

# NATIONAL SCHOOL OF PUBLIC HEALTH, MANAGEMENT AND PROFESSIONAL DEVELOPMENT, BUCHAREST (NSPHMPDB)

# ACTIVITY REPORT YEAR 2019



### **CONTENT**

	Summary
I.	Organizing and providing professional training programs relevant to the existing training needs, at the best quality as possible
II.	Develop the scientific research activity and improve the capitalization of scientific research outcomes
III.	Strengthen the NSPHMPD institutional capacity for scientific research and development
	Annexes
	Annex 1. List of Publications in 2019
	Annex 2. List of Papers presented in 2019

#### **Report Summary**

Our professional activity during the year 2019 has been subscribed to the attain of the objectives corresponding to each development direction as set within the institutional Development Strategy of the National School of Public Health, Management and Professional Development Bucharest (NSPHMPDB) during 2016-2020: Organizing and providing professional training programs relevant to the existing training needs, at the best quality as possible, Develop the scientific research activity and improve the capitalization of scientific research outcomes, and Strengthen the NSPHMPD institutional capacity for scientific research and development.

# Organizing and providing professional training programs relevant to the existing training needs, at the best quality as possible

In comparison with the previous year, the total number of participants in the training programs in public health and health management provided by the NSPHMPDB in 2019, through the Center for Management and Health Promotion (CMHP) and the Center of Health Services Research and Evaluation (CHSRE), has increased by 10%, from 745 to 818 participants. The training programs in other fields, organized by the National Center for Professional Development in Health (NCPDH), have also recorded a significant increase in both total number of series, from 162 to 219 series, as well as in the total number of participants, from 4113 to 6120 participants.

During 2019, NSPHMPDB training programs have been analyzed in relation with: the participants' training needs, the legislative changes, the result of research or informational exchange and international collaboration. Consequently, new themes have been introduced, the training programs have been updated, and the course curriculum for a new training program – Management of the Nursing Care Plan, has been elaborated for nurses.

For the purpose of continuous quality improvement, the training programs have been restructured, by increasing the time allocated for exercises and practical applications up to 1/3 from the total time corresponding to the theme. At the same time, more modern training materials and methods have been introduced, such as video presentations and play-roles, and subsequently, new lecturers have been identified in order to cover the deficit of specialized personnel in the increasingly number of demands for the training programs provided by the NSPHMPDB.

#### Develop the scientific research activity and improve the capitalization of research outcomes

During the year 2019, NSPHMPDB was an institutional partner within three projects carried out within the Third EU Public Health Program (2014-2020) of the Directorate General for Health and Food Safety (DG SANTE), administrated by the European Commission with support of the Consumers, Health, Agriculture and Food Executive Agency (CHAFEA):

- EUnetHTA JA3 2016-2020, "European Network for HTA Joint Action 3";
- ADVANTAGE 2016-2019, "Managing Frailty. A comprehensive approach to promote a disability-free advanced age in Europe: the ADVANTAGE initiative";
- JAHEE 2018-2021, "Joint Action Health Equity Europe JAHEE".

A fourth project involving NSPHMPDB is financed from the European Cooperation Programme in Science and Technology: COST JA 2018-2022, "Towards an International Network for Evidence-based Research in Clinical Health Research (EVBRES)".

Other two new projects have also been initiated:

- one project financed within the Administrative Capacity Operational Program 2014 2020, "Improving quality and performance of the hospital services by cost assessment and standardization" (CaPeSSCoSt 108196);
- one project developed with own funds within a partnership with the Heidelberg University, Germany, "Application of the automatic learning machine for registrations of ICD-10 coded data of the patients hospitalized in Romania during the last 10 years".

Research activity has also been achieved by processing the hospitalization data from the DRG\_National hospital database, in order to identify the system problems impacting the hospital reimbursement, as well as to analyze other issues related to the hospital services of interest to the Ministry of Health and for other collaborating partners from public or private sector.

Our research results have been disseminated through: 19 published scientific articles, of which 10 published in ISI indexed journals, three reports of health technology assessment (HTA) elaborated within the Joint Action EUnetHTA, 15 active participations (oral presentation of the paper, discussing the papers, moderating, contributions on the round tables etc.) in international conferences, and nine papers presented in national conferences.

#### Strengthen the NSPHMPD institutional capacity for scientific research and development

In 2019, 16 employees of the NSPHMPDB have received professional training, including both the specialized personnel – for the purpose of increasing the training and research capacity, as well as the supporting staff – in order to improve the processes of managerial internal control and quality monitoring.

"Networking" and collaboration with other institutions and organizations have included activities within the networks where NSPHMPDB is a member, as following: ASPHER – the Association of Schools of Public Health in the European Region, EUPHA – the European Public Health Association, JBI – the Joanna Briggs Institute, as well as within the partnerships signed for certain punctual activities or future projects. Other collaborating institutions during the year 2019 are: the National Institute for Mother-and-Child Health, the Complutense University of Madrid, the International Centre for Anti-drugs and Human Rights, EORTC - the European Organisation for Research and Treatment of Cancer, Aspen Institute Romania, the Health Commissions of the Romanian Parliament, "Local American Working Group" Association, the Agency for Quality and Accreditation in Health and Social Assistance in Croatia, the Syreon Research Institute in Hungary, the European Observatory for Health Systems and Policies, the National Social Health Insurance Fund, the National Agency of Quality Management in Health, the National Institute of Public Health (Romania), the National Institute of Statistics in Romania, the Romanian College of Physicians, the Order of General Nurses and Midwives in Romania, The World Bank Office in Romania.

Besides the publications and participations in scientific events, visibility of training research - development activity achieved by the NSPHMPDB has been continuously presented on the institutional websites: <a href="http://www.snspms.ro/">http://www.perfmed.ro/</a> and <a href="http://www.drg.ro/">http://www.drg.ro/</a>, as well as by our scientific publication edited by NSPHMPDB: the journal Management in Health.

### I. Organizing and providing professional training programs relevant to the existing training needs, at the best quality as possible

Given the objectives of the NSPHMPDB Development Strategy 2016-2020, evaluation of our training programs in relation with participants' needs, scientific progresses and legislative changes registered in the fields of training, has been continued in 2019. Opportunities to organize new training programs, by request or identifying a target population needing professional development in a certain domain, have also been explored. These activities have been performed for both training programs in public health and health management provided by NSPHMPDB, as well as for training and professional development programs for health personnel from other fields, organized by other training providers request.

General Objectives regarded by the training activities performed in 2019, were:

- Diversification of training and professional development programs for more target groups of specialists working in the health care system;
- Initiating new training and professional development programs, in accordance with the training needs as identified;
- Updating the existing training programs in terms of their content and/or teaching and organizing methods, in order to meet the participants' needs;
- Implementing those specific mechanisms and processes aimed to ensure the continuous quality improvement of the training programs.

The *Training Programs in public health and health management* provided during the year 2019 by the Center for Management and Health Promotion (CMHP) and the Center of Health Services Research and Evaluation (CHSRE), are presented in Table 1.

The Certification Training Program in Health Services Management (AT) was organized both in Bucharest, as well as in other location, in order to facilitate the access of course participants by reducing or even eliminating the accommodation and transportation costs. Therefore, in 2019, besides the three course series organized and provided in Bucharest, two more AT series have been organized in Iaşi, in collaboration with the Public health and health management Department of the Iaşi "Gr. T. Popa" University of Medicine and Pharmacy, and two more course series in Timişoara, in collaboration with the Public health and health management Department from the "Victor Babeş" University of Medicine and Pharmacy. Three course series of this training program have started in 2018 and have been finalized in 2019, while other three course series, initiated in 2019, are to be finalized in 2020. The total number of participants in certification programs in 2019 was 268.

