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advantAGE
MANAGING FRAILTY

Deliverable 8.1	Report on the content, scope and gaps on frailty and frailty prevention in the curricula of the participant Member States' health related workforce
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ABBREVIATION LIST

CGA: Comprehensive Geriatric Assessment

EC: European Commission

E.G: Exempli Gratia = for example

EU: European Union

FPA: Frailty Prevention Approach

JA: Joint Action

MS: Member State

SoAR: State of the Art Report

WHO: World Health Organization

WP: Work Package

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1. FOREWORD

The ADVANTAGE Joint Action (JA) "Managing Frailty" aims at building a common understanding on frailty and its prevention to be used by Member States (MSs) of the European Union (EU). It is the aim to build for a common management approach of older people who are frail or at risk of developing frailty in the EU. ADVANTAGE has already summarized the current State of the Art in a report (SoAR) for the different components of frailty and its management, both at individual and population level. It has collected information on the development of programs to manage frailty in older adults in the EU and will propose, as its main outcome, a common European model to approach frailty, the Frailty Prevention Approach (FPA). This model will also identify gaps of knowledge in the field that would benefit from further research (ADVANTAGE JA; Mañas, L.R. et al., 2018).

The JA is organized in eight work packages (WPs) in total, whereby WP8 – led by the Medical University of Graz (MUG) – deals with extending and expanding the knowledge on educational and research aspects to foster innovative policy on frailty management. WP8 has addressed in detail training aspects to support a well prepared workforce for older people from an individual and population/public health perspective. The objectives associated with WP8 are as follows:

1. To promote better knowledge, skills and attitudes to manage frailty, based on the results and recommendations of the FPA document of the JA.
2. To enable the health workforce to support scaling-up of new models of care which respond to the needs of frail patients.
3. To transfer information to policy makers and health care planners to ensure informed decisions are taken on care planning and health and social policies, with special focus on scaling up the FPA (ADVANTAGE JA, WP8 Extending and expanding the knowledge on frailty to foster innovative policy on frailty).
4. To transfer information to policy makers to inform plans which cover the gaps of knowledge on the provision and delivery of services for frail older people or people at risk for frailty.

This report is written on behalf of WP8 and analyses the content, scope and possible gaps on frailty and frailty prevention in the curricula of the participant MSs' health related workforce and proposes actions to cover them.

2. EXECUTIVE SUMMARY

The JA ADVANTAGE builds a common understanding of frailty for the EU MSs and further aims at reaching a common management approach of older European citizens who are at risk of developing functional decline, such as those experiencing frailty.

Training the health and social care workforce in early detection of functional changes during the ageing process and providing support on all levels of prevention (primary, secondary and tertiary) is key to translate the current evidence in the field of frailty prevention into daily life practices of all EU MSs. The current report summarizes the existing knowledge on how to best train the health and care workforce on frailty, extracts its more relevant components to ascertain the present situation of the ADVANTAGE JA MSs in relation to them and provides recommendations on how to fill the gaps encountered to achieve a goal-oriented healthcare workforce development needed to tackle the requirements of an ageing society across Europe.

3. INTRODUCTION

The EU is facing considerable demographic changes: a continuous rising life-expectancy due to social, technical and medical advances leads to ageing populations within the EU MSs. Although improved living conditions enable people to live longer, not all aged persons are able to live a healthy and independent life. Therefore, active and healthy ageing constitutes a challenge that requires changes and adaptations of health and social systems.

The EC engages in meeting this challenge and aspires to "*foster innovation and digital transformation in the field of active and healthy ageing*" (EIP on AHA, see: https://ec.europa.eu/eip/ageing/home_en). As a result, two initiatives have been launched. The first one is the European Innovation Partnership on Active and Healthy Ageing (EIP on AHA), whose main aim is to improve the health and quality of life of all European citizens with

a focus on older people. The second initiative focuses on one of the main determinants of disability in older ages, frailty, by means of the ADVANTAGE JA, whose main aim is to establish a common strategy across Europe, the FPA, to prevent and manage frailty, also linking all initiatives to a global perspective.

The World Health Organization (WHO) has also displayed a strong focus on ageing in the past years. In 2016 the WHO launched the World Report on Ageing and Health, especially emphasizing on building capacity of older citizens (WHO, 2016). To translate this vision into real life practices, the WHO has developed a framework for action in order to establish a sustainable health workforce in the WHO European Union. The aim of the WHO framework is to support the MSs in reaching long-term health goals by transforming national health workforce and thereby strengthening health systems (WHO, 2017).

According to the WHO, health professionals constitute one of the six components (besides service delivery, information, medical products, vaccines & technologies, financing and leadership & governance) which are regarded as priorities in order to shape and develop health and care systems (WHO, 2007). It is important to train health and social care professionals according to changing population needs. This approach will lead to effective and high-value health services. In fact, educational and training structures that enable the development of multifunctional competencies, according to ongoing developments such as an ageing society, are required (WHO, 2013). This view will also give rise to new professions, will most probably re-define role definitions of existing health and social care professionals, will change responsibilities and will require institutional as well as national adjustments.

In this context, functional decline, frailty and disability are risks for citizens and need to be considered in the education and training of health and social care professionals (ADVANTAGE JA, State of the Art Report). The ADVANTAGE JA was created to address one of these risks, frailty. In order to do that, it considered the need to know the content, scope and gaps on frailty and frailty prevention in the education and training of the health and care workforce of the participant MSs, which is the content of this deliverable. Within this report, the following objectives are addressed:

- Describe the educational and training situation of the participant MSs.
- Establish recommendations on what knowledge and skills health professionals need to have for addressing frailty.

- Check the results for congruency according to WHO recommendations, bearing in mind the differences between the two proposals: WHO recommendations include a global perspective (in total 57 countries, some of those with potential of development) whereas WP8 recommendations focus on the on average more developed ADVANTAGE JA participating MSs.

