

OVERALL REGIONAL SITUATION IN LITHUANIA IN HOME CARE RESEARCH & INNOVATION AND QUADRUPLE-HELIX COOPERATION IN R&I

REGIONAL STUDY OF THE HOCARE PROJECT IN LITHUANIA







Contents

1.	Structural funds programme	5
2.	SMART specialization strategy – RIS3	11
3.	Other policy instruments relevant for Home Care R&I	11
4.	Regional innovation ecosystem in Home Care R&I	11
5.	Regional strategies/analyses/studies carried out in or relevant for Home Care	18
6.	Quadruple-helix cooperation in R&I	19
7.	Potential improvements of the Operational Programme and other possible improvements in region	nal
nn	ovation ecosystem	20
8.	Other information	21
9.	Information gathered by	21
ΑU	THOR – PARTNER OF THE HOCARE PROJECT	21





ABSTRACT (LT)

HoCare projekto tikslas - paskatinti inovatyvius socialinės rūpybos sprendimus regioninėje inovacijų vertės grandinėje, stiprinant veikėjų bendradarbiavimą keturgubos spiralės principu. Projektu siekiama pagerinti struktūrinių fondų projektų efektyvumą, poveikį, kokybę ir t.t. Pradinis turinys tam yra kuriamas atliekant regioninę analizę ir toliau stiprinamas per tematinius seminarus.

Remiantis Lietuvos MTEPI socialinės rūpybos srityje ir keturgubos spiralės MTEPI srityje situacijos analize, 2014-2020 m. laikotarpiu yra identifikuotos trys susijusios paramos priemonės – "Ikiprekybiniai pirkimai LT", "Intelektas. Jungtiniai mokslo-verslo projektai" ir "Inovaciniai čekiai".

Lietuvoje pagrindinės institucijos, atsakingos už MTEPI politikos formavimą yra LR Švietimo ir mokslo ministerija ir LR Ūkio ministerija. LR Socialinės apsaugos ir darbo ministerija iš esmės nevaidina jokio vaidmens skatinant inovatyvius socialinės rūpybos sprendimus, o jos pagrindinis tikslas yra užtikrinti socialinės politikos įgyvendinimą.

Lietuvoje taip pat yra dvi platformos, susijusios su MTEPI socialinės rūpybos srityje - Integruotas mokslo ir verslo centras Santaros slėnis ir Santakos slėnis. Santaros slėnis yra kompetencijos centras šiose mokslo ir technologijų srityse: biotechnologijos ir biofarmacija; inovatyvios medicinos technologijos; molekulinė medicina ir biologiniai vaistai; ekosistemos ir darnus vystymasis. Santakos slėnis yra nacionalinis atviros prieigos MTEP centras, koncentruojantis vienoje teritorijoje mokslo ir studijų potencialą šiose srityse: tvari chemija ir biofarmacija, ateities energetika, mechatronika, informacinės ir ryšių technologijos.

Sveikatos apsaugos srityje didelę dalį žinių ir inovacijų kūrimo bei perkėlimo į medicinos praktiką veiklų atlieka medicinos įstaigos. Tyrimai stipriai išvystyti Vilniaus universitete, Lietuvos sveikatos mokslų universitete ir Kauno klinikose.

Bendras MTEPI sistemos dalyvių iš visų keturgubos spiralės vektorių požiūris į bendradarbiavimą MTEPI srityje yra tas, jog bendradarbiavimas yra tik deklaruojamas, tačiau nekuriantis pridėtinės vertės. Siekiant pagerinti veiksmų programas, skatinančias keturgubos spiralės principu paremtą MTEPI socialinės rūpybos srityje, reikia skatinti bendradarbiavimą tarp visų suinteresuotųjų šalių. Taip pat svarbu gerinti bendrą darbą tarp pagrindinių atsakingų ministerijų – LR Ūkio ministerijos, LR Švietimo ir mokslo ministerijos, LR Socialinės apsaugos ir darbo ministerijos, siekiant paskatinti mokslinius tyrimus socialinės rūpybos srityje, nes šiuo metu ministerijos nebendradarbiauja. Vienas iš galimų sprendimų - sukurti tarpministerinį veiksmų planą.

Be to, siekiant platesnio suinteresuotųjų šalių dalyvavimo, nereiktų vertinti jų įtraukimo kaip formalaus proceso, bet pabandyti atsižvelgti į jų nuomonę, tuo pačiu metu skatinant juos aktyviai dalyvauti naujų pasiūlymų ir sprendimų paieškoje.

Ši regioninė analizė leis HoCare projekto rėmuose pradėti intensyvų regioninį ir tarpregioninį mokymosi procesą. Ši analizė, kartu su identifikuotomis gerosiomis praktikomis taip pat sudarys pagrindą tolesniam veiksmų plano formavimui.





ABSTRACT (EN)

The objective of HoCare project is to boost delivery of Home Care innovative solutions in regional innovation chains by strengthening the cooperation between actors in regional innovation system using Quadruple helix approach. The project aims to positively influence efficiency, impact and the quality of Structural Funds. The initial content for the project has been developed by partners during Regional analysis session, and further investigated during International Thematic Workshops.

Based on analysis of Lithuanian regional situation in Home Care R&I and quadruple-helix cooperation in R&I, three available support programs in the 2014-2020 financing period can be identified: "Pre-commercial procurement LT", "Intellect. Joint science - business projects" and "Innovation vouchers".

In respect to Lithuania, the main institutions that are involved in and related to R&D policy development are the Ministry of Education and Science and the Ministry of Economy. Ministry of Social Security and Labor practically does not play any significant role in promoting innovative home care solutions; the main aim of the latter is to ensure smooth implementation of social policies.

In addition to this, there are two platforms that also support Home Care R&I in Lithuania - Integrated scientific and business centers Santaros Valley (Santara) and Santakos Valley (Santaka). Santara is a competence center within the following science and technology areas: Biotechnology and biopharmaceuticals; Innovative medicine technologies; Molecular medicine and biopharmaceuticals; Ecosystems and sustainable Development. The Santaka Valley is a national open access R&D centre which concentrates the science potential in one designated territory. Specifically, the Santara Valley focuses on the following areas: sustainable chemistry and biopharmacy, future energy, mechatronics, information and communication technologies.

In the field of health protection, creation and transfer of innovation into practice is implemented by the medical institutions. Research is developed in the Vilnius University, Lithuanian Health Science University and Kaunas clinics.

The general attitude of main R&I actors from all 4 helixes towards using the quadruple-helix model based R&I cooperation is that currently, cooperation is only declared, but does not create the necessary added value. In order to improve the Operational Programme regarding its support for quadruple-helix based R&I in Home Care, cooperation between all stakeholders must be encouraged. It is also important to improve the cooperation between the main responsible ministries – The Ministry of the Economy, the Ministry of Education and Science, the Ministry of Social Affairs and Labor – in order to promote research in the field of home care. One of the possible solutions is to create an interministerial action plan to encourage R&I activities in Home Care areas.

Also, in order to achieve the broader stakeholder participation, there is no need to assess their inclusion from a formal process perspective. Instead, it is best to take into account their views and encourage them to actively participate in the formulation of new proposals and solutions for existing and potential incentives.

This regional analysis will enable the HoCare project to start intensive regional and interregional learning process. Based on that, a Regional Analysis, together with identified and further developed good practices, will form a basis for subsequent Action plan formulation.





