



Strategy of Riga First Medical College of the University of Latvia for 2015 - 2020

Riga First Medical College is a modern college that implements its development vision in order to fully integrate into the Latvian and European higher education space.

Strategy 2015-2020 was developed on the basis of the Law on Higher Education Institutions, Cabinet of Ministers Regulation No. 305 of 8 May 2009 "Regulations of Riga 1st Medical College" and Education Development Guidelines 2014 - 2020 as well as in compliance with the Latvian Research and Innovation Strategy for Smart Specialization in the fields of specialization binding on the College and the Ministry of Health Guidelines "Development of Human Resources in Health Care" approved by the Cabinet of Ministers.

CONTENTS

| | |
|--|----|
| About the College..... | 5 |
| College History | 5 |
| First level professional higher education programs..... | 6 |
| Professional secondary education programs..... | 6 |
| Vocational programs..... | 7 |
| Current aims and main tasks of Riga First Medical College | 7 |
| Aims..... | 7 |
| Objectives..... | 7 |
| Factors affecting the development of Riga First Medical College | 8 |
| Factors contributing to the College development | 8 |
| College management | 8 |
| Academic staff..... | 8 |
| Study process and further education..... | 8 |
| Students and alumni | 9 |
| Cooperation..... | 9 |
| Environment and resources | 9 |
| Quality monitoring process..... | 9 |
| Factors and threats impeding the College development..... | 9 |
| Opportunities for the College development | 9 |
| Compliance of the College Strategy with the Latvian Smart Specialization Strategy | 11 |
| Riga First Medical College Strategy 2015-2020..... | 12 |
| Mission | 12 |
| Vision..... | 12 |
| Summary of strategic development directions and priority objectives..... | 12 |
| 1. College as an institution of higher professional education oriented towards the labor market..... | 16 |
| Current situation | 16 |
| Planned actions | 16 |
| Performance indicators..... | 17 |
| 2. College as a university cooperation partner | 17 |
| Current situation | 18 |
| Planned actions | 20 |
| Performance indicators..... | 21 |
| 3. Contemporary and modern college | 22 |
| Current situation | 22 |
| Planned actions | 22 |
| Performance indicators..... | 23 |
| 4. Internationally recognized college | 23 |
| Planned actions | 23 |

| | |
|---|----|
| Current situation | 23 |
| Performance indicators..... | 23 |
| 5. Study programs satisfying the labor market requirements | 23 |
| Current situation | 23 |
| Planned actions..... | 24 |
| Performance indicators..... | 25 |
| 6. Student as a priority in the study process..... | 25 |
| Current situation | 25 |
| Planned actions..... | 26 |
| Performance indicators..... | 26 |
| 7. Cooperation with alumni..... | 26 |
| Current situation | 26 |
| Planned actions..... | 28 |
| Performance indicators..... | 28 |
| 8. Competent academic staff | 28 |
| Current situation | 28 |
| Planned actions..... | 29 |
| Performance indicators..... | 29 |
| 9. Research consistent with the current labor market interests | 30 |
| Current situation | 30 |
| Planned actions..... | 30 |
| Performance indicators | 30 |
| 10. Modern and stable technical facilities and study resources | 31 |
| Current situation | 31 |
| Planned actions..... | 31 |
| Performance indicators..... | 32 |
| 11. Cooperation for the enhancement of the quality of professional education..... | 32 |
| Current situation | 32 |
| College aims in cooperation with employers..... | 33 |
| Planned actions..... | 34 |
| Performance indicators..... | 34 |
| Research directions..... | 34 |
| 12. College financial planning..... | 35 |
| Current situation | 35 |
| Buildings under College management | 37 |
| Land units under College management | 37 |
| Training facilities and equipment at Riga First Medical College | 37 |
| Description of investment..... | 38 |
| Planned actions..... | 39 |

| | |
|---|----|
| Other priorities..... | 39 |
| Investment Plan until 2020 | 40 |
| The amount of funding required for the improvement of the learning environment in the period from 2015 to 2020..... | 40 |
| Evaluation of alternatives of the project "Modernization of the STEM study program infrastructure at Riga First Medical College" | 44 |
| Risk analysis..... | 49 |
| | |
| <i>Statement of the Health Care Development Association No.1 / 01-040117 of 4 January 2017 “On the development of new programs at Riga First Medical College“</i> | 86 |
| <i>Statement of the Association of Directors of Social Care and Rehabilitation Institutions No.16 / 4 of 28 December 2016, “On the development of a new program”</i> | 87 |
| <i>Statement of the Emergency Medicine Association of the Republic of Latvia No. 1 of 6 January 2017 “On Riga First Medical College operations and the College strategy until 2020”</i> | 88 |
| <i>Reference of the Latvian Nurses’ Association No.La-24/2016 of 31 October 2016 “On Riga First Medical College operations in 2016 and in the context of the College strategy until 2020”</i> | 89 |
| <i>Reference of the Latvian Pharmacists’ Association No.2-5 / 559 of 24 October 2016 “On Riga First Medical College operations in 2016 and in the context of the College strategy until 2020”</i> | 90 |
| <i>Statement of the Emergency Medical Service No.1-9 / 1027 of 25 October 2016 “On cooperation with the Medical College”</i> | 91 |

Strategy of Riga First Medical College 2015-2020, as a mid-term planning document, was developed on the basis of the Law on Higher Education Institutions, Cabinet Regulation No. 305 of 8 May 2009 “Regulations of Riga First Medical College”, Education Development Guidelines 2014-2020 of 22 May 2014 approved by the Saeima and in compliance with the Latvian Smart Specialization Strategy in the fields of specialization binding on the College as well as the Guidelines “Development of Human Resources in Health Care” developed by the Ministry of Health and approved by the Cabinet of Ministers.

About the College

College History

Riga First Medical College is a state professional higher education institution that is subordinate to the Ministry of Education and Science of the Republic of Latvia.

College address: 37 Tomsons street, Rīga, LV-1013.

Since 15 November 1988 *Inese Bunga* has been the College Director. Inese Bunga holds a Master’s degree in pedagogy; she is an assistant professor, dentist, Cross of Recognition officer,

The total number of students at Riga First Medical College and its structural unit “Professional Secondary School of Riga First Medical College” is 1037 (data as of 1 October 2015), including:

- 545 students in study programs at the College;
- 492 students in study programs in the professional secondary school.

Riga First Medical College is the only educational institution in Latvia that has been awarded the David Hieronymus Grindel Medal for the College contribution to the training of pharmacists and other medical staff. David Hieronymus Grindel was a famous chemist, pharmacist, doctor and the first Latvian naturalist.

Inese Bunga, Director of Riga First Medical College, has been awarded a Certificate of Recognition and a 3rd degree Cross of Recognition for her contribution to the development of Riga First Medical College and the preparation of new specialists in the field of medicine for the Latvian labor market.

Riga First Medical College is an educational institution with more than 114 years of experience and its historical roots dating back to 1902 when the first information about this educational institution surfaced. Initially, this educational institution received the name “Riga Midwifery School” which was approved by the Riga City Council. Over the years, the School expanded its operations, new classrooms were set up and the school budget was approved. The development of the school was significantly affected by the two world wars, and for some time it operated as a nursing school in Bashkortostan.

In 1945, the School commenced training paramedics, thus, gradually shifting towards the training of single-profile paramedics (the specialty was referred to as “paramedic (feldsher) - midwife”). In 1954, the Paramedic and Midwifery School was renamed Riga First Medical School. In 1960, the School of Pharmacists was joined to the Riga First Medical School, which was transformed into the School Pharmacy Department. The School of Dental Technicians was joined to the School in 1963. Since 1963 Riga First Medical School has had new training facilities at 37 Tomsona Street. New specialties were introduced in 1992 and 1997 - a dental nurse and a dental assistant, respectively.

In accord with the Ministry of Education and Science Order of 25 August 2005, Riga First Medical School was assigned the status of college and thus it became the successor of the rights and legal obligations of Riga First Medical School.

Riga First Medical College was registered in the Register of Educational Institutions of the Ministry of Education and Science of the Republic of Latvia (Registration Certificate No. 3334002593) on 22 September 2005.

Since September 2006 the College has been implementing the training of nurses, midwives and physician assistants, while since September 2007 the College has additionally been offering training of pharmacist assistants in accordance with the licensed first level professional higher education programs.

The training of nursing assistants has been offered on the basis of secondary education in the College vocational education programs since 2006, and since 2010 - on the basis of primary school. In 2011, the first groups of patient carers commenced their education (on the basis of the secondary and primary education).

In 2007, Riga First Medical College was accredited for the first time (accreditation sheet No. 071). By 31 December 2013 all the first level College professional higher education programs had been accredited:

- "Medical treatment" (41721) with the professional qualification of a physician assistant;
- "Medical treatment" (41721) with the professional qualification of a midwife;
- "Nursing" (41723) with the professional qualification of a nurse;
- "Pharmacy" (41725) with the professional qualification of a pharmacist assistant.

In 2012 and 2013, the outcome of the re-accreditation process was the high evaluation of the study direction "Health Care" which was assessed as qualitative and sustainable. International and Latvian experts highly evaluated the College and the study direction.

Consistent with the experts' questionnaires, the following evaluation was obtained for the College level STEM programs:

- "Pharmacy" (41725): out of 61 evaluation criteria, 59 criteria received the highest score of 4 points, whereas 2 criteria received 3 points;
- "Nursing" (41723): out of 61 evaluation criteria, 60 criteria received the highest score of 4 points, whereas 1 criterion received 3 points;
- "Medical treatment" (41721): out of 61 evaluation criteria, 60 criteria received the highest score of 4 points, whereas 1 criterion received 3 points.

Consistent with the Study Accreditation Committee Decision No.5 of 17 May 2013, the study direction "Health Care" was accredited for 6 years from 17 May 2013 until 16 May 2019.

According to the data published by the Ministry of Education and Science in 2012, Riga First Medical College was ranked first in the ranking of Latvian higher education institutions in the education quality assessment.

Professional higher education programs implemented at the College

In the academic year 2015-2016, eleven basic education programs were implemented at Riga First Medical College:

First level professional higher education programs

- "Pharmacy" (41725) with the qualification of a pharmacist assistant
- "Medical treatment" (41721) with the qualification of a midwife
- "Nursing" (41723) with a nursing qualification
- "Medical treatment" (41721) with the qualification of a medical assistant

Professional secondary education programs

- "Dentistry" (35b724001) with the qualification of a dental technician
- "Dentistry" (35b724001) with the qualification of a dental nurse

Vocational programs

"Dentistry" (35a724001) with the qualification of a dental assistant

"Social care" (35a762031) with the qualification of a patient carer (based on secondary education)

"Social care" (32a762031) with the qualification of a patient carer (based on basic education)

"Nursing" (35a723001) with the qualification of a nursing assistant (based on secondary education)

"Nursing" (32a723001) with the qualification of a nursing assistant (based on basic education)

Current aims and main tasks of Riga First Medical College

Aims

- Training of qualified specialists required by employers in such professions as a midwife, medical assistant, nurse, pharmacist assistant, dental technician, dental nurse, dental assistant, nursing assistant, patient carer in accordance with the legislation of the Republic of Latvia, professional standards and European Union directives.
- To create an internationally recognized college with a focus on students and lecturers with a creative and positive academic and cultural environment.
- In cooperation with the College partners, to systematically develop and offer necessary further education opportunities for health care professionals.
- Providing opportunities for students to acquire competitive professional competencies and practical skills in demand on the labor market. To offer training for continuing education in other higher education institutions in Latvia and abroad, to create a stable basis for lifelong learning.
- Academic staff competent in the fields of their specialization and pedagogy and who are able to work in accordance with international standards.

Objectives

- To enhance study programs based on the latest knowledge of medical sciences and pedagogy, thus, improving the academic information, technical and methodological base and developing the intellectual potential of the College academic staff and cooperation partners.
- In accordance with the demand of the labor market, in cooperation with the University of Latvia and other higher education institutions, professional associations and societies to create new study programs and develop research activities.
- To ensure annual modernization of the College academic process, implementation of a modern educational process, promoting the enhancement and development of students' personality and providing students with the opportunity to obtain the first level professional higher education, professional secondary education and vocational education.
- To create study program and student work evaluation systems that promote the enhancement of study quality, using the experience of cooperation partners.
- To motivate students for lifelong learning.
- Development of the College equipment base in accordance with the Guidelines of the Smart Specialization Strategy, creating a technological base that promotes the acquisition of comprehensive and advanced knowledge as well as effective new skills.
- To motivate lecturers for continuous enhancement of competencies in their specialty and pedagogy, for Master's and doctoral degree studies and scientific research.
- To further develop the College economic activities for providing modern material and technical facilities and for renovating and improving the College building and student hall of residence, possibly participating in the EU-funded projects.

In the past the long-term College development was based on the Riga First Medical College Development Concept 2007–2012 and from 2009 on Riga First Medical College Development Strategy 2009-2015. Recently the long-term College development has been proceeding consistent with the Riga First Medical College Development Strategy 2015-2020.

In accordance with the development strategy and based on the evaluation of the previous reporting period, the College activities are carefully planned for next academic year. The plan of activities is shown in the annual cyclogram.

Factors affecting the development of Riga First Medical College

In order to ensure the College sustainability and the attainment of the College aims set in the Strategy, the College takes into account the factors stimulating and impeding development and attempts to identify risks in a timely manner in order to minimize their negative impact.

Factors contributing to the College development

College management

- Knowledgeable and competent specialists with experience in teamwork
- Knowledge, competence and longitudinal experience of the College Director
- Flexible and motivating College management process, democratic decision-making
- Targeted and motivating staff policy
- Proper resource planning and monitoring of resource use
- Ability to respond to change and reduce risks
- Positive evaluation of foreign and Latvian experts¹

Academic staff

- High professional and pedagogical competencies
- Ability to use innovative technologies and deploy them in the study process
- High quality teaching
- Extensive opportunities for further education in Latvia and abroad
- Experience in ensuring cooperation between students and academic staff
- Cooperation of academic staff with employers and international professional partners in relevant fields of specialization, including on issues of curriculum development and research.