4. REPORT'S STRUCTURE

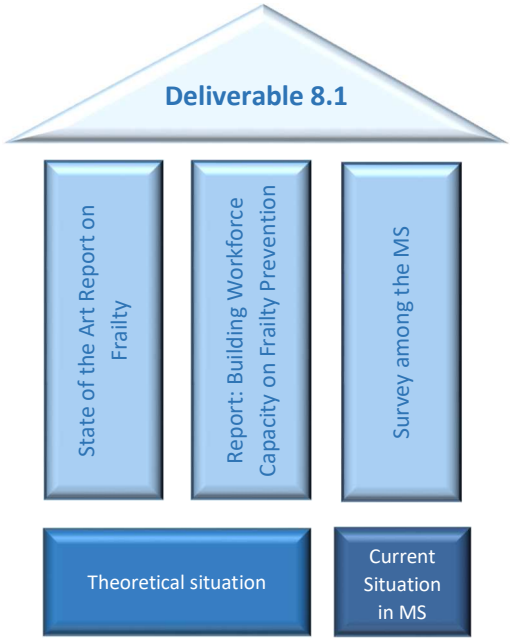

Figure 1 Structure of the Deliverable

Figure 1 describes the pillars the Deliverable 8.1 is based on. The SoAR on frailty and its expansion in terms of education/training of the health workforce (ADVANTAGE JA, Building Workforce Capacity on Frailty Prevention, see: http://advantageja.eu/images/WP8-1-Building-workforce-capacity-on-frailty-prevention-a-Systematic-Review.pdf) provided results which constituted the theoretical baseline whereas the survey among the MSs reflects their current situation.

5. THE THEORETICAL SITUATION AND THE EDUCATIONAL FRAMEWORK OF THE JA FOR HEALTH WORKFORCE DEVELOPMENT

5.1 Methods

The report "Building workforce capacity on frailty prevention" aimed at gathering evidence in the field of education/training of health and social care professionals to promote and support prevention of frailty across the European MSs and has been published under the umbrella of the Joint Action Advantage (ADVANTAGE JA, Building Workforce Capacity on Frailty Prevention). This was done through a systematic review of scientific literature concerning educational programmes for frailty prevention, EU-funded projects addressing education and training of health and social care professionals involved in the prevention and management of frailty, good practice programmes in the MSs for continuous education/training of health professionals on frailty and WHO recommendations on the education and training of health professionals. (ADVANTAGE JA, Building Workforce Capacity on Frailty Prevention). Built upon these pillars, partners of the JA developed a new framework to be used by MSs for evaluation of the national or regional situation of education and training addressing prevention of frailty.

5.2 Core Content and Results of the recent work

The results of the systematic review identified no relevant publications addressing the evidence and sustainability of educational programs for frailty prevention. Three EU-funded projects (FACET, SUNFRAIL and PERSILAA) as well as 22 good practice programmes for continuous education and training of health professionals on frailty were found. None of the projects included evaluation concepts and data coming from the projects could not be evaluated in terms of didactic aspects, a fact which explains the scarcity of results and evidence present for educational interventions to tackle frailty and its prevention.

However, as may be seen from the following tables, the EU-funded projects involved different professionals in their efforts for frailty prevention. The roles were clearly defined and competences were described within the projects as follows:

FACET:

This project offers a free online course that covers the relevance of monitoring frailty,

symptoms and associated risk factors, how frailty needs to be considered in current health care practice and solutions to detect frailty.

Health professions	Outcomes (Learning outcomes)
• Community care workers • Residential care workers • Nurses • General practitioners • Social Care Workers • Occupational Health Care workers	• Knowledge of the ageing-process related with functional decline • Knowledge of the main geriatric syndromes, including disability, co-morbidity and frailty • Knowledge about the relationship of functional decline with increased medical care, hospitalisation and institutionalisation • Identification of risk factors for frailty, falls and functional decline • Knowledge of the tools available to screen and assess for frailty • Knowledge of solutions that can assist the older adult in assessment/monitoring/prevention/rehabilitation of frailty For more information, see: https://waru.org.uk/cms/projects/facet/facet-mooc/

Table 1: FACET project

SUNFRAIL:

The overall aim of the project is the identification, prevention and management of frailty; one work package is especially directed at "Healthcare staff innovative education". The goal of this work package is the development of an interdisciplinary education across different health care professions.

Health professions	Outcomes (Identified Areas of Improvement)
• Geriatricians • Physicians in most specialities • General practitioners • Nurses • Social workers • Psychologists • Physiotherapists • Pharmacists • Administrative staff	• Strengthen the early identification of frailty through its main risk factors and address its bio-psycho-social domains • Harmonize the tools for the early identification of frailty at primary care and community based level as first entry gate • Broaden the use of interventions taking advantage of innovative tools to prevent frailty • Support the establishment and functioning of multidisciplinary teams by linking primary care and secondary care • Train professionals and carers on the need of a multidisciplinary approach to frailty and empowering them to the use of innovative approaches • Support the delivery of activities on preventing frailty and multimorbidity linked to the assessment of their risk factors, and integrate ICT tools • Identification of contextual barriers (sociocultural, economic, organizational) to the provision of adequate and integrated services to older adults • Increase health and ICT literacy among older adults to improve self-assessment and early identification of frailty, to allow sustainable interventions and reduce progression to dependency

	• Work with key decision makers, providing evidences on barriers to care regarding frailty and multimorbidity, with a focus on the sustainability and equity of early and innovative interventions to prevent and manage frailty For more information, see: http://www.sunfrail.eu/ For detailed information to Healthcare staff innovative education, see: http://www.sunfrail.eu/wp-content/uploads/2015/09/D6.3-Sunfrail-Model-of-Care-on-Frailty-and-Multimorbidity_07.07.2018_FINAL.pdf

Table 2: SUNFRAIL project

PERSSILAA:

The educational part of the project dealt with training strategies necessary to promote the implementation of a new e-health service for frailty screening and prevention. A well-known training method – train the trainer – was utilized and offered socialization opportunities for older adults.

Health professions	Outcomes (Learning goals)
• General practitioners • GP assistant • Healthcare professionals • Physical trainers • ICT experts • Volunteers/students • Healthcare professionals	• The trainers and stakeholders become familiar with the PERSSILAA service model and their task • The stakeholder knows how to prepare, coordinate and execute the screenings • Older adults are trained on Health and ICT Literacy as well as in the physical, health and nutrition domain For more information, see: https://perssilaa.com/ For the education package, see: https://perssilaa.com/wp-content/uploads/2015/11/D5.4_final.pdf

Table 3: PERSSILAA project

GOOD PRACTICES:

The good practices were selected by means of a rating model for education and training, developed and approved by the JA. This model aligns with the recommendations for "Best Practice Evaluation" in Europe, a template from the EU which was modified for the purposes of the JA. The catalogue to rate best practice models for education and training is retrievable from the ADVANTAGE JA Homepage (ADVANTAGE JA). A total of 22 good practices were identified within the rating process and presented in the report about Building Workforce Capacity on Frailty Prevention (ADVANTAGE JA, Building Workforce Capacity on Frailty