The Hospital Management Training Program dedicated to the hospital managers has been completed for three series, with a total number of 107 persons.

The Training program Hospital Management for hospital head nurses and nurse superiors has been held for four series and totalized 112 participants.

Six series of the *Training program Quality Management in hospital*, have been organized in 2019 for employees from hospital quality management structures, out of which three series for persons without working experience in/with hospitals, and other three series for persons having previous hospital work experience. 211 persons in total have participated in this type of training program.

Two series of the training program *Professional development for hospital evaluators*, with 48 participants (evaluators), have been carried out in 2019, within our collaboration with the National Authority for Quality Management in Health (ANMCS).

Our training program *Reporting, contracting and reimbursing the hospital services* (*DRG*), organized by the Center of Health Services Research and Evaluation, has been provided in 2019 to two series of hospital personnel in charge with reporting and monitoring of hospital clinical activity, totalizing 62 participants.

Table 1. Distribution of series and participants per training programs in public health and health management, 2019

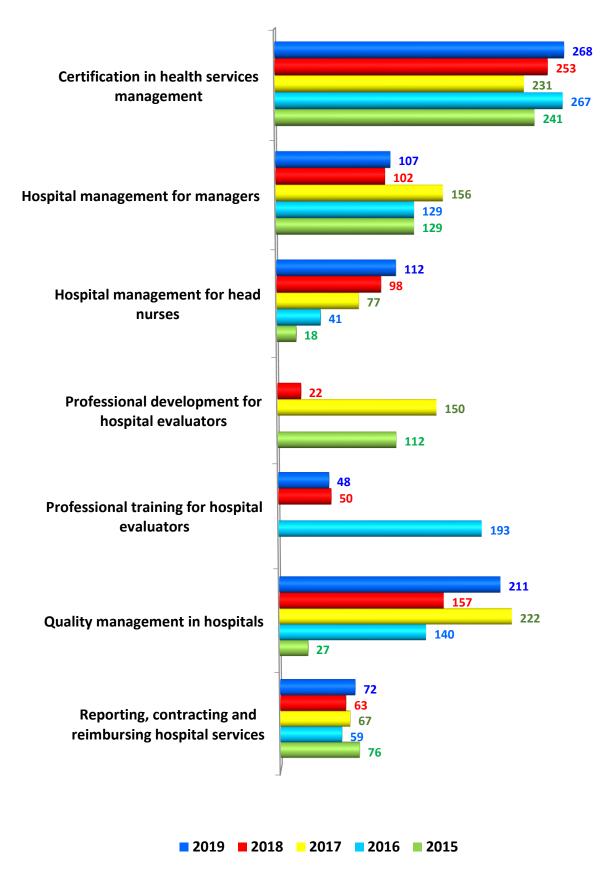
Training program	Number of series per each program	Number of participants per each program	
Certification Training Program in Health Services	7	268	
Management (AT) for specialist MDs	/	200	
Hospital Management (MS) for hospital managers	3	107	
Hospital Management for hospital head nurses	4	112	
and nurse superiors (AMD)	7	112	
Quality Management in hospital (MQ)	6	211	
Professional Development Program for hospital	2	48	
evaluators (PEV)	2	40	
Reporting, contracting and reimbursing the	2	72	
hospital services (DRG)	2	12	
Total	24	818	

Data source: CMHP

In comparison with previous year of activity, total number of participants in NSPHMPDB training programs in public health and health management increased by 10%, from 745 to 818 persons in 2019. Dynamic of participants number in each program provided by the NSPHMPDB during 2015-2019 is presented in Figure 1 below. Therefore an increase in the number of persons participating in all the training programs is observed, except for the Professional Development Program for Hospital Evaluators, with fewer participants than during the previous year, while no Training program for hospital evaluators was organized in 2019, according to NAQMH decision.

Figure 1. Distribution of the course participants per training programs during the period 2015-2019

#### Distribution of course participants by program type, 2015-2019

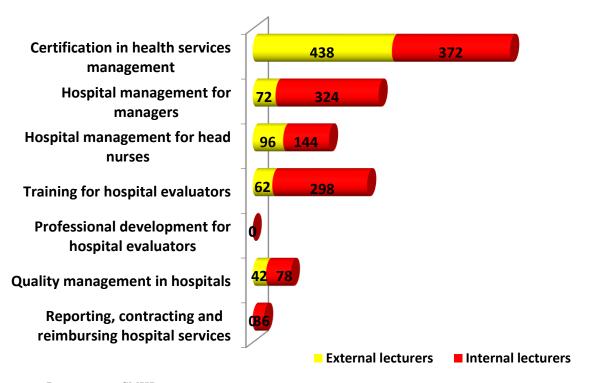


Data source: CMHP

The training programs in public health and health management organized and provided by the NSPHMPDB during the year 2019 have totalized a number of 1,962 course hours, out of which 1,250 hours (representing approximately 64% of total) have been held by our own lecturers (internal lecturers, while 712 course hours have been held by our external collaborators (external lecturers) (see Figure 2).

Figure 2. Distribution of course hours taught per training program and per lecturers in 2019

Distribution of training hours as provided by lecturers in 2019



Data source: CMHP

Besides the course hours taught (not including the time for their preparation), personnel involved in training has also performed specific activities of coordination of final papers and presentations of course participants within the programs "Hospital Management", "Certification Training Program in Health Services Management", and "Quality Management in hospitals".

NSPHMPDB has signed collaboration agreements with six clinical hospitals in Bucharest for practical training programs and preparatory placement within hospitals. In order to train its own personnel in hospitals, NSPHMPDB has received requests and has also signed contracts with 11 other hospitals during the year 2019.

In order to meet the proposed objectives, curriculum of training programs provided by NSPHMPDB have been updated in relation with course participants' needs, with legislative changes, and with research results and/or information exchange and international collaboration. Consequently:

- new themes have been introduced within the following training programs: Certification in Health Services Management (e.g. "Health Literacy"), Quality Management in hospitals (e.g. Medical waste management, Organizational communication) and Professional

Development for hospital evaluators (e.g. Module CaPeSaRo application use, Evaluation Procedure module);

- existing training programs have been updated according to the legislative changes made in the field, or to other documents specific to the course themes approached, such as the Hospital evaluation standards Manual, and the Hospital Evaluator Guide;
- curriculum of a new training program dedicated to nurses Management of Nursing Care Plan, to be provided starting with 2020, has been elaborated.

For the purpose of their continuous quality improvement, our training programs have been restructured, increasing the time allocated for exercises and practical applications up to 1/3 of the total time related to that topic. More modern course materials and training methods have also been introduced, such as video presentations and play-roles, and consequently, new lecturers have been identified in order to cover the deficit of specialized personnel caused by an increasing number of demands for the training programs provided by the NSPHMPDB.

As presented in Table 2, the National Center for Professional Development in Health (NCPDH) has organized a number of 85 training programs during the year 2019 (with 23 more programs than during the previous year), thus totalizing 219 course series and 6120 course participants (compared to 4113 participants in 2018).

