

Brussels, 27 May 2022

COST 036/22

DECISION

Subject: Memorandum of Understanding for the implementation of the COST Action “PROmoting GeRiAtric Medicine IN countries where it is still eMerGing” (PROGRAMMING) CA21122

The COST Member Countries will find attached the Memorandum of Understanding for the COST Action PROMoting GeRiAtric Medicine IN countries where it is still eMerGing approved by the Committee of Senior Officials through written procedure on 27 May 2022.

MEMORANDUM OF UNDERSTANDING

For the implementation of a COST Action designated as

COST Action CA21122
PROMOTING GERIATRIC MEDICINE IN COUNTRIES WHERE IT IS STILL EMERGING
(PROGRAMMING)

The COST Members through the present Memorandum of Understanding (MoU) wish to undertake joint activities of mutual interest and declare their common intention to participate in the COST Action, referred to above and described in the Technical Annex of this MoU.

The Action will be carried out in accordance with the set of COST Implementation Rules approved by the Committee of Senior Officials (CSO), or any document amending or replacing them.

The main aim and objective of the Action is to define the content of education and training activities on basic principles of older people' care, destined for professionals non-specialists in geriatric medicine (GM) and adapted to the local context, the needs and assets of stakeholders and the pragmatic possibilities of involved settings, especially for countries where GM is still emerging.. This will be achieved through the specific objectives detailed in the Technical Annex.

The present MoU enters into force on the date of the approval of the COST Action by the CSO.

OVERVIEW

Summary

Geriatric Medicine (GM), which is the field of medicine that is concerned with the health and well-being of older adults, can play a crucial role in the alignment of health systems to the needs of the constantly growing older populations. However, countries have varying GM development backgrounds.

This Action's objective is the definition of the content of targeted education and training activities in GM for health care professional across various clinical settings, destined mainly for countries where GM is still emerging and adapted to the local context, the needs and assets of stakeholders and the pragmatic possibilities of involved settings.

This will be accomplished by the description of the state-of-the-art of GM education in involved countries, the identification of the global and more specific local needs regarding the development of GM-related clinical skills and competencies of medical doctors and allied healthcare professionals involved in the care of older people across all the spectrum of health care services, the definition of the content of training courses in GM destined for non-geriatricians, by adjusting international standards to local needs and pragmatic possibilities, and the dissemination of results on identified needs and proposed solutions to stakeholders, policy makers and the public. Countries with well-established GM systems will contribute with their experience and know-how in clinical and academic GM.

Pragmatic solutions that aim to address the specialized health care needs of older people, such as tailored education and training of existing workforce, are feasible, affordable and exponentially efficient, and, thus, highly relevant.

Areas of Expertise Relevant for the Action <ul style="list-style-type: none"> • Clinical medicine: Geriatrics and gerontology • Educational sciences: Education: training, pedagogy, didactics 	Keywords <ul style="list-style-type: none"> • Geriatric Medicine • Professional Education • Older people • Health care
---	---

Specific Objectives

To achieve the main objective described in this MoU, the following specific objectives shall be accomplished:

Research Coordination

- Description of the state-of-the-art of GM in involved countries, with focus on the specialization of GM and the opportunities of training in GM of health care professionals
- Identification of the global and more specific local (educational and organizational) needs regarding the development of GM-related clinical skills and competences of medical doctors and allied healthcare professionals involved in older people's care, across all the spectrum of health care services in countries where GM is still emerging
- Definition of the content of a training program in GM destined to the non-specialist (i.e. non geriatrician) healthcare professionals, by adjusting international standards to local needs and pragmatic possibilities. Provide variations according to the particular setting to which the program will be addressed and define features of online versions.

- Dissemination of results on identified needs and proposed solutions, including adjusted GM curricula for the continuous professional education of non-GM-specialists and ways to implement them, to stakeholders and policy makers.

Capacity Building

- Creation of an international multidisciplinary stakeholders' network involved in older people's the care, aiming to promote specialized care and prevention strategies for older people, mainly in countries where GM is emerging (but also beyond), by producing professional education recommendations that adjust international strategies to pragmatic local needs and possibilities.
- Creation of the networking ground and a robust scientific international cooperation to allow twinning actions, enhance the potential for further research collaborations and actively involve Young Researchers and Innovators and Inclusiveness Target Countries in the Action's activities for better identification and tackling of educational needs and promotion of research opportunities.
- Creation of a robust scientific international cooperation that could gain endorsement of international societies and organisms related to older people's health and welfare and influence policymakers to implement actions promoting specialized well-targeted care to seniors and reinforce the integrated model of care across the spectrum of national healthcare systems
- Setting of a solid ground for promoting education of existing health workforce as strategic, pragmatic, cost-effective and innovative solution regarding public health challenges due to present and forthcoming demographic changes, especially to trigger change in countries with poor GM background and limited resources.

TECHNICAL ANNEX

1. S&T EXCELLENCE

1.1. SOUNDNESS OF THE CHALLENGE

1.1.1. DESCRIPTION OF THE STATE OF THE ART

The challenge of demographic change towards a growing share of older people is an unquestionable and worldwide phenomenon. Average life expectancy at 65 years on the European Union (EU) of 28 countries was 19.9 years in 2017 and epidemiological trends about a growing old population are similar all over Europe (1). Moreover, the share of people 80 years and older is continuously growing.

The opportunities that arise from increasing longevity will be largely dependent on the key factor of the health of these older populations, since along with this predictable phenomenon of prolongation of life comes, in many cases, an increased burden of disease and disability, which constitutes a major socioeconomic challenge for local health and social security systems and for the international community. World Health Organization (WHO) committed to a decade of concerted global action, the Decade of Healthy Ageing, from 2020 to 2030 (2). Strategic planning on ageing and health, as stated during the 69th World Health Assembly, also included the commitment of member countries to action on Healthy Ageing at a local level, to the alignment of health systems to the needs of older populations and to the development of sustainable and equitable systems for providing long-term care (3). Similarly, the report of the European Academy of Sciences, stated that it seems reasonable to develop sustainable and interprofessional care systems for the care of ageing societies (4).