Study process and further education

- Positive experience in the implementation of retraining programs for new medical personnel in Latvia
- Experience in organizing and implementing the study process for persons with previously acquired professional experience and education
- High quality teaching methodological base. Appropriate material and technical study equipment
- Appropriate number of study placement bases, which yields an opportunity to satisfy the requirements essential for attaining the study aims
- Experience in implementing new retraining programs
- College visibility

¹ International accreditation within the framework of the ESF project “Evaluation of Higher Education Study Programs and Proposals for Quality Improvement” (2012)

Students and alumni

- Thoughtful and well-organized first year students' adaptation process and its positive outcomes
- Student participation in solving issues pertinent to the study process and College development
- Active participation of students and alumni in scientific research activities (scientific conferences, research projects in pharmacy, medical treatment, dentistry and nursing)
- Regular monitoring of alumni. Implementing necessary adjustments
- Sustained demand for College graduates in the Latvian and European labor market, which testifies to the graduates' international competitiveness

Cooperation

- Successful and prospective cooperation with Latvian and foreign universities
- Long-term and multifaceted cooperation with health sector employers
- Cooperation with professional associations, societies, foundations and other non-governmental organizations
- Cooperation with College alumni
- Successful cooperation with more than 200 placement bases in Latvia.

Environment and resources

- The College has developed modern material and technical facilities, which ensures the optimal study process and safe environment as well as guarantees a high quality of studies.
- The methodological and technical basis of the study process has continuously been developed and improved in accordance with the Latvian Smart Specialization Strategy and the recommendations of the College cooperation partners.
- The College has been planning and, as far as possible, obtaining investment for the purchase of modern, innovative teaching equipment.
- The process of financial resources planning and monitoring of the use of funds ensures purposeful and efficient deployment of all types of resources.

Quality monitoring process

The College maintains a study quality assessment and control system (Strategy, Appendix 1, p. 53) with the aim of ensuring proper planning, deployment and monitoring of the academic staff policy, infrastructure and financial resources of Riga First Medical College.

Factors and threats impeding the College development

- Difficulties in recruiting new academic staff
- Demand for labor in a changing industry
- Political decisions affecting the College development

Opportunities for the College development

- More rapid development of scientific research activities with the focus on practical usability
- Mobility in ensuring industry employers' demand for specific training programs
- Satisfying the demand for improving the knowledge and skills of medical practitioners
- Need to develop skills essential for the implementation of e-healthcare, for example, such as those required for the implementation of e-prescriptions
- Provision of various study materials and other additional opportunities in the e-environment

**Riga First Medical College study programs
implemented at other
higher education institutions**

| No. | Study program | Riga First Medical College | | | |
|-----|---|--|---|---|--------------------------------|
| | | Riga First Medical College | Riga Stradiņš University (RSU) | University of Latvia (LU) | Other educational institutions |
| 1. | Nurse 41723, Prof. qualification level 4 | Riga First Medical College Since 1920 | RSU Red Cross Medical College | LU Riga Medical College LU P. Stradiņš Medical College | Daugavpils Medical College |
| 2. | Physician assistant 41721, Prof. qualification level 4 | Riga First Medical College Since 1943 | RSU Red Cross Medical College | LU P. Stradiņš Medical College LU Riga Medical College | Daugavpils Medical College |
| 3. | Pharmacist assistant 41725, Prof. qualification level 4 | Riga First Medical College Since 1960 | RSU Red Cross Medical College Since 2016 | Not implemented | Not implemented |
| 4. | Midwife 41721, Prof. qualification level 4 | Riga First Medical College Since 1902 | Not implemented | Not implemented | Not implemented |
| 5. | Dental technician 35b724001, Prof. qualification level 3 | Riga First Medical College Since 1963 | Not implemented | Not implemented | Not implemented |
| 6. | Dental nurse 35b724001 Prof. qualification level 3 | Riga First Medical College Since 1992 | RSU Red Cross Medical College | Not implemented | Not implemented |
| 7. | Dental assistant 35a724001, Prof. qualification level 2 | Riga First Medical College Since 1997 | Not implemented | Not implemented | Not implemented |
| 8. | Nursing assistant 35a723001 Prof. qualification level 2 | Riga First Medical College Since 2005 | RSU Red Cross Medical College | Not implemented | Daugavpils Medical College |
| 9. | Nursing assistant 32a723001 Prof. qualification level 2 | Riga First Medical College Since 2009 | RSU Red Cross Medical College | Not implemented | Daugavpils Medical College |
| 10. | Patient carer 35a762031, Prof. qualification level 2 | Riga First Medical College Since 2010 | Not implemented | Not implemented | Not implemented |
| 11. | Patient carer 32a762031, Prof. qualification level 2 | Riga First Medical College Since 2010 | Not implemented | Not implemented | Not implemented |
| 12. | Dental hygienist (with secondary special education) | Not implemented | RSU | Not implemented | Not implemented |
| 13. | Health sports specialist – massage therapist | Not implemented | RSU Red Cross Medical College | LU P. Stradiņš Medical College LU Riga Medical College | |

The demand for young healthcare specialists in Latvia exceeds the supply of educational institutions, as evidenced by the annual filling up of state funded study places (Riga First Medical College, etc.). The rationale for the future demand for specialists is consistent with the guidelines “Human Resources Development in Health Care 2014-2020”, Ministry of Economics 2016 document “Informative Report on Medium and Long-Term Labor Market Forecasts”, Foreign Investors' Council in Latvia Report of 30 May 2014 “Position Report on the Development of the Latvian Health Care System”, etc. (Strategy, Appendix 2, p. 57)

**Strengths and opportunities for Riga First Medical College
in comparison with other higher education institutions:**

For more than 20 years, the College has been implementing the **prevention direction** at all levels of health care, which is special and unique for Riga First Medical College in the following aspects:

- it is implemented and developed in accordance with the guidelines of the European health policy;

- it is integrated into the contents of all study programs;
- it is a priority in research carried out by students and academic staff (the results are evident in annual international scientific conferences held at the College);
- it is implemented at the public education level - students participate in health promotion activities in Latvia, including the events at general education schools, pre-school institutions, etc.

Compliance of the College Strategy with the Latvian Smart Specialization Strategy

The Latvian Smart Specialization Strategy envisages the modernization of education with the aim of promoting the transformation of the economy into higher added value, promoting growth in both traditional sectors of the economy, sectors with high future growth potential and sectors with a significant horizontal impact.

The Ministry of Economics emphasizes in its informative reports on medium- and long-term labor market forecasts that the labor force is aging. One of the solutions in reducing the mismatch between higher education supply and labor market demand is to increase STEM students in priority study fields such as natural sciences, mathematics, information technology, engineering, manufacturing, construction, agriculture and health care and to improve the College supply with modern equipment and technologies in such priority fields.

Attaining the aim will be facilitated by implementation of the specific support objective 8.1.1 “Increasing the number of modernized STEM study programs, including in the medical and creative industries”.

In the Education Development Guidelines 2014–2020, one of the tasks is to purposefully use the resources of higher education institutions, promoting the territorial spatial concentration of STEM² studies and scientific activities as well as modernization of material and technical facilities in medical and creative industries.

In accordance with the above-mentioned policy planning documents and forecasts of the Ministry of Economics, the Strategy of Riga First Medical College determines several strategic directions and priorities that promote the implementation of the aims set in the Latvian Smart Specialization Strategy and which are in line with the determined development priorities.

Riga First Medical College Strategy 2015-2020 identifies the following development directions:

1. *College as a labor market-oriented professional higher education institution*
2. *College as a cooperation partner of higher education institutions, including colleges*
3. *Modern and contemporary college*
4. *Internationally recognized college*
5. *Study programs meeting the requirements of the labor market*
6. *Student as a priority in the study process*
7. *Cooperation with alumni*
8. *Competent academic staff*
9. *Research consistent with the current interests of the labour market*
10. *Stable, safe and modern study and technical facilities.*
11. *Cooperation for the enhancement of the quality of professional education*
12. *Proper financial planning for the implementation of the Strategy*

² *Science, Technology, Engineering and Mathematics*

Mission

By creating a stable basis for lifelong learning, training highly qualified health care and social care specialists who are competitive and who are in demand in the Latvian labor market.

Vision

A contemporary, prestigious and modern college with an attractive communication and cultural environment and with a stable professional base that implements and develops sustainable professional education in health care and social care.

Summary of strategic development directions and priority objectives

| Strategic directions of actions | Aims of action directions |
|--|--|
| <p><i>1. College as a labor market-oriented professional higher education institution</i></p> | <ol style="list-style-type: none"> 1. Riga First Medical College as a partner contributing to the development of a population-oriented, efficient and high-quality healthcare sector that proceeds in accordance with the health sector development policy and cooperating with employers on the issues of the development of healthcare human resources 2. A modern, labor market-oriented college, which creates an opportunity for all students to acquire the knowledge, competencies and skills in demand for specific purposes on the labor market. 3. Riga First Medical College as a provider of a wide range of healthcare specialists to all regions of Latvia 4. The College as a support provider in expanding the knowledge and skills of employers' staff and as a provider of lifelong learning opportunities |
| <p><i>2. College as a cooperation partner of higher education institutions</i></p> | <ol style="list-style-type: none"> 5. Develop and enhance the College cooperation with other higher education institutions in the following: <ol style="list-style-type: none"> 5.1. To promote cooperation with colleges and universities in such common study fields (especially in pharmacy and dentistry) that can ensure the continuity of learning and that can ensure the acquisition of an appropriate Bachelor's level qualification; 5.2. Considering the positive experience of the current cooperation, to further develop the cooperation with the University of Latvia by implementing the development directions specified in the College Strategy: <ol style="list-style-type: none"> 5.2.1. By cooperating with partners, to develop and enhance the College scientific and academic potential as well as material and technical facilities, ensuring their rational and appropriate deployment for studies and research; |

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| | <p>5.2.2. In cooperation with the University of Latvia, to participate in the European Union-funded Horizon 2020 projects as far as possible and in accordance with the College research directions.</p> |
| <p>3. Modern college</p> | <p>6. To implement the symbiosis of 11 educational programs implemented at Riga First Medical College and to further enhance the quality of the common study and research process by introducing modern and effective teaching methods and modernizing the College infrastructure.</p> <p>7. To improve the contents of studies, research and lifelong learning in the fields of College education, specifically, in pharmacy, dentistry, medical treatment, nursing and social care.</p> <p>8. When involving students in research activities, to use the experience and capacities of the University of Latvia (henceforth – LU), Latvia University of Life Sciences and Technologies (henceforth – LLU), Rīga Stradiņš University (henceforth – RSU) and other higher educational institutions for the purposes of engagement in scientific projects and in compliance with the funding conditions and general terms for student involvement in scientific research activities.</p> |
| <p>4. Internationally recognized college</p> | <p>9. Development of the College international visibility with the support of the EU structural funds and on the basis of bilateral cooperation agreements.</p> <p>10. Development of new study programs/study modules in cooperation with foreign partners.</p> <p>11. Increasing the number of international exchange students.</p> <p>12. Expansion of lifelong learning opportunities in cooperation with foreign partners.</p> <p>13. Internationalization of study programs (mutual opportunities to complete specific study modules, study courses or study placement in part or fully in a different country).</p> <p>14. To improve the forms of international cooperation in student and academic staff exchange and research activities in the EU-funded projects (Erasmus +, Nord Plus Nordejordemodern, etc.).</p> |
| <p>5. Study programs meeting the requirements of the labor market</p> | <p>15. In cooperation with employers to create and start implementing new study programs:</p> <p>15.1. “Health and Social Welfare” 41762 with the qualification of a social caregiver.</p> <p>16. To deepen cooperation with employers in the development of study contents, research activities and lifelong learning in the College study programs, specifically, in pharmacy, dentistry, medical treatment, nursing and social care.</p> <p>17. Implementation of high-quality, demanded further education / lifelong learning in line with the development of the national economy. Development of lifelong learning in cooperation with</p> |

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| | <p>Latvian employers, professional associations and foreign partners.</p> <p>18. In cooperation with employers (LNM Association, Latvian Association of Nurses, Association of Directors of Social Care and Rehabilitation Institutions, Latvian Association of Midwives, etc.) to create a modern, innovative and practical study module “Extreme, Intensive and Palliative Care Module”.</p> <p>19. In cooperation with the Latvian Association of Dental Technicians and in accordance with the Smart Specialization Strategy, to purchase a new technologically innovative 3-D device of the CAD/CAM system for training of dental technicians.</p> <p>20. In accordance with the e-prescription information system developed within the framework of the e-Health project, its operational principles and the prescription and medicine circulation process, to create a study module for pharmacist assistants and physician assistants.</p> |
| <i>6. Student as a priority in the study process</i> | <p>21. To ensure free, creative and co-responsible cooperation of students and academic staff in the study process.</p> <p>22. To ensure professional competitiveness and understanding of the significance of humane and ethical principles in professional activities. To support the activities of the student self-government.</p> <p>23. To develop students' cooperation skills.</p> <p>24. To promote the enhancement of professional and pedagogical competences of the academic staff.</p> <p>25. To ensure the attraction and retention of students.</p> |
| <i>7. Cooperation with alumni</i> | <p>26. Monitoring of alumni: to analyze and compile information on graduates' further education and work opportunities, providing graduates with the necessary informative support.</p> <p>27. To promote mutual cooperation of students, alumni and academic staff in research activities.</p> <p>28. To promote the participation of students and alumni in discussions, conferences, master classes, various cooperation and research projects.</p> <p>29. To use social media and to engage alumni in information provision about the College and study opportunities at the College.</p> |
| <i>8. Competent academic staff</i> | <p>30. To ensure staff development and to support the development of motivation of the academic staff to increase their professional capacity and to enhance their competence.</p> <p>31. Within the framework of study programs, to develop the cooperation of the academic staff with employers and</p> |