Table 2. Number of programs, series and participants per each type of training program organized by the National Center for Professional Development in Health, in 2019 comparatively with 2018

Training program type	progra	Number of programs of each type  Total no. of series per each program type		Total no of participants per each program type		
Year	2018	2019	2018	2019	2018	2019
Certification Training Programs for MDs	21	21	39	45	901	747
Continuous medical education (CME) for MDs /dentists	9	8	17	16	570	491
CME for nurses, emergency medical technicians, caregivers	8	14	54	60	1320	2020
CME for physiotherapists	2	3	8	7	138	97
CME for medical nurses (POCU)		1		17		1279
Training of trainers (TOT), evaluation of trainers	2	6	2	7	37	99
Nurses specialization, professional reconversion, skills	9	10	30	27	880	1015
Practice placements for medical nurses	5	14	35	32	35	95
CME distance e-learning	7	8	7	8	200	277
Total	62	85	162	219	4113	6120

Data source: NCPDH

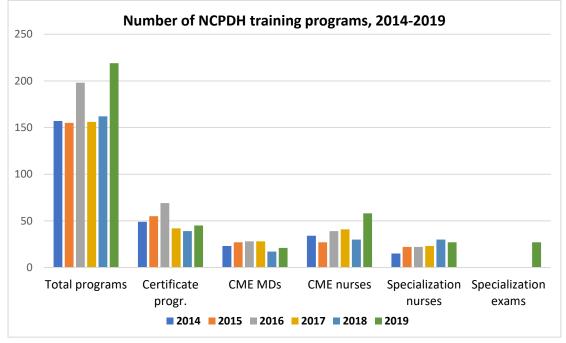
Number of participants in the training programs organized by the NCPDH in 2019 has increased, especially due to an increasing number of CME programs for nurses, emergency medical technicians and caregivers, and also to an increasing number of training programs and/or participants in training of trainers (TOTs), specialization programs for nurses, CMED programs and practice work placements.

NCPDH has introduced the following new training programs during 2019:

- Certificate Program of complementary studies: "Non-invasive Ventilation";
- Two new specialization programs for medical nurses for acquiring skills: "Psychiatry" and "CT Operator / MRI Operator" for which registrations were made in 2018;
- Six CME programs for nurses in transfusion hematology: "Organizing and performing transfusion in hospital Medical nurse responsibilities in Blood Transfusion Center"; "Initial training in blood transfusion"; "Initial training in blood transfusion hematology"; "Hemovigilance"; "Blood transfusion medicine for the Blood Transfusion Center nurses"; "Blood transfusion safety for the patient"; "Blood transfusion activity in hospital wards in terms of transfusion hematology";
- Two CME programs for physicians: "Role of treating physician in hospital transfusion safety assurance"; "Role of Blood Transfusion Center coordinator in transfusion safety assurance in hospital";
- One CME program addressed to nurses entitled "Care of the Critical patient with kidney, cardiovascular and respiratory problems", achieved within the project "National Modular Program for increasing the professional level of medical personnel working in the national system of defense, public order and national safety" (108196), financed from the Operational Programme Human Capital (POCU) 2014-2020 (see page 10).

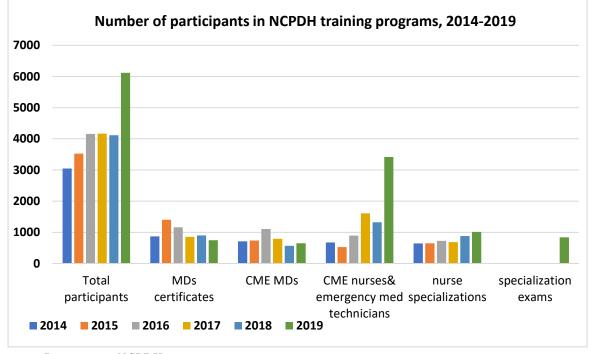
Analysis of dynamics in the number of participants and course series of the training programs organized by the NCPDH, in 2019 compared to previous years (Table 2, Figure 3, Figure 4), indicates a significant increase for both indicators in year 2019. Although the number of course series of certificate programs has increased since 2018 (45 vs. 39), the number of course participants has decreased from 901 to 747. There were more course series and more participants in the on-line CME Programs for physicians (Figure 2 and Figure 3), and a slight increase for the classical training programs (Table 2). CME Programs for nurses, emergency medical technicians and caregivers have increased as both as number of course series (77 vs. 54 in 2018), and especially as number of participants (3299 vs. 1320 in 2018). Much of this increase was due to the training program dedicated to medical professionals working in the national system or defense, public order and national safety, organized within the POCU Project "Care of the Critical patient with kidney, cardiovascular and respiratory problems", gathering 1279 participant nurses. This increase was also due to a larger training demand from emergency medical technicians and participations in the new programs of transfusion hematology. Although the number of course series organized for specialization programs for nurse reconversion and professional skill development, has registered a slight decrease since 2018 (27 vs. 30), the number of their participants rose from 880 up to 1015.

Figure 3. Evolution of course series organized by NCPDH during the period 2014-2019, per program type and total programs



Data source: NCPDH

Figure 4. Evolution of participant numbers in training programs organized by NCPDH during 2014-2019, per program type and total



Data source: NCPDH

Through NCPDH, the NSPHMPDB is a partner in the project "National Modular Program for increasing the professional level of medical personnel working in the national system of defense, public order and national safety" (code SMIS108196)

Financing source: Operational Programme Human Capital 2014-2020, priority Axis 4 - Promote social inclusion and fight poverty, specific Objective 4.8 – "Improving the level of competences of professionals in medical sector", and own sources.

Project duration: 30 months (26.02.2018-25.08.2020).

Partners: This Project is carried out by the Emergency Hospital "Prof. Dr. Dimitrie Gerota" of the Ministry of Internal Affairs, in collaboration with the University Emergency Central Military Hospital "Dr. Carol Davila", Clinical Emergency Hospital "Prof. Dr. Agrippa Ionescu" (UM 0521), and the National School of Public Health, Management and Professional Development. This Project includes five more associated partners: Medical Department of the Ministry of Internal Affairs, the Ministry of National Defense, Medical Department of the National Agency of Penitentiaries, Medical Center of the Protection and Guard Service, Medical Center of the Special Telecommunications Service.

Goal of the project is to increase the quality of medical practice performed in health care facilities of the national system of defense and public order, by providing a unitary training program to be implemented at national level, leading to the improvement of professional level of competencies and skills for the target group.



#### Specific Project Objectives:

- Improving professional competences / skills in major noncommunicable diseases for 1300 medical personnel from all country regions involved in priority areas of health programs in safety, defense and public order, through modular courses.
- Improving professional competences / skills in major non-communicable diseases for 60 medical professionals from all the country regions involved in priority areas of health programs from the field of safety, defense and public order, through experience exchange/ good practice exchange in Europe, especially in similar military hospitals. Expected results
- 1300 beneficiaries of training and/or good practices exchange, out of whom: 1170 persons from less developed regions, and 130 persons from developed regions.
- 1300 persons who improved their professional qualification level, out of whom: 1170 persons from less developed regions, and 130 persons from developed regions.
- 60 persons who benefit from good practices exchanges. NSPHMPDB role within this project:
- Elaborate the educational packages and materials according to the adult education learning principles (participant manual, trainer manual);
- Accreditation of the CME programs for nurses and request the credits from the Order of General Nurses and Midwives in Romania (prepare CME credit files);

- Accreditation of the CME programs for physicians and request the training program credits from the Romanian College of Physicians (prepare CME credit files);
- Achievement of an e-learning module for nurses / physicians;
- Certificating the medical nurses and physicians who graduated the CME programs.

In 2019, course curriculum of the CME Program "Care of the Critical patient with kidney, cardiovascular and respiratory problems" for nurses has been finalized, and 17 course series of it were carried out, thus totalizing 1279 graduates.

A degree examination for 9 programs de specialization for nurses was also organized and carried out during 2019, according to the provisions of the Minister of Health order no. 1076/2019, thus totalizing 27 course series of 840 participants. The examination was held based on a new methodology elaborated by the Ministry of Health, and one central examination commission was organized for each specialization. Registration of course participants to examination was performed online as their registration to the training programs, on the NSPHMPDB web platform: <a href="https://www.perfmed.ro">www.perfmed.ro</a>.