Geriatric Medicine (GM), which is the field of medicine that is concerned with the health and well-being of older adults (5), can play a crucial role in this strategy. A considerable part of disability and poor quality of life in the latest years of life is avoidable or effectively manageable. The main cause of disability are chronic non communicable conditions, many of which can be prevented or delayed by timely lifestyle, medical or environmental interventions (3). GM addresses not only physical, but also mental, emotional, social and environmental needs of the older person, emphasizing preservation of functional independence even in the presence of multiple chronic diseases. In the core of GM lies the Comprehensive Geriatric Assessment, which typically requires the collaboration of the multidisciplinary geriatric team, consisting not only of medical doctors, but also of allied health care professionals. The GM approach has been found effective in improving health, activity and function in frail older people, in reducing morbidity and mortality, in preventing hospital admission, and in delaying or postponing institutionalization (6-8). GM expertise is needed in all vertical—primary, secondary and tertiary—levels and also in the horizontal level of multi-professional teams. GM may act as key driver for innovation of health care, as foreseen also by WHO, and promote transformation of healthcare by delivering evidence-based care standards to all professions involved in the care processes across Europe and by aligning with integrated care and health co-production models (9-10).

However, countries currently have varied geriatric infrastructure backgrounds (2,11-12) and every single older person, residing in European and proxy countries, does not seem to have the same opportunities of access to specialized health care services (13-15). Beyond economic and societal status variations across Europe and the wider neighbour area, health care and health professionals' educational systems also vary widely among countries. Undergraduate education in GM seems globally underestimated in Medical Faculties of several European countries, especially Southern and Eastern European countries

and the proxy area, and at a post-graduate level, a high heterogeneity is observed (15,16). Currently, only a few Balkan countries have GM as a recognized medical specialty or subspecialty (11). Consequently, familiarization of health care professionals with basic principles of the specialized care of older people varies widely across Europe and reflects a low level of preparedness for pragmatic needs. The problem is even more pronounced, adding on the top of the EU health care workforce crisis (4).

Raising public awareness about the added value of specialized geriatric care and geriatric literacy among health care professionals could lead to convincing governments and to the application of targeted global actions, at a local and broader international level, towards the enhancement of the health services and the quality of life of older people across Europe and the proxy area.

1.1.2. DESCRIPTION OF THE CHALLENGE (MAIN AIM)

Facing the global demand for Healthy Aging and quality health care services for the growing share of older people, health care systems need to reshape towards a more integrated care approach; from community to primary care, to institutions, all dealing with older people. This journey will involve many professions alongside a patient's journey who need to align their practices to a personalized and holistic care approach.

Many countries outside the core of central and north European continent face the worrisome reality of almost complete unpreparedness to deal with the demographic changes and even more with the illness and disability that it inevitably carries. Even in countries with a more longstanding tradition in geriatric services, knowledge and skills in geriatric principles of non-specialists health care professionals are often inadequate. All these lead to suboptimal services to older people, inequality in health care delivery, barriers in interdisciplinary cooperation and a fragmented care. The COVID-19 pandemic tragically brought into the light health care disparities, especially regarding access to care of older people and pointed out the urgent need for reforming of health care systems, practices and attitudes (17). International cooperation is indispensable when dealing with global challenges.

Geriatric medicine has a longstanding experience, evidence and tradition in older people's care and geriatricians know how to tackle inter professional care (18,19). Furthermore, the European Geriatric Medicine Society has set standards for geriatric education for all medical doctors (undergraduate training) (20), for geriatric medicine specialists (postgraduate curriculum) (21), as well as for core capacities for all health professionals involved in the care of older people (22). Guidelines have been developed and published also by the European College of Gerodontology, concerning the under-, and postgraduate teaching, the continuous education and also the implication of primary health care providers in implementing oral health prevention and care for dependent older adults (23,24). Therefore, there is already a solid basis of elements to evolve regarding the geriatric education and training. Still, adjustments need to be scheduled according to particular needs and assets of countries with weaker geriatric backgrounds.

The main aim/challenge of the PROGRAMMING (PROmoting GeRiAtric Medicine IN countries where it is still eMerGing) COST Action is the definition of the content of educational programs on basic principles of care of older people, destined for professionals non-specialists in GM and adapted to the local context, the needs and assets of stakeholders and the pragmatic possibilities of involved settings.

Dramatic changes in health care systems do not occur from scratch just in a few years' time. However, investing in education and training seems a strategic starting point. Pragmatic solutions that aim to address the specialized health care needs of older people, such as tailored education and training of existing workforce, are feasible, affordable and exponentially efficient, and, thus, highly relevant in the current context.

1.2. PROGRESS BEYOND THE STATE OF THE ART

1.2.1. APPROACH TO THE CHALLENGE AND PROGRESS BEYOND THE STATE OF THE ART

The PROGRAMMING COST Action will propose a feasible and pragmatic basis for cost-effective, high impact and, thus game-changing, key activities for advancing the health care of older people, especially in countries with weak geriatrics backgrounds. Key aspects of the Action are:

- The participation of Members coming from environments with different levels of GM development. Given the assumption that older people's needs and health-related problems are similar, different levels of systems' development for each Member reflect different conditions and challenges and different historical approaches to these problems. This could be the basis for sharing applied and efficacious provenly strategies that could work as potential solutions for others, e.g., by using a twinning approach. On the other hand, pitfalls of tested strategies of more experienced Members could ground the basis for healthier systems in places where they emerge from scratch. Sharing the know-how in the European community is essential. The high representation of countries with emerging GM in this Action and the collective effort to adapt existing knowledge in their particular context is an innovative approach to the global issue of the heterogeneity of GM education and services across the concerned area.
- Prestigious scientific associations and worldwide known experts participating in the Action will join forces for harmonizing GM education and scaling-up good clinical practice across participating countries.
- Interdisciplinarity lies in the core of GM, in the sense that medical doctors and allied health care professionals typically work as a team to optimize of the care of older people. Beyond this, the dissemination activities of the PROGRAMMING COST Action will bring together experts from other disciplines as well, such as information-communication technology (ICT), social media and marketing experts, older people's representatives, health care users and policy makers, to achieve the optimal alignment of the final product with pragmatic requirements and efficient solutions, building sustainable ecosystems. This global co-production approach is rather innovative for creating educational curricula.
- Already existing curricula are not necessarily applicable to countries where GM is still emerging. Therefore, versions tailored to local needs and possibilities are mandatory. In the process of deciding on the content of the training program, practical and organizational aspects will be considered so as they will be not only scientifically pertinent, but also feasible in the special circumstances of the countries in question.
- The PROGRAMMING COST Action will be the starting point for the opening of a dialogue with policy makers and governments of countries where GM is still emerging. Offering to policy makers ready-to-apply and easy to scale solutions (for instance pre-prepared curricula) could facilitate and accelerate the often difficult first steps of designing and applying new policies. Innovation lies in the bottom-up initiative by stakeholders, rather than responding to policymakers' call.
- The framework to be developed during this COST Action will also include components as outlined in the blueprint on digital innovation of the European Commission, making use of ICT solutions already during the time of the COST Action and beyond (25). Alternative methods of implementation of the proposed educational activities will also be considered, with the aim to overcome the limitation of lack of certified academic structures along many geographical zones of the involved countries and in order to provide a training alternative in case in presence participation is not possible or allowed (e.g., in case of a sanitary crisis like the COVID-19 pandemic).
- Using the networking of the PROGRAMMING COST Action as a starting point, the international community that will be constituted will make up a scientific core with critical mass, required expertise

and adequate experience to continue working also in other aspects for the advancement of GM, beyond the educational endeavour. Beyond the potential of a significant impact on health care policies, the facilitation of joint research efforts is also another advantage of this capacity building.