1. Structural funds programme

Structural funds' - Operational Programme(s) - basic information

Name of the Structural funds' -	Operational programme for the European union funds' investments in
Operational Programme (OP) -	2014-2020 (2014–2020 metų Europos Sąjungos fondų investicijų
supporting Research & Innovation	veiksmų programa)
Geographical coverage of this OP (whole country, specific counties, international, etc.)	Whole country of the Lithuania
Managing Authority (Responsible body) for this OP	Ministry of Finance of the Republic of Lithuania
Intermediate body(ies) for this OP (if relevant)	Ministry of Environment of the Republic of Lithuania Ministry of Energy of the Republic of Lithuania Ministry of Culture of the Republic of Lithuania Ministry of Social Security and Labour of the Republic of Lithuania Ministry of Transport and Communications of the Republic of Lithuania Ministry of Health of the Republic of Lithuania Ministry of Education and Science of the Republic of Lithuania Ministry of Economy of the Republic of Lithuania Ministry of the Interior of the Republic of Lithuania Regional Development Department under the Ministry of the Interior of the Republic of Lithuania Environmental Projects Management Agency of the Ministry of Environment of the Republic of Lithuania Public Institution European Social Fund Agency Transport investment directorate Public Institution Central Project Management Agency Public Institution Lithuanian Business Support Agency LTD Investment and business guarantees Research Council of Lithuania Agency for Science, Innovation and Technology Public Investment Development Agency Public Procurement Office Financial Crime Investigation Service under the Interior of the Republic of Lithuania
General objectives of the OP (max. 1000 characters)	The Lithuanian OP brings together several key EU investment funds aimed at helping Lithuania's economic development as well as tackling social exclusion, unemployment and vital issues like energy security. The Operational programme for the European union funds' investments in 2014-2020 support contributes significantly to the promotion of Lithuania's ability to achieve the key EU and national development goals: • to boost RTD and innovation; • to support SMEs' competitiveness and innovation; • to support the shift towards a low-carbon economy in all sectors; • to boost environment, sustainable use of natural resources and adaptation to climate change; • to remove barriers to the core network infrastructure through modernisation and development of transport and energy infrastructure; • to promote sustainable and quality employment and supporting labour mobility; • to improve access to social housing and quality of health care services for people at risk of poverty or social exclusion; • to improve educational system; • to reduce the administrative burden for businesses and improving the quality and efficiency of public services in general.





Name of the relevant thematic priority axis supporting R&I activities (+ in local language in brackets)	1 priority "Strengthening of R&I" (1 prioritetas "Mokslinių tyrimų, eksperimentinės plėtros ir inovacijų skatinimas")
Specific objectives of the given priority axis described above (max. 1000 characters)	The first priority is to focus on strengthening of synergy between business, studies and research, resulting in possible increase in country's economic competitiveness.
	The main objective is to promote development and connection to the regional and European research infrastructure network of public and private R&I infrastructures that are directly related to strengthening of competitiveness.
	Corporate R&I activities are also supported for increasing the supply of value-added products and services.
	The fundamental change is also expected in direct promotion of demand for innovations that is performed by state institutions – this is achieved by more wide allowance of innovative and pre-commercial procurements and using other promotional incentives that are dedicated for promoting production and/or distribution of innovative products and services in the market.

Available support programmes / intervention areas in 2014-2020 relevant to Home Care R&I and quadruple-helix cooperation in R&I

PRE-COMMERCIAL PROCUREMENT LT (Ikiprekybiniai pirkimai LT) http://ukmin.lrv.lt/lt/veiklos-sritys/es-parama/2014-2020-m/ikiprekybiniai-pirkimai-lt	
Supported activities	 Stimulating innovation demand through the pre-commercial procurement (encouraging public institutions to purchase R&D services), which creates a new, non-existent product, service, material, process or substantially upgrade an existing product, service, material, process, which is intended for the solving general public on current socio-economic problems. Awards for applicant (project manager) participants, designed to promote the achievement of the project objectives.
Relevancy of this support programme	Relevant both to Home Care R&I + quadruple-helix cooperation in R&I
Reasons of its relevance for Home Care R&I	This support programme is used to stimulate the demand for innovations by implementing pre-commercial procurements (motivating state institutions to purchase R&I services) during which innovative products meant for relevant socioeconomic problem solutions are developed. While developing innovative technologies and processes, development is also attempted in two other smart-specialization directions that are related to Home Care: involved and creative society; health and bio-technology.
Reasons of its relevance for quadruple-helix cooperation in R&I	The contracting authority carrying out high-value pre-commercial procurement is obliged to consult with the Research, development and innovation strategic council. The Council consists of relevant ministries, research, development and innovation policy implementing institutions, academic and research institutions, business and other social partners. The Council is a high-level platform for discussion, covering the science, technology and innovation development-related issues, such as smart specialization, integrated science, study and business centers (valleys), innovation-friendly environment etc. The contracting authority must also inform the public about its ongoing pre-commercial procurement, achieved results and the aplying posibilities of these rezults.





