

# Health promotion for older people performed in health sector. Indication and analysis of key sectorial institutions in selected EU countries: importance, cooperation, and perspectives for change

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## ABSTRACT

**Background:** Health sector plays important role in health promotion for older population (HP4OP). The institutions involved constitute a very differentiated sphere: variety of models, structures, financing methods, different forms of providers and payers. HP4OP requires engagement of health sector and medical/public health professionals. This paper aims to review and narratively describe within 10 representative countries of Central Europe, Eastern Europe and the Mediterranean the institutions dealing with HP4OP in the health sector, their functions and some recognized good practices.

**Methods:** A peer-reviewed and grey literature review of activities of HP4OP in the health sector was conducted through a narrative search of MEDLINE and on the website of the major European institutions, agencies and database (i.e. the healthPROelderly database). The search was restricted to papers published in English. Questionnaires, individual interviews and templates were provided for collecting information from country experts.

**Results:** Health sector institutions are crucially active in HP4OP: the majority of the project countries experts indicated HS as the most important or underlined its importance. That has been confirmed by the extensive literature review as well as by the deep interviews, which underline the preeminent role of primary care, together with the importance of the institutional and inter-sectorial cooperation, specifically with local governments and NGOs. Moreover, innovations, new technologies used by professionals and patients may significantly improve activities of health sector oriented on effective and long lasting HP4OP.

**Conclusions:** The research performed provided a set of information for the description of the sectorial role in HP4OP, including barriers and limitations, the prerequisites for the cooperation, good practices regarding health promotion projects/ programs focused on old population. The paper, based on EU project, presents the overall picture of health sector involvement in HP4OP and the statement that various institutional arrangements in EU do not contravene the idea of good practices applicability and importance for the effective implementation of HP4OP programs.

*Key words:* health sector, health promotion, primary care, older population, institutions, organizations, UE

## INTRODUCTION

Over the last few decades, a reduction in the birth rate and a gradual increase in life expectancy have been accompanied, especially in developed countries, by a remarkable ageing process that has been much faster than was expected. The age structure of the EU population is changing dramatically: in 2013 the most numerous cohorts were around 45 years old, by 2060 it is expected that the number of elderly people will account for an increasing share of the population [1].

European countries vary in health status in older age and these differences together with age specifics should be accounted for when designing adequate public health policy and health promotion [2]. Furthermore, great differences among European countries exist not only due to the economic and social situation, but also to policy systems, the structure and nature of institutions, the range of competencies, the scale of activities and size of institutions, the financial resources available, and many other factors. Similarly, potential health promotion providers vary considerably from country to country.

The 6th work-package of ProHealth65+ (VWP6) focuses on gathering knowledge concerning institutional intervention for the protection of health at different stages of life and health promotion targeted at older people (HP4OP) in selected European countries (Bulgaria, the Czech Republic, Germany, Greece, Hungary, Italy, Lithuania, the Netherlands, Poland and Portugal). This paper, based on the report on Health Sector, aims to review and narratively describe within 10 representative countries of Central Europe, Eastern Europe and the Mediterranean the institutions dealing with HP4OP in the health sector. Particular analyses regarding HS and HP4OP were provided searching for the indication of general HP functions and those focused on HP4OP, sectorial institutions/bodies and potential examples of good practices.

## METHODS

The literature review, desk research methods concerning the HP4OP in general and specifically regarding the HS involvement were used. The sources searched were mostly websites of the main HS institutions possibly engaged in HP4OP, but also entities defined as "peripheral" for HS or overlapping HS.

Information and data accessed with PubMed and Google search were used as well as detailed searches of WHO documents, the European Observatory on Health Systems and Policies, ministries of health and other ministries, relevant bodies/agencies or departments, involved in health care and institutional reports on health care issues.

At the beginning of the research process the basic information was obtained with the use of a dedicated tool: Pro-Health 65+ Questionnaire (overall country-specific

information on HP4OP given by experts on public health sphere from the project countries). The HS basic role regarding HP4OP was indicated in eight countries, however not always regarding the same institutions. Detailed sectorial templates (*Health Sector Template* (HST)) have been delivered to the experts from the countries that indicated HS as the most engaged in HP4OP, according to the methodology described in the paper of Sitko et al [3]. The template constitute a tool serving the indication of what, where and how the interventions/ activities are being undertaken and realized. They have been designed as a set of questions concerning the three HS levels: 1) questions concerning general HS activities in relations to HP4OP; 2) questions concerning particular sectorial level/ provider for HP4OP (primary care/ other institutions delivering health services) and 3) the street – level health promoters involvement ("inside" health sector).

The main HS stakeholders groups are as follows: decision – makers (in relation to health policy); payers/ insurers; providers; medical professionals and other professionals employed by sectorial institutions (table 1). Consequently, the analyses included:

- HS characteristics (focus on involvement, role in HP4OP);
- PH and HP models, main HP4OP functions (information, education, prevention, advocacy);
- HP activities in HS (e.g. physical activity, healthy diet, chronic disease prevention);
- Description of the potential cooperation with other institutions/ sectors;
- Selected examples of good practices;
- Conclusions and recommendations concerning HS involvement in HP4OP:

At the course of the research it occurred to be extremely difficult to collect information using the template distribution. For this reason the list of questions was shortened and individual interviews with experts were provided (on a limited scale due to the respondent's lack of engagement). Country experts' opinions were crucial due to the variety and specificity of HS in project countries.

In the WHO definition HS role concentrates on health services delivery including HP and disease prevention [5]. Hereby the wide definition was accepted (including entities, functions and structures). The other terms accepted were based on WHO Glossary on Health Promotion [6]. Despite HS specificity and diversity between countries there are typical common elements regarding HP, the simplified picture presents the scheme below (Figure 1).

## RESULTS

In literature the two main PH approaches are mentioned regarding accomplishment of compression of morbidity and health of the old age population: 1)