- On the top of the current crisis in health care workforce in EU, and probably all over Europe and neighbour area, there is an even more important shortage of professionals in the care of older people. Working in the field of ageing care does not seem to be attractive at that moment in many countries. This Action may also help to increase awareness and modify attitudes among professionals, improving visibility and boosting attractiveness of GM at an interprofessional level.

- Finally, any progress can be considered as progress beyond the state-of-the-art when relevant possibilities are almost completely lacking in several Member countries.

1.2.2. OBJECTIVES

1.2.2.1 Research Coordination Objectives

The main research coordination objective is the definition of the content of targeted education and training activities (basically a few days' continuous professional education courses) in GM for health care professionals across various clinical settings, destined mainly for countries where GM is still emerging and adapted to the local context, the needs and assets of stakeholders and the pragmatic possibilities of involved settings. Countries with well-established GM systems will contribute with their experience and know-how in clinical and academic GM and with hosting Young Researchers and Innovators (YRI) in their centers of excellence for Short Term Scientific Missions (STSM). The methodology to achieve this objective comprises of the following steps:

- Description of the state-of-the-art of GM in involved countries, with focus on the specialization of GM and the opportunities of training in GM of health care professionals to facilitate the innovation process throughout care systems

- Identification of the global and more specific local (educational and organizational) needs regarding the development of GM-related clinical skills and competences of medical doctors, allied healthcare professionals involved in the care of older people and other stakeholders, across all the spectrum of health care services (primary care, hospital, rehabilitation centre, nursing home, hospice and home care etc) in countries where GM is still emerging

- Definition of the content of a training program in GM destined to the non-specialist (i.e., non geriatrician) medical doctors and allied healthcare professionals, by adjusting international standards to local needs and pragmatic possibilities. Provide variations according to the particular setting to which the program will be addressed and define features of online versions.

- Dissemination of results on identified needs and proposed solutions, including adjusted GM curricula for the continuous professional education of non-GM-specialists and ways to implement them, to stakeholders and policy makers.

1.2.2.2 Capacity-building Objectives

Capacity-building objectives of the PROGRAMMING COST Action are:

- The creation of an international multidisciplinary stakeholders' network involved in older people's the care, aiming to promote specialized care and prevention strategies for older people, mainly in countries where GM is emerging (but also beyond), by producing professional education recommendations that adjust international strategies to pragmatic local needs and possibilities. In this collaborative international network, expertise and experience of countries with developed systems regarding older people's care will be shared, previous experiences, challenges and innovative solutions will be exchanged and actions towards enhancing the health of older people will be

empowered at a national and international level (ready to scale platform). Inclusion of key persons coming from multiple disciplines will aim to tackle different aspects of older people's health and wellness and different aspects of the application of the proposed educational solution. Disciplines involved will be determined during the work of the COST Action and will be affiliated accordingly during the duration of the project and beyond.

- The creation of the networking ground and a robust scientific international cooperation to allow twinning actions, enhance the potential for further research collaborations and actively involve Early Career Investigators and Inclusiveness Target Countries in the Action's activities for better identification and tackling of educational needs and promotion of research opportunities.

- The creation of a robust scientific international cooperation that could gain endorsement of international societies and organisms related to older people's health and welfare and influence policymakers to implement actions promoting specialized well-targeted care to seniors and reinforce the integrated model of care across the spectrum of national healthcare systems. Results will be operationalized by raising of the public and health care professionals' awareness on the special needs and specialized care of older people, recommendations to policy makers and academia regarding contributions to the education and training of healthcare professionals and advocacy in front of the stakeholders of the finetuning of the modalities of the continuity of care for older people across health care services.

- The setting of a solid ground for promoting education of existing health workforce as strategic, pragmatic, cost-effective and innovative solution regarding public health challenges due to present and forthcoming demographic changes, especially to trigger change in countries with poor GM background and limited resources. The proposal of an adjusted, and variable to different clinical settings, training curriculum as an exponentially rentable and feasible solution for horizontal integration of care processes developing GM from scratch in countries where it is still emerging, creates the basis for: a) the attenuation of problematics derived from the lack of GM-oriented health literacy among healthcare professionals and thus the lack of GM-sensitized approach in clinical practice, in countries with inexistent or very little participation of GM in the undergraduate curricula of healthcare professionals, b) the attenuation of the problematics derived from the lack of healthcare systems organized in accordance with the special needs of older people and the lack of GM-related networks across the spectrum of health care services in countries where GM is still emerging and b) the implementation and evaluation of this curriculum in the context of future funding opportunities and constitutional health policy innovations. As success of this objective will be deemed the opening of a sustainable dialogue on GM education and the consideration of this proposal by national health education policymakers.

2. NETWORKING EXCELLENCE

2.1. ADDED VALUE OF NETWORKING IN S&T EXCELLENCE

2.1.1. ADDED VALUE IN RELATION TO EXISTING EFFORTS AT EUROPEAN AND/OR INTERNATIONAL LEVEL

Efforts to harmonize the practice of GM across Europe are ongoing by international scientific associations and they consist mostly of position statements, educational curricula construction and good clinical practice manifestos. However, the level of development of GM in countries across Europe and the wider proxy region is very variable, ranging from fully developed systems with long tradition in GM to completely inexistent infrastructure and specialized workforce. Therefore, available guidelines, without significant tailoring, are hardly applicable to all countries. Scientific exchanges among countries with different levels of GM development occur during international meetings and

scientific conferences, and relevant scientific societies such as the European Geriatric Medicine Society dispose groups of focused interest on the harmonization of GM across Europe. Up to now and to the best of our knowledge, the critical mass of GM-related stakeholders from countries where GM is still emerging has not yet been gathered with the aim of a tangible project. We strongly believe that adding to this task force the contribution of countries with more advanced GM systems, as well as multi-domain stakeholders and YRI, will produce a final project of great value and applicability potential. Evaluation of the needs and consideration of local conditions will also contribute to the added value, relevance and feasibility of the PROGRAMMING Action.