Prevention). Within this current report, the good practices still provided and available (13 programmes, mostly involving continuous professionals' education) were again screened for skills and knowledge required for frailty prevention and management in different health and social care professions. The results stemming from the re-screening are listed in the following table:

Name	Health professions	Outcomes
Education Module – Frailty (UK)	• Healthcare Professionals	• Frailty and complex care: Recognizing frailty, navigation of complex care pathways, the role of multidisciplinary teams in integrated and coordinated care • Comprehensive assessment and care planning: Key components of a good care plan, navigation of health systems, covering health problems of frail elderly in a care plan • Prescribing for the elderly: Awareness of negative implications of medication • Safeguarding: How to initiate a safeguarding procedure For more information, see: https://gps.camdenccg.nhs.uk/education-module-frailty
Frailty 360 Online Learning (UK)	• Healthcare Professionals	• Frailty Aware: Build understanding and awareness of frailty • Identifying and assessing frailty: Comprehensive Geriatric Assessment • Journeys of frailty: Explore key points and assess understanding • Multi-dimensional nature of frailty: Frailty Fulcrum model • FrailtySIM – the virtual reality experience For more information, see: https://www.frailtytoolkit.org/frailty360/
Frailty Training Events (UK)	• Multidisciplinary Teams	• Understanding and identifying frailty • Managing frailty • Supporting independence and person-centred care • FrailtySIM (virtual reality experiences) • Multi-disciplinary teams For more information, see: http://fusion48.net/uploads/documents/Frailty_360_-_Programme_Overview.pdf
Frailty for Healthcare Professionals (UK)	• Healthcare Professionals	• Understanding frailty: Gain knowledge and understanding of frailty, understand the issues of frailty, understand the Electronic Frailty Index, gain awareness of the

	• Health and Social Care Support Workers	organisation of care for frailty within the local economy • Long Term Conditions and Frailty: Increase Understanding of long term conditions in relation to practice For more information, see: https://stwh.co.uk/search?q=frailty
Frailty risks screening in community-dwelling older people (FR)	• Nurses	• Basic concepts of frailty • Knowledge that physiological ageing can lead to emergency-situations in the care of older people • Establish working surroundings ready to meet the needs of frail people For more information, see: http://www.anaisformation.com/360-31-ehpad-et-ch-formation-en-intra-accueil-soin-prevention-urgences-evaluation
Postgraduate Certificate in Acute Care of the Older Person with Frailty (UK)	• Healthcare Professionals	• Care of the older person with frailty: Development of knowledge, skills and understanding of the complexity of assessment, planning, delivery and evaluation of care relevant to frail persons For more information, see: https://www.brookes.ac.uk/courses/postgraduate/postgraduate-certificate-in-acute-care-of-the-older-person-with-frailty/
Medical Science (Frailty and Integrated Care) (UK)	• GPs • Nurse Practitioners • Specialists in Primary Care	• Provide person-centred and integrated care beyond traditional professional and organisational boundaries • Empower clinicians in their holistic approach to complex issues associated with frailty • Take on clinical roles and take up new opportunities For more information, see: https://www.keele.ac.uk/study/postgraduatestudy/postgraduatecourses/medicalsciencefrailtyandintegratedcare/
Postgraduate Program Management of Aging and Chronic Diseases (EL)	• Doctors • Nurses • Occupational Therapists • Speech Therapists • Social Workers • Sociologists • Health Visitors • Physiotherapists • Psychologists • Lawyers	No detailed information about Outcomes/Learning goals available For more information, see: https://www.eap.gr/en/important-announcments/5963-call-for-expressions-of-interest-for-studies-in-8-postgraduate-courses-with-semi-annual-modules

	• Dentists	
MSc Specialist Practice Frail Older Adults for Health and Social Care (UK)	• Nurses • Health and Social Care Workers	• Obtain a specialist practice which requires the exercise of higher levels of judgement, discretion and decision making • Content of the program (in parts): Problem-solving and decision making Negotiation and person-effectiveness skills Counselling, support, communication and related therapeutic techniques Quality assurance – evaluation of standards and outcomes of practice Leadership, management and resource management skills Clinical supervision of practice, peer review and peer assessment techniques For more information, see: http://www.lincoln.ac.uk/about/courses/nursppms_2017-18.pdf
National Frailty Education Programme (IE)	• Healthcare Professionals	• Inter-professional education to strengthen and optimize healthcare systems and improve patient outcomes • Incorporate key-research findings from TILDA (The Irish Longitudinal Study on Ageing) • Provide an overview of the theoretical models underpinning frailty • Include an overview of a suite of key frailty assessment tools For more information, see: https://www.hse.ie/eng/about/who/onmsd/nmpdu/nmpdugl/frailty-conference-presentation-6.pdf
Frailty training programs (FR)	• GPs • Physiotherapists • Nurses • Geriatricians • Nursery auxiliaries • Occupational Therapists	Part of the National Strategy: • Improve and strengthen the competencies and power of all health professionals involved in support of the elderly • Taking into account the preservation or maintenance of the autonomy of individuals • Renew professional practices and incorporate new issues of prevention in the professional culture • Develop continuous training by integrating the themes in national priorities • Usage of innovative techniques for the transmission of knowledge within the structures • Promote intersectoral gateways For more information, see: http://solidarites-sante.gouv.fr/IMG/pdf/plan_national_daction_de_prevention_de_la_perte_dautonomie.pdf

Training program for Health Care Professionals on detecting pre-frailty and recognizing the initial steps of frailty in primary care (ES)	• Physicians	• Recognition of the initial steps of frailty and detection of pre-frailty patients • Detection of frailty risk factors • Accurate diagnose of frailty • Knowledge how frailty develops into disability For more information, see: https://ec.europa.eu/eip/ageing/commitments-tracker/a3/training-program-health-care-professionals-detecting-pre-frailty-and_en
+AGIL Barcelona (ES)	• Geriatricians • Physical Therapists • Interdisciplinary professionals (Primary Care Team)	• Design and implement multicomponent programs • Use a person-centred approach • Empower the person and the caregivers • Design adaptable and flexible interventions • Move the intervention close to the person • Build integrated care models, involving community agents and resources • Use an opportunistic case finding strategy • Contextualize the intervention through a users' participation approach • Raise awareness and sensibility • Make an adequate plan for investment and evaluation of the outcomes For more information, see: https://www.ejinme.com/article/S0953-6205(18)30294-2/fulltext

Table 4: Good-practice programmes. EL: Greece; ES: Spain; FR: France; IE: Ireland; UK: United Kingdom.

