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WP1. ANALYSIS AND ROADMAPING: PUBLIC HEALTH EDUCATION IN MONTENEGRO

**DELIVERABLE 1.4 *'Roadmap for New Educational System in
Public Health in Montenegro- VERSION I'***

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1. Introduction and preliminaries

Medicine is currently undergoing a major revolution that is gradually transforming the nature of healthcare from reactive to preventive. The changes are catalyzed by a new systems approach to disease that have triggered the emergence of keeping people healthy and active since, as this will in the long run have a positive impact on productivity and competitiveness. However, developing, managing and exploring integrated models of service delivery and cooperation across many sectors is challenging.

Health systems in EUROPE are at the core of its high level of social protection and they are a cornerstone of the European social market economy. The healthcare sector accounts for 8% of the total European workforce and for 10% of the EU's GDP. The EU Health Strategy 'Together for Health' gradually gives a consistent and integrated policy framework to respond to common challenges in the field of health that combines legislation, cooperation and financing. It puts an additional strain on the sustainability of health systems and raised the urgency to channel EU efforts towards economic recovery and growth as outlined in the Europe 2020 strategy. Investing in health can lead to smarter spending — not more spending — that brings savings or secures better health outcomes. It may take different forms, such as change in the management of care to improve efficiency while improving health outcomes, investment in healthcare staff, training or equipment and initiatives to promote good health and prevent diseases. Furthermore, universal access to safe, high-quality, efficient healthcare services, better cooperation between social and healthcare services and effective public health policies to prevent chronic disease can make an important contribution to economic productivity and social inclusion. Reforms complemented by the above mentioned targeted investments should foster cost-effective innovation to achieve good health outcomes and aim to avoid increasing disease and financial burdens in the long term. Thus, the following key areas are prioritized in 'Investing in Health' (contributing to Europe 2020 objectives of smart, sustainable and inclusive growth): (i) Investing in sustainable health systems, (ii) Investing in people's health as human capital, (iii) Investing in reducing health inequalities, and (iv) Investing in health through adequate support from EU funds, on which basis EU member states adopted National Strategies for Health.

Montenegro is a small country facing rapid changes and development challenges in all areas that are relevant for societal progress and prosperity. ME Government and Ministry of Health defined health as a priority value and, as the major developmental task, in order to: prepare a set of measures to achieve optimal health of the population, reduce

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inequalities in health between regions and among citizen groups, promote healthy behaviour and prevention of early morbidity, improve accessibility, safety and quality of health services, invest in human capacities and modernization of health facilities.

The strategic document 'Master Plan: Development of Health care System of ME 2010 - 2013' directs development of health care system in ME in line with the overall development of the country and by following the guidelines of the healthcare strategy of the EU 'Together for Health', thus aimed on providing conditions for efficient, rational and sustainable development of the health care system, creating the conditions for the health care system to become a part of the health integration into the EU, in accordance with universal values, goals and instruments.

Even that health status of the population in ME, when measured by health indicators, is at the level of the Central and Eastern European countries, recent EC working document about ME accession negotiation (Report -ME 2015), in the Chapter 28- 'Consumer and health protection ' highlights that "ME should in particular: Do more to improve health promotion and prevention and achieve sustainable improvement in patient safety and the quality of healthcare", thus showing lacks in implementation of Master plan from 2013.

This is why ME Government identified priority aims to: (i) develop national programme of preventive health measures in all health institutions, (ii) develop post-graduate studies in public health, (iii) develop cost-effective measures to invest in sustainable health system, (iv) improve mechanisms for the sound implementation of the law on patients' rights in cross-border healthcare and raise awareness on this subject and on existing procedures, (v) continue with further improvements of integral information system (developed in 2010), by health technology assessments, etc.