Objective Obje	Amount of funds	29 360 732,00 EUR
coordinating authority that the procurement can be organized in accordance with the description of the procedure of pre-commercial procurements. Partners — contracting authorities that are engaged in pre-commercial procurements with the recipients. Calls are irregular, carried out by state planning. The first call is planned for the 2" quarter of 2017. INTELLECT. JOINT SCIENCE – BUSINESS PROJECTS (Intelektas. Bendri mokslo — verslo projektai) http://ukmin.lrv.lt/lt/veiklos-sritys/es-parama-1/2014-2020-m/intelektas-bendri Supported activities - R&D - companies' initial investment, which is intended to create a new or expand an existing company R & D and innovation infrastructure, which is not available publicly or in clusters. Relevancy of this support programme is aimed at encouraging joint ventures between private legal entities and research and academic institutions in R&I projects in smart specialization areas (areas related to Home Care - "Involved and creative society" and "Health technology and bio-technology"), thus creating favourable conditions for long-term partnerships between business and scientific communities, better exploitation of this synergetic effect. Reasons of its relevance for quadruple-helix cooperation in R&I cooperation in R&I Objective Objective of the support programme – to motivate companies to invostions in social and public services as well as stimulating demand, networking, group and open innovations. Public participation is ensured indirectly, by identifying businesses' needs for new R&I projects and by developing social innovations in innovative products, services and processes to launch necessary R&I, as well as to encourage establishment and development of innovation infrastructure, innovative technology in provate legal entities and public institutions. Time plan for calls Objective of the support programme – to motivate companies to invest in innovative products, services and processes. Developments are also intended for two smart-specialization home Care areas:	_	developing new products as well as speed up the development of such innovations that would efficiently address the needs of the public sector.
INTELLECT. JOINT SCIENCE - BUSINESS PROJECTS (Intelektas. Bendri mokslo - verslo projektai) http://ukmin.lpv.lt/lt/veiklos-sritys/es-parama-1/2014-2020-m/intelektas-bendri	Eligible recipients	coordinating authority that the procurement can be organized in accordance with the description of the procedure of pre-commercial procurements. Partners – contracting authorities that are engaged in pre-commercial
mokslo - verslo projektai) http://ukmin.lrv.lt/lt/veiklos-sritys/es-parama-1/2014-2020-m/intelektas-bendri Supported activities	Time plan for calls	
Supported activities - R&D - companies' initial investment, which is intended to create a new or expand an existing company R & D and innovation infrastructure, which is not available publicly or in clusters.		· ·
Supported activities - R&D - companies' initial investment, which is intended to create a new or expand an existing company R & D and innovation infrastructure, which is not available publicity or in clusters. Relevancy of this support programme Reasons of its relevance for Home Care R&I = Quadruple-helix cooperation in R&I projects in smart specialization areas (areas related to Home Care - "Involved and creative society" and "Health technology and bio-technology"), thus creating favourable conditions for long-term partnerships between business and scientific communities, better exploitation of this synergetic effect. Reasons of its relevance for quadruple-helix cooperation in R&I projects in smart specialization areas (areas related to Home Care - "Involved and creative conditions for long-term partnerships between business and scientific communities, better exploitation of this synergetic effect. This support programme is nitended to encourage business, knowledge institution and higher education sector interaction elaboration by attracting investments for product and service development, technology, innovations in social and public services as evice as evice development, technology, innovations. Amount of funds 139 017 609,00 EUR Objective Objective of the support programme – to motivate companies to invest in innovative products, services and processes to launch necessary R&I, as well as to encourage establishment and development of innovation enterprises by investing in R&I and development of innovation infrastructure, innovative technologies and processes. Developments are also intended for two smart-specialization Home Care areas: "Involved and creative society" and "Health technology and bio-technology". Eligible recipients Frime plan for calls Calls are regular, planned for 2 th quarter of 2017, 1 th quarter of 2018, 3 th quarter of 2019. INNOVATION VOUCHERS (Inovaciniai čekiai) http://inocekiai.mita.lt/ Supported activities - Provision of the innovative vouchers for technical feasi		
- companies' initial investment, which is intended to create a new or expand an existing company R & D and innovation infrastructure, which is not available publicly or in clusters. Relevancy of this support programme Reasons of its relevance for Home Care R&I = quadruple-helix cooperation in R&I support programme is aimed at encouraging joint ventures between private legal entities and research and academic institutions in R&I projects in smart specialization areas (areas related to Home Care - "Involved and creative conditions for long-term partnerships between business and scientific communities, better exploitation of this synergetic effect. Reasons of its relevance for quadruple-helix cooperation in R&I communities, better exploitation of this synergetic effect. This support programme is intended to encourage business, knowledge institution and higher education sector interaction elaboration by attracting investments for product and service development, technology, innovations in social and public services as well as stimulating demand, networking, group and open innovations. Public participation is ensured indirectly, by identifying businesses' needs for new R&I projects and by developing social innovations. Amount of funds 139 017 609,00 EUR Objective Objective of the support programme – to motivate companies to invest in innovative products, services and processes to launch necessary R&I, as well as to encourage establishment and development of innovation enterprises by investing in R&I and development of innovation infrastructure, innovative technologies and processes. Developments are also intended for two smart-specialization Home Care areas: "Involved and creative society" and "Health technology and bio-technology". Recipients – private legal entities and academic institutions. Partners – private legal entities and academic institutions. Calls are regular, planned for 2 th quarter of 2017, 1 th quarter of 2018, 3 th quarter of 2019. INNOVATION VOUCHERS (Inovaciniai čekiai) http://ino	nttp://ukmin.irv.it/it/veikid	os-sritys/es-parama-1/2014-2020-m/intelektas-bendri
Support programme Reasons of its relevance for Home Care R&I Egal entities and research and academic institutions in R&I projects in smart specialization areas (areas related to Home Care - "Involved and creative society" and "Health technology and bio-technology"), thus creating favourable conditions for long-term partnerships between business and scientific communities, better exploitation of this synergetic effect. Reasons of its relevance for quadruple-helix cooperation in R&I This support programme is intended to encourage business, knowledge institution and higher education sector interaction elaboration by attracting investments for product and service development, technology, innovations in social and public services as well as stimulating demand, networking, group and open innovations. Public participation is ensured indirectly, by identifying businesses' needs for new R&I projects and by developing social innovations. Amount of funds		 companies' initial investment, which is intended to create a new or expand an existing company R & D and innovation infrastructure, which is not available publicly or in clusters.
This support programme is aimed at encouraging joint ventures between private legal entities and research and academic institutions in R&I projects in smart specialization areas (areas related to Home Care - "Involved and creative society" and "Health technology and bio-technology"), thus creating favourable conditions for long-term partnerships between business and scientific communities, better exploitation of this synergetic effect. Reasons of its relevance for quadruple-helix cooperation in R&I cooperation in the co		Relevant both to Home Care R&I + quadruple-helix cooperation in R&I
legal entities and research and academic institutions in R&I projects in smart specialization areas (areas related to Home Care - "Involved and creative society" and "Health technology and bio-technology"), thus creating favourable conditions for long-term partnerships between business and scientific communities, better exploitation of this synergetic effect. Reasons of its relevance for quadruple-helix cooperation in R&I cooperation in R&I This support programme is intended to encourage business, knowledge institution and higher education sector interaction elaboration by attracting investments for product and service development, technology, innovations in social and public services as well as stimulating demand, networking, group and open innovations. Public participation is ensured indirectly, by identifying businesses' needs for new R&I projects and by developing social innovations. Amount of funds 139 017 609,00 EUR Objective Objective of the support programme – to motivate companies to invest in innovative products, services and processes to launch necessary R&I, as well as to encourage establishment and development of innovation enterprises by investing in R&I and development of innovation enterprises by investing in R&I and development are also intended for two smart-specialization Home Care areas: "Involved and creative society" and "Health technology and bio-technology". Recipients – private legal entities and public institutions involved in R&I activities (except academic institutions). Partners – private legal entities and academic institutions. Calls are regular, planned for 2 th quarter of 2017, 1 th quarter of 2018, 3 th quarter of 2019. INNOVATION VOUCHERS (Inovaciniai Čekiai) http://inocekiai.mita.lt/ Provision of the innovative vouchers for technical feasibility studies; Providing innovative voucher for early-stage R & D projects. Relevant both to Home Care R&I + quadruple-helix cooperation in R&I		This support programme is aimed at encouraging joint ventures between private
institution and higher education sector interaction elaboration by attracting investments for product and service development, technology, innovations in social and public services as well as stimulating demand, networking, group and open innovations. Public participation is ensured indirectly, by identifying businesses' needs for new R&I projects and by developing social innovations. Amount of funds 139 017 609,00 EUR Objective Objective of the support programme — to motivate companies to invest in innovative products, services and processes to launch necessary R&I, as well as to encourage establishment and development of innovation enterprises by investing in R&I and development of innovation infrastructure, innovative technologies and processes. Developments are also intended for two smart-specialization Home Care areas: "Involved and creative society" and "Health technology and bio-technology". Eligible recipients Recipients — private legal entities and public institutions involved in R&I activities (except academic institutions). Partners — private legal entities and academic institutions. Calls are regular, planned for 2 th quarter of 2017, 1 th quarter of 2018, 3 th quarter of 2019. INNOVATION VOUCHERS (Inovaciniai čekiai) http://inocekiai.mita.lt/ Supported activities - Provision of the innovative vouchers for technical feasibility studies; - Providing innovative voucher for early-stage R & D projects. Relevant both to Home Care R&I + quadruple-helix cooperation in R&I		legal entities and research and academic institutions in R&I projects in smart specialization areas (areas related to Home Care - "Involved and creative society" and "Health technology and bio-technology"), thus creating favourable conditions for long-term partnerships between business and scientific
Objective Objective of the support programme – to motivate companies to invest in innovative products, services and processes to launch necessary R&I, as well as to encourage establishment and development of innovation enterprises by investing in R&I and development of innovation infrastructure, innovative technologies and processes. Developments are also intended for two smart-specialization Home Care areas: "Involved and creative society" and "Health technology and bio-technology". Eligible recipients Recipients Private legal entities and public institutions involved in R&I activities (except academic institutions). Partners – private legal entities and academic institutions. Calls are regular, planned for 2 th quarter of 2017, 1 th quarter of 2018, 3 th quarter of 2019. INNOVATION VOUCHERS (Inovaciniai čekiai) http://inocekiai.mita.lt/ Supported activities Provision of the innovative vouchers for technical feasibility studies; Providing innovative voucher for early-stage R & D projects. Relevancy of this support programme Relevant both to Home Care R&I + quadruple-helix cooperation in R&I	for quadruple-helix	institution and higher education sector interaction elaboration by attracting investments for product and service development, technology, innovations in social and public services as well as stimulating demand, networking, group and open innovations. Public participation is ensured indirectly, by identifying
innovative products, services and processes to launch necessary R&I, as well as to encourage establishment and development of innovation enterprises by investing in R&I and development of innovation infrastructure, innovative technologies and processes. Developments are also intended for two smart-specialization Home Care areas: "Involved and creative society" and "Health technology and bio-technology". Eligible recipients Recipients – private legal entities and public institutions involved in R&I activities (except academic institutions). Partners – private legal entities and academic institutions. Calls are regular, planned for 2 th quarter of 2017, 1 th quarter of 2018, 3 th quarter of 2019. INNOVATION VOUCHERS (Inovaciniai čekiai) https://inocekiai.mita.lt/ Provision of the innovative vouchers for technical feasibility studies; Providing innovative voucher for early-stage R & D projects. Relevancy of this support programme Relevant both to Home Care R&I + quadruple-helix cooperation in R&I	Amount of funds	,
(except academic institutions). Partners – private legal entities and academic institutions. Time plan for calls Calls are regular, planned for 2 th quarter of 2017, 1 th quarter of 2018, 3 th quarter of 2019. INNOVATION VOUCHERS (Inovaciniai čekiai) http://inocekiai.mita.lt/ Provision of the innovative vouchers for technical feasibility studies; Providing innovative voucher for early-stage R & D projects. Relevancy of this support programme Relevant both to Home Care R&I + quadruple-helix cooperation in R&I support programme	Objective	to encourage establishment and development of innovation enterprises by investing in R&I and development of innovation infrastructure, innovative technologies and processes. Developments are also intended for two smart-specialization Home Care areas: "Involved and creative society" and "Health technology and bio-technology".
INNOVATION VOUCHERS (Inovaciniai čekiai) http://inocekiai.mita.lt/ Supported activities - Provision of the innovative vouchers for technical feasibility studies; - Providing innovative voucher for early-stage R & D projects. Relevancy of this support programme Relevant both to Home Care R&I + quadruple-helix cooperation in R&I support programme	Eligible recipients	(except academic institutions). Partners – private legal entities and academic institutions.
Supported activities - Provision of the innovative vouchers for technical feasibility studies; - Providing innovative voucher for early-stage R & D projects. Relevancy of this support programme Relevant both to Home Care R&I + quadruple-helix cooperation in R&I	Time plan for calls	
- Providing innovative voucher for early-stage R & D projects. Relevancy of this support programme - Providing innovative voucher for early-stage R & D projects. Relevant both to Home Care R&I + quadruple-helix cooperation in R&I		
support programme	Supported activities	
Reasons of its relevance By this support programme private legal entities are given innovation vouchers,	_	Relevant both to Home Care R&I + quadruple-helix cooperation in R&I
	Reasons of its relevance	By this support programme private legal entities are given innovation vouchers,