In addition, a great number of the proposers dispose significant experience in traditional but also novel pedagogic tools and methods that will be incorporated to the final design of the program. ICT possibilities as educational and training tools will also be considered for the digital framework of the program.

Moreover, YRIs can offer the added value of their perspective, which is by definition closer to the essence of the deliverable project, i.e., the content of a training course in GM: YRIs are in a privileged position to identify unmet educational needs, since they have more recently experienced educational procedures and faced relevant challenges themselves, especially those coming from ITC. Additionally, a significant number of the proposers dispose a double-country experience regarding health care systems and for several others a relevant experience can be achieved by the tool of STSM, providing the benefit of a combined creative approach to the course designing.

Creating a solid basis by the tangible experience of the PROGRAMMING COST Action will be a reference point for exploration, following and beyond the Action, of further research funding opportunities for the construction, implementation and validation of the training courses according to the needs-adjusted design defined by this COST Action.

Integrated and interprofessional care of older people has been shown to be effective and cost-saving. This COST action goes beyond state of the art, delivering solutions mandated by WHO and the European Commission, delivering a Pan-European framework for educational actions needed and allowing to create national ecosystems for the care of older people making use of adapted knowledge skills and attitude of all professionals involved in the care process. GM will help to reach these goals as major driver, bringing together all stakeholders involved, using twinning activities and scaling up innovative solutions.

2.2. ADDED VALUE OF NETWORKING IN IMPACT

2.2.1. SECURING THE CRITICAL MASS AND EXPERTISE

Critical mass and expertise will be achieved by involvement of various key persons at three strategic levels.

1. Multidisciplinary and intersectoral expertise: Better interprofessional collaboration in practice lies in the core of GM and thus the involvement of medical doctors of various specialties and allied health professionals to the PROGRAMMING Action is evident. To better assess pragmatic needs, ultimate end users of the desired progress, i.e., older people themselves, will also be requested to participate in the relevant stages of the project via the representatives of their associations. The network's enrichment with the contribution of experts from other fields (health structures' managers, sociologists, epidemiologists etc.) aims at better targeting the content of the training course to stakeholder's needs and local circumstances, to maximize social impact and to better advocate the potential of this project to policy makers. Including ICT technologies in the description of the implementation of the

educational course will be achieved by involving ICT experts and academic teachers with experience in the application of novel didactic methods.

2. Different stages of career development: The group of proposers will be composed by worldwide academic experts in the field of GM and related professions, representatives of relevant scientific organizations, experienced clinical practitioners, and also YRIs and younger practitioners. This variability will enhance the capability of better identification of needs and, in response, proposition of pertinent solutions. Most of academic experts carry a great experience in research, educational and health structures' organization and management and many of them in health policy counselling. The majority are also involved in the activity of relevant scientific associations, both at a local and at an international level. Many of them also participate in committees and working groups to generate GM-related guidelines and position statements. Most of the YRIs have a shared clinical and early academic activity, including experience as trainers, and trainees (until recently and in many cases also currently). Almost all participants have relevant research experience. This representativeness of experienced seniors and motivated YRIs in the network of proposers is ideally situated to address better training and educational needs, which is the core of the research endeavour of this Action.

3. International cooperation and representatives from countries with varying levels of development in GM: Last but not least, the major asset of the PROGRAMMING Action is the participation of countries with different levels of GM development, including countries developed in this field, with the goal to communicating the know-how and also to invent novel adaptations to tested solutions that would fit the needs and circumstances of countries where GM is still emerging. At the time of submission, the network of proposers consists of 24 COST Member countries (including 14 ITC), among which some with weak level of development of GM, where typically GM is still emerging, and 3 NNC.

2.2.2. INVOLVEMENT OF STAKEHOLDERS

Involvement of stakeholders will take place as follows:

1. Specialists in geriatric medicine and allied health professionals with experience in GM are expected to mostly play the role of trainers in a potential future application of the training courses described by the Action. They will participate in practically all stages of the Action, from surveys for detecting unmet needs to scientific and stakeholders' meetings and focus groups and to the Delphi procedure for the definition of the educational content. They will be the main beneficiaries of the STSM, especially the YRI. They will also be actively involved in the dissemination activities of the Action, named webinars, press conferences, congress symposia and scientific papers.

2. Medical doctors others than geriatricians and allied health care professionals will be the main beneficiaries as trainees of a potential future application of the training courses described by the Action. They will be involved in the stage of the identification of gaps and needs in education and training in GM and will participate in the proposition of the content of the educational material, by participating in surveys, in the scientific meetings, in local meetings with stakeholders and in focus groups. They may also participate in the Delphi procedure for defining the learning objectives and the priorities regarding the educational material, as well as in dissemination activities.

3. Older people themselves are the indirect end beneficiaries of the progress in GM in countries where it is still emerging. Their points of view will be captured by the participation of representatives of seniors' organizations in the meetings of stakeholders.

4. ICT, social media and communication experts, sociologists, epidemiologists, will participate in the scientific and stakeholders' meetings and in the dissemination activities.

5. Representatives of health structures' managers and policy makers will participate in surveys and in the stakeholders' meetings.

2.2.3. MUTUAL BENEFITS OF THE INVOLVEMENT OF SECONDARY PROPOSERS FROM NEAR NEIGHBOUR OR INTERNATIONAL PARTNER COUNTRIES OR INTERNATIONAL ORGANISATIONS

At the moment of submission 3 NNC (Russian Federation, Armenia and Tunisia) participate in the network of proposers. The level of development of GM in these three countries, as well as in the rest of the COST Members and ITC proposers is variable. Therefore, mutual benefits for all participants, including NNC, are expected in terms of progress in the development of GM in their countries.

Moreover, International Organizations and Scientific Societies, such as the European Geriatric Medicine Society and the European Academy for Medicine of Aging, will be involved in the PROGRAMMING Action, which are leaders in the field of older people's health and are principally interested in contributing to the harmonization of the practices of older people's care across Europe and the wider area. Reference to the work previously done in this field by these organizations and synthesis with regard to the identification of special needs of countries where GM is still emerging, will contribute to significant progress and translation in the practice of research findings.