# II. Develop the scientific research activity and improve the capitalization of their results

NSPHMPDB perform research activities within the European financing projects, and through operation of the DRG\_National hospital database. Our research activity carried out in 2019 has been part of the priority topics at European level, as well as nationally, considering also the main *objectives* of NSPHMPDB Development Strategy 2016-2020, namely:

- ➤ Select the research topics in line with the current needs of the Romanian healthcare system, with European priorities and with NSPHMPDB expertise;
- ➤ Continue our research in hospital services management, by engage in new topical studies, using NSPHMPDB expertise and experience, and in line with the needs expressed by the main stakeholders (MoH, NHIF, NAQMH, hospitals);
- > Training needs assessment for public health and health management, and perform impact studies for future training programs;
- ➤ Properly disseminate and capitalize the results of studies and research projects carried out by the NSPHMPDB;
- > Improve research methodologies, protocols and procedures used in NSPHMPDB.

In 2019 NSPHMPDB a participated in 4 projects with European financing. Three projects are funded within the Third EU Health Programme (2014-2020) - Public Health, of the Directorate General for Health and Food Safety (DG SANTE), administrated by the European Commission with support of the Consumers, Health, Agriculture and Food Executive Agency (CHAFEA):

- EUnetHTA JA3 2016-2020, "European Network for HTA Joint Action 3";
- ADVANTAGE 2016-2019, "Managing Frailty. A comprehensive approach to promote a disability-free advanced age in Europe: the ADVANTAGE initiative";

- JAHEE 2018-2021, "Joint Action Health Equity Europe — JAHEE".

The fourth research project is funded from the European Cooperation for Science and Technology: COST JA 2018-2022, "Towards an International Network for Evidence-based Research in Clinical Health Research (EVBRES)".

#### "European Network for HTA - Joint Action 3" (EUnetHTA JA3)

Financing source: European Commission - DG SANTE, and own sources.

Project duration: 4 years (2016-2020).

Partners: Project EUnetHTA JA 3 is carried out by a Consortium of 81 partners from 29 countries, coordinated by the National Health Care Institute from Netherlands.

Network website: <a href="http://www.eunethta.eu/">http://www.eunethta.eu/</a>

The purpose of this project is to implement a sustainable model for technical and scientific cooperation in health technology assessment at European level.

Strategic Objectives of EUnetHTA JA3 are as following:



- Improving the implementation process of the tools through an international HTA collaboration approach;
- Strengthening and improving collaboration within the EuNetHTA network, to lead to a better understanding (from the EC and the Member States) of methods to establish a durable HTA structure in the European Union;
- Development of a general strategy based on principles and implementation proposals for a sustainable collaboration at European level, in accordance with provisions of the Article 15 of "The Directive for cross-border healthcare";
- Creating an efficient collaboration framework for rapid health technology assessment;
- Uniform/standardize the HTA reports used for decisions related to the reimbursement of health services and the elaboration of clinical practice guidelines.

Expected results:

Current collaboration continues the previous projects EUnetHTA JA1 and JA2. This third phase is based on previous collaborations, where many tools needed for transnational collaboration activities have already been completed, between the HTA network members, and to be followed by producing HTA reports.

Main expected result is to define and implement a permanent and sustainable network for collaboration in health technology assessment in Europe. Additional results:

- Producing at least 50 HTA reports per year;
- Increase the quality of reports, increase nationally adaptation and use of these collaborative reports;
- Improve decision making and health policy making in the Member States on basis of disseminated information, in such a way as to protect their citizens against those health technologies that are not safe and nor effective, and finally leading to a better health status of the population.

NSPHMPDB participates in 4 working groups within this project:

WP4 – producing HTA reports through international collaboration;

WP5 – improve the production of evidences;

WP6 – assurance of quality management tools and scientific guidelines;

WP7 – national implementation and impact evaluation.

In 2019, NSPHMPD has participated in many activities, out of which some are finalized, while others are still running:

- Participation in a pilot exercise to set priorities and achieve a material with recommendations to identify, select and prioritize health technologies to be assessed, "Horizon Scanning: Recommendations for a Topic selection, Identification and Prioritization" la care NSPHMPDB are quality de co-author, in collaboration with other partners of the working group WP4;
- Participation, as co-author, in the assessment of the following three health technologies: "Bioresorbable Stents in cardiovascular indications (coronary artery disease)" (started in 2018), "Point-of-care Tests (POCT): D-Dimer and Troponin", and "Rectum spacers (i.e. SpaceOAR) to reduce toxicity during radiotherapy for prostate cancer" (to be continued in 2020) WP4;
- Participation in revision of the assessment process and report of "Screening for osteoporosis in the general population" WP4 (activity started in 2018);
- Revision of seven
  Standard
  Operational
  Procedures (SOP),
  within WP6: "Call
  for collaboration
  and formation of
  assessment team
  OT"; "Call for
  collaboration and



formation of assessment team PT"; "Data Extraction"; "Scoping and Drafting the Project Plan"; "Data analysis"; "Publication and Dissemination of Project Plan and Assessment Report"; "Error reporting and correction";

- Participation in revision of the guidelines used in the assessment of technologies "Critical assessment of clinical evidence", "Critical appraisal of economic evaluation" (WP 6);
- Participation as co-author in elaborating a new assessment report model, based on the Core Model, but improved according to experience accumulated in producing assessment reports within the EUnetHTA JA3 ("HTA Core Model: First draft Assessment Report") (WP6);
- Participation in the experimental use for the purpose of finalizing the comprehensive guide for health technology assessment within the EUnetHTA ("EUnetHTA Companion Guide"), containing all the elements of the quality management system: map of processes, standard operational procedures, forms, tools and scientific guidelines, training materials (WP6);
- Participation in activities carried out within WP7, a project component that elaborates periodical implementation reports of EUnetHTA collaboration, assessing the utilization and/or dissemination of the assessment reports at national level; whereas the NSPHMPDB is not an official Agency for health technology assessment, and there are no such requests from the authorities deciding on the health technologies to be used in Romania, only

dissemination reports elaborated through international collaboration within EUnetHTA JA3, have been reported;

- Participation in the General Assembly of the Consortium, in the EUnetHTA Forum, and in 3 working meetings organized within the working packages WP4, WP6, and WP7.

# "Managing Frailty. A comprehensive approach to promote a disability-free advanced age in Europe: the ADVANTAGE initiative" (ADVANTAGE)

Financing source: European Commission - DG SANTE, and our own sources.

Project duration: 3 years (2016-2019).

Partners: Project ADVANTAGE is carried out by a Consortium of 35 partners, coordinated by the Foundation for Biomedical Research of the Getafe University Hospital (Fundacion para la Investigacion Biomedica del Hospital Universitario de Getafe), from Spain.

Action website: <a href="http://www.advantageja.eu/">http://www.advantageja.eu/</a>

Goal of this project is to achieve a common understanding of the "frailty" condition and term, to be further utilized in all the Member States of the EU, as the basis for a common management, at both individual level, as well as at elderly population level, frail persons, or persons at risk of developing frailty. Identification of the basic frailty components and its management should promote the need for change in organization and



implementation of health care services and social services, in order to offer Models of Care; existing results at national levels will allow the Member States to face this challenge within a joint framework.

#### **Project Objectives:**

Project will outline the current stage of "frailty" management at both individual level, as well as in the general population, will collect information related to development programs approaching "frailty" in elderly, and will finally propose, as a main result, a common European Model to approach "frailty". This main result will include a road map setting the steps to be done in time on short, medium and long term. This path will propose not just measurements/evaluation for implementing the health and social services (in order to meet the current uncovered needs, greater in people at risk of "frailty"), but will also collect/identify the existing lack of knowledge in this field, using the same approach.