**TABLE 1. Health sector: role and specific functions in HP &HP4OP. Own source.**

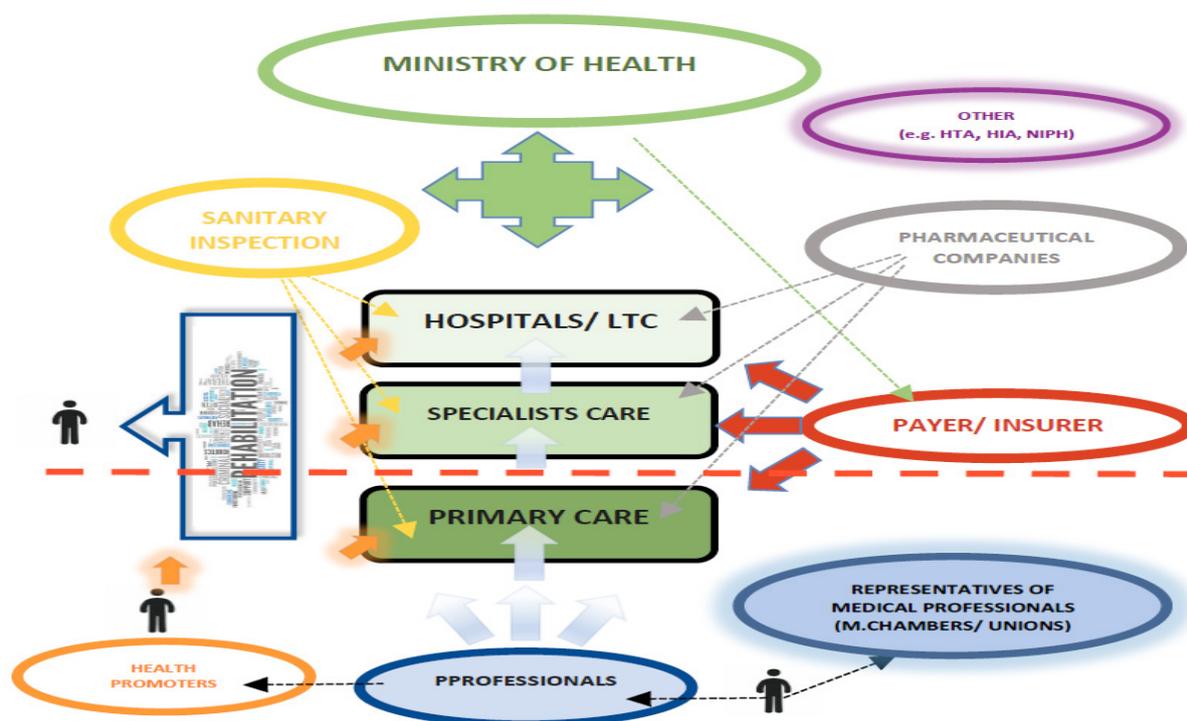
SECTORIAL INSTITUTION	1.MISSION (OFFICIAL) 2. MAIN SECTORIAL ROLE (GENERAL)	GENERAL HP FUNCTIONS	SPECIFIC FUNCTIONS IN RELATION TO HP & HP4OP
Ministry of Health	<ol style="list-style-type: none"> <li>1.General responsibility for decisions concerning population health</li> <li>2. Governing, ruling the sector, controlling main public institutions</li> </ol>	Public health and health promotion realization: generate resources, deliver services, provide oversight or exert influence over decisions etc.	<ol style="list-style-type: none"> <li>1.Planning, implementing, monitoring, evaluation of HP4O strategies, programmes, initiatives (national plans, programs, other nationally implemented initiatives - central and local level)</li> <li>2. Goals and guidelines indication (national policy – HP addressed to OP in HS)</li> <li>3. Defining and providing proper quality and efficient services including the HP4OP services</li> <li>4. Protection of public health (including health promotion)</li> <li>5. Considering effects of health policy into other (HIA and HiAP) sectors and stakeholders</li> </ol>
Payer/ insurer	Enabling delivery of services to population	Financing and organizing services delivery	<ol style="list-style-type: none"> <li>1.Financing/ contracting HP programs</li> <li>2. Controlling, monitoring, evaluating HP programs realization process</li> <li>3. Final control of the services delivery within HP programs (contracts, other methods of financing)</li> </ol>
Providers	Practical realization of main sectorial aim: services accessibility	Services provision in respect to HP	<ol style="list-style-type: none"> <li>1.Delivery of services oriented on prevention and prophylactic, early diagnosis provision</li> <li>2.Health promotion services direct delivery due to information, education and support (lifestyle, physical activity, diet)</li> <li>3.Delivery of rehabilitation services</li> </ol>
Professionals organizations (e.g.Medical Chambers, associations of professionals)	Representation of professionals interests	Participation in social consultations, provision of standards	<ol style="list-style-type: none"> <li>1.Advocacy for HP and HP4OP</li> <li>2.Expertise delivery</li> <li>3.Information dissemination</li> </ol>
Medical/ PH professionals	HS services provision	SH services provision	<ol style="list-style-type: none"> <li>1.Advocacy for HP and HP4OP</li> <li>2.Expertise delivery</li> <li>3.Information dissemination and education</li> </ol>
Sanitary Inspection	Surveillance of health safety	Information concerning HP delivery	<ol style="list-style-type: none"> <li>1.Information dissemination concerning healthy behaviours</li> <li>2.Monitoring activities focused on health risk elimination</li> </ol>

implementing prevention and developing PH systems - following the rule: HP delivered encompassing the whole life cycle; 2) in case of elderly, HS has to correspond to the geriatrics knowledge and should be developed as the integrated health system (including PH and clinical approaches spanning primary, secondary, and tertiary prevention for populations and individuals, respectively), and effective geriatric medical and social care with focus on prevention during the whole life cycle [7]. The important factors are also connected to occupational medicine role [8], which is described in a dedicated paper. HP activities within HS are generally undertaken in/ by the crucial sectorial institutions: primary care, payer/ insurer and medical/public health professionals. Description of HS most important characteristics helps to understand its role in HP4OP in different contexts (legal, organizational and structural). The main responsibilities and activities of HS institutions in HP4OP in general and in four “model” countries (main partner of the ProHealth65+ project) are shown in table 2 and 3, respectively.

The priority values concerning HS functioning have to be underlined in relation to universal health coverage [9]. It is also crucial that the issue of equal access belongs to fundamental HS questions - no matter the sectorial model [10]. The prevailing HS role in regard to PH (including HP4OP) is based on the “old” approach - “traditionally” understood PH objectives. The ideas of HS role and its institutions engagement in relation to treatment are quite well developed. On the contrary, the new, social or cultural aspects of PH and health determinants are somehow neglected: responsibilities still not defined in a way motivating health professionals to undertake HP activities. The social context, behavioural, cultural and socio-economical determinants of health and health inequalities are thus situated “outside” the HS interests and activities [11]. Such situation regards both national and regional levels [12].

HS role in federal and decentralized countries differs: in case of the high autonomy of the states governments (Germany or Austria) HS responsibilities concerning HP

FIGURE 1. Health sector main institutions and HP4OP.



may be delegated to payers (health insurance funds) [13]. In Italy, Spain, Sweden, Switzerland, Great Britain, Belgium and Denmark responsibilities are located outside HS (administration on different levels). The Swedish example may be recalled hereby as the illustration of well-defined sectorial responsibility in relation to other sectors [14]. Decentralized approach and solutions concerning HS organization and responsibilities in Portugal [15], Hungary and Ireland have been changed to the subsequently recentralized system regarding PH and HP. Ireland example also shows a great change in relation to patient's participation, including older population [16]. The issue of health literacy in relation to HS and HP4OP is also very important, however the term itself constitutes a source of confusion and debate [17].

In post-soviet countries health systems underwent the process of systemic transformation, from the so-called Semashko system. In reality, the central and eastern Europe did not develop strong HP [18]. On the other hand, the progress concerning communicable diseases fighting cannot be denied, e.g. activity of Polish Sanitary Inspection [19], but HP and inter-sectorial action were neglected [20]. In literature concerning post-soviet HS reforms the opinion that the preventive medicine was a key strength of the Semashko system was based on the secondary prevention activities within HS. It rarely relied on the primary prevention of non-communicable diseases [21] and HP still belongs to the HS neglected functions [22]. It is still focused on the traditional concept of HS as a

site for treatment - not for PH services (focused on hygiene, sanitation, traditional methods of communicable disease control) [23].

The specific role concerning HS engagement in HP concerns the group "independent" agencies providing HS institutions (payers/ insurers) with the necessary information (e.g. effectiveness of programs and activities, research, expertise, PH surveillance data). Such subjects are for instance sanitary inspections or national institutes of PH (Polish National Institute of Public Health and German Robert Koch Institute). HS engagement in HP activities may be differentiated also due to the strictly political context: the countries that are defined as liberal (e.g. Great Britain), create conditions much more involving HS in HP than southern European countries (Spain, Italy, Greece) or the countries defined as conservative (France, Germany or Belgium). The Nordic countries (welfare state concept based), develop supportive conditions for HP within HS [24]. In the "old" EU countries that based HS on the health insurance model, after the time of neglecting such activities, the role of HP was strengthened in the processes of systemic reforms [25]. Such examples may be provided regarding Germany or Holland.