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| | international professional partners in the field for the academic staff teaching and research. |
| <i>9. Research consistent with the current interests of the labour market</i> | <p>32. Development of research activities in cooperation with LU, LLU, RSU and other higher education institutions, colleges in Latvia and abroad, employers, foreign partners.</p> <p>33. Involvement of employers in the choice of research directions and themes.</p> <p>34. Prevention is the priority research direction of the College.</p> <p>35. Student research is the leading factor of the College innovative activities and the most important development indicator.</p> <p>36. To involve students in research activities, using the experience and capacities of the University of Latvia and other large higher education institutions in pertinence to engagement in scientific projects, which fulfills the funding terms and conditions regarding the involvement of students in scientific research activities.</p> |
| <i>10. Stable, safe and modern study and technical facilities.</i> | <p>37. Maintenance and development of stable, modern academic material and technical facilities (equipment, devices, etc.).</p> <p>38. Use of e-resources and modern information technologies</p> <p>38.1. in the organization of the study process;</p> <p>38.2. gradual digitization of study content;</p> <p>38.3. adaptation of teaching methods to studies in electronic environment;</p> <p>38.4. College management work;</p> <p>38.5. development of mutual communication;</p> <p>38.6. organization of international scientific conferences.</p> <p>39. Introduction of advanced technologies and usage of training equipment in the study process:</p> <p>39.1. to create an innovative practical study module “Extreme, Intensive and Palliative Care Module”;</p> <p>39.2. to purchase a new technologically innovative 3-D device of the CAD/CAM system for training dental technicians;</p> <p>39.3. to develop a pharmacy training model in cooperation with the pharmaceutical company “Tamro Baltics Retail” (Benu aptiekas).</p> <p>40. To ensure the competitiveness of the students of the study program “Dental Technician”, which is the only educational program of this type in Latvia, in the international labor market.</p> |
| <i>11. Cooperation for the enhancement of the quality of professional education</i> | <p>41. Strengthening the College cooperation with social partners, employers, universities and non-governmental organizations.</p> <p>42. Improvement of the College study quality assessment and control system.</p> |

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| 12. College financial planning | <p>43. Consolidate financial resources in order to achieve the aims set in the Strategy.</p> <p>44. To attract financial resources of cooperation partners in support of specific target programs.</p> <p>45. To continue to obtain EU structural funds (ERASMUS +, ERDF, Nord Plus, Nordejordemodern, etc.).</p> <p>46. To raise financial resources of businesses for the development of new further education programs.</p> <p>47. To develop tuition-based studies.</p> |
|---------------------------------------|---|

1. College as an institution of higher professional education oriented towards the labor market

Current situation

In accordance with the health sector development policy, in order to ensure the long-term growth of the population-oriented, rational, efficient and high-quality healthcare sector and in order to develop human resources for the healthcare sector, the College plans its activities according to the labor market demands, therefore, attempting to ensure that the employers' needs for competent specialists in specific fields are promptly met. It should also be noted that the demand for the College-trained specialists has been increasing, especially for pharmacist assistants, midwives, dental technicians, dental nurses and patient carers.

The development of the College education programs is presented in more detail in the development plan of the Riga First Medical College education program offer (Strategy, p. 57), while the planned future development of cooperation is described in more detail in the cooperation development plan with Latvian and foreign higher education institutions and employers (Strategy, 70). p.).

Riga First Medical College has traditionally been in close partnerships with employers and their professional organizations in all study programs. The College has long-term and effective cooperation with the Latvian Association of Pharmacists, Latvian Association of Midwives, Riga Maternity Hospital, Latvian Association of Hospitals, Emergency Medical Service, Latvian Association of Nurses, largest Latvian clinics in Riga and Latvian regions, Latvian Association of Social Care and Rehabilitation Institutions (SARIDA), the largest social care institutions, the Latvian Association of Dental Technicians as well as dental clinics throughout Latvia, etc.

College aims for cooperation with employers:

- To determine the current demand in the labor market, the demand for specialists, new quality requirements and professional perspectives of healthcare workers, growth opportunities.
- To find out the opinion of employers about the compliance of the contents of study programs with the requirements set by employers.
- Involve employers in the evaluation of the quality of study results by including the qualification exam in the commission.
- To promote active participation of employers in the enhancement of the contents of study programs and the development of research activities of students and academic staff.
- Receive specific orders for applied research from employers.

Planned actions

1. To start planning and create a new study program in accordance with the requirements of the national economy:

- 1.1. “Health and Social Welfare” 41762 with the qualification of a social caregiver.
2. To develop and launch new study programs demanded in the healthcare labor market, develop further education programs in pharmacy, dentistry, medical treatment and social care.
3. In cooperation with the Latvian Employers' Confederation, to consider the need to establish a Sector Expert Council (SEC) in Medicine, bringing medical education closer to the business environment.
4. In cooperation with employers, to create a modern, innovative and practical study module that will simulate the human/patient care cycle from birth to the end of life.
5. In accordance with the Guidelines of the Smart Specialization Strategy, to purchase a new technologically innovative 3-D device for the training of dental technicians.
6. Based on the e-prescription information system developed within the e-Health project, its operational principles and the medicine circulation process (from prescription to pharmacy processing and medicine dispensing to patients), to create a study module for pharmacist assistants and physician assistants for medicine circulation and pharmacovigilance training.
7. In cooperation with the pharmaceutical company “Tamro Baltics Retail” (Benu pharmacies) to create a pharmacy study model.
8. In cooperation with healthcare specialists to develop research activities of students and academic staff to the highest quality standards. To determine priority research directions and to work on topical and important research topics in health care, including those related to the direction of prevention.

Performance indicators

1. During the planning period 2015-2020, the College implemented the development of academic material and technical facilities, creating modern and innovatively equipped study modules suitable for the College STEM and other programs and consistent with the Smart Specialization Strategy, which enabled efficient and new quality theoretical and practical training of students.
 - 1.1. In cooperation with employers (Latvian Association for Emergency Medicine, Latvian Association of Nurses, Association of Directors of Social Care and Rehabilitation Institutions, Latvian Association of Midwives, etc.), there was developed a modern, innovative and practical study module for the human/patient care cycle from birth to the end of life.
 - 1.2. A new technologically innovative 3-D device for training dental technicians was purchased.
 - 1.3. A study module for pharmacist assistants, midwives and physician assistants was developed for prescription, medicine circulation and pharmacovigilance training.
 - 1.4. A pharmacy study model was created.
2. In accordance with the Investment Plan 2020, additional funds were raised for further modernization of the College material and technical facilities.
3. In 2015-2019, the contents of all study programs implemented at the College were enhanced and teaching methods were updated.
4. In 2019, the existing first level higher education programs were successfully reaccredited in the study direction “Health Care”, “Pharmacist Assistant”, “Midwife”, “Physician Assistant” and “Nurse”.
5. A new educational program was created (Strategy, Investment Plan, pp. 37-41).

2. College as a university cooperation partner

Cooperation is one of the main factors stimulating the development of the College. In the cooperation process, we plan to make full use of opportunities to share intellectual potential, research

and international cooperation, striving to provide students with wider opportunities for studies, scientific research and creative activities, by using the resources and intellectual potential of cooperation institutions.

Current situation

Riga First Medical College successfully cooperates with higher education institutions in Latvia as well as universities and vocational training institutions that implement related study programs abroad. Cooperation with other universities promotes the sustainability of the Riga First Medical College development and ensures international recognition of the College, the deployment of innovative teaching and research methods as well as the usage of modern technologies in the study process.

Cooperation universities and colleges in Latvia are the following: LU, LLU, RSU, Daugavpils Medical College and other Latvian medical colleges.

The cooperation with the University of Latvia has historically been successful, which is in line with the signed cooperation agreement of 2 June 2014 between the University of Latvia and Riga First Medical College; the cooperation is going to continue over the strategically planned periods, too.

Succession opportunities for the Riga First Medical College study programs

| Higher education institutions | Alumni of Riga First Medical College (profession) | RSU ³ | LU ⁴ |
|--------------------------------------|---|---|--|
| <i>Higher education institutions</i> | Nurses | Nursing study program (agreement with RSU) | Faculty of Medicine, Professional Bachelor's program "Nursing", semester VII |
| | Midwives | Medical treatment study program | Faculty of Medicine, Professional Bachelor's program "Nursing", semester V |
| | Pharmacist assistants | Pharmacy study program | Faculty of Medicine, Bachelor's program "Pharmacy", semester III |
| | Physician assistants | Medical treatment study program | Faculty of Medicine, Professional Bachelor's program "Nursing", semester V |
| | Dental nurses Dental assistants | First level professional study program "Dental Hygienist" | |
| | Dental technicians | Dental study program "Dental Technician" (Bachelor's and Master's study programs are currently being developed) | |
| <i>Riga First Medical College</i> | Nursing assistants have an opportunity to continue education in the study program "Nursing". Dental assistants have an opportunity to continue education in the study program "Dental Nurse". College alumni have an opportunity to pursue education yet in another study program of interest to them (subject to the admissions requirements). College students have an opportunity to transfer from one study program to another one (subject to the requirements of specific study programs). | | |

³ Agreement with RSU

⁴ Cooperation agreement with LU of 2 June 2014; agreement with LU of 19 January 2017 "Partnership agreement"

| | |
|--|--|
| | Professional secondary education “Dental Technicians” complies with the Professional Standard PS 0246. Education proceeds through competence development activities, organized in cooperation with the Latvian Association of Dental Technicians. |
|--|--|

Currently, the College has several foreign partners from different countries.

| | | | | | |
|----|--|----------------|----|--|-----------|
| 1 | Arcada University of Applied Sciences | Finland | 2 | College of Education and Administration | Poland |
| 3 | Helsinki Polytechnic Stadia | Finland | 4 | Plovdiv Medical University | Bulgaria |
| 5 | Pharmacon, Danish College of Pharmacy Practice | Denmark | 6 | Tartu Health Care College | Estonia |
| 7 | Aarhus School of Dentistry, Aarhus University | Denmark | 8 | Izmir Katip Celebi University | Turkey |
| 9 | Kaunas University of Applied Sciences | Lithuania | 10 | Jeanne Antide Vocational School | France |
| 11 | Tallinn Health Care College | Estonia | 12 | MUS Alparslan University | Turkey |
| 13 | Palacky University, Olomouc | Czech Republic | 14 | Secondary School for Pharmacy, Cosmetics and Health Care | Slovenia |
| 15 | Nordic Midwives Association | | 16 | Utena College | Lithuania |

The main aims of cooperation with foreign cooperation partners - universities and colleges - are the following:

- To increase the innovation capacity in accordance with Smart Specialization Strategy aims by implementing medical education at Riga First Medical College;
- Comparison and enhancement of the contents of study programs;
- Mobility of students and academic staff within the framework of Erasmus + and Nordplus programs;
- Cooperation on the basis of bilateral agreements/contracts on the exchange of professional experience and pedagogy, the preparation and implementation of joint research projects.
- Exchange of academic staff in related study programs, promoting the internationalization and international recognition of the College study programs.

Cooperation with other Latvian medical colleges

- With Daugavpils Medical College:
 - cooperation in the implementation of the first level professional higher education programs “Medical Treatment” and “Nursing”
 - /in the implementation of study program modules, in the acquisition of specific study courses/ topics, in the implementation of placement parts, in the carrying out joint research, in the organization of joint experience in exchange projects in the fields of specialization and pedagogy/ in accordance with the Protocol of 2 December 2011 on Cooperation in the Fields of Study and Research;

- joint work on the study programs, implemented at both colleges, and on professional standards in the working groups organized by the Center of National Education Contents and Ministry of Education and Science;
 - academic staff and students' presentations and participation in scientific conferences;
 - participation of students and academic staff in professional competitions and other college-level and international activities (for example, in the international Student Mastery Competition held on 21 April 2016, which was dedicated to the 70th anniversary of Daugavpils Medical College).
- With RSU Red Cross Medical College, LU Riga Medical College, LU P. Stradiņš Medical College:
 - participation of students and academic staff in annual scientific conferences;
 - cooperation in joint working groups of study programs organized by the Ministry of Education and Science, Center of National Education Contents and professional associations (Latvian Association of Nurses, Emergency Medical Service, etc.);
 - cooperation with RSU Red Cross Medical College in the working group of the pharmacist assistant study program.

Planned actions

1. In the period of strategic planning 2015-2020, in cooperation with the University of Latvia⁵ and other higher education institutions, to continue to implement activities aimed at promoting the competitiveness of higher education:
 - 1.1. To promote the development of study programs, especially in pharmacy and dentistry, consistent with the joint study direction of the College and the university, which ensures the continuity of studies as well as the acquisition of the appropriate Bachelor's level qualifications.
 - 1.2. To develop and enhance the scientific and academic potential, material and technical facilities of the College in accordance with the Guidelines of the Smart Specialization Strategy and to ensure the rational deployment of the College potential, material and technical facilities in order to implement the research and study activities corresponding to the international achievements of the 21st century;
 - 1.3. To involve students in research activities, using the experience and capacity of LU, LLU, RSU in engaging in scientific projects, which comply with the funding conditions and terms for students' involvement in scientific research activities;
 - 1.4. To participate in the *EU Horizon 2020* projects in scientific fields of College specialization, using the experience of the University of Latvia and the knowledge and competences of the College staff.
2. With partner universities abroad:
 - 2.1. To increase the number of international exchange students in the EU-funded projects (ERASMUS +, Nord Plus, Nordplus Nordejordemodern, etc.);
 - 2.2. To develop joint research activities in the pharmacist assistant study program in cooperation with Tallinn Health Care College and Kaunas College;
 - 2.3. In the midwifery study program, with the universities and maternity care institutions participating in the Nord Plus Nordejordemodern project.

⁵ LU and Riga First Medical College signed the cooperation agreement on 2 June 2014 and partnership agreement on 19 January 2017.

3. To enhance the contents of study programs with higher education institutions specializing in respective fields, to create innovative, modern methodological provision and to develop teaching materials for the following study programs: “Pharmacist Assistant”, “Midwife”, “Nurse”, “Physician Assistant”, “Dental Technician”, “Dental Nurse”, “Dentist Assistant”, “Nurse Assistant” and “Patient Carer”.
4. To engage foreign academic staff in teaching specific study modules (both theoretical and practical aspects) to College students (in dentistry, pharmacy and medical treatment programs).
5. College academic staff are to continue to develop specific modules and themes in the English language, subsequently, offering them to students at partner universities.

Cooperation issues are discussed in more detail in the document "Riga First Medical College Cooperation Development Plan with Latvian and Foreign Higher Education Institutions and Employers" (**Strategy, p. 70**).