Specific Objectives of the ADVANTAGE Project:

- Standardize "frailty" assessment at individual level (definition, diagnostic);
- Identify clinical aspects, assess comorbidities;
- Identify frailty prevalence in population;
- Identify the "frailty" pathway and its transitional stages;
- Explore strategies, obstacles and opportunities to reduce frailty and its burden;
- Revision of data management at individual level;
- Elaborate guidelines for frailty prevention and clinical management;
- Identify and disseminate examples of good practice;
- Impact analysis of models of individual care;

- Transfer of information and practices regarding frailty;
- Analyze the integration of medical and social services;
- Analyze the costs and benefits.

Expected results:

- Finding a common definition for the term "frailty";
- Possible standardized diagnosis of frailty;
- Prevalence in population;
- Build the pathway of the frail patients and define the transitional stages of "frailty";
- Identify strategies, obstacles and opportunities to reduce frailty;
- Guidelines elaborated for frailty prevention and clinical management;
- Dissemination of good practice example;
- Analysis results of medical and social services integration;
- Results of costs and benefits analysis.

Within this project, NSPHMPDB participates in 4 working groups:

- WP2 communication, awareness and dissemination;
- WP4 knowing frailty phenomenon at individual level;
- WP5 knowing frailty phenomenon at populational level;
- WP7 models of care for "frailty" prevention or delay, enabling elderly to live a better life.

During 2019, the last year of this project, NSPHMPD has participated in many activities focused on completing the joint European model for elaborating strategic plans for frailty in elderly. For this purpose, NSPHMPD has participated in the following actions:

- Organizing a national meeting with stakeholders interested in elderly frailty, in order to disseminate the documents elaborated within the ADVANTAGE European Consortium, and building a national team of experts, able to elaborate the Strategic Plan for Romania (Bucharest, January 2019);
- Elaborate a proposal of Strategic Plan for Romania and revision of the document;
- Validate the proposal Strategic Plan for Romania, by the Ministry of Health;
- Present the proposal Strategic Plan for Romania during the meeting of ADVANTAGE Consortium, in order to complete the common model at the level of participant countries (Athens, 2019);
- Participation at completing the common model containing 10 strategic areas;
- Revision of the proposal Strategic Plan for Romania, according to the common model, and tailoring it to the national context (10 domains covered in 6 strategic areas);
- Organizing a national meeting with the stakeholders concerned about frailty in elderly, in order to disseminate the project and raising awareness of decision makers regarding the importance of "frailty" (Bucharest, December 2019);



- Participation in dissemination activities within the project, namely three national scientific events, with communications on subjects related to frailty and European preoccupations regarding frailty:
- Congress of the "Carol Davila" University of Medicine and Pharmacy, Bucharest;
- Scientific communications session of "Dunărea de Jos" University of Galați;
- International Conference "Alzheimer disease a challenge for contemporary world. Medical, psychological, social research and intervention", Cluj-Napoca.
- Participation as co-author in elaboration of a scientific article submitted to Translational Medicine journal.
- Participation at the elaboration of final versions of the project documents (SoAR State of the Art; FPA Frailty Prevention Approach)
- Participation in the fourth General Assembly of the ADVANTAGE Consortium and the Final Conference of the Project (Bruxelles, November 2019).

#### "Joint Action on Health Inequalities" (JA-HI)

Financing source: European Commission - DG SANTE, and own sources.

Project duration: 3 years (2018-2021).

Partners: the Project is carried out by a Consortium of 25 partners, coordinated by the National Health Institute in Italy (*Instituto Superiore di Sanita*). Other 24 institutions from the EE Member States participate as affiliated or collaborator institutions. For this project, NSPHMPDB is associated with the National Institute for Mather-and-Child Health (NIMCH) "Alessandrescu - Rusescu" Bucharest – as affiliated institution.



Action website: <a href="https://jahee.iss.it/">https://jahee.iss.it/</a>

The goal of this project is to improve the health status and well-being of the EU citizens and attaining a higher equity for final health outcomes across all the society groups, through a strong focus on the socio-economic determinants of health, as well as on inequalities related to lifelong lifestyle.

Specific Objectives:

- Providing a clear frame-policy containing a list of actions and recommendations for national, regional and local implementation;
- Developing more effective policies at national, regional and local level, and improve their monitoring, governance, implementation and evaluation;
- Implementing "good practices" and facilitating experience exchange between the EU
   Member States, in order to acquire new knowledge and practices;
- Identifying success factors, barriers and challenges, as well as ways to overcome them.
   Expected results:
- A framework for actions aimed to reduce health inequities in the EU and the Member States;
- Evaluations and recommendations at national level to reduce inequities among the EU Member States;
- Report with lessons learned from case studies related to fighting against inequalities and counteracting against challenges in health inequalities – reports per each WP, and one final report;
- Final results of this project will be translated in useful materials for political decision makers and stakeholders, such as: political briefs, graphic information, video materials and communication of evidences from EU to local level.

Project activities will be carried out within 9 working packages:

- WP 1 Management of the action;
- WP 2 Dissemination of results;
- WP 3 Evaluation;
- WP 4 Integration in National Policies and project Sustainability;
- WP 5 Monitoring inequalities;
- WP 6 Healthy living environments;
- WP 7 Migration and health;
- WP 8 Improving access to health and social services for those left behind;
- WP 9 Health and Equity in All Policies Governance.

NSPHMPDB participates at the working packages WP4, WP5, WP6, WP8, and WP9.

Main activities carried out during the year 2019 with participation of the NSPHMPD were identification and starting the "Feasible Actions", namely "Complex Actions", to be furtherly developed at national level within each working package; these are descriptions of the projects implemented or in implementation in that particular country, which could be considered examples of good practices for the other JAHEE partners.

Actions per each working package are the following:

- Building a monitoring system for inequalities in reproductive health (WP5). Analysis of the health information system in Romania has revealed that there is no system dedicated monitoring the health inequalities. Although there is a large volume of data currently reported, the system is not able to generate detailed reports related to differences in health status on most variables affecting health (e.g. socio-economic status, educational level, ethnicity, etc.). Given the difficulty of proposing changes for the entire system, as JAHEE have not sufficient resources for implementation, and considering the fact that affiliated

institution to this project (the National Institute for Mother-and Child Health) is in charge with implementation of the national programme for mother-and-child health, having a great expertise in reproductive health, it was decided to develop a monitoring system for inequalities in reproductive health and be proposed as part of the national programme for mother-and-child health; in 2019, a health reproductive report to justify introduction of such a system has been achieved, and scientific documentation on monitoring inequalities in reproductive health in other countries, has been initiated;

Body building and health through sport (WP6). This is a project of the Bucharest City Hall providing free sessions of physical training in 17 sport disciplines to children 6 - 18 years old living in Bucharest; a special concern is provision of physical training to children with special needs; in 2019, NSPHMPDB contacted the coordinators of this project and a collaboration agreement in principle for this project has been signed. Within this agreement. **NSPHMPDB** will elaborate informative materials about healthy life styles dedicated to children registered in physical training, will disseminate information related to this project among institutions for children with special needs, and will monitor implementation of the project for the purpose to reduce access inequalities to a healthy lifestyle of



children from disadvantaged groups or children with special needs;

Prophylaxis of dystrophia in children aged between 0-12 months, not breastfed, by providing them with powder milk formula (WP8). Sub-programme of the National Programme for Mother-and-Child Health, carried out under coordination of the National Institute for Mother-and Child Health, action was selected to reveal reducing inequalities in accessing powder milk formula for children from disadvantaged populations; a Plan of actions has been initiated in 2019, dividing the tasks between NSPHMPDB and NIMCH; actions will consist in training the community members on program components, training medico-social personnel on interventions necessary to facilitate the access of disadvantaged children to powder milk formula, analyze the profile of beneficiaries of this programme;

- Impact evaluation of community centers foundation on vulnerable population (WP9). Action consist the in impact evaluation on long term of a project implemented by the

**NSPHMPDB** during the period 2009-2012, in 10 counties from Central and Western Romania, and, in case of a positive impact registered, to present the report to decision makers for supporting replication of project; evaluation plan has been elaborated in 2019. data collection means



have been decided, and questionnaires and interviews were applied to both community nurses, and local authorities;

- Participation in General Assembly and in 7 working meetings organized within the working packages WP5, WP6, WP8, and WP9.