The need to assure finances for HP purposes has to be stressed in the context of HS role and HP ideas implementation [26]. The lack of evidence in case of HP realisation is often highlighted in this context. The innovative approach to HP (new technologies, tools and methodology), may create a chance for modern HP within HS, starting from

**TABLE 2. HS institutions: responsibilities in HP4OP and activities.**

MINISTRY OF HEALTH	PROVIDERS (GENERAL)	PRIMARY CARE	PH PROFESSIONALS/ MEDICAL PROFESSIONALS	INSURER	OTHER
<b>Main responsibility for organization and supervision of systemic population health protection</b>	<b>Services delivery to the insured/ patients – particular services (adequately to a provider type)</b>	<b>Services delivery to the insured/ patients with the focus on first contact with patients – wide spectrum of services</b>	<b>Direct contact with patients: personal, intimate relationship based on trust</b>	<b>Main responsibility for financing, contracting, management of services provision</b>	<b>In selected project countries there are specific HS institutions involved also in HP4OP (some not indicated in other countries) – their roles differ due to the systemic organization and structure</b>
Initiating and planning, implementing, monitoring and evaluation of HP4O strategies, programmes, initiatives on the central and local level Creating the main guidelines, goals in the national policy – health promotion addressed to OP in the health sector Provide the high quality and efficient health care services including the HP4OP services. Protection of the key public health functions (including health promotion) Take into account the effect of health policy into other (HIA and HiAP) sectors and stakeholders	Depend on the provider: 1) selected specialists 2) hospitals 3) emergency units Providers role and functions mostly focused on education and information regarding prevention of specific problems in later life	Generally - see providers box Specifically – PC constitutes the first “entry” point to the HS, thus the important HP4OP services are: 1) Prophylactic (wide range of services) 2) HP information, education and advice (Promoting physical activity, Healthy diet and nutrition, Injury prevention and safety promotion, Risk prevention: smoking, excessive alcohol drinking, dangerous sex, falls, obesity, social isolation, Preventing chronic non-communicable disease. Medical treatments (interventions) in the framework of primary prevention: medical consultancy and supervisory (e.g. home visits), vaccinations, rehabilitation,	PH and HP professionals are the crucial elements in a chain of activities oriented on HP4OP: they have the specific knowledge, adequate to patients needs, they know them and offer personal help, often focused on a specific problems (activities may differ depending on a particular patient’s health status, actual condition, as well as environment, social and family conditions, possibilities for support and encouragement) however some general actions are also possible (education and persuasion for active life in general)	Planning, implementing, monitoring and evaluation of HP4O programmes – due to responsibility concerning financing, the evaluation of programs effectiveness may be crucial (decisions on postponing financing), the contracting decisions may be focused on treatment or may include selected HP and HP4OP services (indicated as beneficial for the patients health). Insurers may play active role in regard to HP4OP programs – starting form initiative of such action and ending on evaluation and payments	1) Sanitary inspections/ units: controlling/ surveillance 2) Pharmaceutical companies: financing of some HP services/ initiatives (brochures, posters, equipment free delivery) 3) Medical professionals organizations: support, education, information regarding HP 4) Nursing homes for elderly (and LTC units): provision of HP services – physical activity classes (healthy movement, walking, dancing and other HP activities oriented on specific problem)

Source: Based on [http://www.healthproelderly.com.pdf.hpe\\_European\\_Report\\_2008.pdf](http://www.healthproelderly.com.pdf.hpe_European_Report_2008.pdf)

the primary care level [27]. Innovative approach is crucial for health services provision, specifically within PC [28]. Red Cross underlines the importance of EBHP in relation to older people [29]. In relation to HS the term “community care” should be evoked as well. Medical professionals may offer specialized support allowing independency at own environment (not dependent on institution care) under the condition that the local community/ organizations and individuals provide reliable support to medical staff [30, 31, 32]. The sectorial specificity and differentiation has crucial meaning for the project research. It is rooted in a base model for HS systemic organization.

Non-questionable requirements regarding HP activities are: sustainability, evidence-based, adjusted to the specificity of addresses, local, cultural and social contexts. HP understood as variety of actions of different stakeholders requires concerted and common approach of other sectors/ institutions. HS engagement in HP4OP regards mainly actions undertaken directly by sectorial professionals and often creates a proper, available and reliable setting for actions [33]. Ministries of health or payers/ insurers initiatives, oriented on earlier “stages” of HP –policy ideas, plans, programmes, management, coordination and financing create the environment that

**TABLE 3. Four “model” countries and HS, public health/ HP/ HP4OP. Based on literature review, country profiles (electronic reports).**

COUNTRY HS MAIN FEATURES/ HP	HOLLAND	POLAND	ITALY	GERMANY
<b>BASE RULES &amp; Legal frames for HP/ HP4OP</b>	Bismarckian, single compulsory h. Insurance scheme (s.2006) Public Health Act does not include HP4OP directly (includes youth health care responsibilities, health education), HP for elderly not specified directly	Health insurance + budget funds, tax & insurance fee (MIXED MODEL) legal base for HP: 1. NHF regulations – general HP 2. Central Government (MoH) – NHP (general HP) 3. Local governments – RHP (HP)	NHS (SSN)– regionally based, MoH role, intersectoriality 1. ASLs centred template ASL (acting as provider and purchaser) 2. Regional templates	Health insurance: statutory + private Legal base for HP differs from land to land – health promotion & education depends on the regional regulation WIDE AUTONOMY (generally SGB V)
<b>PAYER/ INSURER/ FINANCING</b>	Financing based on health services contracting: 1) Process of negotiating services (with the committees representing GPs) 2) Selective contracting	NHF: centralized (territorial units – on administrative level)	Budgetary – universal coverage but system organized on three levels – local health authorities responsible for HP with PC and contracting (taxes – source of financing)	Sickness funds: Primary prevention and health promotion - mandatory in 1989, eliminated in 1996 and reintroduced in 2000 (modified form), 2007 – occupational HP included into SHI standards
<b>PRIMARY CARE/ PREVENTIVE CARE</b>	Different providers: GP (gate keeper), nurses, midwives, physiotherapists, psychologists, pharmacists (integrated provision of health services) – separated PC and preventive care	Different entities (mainly – since systemic reforms – private ownership)	PC – central institution for h.s. delivery by GPs: the first contact point with the system, responsible for continuity of care & health education (gate keeper)	Since 70-ties: Benefit basket expanded – individual preventive services transferred to physicians private practise, family practitioners are not gate-keepers (coordinators)
<b>SPECIALIST CARE &amp; other forms of care</b>	Main rule: accessible only on the basis of a GPs referral (only 4% of contracts with GPs results in secondary care referral)	Vary in forms, also private ownership, specialist in question: geriatrists, oncologists, cardiologists, rheumatologist, diabetes specialists	Available on the GPs referral 'base-group practice', 'network group practice' and 'advanced group practice' ADI & UVM role	Generally depends on family physician referral
<b>OTHER ENTITIES/ SUBJECTS</b>	HP (understood as public health services) included to responsibilities of MUNICIPALITIES & PREVENTIVE CARE: municipal health services – GGDs (local policy for community health)	1. Organizations representing medical doctors & nurses engaged in aging /geriatric problems 2. Sanatoriums, rehabilitation centres, private medical practices	Informal carers Regional Departments of Health ASLs (Local health authority) - responsible for HP and improving quality of life	1. Federal Centre for Health Education – agency of the Federal MoH (population-wide campaigns for lifestyle-oriented primary prevention), 2. German Forum for Prevention and Health Promotion
<b>HP MAIN ACTIVITIES (examples)</b>	HP different activities realized formally in a frame of a separated preventive care Recommended physical activity on medical prescription Education regarding healthy life style and nutrition screening and vaccination (influenza)	Education/ advising of patients during regular visits Immunisation (PC) Information/advertising via brochures & other material (pharmaceutical entities), Diseases prevention (tests, medical check-ups and other forms of specialists care regarding HP)	Education and information (nutrition, healthy life style) delivered to patients by doctors and nurses (GPs, specialists) Important preventive activities – occupational medicine (regular m. check-ups)	Education/ advising patients, Physical activity prescription (GPs) Information delivery (Sickness Funds) Immunization (seasonal – mainly against flue)
<b>OTHER ACTIVITIES (examples)</b>	Different forms of informing (regarding life style, nutrition, preventive services) – medical and public health professionals with participation of media and private sector	Mainly on voluntary basis: different events organized with participation of health sector (community nurses, MDs, other professionals, organizations of professionals)	Occupational medicine – includes different activities concerning HP (under MoH general responsibility)	Network to promote healthy nutrition and activity among others elderly pop. (Ministry of Food and Agriculture initiative)

