improve their knowledge and skills in both Lithuania and abroad. The topics chosen by the teachers were directly related to the subjects they teach and were achieved through advanced training courses, consecutive studies and by international exchanges. For the purpose of the development of educational competences, LSMU operates the Innovative Education Department of the Study Centre (SC IES).

Recommendations for this evaluation area:

No recommendations

3.6. LEARNING FACILITIES AND RESOURCES

Study field learning facilities and resources should be evaluated according to the following criteria:

3.6.1. Evaluation of the suitability and adequacy of the physical, informational and financial resources of the field studies to ensure an effective learning process.

The DH study programme, as a part of Faculty of Odontology, uses the facilities associated with the Lithuanian University of Health Sciences and the Hospital of the Lithuanian University of Health Sciences Kaunas Clinics including: the main auditorium, 23 classrooms and training rooms. All classrooms used for theoretical training are equipped with computers and multimedia. For speciality subjects, there are 7 seminar rooms and 4 classrooms devoted to the different clinical departments of the Faculty of Odontology. DH students share the same equipment used by the Odontology programme students. Pre-clinical practical skills training takes place using 36 phantom heads and the students have access to 101 dental units within odontology.

Due to the departments currently being situated in the different buildings, the DH students have to work as a team with the odontology students when carrying out clinical work, in order to achieve the optimal patient outcomes. It is stated in the SER, that improvements are on-going to accommodate the needs of disabled students, including the acquisition of equipment to aid students with various kinds of mobility, visual and hearing impairments. This equipment is available in the libraries and elsewhere on the campus. As a result of the project "Ensuring the Accessibility of Studies for Students with Special Needs" carried out by the State Studies Foundation and the LSMU as project partners, the Bellman Audio Domino Pro system has been made available to students with hearing impairments at the LSMU Library and Information Centre. The University has purchased JAWS 14 for Windows software and WinTalker Voice 1.6 software. JAWS 14 for Windows is software which can convert text on a screen into speech.

3.6.2. Evaluation of the planning and upgrading of resources needed to carry out the field studies.

In 2020 the faculty plans to move all the clinics to a separate faculty building which will significantly improve the educational environment for the students. For example, this would allow an increase the number of hours dedicated to preclinical education and simulation classes. Centralisation of the facilities into one building will significantly improve the communication between the different departments and between the students on the different study programmes. Also, it will allow closer team working between senior and junior students. During the Covid-19 pandemic, when teaching moved to a distance learning format, the students received support for the change from the teachers, the IT department, mentors and from the administrative clinical departments.

Recommendations for this evaluation area:

Concentration of the resources in the same building would have a significant positive impact of the student's education. The new facilities could enhance the visibility of the DH speciality within the context of the Odontology programme.

Development of a platform to merge IT resources is needed.

3.7. STUDY QUALITY MANAGEMENT AND PUBLICITY

Study quality management and publicity shall be evaluated according to the following indicators:

3.7.1. Evaluation of the effectiveness of the internal quality assurance system of the studies.

The LSMU has a well described system of internal quality assurance and development of studies with many bodies involved in the processes with responsibilities on four levels: subject level (the subdivision responsible for studies), the programme level (study programme committees), The Faculty level (Faculty councils) and the institutional level (The Study Quality Monitoring and Improvement Commission). The Study Centre co-ordinates the processes involved in the internal quality assurance of studies at the different levels, provides methodological assistance to the sub-divisions on the improvement of the quality of studies. They organise surveys amongst students and present the results to the University community. All functions and responsibilities of the Study Centre are well described.

The University regularly implements various surveys to gauge the opinion of students, teachers, graduates and other stakeholders. These surveys are organised and analysed by the University's academic and non-academic sub-divisions depending on the nature of the surveys and the planned time of the surveys. The DH programme students completed several written questionnaires during the 2018-2020 period, however, the actual outcome of these questionnaires were not specified in the SER. In 2020, all of the DH programme students (1st-4th year) evaluated three key areas of the programme using a 1 to 10 scale. These were scored as follows: (i) Implementation of study modules/subjects had a mean score 5.83 points, (ii) quality of the teaching scored 6.8 points and (iii) acquired knowledge scored 6.91 points. The students were highly satisfied with both the virtual learning and teaching they received during the Covid-19 lockdown (90-95% satisfaction) and with the evaluation in the virtual environment.