# "Towards an International Network for Evidence-based Research in Clinical Health Research- (EVBRES)"

Financing sources: European Cooperation in Science and Technology COST JA 2018-2022, and own sources.

Project duration: 4 years (2018-2022).

Partners: research institutions from 33 countries. NSPHMPDB participates in this action along with the "Spiru Haret" University. Coordinator institution is the Western Norway University of Applied Sciences in Bergen, Norway.



Action website: <a href="https://evbres.eu/">https://evbres.eu/</a>

Action goal is to use the research outcomes in substantiating new studies in a systematic and transparent manner (through systematic reviews), so as to get valid, efficient and accessible evidences.

Specific Objectives of research coordination

- Increase the awareness and acceptance of these challenges by all the relevant stakeholders;
- Develop training materials for Evidence-Based Research (EBR);
- Gathering collaboration between stakeholders in order to increase efficiency of updating and elaborating systematic reviews;
- Creating a common vision on the evaluation of EBR implementation.

Specific Objectives for capacity development

- Identify implications of EBR approach for each stakeholder;
- Training researchers in EBR application;
- Describe processes and technologies used in systematic reviews in need for improvements;

- Establish a common understanding of how to monitor the EBR application in clinical research.

Working packages structure

- WP 1. Dissemination and implementation.
- WP 2. Development and Teaching Methods to be Evidenced-Based for Clinical research.
- WP 3. Improving Efficiency in producing and updating Systematic Reviews.
- WP 4. Meta-research on EBR.

Expected results

- Conducting a Delphi study on the involvement of research ethics committees, funding agencies and scientific medical journals in EBR;
- Identify obstacles, difficulties and necessary knowledge, through a Delphi study; an advisory material for conferences and a manual for online training will be developed, based on study results;
- Identifying areas for possible improvements of efficiency in producing and updating

### Workshop 1: Bergen, Norway 4-6th February 2019



EVBRES participants at the first Workshop meeting in Bergen, Norway. Feb 4-6th, 2019

systematic reviews, through Delphi method;

- Conduct a
Delphi study in
order to identify
ways of
evaluation of
clinical research
practice, and
initiate
implementation
of these
methods.

Activities carried out in 2019 with NSPHMPD participation:

Project was actually initiated in February 2019, at a working meeting organized by the Bergen University, Norway. Within this meeting, the componence of working groups has been completed, and specific roles have been assigned, within each group.

NSPHMPDB is involved in the working group WP2, which is a training component, and in the working group WG3, in activities aimed to identify areas where production and updating of systematic reviews can be achieved more effective.

#### Therefore, in 2019 NSPHMPDB participated in:

- the development of course curriculum and elaboration of materials for a training program in Evidence-Based Research, dedicated to young researchers. The training program was piloted during the second working meeting, organized by the Tartu University, Lithuania. Training program will be assessed and then improved consequently, to be continued in 2020. NSPHMPDB consider the replication of this training program at national level;
- development of a protocol for a qualitative study centered on: identification of those systematic review phases considered resource consuming, the reasons why researchers have

this perception, and finding the ways to improve the efficiency of the process of elaborating systematic reviews. This activity also generated writing a scientific paper/article to be published in NSPHMPDB journal, Management in Health.

#### **Projects initiated in 2019**

Two new projects have been initiated in 2019. One project was accepted for funding within the Operational Programme "Administrative Capacity" 2014 – 2020, Component 1 - IP12/2018 – Support for actions strengthening the capacity of public authorities and central institutions, Priority Axis - Efficient Public Administration and Judiciary System, Operation - Developing and introducing common systems and standards in public administration to optimize citizens-oriented decisional processes and business environment, in concordance with the Strengthening Public Administration Strategy. The other project is carried out with our own funds, within a partnership with the Heidelberg University.

# "Improving quality and performance hospital services through costs evaluation and standardization" (CaPeSSCoSt – 108196)

Financing source: structural funds – the Operational Programme "Administrative Capacity" (OPAC), and own sources

Project duration: 3 years (2019-2022)

Project financing has been accepted and project is to be carried out by the Ministry of Health, in partnership with: the National Authority for Quality Management in Health (NAQMH), the National Social Health Insurance Fund (NSHIF), and the National School of Public Health, Management and Professional Development Bucharest (NSPHMPDB).

Goal

Improving the quality and efficiency of the public services din Romanian healthcare system, by supporting the sectorial decentralization process, promoting public integrity and accountability in spending public funds.

Specific Objectives

- Increasing capacity of decentralized health institutions to internalize all the specific functions of the health care system.
- Promoting quality and integrity in services supplied by the Romanian health care system.
- Supporting the application of National Anti-corruption Strategy 2008-2010 coordination mechanisms, and future strategic documents on anti-corruption.
- Limiting misappropriation of health system funds by fraud of the public procurement procedures, contracting and misappropriation of property goods and associated corruption.
- Strengthening cooperation between the institutions involved in elaboration, implementation and control of applying the decentralization health policies.

Activities:

- A.1. Project Management
- A.2. Information and promotion
- A.3. Mapping cost data collected from hospitals
- A.4. Developing an IT application for hospital cost data collection and processing
- A.5. Collect and process cost data from pilot hospitals
- A.6. Developing hospital cost calculation methodology and defining costing elements
- A.7. Implementing cost calculation methodology in 50 pilot hospitals

- A.8. Calculating relative values for the hospital cases discharged from pilot hospitals
- A.9. Elaborating the methodology for updating the DRG grouping system for continuous hospital care cases
- A.10. Settle cost standards for the first 20 most frequent pathologies discharged from hospitals
- A.11. Elaborating the methodology for implementation of the International Classification of Diseases system version ICD 11
- A.12. Corelating the International Classification of Diseases version ICD 11 system, with the RoDRG system
- A.13. Elaborating course curriculum and technical specifications for the manual Hospital Services Quality Management
- A.14. Writing the manual Hospital Services Quality Management
- A.15. Periodical interinstitutional consultation in development process of the manual
- A.16. Publishing the manual and disseminating results
- A.17. Organizing the elaboration process of the Normative Code on Health Services Quality Management
- A.18. Elaborating the Normative Code on Health Services Quality Management
- A.19. Approval and publish the Normative Code on Health Services Quality Management
- A.20. Train 150 persons.

Expected results

- A unitary and up-to-date methodology for cost data collection, elaborated and implemented in Romanian hospitals;
- A unitary, adequate, tailored costing methodology for the hospital services, adapted to the Romanian health care system, elaborated and applied to the first 20 most frequent pathologies;
- A methodology to upgrade the current national grouping system of continuous hospital care acute cases, financed through the DRG mechanism (Diagnosis-Related Groups);
- Cost standards elaborated for the hospital services;
- Unitary procedural framework created to implement the International Classification of Diseases (ICD) system version ICD 11, in Romanian hospitals;
- Manual on Hospital Services Quality Management, elaborated.

This Project was initiated in December 2019, when clarifications between the partners and the competent authority have been discussed.