5.3 Development of the educational model for training of health care professionals

Based on the previous research for EU-funded projects and good practice examples, not only skills and knowledge could be filtered out, but almost all the examples and projects presented included the following characteristic in their actions:

- Interdisciplinary and multiprofessional approach by translation of skills and knowledge across settings.

Although the amount of interdisciplinarity and multiprofessionality varies across the different EU-funded projects and good practice examples, almost all put a strong focus on addressing different disciplines within their activities. The extent of an interdisciplinary and multiprofessional approach can be seen in the tables above which reveal the involved health and social care professions.

Additional to this aspect, the SoAR (ADVANTAGE JA, State of the Art Report) determined not only further criteria for the training of the workforce, but for the organisation of national health and care systems to manage frailty that are relevant to the training of the professionals:

- National and/or regional strategies, clear policies and procedures, which serve as a guiding framework and permeate the educational and training structures from macro (social, political, economic and public health dimensions) to micro (individual that is educated and trained) level.
- Interprofessional training and education, which facilitates a cooperative approach to prevent and manage frailty in different health professions.
- Establishment of single entry points to the system and individualised assessment and care plans.
- Focus on case management.
- Coordination of home and community services across the continuum of care.
- Usage of ICTs.

All these parameters gave reason to build a new framework on professional workforce development for MSs in the Joint Action. This model, which may be seen in Figure 2, was also tested for usability during a MSs survey conducted by the work of partners in the JA ADVANTAGE.

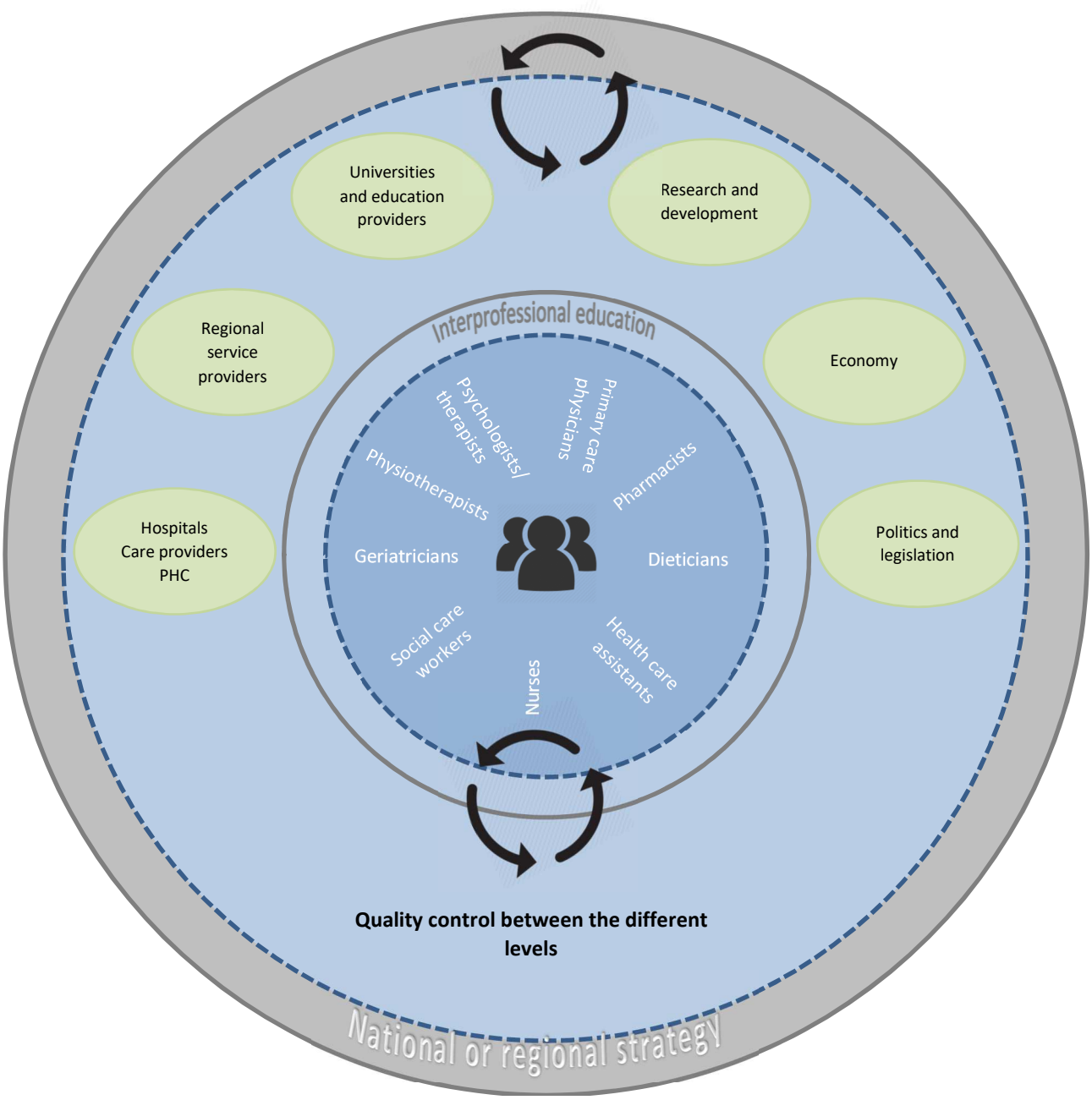

Figure 2: Proposal model for educational transparency.
PHC: Primary Health Care

This model exemplifies the whole process of educational transparency as a dynamic ecosystem where education and training of health and social care professionals ideally takes place in a continuum of different, interconnected spheres. Regarding workforce development from an interdisciplinary and dynamic perspective, adaptation and modification according to changing needs and requirements builds ground for a goal-oriented care of older people. As this illustration describes a target situation, MSs can use it to reflect their individual condition and develop measures (e.g. Ireland developed a National Frailty Education Programme, see:

https://www.ijic.org/articles/abstract/10.5334/ijic.3659/) in order to strive for educational transparency.