should follow the fundamental questions: health inequalities reduction, population health status improvement and satisfaction of population needs. In case of elderly health inequality seems to be specifically important regarding HP4OP activities. It was indicated lately in literature as a crucial factor in health care [34]. Contemporarily HP importance for all of the mentioned aims, however the systemic model may matter, cannot be denied.

Country experts indicated HS as the key one for HP4OP activities in all main project countries. In case of Germany, Health Insurance Companies with the National Association of Statutory Health Insurance Funds (GKV-Spitzenverband), Federal Joint Committee (G-BA) and German Medical Association are responsible for HP. The National Health Targets, Equity in Health and Healthy Cities Network were also listed (national cooperation networks). Due to experts opinions the most important institutions are local/regional actors [35]. Legislation in Germany includes a set of provisions on HP -Social Security Code (SGB):- §20 SGB V "prevention and self-help" and §§ 21-26 SGB V (prevention and HP within the health insurance funds), implementation provisions ("*Leitfaden Prävention*" - prevention guideline- by GKV-Spitzenverband). The indicated federal law level was the 2015 law. Accordingly to the expert opinion, the funding of prevention, health protection and HP in 2013 came from: a) Statutory health insurance -45%; b) Public budgets - 19%; c) Statutory accident - 11%; d) Private households - 10%; e) Employers - 9%. Federal Ministry of Health plays important role, initiating some important changes: new legislation regarding HP4OP, establishment in 2002 of German Forum for Prevention and Promotion [36].

Expert for Holland indicated the Regional Public Health Centers (GGDs), *Centrum Gezonde Leven* and health/ public health professionals. GGDs are involved in different activities focused on prevention of infectious diseases, sexually transmitted diseases, vaccination programs, environmental health and many others, including also community health prevention activities related to the elderly (wpg). The *Centrum Gezonde Leven* (CGD) activities are connected to HP and prevention. CGD acts within the structure of the Dutch National Institute for Public Health (RIVM), focuses on the effective local HP activities. The questionnaire responses indicated also HS professionals: a) physiotherapist, dieticians & mental health practitioners; b) general practitioners (GP's). On the basis of Dutch law, municipalities (*gemeente*) are responsible for HP and prevention activities (the idea of HPA understood as a community interest sphere). The Dutch Association of Mental Health and Addiction Care (GGZ) was also included into HS. CGD is responsible for education of elderly, developing, support and realization of HP and HP4OP (prevention of depression, loneliness, promotion of active movements, accidents and fall prevention, healthy nutrition, monitoring health status). In the Netherlands the right of elderly to health promotion is being underlined,

which obviously depends on specific factors related to age [37].

Experts from Bulgaria, Czech Republic, Italy, Lithuania and Portugal also indicated HS as important for HP4OP. In Bulgaria the Regional Public Health Institutes were pointed as main sectorial institution. The strategic documents: the overall National Strategy for Active Ageing, Active aging concept (2012-2030) and National programme for active ageing, adequate participation of pensioners in social life and prevention of their social exclusion – addressing specifically needs of the older population. The national health strategy and the health law indicate the vulnerable groups – excluding elderly. In Bulgaria HP is mainly financed by state and regional budgets and projects funds. The main documents are: National health strategy 2014-2020; National programme for prevention of chronic non-communicable diseases; Annual report for the health of the nation; Common health problems among Roma and ways for overcoming them; and (regarding HP4OP) Active ageing concept (2012-2030).

In Czech Republic the identified entities were Geriatric Clinic and General University Hospital in Prague. The PH and HP are regulated by the two acts concerning health protection: Public Health Protection Act, No. 258/2000 Sb. (partly) and No. 372/2011 Sb. The indicated source for financing HP4OP is the public budget in general (operating costs of public institutions coverage mechanisms). The institutions delivering services are mainly NGOs (financed from grants). In Lithuania the Lithuanian Health Education and Diseases Prevention Centre plays important role. Also the National Health Board was indicated with Ministry of Health. The HP obligation are regulated by the Health System Law of the Republic of Lithuania, 1994 and Public Health Law, 2002 - not exclusively focused on older population as a specific group of addressees. In Italy HP is deeply interwoven within the National Health Service. HP4OP policies have been implemented in Italy since 1992 and in the subsequent National Health Plan. Public health and health promotion policies, including HP4OP, as outlined in the National and Regional Prevention Plans, are ensured by the local health authorities in deep collaboration with the healthcare and social professionals [37].

In Portugal the system is based on the universal coverage (National Healthcare System (NHS), composed of the three coexisting, overlapping systems: the NHS, special public and private insurance schemes for certain professions and private VHI [38, 39]. The state responsibility for health care is realized within the NHS funds and structures. This model replaced the previously functioning health insurance system. NHS is complemented by the two sub-systems: 1) the residual social health insurance system and 2) the private voluntary health insurance - VHI. The basic principles state: services are delivered for population needs satisfaction and coordinated on regional levels. The Portuguese health care system is centralized,

despite the administration structures. These bodies are basically responsible for provision of health care services to the indicated groups, mainly financing PC. The legal status of the providers acting in the system varies: from public entities to the private companies (non-profit subjects play also important role). All are related to the Ministry of Health on a different basis, the same concerns relationship with patients. Public health services, including HP, are the subject of national competencies and duties (national plans confirmation, programs, strategies establishment, other activities coordinated at national level). The leading document is the National Health Plan. At all levels there are health authorities and public health doctors, GPs on the local level.

The interesting result regards the Hungarian questionnaire: HS was indicated as important for HP in general and not regarding HP4OP. HP activities are financed mostly from the central government budget, health care services by social health insurance contributions (National Health Insurance Fund Administration). The older population as a specifically beneficiary group included into delivered services of HP was not indicated in regulations.

An overview of the main HS institutions and HP4OP activities in project countries is synthesized in table 4

The above illustrates that the approach to HP depends on different socio-economic approaches and institutional structures of political systems [39]. HS constitute structures strongly connected to the milieu defined by political, economic, cultural factors, mainly included into public sector [40]. It is also the one with specific responsibility for HP; amongst its institutions the very important role is attached to primary care (PC) and different professionals. In project countries PC was often a subject of analyses in respect to HP [3, 42-44]. It is often underlined that HS are still focused mainly on treatment or diagnosis processes [45]. The need to support necessary change in PC is also widely recognized [46]. Moreover, HS faces serious financial problems contemporarily that has crucial meaning for HP and HP4OP and concerns majority of European countries [47]. The health needs grow adequately to the process of ageing and, paradoxically, to the medical technologies development and medical research success. Thus it is important to cooperate with other sectors, possibly supporting HP4OP financially and institutionally (table 5). The innovative approach has to be underlined, specifically in relation to wider cooperation on European level [48] and EU strategies [49].