The aim of the Roadmap is, based on previous experiences, to show most appropriate steps to be taken for proper educational improvements moving towards creation of public health community at national level in Montenegro. The Roadmap will offer information about the profiles of the needed experts and also about the specific needs of public health education in Montenegro. The Roadmap will provide us with short terms and long terms goals for public health education development in Montenegro.

The **short term goals** will represent the needs for creation of the basis in formal and informal public health education. It is very important to raise awareness among citizens regarding public health issues and its importance for quality life. Furthermore, informal education of people shall contribute to strategic priorities defined at the Master Plan of the Development of Health system in Montenegro 2015-2020 (Montenegro, 2015), including improving the population health, health activity, preventive and proactive measures of



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health protection, quality of health care and patients' safety, etc. Also, education will help managers and authorities to manage their activities to improve preservation and improvement of health, organization and functioning of health system, financing, quality of health care and patients' safety, pharmaceutical policy, integrated health information system, cooperation with other sectors and society as a whole.

The Roadmap will give us insight in **Long term period** that might be long enough for Montenegro to establish integral public health educational system at national level.

The Roadmap will also provide Plan - Do - Check - Act (PDCA) for each plan activity. In that way this document is not only intended to be an overview of what should be done but also will provide detail description of steps that should be done to the end of the project to achieve the defined goals.

As being created on the beginning of project implementation, this document presents the **first version of the Roadmap**, which is expected to be updated after making the analyses of the level of achievement of the specified short-term goals. The first period for achievement and impact analyses is expected after first 18 months of project implementation (May 2018).



2. Goals of the Roadmap

2.1. Short-term goals (2017-2019)

For short term period (which is for this Roadmap limited on three years, 2017-2019), the following priorities are defined:

- **Raise awareness about public health among Montenegrin population in general.** Target should be to educate all population about importance of health as a key goal for quality of life, and make them familiar with basic organization of public health at national level, patients' role in the health system, their safety, rights and responsibilities.
- **Provide detailed analyses of existing situation in public health in Montenegro cross-matched with best EU standards and practices.** The cross-matching analyses is needed in order to identify the needs at national level in Montenegro, and implementation paths in accordance with best practices at EU and global level.
- **Establish sustainable strategies for trainings of professionals in multidisciplinary public health fields of law, management, economy, ICT and medicine.** Target should be to ensure that all professionals working at managerial positions, including directors, policy makers, managers at wide spectrum of institutions included at national health system and connected sectors.
- **Create core elements of formal educational system in public health (including all levels, from undergraduate to post-graduate studies, including MSc and PhD studies).** In order to ensure sustainable education in public health, educational system should be established, including both, formal and informal education. In accordance with the above priorities, its core elements should include literacy of public health with multidisciplinary approach at all levels of undergraduate studies, and also specialized education at Master and Doctoral levels. All other elements of educational system may be established later in full coherence with those core elements.
- **Raise awareness about new study programs and attract future students at national level in Montenegro.** New study programs will provide new qualification as being unique at national level, and thus more promotion and recruitment at national level is essential.
- **Integrate modern aspects of evidence based teaching and learning in public health.** Modern ICT enhanced tools for education and learning shall be developed and integrated in all aspects of public health education and training.



- **Enhancement of the level of competencies and skills of staff members** making them highly skilled to implement public health teaching models of innovation and good practice; respecting the diversity of national and EU population health challenges and threats
- **Increase visibility at international level and strengthen connections at national, regional and international level.** Building grounds for further capital development of educators in public health through entering into European associations for public health educators, fulfilling their requirements at institutional and professional levels, certifying teachers in interdisciplinary public health domains, etc.