3. IMPACT

3.1. IMPACT TO SCIENCE, SOCIETY AND COMPETITIVENESS, AND POTENTIAL FOR INNOVATION/BREAKTHROUGHS

3.1.1. SCIENTIFIC, TECHNOLOGICAL, AND/OR SOCIOECONOMIC IMPACTS (INCLUDING POTENTIAL INNOVATIONS AND/OR BREAKTHROUGHS)

Scientific impact

-Defining the content of an adjusted training course in GM, planning its implementation and defining the modalities of its application will offer a solid background for progress in the field of GM education and training, especially in countries where universally available curricula are not directly applicable [Quantitative by relevant Deliverables, primary impact aim].

- Applying qualitative research methods, prior to the definition of the course's content, for the investigation of needs and pragmatic challenges (standardized maturity assessment framework) and providing a number of variations according to the various clinical settings are expected to provide a tailored solution, maximizing acceptability, feasibility and, therefore, impact. This approach is considered innovative, especially for countries where GM is still emerging and this kind of opportunity, especially tailored to specific features, are rare and much demanded [Quantitative by relevant Deliverables, primary impact aim].

- Given the fact that occasions for the training of health care professionals in GM are scarce in many involved countries, designing the content of an educational course may be the first step towards its

actual application, which would be an educational opportunity for them, promoting scientific knowledge and practical skills. The achievement of this form of impact mainly depends on the exploitation of the Action's results and legacy by stakeholders at a local level [Qualitative, secondary impact aim].

- From the investigators point of view, the rich interactive environment created by such an Action can be very fulfilling and rewarding in terms of scientific progress in the topic of GM research and education. Scientific publications will come from the PROGRAMMING Action, which will, in turn, provide their impact on the wider scientific society [Quantitative by the number of scientific publications. Secondary impact aim].

- Created networking is expected to function beyond and further the current Action in order to foster relevant academic activities and research projects in the future. Research funding possibilities can be significantly expanded by activating an international multidisciplinary network, mainly to the benefit of ITC where research opportunities in GM are scarce. YRIs can also benefit by their implication in the current Action and future research opportunities [Qualitative, secondary impact aim].

- Especially for YRI, the possibility of STSM will be a unique opportunity to get in contact and exchange knowledge, skills and research ideas and cooperation with experts from the centres of reference. This exchange will be concretized by the obligation of the person benefiting from the STSM to synthesize in a report the gains acquired by this activity and possible ways of continuation of this exchange and/or of implementation of fruits of this experience into their own settings and national context [Qualitative, secondary impact aim].

Societal and socio-economic impact

- Interventions in interprofessional education have a powerful impact in terms of cost-effectiveness, since the initial investment can be exponentially productive. Special features of the PROGRAMMING Action towards this direction are a) the training of health care professionals already constituting the workforce of their corresponding health care systems (thus optimizing the advantage of already existing resources), b) the provision of the content of an online version of the training program, which can have a wide impact by an expanded distribution beyond geographic limitations and time restrictions and c) the adaptation to the local needs of the educational material, including the intention of translation in local languages [Quantitative by number of Training Schools, the deliverable on the modalities on online versions of the program and the number of available translations. Primary impact aim].

- Efforts at a local level towards the research, education and clinical practice possibilities regarding GM made by investigators in countries with still emerging GM encounter significant obstacles, with the absence of a critical mass of human resources and the lack of means of political pressure being some of the major barriers. We believe that the PROGRAMMING Action task force will raise the critical mass of scientists, create an international supportive network and gain the endorsement and support of prestigious international organizations so as to overcome these barriers and maximize influence to policy makers in countries where GM is still emerging. This influence is expected to go beyond the aim of educational activities for health care professionals. Still, it is likely to extend to other aspects of health care policies and GM-related specialized services. This evolution would constitute a breakthrough for countries where GM is still emerging. On a long-term basis, the network of proposers aspires to function as a scientific working group ready to provide on-demand expertise counselling to policy makers. Data of the identification of needs survey will be available to relevant policy makers. The group of proposers is aware of the role of relevant organizations such as the Science Advice for Policy by European Academies and will attempt to reach out to them during the Action. The Action aims at the opening of a sustainable dialogue with international and national policymakers on issues relevant to GM education and the health care of older people in general. [Qualitative, primary impact aim].

- Dissemination activities such as scientific conferences and stakeholders' meetings that will take place in countries with a less favourable profile in terms of GM, will promote awareness on the added

value of GM in the public, more globally, in the scientific community and among the health care professionals, paving the grounds for the scaling up of good practices across Europe [Qualitative, secondary impact aim].

3.2. MEASURES TO MAXIMISE IMPACT

3.2.1. KNOWLEDGE CREATION, TRANSFER OF KNOWLEDGE AND CAREER DEVELOPMENT

As mentioned already, there are no internationally validated GM-related curricula adjusted to special conditions of countries where GM is still emerging. The qualitative research methods that will be employed for tasks' accomplishment will have a major contribution to the original end-product of the Action, derived directly from newly acquired knowledge along with already existing training curricula (co-creation process). Qualitative research expands in multiple levels -i.e., international, interdisciplinary, intersectoral- and, thus, leads to a unique synthesis of gathered knowledge. Exchanges among Action Members with different stages of GM development, among investigators at different career stages and among different institutions and reference centres will build the ground for multidimensional networking and exchange of mined knowledge in a co-creation approach. Regular meetings, in different sites, and STSM will enhance this characteristic. YRIs will have the opportunity to enrich their empirical knowledge on the topic by participation in STSM, hosted in countries with long tradition and developed infrastructure in GM. However, any GM-related structure could function as a STSM hosting centre as soon as it demonstrates a model of care with special interest to peers, independently of being in a "GM-developed country" or not.

On the other hand, even in countries with more developed GM, systems are not ideal and weak points may be revealed under certain circumstances, i.e., the case of the COVID-19 pandemic. More developed countries can also benefit from the international exchange: other systems' understanding and corrective actions are always relevant in the light of the invention of novel solutions. Stakeholders' meetings will be hosted preferably to ITC countries and COST member countries where GM is still emerging, provided that the COVID-19 pandemic conditions allow meetings in person. In the opposite case, care will be applied so as the invited participants will mostly originate from the countries mentioned above.

The benefit of this international expertise exchange is evident especially for YRI. Particularly those coming from ITC and countries where GM is still emerging rarely have the opportunity to access high-level international expertise and barely have the chance to experience the way of functioning of reference centres specialized in GM. New research projects at a synergistic international level are also anticipated, possibly giving opportunities to YRIs, to PhD and post-doctoral thesis.

Finally, a unique aspect of the PROGRAMING Action is that knowledge acquisition and exchange will not only be exploited at a level of personal career development or contribution to the global scientific community, but also, and mainly, with the aim to be brought "back home", i.e., to be used appropriately to the benefit of local communities.