Performance indicators

1. Planned areas of cooperation of Riga First Medical College with the University of Latvia in the period until 2020:
 - to connect to the LU library resources;
 - to cooperate in the maintenance of student information systems and the website;
 - to cooperate on the issues related to the use of the learning environment “Moodle”, which would provide students with additional services.
2. Over the period of 2016-2020, using the scientific capacity of the University of Latvia and other Latvian and foreign cooperation partners, there were developed research topics for students and academic staff in the areas of health care and medical treatment (prevention, pharmaceutical care, prevention and promotion of reproductive health, etc.)
3. The number of exchange students in the EU-funded international projects increased in the following manner:
 - in 2017 by 10%;
 - in 2018 by 10%;
 - in 2020 by 30%.
4. Dynamics of staff exchange numbers in international projects in the period until 2020:

| 2016 | 2017 | 2018 | 2019 | 2020 |
|------|------|------|------|------|
| 8 | 10 | 12 | 14 | 18 |

5. Dynamics of guest lecturer numbers until 2020:

| 2016 | 2017 | 2018 | 2019 | 2020 |
|------|------|------|------|------|
| 4 | 6 | 7 | 7 | 8 |

In 2015, two guest lecturers delivered lectures and practical classes. Eight foreign lecturers gained experience of teaching lectures and practical classes at Riga First Medical College.

6. By 2020, each College lecturer had prepared 2-3 new modules/topics in English in his/her study program in English, which were offered to foreign partner universities (in 2015, most lecturers developed 1-2 topics).

3. Contemporary and modern college

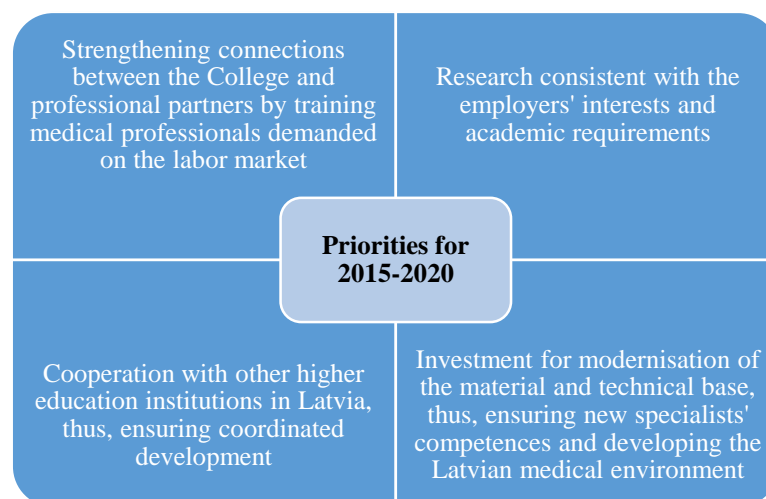
A modern college is characterized by topical study programs and research, modern teaching methods and technologies, the use of study materials in the e-environment, a modern and efficient management process, stability and reliability, attractive communication and cultural environment.

Current situation

The College has developed modern material and technical facilities, which guarantees a high quality of studies. In accordance with the Latvian Smart Specialization Strategy, the College has continuously been developing and enhancing it. It is planned to obtain investments for the purchase of modern and innovative teaching equipment with the aim of providing students with practical training at a qualitatively new level in all study programs implemented by the College.

Boosting the Position of the College as a Higher Education Institution

Riga First Medical College Strategy 2015-2020 as a strategic document includes the description of the existing resource capacity and sustainability of the College as well as planning of further actions with the aim of boosting the College position of a higher education institution.



Planned actions

1. To implement the symbiosis of 11 study programs implemented at Riga First Medical College and to further develop:
 - 1.1. the quality of the overall study and research process;
 - 1.2. to deepen cooperation in the development of study contents, research activities and lifelong learning in the areas of the College specialization, specifically, in pharmacy, dentistry, medical treatment, nursing and social care.
2. In cooperation with employers, to create and prepare a new study program (*Strategy, p. 22*).
3. To involve students in research activities using the experience and capacity of LU, LLU, RSU in involvement in scientific projects and in accordance with the terms on students' involvement in scientific research activities.
4. To involve the experience of foreign partners in the development and application of innovative technical facilities, equipment and teaching methods.
5. The measures identified in the Investment Plan were implemented (*Strategy, pp. 37-41*).

Details of the measures that the College is planning to implement in order to continue to develop as a modern and up-to-date college are available in the College Curriculum Development Plan, Cooperation Development Plan with Employers and Latvian and Foreign Higher Education Institutions, College Management Improvement Plan and other college development plans.

Performance indicators

1. The ideas for the development of the academic material and technical facilities of the College as a modern higher educational institution have been implemented.
2. New, modern practical study modules, including the content and technological aspects, have been created in accordance with the Smart Specialization Strategy and therefore enable theoretical and practical training of students more efficiently and consistent with higher quality standards.
3. The data of surveys show that employers, alumni and society are satisfied with the quality of the College education.
4. The competences of the College alumni graduates are highly valued in the Latvian and foreign labor market.

4. Internationally recognized college

Riga First Medical College successfully cooperates with foreign higher education institutions that implement related study programs, thus, promoting the sustainability of the College development, international recognition and the effective use of innovative teaching and research methods.

Planned actions

1. Development of new study programs in cooperation with foreign partners.
2. Increasing the number of international exchange students.
3. Expansion of lifelong learning in cooperation with foreign partners
4. Internationalization of study programs, promoting mutual opportunity to complete specific study modules, study courses or to complete study placement in full or in part in another country.
5. To enhance and expand forms of international cooperation in student and academic staff exchange, research, the EU-funded projects (Erasmus +, Nord Plus Nordejordemodern, etc.).

Current situation

Currently, the College has 16 foreign cooperation partners from 10 countries (*Strategy, table with cooperation partners, p. 17*).

Performance indicators

1. Cooperation agreements have been signed with foreign cooperation partners
2. New study programs have been developed in cooperation with foreign partners (the study program “Clinical Dental Technician”, etc.).
3. College study programs and competences of alumni are highly valued in Latvian and foreign labor markets.
4. The education provided by the College is internationally competitive.

5. Study programs satisfying the labor market requirements

Current situation

The Study Program Development Plan of Riga First Medical College is prepared and reviewed once a year (*Strategy, Appendix 2, p. 57*). Labor market research is carried out in cooperation with

employers, professional associations and industry experts prior to creating new study programs. Each new study program is analyzed and approved by the Council of Riga First Medical College.

The implementation of the study programs is ensured by education succession opportunities in higher-level related programs at LU or RSU for pharmacist assistants, nurses, midwives and physician assistants (*Strategy, p. 17*).

The College implements only those medical study programs, the specialists of which are in demand on the labor market and the training of whom has been supported by employers.

- Employers participate in the meetings of departments and methodological committees, when the contents of the study programs are updated prior to each academic year.
- Employers are involved in decision-making by participating in the College Council.
- Representatives of employers and professional associations participate in the final examinations of all study programs as chairs or members of qualification examination commissions.
- Employers participate in the organization of student placements and evaluation of placement results in placement examination. During the qualification placement, a large number of students are invited to continue working in a clinic, pharmacy, emergency medical service (hereinafter – EMS), etc., after graduating from the College and receiving a diploma, which points to the good quality of training of new specialists at the College. The direct connection between the study programs and the professional work environment is maintained by medical engagements of the academic staff; specifically, the majority of the academic staff, including 70% of the (elected) academic staff working in the study direction “Health Care”, are practicing physicians - pharmacy managers, pharmacists, pharmacist assistants, certified physicians of clinics and EMS teams, family physicians, nurses, including clinic chief nurses and midwives.

Planned actions

1. In cooperation with employers, to create and start implementing a new study program:
 - 1.1. “Health and Social Welfare” 41762 with the qualification of a social caregiver.
2. To deepen cooperation with employers in the development of study contents, research activities and lifelong learning in pharmacy, dentistry, medical treatment, nursing and social care.
3. To implement high-quality further education and lifelong learning that are in demand on the labor market following the developments of the Latvian economy and in cooperation with Latvian employers, professional associations and foreign partners.
4. To plan the introduction of advanced technology and training equipment in the study process in accordance with the Latvian Smart Specialization Strategy.
 - 4.1. In cooperation with employers (Latvian Association of Emergency Medicine, Latvian Association of Nurses, Association of Directors of Social Care and Rehabilitation Institutions, Latvian Association of Midwives, etc.) to create a modern, innovative and practical study module “Extreme, Intensive and Palliative Care Module” that will develop students' quick response, critical thinking in human/patient care in acute and extreme situations. The care stages will include the students’ essential skills, such as emergency care, admission, diagnostics, identifying care problems and performing care for the newborn, child care, adult care and elderly care. In such a modernly equipped practical study module, the knowledge and skills of students of all College specialties will be strengthened in accordance with the competencies required by their study program (STEM and other programs), study course and theme of practical classes.
 - 4.2. In cooperation with the Latvian Association of Dental Technicians and in accordance with the Smart Specialization Strategy, to purchase a new, technologically innovative 3-D device of the CAD/CAM system for the training of dental technicians. Students will have the opportunity to work with a set of equipment in a technologically interactive way, which allows to diversify

the skills of denture making in accordance with global technological trends. The rapid change of technologies and development in dental technology in Latvia and in the world creates the need to ensure the competitiveness of the students of the only study program “Dental Technician” in Latvia in the local and international labor market.

- 4.3. In accordance with the e-prescription information system developed within the e-Health project, its operational principles, prescription and medicine circulation process (from prescription to pharmacy processing and medicine dispensing to patients) to create a study module for pharmacist assistants and physician assistants with the following functionality:
- Discharge of electronic prescriptions in medical practices and setting up orders for medicine products in closed hospital pharmacies;
 - Use of classifiers and registers required in the prescription process (Drug Register of the Republic of Latvia, Diagnostics Classifier SSK-10, Green Form Classification, etc.);
 - Forwarding a prescription to a pharmacy and dispensing medicines to the patient by properly processing e-prescriptions in the pharmacy;
 - Checking drug doses and identifying incompatibilities;
 - Drug recall in accordance with the drug recall procedure in pharmacies and medical institutions;
 - Reports on adverse drug reactions in the pharmacovigilance process.

Students will gain knowledge about the drug circulation regulations and will develop skills for using the information system of the e-Health prescription circulation and for tackling drug incompatibility, drug recall and pharmacovigilance issues.

Performance indicators

1. A technically strong study base meeting the requirements of each study program ensures the high quality of implementation of the College study programs.
2. The College implements the study programs in the field of medicine, the specialists of which are in demand in the labor market and the training of whom is important for employers.
3. Employers participate in the meetings of departments and methodological committees, when the contents of study programs are updated.
4. Employers are involved in decision-making by participating the College Council
5. Employers participate in the organization of student study placements and in the assessment of placement outcomes in placement examinations.
6. The study quality assessment and control system of Riga First Medical College ensures the involvement of employers in the development of study programs.
7. A new study program has been created in cooperation with employers (*Strategy, p. 22*).

6. Student as a priority in the study process

Current situation

The admission to all study programs is competitive and a competition is held every year. The average competition coefficient for the period of 2012-2015 is the following:

- First level professional higher education programs - 2.77;
- Professional secondary education and vocational programs - 2.64.

Number of students per annum according to the statistical data for the period of 1 October 2012-2015:

| College study programs | 2012 | 2013 | 2014 | 2015 |
|------------------------|------|------|------|------|
| Pharmacist assistant | 103 | 121 | 125 | 159 |
| Nurse | 109 | 96 | 98 | 132 |
| Physician assistant | 196 | 171 | 193 | 157 |

| | | | | |
|--|-----|-----|-----|-----|
| Midwife | 112 | 96 | 97 | 97 |
| <i>Study programs at the College Professional Secondary School</i> | | | | |
| Dental technician | 97 | 79 | 69 | 64 |
| Dental nurse | 87 | 78 | 54 | 53 |
| Dental assistant | 63 | 76 | 80 | 105 |
| Assistant nurse (based on secondary and primary education) | 120 | 144 | 151 | 150 |
| Patient carer (based on secondary and primary education) | 120 | 135 | 120 | 120 |

Planned actions

- Free, creative and co-responsible cooperation of students and academic staff in the study process:
 - To ensure students' professional competitiveness and understanding of the importance of ethical principles in professional activities. To support the activities of the students' self-government;
 - To develop students' cooperation skills;
 - To ensure cooperation of academic staff and students in the study process;
 - To promote the enhancement of professional and pedagogical skills of academic staff.
- Attracting and retaining students.

Performance indicators

- To increase the number of students in the basic study programs implemented at the College in accordance with the demand forecasts in the labor market.
The planned results for all College programs are displayed in Appendix 2 "Riga First Medical College Development Plan of Study Program Offers" (Strategy, p. 57).
- The activities of students' self-government have been expanded and the initiatives with students of Daugavpils Medical College and the University of Latvia have been supported.
- Every year, funding is allocated to the students' self-government in the amount of at least 1/200 part of the state budget (in accordance with the Law on Higher Education Institutions). In 2016, the allocated funds constituted EUR 6858.11, which exceeded the minimum amount of funding set by the Law on Higher Education Institutions.

7. Cooperation with alumni

Current situation

Monitoring of alumni, which is performed over the period of 3 years, confirms that 88.6% of the College alumni continue their studies in a medical field or work in their specialty. The demand for healthcare professionals has been increasing.