6. EDUCATION AND TRAINING IN THE EUROPEAN MEMBER STATES: THE SURVEY RESULTS

6.1 Methods

Based upon the Grant Agreement No. 724099 of the ADVANTAGE JA, partners were asked to conduct a survey among the MSs which was built on the contents of the preceding SoAR on frailty (ADVANTAGE JA, State of the Art Report). It was the aim of the survey to identify how MSs are addressing the prevention and management of frailty at national level. The survey covered the different areas of the Joint Actions' WPs, including knowing frailty at individual level (WP4), knowing frailty at population level (WP5), managing frailty at individual level (WP6), models of care to prevent or delay progression of frailty and enable people to live well with frailty (WP7) as well as extending and expanding the knowledge of frailty to foster innovative policy on frailty (WP8). The questionnaire was developed by the coordinating team from input provided by the mentioned WPs.

The questionnaire included 24 questions of which four open questions covered educational and training aspects. These four questions were based on the report "Building Workforce Capacity on Frailty Prevention" (ADVANTAGE JA, Building Workforce Capacity on Frailty Prevention). The formulation of the questions was:

Are there any under-graduate or postgraduate educational/training programmes on frailty for health and/or social care students offered in your country/region?
Is there an evaluation report or national/regional strategy targeting professional continuous educational/training programmes on frailty for health and/or social care professionals or for caregivers available in your country/region?
In your country/region, which professions/disciplines are involved in preventing and managing frailty? Please describe roles and activities for each profession/discipline in the prevention and management of frailty.
There may be educational or training resources for health or social care professionals that address active and healthy ageing or at least single components of it (such as nutrition, exercise programmes etc.) without explicitly addressing 'frailty prevention'. Are there any resources of this kind in your country/region? Please list them and provide a web link to them.

The following MSs actively participated in the interview: Austria, Belgium, Bulgaria, Croatia, Cyprus, Finland, France, Germany, Greece, Hungary, Ireland, Italy, Lithuania, Malta, Poland, Portugal, Romania, Spain, the Netherlands, Slovenia and the United Kingdom.

The partners of WP8 analysed the feedbacks from MSs according to a pre-defined structure to figure out strengths and possible gaps to be addressed. The retrieved results of the survey were clustered in different educational domains (undergraduate, postgraduate, continuous professionals' education). The results from the survey obtained by feedback from the MSs led to the classification of the MSs into five different groups in matters of frailty consideration in education and training programs (see section 6.2 Results). In order to cluster the MSs for all three domains in a reproducible way, a first evaluation of the feedbacks was done by two raters of WP8 independently. It was decided to rate the MSs according to their overall performance in one domain. Following the preliminary ratings, data were brought together in a direct discussion between the two raters who also used the following quality indicators that were established according to the educational transparency model:

- National and/or regional frailty prevention strategies or existence of more scattered initiatives.
- Educational and training programmes on an interdisciplinary level.

6.2 Results

The surveys' results demonstrate that the interviewed MSs present with different strategies to develop the health and social care workforce in their frailty prevention programs.

According to patterns in their feedback, the MSs could be clustered into five different groups depending on their level of frailty implementation in the education and training programs of health and social care professionals. The tables below describe to what extent the MSs implement frailty in education and training throughout the three different domains (undergraduate, postgraduate, continuous education). Those classifications only serve for benchmarking matters and do not illustrate any grading in terms of quality assessment.

TRAINING OF PROFESSIONALS ON UNDERGRADUATE LEVEL		
Levels of implementation	Description of the level	MSs which comply with this level
Sustainable	National and broad implementation of frailty as topic in curricula on an interdisciplinary basis	
Advanced	National and broad implementation of frailty as topic in curricula on profession specific level	UK, FI, FR
Well developed	Wide implementation in several places of undergraduate educational/training programs on frailty on profession specific level	AT, BE, IE, IT, PL, PT, ES
Fair	Scattered initiatives on undergraduate educational/training programs going on locally on profession specific level	EL, BG, SI, DE
Basic	No offers of undergraduate educational/training programs on frailty, or respondents did not answer this question	HU, CY, MT, RO, NL, HR, LT

Table 5: Training on undergraduate level.
MSs: Member States: AT: Austria; BE: Belgium; BG; Bulgaria; CY: Cyprus; DE: Germany; EL: Greece; ES: Spain; FI: Finland; FR: France; HR: Croatia; HU: Hungary; IE: Ireland; IT: Italy; LT: Lithuania; MT: Malta; NL: The Netherlands; PL: Poland; PT: Portugal; RO: Romania; SI: Slovenia; UK: United Kingdom.

TRAINING OF PROFESSIONALS ON POSTGRADUATE LEVEL		
Levels of implementation	Description of the level	MSs which comply with this level
Sustainable	National and broad implementation of frailty as topic in postgraduate education also on an interdisciplinary basis for health and social care workforce	FI, EI, UK, FR
Advanced	National and broad implementation of frailty as topic in postgraduate curricula on profession specific level for health and social care workforce development	IT
Well developed	Wide implementation in several places of postgraduate educational/training programs on frailty on profession specific level	BE, AT, PL, DE, PT, EL, ES
Fair	Scattered initiatives on postgraduate educational/training programs on frailty going on locally on profession specific level for health and social care workforce	BG, SI, LT
Basic	No offers of postgraduate educational/training programs on frailty, or respondents did not answer this question	HR, HU, MT, RO, CY, NL

Table 6: Training on postgraduate level.
MSs: Member States: AT: Austria; BE: Belgium; BG; Bulgaria; CY: Cyprus; DE: Germany; EL: Greece; ES: Spain; FI: Finland; FR: France; HR: Croatia; HU: Hungary; IE: Ireland; IT: Italy; LT: Lithuania; MT: Malta; NL: The Netherlands; PL: Poland; PT: Portugal; RO: Romania; SI: Slovenia; UK: United Kingdom.

TRAINING OF PROFESSIONALS FOR CONTINUOUS PROFESSIONALS' EDUCATION		
Levels of implementation	Description of the level	MSs which comply with this level
Sustainable	National and broad implementation of frailty as topic in continuous professional education also on an interdisciplinary basis for health and social care workforce	FI, IE, UK, ES
Advanced	National and broad implementation of frailty as topic in continuous professional on profession specific level for health and social care workforce development	PT, IT, PL, DE, FR
Well developed	Wide implementation in several places of continuous professional educational/training programs on frailty on profession specific level	AT
Fair	Scattered initiatives on continuous professional educational/training programs on frailty going on locally on profession specific level for health and social care workforce	BE, EL, LT, RO, CY
Basic	No offers of continuous professional educational/training programs on frailty, or respondents did not answer this question	HU, NL, SI, BG, MT, HR

Table 7: Training for continuous professionals' education.
MSs: Member States: AT: Austria; BE: Belgium; BG; Bulgaria; CY: Cyprus; DE: Germany; EL: Greece; ES: Spain; FI: Finland; FR: France; HR: Croatia; HU: Hungary; IE: Ireland; IT: Italy; LT: Lithuania; MT: Malta; NL: The Netherlands; PL: Poland; PT: Portugal; RO: Romania; SI: Slovenia; UK: United Kingdom.