2.2. Long-term goals (2019-2024)

Long terms period (which is for this Roadmap planned on five years, 2019-2024), might be long enough for Montenegro to establish integral public health educational system at national level, and thus the following priorities are defined:

- **Implementation of sustainable training strategy to train professionals in multidisciplinary fields of public health;**
- **Establishing cost effective sustainable plans for specialized trainings in multidisciplinary filed of public health;**
- **Integrate professionalization in multidisciplinary fields of public health in regular programs at private and public institutions/agencies;**
- **Integrate professionalization certifications as mandatory requirements for public health working positions at relevant public/private institutions/agencies;**
- **Create R&D environment in the field of public health.** All improvements and advancements at national level should be initiated and supported from researchers and innovators, as key driver of national development and growth.
- **Increase excellence and widen participation of Montenegrin R&D public health community to international level.**
- **Create sustainable strategies for attracting and retaining young professionals and researches in public health at national level in Montenegro.**

General idea of this Erasmus+ KA2 project is to provide core elements essential for achievement of defined short term goals with sustainable plans focused on long term goals and their realisation.



3. Plan-Do-Check-Act (PDCA)

3.1. Plan-Do-Check-Act for WP1

WP1- 'ANALYSIS AND ROADMAPING: PUBLIC HEALTH EDUCATION IN MONTENEGRO'		
PLAN	<p>Goals:</p> <ul style="list-style-type: none"> - Create a good research ground for carrying out the other project WPs by reviewing and analyzing current EU practice and principles of public health principles, practice and education at both, institutional and national levels at EU and at global level. - Create thematic working groups among project partners in different interdisciplinary fields of public health - Help ME institutions to summarize their current level at public health education and cross-match with EU practice and standards, on which bases the Roadmap will be created for improving educational system, spreading the excellence and human capital development. 	<p>WP leader: University of Athens (Greece)</p>
	<p>Key measures:</p> <ul style="list-style-type: none"> ○ Analyses of existing approaches and best practices at EU and global level ○ Creation of review documents ○ Cross-matching with current state in Montenegro ○ Creation of suggestions, recommendations and action plan at national level in Montenegro 	<p>What-Whom-When:</p> <ul style="list-style-type: none"> ○ Experienced EU partners shall provide inputs related to best EU practices and approaches ○ ME partner institutions shall contribute in analyzing existing situation at national level ○ Partner institutions shall share experience and



		<p>knowledge transfer to ME partners</p> <ul style="list-style-type: none"> o Work on creation of all deliverables jointly led and coordinated by activity leaders
DO	<ul style="list-style-type: none"> o Create methodological framework for analyses of existing approaches and cross-matching with EU standards and practices o Distribute tasks and responsibilities o Coordinate among all partners aimed on high quality research in respect with timeframes 	<p>Create documents:</p> <ul style="list-style-type: none"> o Deliverable 1.1- Report: Analysis of EU practice for public health o Deliverable 1.2- Report: Analysis of EU practice for public health education o Deliverable 1.3- Report: Cross-matching of practices in ME with EU standards o Deliverable 1.4- Roadmap: New Educational System in Public Health in Montenegro
CHECK	<ul style="list-style-type: none"> o Use all existing strategic documents at both, national and international level o Collect reports and other evidences about best practices from international institutions and associations o Check the relation between strategic priorities, existing situation and capacities at national level in Montenegro 	
ACT	<ul style="list-style-type: none"> o Identify possible improvements o Prepare improved versions of documents and presentations o Prepare printed versions of documents 	



3.2. Plan-Do-Check-Act for WP2

WP2- 'HUMAN CAPACITY BUILDING IN PUBLIC HEALTH EDUCATION IN MONTENEGRO'		
PLAN	<p>Goals:</p> <ul style="list-style-type: none"> ○ Help staff members from ME HEIs to enhance their expert knowledge in public health by sharing evidence-based public health teaching models of innovation and good practice; respecting the diversity of national and European population health challenges and threats ○ Support organization of training, workshops, networking, good practice exchange ○ Contribute to educators' capital development, teaching capacity building ○ Increase the visibility of ME HEIs staff members and participating institutions' profiles in international teaching community in the interdisciplinary area of public health. 	<p>WP leader: Heidelberg University, Germany</p>
	<p>Key measures:</p> <ul style="list-style-type: none"> ○ Analyses of existing approaches in teaching and education commonly used at ME HEIs ○ Create plan for capacity building of ME staff members ○ Organise trainings and workshops ○ Expand connections and links, improve visibility and knowledge transfer with institutions and associations at international level 	<p>What-Whom-When:</p> <ul style="list-style-type: none"> ○ Experienced EU partners shall provide inputs related to best EU practices and approaches ○ EU partners: capacity building, sharing of teaching and education approaches, materials, etc. ○ EU partners: help in building new connections and links ○ ME partners: review existing approaches, participate in trainings,