for Home Care R&I	which are meant for technical capability studies and early stage R&I projects. According to the description of the programme, projects must satisfy smart-specialization areas, of which "Involved and creative society" and "Health technology and bio-technology" are related to Home Care.
Reasons of its relevance for quadruple-helix cooperation in R&I	Innovation vouchers is a measure which enables collaboration between business and academic sector. Project eligibility selection is carried out by panel of experts, comprised of representatives of government, science, business and society, thus ensuring quadruple-helix cooperation principle.
Amount of funds	10 136 700,00 EUR
Objective	The objective of the programme – to promote initial contacts between business and science institutions, to continue cooperation in research and experimental development, to encourage enterprises to be involved in innovation activities more actively and to take advantage of opportunities arising from business and science cooperation.
Eligible recipients	Private legal entities
Time plan for calls	Calls are regular: 1 th quarter of 2017, 4 th quarter of 2018, 4 th quarter of 2019.

Evaluation of applications

T-	
Evaluation process for applications set up the same way for all support programmes calls?	No, it is different for various support programmes / calls
Where are the evaluators from?	From the partner country
Who evaluates applications of each of the support programme / intervention area call?	"Pre-commercial procurement LT" – Lithuanian Ministry of Economy and Steering committee of measures (LT Ūkio ministerija ir Priemonės projektų priežiūros komitetas); "Intellect. Joint science - business projects" – Lithuanian Business Support Agency (Lietuvos verslo paramos agentūra); "Innovation vouchers" – Agency for Science, Innovation and Technology (Mokslo, inovacijų ir technologijų agentūra).
Which evaluation criteria are used with what weight in each of the support programme?	 "Pre-commercial procurement LT": Experts of science, technology and business sectors evaluate pre-commercial procurement documents individually, giving the conclusions regarding the compliance to the requirements of pre-commercial procurements. The main criterias are: the market can not meet the current demand – yes/no during pre-commercial procurement aims to ensure competition between the participants – yes/no; pre-commercial procurement participants are interested in efficiency of this process, therefore pre-commercial purchasing benefits and risks are shared according to market conditions; the paid price is fully in line with the contractor benefits market value and the risk assumed by the participant – yes/no; contracting authority needed innovative product available on the market or there is no indication in the short term (less more than one year) that market participants such product will present on the market – yes/no; product in the market does not meet the needs of the contracting authority, and therefore need to significantly improve the functional properties of the product and (or) to reduce the current costs of the products, and there is no indication in the short term (less than one year) that the market participants will present such products on the market – yes/no.





"Intellect. Joint science - business projects":

- Level of significance of the project generated product (innovation), weight factor – 6:
- Commercialization coefficient of the project generated product (innovation), weight factor – 6;
- 3. Income generated by the enterprise during the course of and 3 years after the end of the project;
- 4. Ratio between project generated products that were placed on the market and expenses of the project eligible for financing, weight factor 3;
- 5. Experience obtained by the recipient by participating in international business and science collaborations in R&I projects and carrying out R&I activities, weight factor 2;
- 6. Project contributes to at least one of EU Baltic region strategic goals and the action plan in the priority field of "Innovation" and/or "Education", weight factor 1;
- 7. Project contributes to the horizontal priority "Culture" of the 2014-2020 national advance program's inter-institutional action plan, approved by the Government of the Republic of Lithuania on 19th of March 2014, resolution no. 269 "On the action plan approval of horizontal priority "Culture" of the 2014-2020 national advance program", weight factor 1;
- 8. Project contributes to the horizontal priority "Health for all" of the 2014-2020 national advance program's inter-institutional action plan, approved by the Government of the Republic of Lithuania on 26th of March 2014, resolution no. 293 "On the action plan approval of horizontal priority "Health for all" of the 2014-2020 national advance program", weight factor 1;

"Innovation vouchers":

Project is given a higher evaluation if the recipient doesn't hold experience in R&I projects and hasn't established a contact with an academic institution. For projects, recipients of which:

- 1. Haven't carried out R&I projects in last 3 years given 5 points
- Carried out one R&I project, funded by Economic Development Programme 1 priority "Research and technological development for economy competitiveness and growth" measure VP2-1.3-ŪM-05-K "Inovouchers LT" in last 3 years, but on a different topic – given 3 points
- 3. 3. Carried out one R&I project in the last 3 years that is different from one mentioned in item 2 given 1 point.

Governance of the relevant thematic priority axis of the Operational Programme

Main management bodies that influence the OP

Preparation work schedule for using 2014-2020 EU structural funding, proposed EU structural funding programming document projects and 2014-2020 Lithuanian EU structural funding management and control system model project are approved by 2014-2020 European Union structural funding commission under the government of Republic of Lithuania. This working party also submits proposals to the Lithuanian positions regarding the documents related to the EU cohesion policy after 2013, prepared by the European Commission. Structural funding commission shall report to the Government of the Republic of Lithuania. The commission consists of government, municipal and community representatives.