The total number of College alumni in 2015 was 514, including:

In the first level professional higher education programs - 157

| Sudy program | Qualification | Number of alumni |
|---------------------------|----------------------|------------------|
| Pharmacy (41725) | Pharmacist assistant | 34 |
| Medical treatment (41721) | Midwife | 31 |
| Nursing (41723) | Nurse | 27 |
| Medical treatment (41721) | Physician assistant | 65 |

In professional secondary education programs - 45

| Sudy program | Qualification | Number of alumni |
|-----------------------|-------------------|------------------|
| Dentistry (35b724001) | Dental technician | 22 |
| Dentistry (35b724001) | Dental nurse | 23 |

In vocational programs - 312

| Sudy program | Qualification | Number of alumni |
|-------------------------|-------------------|------------------|
| Dentistry (35a724001) | Dental assistant | 65 |
| Social care (35a762031) | Patient carer | 57 |
| Social care (32a762031) | Patient carer | 57 |
| Nursing (35a723001) | Nursing assistant | 84 |
| Nursing (32a723001) | Nursing assistant | 49 |

Employment of alumni in 2014-2016

| College first level professional higher education alumni | Monitoring data for 2014-2016 (every year on 1 August) | |
|---|--|--|
| | Employed in a medical field | Continue studies in medicine, including combining studies with work in a medical field |
| Medical treatment (41721) with the qualification of a physician assistant | 89 % | 7 % |
| Medical treatment (41721) with the qualification of a midwife | 73 % | 13% |
| Nursing (41723) with the qualification of a nurse | 82% | 12% |
| Pharmacy (41725) with the qualification of a pharmacist assistant | 82% | 16% |

| College professional secondary education alumni | Monitoring data for 2014-2016 (every year on 1 August) | |
|---|--|--|
| | Employed in a medical field | Continue studies in medicine, including combining studies with work in a medical field |
| Dentistry (35b724001) with the qualification of a dental technician | 89% | 8 % |
| Dentistry (35b724001) with the qualification of a dental nurse | 88% | 9 % |
| Dentistry (35a724001) with the qualification of a dental assistant | 92% | 5% |
| Nursing with the qualification of a nursing assistant: on the basis of secondary education (35a723001) and on the basis of primary school education (32a723001) | 92 % | 4% |
| Social care with the qualification of a patient carer: on the basis of secondary education (35a762031) and on the basis of primary school education (32a762031) | 94% | 4% |

Planned actions

1. To analyze and collect information on further education and work opportunities of the College alumni, providing alumni with the necessary informative support.
2. To promote mutual cooperation of students and academic staff in research activities.
3. To promote students' participation in discussions, conferences, master classes, various cooperation and research projects.
4. Use social media to provide information about the College and student opportunities at the College.

Performance indicators

1. The survey and research data show that the College alumni are satisfied with the quality of College education, organization of the study process and cooperation with the College academic staff.
2. Alumni together with students and academic staff participate in discussions, conferences, various cooperation and research projects with good results.
3. All necessary information about the College, student activities and further education of interest to alumni is well structured and is available in various information sources.

8. Competent academic staff

Current situation

The development of the academic staff proceeds in accordance with the Human Resources Development Plan of Riga First Medical College (*Strategy, Appendix 3, p. 66*), ensuring the motivation of the academic staff to increase their professional capacity and competence.

The academic staff of Riga First Medical College are characterized by high quality of academic work, which ensures the achievement of the planned study results, high professional and pedagogical competencies, the ability to work with innovative technologies and use them in the study process.

The cooperation of the academic staff with employers and international professional partners in respective medical fields is developed within the framework of the study programs.

In 2015, the average age of the academic staff employed at the College was 50 years.

| Elected academic staff - a total of 39 lecturers | | | | | |
|--|-------------------------|----|--------------------------|-------------------------|----|
| Breakdown by sex | Breakdown by age groups | | Position | Education | |
| females - 32 | up to 30 years old | 1 | | Doctor of science | 2 |
| males - 7 | 31-39 years old | 4 | Assistant professors - 6 | Master's | 37 |
| | 40-49 years old | 5 | Lecturers - 33 | Including | |
| | 50-59 years old | 14 | | A medical doctor degree | 16 |
| | above 60 years old | 15 | | Two Master's degrees | 5 |
| | | | | Ph.D. student | 1 |

A special committee has been established at Riga First Medical College, which in accordance with the regulations conducts the assessment of the academic staff performance, including the evaluation of the activities of students engaged in various creative, study and research undertakings. The following assessment criteria are applied: results of scientific research activities per stage, research importance, practical applications of research, research publications, including in the proceedings to international scientific conferences, forums, relevant research journals and other types of publications, publication

topicality, quality, number of publications, applied aspects and usability of research, team research (cooperation of the academic staff with students), etc.

Planned actions

1. To develop the staff recruitment and development policy of Riga First Medical College in cooperation with the industry and other higher education institutions, LU, LLU, RSU, professional associations, College alumni working in the industry, thus, enabling the recruitment of competent and loyal academic and administrative staff.
2. To create a staff motivation system based on the results of staff performance in the study process and research.
3. To support the career development of the academic staff within the College infrastructure.
4. To organize the elections of the academic staff during the academic year 2019-2020.
5. To actively attract doctoral students and new doctors of sciences for the development and implementation of studies.
6. To support the enhancement of pedagogical competences of the academic staff. To organize higher education didactics courses at the College in the academic year 2016-2017.
7. To identify programs established by international institutions in Latvia and by other funders to support the development of the competences of the College academic staff and to support their effective use. To involve the College academic staff in these programs.
8. To promote the ability of the College academic and administrative staff to work in accordance with international standards (enhance foreign language skills, ICT skills, methodological and communication skills, etc.), deploying the College internal and external resources.
9. When developing the staff development policy, to continue to implement the positive experience of the College, specifically, to involve more alumni of Riga First Medical College and experienced specialists in relevant fields in the College academic and administrative activities. In 2015, more than 30% of the alumni of Riga First Medical College were among the College academic staff and the teachers of the secondary professional education programs.

Performance indicators

1. In 2016-2020, the College academic staff regularly increased the level of their knowledge and skills by acquiring new competences in innovative technologies for the effective use in the study process and research.
2. Over the period of 2016-2020, thematic seminars/courses on smart technologies were organized for the development of the competences of the academic staff twice per academic year. The academic staff enhanced their academic and research competencies in the fields included in the Latvian Smart Specialization Strategy in medical science, education, information and communication technologies.
3. In 2016-2020, each member of the academic teaching staff attended at least 25 qualification raising training events in the field of their specialization and pedagogy.
4. In 2017, 39 academic teaching staff increased their qualification in higher education didactics courses (in cooperation with the LLU Lifelong Learning Center).
5. In 2020, 15-20% of the (elected) academic staff were doctoral students or with a doctor of science degree.
6. The (elected) academic staff of the College consist of assistant professors, lecturers and assistants (from the academic year 2019-2020).
7. The staff motivation system has been improved by incorporating the results of academic and research performance.
8. In 2020, the average age of the College academic teaching staff was 45 years.

9. Research consistent with the current labor market interests

Current situation

Research activities at the College are organized in cooperation with healthcare specialists and are aimed at promoting cooperation between students and academic staff. Priority research directions are identified in accordance with topical issues in health care.

Some research directions, planned by students and academic staff, are the following:

- prevention;
- pharmaceutical care in dispensing over-the-counter medicines to customers;
- dental implants for health and aesthetics purposes;
- spirometry - screening in lung problem diagnosis;
- reproductive health prevention and promotion;
- research in cooperation with SIA “Eiroaptieka” on “Customer flow in pharmacy and efficiency of pharmacist assistant services as an indicator of pharmaceutical care quality”, envisaging the continuation of the research project on the international scale with partners from Tallinn Health College and Kaunas College;
- skills and competences of a physician assistant in handling emergency situations in the context of an increased terrorist threat in Europe;
- intercultural communication skills in the implementation of refugee integration and in their medical care.

Planned actions

1. Development of research activities in cooperation with employers, universities, colleges and foreign partners.
2. More active involvement of students in research by creating joint research projects with the College academic staff.
3. To involve students in research activities using the experience and capacity of the University of Latvia and other universities in engaging in scientific projects.
4. To evaluate the need and possibilities of the College academic staff and students to connect to the Latvian academic core network.

Performance indicators

1. Orders for applied research have been received from employers.
2. The most significant research of the College students, alumni and academic staff was presented at conferences organized by the College in 2016, 2017, 2018, 2019 and 2020. Research outcomes were published in the College annual publications and on the College website.
3. By 2020 and in accordance with the priority research direction “Prevention”, overall students and academic staff had carried out at least 10 researches on the topic of prevention in the study programs “Physician Assistant”, “Midwife”, “Pharmacist Assistant”, “Nursing” and “Dentistry” within the framework of each study program.
4. Priority research directions were identified for 2017-2020. Students and academic staff work on topical and important research topics in health care:
 - 4.1. direction “Prevention” in all study programs;
 - 4.2. in pharmacy, research in cooperation with “Europharmacies”, Ltd., on “Customer flow in pharmacy and efficiency of pharmacist assistant services as an indicator of pharmaceutical care quality”, envisaging to continue it as an international research direction with partners from Tallinn Health College and Kaunas College;
 - 4.3. Medical treatment:
 - 4.3.1. reproductive health prevention and promotion;

- 4.3.2. skills and competences of a physician assistant in handling emergency situations in the context of an increased terrorist threat in Europe;
- 4.3.3. intercultural communication skills in the implementation of refugee integration and in their medical care.
- 4.4. Nursing:
 - 4.4.1. public health promotion and prevention;
 - 4.4.2. accessibility of the environment for patients with special needs;
 - 4.4.3. intercultural and multidisciplinary patient care at primary, secondary and tertiary care levels.
- 5. The need and possibilities of the College academic staff and students to connect to the Latvian academic core network have been assessed, envisaging the possible connection by 2020.

10. Modern and stable technical facilities and study resources

Current situation

The College has material and technical facilities that ensure proper study quality. Consistent with its financial capabilities, Riga First Medical College annually invests in the maintenance and development of stable academic material and technical facilities with the aim of ensuring the introduction of advanced technologies and teaching equipment in the training process in accordance with the Latvian Smart Specialization Strategy. Safety is ensured and attractive aesthetic environment is created in College facilities, furnishing and equipment. Financial planning and the monitoring of the use of funds ensure the purposeful use of resources.

Planned actions

1. To raise funds for the modernization of the College material and technical facilities, thus, improving the training facilities necessary for maintaining high quality of the College study programs and participating in the EU-funded projects as much as possible.
2. To plan the development of material and technical facilities, making the maximum use of mutual cooperation and of common resource opportunities that exist between universities, colleges and other partners (in dentistry, pharmacy and health care).
3. To enhance the training facilities in order to improve the academic process.
4. To create modern, innovative and practical study modules, in which students of different specialties will be able to develop their knowledge and skills in accordance with the competences required in their study programs, courses and themes of practical classes.
 - 4.1. To create a training module similar to an EMS vehicle in order for students to acquire emergency medical algorithms and practical skills;
 - 4.2. To create a training neonatal intensive care unit (10 steps);
 - 4.3. To purchase new, technologically innovative 3-D equipment for training dental technicians;
 - 4.4. To create a study module for pharmacist assistants, physician assistants and midwives in accordance with the e-prescription information system developed within the e-Health project;
 - 4.5. To create a health and palliative care unit;
 - 4.6. To create a pharmacy training model in pharmaceutical care.
5. Wider use of e-resources and modern information technologies in the following areas:
 - 5.1. organization of the academic process;
 - 5.2. gradual digitization of academic contents;
 - 5.3. adaptation of teaching methods for academic activities in the electronic environment;
 - 5.4. College management activities;
 - 5.5. development of mutual communication;

5.6. organization of international scientific conferences.

Performance indicators

1. Funds have been raised for the modernization of the College material and technical facilities.
2. Training facilities have been enhanced, thus, improving the academic process.
3. Modern and innovative training modules have been developed.
4. E-resources and modern information technologies have widely been used to support the College operations.
5. The measures provided for in the Investment Plan have been implemented (*Strategy, pp. 37-41*).

11. Cooperation for the enhancement of the quality of professional education

Current situation

Traditionally Riga First Medical College has established close partnerships with employers and their professional organizations in all study programs. The College cooperates with the Latvian Association of Pharmacists, “Grindeks”, Ltd., “Sentor Farm Pharmacy”, Ltd. (network “Moon Pharmacies” (“Mēness Aptieka”, LV), Latvian Association of Midwives, Riga Maternity Hospital and its chief midwife Viju Bathen, Latvian Hospital Society, Emergency Medical Service, Latvian Association of Nurses and its president Dita Raisk, major Latvian clinics (Traumatology and Orthopedics Hospital, Riga First Hospital, Riga Second Hospital, Pauls Stradiņš Clinical University Hospital, Riga East University Hospital) and medical institutions in Latvian regions (Tukums Hospital, Vidzeme Hospital, etc.), Association of Directors of Latvian Social Care and Rehabilitation Institutions (SARIDA), major social care institutions, Latvian Society of Dental Technicians and dental clinics throughout Latvia and other employers.

Cooperation with employers takes place in all study programs at all levels of cooperation. An example of pharmaceutical cooperation is provided below.

Ausma Cēbere, Deputy Director of Riga First Medical College, works in the Latvian Association of Pharmacists in Pharmaceutical Specialists Education and Human Resources Strategy Council, who works nationally and internationally to promote the development, maintenance and enhancement of the high-quality and innovative pharmacy co-diploma education and further education system compliant with the requirements of the professional environment and who develops proposals for the planning and development of pharmaceutical human resources in Latvia. The Council Committee consists of a representative of Riga Stradiņš University, a representative of the University of Latvia, A. Cēbere, Deputy Director of Academic Affairs of Riga First Medical College, and representatives of “Sentor Farm Pharmacy”, Ltd. (“Sentor Farm Aptieka”, LV) and “My Pharmacy”, Ltd. (“Mana Aptieka”, LV)

Based on the cooperation agreement of 7 November 2012, Riga First Medical College implements cooperation with “Europharmacy”, Ltd. (“Eiroaptieka”, LV) with the aim to develop cooperation in health care and pharmacy and to promote research development in Latvia.

Having used the Danish experience, the College academic staff and students participated in an international pharmacy seminar “Lifelong learning methodologies and practices of pharmacists in pharmaceutical care for respiratory and asthma patients in Denmark”, held on 25 September 2013.

Based on experience gained in cooperation with Latvian and international partners, in 2013-2014 the College organised 9 further education seminars on pharmaceutical care for respiratory and asthma patients in pharmaceutical care. In 2015-2020, the College is planning the development and continuation of the above-mentioned pharmaceutical lifelong learning program.

In accord with the placement agreements, the College provides 100% of students with study placements, which are potential future jobs of the College alumni. Currently there is active cooperation

with more than 200 health institutions that are the College placement bases throughout Latvia. Some of them are indicated below in tables below.