		learn from EU partners and transferred knowledge, etc.
DO	<ul style="list-style-type: none"> ○ Create thematic groups in multidisciplinary fields of public health ○ Create training plan within each thematic group ○ Prepare training materials and organise trainings for staff members ○ Initiate new connections and links at international level: key associations, bodies, agencies, HEIs, etc. 	<p>Create documents:</p> <ul style="list-style-type: none"> ○ Deliverable 2.1.- Report: Analyses of teaching approaches commonly used in ME ○ Deliverable 2.2.- Events/ Reports/Teaching materials: Teaching Competencies Development of academic staff from Montenegro ○ Deliverable 2.3.- Report: Strengthening cooperation with EU authorities in healthcare education
CHECK	<ul style="list-style-type: none"> ○ Review best practices in teaching public health fields commonly used at EU and global HEIs ○ Review modern ICT enhanced tools and approaches (e.g. blended learning, evidence based, etc.) ○ Review membership requirements to be enrolled at key international organisations and institutions 	
ACT	<ul style="list-style-type: none"> ○ Identify possible improvements ○ Prepare improved versions of documents and course/dissemination material and plans ○ Prepare printed versions of documents ○ Present material and documents to national authorities 	



3.3. Plan-Do-Check-Act for WP3

WP3- 'DEVELOPMENT OF STUDY PROGRAMS IN PUBLIC HEALTH IN ME'		
PLAN	<p>Goals:</p> <ul style="list-style-type: none"> ○ Detailed analyses of existing educational programs in ME related to public health interdisciplinary fields ○ Identification and creation of new study programs; improvements of existing and update of courses/curricula; all in accordance with best EU practices 	<p>WP leader: University of Debrecen, Hungary</p>
	<p>Key measures:</p> <ul style="list-style-type: none"> ○ Analyses of existing educational programs in ME related to public health interdisciplinary fields ○ Create plan for establishment of new study program(s) and new courses/curricula ○ Accreditation new study program(s) in accordance with national regulations of higher education ○ Formal integration of updated courses/programs into the existing curricula ○ Create ICT support for evidence based teaching and learning in public health 	<p>What-Whom-When:</p> <ul style="list-style-type: none"> ○ Experienced EU partners shall provide inputs related to their practices of public health education; teaching and training process ○ ME partners: review of existing programs and courses; accreditation of new programs; formal integration of updated courses/programs ○ All partners: modelling and implementation of ICT support to teaching and training in public health
DO	<ul style="list-style-type: none"> ○ Create thematic groups in multidisciplinary fields of public health ○ Create training plan within each thematic group ○ Prepare training materials and organise trainings for staff members 	<p>Create outputs:</p> <ul style="list-style-type: none"> ○ Deliverable 3.1.- Report: Analyses of educational programs in Public Health ○ Deliverable 3.2.- Report: Creation of new and