Operational programme monitoring committee – committee formed by the Government of the republic of Lithuania, responsible for operational programme implementation's supervision and quality, examination and approval of selection criteria, progress of the programme, examining the results and annual reports and etc. The commission consists of government, municipal and community





	representatives.
	Institutions responsible for operational programme management, control and audit: • Managing authority (EU structural funding management department of Ministry of finance);
	 Certifying authority (National fund department of Ministry of finance); Audit authority (8th Audit state control department of the Republic of
	Lithuania); • Paying authority (State treasury department of Ministry of finance).
	Intermediary institutions – ministries and other institutions (Ministry of environment, Ministry of Energy, Ministry of Culture, Ministry of Social Security and Labour, Ministry of Health, Ministry of Education of Science, Ministry of Economy, Ministry of Internal Affairs, Department of Regional Development of Ministry of Internal Affairs) and implementing authority; Ministry of internal affairs and Regional development council, Public procurement council, Financial crime investigation service.
	Action programme steering committee – a committee is formed from representatives of managing, certifying and intermediary authorities to examine issues on action programme execution. Socioeconomic partners and centres of excellence may be included in the committee as observers.
	Assessment coordination group – a working party that considers annual evaluation plans, analyses their progress and implementation, considers EU structural funding evaluation project technical specifications and results, submits proposals to the responsible authorities regarding EU structural funding evaluation action planning and execution, carries out other tasks related to EU structural funding evaluation coordination. This working party is comprised of representatives of the Ministry of Finance of the Republic of Lithuania and intermediary authority.
Possibilities to influence the OP outside of	yes
commitees?	
How?	Representatives of the audit authority and methodological assistance centres, partners and other interests can participate in the meetings of operational programme steering committee as observers. It is expected that the managing authority and ministries (within their competence) shall ensure that collaboration with partners takes place during the preparation, implementation, monitoring and evaluation of the operational programme
	Ministries or the managing authorities shall inform the partners and the public regarding the selection criteria of the projects, their replacement projects and terms of project funding. They may submit relevant comments to EU structural funds website www.esinvesticijos.lt . Ministry must assess the remarks and indicate which ones were taken into account and provide an explanation for those that were not.
	Partners and members of the public are also included in the whole EU structural funds evaluation process. EU structural funds evaluation plan and its implementation is discussed within the operational programme monitoring committee meetings with the presence of partners. Partners receive all the assessment reports and information on the implementation of recommendations. Partners are involved in the implementation of specific evaluations, notably the evaluation planning, data collection and result discussion stages.





SMART specialization strategy – RIS3

The "SMART specialization strategy – RIS3" section provides more detailed information on defined RIS3 in the region and the main supported R&I areas contributing to Home Care R&I.

SMART specialization strategy on the same level as above described Structural Fund? (e.g. national-national, regional- regional)	yes
RIS3 R&I specialization segments contribute to Home Care R&I support?	Health technology and bio-technology Involved and creative society

3. Other policy instruments relevant for Home Care R&I

The "other policy instruments relevant for Home Care R&I" section provides more detailed information on other policy instruments supporting R&I in Home Care, following the same description as for the Operational Programme described above.

Other policy instruments	No, there is no other policy instrument supporting Home Care R&I.
relevant for Home Care	
R&I support in your	
country?	

4. Regional innovation ecosystem in Home Care R&I

The "regional innovation ecosystem in Home Care R&I" section provides more detailed view on regional innovation ecosystem in Home Care R&I including a general description overview of the ecosystem followed by a list and a description of the most important supporting platforms, networks, events, major projects carried out already and most significant actors in all 4 helixes of quadruple-helix cooperation approach – formal and informal providers of health care, businesses, research and public institutions – who might work together to drive new innovations in Home Care.

Summary description of regional innovation ecosystem in Home Care R&I

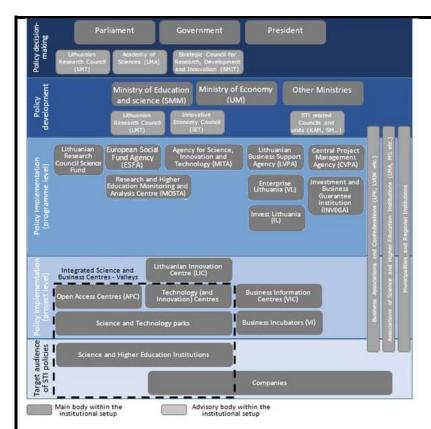
Summary description of regional innovation ecosystem in Home Care R&I in your region including the most significant main actors, infrastructure, resources, available public / private supporting services, networks, platforms and events) (max. 5000 characters)

At the decision-making level, the Lithuanian R&D policy is set by the Lithuanian Seimas (Parliament) and the Government of Lithuania. Lithuanian Research Council serves as an advisory body to the Seimas and the Government. On strategic level, the R&D development is managed by the Strategic Council for Research, Development and Innovation formed by the Government of the Republic of Lithuania.

There are two main institutions involved in and related to R&D policy development level. The Ministry of Education and Science is mainly responsible for the policy development in these areas: research excellence in the public science, highly skilled human resources for R&D etc. The Ministry of Economy is the principal institution involved in modelling policy for the promotion of innovation and business development. The Ministry of Economy coordinates the establishment and the operations of innovation support organisations such as innovation centres, science and technology parks and business incubators. In their responsibilities for specific policy domains, other ministries are also active in sector-specific R&D policies. Ministry of Social Security and Labour basically does not play any role in promoting innovative home care solutions and the main aim is to ensure social policies implementing.







R&D policy implementation at programme level happens via different agencies that are coordinated solely by one ministry or by few ministries jointly. The European Social Fund Agency (ESFA) administers EU Social Fund aid and implements measures in the development of human resources for science, technology and industry. Lithuanian Business Support Agency (LVPA) administrates the funds of European Union which are allocated to business support programmes, including innovation and R&D in the business sector. During the last years, considerably higher role in implementation of R&D policy is played by Investment and Business Guarantee Institution (INVEGA). This institution successfully implements and administers financial and other support measures for small and medium businesses.

The aim of Agency for Science, Innovation and Technology (MITA) is to foster business and science cooperation and to create a friendly environment for business needs and innovation. This institution administers a number of measures and programmes aimed at innovation and especially R&D collaboration, for instance Industrial Biotechnologies Development Programme and the High Technologies Development Programme. MITA also administers the measure of 'innovation vouchers' for SMEs.

Regionally 9 science and technology parks offer favourable infrastructure for the establishment of new innovative businesses in Lithuania and serve as a convenient space for business enterprises, scientists and students to combine their knowledge, experience and ideas, and lead to the development of innovations as well as initiating and implementing numerous business projects. None of the parks does not specializes in the field of health protection or home care.

In the field of health protection significant knowledge and innovation creation and broadcast to the medical practice is performed by medical institutions. Research strongly developed in the Vilnius University, Lithuanian Health Science University and Kaunas clinics.

Open Access Centres (APC) enables availability of cutting-edge R&D equipment to scientists, researchers and students, as well as to the private sector. The establishment of such APC's is aimed at ensuring the availability of the R&D infrastructure developed in the valleys to both the university or research institute to which it belongs, and to other interested users. APC's facilitate co-operation between Lithuanian and foreign scientists, trainees, students, and researchers who work for businesses.

The aims of 5 integrated science, studies and business centres (valleys) are to facilitate generation of high-level





research-based new knowledge; to strengthen and mobilize R&D intellectual capacities, encourage national and international cooperation among scientists and other researchers; to promote the development of R&D intensive sectors of the economy and the development and commercial application of innovative products, to enable science and business to cooperate effectively in R&D and innovation and to advance technology development and transfer; to concentrate and update R&D, innovation, higher education, and knowledge-intensive business infrastructure, and to provide its effective application. Santara and Sauletekis Valleys focus on biotechnologies, innovative medicine, biopharmacy, ecosystems, ICT, laser and lightechnologies, nanotechnologies, semiconductors technologies and electronics, civil engineering. Nemunas and Santaka Valleys in Kaunas focus on agro biotechnologies, bioenergy and forestry, food technologies, safety and wellness, sustainable chemistry and pharmacy, mechatronics, future energy and ICT.