PATTERNS OF COUNTRIES:

The MSs classified as "Sustainable" or "Advanced" in the rating process already report high standards in academic training for health and social care professionals and individual efforts to implement an interdisciplinary and multiprofessional education are evident. The countries reaching a "Well Developed" or "Fair" level show some fragmented patterns of frailty prevention and management in the education and training of the health and social care workforce. Parts of the quality indicators are already met with room for revision of the current status and further development, especially considering multidisciplinary education and integrated learning strategies for the three domains (undergraduate, postgraduate, continuous). MSs on a "Basic" level of frailty implementation have room for development and improvement in all quality indicators. If frailty is already partly considered in education and

training, only little content is covered and multidisciplinary as well as interprofessional aspects are missing on a larger scale.

On a different matter, the survey's results demonstrate the professions mostly involved in the prevention and management of frailty across the European MSs are: Primary care physicians, geriatricians, nurses, pharmacists, physiotherapists and social care workers. Other professions including dieticians, psychologists, occupational therapists, or speech therapists amongst others are participating on a fractional level. The table on the following page illustrates which professions are currently involved in the prevention and management of frailty in the individual MSs participating in the ADVANTAGE JA. This situation constitutes a starting point to build on, promoting and expanding existing capacities based upon evaluation of defined quality indicators (educational framework delivered by the ADVANTAGE JA) and to develop and adapt processes according to this framework.

Table 8: Involvement of professions in the prevention and management of frailty

Profession	Member State																				
	AT	BE	BG	HR	CY	FI	FR	DE	EL	HU	IE	IT	LT	MT	PL	PT	RO	ES	NL	SI	UK
Primary care physician	●	●	●	NA	●	●	●	●	●		●	●		●	●	●	●	●	●	●	●
Geriatrician	●	●	●		●	●	●	●	●		●	●	●	●	●	●	●	●	●	●	●
Nurse	●	●	●		●	(●)[5]	●	●	●		●	●		●	●	●	●	●		●	●
Nurse assistant	●	●	●		-	-	-		●		-			●		●	●	●		●	●
Other hospital specialist	(●)[1]	●	●		(●)[3]		●		(●)[9]		●	●		●	(●)[15]	●	●	●		●	●
Social care worker	●	●	●		●		●	●	(●)[11]		●	●	-	●	●	●	●	●	●		●
Home-based personal care worker	●	●	●		●	●	●				-	●	-	●	●	●	●	●		●	●
Therapist/ Psychologist		●	●		(●)[4]		(●)[7]		(●)[10]		(●)[13]	(●)[14]		●	(●)[16]	●	●	●			●
Pharmacist	●	●	●		●		●		●		●	●		●	●	●	●	●		●	●
Physiotherapist	●	●	●		●	●	●		●		●	●		●	●	●	●	●			●
Health care assistant	●	-	●				-	(●)[8]	●		-	●	-	●	●	●	●	-			●
Others		(●)[2]				(●)[6]			(●)[12]								(●)[17]	(●)[18]		(●)[19]	(●)[20]

AT: Austria; BE: Belgium; BG; Bulgaria; CY: Cyprus; DE: Germany; EL: Greece; ES: Spain; FI: Finland; FR: France; HR: Croatia; HU: Hungary; IE: Ireland; IT: Italy; LT: Lithuania; MA: Malta; NL: The Netherlands; PL: Poland; PT: Portugal; RO: Romania; SI: Slovenia; UK: United Kingdom.

Legend:

- : this profession does not exist/no defined role **Blank cells:** no response	(●)[7] : Occupational therapists	(●)[14] : Psychologists, speech therapists, dieticians, other therapists
(●)[1] : Occupational therapists, dieticians	(●)[8] : Primary care practice helpers (two years training course on nurses and management issues in primary care practices)	(●)[15] : Medicine specialists and psychologists
(●)[2] : Occupational therapists	(●)[9] : Dieticians, internists, psychiatrists, neurologists	(●)[16] : Occupational therapists
(●)[3] : Psychiatrists	(●)[10] : Psychologists, occupational therapists, logotherapists	(●)[17] : Architects, Day-centers/nursing homes/respite centers/assisted living facilities, mayors
(●)[4] : Occupational therapists	(●)[11] : Social welfare workers	(●)[18] : Physicians in nursing homes, sports science graduates
(●)[5] : Nurses and practical nurses	(●)[12] : Family assistants, Community health workers	(●)[19] : Kinesiologists
(●)[6] :"Geronomi" (Bachelor's programs of Social Services and Health Care)	(●)[13] : Predominantly occupational therapists	(●)[20] : Psychiatry specialists, occupational therapists, dieticians, speech and language therapists, audiologists, podiatrists, optometrists

Specific strengths, competencies and good practice examples were outlined by some partners during the survey among the MS. Those patterns constitute particular orientation points and do not represent the complete approach of the different national systems to include frailty in education and training of health and social care professionals.

Finland, for instance, pursuits an aging policy that emphasizes the prevention and maintenance of older people's functional capacity, independent living at home and active participation in society. In addition, the "elderly care act" and the "act on qualification requirements for social welfare professionals" ensure the quality of services provided for older persons and refer to necessary and appropriate education and training structures. Finland coordinates the ELLAN – European Later Life Active Network, which developed a Core Competencies Framework for Health and Social Care Professionals working with older people. The described competencies within this framework refer to different roles:

Role	Competencies
Experts	• Assessment • Analysis and Problem Identification • Planning • Carry out interventions based on professional standards • Evaluation
Communicator	• Maintain relationships and effective communication • Empowerment • Coaching
Collaborator	• Integral cooperation and integrated services • Informal care and support
Organizer	• Planning and coordination of care and services • Programme of care
Health and welfare advocate	• Collective prevention and health promotion • Social map and social networks
Scholar	• Expertise • Innovation of care and support
Professional	• Professional ethics • Professional commitment and personal awareness