	<ul style="list-style-type: none"> ○ Initiate new connections and links at international level: key associations, bodies, agencies, HEIs, etc. 	<p>updated programs and courses curricula</p> <ul style="list-style-type: none"> ○ Deliverable 3.3.- Accreditation material for new study program(s) ○ Deliverable 3.4.- Accredited new study program(s) ○ Deliverable 3.5.- Integrated new/updated courses into the curricula of ME partner HEIs ○ Deliverable 3.6.- New teaching and learning materials in public health fields ○ Deliverable 3.7.- Developed ICT support to distance/ blended learning ○ Deliverable 3.8.- Developed National Platform for Education and Research in Public Health
CHECK	<ul style="list-style-type: none"> ○ Review best practices in education of public health at EU and global level ○ Check requirements and procedure for accreditation of new study program at national level in Montenegro ○ Review best practices of ICT support for teaching and training as well as evidence-based learning approaches for public health education 	
ACT	<ul style="list-style-type: none"> ○ Identify appropriate study program(s) and course(s) to be implemented at ME universities ○ Prepare materials in accordance with 	



	<p>accreditation procedure at national level</p> <ul style="list-style-type: none"> ○ Promote innovative ICT support to teaching and learning 	
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3.4. Plan-Do-Check-Act for WP4

WP4- 'PILOTING AND EVALUATION'		
PLAN	<p>Goals:</p> <ul style="list-style-type: none"> ○ Provide first generation of professionals in public health fields ○ Organise high quality education in study programs and courses of public health ○ Increase knowledge of ME HEIs staff members in quality assessments and assurance ○ Support organisation of workshops for students at ME HEIs organised by EU staff members, serving as a tool for fostering courses and exchange of students and teachers between ME and partner EU countries ○ Conduct comprehensive evaluation assessments over organised education process in public health in ME, and provide corrective measures and directions for improvements 	<p>WP leader: University of Donja Gorica, Montenegro</p>
	<p>Key measures:</p> <ul style="list-style-type: none"> ○ Enrolment of the first generation of students ○ Organisation of education process for enrolled students; quality assurance and monitoring ○ Capacity building of staff members at ME HEIs about quality assurance of public health education 	<p>What-Whom-When:</p> <ul style="list-style-type: none"> ○ ME partners: publish public call for the first generation of students, evaluation of registered students, enrolment. ○ All partners: organise teaching process for students, quality control and monitoring of teaching process ○ EU partners: participate at



		organisation of workshops for students, organise capacity building of ME HEIs regarding quality control and monitoring of teaching in public health.
DO	<ul style="list-style-type: none"> ○ Create evaluation criteria for enrolment of 1st generation of students ○ Announce public call for enrolment, conduct evaluation and make selection of candidates; enrol 1st generation of students ○ Organise teaching process ○ Conduct quality control and monitoring ○ Organise workshops for ME HEIs aimed on presenting modern trends in quality assessments of teaching processes 	<p>Create documents/outputs:</p> <ul style="list-style-type: none"> ○ Deliverable 4.1.- Report: Enrolment of new generation of students ○ Deliverable 4.2.- Events/Report/Training materials: Strengthening cooperation with EU partner HEIs through organisation of workshops for students ○ Deliverable 4.3.- Events/Report/Training materials: High standards and quality assurance of educational process and teaching ○ Deliverable 4.4.- Evaluation of teaching process and students experience
CHECK	<ul style="list-style-type: none"> ○ Review best practices in assessments of teaching processes in public health ○ Review commonly used criteria for enrolment of new generation at study programs in public health at EU level and make them adopted to Montenegrin educational system and practices 	
ACT	<ul style="list-style-type: none"> ○ Identify actions if low interests for new study programs occurs 	



	○ Identify actions in case of poor motivation of staff members for high quality in teaching and training	
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4. Conclusion

The Roadmap presents first result of planning actions at national level in Montenegro, created in accordance with the project goals/objectives and planned activities.

Having in mind that PH-ELIM project is prepared in accordance with realistic needs by cross-matching of both, strategic orientation and priorities of Montenegro as a small country and best EU and global practices.

The Roadmap will be updated two times: firstly, after 18 months of project implementation and secondly, at the end of project implementation, by considering achieved results and their impacts at national level in Montenegro.