Existing platforms, networks and events supporting Home Care R&I

Existing platforms, net	tworks and events supporting nome Care R&I
Existing platforms / networks supporting Home Care R&I	Integrated scientific and business center Santaros Valley (Santara) Santara is a medical and biotechnology cluster of business, science and education institutions in the north of city Vilnius, Lithuania Santara goals are to develop the knowledge - based society, science and studies and scientific cooperation between business, same as an open and equitable valleys science, studies and business in an integrated system. Santara is a competence centre within the following science and technology areas: Biotechnology and biopharmaceutical; Innovative medicine technologies; Molecular medicine and biopharmaceuticals; Ecosystems and sustainable Development. The Santara members are: Nature Research Centre, Innovative medicine centre; Vilnius University; Vilnius Gediminas Technical University; The Vilnius Municipality; Santariskes Hospitals, Northway, Institute of Oncology; hightech business - Pharmaceutical, IT and biotechnology companies. The Santara mission is to consolidate business, universities and public R&D efforts in order to create viable link between scientific research, high-tech business and academia.
	Integrated scientific and business center Santakos Valley (Santaka) The Santaka is a national open access R&D centre, concentrating in one territory science and studies potential of the following most promising areas: sustainable chemistry and biopharmacy, future energy, mechatronics, information and communication technologies. Santaka hosts modern medical technology and pharmaceutical laboratories, which employ highly-skilled Lithuanian and foreign scientists conducting research in medical, pharmaceutical and biopharmaceutical fields. R&D collaboration areas position the center as a driver and important player life sciences among others: tissue engineering — tissue engineering of heart valves and cartilage, diagnostic medical devices trials, personalised medicine, technologies for early diagnostics of gastrointestinal cancer, development of new innovative means and methods for early diagnostics of Alzheimer's disease, investigation of molecular mechanisms of ischemic and pharmacological preconditioning in brain and heart in order to develop innovative methods for neuro- and cardioprotection in ischemic syndromes.
Existing regular events (both formal and informal) supporting Home Care R&I	No data

Main actors in Home Care R&I in all 4 helixes of quadruple-helix model – formal and informal providers of health care, businesses & business supporting actors, research and public institutions

1. Citizens / users helix

Main formal + informal providers of healthcare, elderly care recipients / associations in Home Care R&I





Name + website	Description of activities focused on in that field
The National Institute for Social Integration (Nacionalinis socialinės integracijos institutas) http://zmogui.lt/	This organization creates and applies social innovations, which supports the integration of the persons from various socially vulnerable groups within the manifold society. The National Institute for Social Integration is the most known in the field of Home Care because of innovative mobility program of disabled people "Social taxi", which they created. This service allows people with disabilities to become more mobile and more independent in a daily activities.
PI "Vilties ziedas" http://www.viltiesziedas.lt/	Company produces and provides innovative and quality orthopedic and rehabilitation products and services. They implemented a project "The creation of advanced orthopedics and rehabilitation measures and open access to R&D infrastructure".
Vilnius University Hospital Santariskiu Clinics (Vilniaus universiteto Santariškių klinikos) http://www.santa.lt/	The activities of the Santariskiu Clinics encompasses practical and scientific medicine, education, continuing professional training. The Clinics owns 31 study and research centres. Innovative solutions, needs and possibilities of home care are being investigated here.
Lithuanian organization of nursing specialists (Lietuvos slaugos specialistų organizacija) http://www.lsso.lt/www/	The aim of the organization is to join and to represent nurses, working in Lithuania, as well as those, who are directly or indirectly related to nursing education and practice. Organization activities include the development of nursing science, researches, research-based competency and practices.
UAB "Orange Group Baltic" http://orange-group.lt/	The branch of Swedish company Orange Personal AB, where professional nurses, assistants and social workers works, who provide social care services, consultations and medical procedures. Work of the company is based on an innovative model applied in Scandinavian home care, whose key is the exceptional attention and respect towards a patient as well as catering to the patient's needs.
Lithuanian Disability Forum (Lietuvos neįgaliųjų forumas) http://lnf.lt/	Lithuanian Disability Forum represents the interests of people with disabilities in policy decisions and monitor, analize and present their position to the public. Forum seeks, that peoples with disabilities isolation policy would be changed to their empowerment and encouragement to participate in all areas of social life.

2. Business helix

Main businesses and busin	Main businesses and business supporting actors in Home Care R&I		
Name + website	Business or business supporting actor	Description of highly innovative solutions provided in that field	
UAB "Vildoma" http://www.vildoma.lt/	Business	UAB "Vildoma" key activities are supply and service of measurement instruments and monitoring equipment, development of rehabilitation software and testing. In cooperation with scientists, company created and patented unique and innovative medical equipment, consisting of body balance maintenance system with leg control mechanism. It is designed to support therapy of balance keeping, gait and other movement disorders and is used in medical rehabilitation and physical training of the disabled.	
INVEGA http://invega.lt/	Business supporting actor	INVEGA mission is to promote the growth and competitiveness of Lithuanian businesses by being an active partner in innovative business financing. Main activities of INVEGA are providing individual and portfolio guarantees for innovative business companies; implementing the risk capital investment measures; compensating a part of interest; performing an intermediate institutions functions in EU	





		structural funds management and control system administration area.
The Lithuanian Business Support Agency (Lietuvos verslo paramos agentūra) http://lvpa.lt/	Business supporting actor	The Lithuanian Business Support Agency (LBSA), established by the Ministry of Economy, administers the European Union funds granted for the development of Lithuanian innovative business, researches, experimental development and other sectors, also make support contracts of business, researches and experimental development, provide the information necessary for applicants to business, research and development, to prepare and submit applications.
AB "Puntukas" http://www.puntukas.lt/	Business	AB "Puntukas" construct and produce a variety of wheelchairs and other innovative compensatory technologies for the disabled people. A series of measures aimed for children with complex disabilities education and a variety of wheelchairs for people with disabilities including those, who move and do sport, are produced. Company designs and manufactures innovative measures for the nursing and service of patients and disabled people.
UAB Fidens http://www.fidens.lt/	Business	UAB "Fidens" goal is to develop simple, safe, widely applicable, cost-effective products providing unique treatment methodologies. Organization develops innovative products for health promotion. One of the newest UAB "Fidens" established innovative product is vibro bracelet to promote blood circulation in the human body, what is especially important for people with diabetas, patients with disabilities or for those, who have hypertension problems.
UAB "Baltic Orthoservice" http://www.orthobaltic.lt/	Business	UAB "Baltic Orthoservice" is one of the few Lithuanian companies engaged researching and creating innovative products and technologies. Technology and Innovation Centre of this company created not only a new supporting orthopedic technical products, but also personalized joints, head, spine and dental implants. When designing new and innovative products, they have been cooperating with many research and academic institutions.

3. Research helix

Main research actors in Home Care R&I		
Name + website	Description of excellent research activities done in that field	
Kaunas university of technology (Kauno technologijos universitetas) http://ktu.edu/	Kaunas university of technology (KTU) traditionally engages in research of physical, technological and social sciences, and experimental development, while researches of biomedical sciences and humanities are also promoted. One of the excellent research activities done in a Home Care field was a prototype of innovative wireless multi-sensory system for the registration of physiological and biomechanical parameters creation and description.	
Vytautas Magnus University (Vytauto Didžiojo universitetas) http://www.vdu.lt/	An exceptional feature of the Vytautas Magnus University (VDU) is the formation of education and research clusters. VDU concentrates 39 science and research clusters, many of which are assigned to the biomedical and physical sciences, where the models of R&D are applied. Also clusters investigate and analyze the innovative solutions in a Home Care field.	
Lithuanian university of health sciences (Lietuvos sveikatos mokslų	Lithuanian university of health sciences is the only university in Lithuania, which act exclusively in the field of health. University prepares biomedical professionals, and carries the highest level of scientific research. University has	





universitetas) http://www.lsmuni.lt/	a science centre, which organizes and coordinates the scietific activity of the university in creation and development of innovations solutions in human health, Home Care and other fields, where biomedical fundamental and applied researches are carried out.
Vilnius University (Vilniaus universitetas) http://www.vu.lt/	Vilnius university is the biggest and the oldest institution of science and studies in Lithuania. University carries out researches in various scientific fields. It has 5 study and Research centres, where researches and activities in a Home Care and many other fields are carried out. Also University has a Science and Innovation Directorate, which is responsible for cooperation with the business in a research and innovation field.
Social Innovation Institute (Socialinių inovacijų institutas) http://www.sii.lt/	Public Institution Social Innovation Institute is an independent organization engaged in social sciences and applied social research, implementing projects in the social, educational and scientific policy and scientific communication fields, providing services and solutions to public policy makers and practitioners, non-governmental organizations and businesses. The institute seeks to contribute to the groups of people, who have fewer opportunities social intergration into society.
Lithuanian Social Research Centre (Socialinių tyrimų centras) http://www.lstc.lt/	Lithuanian Social Research Centre is a public research institute, which carry out for the state, society, international cooperation or economic entities important long-term research and experimental (social, cultural) development. Institute analyze the socio-economic, political and demographic processes to the new knowledge-based solutions, public policy, justification of measures, assessment of the consequences and the strengthen of scientific and social cohesion.