Table 9: Core Competencies Framework

For more information about Finland, see:

http://www.finlex.fi/en/laki/kaannokset/2012/en20120980_20120980.pdf

https://www.finlex.fi/en/laki/kaannokset/2005/en20050272.pdf

http://ellan.savonia.fi/images/English_ECCF.pdf

Ireland established a National Frailty Education Programme to provide healthcare professionals with an enhanced understanding of frailty and frailty assessments, ensure earlier recognition of frailty and better health outcomes for frail older adults. Furthermore, a 10 Step Framework provides practical guidance to healthcare professionals for the implementation of integrated care programs for older persons. One step refers to the workforce planning for an ageing population:

Enablers:
• Build capacity to redesign/reconfigure services and the workforce based on best practice
• Build evidence based models of care and anticipated future needs
• Support individuals and teams to adopt new ways of working and practice changes in line with evidence
• Explore use of "technology" to support an agile, flexible and mobile workforce

Table 10: Step 9 "Enablers" of the 10 Step Framework

The Guidance on Comprehensive Geriatric Assessment highlights the key roles of professionals in managing the care of older people. Core competencies for the different disciplines were identified based on five domains:

Disciplines	Competencies
• Consultant Geriatrician and Medical Team • Nursing • Occupational Therapy • Speech and Language Therapy • Physiotherapy • Clinical Pharmacists • Nutrition and Dietetics • Social Work	Professional/ethical practice: • Practice in accordance with legislation, regulation and policy • Practice within the limits of own competence and take measures to develop this Holistic approaches to care and integration of knowledge: • Conduct a systematic holistic gerontological assessment of the patient based on evidence-based practice and take into account carers needs • Plan care in consultation with the older person, their family and care-givers taking into consideration interventions by multidisciplinary members of the specialist geriatric team • Implement planned care and prescribed interventions to achieve the identified outcomes Interpersonal relationships: • Establish and maintain caring therapeutic interpersonal relationships with the older person, their family, carers and healthcare team • Collaborate with all members of the healthcare team Organisation and management of care: • Refer to other professionals' activities commensurate with their expertise and professional practice • Facilitate the coordination of care Personal and professional development: • Act to enhance the personal/professional development of self and others

Table 11: Guidance on Comprehensive Geriatric Assessment

For more information about Ireland, see:

https://www.ijic.org/articles/abstract/10.5334/ijic.3659/

https://tilda.tcd.ie/ppi/frailty-education/

https://www.hse.ie/eng/services/publications/clinical-strategy-and-programmes/a-practical-guide-to-the-local-implementation-of-integrated-care-programmes-for-older-persons.pdf

https://www.hse.ie/eng/services/publications/clinical-strategy-and-programmes/comprehensive-geriatric-assessment-document-.pdf

In the UK, a planned Frailty Core Capabilities Framework will provide a consistent and thorough structure for review and staff development. The capabilities include the following topics:

Core Capabilities (knowledge, skills, behaviour)	
• Frailty awareness	• Promoting community skills, self-care and autonomy
• Frailty identification and assessment	• Physical and mental health and wellbeing
• Person-centred approaches	• Managing medication
• Communication	• Care and support planning
• Families and carers as partners in care	• Law, ethics and safeguarding
• Collaborative and integrated working	• Research and evidence-based practice
• Prevention and risk reduction	• Leadership in transforming services
• Living well and promoting independence	

Table 12: Core Capabilities Framework

Moreover, the Welsh Document on Workforce Development and the Report on New and Hybrid Roles and Projects point out the blurring of roles, the extended scope of practice and new roles that operate across care settings. Core features of the primary care workforce are described as follows:

Core features	
• Understand and meet the health and wellbeing needs of the whole person with a focus on outcomes	• Facilitate flexible access
• Plan from a system-wide perspective, taking into account a range of partners and stakeholders	• Provide improved coordination and continuity of care
• Plan to deliver universal care, varying the intensity and volume according to the needs of individuals, families and local communities	• Use the voice of the individual and encourage self-management and independence

• Equipped to deliver anticipatory and preventative care	• Embrace technology and be skilled in its use
• Provide people with access to the right professional or other source of help as early as possible	

Table 13: Core Features of the Primary Care Workforce

For more information about the UK, see:

http://www.skillsforhealth.org.uk/services/item/607-frailty-core-capabilities-framework

https://gov.wales/docs/dhss/publications/151106plannedprimarycareen.pdf)

https://www.skillsforcare.org.uk/Document-library/NMDS-SC,-workforce-intelligence-and-innovation/Workforce-integration/Pioneer-sites/Hybrid-worker-roles-and-projects---discussion-document-(v2-June-2015).pdf

France includes the frailty concept in the annex of the law "adaptation of the society to ageing" with various approaches. In addition, national training priorities for health professionals are defined in a regulatory text with several approaches:

Approaches for national training priorities for health professionals	
• Screening and management of elderly at risk of autonomy loss	• Prevention of iatrogenic disability
• Disability prevention	• Optimization of hospital discharges
• Appropriate prescription and prevention of drug programs	• Multimorbidity in elderly
• Medication optimization	• Falls prevention

Table 14: National training priorities for health professionals

For more information about France, see:

https://www.legifrance.gouv.fr/jo_pdf.do?id=JORFTEXT000031632884

In Spain a Consensus Document on frailty and falls prevention among the elderly has been produced within the Prevention and Health Promotion Strategy of the Spanish NHS. One of its main lines of action directs at the early detection and intervention of frailty. It includes a component of continuous training of health professionals in the detection and management of frailty. It is delivered through a 30 hours free online course aimed at:

Health Professions	
• Physicians	• Occupational therapists
• Nurses	• Public health technicians of the local authorities

• Physiotherapists

Table 15: Continuous Training of Health Professionals in Frailty Detection and Management

The core element of this document is frailty screening of all individuals aged 70 and older with the help of a tool that will allow the early detection of early functional decline. Individuals and populations detected as frail will be offered a multi-dimensional assessment and multi-component interventions to reverse this state.

Moreover, the "Plan of Attention to the Old One" from one of the Spanish regions (Andalucía) includes a training program for health professionals and the NHS Madrid has developed a short course on its new service 420 on frailty for all primary care centres of the region. These interventions are both based on the Consensus Document.

For more information about Spain, see:
https://www.mscbs.gob.es/profesionales/saludPublica/prevPromocion/Estrategia/docs/FrailtyandfallsElderly.pdf

7. RECOMMENDATIONS COMING FROM THE JA

After the examination of the SoAR, the report on Building Workforce Capacity on Frailty Prevention, the survey among the MSs' and the development of the framework model for educational transparency, the following competencies and learning outcomes for a well-prepared workforce in frailty prevention and management can be concluded (ADVANTAGE JA). These recommendations align with general WHO recommendations for transforming and scaling up the health workforce (WHO, 2013), therefore proving the relevance of this issue.