Requirement of HS cooperation with other sectors results from the following problems: lack of specific competencies/resources, low knowledge on methodology, poor accessibility of useful tools and general problems of HS. The common interest is often a base for joined actions. EU approach, includes very strong emphasis on the multi-institutional and inter-sectorial cooperation [48]. Such cooperation, specifically concerning innovative healthcare, provides new solutions, based on technological

development including HP4OP: use of Internet and electronic technologies [50]. At the level of primary care the successful realization of HP programs is contemporarily connected to innovations [51, 52]. HS should take on the responsibility for leadership, organization of networks and supportive premiums. It is crucial to recognize not only needs of elderly population (needs mapping) but also barriers and limits (e.g. use of technologies) that may be eliminated due to cooperation. In literature there are examples of simple instruments aiming at better communication successfully used for HP4OP [53]. The interdisciplinary cooperation may be seen as more effective. Table 6 presents possible networks for sectorial and institutional cooperation. The socio-economical environment also matters for HS and HP4OP (see below figure 2).

## DISCUSSION AND CONCLUSION

HS institutions are crucially active in HP4OP: the majority of the project countries experts indicated HS as the most important or underlined its importance. Due to the expert's opinions the specificity of HS regards the very close relationship with beneficiaries: older population, specifically at the level of primary care. On one hand the fundamental rule of trust is often indicated and underlined (patients – medical professionals relationships). On the other - research based on grey literature shows that the involvement of HS institutions is not so obviously visible and comparable in all the project countries. Literature and results obtained also due to Questionnaire surveys and Country Profiles provide information for the conclusions regarding HS and HP4OP in the project countries. The below box presents the specificities of HS and the adequate comparative analysis problems: HS characteristics, features, structures that significantly differ in EU countries. Such variety results first of all from the models chosen for HS establishment but contemporarily depends also on the reforms processes, changing the structure, organization, functions and areas of responsibility of HS in EU.

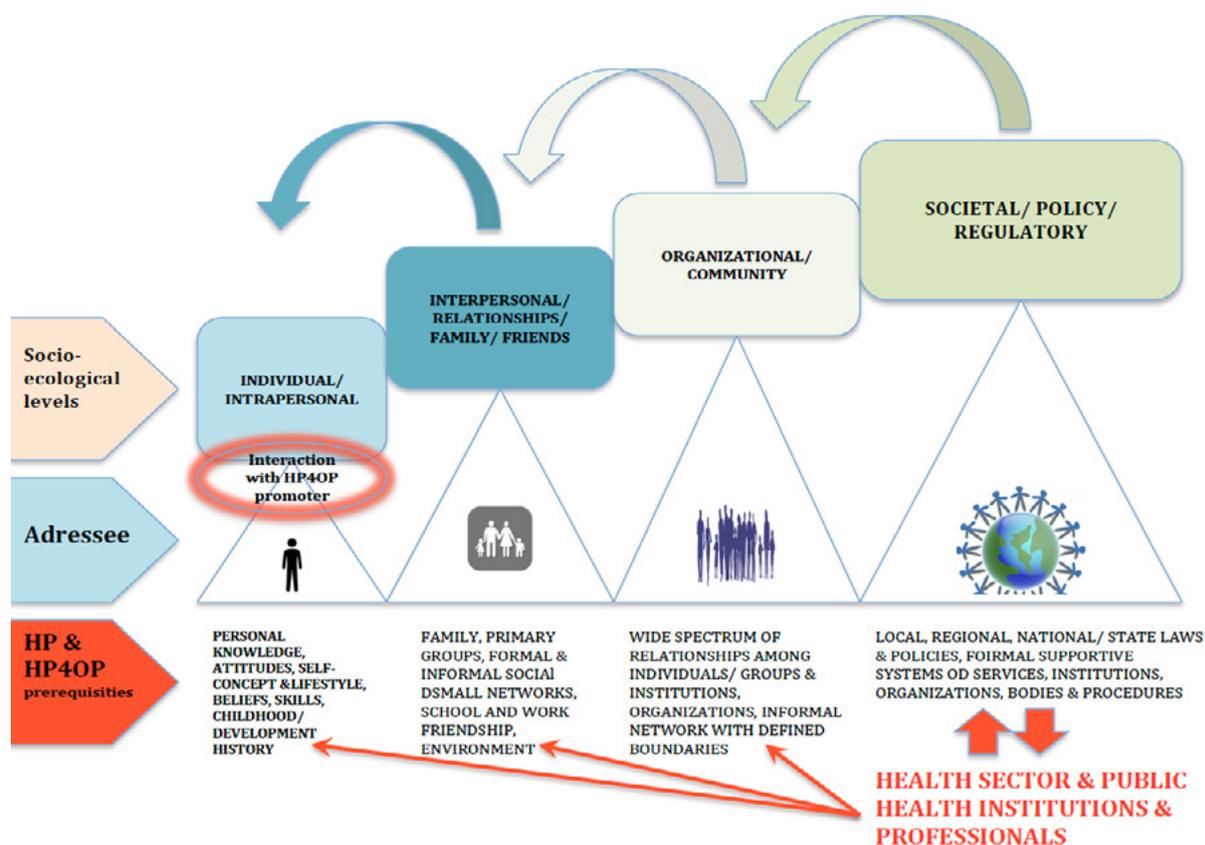
Own source, based on Prohealth 65+ research.

The most important conclusion however, that may at first look as the opposite to the presented above box, has to be related to the indicated by all the responding country experts: HS and specifically primary care play the crucial role in HP4OP. Variety of institutional and organizational aspects does not influence negatively the HS potential. It may emerge for different solutions only in respect to such organization issues (for instance payment methods, responsibility for decisions, programs implementation) but not regarding the necessary HS involvement. Also the very important context of innovations in HS in regard to HP4OP and HP in general must be underlined: the improvement needs more evidence based initiatives and use of modern and innovative tools and methods.

**TABLE 4. HS institutions and HP4OP activities in project countries. Based on country experts opinions and literature.**