4. Public institutions / government helix

Main public actors (policy decision makers including Managing Authority of OP, health insurance companies, health and social care regulators) in Home Care R&I		
Name + website	Description of activities relevant for Home Care R&I	
Ministry of Finance of the Republic of Lithuania (Lietuvos Respublikos finansų ministerija) http://finmin.lrv.lt/lt/	Lithuanian Ministry of Finance – the institution of executive authority, whose mission is to develope and implement an effective fiscal policy in order to ensure the country's macro-economic stability and economic development. The operational objectives of Ministry of Finance are to develop, organize, coordinate and control the implementation of the European Union's structural and cohesion policy.	
Ministry of Economy of the Republic of Lithuania (Lietuvos Respublikos ūkio ministerija) http://ukmin.lrv.lt/	Lithuanian Ministry of Economy is authority institution, which develope a national innovation system throught creating a favorable environment for the development of new products and processes in the business; coordinating the development and expansion of an innovation support infrastructure, participating in the development of national research and development policies; implementing innovation development programs, initiating measures to encourage innovation, information, management capacity building.	
Švietimo ir mokslo ministerija (Ministry of Education and Science) https://www.smm.lt/	The main objective of the Ministry of Education and Science is to establish a state policy in the following areas: research and experimental (social, cultural) development, technology development, also to organize, coordinate and control its implementation.	
Agency for Science, Innovation and Technology (Mokslo, inovacijų ir technologijų agentūra) http://www.mita.lt/	Agency implements research-based innovation promotion policies, promotes the cooperation of scientific and business, forms a favorable environment for applied research, experimental development and for innovation. The agency finances the works of applied research and experimental development, promotes the Lithuanian natural and legal integration into the international research and innovation area, organizes the expert evaluation of experimental development and innovation activity.	
Republic of Lithuania ministry of social security	The operational objectives of Ministry are to form the policy of social integration, organize, coordinate and monitor its implementation. The ministry also organizes	





and labour (LR Lietuvos socialinės apsaugos ir darbo ministerija) http://www.socmin.lt/	the monitoring of occupational safety and health status; analyzes and evaluate the state of social services, analyzes the needs of social workers and their assistants to raise professional qualification, organizes social workers attestation; organizes the implementation of social integration mechanism for people with disabilities.
The Department for the Affairs of Disabled under the Ministry of Social Security and Labour (Neįgaliųjų reikalų departamentas prie socialinės apsaugos ir darbo ministerijos)	The mission of The Department for the Affairs of Disabled under the Ministry of Social Security and Labour is to plan, organize and coordinate the policy measures implementation of disabled, in order to allow disabled people equal rights and opportunities to participate in social life. The goal of the department is to ensure social integration of people with disabilities by implementing different social programs, projects and policies.

Most significant research projects / research cooperation initiatives in Home Care R&I

Significant R&I projects / research cooperation initiatives in Home Care in Lithuania during 2007-2016			
Project name + description	Participating members / organizations	Results of the activities	
"Establishment of implant designing and development centre", http://www.orthobaltic.lt/index.php/id/25/nID/39/action/viewArticle/lang/1 lmplant designing and development centre was established during the course of the project, in which new generation standard orthopaedic, post-traumatic and dental implants, custom implants and surgical instruments are designed and developed.	UAB "Baltic Orthoservice"	R&I infrastructure that involves technologies required for state-of-the-art new generation medical product designing and development: 3D body scanning (3D scanner - ARTEC EVA-M) Radiological image engineering (DICOM image 3D reconstruction software - Mimics) 3D virtual simulation (3D modelling software Rhinoceros, 3D sculpting software Geomagic Freeform Plus) 3D printing DMLS, SLS and INKJET technologies (printers EOSINT M 280, EOS P 396, ProJet 660Pro) Surface treatment (5 axes CNC milling equipment Cybaman, vibrational treatment, sanding and polishing equipment EoolWasch, washing — disinfection equipment Smeg) and others.	
"Establishment of advanced orthopaedic and rehabilitation method cluster open access R&I infrastructure", http://www.viltiesziedas.lt/uploads/documents/klasteris.docx Advanced orthopaedic and rehabilitation method cluster combines Lithuanian university and applied science institutions, orthopaedic and rehabilitation sectors, electronic equipment, public and private companies working on development, manufacturing and distribution in laser and IT sectors.	PI "Vilties žiedas", JSC "Start Vilnius", Lithuanian Sports University, JSC "Optronika", JSC "Plėtra", JSC "MT sprendimai", JSC "Gaumina", JSC "Eleston", Centre for Physical Sciences and Technology.	Cluster open access R&I infrastructure was established during the course of the project – laboratory centre, creating favourable conditions for business and science cooperation in attempt to carry out high level R&I activities in orthopaedics and rehabilitation.	
Stimulating blood circulation in hands and feet of using mechanical vibrations, http://www.vilim.lt/.	MB Fidens, Kaunas University of Technology, Kaunas Science and	A bracelet type prototype for stimulating blood circulation in hands and a training device-type prototype for feet are currently developed, medical tests are being	





The operation principle "ViLim" system, developed by "Fidens", is	Technology Park, Agency for Science,	performed. In the near future, it is planned to carry out development of the final prototype,
based on mechanical stimulation	Innovation and	reduce the scale of the device and initiate
generated by vibrational engine.	Technology.	commercialization.
System is developed to address problems in the human circulatory		
system. The system is oriented in		
solving circulatory problems of		
patients with diabetes or arthritis,		
can lead to mortification of limbs or		
prolonged healing of wounds. A		
wide applicability of the system		
was achieved during the process of		
development, not only limited to the		
before-mentioned illnesses.		

5. Regional strategies/analyses/studies carried out in or relevant for Home Care

This section provides references to strategies, analyses and studies carried out that are relevant to Home Care segment.

Market analysis name	Short description of the aim of the analysis	Website link for more information / download
Situation of the disabled in the labour market; participation in vocational rehabilitation programme of people with different types of disabilities and employment result tendencies in Lithuania after completing such programmes (Neįgaliųjų padėtis darbo rinkoje, skirtingą negalios pobūdį turinčių asmenų dalyvavimo profesinės reabilitacijos programoje ir šių asmenų įdarbinimo rezultatų, baigus profesinės reabilitacijos programą, tendencijos Lietuvoje)	Aim of the study – to analyse the situation of the disabled in the labour market and participation in vocational rehabilitation programme of people with different types of disabilities and employment result tendencies in Lithuania after completing vocational rehabilitation (2010 - 2012) programmes; to develop proposals for quality improvement of vocational rehabilitation services for increasing employment of the disabled who have completed such programmes.	http://webcache.googleusercontent.com/search?q=cache:cRKvktSGYPgJ:www.reabilitacija.lt/uploads/documents/riedas_r72012.pdf+&cd=7&hl=lt&ct=clnk≷=us&client=firefox-b-ab#12
Working motivation of the disabled, situation in the labour market and employment efficiency tendencies in Lithuania of persons who have completed vocational rehabilitation programme (Neįgaliųjų motyvacija dirbti, asmenų, baigusių profesinės reabilitacijos programą, padėtis darbo rinkoje ir įdarbinimo efektyvumas)	The aim of this study – to analyse the motivation to be involved in the labour market of the disabled, to investigate the situation in the labour market and employment efficiency (considering the type of disability) of the disabled who have completed vocational rehabilitation programmes, also to develop proposals to increase motivation and employment efficiency.	http://webcache.googleusercontent.com/search?q=cache:xXNcwRJizMsJ:www.reabilitacija.lt/uploads/documents/yrimo_ietuvoje_santrauka.pdf+&cd=6&hl=lt&ct=clnk≷=us&client=firefox-b-ab