1. Knowledge of frailty:

Acquire a comprehensive understanding and awareness about frailty as a main geriatric syndrome and raise sensibility for the issues of frailty. In the JA SoaR a definition of frailty can be found (ADVANTAGE JA, State of the Art Report).

2. Enabling an early identification of risk factors for frailty:

Strengthen the early identification of risk factors by recognizing the initial steps of frailty and detecting pre-frail patients.

3. Knowledge of the tools available to screen and assess for frailty:

Key frailty assessment and screening tools facilitate an accurate diagnose of frailty. Health care professionals know how to prepare, coordinate and execute the screenings.

4. Management of frailty:

A common approach for the management of frailty is the Comprehensive Geriatric Assessment (CGA). Particular actions, treatments and processes with regard to frailty can be structured and allow for an organized, comprehensive delivery of care by different health and social care professions (ADVANTAGE JA, State of the Art Report).

5. Establishment of multidisciplinary teams:

Professionals are trained and educated in a multidisciplinary approach to optimize healthcare systems and improve patient outcomes. The competencies of health and social care professionals are built up and therefore link primary care and secondary care. Interprofessional teams lead to the definition of new roles and support individuals and teams to adopt new ways of working.

Most of the EU-funded projects, the good practice examples and the survey results from the MSs already acknowledge a multidisciplinary approach in the prevention and management of frailty. The projects, courses and strategies mentioned within this report are directed at different health and social care professionals. Especially teams consisting of general practitioners, nurses, health and social care workers and eventually other specialists constitute the most frequent description of a multidisciplinary team.

This point is specifically aligned with the WHO recommendation #9: Enforce interprofessional education through all domains (undergraduate and postgraduate programs) (WHO, 2013)

6. Build integrated and coordinated care models:

Integrated and coordinated care by involving community agents and resources beyond traditional professional and organisational boundaries constitutes another relevant aspect in the education and training of health and social care professionals. Moreover, the innovation of care and support leads to a health and social care organization that understands and meets the needs of the whole person with a focus on outcomes.

7. Training on a multidisciplinary approach to frailty:

Design and implement multicomponent programs that comprise adaptable and flexible interventions in accordance with the multi-dimensional nature of frailty, also taking into consideration evidence-based practice.

8. Use of ICT-Tools:

The integration of ICT-Tools supports an agile, flexible and mobile workforce. Innovative technologies promote the transmission of knowledge within different structures.

9. Adopt person-centred approaches:

Focusing on the frail person and considering his/her individual condition is vital for improved patient outcomes and patient adherence.

Extra recommendations can also be made about the organisation of the training on frailty:

10. Perform continuous training:

Enhancing the personal and professional development of the health and social care workforce in order to guarantee a high-quality, temporary and innovative health and social care.

This point is specifically aligned with the WHO recommendations #1: Establishment of continuous development programs according to emerging healthcare needs of the population and #8: Enable the development of healthcare professionals by means of carer ladders and educational pathways (WHO, 2013).

11. National/regional strategies:

Define a national/regional strategy on frailty with respect to the MSs' contexts, where the development of the care workforce by education and training is an integrated part of that strategy. Experiencing those strategies as steering tools, MSs will be enabled to facilitate education and training of health and social care professionals.

12. Integrated education and training:

Develop integrated learning objectives which crosscut the three educational levels, adopting level of competence for different health and social care professions. This means that all knowledge and skills outlined in this document should be part of curricula of health and social care professionals across the whole period of education and training.

13. Evaluation and quality control:

Implement continuous quality assurance processes among national/regional levels, the different institutions/settings providing training and education and throughout all three educational cycles (undergraduate, postgraduate, continuous) in order to allow for evaluation and improvement in education and training (e.g. by evaluation reports).

This point is specifically aligned with the WHO recommendations #4: Modification of curricula according to emerging healthcare needs of the population and #10: Implement accreditation of healthcare professionals' education programs to facilitate quality management processes (WHO, 2013).

14. Aspire for empowerment of caregivers and intersectoral collaboration:

Empowerment of caregivers will enable a better collaboration between different settings in the health and social care continuum. Intersectoral collaboration between various settings, such as hospitals/care providers, regional service providers, universities and education providers, research and development as well as economics and politics in turn leads to a holistic, common approach in frailty prevention and management and thus facilitates the best delivery of care. The overall aim of the JA to produce a common European approach for the prevention and management of frailty (FPA) is an exemplary illustration in this context.

15. Sustainability:

Implementation and pursuit of the presented recommendation of the JA should be aimed at sustainability. This means, that concrete actions towards management and prevention of frailty (see recommendations 1-8) as well as organizational and structural processes (see recommendations 9-13) are able to continue in the long-term with possibilities to adapt to changing needs and emerging issues concerning frailty prevention and management.

8. LIMITATIONS OF THE PROCESS FOLLOWED

The information collected in this report is based on the survey conducted among the MSs. No additional sources were retrieved in order to collect more detailed information. Questions in the survey were open and have been answered with different levels of exhaustiveness. Moreover, some respondents may not have nor have found expert knowledge on education/training issues. Different methods were used to answer the MSs' survey (interviews with key informants and search for health profession' faculties' curricula in internet), which results in inconsistent and differentiated feedback. Because of the survey's structure the concrete prerequisites of individual professions for frailty prevention and management (such as skills, values and knowledge) are not recognisable. Nevertheless, it is assumed that the MS's rated as sustainable and advanced are definitely oriented towards certain knowledge and skills patterns in education and training, which have been used as reference for the recommendations made. Because of these limitations the document makes no claim to be exhaustive.

9. CONCLUSION

The aim of this report was to reflect the current education and training situation based on the SoAR, the document "Building Workforce Capacity on Frailty Prevention" as well as the MSs' survey and, subsequently to identify training needs in the workforce that enable health and social care professionals to respond to an ageing and frail population with the appropriate skills and knowledge. Research about the theoretical situation and comparison with the current situation illustrated by the survey among the MSs not only led to the development of a model for educational transparency, but it also allowed the JA to make concrete recommendations for education and training in frailty management and prevention. Those

recommendations refer to concrete actions in frailty prevention and management as well as to more strategic organizational and structural developments. By pursuing those recommendations, education and training of the health and social care workforce will be substantially transformed in order to be able to tackle frailty.

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