Study Placements in English

| | |
|---|---|
| “Traumatology and Orthopedics Hospital”, PLC | Branch “Ezerkrasti” of the National Social Care Centre "Rīga" |
| “Rīga Maternity Hospital”, Ltd. | Major Latvian dental clinics |
| “Pauls Stradiņš Clinical University Hospital”, PLC | Major Latvian dental technical laboratories |
| “Rīga First Hospital”, Rīga municipal Ltd. | JSC “Grindeks” |
| “Rīgas Second Hospital”, Rīga municipal Ltd. | “Solar Pharmacy Board”, Ltd. |
| “Children’s Clinical University Hospital”, PLC | Production company "Baltfarm" |
| JSC “Latvian Maritime Medical Center” | JSC “Sentor Farm Aptiekas” |
| Emergency Medical Service | “Hansa Pharma Aptiekas”, Ltd. |
| “Rīga East University Hospital”, Ltd., hospitals | “Europharmacy”, Ltd. |
| “Bīķernieki Hospital”, “Latvian Oncology Center”, “Gaiļezers” | |
| “Vidzeme Hospital”, Ltd., and other district, regional and city hospitals | “A Pharmacy”, Ltd. |

The Study Placements in Latvian

| | |
|--|--|
| VSIA “Traumatoloģijas un ortopēdijas slimnīca” | VSAC "Rīga" filiāle "Ezerkrasti" |
| SIA “Rīgas Dzemdību nams” | Latvijas lielākās zobārstniecības klīnikas |
| VSIA “Paula Stradiņa Klīniskā universitātes slimnīca” | Latvijas lielākās zobu tehniskās laboratorijas |
| Rīgas pašvaldības SIA “Rīgas 1.slimnīca” | A/S “Grindeks” |
| Rīgas pašvaldības SIA “Rīgas 2.slimnīca” | SIA “Saules aptieku pārvalde” |
| VSIA “Bērnu klīniskā universitātes slimnīca” | Ražošanas komercfirma "Baltfarm" |
| A/S “Latvijas Jūras medicīnas centrs” | A/S “Sentor Farm aptiekas” |
| Neatliekamās medicīniskās palīdzības dienests | SIA “Hansa Pharma” aptiekas |
| SIA “Rīgas Austrumu klīniskā universitātes slimnīca”, klīnikas “Bīķernieku slimnīca”, “Latvijas Onkoloģijas centrs”, “Gaiļezers” | SIA “Eiroaptieka” |
| SIA “Vidzemes slimnīca” u.c. rajonu, reģionālās un pilsētu slimnīcas | SIA “A Aptiekas” |

In order to ensure the quality and effectiveness of the College operations, the Study Quality Assessment and Control System of Rīga First Medical College has been developed and implemented and it will be improved during the strategic planning period.

College aims in cooperation with employers

- To identify and evaluate the following aspects of the labor market: the demand for specialists, new requirements for specialists, professional perspectives and growth opportunities.
- To identify the opinion of employers about the compliance of the contents of study programs with the employers’ requirements (surveys, questionnaires, meetings in working groups and social media).
- To involve employers in the evaluation of the quality of academic results and in the improvement of the College system of study quality evaluation and control by including representatives of employers in the qualification examination committees.

- To promote the active participation of employers in the improvement of the contents of study programs and the development of research activities of students and academic staff.
- To receive specific orders for applied research from employers

Planned actions

1. In cooperation with employers and professional associations, to start planning and developing a new study program in accordance with the requirements of the national economy:
 - 1.1. “Health and Social Welfare” 41762 with the qualification of a social caregiver.
2. In cooperation with employers, to develop and start training of students in new study and further education programs in demand in the healthcare labor market in pharmacy, dentistry, medical treatment and social care (*Strategy, Appendix 2, p. 57*).
3. In cooperation with the Latvian Employers' Confederation, to consider the possibility and necessity to establish a Sector Expert Council in the medical sector, aligning medical education with the business environment.
4. By obtaining European funds and in cooperation with employers (Latvian Association of Emergency Medicine, Latvian Association of Nurses, Association of Directors of Social Care and Rehabilitation Institutions, Latvian Association of Midwives, etc.), to create a modern, innovative and practical study module that will simulate the human/patient care cycle from birth to end of life.
5. In accordance with the Guidelines of the Smart Specialization Strategy, to purchase a new, technologically innovative 3-D device for the training of dental technicians.
6. In cooperation with healthcare professionals, to develop higher quality research activities for students and academic staff. To determine priority research directions and to work on topical and important research themes in health care, including prevention.
7. To improve lifelong learning programs in pharmacy.

Performance indicators

More detailed information on further education and new basic study programs is provided in the Study Program Development Plan of Riga First Medical College (*Strategy, Appendix 2, p. 57*).

1. By obtaining European funds and in cooperation with employers (LNM Association, Latvian Association of Nurses, Association of Directors of Social Care and Rehabilitation Institutions, Latvian Association of Midwives, etc.), there has been developed a modern, innovative and practical study module that simulates the human/patient care cycle from birth to the end of life.
2. In accordance with the Guidelines of the Smart Specialization Strategy, a new, technologically innovative equipment for the training of dental technicians has been purchased.
3. In 2020, with the support of cooperation partners, there have been obtained funds for the modernization of the College material and technical facilities in pharmacy and dentistry.
4. By 2019, the contents of all study programs implemented at the College had been improved and teaching methods had been updated in accordance with the recommendations of study placement institutions, specifically, healthcare institutions, which included the assessment of graduates' competences provided by employers.
5. In 2019, with the support and involvement of employers and professional organizations, the following first level higher education programs were successfully reaccredited in the study direction “Health Care”: “Pharmacist Assistant”, “Midwife”, “Physician Assistant” and “Nurse”.
6. In cooperation with healthcare specialists, there were identified priority research directions for 2017-2020. Students and academic staff work on topical and important research themes in health care.

Research directions

In all College study programs, the priority research direction - prevention - has been developed as a unique research direction for more than 20 years.

- In pharmacy, research in cooperation with “Europharmacy”, Ltd. on “Customer flow in pharmacy and efficiency of pharmacist assistant services as an indicator of quality of pharmaceutical care”, envisaging its continuation as an international research direction which could be developed with partners from Tallinn Health College and Kaunas College.
- In medical treatment, prevention and promotion of reproductive health. Skills and competences of a physician assistant in handling emergency situations in the context of an increased terrorist threat in Europe. Intercultural communication skills in the implementation of refugee integration and in their medical care.
- In nursing, public health promotion and prevention. Accessibility of the environment for patients with special needs. Intercultural and multidisciplinary patient care at primary, secondary and tertiary care levels.

All research themes of the College students and academic staff are developed in cooperation with employers in accordance with employers’ needs. Therefore, these research themes are topical and meet the requirements of the labor market.

12. College financial planning

Current situation

The financial section of the Riga First Medical College Strategy envisages the following sources of financing of the College operations:

- subsidy from the state primary budget;
- own revenues from paid services;
- revenues from educational services (from paid studies and further education courses received in the form of direct payments and co-financing);
- revenues from rent of non-residential facilities;
- revenues from the services of the student hall of residence;
- financial resources from European funds (ESF, ERAF, ERASMUS+, Nord Plus, etc.);
- financial resources of cooperation partners to support specific target programs.

In the previous period, the College was able to establish successful cooperation in enhancing the study material base, purchasing unique material resources, informative support and organizing lifelong learning events with JSC “Grindeks”, “Europharmacy”, Ltd., “Sentor Farm Pharmacies”, Ltd., “Astra Zeneca Latvia”, Ltd., “ Riga Dental Equipment”, Ltd., etc.

Priorities for investments in the development of the College infrastructure and academic base:

- To continue to actively obtain EU structural funds (ERASMUS +, ERDF, Nord Plus, Nordejordemodern, etc.).
- Considering the rapid development of technologies in medical sciences, health care and the College focus on excellence, to plan the usage of advanced technologies and study equipment in the academic process consistent with the policy of the Latvian Smart Specialization Strategy.
 - In cooperation with industry representatives, there are plans to make investments in the pharmacy programs (for a pharmacy training model to be created with pharmaceutical company “Tamro Baltics Retail”; to continue to obtain resources for curriculum development and the improvement of the material and technical facilities in accordance with the Donation Agreement of 2 April 2012 with “Farma Balt Pharmacy”, Ltd.), in the dentistry programs (with the major dental technical laboratories) and in the medical treatment programs (with clinics, taking into account the financial possibilities of medical institutions).

- In the capacity of a cooperation partner, the College is planning to involve in the European Social Fund project implemented by the State Education Development Agency of the Republic of Latvia with specific objective 8.4.1 on "Improving the professional competence of employed persons". The College is also planning to participate in other project competitions, if they contribute to the achievement of the Strategy aims and to ensuring the College competitiveness. Participation in specific projects will be evaluated following the development of relevant competition regulations, for example, in the following programs:
 - Specific objective 8.2.1 "To Reduce the Fragmentation of Study Programs and Strengthen the Common Use of Resources";
 - Specific objective 8.2.2 "To Strengthen Academic Staff of Higher Education Institutions in the Areas of Strategic Specialization";
 - Specific objective 8.2.3 "To Ensure Better Governance in Higher Education Institutions".

Financial Management of Riga First Medical College

The management and supervision of the College financial resources comply with the requirements of the legislation of the Republic of Latvia. Decisions on the College activities are made by the College Council. Financial reports which must be submitted to the Ministry of Education and Science and other state institutions are submitted within the determined deadlines.

When planning the College financial operations and support for the development of study programs using the financial resources of the state budget, the compliance of such initiatives with a new higher education financing model, the implementation of which has been initiated by the Ministry of Education and Science, is assessed based on the recommendations of the World Bank study "Proposal for Financing of Higher Education in the Medium-term".

According to the recommendations of the World Bank, the most appropriate model for financing higher education in Latvia in the current socio-economic context is a three-pillar financing model consistent with which university and college financing is supplemented with performance-oriented elements and additional support is provided for the development of university profiles and innovations, including the orientation towards increasing the number of STEM specialists. Financial planning will be performed in alignment with the Conceptual Report "Implementation of a New Higher Education Financing Model in Latvia". The College will follow the recommendations of the report "Implementation of a New Higher Education Financing Model in Latvia".

| | Pillar I: Basic funding | Pillar II: Performance-based funding | Pillar III: Funding for development |
|----------|--|--|--|
| Studies | Basic operations <ul style="list-style-type: none"> • Number of study places (by specializaiton) • Cost coefficient | Institutional indicators Performance <ul style="list-style-type: none"> • Number of Master's and doctoral students, number of professionals with Master's and Doctoral degrees employed in research • Financing of research commissioned by relevant industries • Financing of international projects • Municipal funding • Arts and creative projects | Development Profile-oriented competitive funding and targeted contracts Studies + research Infrastructure development + "third mission" Funding of excellence centres |
| Research | <ul style="list-style-type: none"> • Research staff (by specialization) • Specialization coefficient | | |

| Pillar I: Basic funding | Pillar II: Performance-based funding | Pillar III: Funding for development |
|---|--|--|
| Allocation component remaining constant over a specific period of time. It aims at predictable and reliable financing, which ensures the continuity of the core functions of higher education institutions. | Allocation component aimed at creating financial incentives for growth. Performance-based funding is awarded on the basis of expected and achieved learning and research outcomes. | Allocation component focusing on the implementation of future vision, innovations and university profiling. It aims at stimulating innovation, research (or study) excellence, institutional specialization and profile development. |

Buildings under College management

| Building, area, usage | Current state | Encumbrance |
|---|--|-------------|
| The building of Riga First Medical College, situated at 37 Tomsons Street, Riga, cadastre No. 01000240222002, total area 4884.5 m ² , is used to perform the functions of a state educational institution as it is used to ensure the implementation of the academic process of Riga First Medical College. | Appropriate for the implementation of the academic process of Riga First Medical College. However, energy efficiency needs to be improved. | No |
| The building of the student hall of residence is situated at 39 Tomsons Street, Riga, cadastral No. 01000242058001, total area 5285.1 m ² , is used to perform the functions of a state educational institution as it is used to implement the academic process of Riga First Medical College and to perform the functions of a students' hall of residence. | Appropriate for the implementation of the academic process of Riga First Medical College and for performing functions of students' hall of residence. However, energy efficiency needs to be improved. | No |
| The garage building at 37 Tomsons Street, Riga, cadastre No. 01000240222006, total area of 84 m ² , is used to perform the functions of a state educational institution as it is used to implement the infrastructure maintenance functions of Riga First Medical College. | Appropriate for ensuring the infrastructure maintenance functions of Riga First Medical College | No |

Land units under College management

| Land, area, usage | Current state | Encumbrance |
|---|--|-------------|
| The land unit at 37 Tomsons Street, Riga, cadastre No. 01000240222, is used to perform the functions of a state educational institution at it is used to implement the academic process of Riga First Medical College. There is a five-storey building of Riga First Medical College, access road and infrastructure maintenance buildings on this land unit. | Appropriate for the performance of its functions | No |
| The land unit at 39 Tomsons Street, Riga, cadastre No. 01000242058, is used to perform the functions of a state educational institution as it is used to implement the academic process of Riga First Medical College and to perform the functions of a students' hall of residence. | Appropriate for the performance of its functions | No |

Training facilities and equipment at Riga First Medical College

| List of training equipment | Value on the balance sheet, EUR | Description of the current state |
|----------------------------|---------------------------------|---|
| Computer equipment | 120 173.37 | <ul style="list-style-type: none"> • Appropriate for the implementation of the academic process • Some improvements are necessary |
| Technological equipment | 171 348.10 | |
| Library resources | 37 898.38 | |
| Training equipment | 55 701.19 | |
| Educational aids | 49 185.24 | |

The material and technical, methodological and informative (including room equipment, study environment) provision of the study programs implemented at Riga First Medical College is sufficient to ensure the implementation of the academic process and research activities. The College study and equipment base is supplemented and modernized on the annual basis. Following the Guidelines of the Smart Specialization Strategy, it is planned to create a technological base of studies that will promote the acquisition of advanced knowledge and the development of effective new skills and abilities over the period of 2015-2020. The implementation of this plan requires the mobilization of the EU resources.