3.2.2. PLAN FOR DISSEMINATION AND/OR EXPLOITATION AND DIALOGUE WITH THE GENERAL PUBLIC OR POLICY

Dissemination and exploitation tools and strategies (mainly Working Group (WG)5, section 4.1.1) will consist of:

-Scientific publications: this will be the main way of communicating of the Action's results to the scientific community. It is expected to produce at least 4 (but possibly more) scientific papers (WG1, 2 and 3, section 4.1.1) for open access journals of GM, primary health and public health scope.

-Stakeholder meetings and associated educational events: they will be at least 3 stakeholders' meetings (Gantt chart, section 4.1.4), one for each of the first three years, that will be hosted either in ITC either in countries where GM is still emerging, possibly at about 6 months-time distance from the main annual meetings of the MC and the WGs. Health care professionals, older people's representatives, health structures' directors, policy makers, sociologists, epidemiologists, economists etc. will be invited by the hosting Member, upon approval of the management committee (MC) of the proposed synthesis of the panel. Involvement of the conventional press will be attempted. These meetings will have a communication and dissemination purpose, but also organizational and, perhaps most importantly, academic objectives, as educational events will accompany them. They will also function as an opportunity to raise awareness of main geriatric topics especially for local health professionals in countries where GM is still emerging and possibly the general public as well. A significant involvement of YRIs will be aimed. An ultimate goal would be the expansion of the educational part of these activities beyond the end of the duration of the COST Action and their harmonization with the educational needs of countries with GM under development.

-Kick-off meeting, final event and press conferences: During the kick-off meeting the composition of the WGs, their more specific objectives, an action plan to achieve them and its schedule will be discussed. Possibilities of an expansion of the network of investigators will also be investigated, according to those objectives. The MC and WG members will get to know each other better. The final event to be held at M48 (Gantt Chart, section 4.1.4) will be the occasion to communicate the project results in their integrity. This event will be open to all: stakeholders, policy makers, the press etc., upon invitation and open access. Participation online will also become possible for stakeholders from Action Members other than the hosting country. At least two press conferences will take place, one at the beginning and one during the final event. The possibility will be examined that the final event meeting, will be organized as a satellite activity to a major international event on GM, to maximize participation, involvement of stakeholders and sensibilization of the press.

-Participation in other scientific and public events: Local Action's participants will be able to organize parallel activities aiming at the general public, during other scientific and social events, and also independently, and to participate in national scientific congresses with abstracts' and symposia submission. Participation in congresses of scientific societies directly related or not to GM, will be attempted also at an international level. The content of all presentations where the Action is involved will be subject to approval by the management committee (MC) and the WG leaders.

- Internet site and social media: the PROGRAMMING Action will create its own internet site including information on the project's goals and aspirations, list of participating Members and persons and an invitation to join the Action at its implementation phase. Communication of messages will also be done via social media (Twitter, Facebook, blogs, forums etc.).

- Conventional media will be involved mainly to report on events and to participate in the press conferences. Outside the context of public events, radio, television and non-scientific press will be approached mostly at a local level to raise public awareness on issues regarding GM and apply some pressure to policy makers.

- Printable material such as flyers, posters, handouts, annual newsletter etc will be produced by WG5 and distributed by physical and mostly online means to stakeholders via mailing lists, social media, in-

person contact during meetings and events and with the help and cooperation of scientific and senior associations participating in or endorsing the Action.

- The approach to policy makers is a major endeavour of the PROGRAMMING Action with the potential to create a significant scientific and societal impact. The envisaged strategy is to communicate preliminary and final results of the Action to policy makers, along with a plan of proposed solutions, by official letters, position statements, white papers etc. Personal contact will also be attempted, as well as invitation of policy makers to the Action's stakeholder meetings and to the final event. In order to be more efficient and apply a higher level of pressure, the endorsement of prestigious international organisms and societies will be stated in advance.

There will be no absolute restrictions regarding Intellectual Property Rights of the designed content of the program. The final deliverable is susceptible to exploitation at an international and local level by stakeholders and policy makers, to achieve maximum impact. Exploitation will be subject to no special regulations, other than the scientific and academic qualification on GM of the persons eligible to play the role of trainers. Availability of all the Action's deliverables (section 4.1.2) to policy makers and other stakeholders will be possible upon approval of the MC and the WG leaders. Translated versions of the designed program will enhance local impact and any relevant action will be lively encouraged.

4. IMPLEMENTATION

4.1. COHERENCE AND EFFECTIVENESS OF THE WORKPLAN

4.1.1. DESCRIPTION OF WORKING GROUPS, TASKS AND ACTIVITIES

The Management Committee (MC) will assure the representativeness in the Working Groups of at least 40% of YRIs, at least 50% of women's participation and at least 2 WG leaders from ITC countries. The task of the Action's general coordination (e.g., the expansion and the smooth functioning of the network of investigators, to coordination of the articulations between all WGs, help to the building of understanding and fruitful communication between involved stakeholders, and the guarantee of a balanced participation of all) will be taken over by the MC, and will last all throughout the Action.

Milestone 1: Kick off meeting (M1).

Working Groups are as follows:

- WG1: State-of-the-art mapping and needs' assessment

Aim: To highlight the current situation regarding GM in COST Member countries with a focus on GM education and training and map educational and training programs at an undergraduate, postgraduate, continuous medical education and professional training level. Additionally, conduction of a co-creation process by qualitative research methods in order to identify, describe and categorize unmet needs regarding GM education, GM-related health literacy, GM-related public awareness and appropriate implementation of training activities for health care professionals across the spectrum of health care settings in participant countries where GM is still emerging. The MC will take care so as most (if not all) of the countries in question and the ITC will be represented and actively participate in WG1.

T1.1 Description of the current situation regarding GM education and training and mapping of relevant academic structures and educational possibilities. Activities and tools to accomplish the task: surveys,

contacts of key persons and institutions, meetings, literature review including grey literature, STSM (M1-12).

T1.2 Qualitative research for assessing GM-related educational and training needs of health care professionals working in primary health care, ambulatory care and at-home care networks in countries where GM is still emerging. Activities and tools to accomplish the task: surveys, interviews with stakeholders, meetings' minutes, focus groups, STSM (M4-9: preparatory period and M10-36: main period).

T1.3 Qualitative research for assessing GM-related educational and training needs of health care professionals working in hospital and rehabilitation settings in countries where GM is still emerging. Activities and tools to accomplish the task: surveys, interviews with stakeholders, meetings' minutes, focus groups, STSM (M4-9: preparatory period and M10-36: main period).