In addition, meetings were held with the students to assess the quality of the studies, with six such meetings taking place during the evaluation period. The students were able to express their opinions about the study process directly with members of the SPC and the teachers, and improvements to the study process were subsequently made. In 2019 the LSMU launched the "Quality Thermometer" in order to meet the expectations of the students and their need to see changes. However, the DH students interviewed by expert panel during the virtual site visit were unaware of the "Quality Thermometer" and had no understanding of the quality assurance processes undertaken at either the programme or university levels. The Students Union representative interviewed was aware of these processes. It was apparent during the meeting with the students that the reason for the low response rate for student questionnaires, in their opinion, was due to the students feeling that the surveys didn't matter to them.

From the meetings with students, staff, employers and social partners, it seems that they knew little about the quality assurance processes and how the outcomes are used to develop the quality of the programme. Important stakeholders and social partners are involved in teaching practice-based skills and participate in the preparation and reviewing processes of the final thesis. From the SER, we were able to see that external social partners participate in

the Study Programme Committees, Faculty Councils and in the assessment process. Furthermore, the Lithuanian and foreign partners are also included in the programme quality assurance processes, particularly with benchmarking.

Based on these findings, the expert panel is satisfied that the internal quality assurance used to enhance the DH study programme is quite extensive. However, the expert panel recommend a stronger focus on the quality assurance processes taking place at both the subject and programme levels. For example, more involvement of students and other important stakeholders in the gathering, analysing and utilising of the information used for quality development. Furthermore, we recommend making the impact of these results more visible to the stakeholders, in order to increase their engagement in the systematic quality assurance processes.

3.7.2. Evaluation of the effectiveness of the involvement of stakeholders (students and other stakeholders) in internal quality assurance. Evaluation of the planning and upgrading of resources needed to carry out the field studies.

LSMU has a long tradition of involving stakeholders and the SER explained the cascade of activity for involving students and important stakeholders in the internal quality assurance of the programme. It was unclear to the expert panel, however, how the many bodies involved in the processes contribute to the engagement of the students and stakeholders. It would have been useful for the description of the LSMU quality assurance processes (Figure 4) to have included more details regarding the implementation of it and the outcomes. During the virtual meeting with the management staff, it was evident that the department of Odontology, where the study programme belongs, has comprehensive planning for the imminent upgrade of the clinics, but it is less clear how this need have arisen. During the meetings with the students and employers, we were unable to ascertain how the most important stakeholders were involved in the quality assistance and developmental processes. The expert panel were unable to find much evidence of an evaluation of the effectiveness of the involvement of students and other stakeholders in the internal quality assurance system. The expert panel recommends that more attention is given to such a meta-reflection.

3.7.3. Evaluation of the collection, use and publication of information on studies, their evaluation and improvement processes and outcomes.

According to the SER, information on studies, surveys, student opinions, evaluations of the University's activity by recognised institutions and quality assurance are present on the LSMU website. The expert panel we unable to access this information on the English language pages of the LSMU website or on the "Ave Vita" and "Towards the quality of studies: innovations, education, and changes" webpages. It is therefore unclear to the panel to what degree the study programme benefits from the evaluation of the data, the evaluation and improvement processes, and the outcomes. Therefore, the expert panel suggest that this area is given further consideration and that the information on the webpages are made more easily accessible.

3.7.4. Evaluation of the opinion of the field students (collected in the ways and by the means chosen by the SKVC or the HEI) about the quality of the studies at the HEI.

The study programme utilises its own student survey questionnaire. In 2020, all DH students (1st to 4th year) evaluated three key areas of the programme using a scale from 1 to 10 points. The mean results for each area were as follows: (i) implementation of study modules/subjects scored 5.83 points, (ii) quality of the teaching of the modules/subjects scored 6.8 points and (iii) acquired knowledge was 6.91 points. The students were most satisfied with the comfort and suitability of the classrooms/laboratories and the support and consultations provided by the teachers during and outside lectures. After the transition to distance learning, due to the Covid-19 pandemic, a survey was conducted in April 2020 to clarify how successful the distance learning was. Out of the students who participated in the survey, 95% were satisfied with the organisation of the distance learning. They liked the recorded lectures and their quality (90%) the most, and they also liked the evaluation procedures used in the virtual environment (70%). The surveys conducted in 2020 showed a good level of student satisfaction with the programme, which was especially high following the move of distance learning in the spring of 2020. The high student satisfaction with the programme was confirmed during the expert panel meeting with the DH students. The expert panel suggest that the study programme considers utilising the questionnaire offered to them by the SKVC, as this would ensure that the requirements of the HEI are fulfilled. Furthermore, this would also allow better benchmarking with other similar programmes in Lithuanian.

Recommendations for this evaluation area:

The expert panel recommends that the study programme develops a way to include students and other stakeholders in the quality development of the study programme and how the "Quality Thermometer" can facilitate these processes.