Description of investment

Description of the investments made in the modernization of buildings, rooms, purchase of new training devices and equipment, modernization of existing equipment

| Amount of investment (EUR) 2011-2015 | Description of investment | Source of investment financing |
|--------------------------------------|--|--------------------------------|
| 66 171 | Computer equipment, software, copying equipment, including software WIN STUDENTS on two workstations, computers CAPITALS NEO Business PRO Gx24, CAPITAL NEO Gx20, computers-tablets SAMSUNG Galaxy, MD515 Ipad, laptops GAUJA, Dell Latitnde, monitors ACER AL, DELL, projectors Beng Ben QMX50315, OptimaX605, projectors multimedia EPSON, CANON, View sonic PSD5234L, multifunctional printers, copiers SHARP MX-M354N, TOSHIBA e-STUDIO2505H, etc. | Subsidies and own revenues |
| 14 963 | Training equipment, including the following items: models Baby Care (male), Baby Care (female), embryo model, patient lifting aid Magic 65x25cm, skin model 3-part 80x magnification, intravenous injection moulage, skin suture simulator, mannequin with a changeable intravenous vein network, set of 7 BONElike verterbrae, 3B MICROanatomy liver model, orthoses for the neck, knee, back, ankle, patient transfer boards, laryngoscopes, etc. | Subsidies and own revenues |
| 54 374 | Books, two thirds of which are in English (about 200 titles), in dentistry, medicine, nursing, pharmacy, including Oxford Handbook of Acute Medicine, Oxford Handbook of Palliative Care, Oxford Handbook of Emergency Medicine, Antibiotic Essentials, Nurse's Guide to Clinical Procedures, Predictive Toxicology: From Vision to Reality, Medical Instruments and Devices: Principles of Practices, Pharmacology in Drug Discovery: Understanding Drug response, Breast Imaging, Modern Dental Assisting, Guidelines for Adhesive Dentistry: The Key to Success, Esthetics and Biomechanics in Orthodontics, Fundamentals of Implant Dentistry: Prosthodontic Principles, Sobotta Atlas of Human Anatomy, Package, etc. | Subsidies and own revenues |
| 84 646 | Training equipment, including the dental treatment unit CHEESE EASY, dental chair, dental technician tables, dental technician workstations with gas stoves, trimmer table with sinks, gypsum polishing tables, sandblasting machine, etc. | Subsidies and own revenues |
| 1 017 802 | Repairs, including modernization of classrooms and laboratories, improvements to the College external and internal environment and safety measures, including the repairs of external stairs, installation of fire alarms; renovation of the rooms and household equipment of the student hall of residence, including the repairs of study rooms. | Subsidies and own revenues |
| TOTAL: 1 239 956 | | |

The current condition of the premises, computer equipment and training equipment is sufficiently good to implement the College 11 study programs, including 9 STEM programs. However, in accordance with the Latvian Smart Specialization Strategy and the College strategic aims for 2015-2020, it is necessary to conduct innovative improvement and purchase modern technologies that would ensure the acquisition of skills and competences of students, including the students of further education programs, at a new level of quality consistent with international industry trends.

Planned actions

1. Improvement of premises for the enhancement of the academic process.
2. Development of the extreme, intensive and palliative care module.
3. In cooperation with the Latvian Association of Dental Technicians, to purchase a new, technologically innovative 3-D device of the CAD/CAM system for the training of dental technicians.
4. Development of a module for training students on how to conduct the circulation and monitoring of electronic prescriptions and hospital medicine orders.
5. Pharmacy training model.
6. Insulation of the College building.
7. Insulation of the student hall of residence.
8. Enhancement of the information and communication technologies.

Other priorities

1. To raise private capital for the development of new study programs.
2. To obtain pharmaceutical business funding from pharmacy networks.
3. To develop paid studies.
4. To develop formal and informal education.

Investment Plan until 2020

The amount of funding required for the improvement of the learning environment in the period from 2015 to 2020

| No. | Planned actions | Planned actions and justification | Planned costs and source of financing (EUR with VAT) | 2017 (EUR) | 2018 (EUR) | 2019 (EUR) | 2020 (EUR) |
|--|--|---|---|------------|------------|------------|------------|
| 0. | STEM project management costs | The aim of the activity is to ensure the (STEM) project management for the first and second stages of the measures of specific objective 8.1.4. | EUR 47 250 Funding from the measures of specific objective 8.1.4 (STEM) | 6 300 | 26 160 | 14 790 | |
| <p><i>Aim: Training of students, including the students of further education programs, in the module of extreme, intensive and palliative care in the STEM study programs implemented at the College: Physician Assistant (41721), Midwife (41721), Nurse (41723), Pharmacist Assistant (41725), Dental Technician (35b724001), Dental Nurse (35b724001), Dental Assistant (35a724001), Nursing Assistant (35a723001), Nursing Assistant (32a723001).</i></p> | | | | | | | |
| 1. | Improvement of premises to enhance the study process | The aim of the activity is to create a module of extreme, intensive and palliative care, to improve 5 rooms (rooms No.43, No.44, No.46, No.59, No.60). The total area planned for the improvement of the study process is ~ 179.3 m ² . To adapt the laboratory of dental technicians Nr. 63 (~ 16.3 m ²) for the placement of the innovative 3D dental technical equipment of the CAD/CAM system. | EUR 125 000 Funding from the measures of specific objective 8.1.4 (STEM) | | 125 000 | | |
| 2. | Development of the extreme, intensive and palliative care module | <p>2.1. Emergency Medical Service (EMS) technical equipment</p> <p>Material base: a model similar to an EMS vehicle, which enables students to acquire emergency medical algorithms and practical skills, specifically, to examine and evaluate a patient. The skills required for BLS, ALS, respiratory support, ventilation, vital sign monitoring, defibrillation principles are developed using available apparatuses and equipment. Equipment in the EMS vehicle model:</p> <p>a) emergency response equipment; b) patient immobilization and transfer devices; c) medical devices for detecting, monitoring, maintaining and restoring vital life signs.</p> | EUR 221 998 Funding from the measures of specific objective 8.1.4 (STEM) | | 203 708 | 18 290 | |

| | | | | | | | |
|--|---|---|--|--|--------|--|--|
| | | <p>2.2. Neonatal intensive care unit (10 steps) A high-tech specialized box which allows students to learn appropriate medical care for premature babies. Planned equipment: medical devices for restoring, evaluating, maintaining and ensuring life signs of newborn babies.</p> <p>2.3. Geriatric and palliative care unit To identify patient care issues. To plan and deliver patient care, ensuring a holistic approach to the care of geriatric and incurable patients. Planned equipment: medical devices, devices and equipment for the provision of care and clinical procedures.</p> | | | | | |
| <p><i>Aim: Training of students, including the students of further education programs, using 3D equipment of the CAD/CAM system in the STEM study program “Dental Technician” (35b724001)</i></p> | | | | | | | |
| 3. | <p>3D device of the CAD/CAM system</p> | <p>Using technologically innovative 3D equipment "Lava Disaine Mini", which corresponds to international technological standards in the production of dentures. The new technological equipment ensures the production of non-removable denture spacers and crowns in 3D printing technology from composite acrylate and metal alloys using laser.</p> | <p>EUR 40 870 Funding from the measures of specific objective 8.1.4 (STEM)</p> | | 40 870 | | |
| <p><i>Aim: Training of students in the study program “Pharmacist Assistant” in the context similar to pharmacy environment</i></p> | | | | | | | |
| 4. | <p>Pharmacy training model</p> | <p>The pharmacy training model will be set in a separate College room. The layout and equipment will be set as close to the environment of a real pharmacy as possible. In it, students under the guidance of a lecturer will be able to acquire and practice applied skills in pharmaceutical care, which are essential for all pharmacist assistants employed at a pharmacy. The cooperation partners from the "Benu Pharmacy" network will participate in the development and installation of the pharmacy model.</p> | <p>EUR 10 000 Funding from the pharmacy enterprise “Tamro Baltics Retail”</p> | | 10 000 | | |

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| <i>Aim: Training of students, including the students of further education programs, in the study module on Ensuring the Circulation and Monitoring of Medicine Prescriptions and Hospital Medicine Orders in the following study programs: Pharmacy Assistant (41725), Physician Assistant (41721)</i> | | | | | | | |
| 5. | A training module for the circulation and monitoring of electronic prescription and hospital medicine orders | <p>Based on the e-prescription information system developed within the e-Health project, its functioning principles, prescription and medicine circulation process (from medicine prescription to pharmacy processing and dispensing to patients), to create a training module with the following functionality:</p> <ul style="list-style-type: none"> • Discharge electronic prescriptions in medical practices and creating medicine orders in closed hospital pharmacies; • Use of classifiers and registers required in the prescription discharge process (Latvian Register of Medical Products, Diagnostics Classifier SSK-10, Green Form Classifier; • Forwarding a prescription to a pharmacy and dispensing medicines to the patient by properly following e-prescription procedures; • Checking medicine doses and identifying incompatibilities; • Medicine recall in accordance with the medicine recall procedure in pharmacies and medical institutions; • Reports on adverse drug reaction reports in the pharmacovigilance process. | <p>EUR 95 000 Funding from subsidies, own revenues and the industry</p> | | | | 95 000 |
| <i>Aim: Creating a modern training base for the implementation of a new study program "Social Caregiver"</i> | | | | | | | |
| 6. | Development of new study programs | To develop a new study program "Social Caregiver". | Funding from subsidies, own revenues and the industry | | | | |
| <i>Aim: Enhancing building infrastructure and energy efficiency to improve the academic process</i> | | | | | | | |

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|--|--|--|--|---------------|----------------|----------------|----------------|
| 7. | Insulation of the College building | To carry out the improvement of energy efficiency of the College building at 37 Tomsons Street, Riga, with total area of 4884.5 m ² . | EUR 350 000 Funding from the measures of special objective 4.2.1.2. | | | | 350 000 |
| 8. | Insulation of the student hall of residence | To carry out the improvement of energy efficiency of the building of the student hall of residence at 39 Tomsons Street, Riga, with total area of 4884.5 m ² . | EUR 362 000 Funding from the measures of special objective 4.2.1.2. | | 144 800 | 217 200 | |
| 9. | Improvement of the information and communication system | Establishment of the support infrastructure for the implementation of the academic process, which includes the improvement of the data transmission network, ensuring the availability of teaching aids and information in all school and dormitory buildings, installing the basic online systems for conducting distance and further education learning and equipping 2 classrooms. As a result of the improvement of the data transmission network, it will be secure against vulnerabilities of information systems (computer viruses, malware, attacks from the Internet, protected learning resources). The availability of information systems in all school buildings means a fast and secure wireless data network that provides access to resources to each user (students, academic staff, guest lecturers, guests) | EUR 144 000 Funding from subsidies and own revenues | 19 000 | 25 000 | 28 000 | 72 000 |
| Total indicative funding for the period 2015-2020 | | | 1 396 118 | 25 300 | 565 538 | 288 280 | 517 000 |

Riga First Medical College plans and develops activity programs "Growth and Employment" for the strategic support of special objective 8.1.4. for the implementation of the aim the project "Improving the Learning Environment of the First Level Professional Higher Education STEM Programs, Including Medical and Creative Industries at Colleges" (hereinafter - *Project*), envisaging the full attainment of the Project aims within the framework of available funding and time constraints (until 31 December 2018).

If additional funding is going to be available for the implementation of the Project (in accordance with the regulations of the Cabinet of Ministers of 9 August 2017 on the implementation rules of the program "Growth and Employment" for the support of special objective 8.1.4 "Improving the Learning Environment of the First Level Professional Higher Education STEM Programs, Including Medical and Creative Industries at Colleges"), it will be used for the purchase of additional equipment for the development of the extreme, intensive and palliative care module to ensure the in-depth study program acquisition.

The purchase prices of the planned equipment have been determined by identifying the providers of goods and services on the market. In order to provide sufficient assurance on the planned costs, several suppliers have been identified. The costs of construction, repairs of premises and provision of energy efficiency have been determined using the estimates prepared by certified experts.

Evaluation of alternatives of the project "Modernization of the STEM study program infrastructure at Riga First Medical College"

| | Advantages | Drawbacks | Costs | Selected alternative to the project |
|--|---|--|--------------|--|
| 1. Improvement of study spaces for the enhancement of the study process: to improve 6 rooms at 37 Tomsons Street (rooms No.43, No.44, No.46, No.59, No.60, No.63) with the total area of ~ 195.6 m ² . | Modernized learning environment in specific STEM study courses | Modernization of learning environment is required in other study courses, too. | Low | X |
| 1. Improvement of study spaces for the enhancement of the study process: to improve all rooms at 37 Tomsons Street | Modernized learning environment in all study courses | High costs and unavailability of financial resources | High | |
| 2. Development of the extreme, intensive and palliative care module | | | | |
| 2.1. Purchasing EMS technical equipment | <p>Within the framework of the study program “Physician Assistant”, the study course “Emergency Medical Assistance and EMS” covers 240 hours during which students get acquainted with all the equipment used by EMS.</p> <p>The equipment can also be used in other study courses and study programs.</p> <p>Funding is not required for organizing a study course outside the educational</p> | Suitable rooms and additional funding are needed for the maintenance and renewal of equipment. | Medium | X |

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|--|---|---|--------|---|
| | institution because the study course is provided at the College. | | | |
| 2.1. Not purchasing EMS technical equipment | No additional funding is required for the maintenance and renewal of equipment. | <p>Within the framework of the study program “Physician Assistant”, the study course “Emergency Medical Assistance and EMS” covers 20 hours during which students get acquainted with some specific equipment used by EMS.</p> <p>Equipment is not available in other study courses and study programs.</p> <p>Funding is required for organizing a study course outside the educational institution.</p> | Low | |
| | | | | |
| 2.2. Purchasing a neonatal intensive care unit (10 steps) | <p>Within the framework of the study program “Midwife”, in the study courses “Neonatology”, “Pathological Obstetrics” and “Operative Obstetrics” training on primary neonatal resuscitation and stabilization (in emergency situations) proceeds in the amount of 240 hours during which students learn the performance algorithms applicable to the real-life environment.</p> <p>The equipment can also be used in other study courses, such as “Emergency Medical Assistance”, “Pediatrics, Neonatology” in the study programs “Nursing”, “Physician Assistant” and “Nursing Assistant”.</p> <p>Funding is not required for the organization of a study course outside the</p> | Suitable rooms and additional funding are needed for the maintenance and renewal of equipment. | Medium | X |