T1.4 Qualitative research for assessing GM-related educational and training needs of health care professionals working in nursing homes and other long-term care facilities in countries where GM is still emerging. Activities and tools to accomplish the task: surveys, interviews with stakeholders, meetings' minutes, focus groups, STSM (M4-9: preparatory period and M10-36: main period).

Milestone 2: Accomplishment of T1.1 (M12).

Milestone 3: Accomplishment of T1.2, 1.3, 1.4 (M36)

- WG2: Definition of the content of the training courses in GM destined for professionals working in ambulatory settings and home care networks

Aim: Define the content of the training courses in GM destined for professionals working in ambulatory settings and home care networks, taking into account the results of T1.2, 1.3 and 1.4, already available curricula, literature review, including gray literature, knowledge obtained during STSM, stakeholders' meetings, MC meetings and internal Delphi procedure. Provide variations according to settings where trainees work.

T2.1 Definition of the content of training courses in GM destined for professionals working in ambulatory settings and home care networks (M25-30: preparatory period and M31-48: main period).

T2.2 Definition of the possible modes of implementation of a training course in GM destined for professionals working in ambulatory settings and home care networks (M25-30: preparatory period and M31-48: main period).

- WG3: Definition of the content of the training courses in GM destined for professionals working in acute/subacute and long-term care settings

Aim: Define the content of the training courses destined for professionals working in acute/subacute and long-term care settings, taking into account the results of T1.2, 1.3 and 1.4, already available curricula, literature review, including grey literature, knowledge obtained during STSM, stakeholders' meetings, MC meetings and internal Delphi procedure. Provide variations according to settings where trainees work.

T3.1 Definition of the content of training courses in GM destined for professionals working in acute/subacute (T3.1a) and long-term care settings (T3.1b) (M25-30: preparatory period and M31-48: main period).

T3.2 Definition of the possible modes of implementation of training courses in GM destined for professionals working in acute/subacute and long-term care settings (M25-30: preparatory period and M31-48: main period).

- WG4: Framework for training methods

Aim: To propose a variation of the implementation of the educational course, described by WG2 and WG3, with the aid of ICT for remote application of the training so as to maximize impact and face education and training challenges in case in-person training is not possible and to incorporate various novel didactic methods. Activities and tools to accomplish the task: meetings and interviews with experts, focus groups, knowledge obtained during STSM.

T4.1 Description of the modalities of the online version of the educational program and taxonomy of training methods (M31-36: preparatory period and M37-48: main period).

Milestone 4: Accomplishment of T2.1, 2.2, 3.1, 3.2, 4.1 (M48).

- WG5: Dissemination and impact maximization

Aim: To raise awareness and promote the added value of the specialized approach of GM in the health and wellbeing of older people among health care professionals, policy makers, older people and the general public, as well as to build GM-related health literacy among health care professionals. Furthermore, to influence policy makers of the local and the international scene in favour of the necessity of developing specialized geriatric care for older people. Eventually, to investigate financing possibilities and trace interested parties for future opportunities (beyond the PROGRAMMING Action) of further development of the training course as a final product, ready and available for use.

T5.1 Production of scientific papers. In cooperation with all WG (M4-6: preparatory period and M7-48: main period).

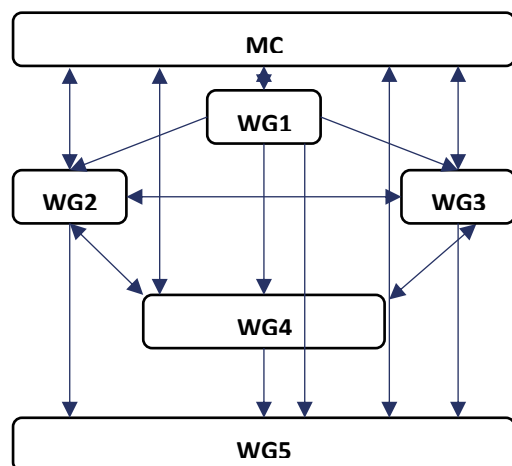
T5.2 Social media and general public campaign. Activities and tools to accomplish the task: creation of the Action's internet site, online and social media dissemination campaign, flyers, posters, events (M1-12: preparatory period and M13-48: main period).

T5.3 Target groups campaign and approach strategy of policy makers and care providers. Activities and tools to accomplish the task: online dissemination campaign, social media, flyers, posters, participation in scientific conferences, meetings with stakeholders and policy makers. In cooperation with WG1 (M1-12: preparatory period and M13-48: main period).

T5.4 Research of new funding tools for the future implementation of the designed program (M13-36: preparatory period and M37-48: main period).

Milestone 5: Final event (M48).

The figure below shows the interactions between WG



Besides the WG mentioned above, the MC will proceed to the constitution of an advisory board of key persons, who will have the role to oversee the work of WG and propose corrective actions and suggestions accordingly.

4.1.2. DESCRIPTION OF DELIVERABLES AND TIMEFRAME

WG	Deliverable description	Related Tasks	Timeframe
1	D1.1 Report on the state-of-the-art of GM education and training in countries where GM is still emerging	T1.1, 5.1	M15
1	D1.2 Report on the assessment of the needs in education and training in GM of health professionals working in ambulatory settings and home care networks, acute/sub-acute and long-term care settings.	T1.2, T1.3, T1.4, 1.1	M42
2	D2.1 Report on the content and the possible modes of implementation and evaluation of a training course in GM destined for professionals working in ambulatory settings and home care networks	T2.1, 2.2, 5.1	M47
3	D3.1 Report on the content and the modes of implementation of a training course in GM destined for professionals working in acute/subacute and long-term care settings	T3.1, 3.2, 5.1	M47
4	D4.1 Report on the modalities of the online version of the program and taxonomy of training methods	T4.1, 2.2, 3.2	M47
5	D5.1 Dissemination plan and plan towards the expansion of the investigators' network	T5.1, 5.2, 5.3	M6

5	D5.2 Report on actions uptaken towards the expansion of the investigators' network, the dissemination and impact maximization actions, tools and material	T5.1, 5.2, 5.3, 5.4	M48
WG: Working Group, GM: Geriatric Medicine, D: deliverable, T: task, M: month			