6. Quadruple-helix cooperation in R&I

The "quadruple-helix cooperation in R&I" section provides more detailed review of existing quadruple-helix model research projects / cooperation initiatives in general health care (with a potential to transfer to a Home Care segment) as well as Home Care segments including the list and description of the most significant ones. The projects / cooperation initiatives cited for general health sector aim to provide comparison of quadruple-helix model based research and innovations usage in general health sector compared to sector of Home Care R&I usage only. The last part of this section reveals attitudes of the main actors in R&I from all 4 helixes (formal and informal health care providers, business & business supporting actors, research and public institutions) towards using quadruple-helix model based cooperation in R&I.

Quadruple-helix model based research projects / cooperation initiatives in general health R&I (excluding Home Care R&I but with a potential for transfer into Home Care segment, both pure regional or international with regional implementation)

SMART WEARABLE SENSOR SYSTEM FOR HUMAN HEALTH MONITORING http://www.balteccnc.com/lt/Apiemus/Projektai/id-24/ A modular wearable sensor and data analysis system was developed during the course of the project providing conditions for development and spread of new health promoting products and services. The system consists of innovative biocinematic and electro-physiological parameter sensors and a new, adapting to the user signal processing and analysis software.

Quadruple-helix model based research projects / cooperation initiatives in Home Care R&I

ESTABLISHMENT OF ADVANCED ORTHOPAEDIC AND REHABILITATION METHOD CLUSTER OPEN ACCESS R&I INFRASTRUCTURE http://www.viltiesziedas.lt/u ploads/documents/klasteris .docx The cluster combines Lithuanian universities and applied science institutions, orthopaedic and rehabilitation sector, public and private companies working on electronic equipment, laser and IT development, manufacturing and distribution. The organisations formed a cluster in an attempt to cooperate in R&I activities, developing and providing innovative orthopaedic and rehabilitation solutions for the market and as well as increasing competitivity of the cluster and separate companies.

Attitude of main R&I actors from all 4 helixes towards using quadruple-helix model based R&I cooperation

Attitude of actors from the citizens / users helix (formal + informal health care providers, elderly care recipients) towards using quadruple-helix R&I cooperation Actors from citizens / users helix uniquely agree that they are very low or completely excluded from the quadruple-helix R & I cooperation. The only involvement measure in the the political level there are general public events, which are featured the new policy instruments, programs or trends. Basically, however, they are not intended for cooperation, but rather of a formal nature. Businesses also in turn is further away from the user and does not see them as potential cooperation partners whose opinion may lead to the emergence of innovation. Science sector also does not see the he need to cooperate with actors from the citizens / users helix.

Attitude of actors from the business helix (businesses + business supporting actors) towards using quadruplehelix R&I cooperation Typically, the government is not inclined to cooperate with the business sector. Cooperation is limited to formal events and little value working groups. In essence, the government cooperates only with individual large companies or research institutions, whose opinion is taken into account and consulted on the new financial instruments or planned measures. Cooperation with the R&D sector recently led to quite a number of EU financial investments in this area. Therefore,





	cooperation is gradually growing and is receiving positive results but is a risk that at the end of the funding period, this cooperation could be reduced.
Attitude of actors from the research helix towards using quadruple- helix R&I cooperation	The government is not inclined to cooperate with the research sector. Involvement of interested parties is merely declaratory in nature, mainly covering public events. Cooperation with business is slowly growing, but universities and research institutions are still heavily concentrated in academic activities, rather than to work with the business. Scientific institutions acting in the field of R&I, which is affiliated with Home Care activities, cooperate with a limited number of service providers, with whom is began a long-term relationship, but others remain an unexploited potential due to lack of time and resources.
Attitude of actors from the public institutions helix (excluding SF owner – health insurance companies, health care and social care regulator, etc.) towards using quadruple-helix R&I cooperation	In recent years, cooperation with stakeholders is increased. There are organize consultative events, discussions, are taken into account their opinion in the formation of new regulatory documents and and etc. However, interested parties (especially the NGO sector) competences to provide reasoned proposals or positions are still quite low. Business involvement is also not active and is limited to private interest lobbying.
Attitude of the Operational Programme owner towards using quadruple-helix R&I cooperation	Interested parties are strongly encouraged to get involved in full co-operation activities. From the Operational Programme owner side collaboration with stakeholders include the OP development process and priority delivery activities. The public is presented expert foresight on the formulation of the Action Programme priorities, targets and indicators. There are always discussed the planned intervention, in order to ensure the planned investment suitability and effectiveness.

7. Potential improvements of the Operational Programme and other possible improvements in regional innovation ecosystem

The "Potential improvements of the Operational Programme and other possible improvements in regional innovation ecosystem" section provides suggestions on possible improvements for support of R&I in Home Care via quadruple-helix cooperation in 2 levels: via the Operational Programme management, strategic focus and operations, and via any other possible improvements in the regional Innovation ecosystem.

List of possible improvements in the Operational Programme regarding its support for quadruple-helix based R&I in Home Care as based on brainstorming discussions within HoCare Regional Multistakeholder group	First, in order to improve the Operational Programme regarding its support for quadruple-helix based R&I in Home Care, need to encourage cooperation between all stakeholders. At present, cooperation is the only declared, but basically without creating any added value. It is also important to improve the cooperation between the main responsible ministries – The Ministry of the Economy, the Ministry of Education and Science, the Ministry of Social Affairs and Labour - in order to promote research in the field of home care, because this time, the ministries does not cooperate. One of the possible solutions - to create an interministerial action plan to encourage R&I activities in Home Care areas. Also, in achieving the broader stakeholder participation, there is no need to assess their inclusion as a formal process, but try to take into account their views and at the same time encourage them to actively participate in the formulation of new proposals and solutions for existing and potential incentives. A very important factor is the home care area, as having great potential for the development of innovation, actualization, because currently in Lithuania this is not a priority, but state intervention in this area usually limited to social support.
Other ideas + possible improvements in the regional innovation ecosystem regarding	Since in Lithuania innovation and R&I activities in the field of home care are quite rare, first it must be identified the existing potential and stakeholders opportunities. Perhaps in Lithuania is the potential of the science side, but users (state or end-user) purchasing power is not enough to invest in innovative





support for quadruplehelix based R&I in Home Care as based on brainstorming discussions within HoCare Regional Multistakeholder group solutions or the business do not see opportunities the created product to realize on a larger scale. In order to identify the existing potential could be create a stakeholder forum with the participation of all interested parties with the task of purification of the situation to formulate broader proposals for policy concerns that field development and enlargement.

8. Other information

In this section, any other relevant information for future regional analysis might be added.

Any other relevant	-
information for regional	
analysis	

9. Information gathered by ...

The information within this template has been gathered for the purpose of regional analysis within the HoCare project (Interreg Europe Programme) by the following organization in cooperation with members of the regional HoCare multi-stakeholders group in Lithuania.

Region	Lithuania
Organization name(s) in local language	Lithuanian Innovation Centre
Name of the contact person(s)	Giedrė Stumbrytė
Contact email(s)	g.stumbryte@lic.lt

AUTHOR - PARTNER OF THE HOCARE PROJECT

Lithuanian Innovation Centre - www.lic.lt