Country	PROBLEM/ INTERVENTION AREA	HS INSTITUTION INVOLVED	COMMENTARY (based on experts opinions)
Netherlands	Depression Stress	Health insurance funds	<p>1. Netherlands example shows the importance of the intersectoriality: the main, leading role plays HS however, the other sectors are also involved and supportive – social assistance, local government</p> <p>2. Other important characteristic for HP4OP in Netherlands may be connected to the fact that programs are not focused on a selected one, single health problem but combine different problems related to each other (depending on different health problems), thus the undertaken variety of measures within one program may be observed</p> <p>3. Insurance funds are important – the insurance companies include HP services into the basket of services</p> <p>4. A very specific solution is the so called physical activity prescription (GPs prescribe specific type of activity for patients, adequate to the health problem and health condition)</p>
	Fall prevention Physical activity	Health insurance funds	
	Fall prevention Healthy life style Rheumatology	Health insurance companies (among others)	
	Healthy life style Physical activities	Health institutions (with a wide spectrum of cooperation with other institutions – intersectoriality)	
	Physical activities Chronic disorders Life style	Health institutions	
Italy	General health promotion	Ministry of Health and other health sector institutions (intersectoriality)	<p>1. In Italy the national dimension of the programs is visible (HP programs constituting parts of a general, national-wide strategy or national plan)</p> <p>2. The intersectorial approach is generally accepted but with a dominant role of the health sector - ministry of health as main responsible institution and other sectorial institutions, specifically different types of providers but also different research bodies</p> <p>3. The specific problems are also taken into account: for Italy the very important and at the same time specific (Mediterranean climate) health risk extremely dangerous for older population is connected to the excessive heat during summer period, which is a problem recognized by HS and professionals employed there - strong engagement of HS in this respect is visible</p>
	Chronic diseases Risky behaviours Extra –health determinants	Ministry of Health and other health sector institutions (intersectoriality)	
	Reduction of the impact of excessive heat on health	Ministry of Health in collaboration with the Centre for prevention and control of diseases (CCM) with participation of GPs	
Portugal	1) physical activity - promoting healthy lifestyles and tackle sedentariness- and 2) viral hepatitis	GPs – primary care	<p>1. Characteristic for HS – direct &amp; sole involvement of the health institutions, mostly in a form of multi-institutional and cross-sectorial cooperation (with municipalities)</p> <p>2. Example of multi-institutional cooperation in the field of HPFE: the National Network for Integrated Continuous care (RNCCI) in 2006 - concerns the issues of long-term and palliative care, social support and social security services (support in the situation of financing sources decrease)</p> <p>3. Health sector often contacted via different institutions outside health care: Active Groups of Health Centres and their Units, GPs, nurses, physiotherapists, social operators from municipalities, NGOs</p> <p>4. Primary care identified as the crucial level in relation to HP4OP: GPs, Nurses and physiotherapists, and continuity of care system, both managed by Groups of Health Centres through the Family Health Units (FHUs), the Community care units – (CCU), the Personalized health care units (PHCU), the Public health units - PHU. (Unidade de saúde pública - USP) and the Shared healthcare resources units (SHRU)</p>
	Diabetes	GPs	
	Mental health and ageing	GPs, psychiatrists, gerontologists	
	Dementia in old age prevention	GPs, psychiatrists, gerontologists	
Poland	Prevention of diseases in old age	Primary care (GPs and nurses) Professionals (physiotherapists, dieticians)	<p>In Poland the engagement of health sector in intersectorial public health programs is low. Institutions are mostly involved in epidemiological programs, oriented on the specific diseases prevention (traditionally: diagnostic tests, screening)</p> <p>1. The medical professionals associated in different forms are engaged - not officially operating health care system providers</p> <p>3. Clearly visible intersectoriality however – program still at the very preliminary phase, health sector mostly involved in the issues of mental health and rehabilitation (cooperation with other sectors naturally necessary)</p> <p>4. Main objectives related to medical issues: focused on the prevention of diseases associated with lifestyle and promotion of "healthy aging", but clearly intersectoriality very important</p> <p>5. Programs realized directly in health sector institutions – primary and specialists care units, ambulatories and also hospitals wards</p> <p>6. Direct engagement of primary care doctors and other medical professionals (the medical professionals – associations of doctors, were amongst the initiators)</p>
	Specific health problems for old age	Particular specialists – geriatricians in different HS institutions (also at hospitals) MD associations	
	Obesity Physical activity Unhealthy lifestyle (smoking, drinking, drugs addiction)	PC Specialists (health problems related to obesity)	
	Mental health	Medical specialists: Psychiatrists Psychologists	
	Particular problems: hypertension, high level of cholesterol, smoking, low physical activity, overweight, obesity, impaired glucose tolerance, excessive stress, nutrition	Particular medical specialists (highly specialized professionals) cardiovascular diseases specialists, physiotherapists	
Greece	Focus on physical activity, maintaining functional capabilities	Nursing School involved with the academic environment (Kapodistrian University of Athens)	<p>1. The initiative was based on the experience from the previously realized strategies concerning Open Care Centres for Older People (KAPIL) provided by municipalities by engaging health professionals – nurses, physiotherapists.</p> <p>2. Program connected to the HealthPROElderly project (with Greece as a project partner) - it depends also on cooperation with the health institutions, (providers) however cooperation with other sectors not well developed</p>
	Nutrition, healthy life style, diet dependent diseases	Nurses, GPs, other professionals (dieticians)	
Germany	Healthy lifestyle promotion: well-balanced diet and sufficient physical activity (based on a program goal: Stable improvements in dietary and exercise habits by 2020)	GPs, nurses, dieticians	<p>1. National –wide approach</p> <p>2. Program focuses on health and social professionals capacity building and close collaboration in case management of regional health and social services Specific care for people with multimorbidity is already offered with respect to polypharmacy, prevention and self-management training will be implemented in 2016.</p> <p>3. Project evaluated (a midterm evaluation): six months after participating in the intervention participants had already realised the AGil recommendations concerning physical activity and a healthy diet.</p> <p>4. Initiative founded in July 2002 by the Minister of Health (organized into several working groups, one of them called AG 3 "Healthy ageing" guided by the Federal Association for Health).</p> <p>5. Co-funded by DG Health and Consumers, from 2009-2011 (fifteen EU Member States – Germany included – Bavarian Ministry of Public Health, University of 2) one of the aims oriented on intersectoriality: building intra-organisational capacities - i.e. personnel, resources, co-operations within organisations</p> <p>6. In Germany the programs and projects concerning HP in general are the subject of evaluation focused on the good practices indication: BZgA cooperates also with health sector (among other stakeholders) The exemplary structured overview on the existing methods of quality assurance in health promotion is available at the web portal <a href="http://www.evaluationtools.de">www.evaluationtools.de</a>. Also the Cooperation Project on Quality Assurance of Projects for Health Promotion in Settings has been established and in 2004/2005 the BZgA-led nation-wide Cooperation Network 'Equity in Health'. The twelve criteria of good practice (available at: <a href="http://www.gesundheitliche-chancengleichheit.de/english/identified">http://www.gesundheitliche-chancengleichheit.de/english/identified</a>) enabled identification of 118 examples of good practice (available in good practice database: <a href="http://www.gesundheitliche-chancengleichheit.de/praxisdatenbank">www.gesundheitliche-chancengleichheit.de/praxisdatenbank</a>). 'Equity in Health' coordination offices were installed in all 16 states (aiming at dissemination and usage of the good practice criteria in the activities of the state associations for health).</p>
	Innovating care for people with multiple chronic conditions (Whole Life Cycle reference)	GPs, nurses, other providers (regional HC and chronic disease prevention strategy-health literacy activities)	
	Healthy ageing initiative: 1) physical activity, 2) healthy diet, and 3) maintenance and expansion of social participation.	See above	
	Preservation of the older people quality of life and autonomy as long as possible	German Forum Prevention and Health Promotion (initiative institution –71 associations and organizations in the HS involving MD's dieticians, physiotherapists)	
Hungary	Promoting physical activity among sedentary older people (enhancing institutional efforts to promote physical activity among older people)	Health sector as one of the key areas: creation of intersectorial capacities (cooperation of organisations - multiple policy sectors - i.e. health, social care, sport)	<p>For Hungary the health sector was not indicated by the country expert as the most important however, on the basis of the exceptional document – Elderly People's Charter the mentioned Health Care program was prepared, composed by the sequence of acts – intersectoriality oriented approach in all the indicated regulation and documents (continuity and stability of the idea: long-term goals and instruments)</p>
	Particular health related problems	HS institution mostly related to the disease/ health problem addresses in the program	
	Healthy life –style and nutrition, physical activity and mental health	Medical professionals engaged in different activities together with other professionals	

**FIGURE 2. Health sector and HP4OP prerequisites: levels for intervention.**



Own source.