4.1.3. RISK ANALYSIS AND CONTINGENCY PLANS

Risk	Chance	Impact	Mitigation strategy
Difficulties in network expansion	low	medium	The group of proposers already holds a significant capacity to go through most of the tasks' accomplishment and, most importantly, a wide network of personal and professional contacts with high potential of interest in participation in relevant Actions
Low attendance to meetings	medium	high	Meetings will be timely scheduled upon common agreement of the majority of participants. Several will be held concomitantly with traditionally highly attended international meetings in the field of GM. Tandem participation of Action Members will be highly recommended.
Travel and in-person meetings restrictions due to the COVID-19 pandemic	high	medium	Alternative ways of communication such as online meetings, webinars and regulatory-restrained activities, according to existing measures, will be foreseen.
Difficulties in tasks' accomplishment due to busy schedules of health care professionals in case the sanitary crisis continues	medium	High	Involvement and fragmentation of tasks among a sufficient number of participants will ensure a realistic and sustainable management of required commitment. Working in tandem will also facilitate management of duties in case of occasional crisis. Simplification of the activities by ICT means is expected to reduce workload.
Difficulties in tasks' accomplishment due to lower prioritisation from the stakeholders' and policy makers' point of view in case the sanitary crisis continues	medium	medium	Efforts will be made to approach various persons representing stakeholders and policy makers. A rhetoric will be developed towards pointing out: a) the relevance of the Action's main challenge with the origins of the heavier consequences of the sanitary crisis, typically afflicting vulnerable parts of the populations, such as older people. b) The fact that the Action's end-product and deliverables will be

			highly exploitable also in a long-term horizon, after the ending of the sanitary crisis.
High heterogeneity in local conditions of involved countries	medium	low	The Action will design generic but customizable guidelines on education and training programs. Each Member will be able to further develop modified solutions even more targeted to their country's particular context.

4.1.4. GANTT DIAGRAM

[illegible]

5. REFERENCES

1. Eurostat webpage. Eurostat Code: TPS00026. 2020. <https://ec.europa.eu/eurostat>
2. WHO. Decade of Healthy Aging 2020-2030. Zero draft. 2019. https://www.who.int/docs/default-source/documents/decade-of-health-ageing/decade-ageingproposal=en.pdf?Status=Temp&sfvrsn=b0a7b5b1_12
3. WHO. Multisectoral action for a life course approach to healthy ageing: Draft global strategy and plan of action on ageing and health. Sixty-ninth World Health Assembly. 2016. http://apps.who.int/gb/ebwha/pdf_files/WHA69/A69_17-en.pdf. Accessed March 26 2020.
4. SAPEA, Science Advice for Policy by European Academies. (2019). Transforming the Future of Ageing. Berlin: SAPEA. <https://doi.org/10.26356/ageing>
5. Van Den Noortgate N et al. The importance of a geriatric approach in medicine. ActaClinicaBelgica. 2009; <https://doi.org/10.1179/acb.2009.003>
6. Ellis G et al. Comprehensive geriatric assessment for older adults admitted to hospital. CochraneDatabaseSystRev. 2017 Sep 12;9(9):CD006211. doi:10.1002/14651858.CD006211.pub3
7. Gladman JR et al. New horizons in the implementation and research of comprehensive geriatric assessment: knowing, doing and the 'know-do' gap. AgeAgeing. 2016 Mar;45(2):194-200. doi:10.1093/ageing/afw012.
8. Kotsani M et al. The Relevance and Added Value of Geriatric Medicine (GM): Introducing GM to Non-Geriatricians. JClinMed. 2021 Jul 7;10(14):3018. doi:10.3390/jcm10143018
9. WHO global strategy on integrated people-centred health services 2016-2026. Executive Summary. July 2015.
10. WHO Secretariat. Framework on integrated, people-centred health services. Report by the Secretariat. Assembly S-NWH. April 2016
11. Kotsani M et al. Start low, go slow, but look far: the case of geriatric medicine in Balkan countries. EurGeriatrMed. 2020;10.1007/s41999-020-00350-x. doi:10.1007/s41999-020-00350-x
12. Mateos-Nozal J et al. Global approaches to geriatrics in medical education. EurGeriatrMed. 2011; <https://doi.org/10.1016/j.eurger.2011.01.001>
13. Grund S et al. EuGMS survey on structures of geriatric rehabilitation across Europe. EurGeriatrMed. 2019; <https://doi.org/10.1007/s41999-019-00273-2>
14. Deschodt M et al. Implementation of geriatric care models in Europe (imAGE.eu): a cross-sectional survey in eight countries. EurGeriatrMed. 2018; <https://doi.org/10.1007/s41999-018-0107-6>
15. Fisher J et al. New horizons in geriatric medicine education and training : the need for pan-European education and training standards. EurGeriatrMed. 2017;8(5-6):467-73.
16. Michel JP et al. Europe-wide survey of teaching in geriatric medicine. JAmGeriatrSoc. 2008; <https://doi.org/10.1111/j.1532-5415.2008.01788.x>

17. Lindner S et al. Can Integrated Care Help in Meeting the Challenges Posed on Our Health Care Systems by COVID-19? Some Preliminary Lessons Learned from the European VIGOUR Project. *IntJIntegrCare*. 2020;20(4):4.
18. Bhattacharya SB, et al. Novel model to teach health care delivery in geriatrics. *GerontolGeriatrEduc*. 2021 Aug 16:1-13. doi:10.1080/02701960.2021.1958325.
19. Keijsers C.J.P.W. et al. Interprofessional education in geriatric medicine. *EurGeriatrMed*. 2016;7(4):306-314; <http://dx.doi.org/10.1016/j.eurger.2016.01.011>
20. Masud T et al. European undergraduate curriculum in geriatric medicine developed using an international modified Delphi technique. *AgeAgeing*. 2014 Sep;43(5):695-702. doi:10.1093/ageing/afu019.
21. Roller-Wirnsberger R et al. European postgraduate curriculum in geriatric medicine developed using an international modified Delphi technique. *AgeAgeing*. 2019 Mar1;48(2):291-299. doi:10.1093/ageing/afy173.
22. Roller-Wirnsberger R et al. European Collaborative and Interprofessional Capability Framework for Prevention and Management of Frailty-a consensus process supported by the Joint Action for Frailty Prevention (ADVANTAGE) and the European Geriatric Medicine Society (EuGMS). *AgingClinExpRes*. 2020 Apr;32(4):561-570. doi:10.1007/s40520-019-01455-5.
23. Kossioni A et al. European College of Gerodontology: undergraduate curriculum guidelines in gerodontology. *Gerodontology* 2009;26:165-171.
24. Kossioni A et al. Practical Guidelines for Physicians in Promoting Oral Health in Frail Older Adults. *JAmMedDirAssoc* 2018;19:1039-1046.
25. <https://wayback.archive-it.org/12090/20201227095435/https://ec.europa.eu/digital-single-market/en/news/blueprint-innovate-health-and-care-europe>