Partnership with the Heidelberg University from Germany for carrying out the project "Applying the automated learning machine for ICD-10 coded data registrations of patients hospitalized in Romania during the past 10 years"

Financing source: own funds Study duration: 6 months

Objective of the Partnership Agreement signed with the Heidelberg University from Germany is joint participation in a research on automated processing of data from hospital patients discharged during a 10-years-period in order to identify morbidity trends and predictions for the next 3 years.

Study goal is to substantiate the process of health policies development and decision making by identifying trends and predictions regarding the health status of Romanian population for the next three years.

Study Objectives:

- Identify diseases and comorbidities leading to unnecessary or prolonged hospitalization;
- Predict probability and cause of death for each hospitalized patient, within the first three inpatient days of care;
- Predict the incidence of the first 10 most deadly diseases, as defined by the WHO (Ischemic Cardiac Disease, Stroke, Chronic Obstructive Pulmonary Disease, Low Respiratory Infections, Alzheimer Disease, Lung Cancer, Diabetes Mellitus, Road Trauma, Diarrheal Diseases, Tuberculosis), for the next 3 years.

Expected results

Study results will be published in a peer-review international journal.

#### Projects submitted for funding

NSPHMPDB has been included in a Consortium of 22 partners from 13 countries (ERNST CONSORTIUM) that resubmitted an action project proposal on the topic "European Researchers Network Working on Second Victims" (ERNST) for funding within the COST network (European Cooperation in Science & Technology).

The purpose of this action is to facilitate discussions and share scientific knowledge, perspectives, legislation and norms, as well as the best practices related to adverse events in medical institutions, in order to apply the joint efforts made to support the secondary victims and to introduce an open dialog and discussion between the stakeholders regarding the consequences of the "secondary victim" phenomenon, based on a transnational collaboration integrating various disciplines and approaches, including legal, educational, professional and socio-economic perspectives.

#### Other research activities

NSPHMPDB achieve several studies and analysis by exploiting the DRG\_National hospital database, managed by the Center of Health Services Research and Evaluation (CHSRE), within the contract signed with the National Social Health Insurance Fund (NSHIF). Based on this contract, NSPHMPDB collect data related to the clinic activity of all the Romanian hospitals in contract with the NSHIF, validate this data and classify the hospital cases in diagnostic groups, evaluate the activity and performances of health services providers, the quality of medical services, monitor compliance with quality standards of data collected, and propose methodologies for calculating hospital tariffs. CHSRE experts also study and elaborate proposals for developing patient classification systems and hospital costing methodologies, participate in elaboration of methods for adjusting the reimbursement of health organizations, evaluation criteria for managerial performance and tools for their comparative assessment.

In 2019, according to the contract signed with the NSHIF, three quarterly analysis and six reports related to the problems with potential impact on reimbursement of the hospital services have been developed, as following:

- Analysis "Top 50 hospitals accounting for the highest proportion/share of expensive DRGs in total reported and validated hospital discharged cases";
- Analysis of the coding and reporting errors signaling problems impacting the hospital reimbursement:

- Analysis of the first 10 surgical procedures generating the highest variation / differences in classification of the DRG weighted cases;
- Report on the proportion of patients admitted in hospital as "Emergency", per hospitals and per hospital wards;
- Report on the 20 most frequent types of cases and services reported as day hospitalization (day care);
- Report on the case-mix index (CMI) achieved by the hospitals, compared with their CMI contracted values, as published in the Framework Contract Norms;
- Report on variation of the case-mix index (CMI) at hospital ward level, compared to the national average CMI as calculated per medical specialty;
- Report on dynamic of the hospital cases readmitted in 48 hours for the same pathology, within the same type of hospital care;
- Report on the medical procedures and laboratory tests performed for day hospitalizations, per types of services.

The DRG hospital Database is also used to achieve analysis requested by third parties within collaboration contracts or conventions. In 2019 the following studies and analysis have been performed:

- Analysis of cases of vaccine-induced conditions;
- Analysis of hospitalizations caused by thyroid pathology during the period January June 2019:
- Analysis of continuous hospital care and day hospitalizations in pregnant women;
- Analysis of laparoscopic versus open surgery number of cases, between 2008-2018;
- Analysis of the national hospital episodes during January 1<sup>st</sup>, 2018 December 31<sup>st</sup>, 2019;
- Evaluation of cases with acute myocardial infarction (AMI), stroke, transient ischemic attack (TIA), total number of continuous care cases as reported by the hospitals on MDC 20, MDC 21, MDC 22, childbirth and their associated mortality, at national level, during the years 2007-2018 and first 9 months of year 2019;
- Analysis of the cases of vaccine-preventable diseases, cases of iron-deficiency anemia, respiratory infections, cases of gastroenteritis and other functional gastrointestinal disorders, in children from 38 localities in Bacău County, during 2013-2018, as reported to the NSPHMPDB by public and private medical services providers.

NSPHMPDB has a collaboration agreement with the National Institute of Statistics for data exchange purposes, aimed for research activities and data reporting to international organizations. Within this agreement, several analyses have been performed in order to complete the following:

- OECD/EUROSTAT 2017 Questionnaire on nonmonetary health statistics;
- Reports requested for the survey "2017 Hospitals Purchasing Power Parity (PPP) Survey" in Eurostat-OECD Purchasing Power Parities (PPP) Programme;
- Statistics related to health expenditures and health financing sources, according to the System of Health Accounts methodology, according to the EU Regulation no. 359/2015 of the Commission for application of the EC Regulation no. 1338/2008 of the European Parliament and Commission.

Data analysis for completing the OECD Questionnaire - Health Care Quality and Outcomes (HCQO), on 2018-2019 Data Collection, was also performed at the request of the National Agency for Quality Management in Health.

Data analysis from the DRG National hospital database was performed in order to respond to several requests of the Ministry of Health regarding the following: patients with abortion on-demand; psychological counselling provided to hospital admitted patients; bladder litolapaxy (lithotripsy) procedure and endoscopic ureteric stent insertion; indicators for hospital classification and management performance; ROP (Regional Operational Programme) result indicators; hospital medical indicators reported in 2018 by the Central Region; incidents caused by electrocautery use; as well as for substantiating the Ministry of Health Project "Improving quality and performance of the hospital services by cost assessment and standardization" (CaPeSSCoSt).

Besides our research activities, legislative changes have been integrated by additions and updates in the IT application for DRG\_National hospital data collection, and also in the applications for data import and processing. Evaluation indicators of hospital activity have been quarterly calculated and posted on our website <a href="www.drg.ro">www.drg.ro</a>. Our institution participated in working groups organized by the NSHIF for "Establishing the DRG weighted-case tariffs (WCT) calculation methodology for DRG-reimbursed hospitals, year 2020", and "Simulation of WCT calculation methodology. Technical assistance and methodological support have been provided to 100 hospitals per month in average, by phone (100 calls/month in average), e-mail (25/month in average), and faxed letters and visits (4 in average). Technical assistance and methodological support have also been provided to specialized employees working in the control structures of the Directorate-General for Monitoring and Control (DGMC) from the NSHIF and district social health insurance funds (DSHIF), for the purpose of controlling the hospital coding quality.