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|--|---|--|--------|---|
| | educational institution because the study course is provided at the College. | | | |
| 2.2. Not purchasing a neonatal intensive care unit (10 steps) | No additional funding is required for the maintenance and renewal of equipment. | <p>Within the framework of the study program “Midwife”, in the study courses such as “Neonatology”, “Pathological Obstetrics” and “Operative Obstetrics” training on primary neonatal resuscitation and stabilization (in emergency situations) proceeds in the amount of 20 hours during which students get acquainted with performance algorithms in the environment that is similar to real-life contexts.</p> <p>Equipment is not available in other study courses and study programs.</p> <p>Funding is required for organizing a study course outside the educational institution.</p> | Low | |
| | | | | |
| 2.3. Purchasing a geriatric and palliative care unit | <p>In the study programs “Nursing Assistant”, “Nursing”, “Physician Assistant” and “Midwife” students acquire professional technical skills in an educational institution in a real environment, using equipment in accordance with the latest trends in patient care.</p> <p>The equipment can also be used in other study courses related to patient health care.</p> <p>There is no need to obtain funding for organizing a study course outside the</p> | Suitable rooms and additional funding are needed for the maintenance and renewal of equipment. | Medium | X |

| | | | | |
|---|--|---|--------|---|
| | educational institution because the study course is provided at the College. | | | |
| 2.3. Not purchasing a geriatric and palliative care unit | No additional funding is required for the maintenance and renewal of equipment. | <p>In the study programs “Nursing Assistant”, “Nursing”, “Physician Assistant”, and “Midwife”, students acquire professional technical skills in various study placements in the contexts that are close to the real environment, but are different and not fully equipped with all necessary equipment.</p> <p>Equipment is not available in other study courses and study programs.</p> <p>Funding is required for organizing a study course outside the educational institution.</p> | Low | |
| | | | | |
| 3. Purchasing 3D equipment of the CAD/CAM system | <p>The professional skills of the students of the study program “Dental Technician” in the renewal of the facial jaw system are provided in accordance with the technologies recognized by the EU. With the introduction of 3D technologies, students acquire new competences in accordance with the professional standard of dental technicians in the following subjects:</p> <ul style="list-style-type: none"> • “Technologies for the production of non-removable and removable dentures” • “Study of materials” • “Production of metal-ceramic dental prosthesis” | Suitable rooms and additional funding are needed for the maintenance and renewal of equipment. | Medium | X |

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|--|---|--|------------|--|
| | <ul style="list-style-type: none"> • “Facial jaw orthopedics and orthodontics” • “Denture casting technique” <p>Students acquire professional skills in the College in the environment close to a dental technical laboratory, using modern equipment in accordance with the latest innovative trends in the production of dental prostheses.</p> <p>The equipment can also be used in the study programs "Dental Nurse" and "Dental Assistant".</p> <p>Funding is not required for the organization of a study course outside the educational institution because the study course is provided at the College.</p> | | | |
| | | | | |
| <p>3. Not purchasing 3D equipment of the CAD/CAM system</p> | | <p>Students of the study program “Dental Technician” will not be able to acquire new and innovative competences in dental technologies in line with innovations in dentistry. Students will not develop practical skills at the College working with 3D technology before starting their clinical internship in dental technical laboratories.</p> <p>Funding is required for organizing a study course outside the educational institution.</p> | <p>Low</p> | |

Risk analysis

The implementation of the Strategy of Riga First Medical College (hereinafter - College) for 2015-2020 (hereinafter - Strategy) depends on a set of internal and external factors. In order to ensure the fulfillment of strategic aims within the framework of the planned financial and time resources, a risk analysis has been performed, as a result of which the most significant risks that could significantly affect the implementation of the Strategy have been identified, reducing the probability of risk occurrence or reducing its impact on attaining strategic aims. As a result of the risk analysis, the following risks have been identified:

Obtaining funding for the implementation of the Strategy. The link between the priority aims set in the Strategy and the budget planning of Riga First Medical College is an essential precondition for the implementation of the Strategy. Despite the unfavorable conditions caused by the recent economic crisis, which resulted in a significant reduction in financial resources in the state budget and, consequently, in the College budget, the College is aware of the risk of basing its development solely on state subsidies and own revenues because a reduction in any of the above fiscal positions might result in the College inability to fully implement the Strategy. As a result, the College Board diversifies the sources of financial resources necessary for the College development by obtaining additional EU funding (ensuring the modernization of the College infrastructure within SO 8.1.4 and SO 4.2.1.2) as well as by providing support to the pharmaceutical industry.

Delayed development of modern infrastructure. Innovative economy requires more and more new competences and skills not only from new students, but also from practitioners who have already acquired a specialty but have to upgrade their knowledge at an educational institution in order to adapt to changing market conditions. In the period until 2015, the College already predicted such an educational trend, which is why it promptly adapted its study programs to be able to offer lifelong learning opportunities.

In order to ensure a stable and growing number of both new and existing students at the College, a modern infrastructure must be provided on the basis of which it will be possible to offer study programs which train competitive specialists that are in demand on the labor market. While implementing the Strategy, special attention should be paid to obtaining funding and the usage of the EU funds so that the planned funding could serve its goal of developing and modernizing the College infrastructure. Otherwise, it will not be possible to ensure the installation of new technologies which should support study programs, which will result in the College reduced competitiveness and in the increased inability to train competitive specialists for the labor market, which consequently may lead to a decrease in the number of students.

Justification for the purchase of a 3D CAD/CAM equipment

- Innovative equipment that enhances the quality of the only dental technician study program in Latvia, creating the training environment that is similar to the real work process in modern dental technical laboratories.

The technologically innovative 3D equipment of the CAD/CAM system corresponds to the latest standards and trends in the production of dental prostheses, which significantly reduces the time of tooth restoration and by which the patient receives a precise, aesthetic dental prosthesis made of durable dental material.

*Work process of 3D equipment of the CAD/CAM system:
The prosthetic field is scanned using a three-dimensional camera. The missing part of the tooth or the tooth crown is modeled on a computer monitor. Then the grinding block mills the structure, which is then corrected, painted and fixed.*

The CAD/CAM technological equipment provides an opportunity to improve the student training process consistent with a higher quality level, by using modern technologies recognized in the European Union.

- Benefits for the program curriculum:

Work with 3D technology is conducted faster and more accurately, which allows for the expansion of the contents of the curriculum. According to the professional standard of the Dental Technician PS-0246, with the introduction of 3D technologies, students acquire new competences in the following subjects: “Production of Non-removable and Removable Dentures”, “Study of Materials”, “Denture Casting Technique”, “Facial Jaw Orthopedics and Orthodontics”, “Production of Metal and Ceramic Dental Prostheses”.

By installing 3D technological equipment at the College in cooperation with the Latvian Society of Dental Technicians and dental technical laboratories, it is possible to enhance the study process and mutual cooperation between dental technicians, dentists and dental nurses.

Despite the fact that 3D technology is based on computer reconstruction of a tooth, the competence and professionalism of the dental technician, dental nurse who use this technique are equally important.

- Benefits for student safety and health when working with modern 3-d technology:

The 3D technological equipment reduces students' contact with metal alloys, acrylic group materials, which are the most common causes of allergies.

Cooperation with other universities in the implementation of 3D CAD/CAM equipment

The study program “Dental Technician” implemented at Riga First Medical College is the only study program of this type in Latvia, however, as future dentists, maxillofacial surgeons and orthodontists who are trained at the University of Latvia and Rīga Stradiņš University use the same equipment, the College will cooperate on issues related to the development of skills essential for using the equipment and on sharing it.

Planned benefits in the STEM study programs, acquiring new competences using modern equipment

| No. | STEM Study Programs | New Module/ Equipment | Relevant Study Courses/ Subjects | Acquired New Practical Skills, Competences |
|-----|-------------------------------------|---|--|--|
| 1. | Nursing 41723 | Extreme, Intensive and Palliative Care Module | “Surgery, Oncology, Traumatology”, “Professional and Technical Skills”, “Palliative Care”, “Pediatrics, Neonatology” | Students will deepen their competences in primary neonatal resuscitation and stabilization in the environment that is highly similar to the real-life environment, in ergonomics, in technical aspects of patient transfer using modern devices, in basic principles of environmental accessibility. Students will deepen their competences in pre-sterilization and sterilization treatment of surgical instruments, in immobilization of limbs with various types of the latest orthoses and other types of immobilization devices for patients with various types of musculoskeletal disorders. |
| 2. | Midwife 41721 | Extreme, Intensive and Palliative Care Module | “Neonatology”, “Pathological Obstetrics”, “Operative Obstetrics”, “Professional and Technical Skills” | Students will deepen their competences in primary neonatal resuscitation and stabilization in the environment that is highly similar to the real-life environment, in ergonomics, in techniques of patient transfer using modern devices, in basic principles of environmental accessibility. |
| 3. | Physician Assistant 41721 | Extreme, Intensive and Palliative Care Module | “Emergency Medical Care”, “Emergency Medical Service”, “Intensive Care and Toxicology”, “Surgery”, “Traumatology”, “Emergency Medical Care in Military Medicine” | Students will deepen their competences in EMS algorithms, examining patients in different situations: respiratory support, ventilation; principles of defibrillation; rapid response to emergencies; cases of injury immobilization; tactics in cases of closed cavity injuries; |

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| | | | | principles of intensive care in cases of poisoning. |
| 4. | Pharmacy Assistant 41725 | Pharmacy Training Model | "Information Technologies in Pharmacy" | By completing courses, students are ensured with the development of IT knowledge required for preparing information in IT systems, such as circulation of medicines, processing of prescriptions, ordering of medicines, as well as fight against counterfeit medicines. |
| | | | "Pharmaceutical Care" | By completing courses and acquiring skills, students develop competences required for the provision of pharmaceutical care, which is ensured by team work – a patient, physician, pharmacist assistant, thus, pharmaceutical care is provided in accordance with the client's needs, physician's ordination and recommendations. |
| | | Extreme, Intensive and Palliative Care Module | "First Aid", "Professional Ethics", "Fundamentals of Professional Law" | By acquiring practical skills in the first aid, students will be able to assess the life condition of clients in critical situations and will be able to provide the first aid in case of injuries and various acute health conditions according to a relevant algorithm, recommendations and competences, knowing their rights and responsibilities. They will follow ethical standards when providing the first aid. |
| 5. | Nursing Assistant 35a723001 32a723001 | Extreme, Intensive and Palliative Care Module | "Professional and Technical Skills", "Peculiarities of Care for Patients with Health Disorders" "Peculiarities of Care in Therapy and Neurology", "Peculiarities of Care in Surgery, Traumatology and Oncology", "Peculiarities of Child Care", "First Aid and Intensive Care" | By developing knowledge in patient care, students will learn to work in an interprofessional team. Students will be able to adapt the practical tasks of the clinical practice environment to analogous situations in accordance with the specifics of clinics and departments. Students will deepen their competences in the basic principles of accessibility of the environment by caring for patients with mobility impairments. |
| 6. | Dental Nurse 35b724001 | Extreme, Intensive and Palliative Care Module | "Procedure Technique, Desmurgia", "Patient Care in the Operating Room, Admission, Hospital", "Emergency Medical Care" | To master the theory and principles of patient care unity, components of the care process. Working in a team, to practically perform tasks in patient care, in ensuring infection control, in emergency situations. To practically respond to extreme situations using EMS algorithms, monitoring, maintaining and restoring patients' vital functions. |
| | | 3D CAD/CAM System | "Orthopedics", "Orthodontics" | To master the basic principles of team work with a dentist in orthopedic dentistry when performing facial jaw system renewal using an innovative computer reconstruction method, which is widely used in the EU. |
| 7. | Dental Assistant 35a724001 | Extreme, Intensive and Palliative Care Module | "Emergency Medical Care" | To be able to practically respond to extreme situations using EMS algorithms, to monitor, maintain and restore patients' vital functions. |
| | | 3D CAD/CAM System | "Orthopedics", "Orthodontics" | To master the basic principles of team work with a dentist in orthopedic dentistry when performing facial jaw system renewal using an innovative computer reconstruction method, which is widely used in the EU. |
| 8. | Dental Technician 35b724001 | Extreme, Intensive and Palliative Care Module | "Emergency Medical Care" | To be able to practically respond to extreme situations using EMS algorithms, to monitor, maintain and restore patients' vital functions. |
| | | 3D CAD/CAM System | "Study of Materials", "Facial Jaw Orthopedics and Orthodontics", "Production of Non-removable Dentures", | To master the basic principles of team work with a dentist in orthopedic dentistry when performing facial jaw system renewal using an innovative computer reconstruction method, which is widely used in the EU. To be able to |

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|--|--|--|---|---|
| | | | “Production of Removable Dental Prostheses”, “Denture Casting Technique” | perform aesthetic reconstruction of dentures in computer design and printing technology. To get acquainted with the newest materials and their application possibilities. |
|--|--|--|---|---|

Students in 11 innovative basic study programs, including 9 STEM programs, implemented at the College:

| | 2019 | 2020 |
|---------------------------------|------|------|
| “Physician Assistant”(41721) | 80 | 100 |
| “Midwife”(41721) | 60 | 90 |
| “Nursing” (41723) | 80 | 100 |
| “Pharmacy Assistant” (41725) | 120 | 150 |
| “Dental Technical” (35b724001) | 60 | 80 |
| “Dental Nurse” (35b724001) | 40 | 60 |
| “Dental Assistant” (35a724001) | 50 | 60 |
| “Nursing Assistant”(35a723001) | 70 | 90 |
| “Nursing Assistant” (32a723001) | 40 | 60 |
| “Patient Carer” (35a762031) | 80 | 90 |
| “Patient Carer”(32a762031) | 40 | 60 |

Students in 11 innovative study programs and further education study programs, including 9 STEM programs, implemented at the College:

| | 2019 | 2020 |
|---------------------------------|------|------|
| “Physician Assistant”(41721) | 50 | 100 |
| “Midwife”(41721) | 50 | 60 |
| “Nursing” (41723) | 30 | 80 |
| “Pharmacy Assistant” (41725) | 50 | 110 |
| “Dental Technical” (35b724001) | 50 | 100 |
| “Dental Nurse” (35b724001) | 30 | 40 |
| “Dental Assistant” (35a724001) | 30 | 40 |
| “Nursing Assistant”(35a723001) | 80 | 150 |
| “Nursing Assistant” (32a723001) | 80 | 150 |
| “Patient Carer” (35a762031) | 80 | 100 |
| “Patient Carer”(32a762031) | 80 | 100 |