The expert panel recommends that more attention is given to a meta-reflection on how the different activities of the internal quality assurance and development of the studies contributes to the efficacy and effectiveness of the system.

The expert panel suggest that the study programme considers utilising the SKVC questionnaire as this would ensure the fulfilment of the requirements of the HEI, furthermore, it would also allow benchmarking with other similar programmes in Lithuanian.

IV. RECOMMENDATIONS

- 1. Further integrate the teaching of DH and dental students throughout the curriculum, especially in clinical practice, including the evaluation of work carried out on the same patient. This would promote teamworking, peer assessment, leadership and enhance the clinical understanding of more complex clinical cases. The use of a larger variety of evaluation methods for assessing the learning of complex competences may further promote this aim e.g. communication skills.
- 2. Strengthen student involvement and competencies in basic research throughout the curriculum.
- 3. Expand the teaching of oral radiology as knowledge of this subject is valuable in the management of complex cases.

- 4. Enhance the visibility of the DH programme in the Faculty of Odontology to help attract more foreign students to study at LSMU (full-time or on exchanges). For example, develop information on the website to specifically target the needs of foreign students (e.g. recognition of foreign qualification and prior learning) and recruit LSMU staff and students to act as ambassadors for the programme when on exchanges.
- 5. Improve assessment methods used for independent student work and how students utilise feedback in general to promote self-assessment (self-evaluation), progression and lifelong learning.
- 6. It is recommended that the DH study programme or LMSU increase the awareness of how students report incidents of sexual and other types of harassment.
- 7. It is recommended that the faculty develops a more systematic approach to the development of teacher's pedagogical competencies and further promote the academic mobility of teachers.
- 8. It is recommended that the faculty consider how the physical teaching facilities are located and utilised e.g. having a dedicated dental hygiene clinic within the new building might benefit the DH programme. Furthermore, consider how the digital infrastructure could be further developed to help support student learning.
- 9. Develop a more systematic approach to allow students and other stakeholders (alumni, employers and social partners) to have a greater input into the enhancement of the study programme, to ensure it caters for the needs of the new graduates. More attention should be given to meta-reflective approach to internal quality assurance and development of the studies.
- 10. Consider utilising the SKVC questionnaire to help ensure the fulfilment of the requirements of the HEI and aid benchmarking with other similar programmes in Lithuania.

V. SUMMARY

Lithuanian University of Health Science has a mature and comprehensive quality assurance and developmental programme in place. The effectiveness and efficacy of this system, and the work put into it, might benefit if the procedures and methods by which it operates were more systematically evaluated and developed. When for instance, only a few students respond to questionnaires it might be valuable to reconsider this method. Either involve students in this and achieve higher response rates or to choose other methods for data collection e.g. focus groups.

The faculty of Odontology and the DH study programme might benefit from developing a stronger vision for the skills, competences and roles of the different members of the dental team that should lead the planning and teaching of the DH students. This may also benefit the dental students. It might be beneficial for the DH students to see strong artefacts and role

models that shows and reflects the specific and unique characteristics of their profession, along the other professions profiles, that are often much more known and established. This could also be supported by a stronger element of teamwork in the clinic.

The DH programme at Lithuanian University of Health Science seems to have a great potential in developing a stronger and more diverse feedback culture that support the students learning. Choosing assessment methods that support student learning should be another area of improvements for the DH programme.

As with many DH programmes around the world, having a stronger affiliation to research and evidence-based practise is important for the citizens and patients of Lithuania. In order to achieve this, greater elements of internationalisation and the use of English is needed.

In order to align the DH programme, in accordance with international norms for this profession, the content of and competences relating to dental radiology should be reconsidered. It is recommended that the future dental hygienist should be able to take intraoral radiographs, as well as to make use of them for diagnostic purposes. The expert panel are aware that this might need a legislative change in Lithuania. We shall recommend this. Although dental hygienists may not take radiographs on patients, under the present legislation, we still suggest that they learn to do so on phantom heads. This would promote their understanding of radiographic imaging and prepare them for when legislative changes in Lithuania allows dental hygienists to carryout dental radiography, as is already the case in many countries.

Expert panel:

- 1. **Dr. Kevin John Davey** (team leader) member of academic community;
- 2. Assistant Professor Sandra Ribeiro Graça, member of academic community;
- **3. Bo Danielsen,** member of academic community;
- **4. Prof. dr. Vytautė Pečiulienė,** representative of social partners';
- **5. Meda Vaitonytė, students'** representative.