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### References

1. Sowa A, Tobiasz-Adamczyk B, Topór-Mądry R, Poscia A, la Milia DI. Predictors of healthy ageing: public health policy targets. BMC Health Services Research. 2016;16(Suppl 5):289. doi:10.1186/s12913-016-1520-5.
2. Poscia A, Landi F, Collamati A. Public Health Gerontology and Active Aging. In “A Systematic Review of Key Issues in Public Health”. Springer, 2015: 129-51.
3. Sitko SJ, Kowalska-Bobko I, Mokrzycka A, et al. Institutional analysis of health promotion for older people in Europe. Concept and research tool. BMC, Health Services Research BMC 2016; [Suppl 5]:389-403.
4. European Commission. Active and Healthy Ageing, 2017 [https://ec.europa.eu/health/sites/health/files/ageing/docs/leaflet\\_eip\\_](https://ec.europa.eu/health/sites/health/files/ageing/docs/leaflet_eip_)

- aha\_en.pdf (access December 2016).
5. WHO, Glossary of Terms, Health for All series N9.WHO Geneva, 1984.
  6. WHO, Health Promotion Glossary, 1988.
  7. Fried Linda P. Investing in Health to Create a Third Demographic Dividend, *The Gerontologist* 2016; 56(Suppl 2): 167-7.
  8. Poscia A, Moscato U, La Milia DI, et al. Workplace health promotion for older workers: a systematic literature review. *BMC*

**TABLE 5. HS institutions and possible cooperation with other sectors (and institutions), based on experts interviews results**

SECTORIAL INSTITUTION	COOPERATION WITH OTHER INSTITUTIONS (RANKED BY EXPERTS)
Ministry of Health	<ol style="list-style-type: none"> <li>1. Providers (primary care, specialists, PH professionals), Insurer, medical organizations</li> <li>2. NGO's,</li> <li>3. Education, Sport</li> <li>4. Media</li> </ol>
Payer/ insurer	<ol style="list-style-type: none"> <li>1. Ministry of Health, Providers, Sanitary Inspection</li> <li>2. Local government</li> </ol>
Providers	<ol style="list-style-type: none"> <li>1. Insurer</li> <li>2. Public health specialists: nurses, other specialists (diet specialists, psychologists) Physiotherapists</li> <li>3. Government (HP programs)</li> </ol>
Professionals organizations (e.g. Medical Chambers, associations of professionals)	<ol style="list-style-type: none"> <li>1. Government on different levels</li> <li>2. Medical professionals, Insurer</li> <li>3. NGO's</li> <li>4. Media</li> </ol>
Medical/ PH professionals	<ol style="list-style-type: none"> <li>1. Insurer, Professionals organizations</li> <li>2. Local Government, Professionals organizations, Insurer</li> <li>3. NGO's</li> </ol>
Sanitary Inspection (or other controlling/ surveillance institution)	<ol style="list-style-type: none"> <li>1. Government</li> <li>2. Providers, Insurer</li> </ol>
<b>CONCLUSION</b>	<p><b>Possible alliances with the other sectors institutions, aiming at HP4OP better performance/ effectiveness, are beneficial for older persons. Specific role of central government, namely ministry of health has to be stressed in relation to cooperation with other sectors as well as local administration (on the lower levels, closer to specific needs of specific populations) – leadership and coordination of HP4OP within HS</b></p>

**BOX 1. Specificity of health sector – indicated crucial points for research.**

SECTORIAL SPECIFICITY	PROBLEM/ CHARACTERISTICS OF HS
<b>Large number (differentiated also for the project countries) of different types of institutions involved</b> , often on different levels of decision making process (central versus local, regional)	Large number and variety of sectorial decision makers (responsible organs/ bodies on different levels, medical chambers, trade unions/ associations, insurers/payers, sanitary inspection & other inspections, health services providers owners and management bodies)
<b>Wide spectrum of both A) sectorial entities (levels of action, organizational structures) and B) activities:</b> from strictly medical activities, performed during treatment process to the other types of activities, including social, cultural and other activities - within health care providers on different levels/types of interventions but also engaging other sectors institutions (social assistance, NGOs, education)	<ol style="list-style-type: none"> <li>1) Primary care: GP's, nurses;</li> <li>2) specialist care (with focus on geriatrists, cardiologists, rheumatologists and other dealing with health problems of elderly population);</li> <li>3) hospitals;</li> <li>4) emergency units and professionals;</li> <li>5) sanatoriums, health resorts &amp; rehabilitation centres;</li> <li>6) public health specialists (physiotherapists, dietary specialists) – for all the mentioned levels of health care the HP and PH professionals were indicated separately as the 6) group have to be also included as employed there – for instance dieticians at hospitals</li> </ol>
<b>Different status</b> (legal/ formal type of institutions - providers and payers as well as other sectorial institutions, private (including on one hand different companies ruled by trade law and on the other NGO's) and public / state / local government owned, )	Public/ private; systemic (within the HS structure) and outside the system; contract/ non contract, financed from budget/ insurance funds/ out-of-pocket or from other sources), medical professionals working on different basis (employment - labour law contracts and private contracts based on civil code)
<b>Actual/ potential role</b> within the healthcare system in relation to the issue of HP4OP and institutional role/ functions/ activities (also depending on the system organization and structure, management rules and formal liabilities)	Defined in different legal provisions (the legal provisions levels differ in EU countries depending on the legal regime and state form – federal or unified models), often „spread” in different bills, statutory and executive provisions, dependent also on the systemic model, structure and systemic powers/ decision making bodies

- Health Services Research. 2016;16(Suppl 5):329. doi:10.1186/s12913-016-1518-z.
9. Fattore G, Tediosi F. The importance of values in shaping how health systems governance and management can support universal health coverage. *Value in Health*. 2013;16:19–23.
  10. Figueras , McKeeM. *Framework for Country Action Across Sectors for Health and Health Equity*. Maidenhead, 2014, Open University Press: 209–46.
  11. Aluttis, C. A., Chiotan C., Michelsen M., Costongs C., Brand H. (2012), On behalf of the Public Health Capacity Consortium. Reviewing Public Health Capacity in the EU. Maastricht, Maastricht University.
  12. Aluttis C, Broucke S, Chiotan C, Costongs C, Michelsen K, Brand H. Public health and health promotion capacity at national and regional level: a review of conceptual frameworks, *Journal of Public Health Research* 2014; 3:199.
  13. Allin S, Mossialos E, McKee M, Holland W. Making decisions on public health: a review of eight countries, WHO 2004.
  14. Glenngård AF, Hjalte M, Svensson A, Bankauskaite V. *Health Systems in Transition: Sweden*. Copenhagen, WHO Regional Office for Europe on behalf of the European Observatory on Health Systems and Policies, 2005.
  15. Barros P, Machado S, Simões J. Portugal: Health system review. *Health Systems in Transition*, 2011, 13(4):1–156. [http://www.euro.who.int/\\_\\_data/assets/pdf\\_file/0019/150463/e95712.pdf](http://www.euro.who.int/__data/assets/pdf_file/0019/150463/e95712.pdf) (access July 2016)
  16. McDaid D, Wiley M, Maresso A, Mossialos E. Ireland: Health system review. *Health Systems in Transition*, 2009; 11(4): 1 – 268.
  17. Coughlan D, Turner B, Truillo A. Motivation for a Health-Literate Health Care System—Does Socioeconomic Status Play a Substantial Role? Implications for an Irish Health Policymaker, *Journal of Health Communication*, 2013 Dec; 18(Suppl 1): 158–171. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3815196/> (access December 2017).
  18. Saltman R, Allin S, Mossialos E, Wismar M, van Ginneken E. Assessing health reform trends in Europe. In *Health Systems, Health, Wealth and Societal Wellbeing*, 2012, Open University Press 209-46.
  19. Maier CB, Martin-Moreno JM. Quo vadis SANEPID? A cross-country analysis of public health reforms in 10 post- Soviet states. *Health Policy* 2011; 102(1): 18–25.
  20. Gotsadze G, Chikovani I, Gogvadze K, Balabanova D, McKee M. Reforming sanitary- epidemiological service in Central and Eastern Europe and the former Soviet Union: an exploratory study. *BMC Public Health* 2010; 10: 440.
  21. Richardson E, Malakhova I, Novik I, Famenka A. Belarus: Health system review. *Health Systems in Transition*, 2008; 10(6): 1–118.
  22. Maier CB, Martin-Moreno JM. Quo vadis SANEPID? A cross-country analysis of public health reforms in 10 post- Soviet states. *Health Policy* 2011; 102(1): 18–25.
  23. McKee M. Health systems and policies in South-Eastern Europe. In: *Health and Economic Development in South-Eastern Europe*. WHO, Ed. Paris, WHO: 43–69.2006.
  24. Raphael D. The political economy of health promotion: Part 2, National provision of the prerequisites of health. *Health Promotion International* 2013; 28(1):112–32.
  25. Abimbola S, Negin J, Jan S, Martiniuk A. Towards people-centred health systems: multi-level framework for analysing primary health care governance in low- and middle-income countries, *Health Policy and Planning* 2014.
  26. Schang L, Czabanowska K, Lin V. Securing funds for health promotion: lessons from health promotion foundations based on experiences from Austria, Australia, Germany, Hungary and Switzerland. *Health Promotion International* 2012; 27(2): 295–305.
  27. McManus A. Health promotion innovation in primary health care, *AustralasMed J*. 2013; 6(1): 15–8.
  28. Gervas J, Valderas JM. What role for primary health care in modern health service provision? *Innovation in primary Care*, University of Oxford United Kingdom. 2012; Available from: [www.equipoesca.org/?p=2526](http://www.equipoesca.org/?p=2526). (access July 2016).
  29. Lis K, Reichert M, Cosack A, Billings J, Brown P. *Evidence-Based Guidelines on Health Promotion for Older People*. Vienna, Austria: Austrian Red Cross; 2008.
  30. Rifkin SB. Lessons from community participation in health programs: a review of the post Alma-Ata experience. *International Health*. 2009;1:31–6.
  31. Plouffe LA, Kalache A. Making communities age friendly: state and municipal initiatives in Canada and other countries, *Gac. Sanit.*, 2011; 25(S): 131-7.
  32. Habkirk A. 2013. *Healthy Communities Society and Healthy Families BC*, (September 2013), Ministry of Health, *How Do Local Governments Improve Health and Community Well-being? Resource Guide for Local Governments*, Retrieved 4 June 2016, <http://squamish.ca/assets/planH/planh-local-government-guide-web.pdf> (access December 2016).
  33. Scriven A, Hodgins M. *Health Promotion Settings: Principles and Practice*, 2012; Retrieved 4 June 2016.
  34. Sadana R, Blas E, Budhwani S, Koller T, Paraje G. *Healthy Ageing: Raising Awareness of Inequalities, Determinants, and What Could Be Done to Improve Health Equity*, *The Gerontologist* 2016; 56 (Suppl 2): S178-S193 doi:10.1093/geront/gnw034 (access December 2016).
  35. Golinowska S, Huter K, Sowada C, Pavlova M, Sowa A, Rothgang H. *Healthy Ageing in Germany, common care and insurance funding, Country Profile, Prohealth 65+, electronic document - Prohealth 65+ project materials*, 2016.
  36. Baer B, Bhushan A, Abou Taleb H, Vasquez J, Thomas R. The Right to Health of Older People, *The Gerontologist* (2016) 56 (Suppl 2): S206-S217 doi:10.1093/geront/gnw039; WHO, *Health for All Strategy*, [http://www.euro.who.int/\\_\\_data/assets/pdf\\_file/0003/88590/EHFA5-E.pdf](http://www.euro.who.int/__data/assets/pdf_file/0003/88590/EHFA5-E.pdf) (access February 2016)
  37. Poscia A, Falvo R, La Milia DI, et al. Healthy ageing—happy ageing: Health Promotion for Older People in Italy. *Zdrowie Publiczne i Zarządzanie* 2017 (Numer 1), 34-48. DOI 10.4467/20842627OZ.17.005.6231
  38. Barros P, Machado S, Simões J. Portugal: Health system review. *Health Systems in Transition*, 2011, 13(4):1–156. [http://www.euro.who.int/\\_\\_data/assets/pdf\\_file/0019/150463/e95712.pdf](http://www.euro.who.int/__data/assets/pdf_file/0019/150463/e95712.pdf) (access July 2016)
  39. Falvo R, Poscia A, Magnavita N, et al. Health promotion for older people in Portugal. *Zdrowie Publiczne i Zarządzanie* 2017; (1):49-61. DOI 10.4467/20842627OZ.17.006.6232

40. Supplemental Guidance, Public Sector Definition. The Institute of Internal Auditors. <https://na.theiia.org/standardsguidance/Public%20Documents/Public%20Sector%20Definition.pdf> (access December 2016), 2011.
41. Koch K, Miksch A, Schürmann C, Joos S, Sawicki PT. The German Health Care System in international comparison: the primary care physicians' perspective. *Deutsches Ärzteblatt International*, 2011.
42. Gervas J, Valderas JM. What role for primary health care in modern health service provision? *Innovation in primary Care*, University of Oxford United Kingdom. 2012 Sep; Available from: [www.equipoesca.org/?p=2526](http://www.equipoesca.org/?p=2526). (access July 2016)
43. Mierzecki A, Gasiorowski J, Pilawska H. The family doctor and health promotion - Polish experience and perspectives. *Eur J Gen Pract.* 2000;6:57-61. doi: 10.3109/13814780009094305. [Cross Ref]
44. Govin E, Pawlikowska T, Horst-Sikorska W, Michalak M. British and Polish general practitioners' opinions on the importance of preventive medicine. *Health Prom Int.* 2011;26:171-176. doi: 10.1093/heapro/daq047. [PubMed] [Cross Ref]
45. Marcinowicz L, Pawlikowska T, Windak A, Chlabicz S. Perceptions of an older patient on the role of the family doctor in health promotion: a qualitative case study, *Journal of Medical Case Reports*, 2013; v. 7, <http://www.ncbi.nlm.nih.gov/pmc/articles/PMC3599762/> (access 1.07.2016).
46. Canadian Health Services Research Foundation. Picking up the pace: How to accelerate change in primary healthcare. CHSRF. 2010.
47. Arsenijevic J, Groot W, Tambor M, Golinowska S, Sowada C, Pavlova M. A review of health promotion funding for older adults in Europe: a cross-country comparison, *BMC Health Services Research* 2016; 16 (Suppl 5): 371-388 <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5016727/>
48. European Commission. Reference Sites, European Innovation Partnership on Active and Healthy Ageing, Excellent innovation for ageing – A European Guide, 2013.
49. European Commission. Scaling-up Strategy in Active and Healthy Ageing. Part of the European Innovation Partnership on Active and Healthy Ageing, Brussels, 2015.
50. Lowe C, Cummin D. The use of kiosk technology in general practice. *Telemed Telecare.* 2010;16(4):201-3.
51. Bush R, Lord E, Borrott N. Diffusion of innovations: Applying concepts in primary care and general practice. *Healthy Communities Research Centre*, The University of Queensland, 2009.
52. McManus A. Health promotion innovation in primary health care. *AustralasMed J.* 2013; 6(1): 15-8.
53. Downer SR, Meara JG, Da Costa AC. Using SMS text messaging to improve outpatient attendance. *Med J Aust.* 2005;183(7):366-8. [PubMed]