DRG\_National hospital database was used for elaborating three scientific papers published in the NSPHMPDB journal, and for other two scientific papers published in other journals (Annex 1). Analysis and studies based on the DRG\_National hospital database have also documented most of the consultancy and technical assistance performed by request of the central and local health authorities, such as:

- participation in the Technical Working Group and in the Interinstitutional Decisional Group set up for updating the Master Plans for Regional Health Services;
- participation in the Technical Working Group set up in order to support the accomplishment of the investment objective "Braşov Regional Emergency Hospital";
- providing data and information regarding the hospital medical services in South-Eastern Region, in order to prepare the Projection of the Constanța Regional Emergency Military Hospital;
- calculation of hospital management indicators needed for periodical evaluation of managers of the healthcare facilities subordinated to the Ministry of Health;
- participation in monitoring and evaluation of the National Health Strategy 2014-2020 implementation;

- performing the analysis requested in order to regulate the prophylaxis, evaluation and therapy of the vitamin D deficiency, by the specialty Commissions of pediatrics, obstetrics & gynecology, neonatology and endocrinology ale Ministry of Health;
- providing the Ministry of Health with data and information regarding the cases of osteoporosis reported by hospitals as inpatient continuous care;
- analysis of the document "Analysis of current stage of the national health services", elaborated within the Project "Alternative public policies in health", carried out by the Ministry of Health in collaboration with "Filantropia" Federation;
- participation in completing the questionnaire elaborated by the World Health Organization, regarding the implementation of the European child and adolescent health strategy 2015-2020;
- participation in working groups organized by the Ministry of Health together with the World Bank Group representatives in Romania, for the purpose of preparing the loan for "Romania Health Program for Results (PforR)—Loan 9005-RO", aiming to achieve universal primary health coverage of population, especially in a fiscally and institutionally sustainable way;
- participation in the working group Resources for Health, organized by LAWG the Local American Working Group;
- participation in the permanent Working Group of the National Surveillance Commission on Health Information System and Reporting to O.E.C.D.

NSPHMPDB scientific activity is disseminated through the articles published in our journal and in other specialized publications, as well as through our participation in several scientific events. During 2019, the following have been published:

- 19 scientific articles, out of which 10 in ISI journals (Annex 1);
- three health technology assessment reports elaborated within the EUnetHTA joint actions;
   NSPHMPDB is co-author in two of them Bioresorbable Stents in cardiovascular indications (coronary artery disease), and Point-of-care Tests (POCT): D-Dimer and Troponin, and participated in the review of the third report Osteoporosis Screening in general population.

The dissemination has also been achieved through active participation in 15 international scientific events and 9 national scientific events (Annex 2).

NSPHMPDB was registered on the Research Gate network, in order to monitor the dissemination of their research activity, and thus in December 2019, the Research Gate score was 142.63 corresponding to 173 publications registered in total on this platform.

# III. Strengthen the NSPHMPD institutional capacity for scientific research and development

According to NSPHMPDB Development Strategy 2016-2020, fulfillment of all the training and research objectives, as proposed, needs to be supported through a continuous development and strengthen process of NSPHMPDB capacity and expertise. In 2019, the objectives considered for this course of action were as following:

- > Training and professionally developing our specialized personnel in order to extend the areas of excellence and increase training and research performances in public health and health management;
- ➤ Continue the networking activities with experts and reference organizations in education and research in the field of public health and health management, at national and European/international level;
- ➤ Providing the necessary technical facilities for modern training processes and for primary and secondary research;
- ➤ Improving visibility of NSPHMPDB training research development, including through the institutional websites.

Both specialized personnel - in order to increase the training and research capacity, as well as support staff - in order to improve the processes of internal managerial control and quality monitoring, have received professional training in 2019, as following:

- six employees participated in the "Training of Trainers in health services management" training program;
- two persons graduated the training program in "Quality Management in hospital";
- one person participated in "Reporting, contracting and reimbursing the hospital services (DRG)" training program;
- one person participated in the training program "Health Advocacy";
- two persons were trained in "Quality management specialist SR EN 9001:2015", within the Project "Strengthening administrative capacity of the Ministry of Health and organizations under their subordination, coordination and authority through unitary implementation of the Quality Management System SR EN ISO 9001:2015", carried out by the Ministry of Health through the Operational Programme Administrative Capacity;
- four persons were trained on the following topics: "Preventive financial control", "Inventory financial control", "New in the public institutions accounting", and "Evaluating the anti-corruption system".

Besides the collaboration within the projects presented in previous chapter, networking was also performed by participating in actions of the networks where NSPHMPDB is a member: ASPHER - Association of Schools of Public Health in the European Region; EUPHA - European Public Health Association; JBI – Joanna Briggs Institute, Australia.

Therefore, NSPHMPDB participated in 2019 in the annual Assembly of Deans and Directors of Public Health Schools in Europe, retreat organized by the Governing Board of the Italian Postgraduate Schools of Hygiene and Public health, "Ettore Majorana" Foundation and the Centre for Scientific Culture *Erice*, Italy, in the period May 26 -29, 2019, where training issues for public health work force in Europe, as well as topics currently confronting public health, have been discussed: climatic change, antimicrobial resistance, immunization, digital health. Within this event, specific meeting of the working groups established within ASPHER have been held. NSPHMPDB participated in the meeting of working group Public Health Law, and presented the paper "Public health law as an important determinant of access to healthcare – Romania case study" during the scientific session on the same subject.

NSPHMPDB a participated in the 12<sup>th</sup> European Public Health Conference (EUPHA) on "Building bridges for solidarity and public health", held between November 20 - 23, 2019, in Marseille, France. Participation in this conference included four papers: "Hospitalization patterns of uninsured as base for services and health need assessment", "Day light and urban life – mixt methods review", "Appropriate approaches for improving health promotion literacy in adolescents - a systematic review", and "Interventions to reduce stress, anxiety and depression symptoms in teenagers – a systematic review". Based on discussions and debates held during this conference, in the end "The Marseille Statement: Building bridges for solidarity public health" has been which **NSPHMPDB** in issued, to (https://eupha.org/repository/advocacy/Marseille statement 2019/Marseille statement -\_Building\_bridges\_for\_solidarity\_in\_public\_health\_November\_2019.pdf).

#### **NSPHMPDB**

also participated in the European Public Health Week actions, coordinated by EUPHA, by organizing a round table on the topic "Hospital services research, as support for decision making". Action aimed of awareness general public and health system personnel regarding the importance of specific topics. public health



Therefore, participants on the round table organized by the NSPHMPDB have discussed about the importance of accuracy and validity of data reported by the hospitals and the way they contribute to decision making in health.

23 revisions of protocols or literature systematic reviews have been performed in 2019 within the collaboration with the Joanna Briggs Institute - international research and development network from the faculty of Health and Medical Sciences from the University of Adelaide, South Australia, in which NSPHMPDB is affiliated.

#### Other collaboration activities:

- partnership with the National Institute for Mother-and-Child Health, within the Project "RENASC - National network of reproductive health promotion through integrated public policies"; this network will analyze the existing policies in this area and will elaborate proposals to improve legislative provision, in such a way that pregnant women to have unlimited and equal access to medical services of high quality; NSPHMPDB participated in two workshops held within this partnership, in 2019;
- signing new partnerships in order to apply in common projects: partnership with the *Instituto Complutense de Ciencia de la Administración*, of the *Universidad Complutense de Madrid*;

- collaboration with the International Anti-drug and Human Rights Centre (CIADO), in accordance with the National Antidrug Strategy adopted through the Government Decision no. 784/2013, and the Municipal Anti-drug Strategy adopted by the General City Council of Bucharest through the H.C.G.M.B. no. 227/4.09.2014, on the socio-cultural project addressed to employees from ministries, central and locale public administration authorities; this project consists in organizing cultural events (such as theatrical and artistical performance), where the participants are informed about the symptomatology of the young drug user, and receive useful information materials;
- signing a manifest document: "Manifesto for new approach for better medicine in Europe Establishing Treatment Optimization as part of personalized medicine development", initiated by the European Organization for Research and Treatment of Cancer (EORTC) in collaboration with the Panel for the Future of Science and Technology STOA, of the European

  Parliament

  (<a href="https://www.eortc.org/app/uploads/2019/11/Manifesto\_EORTC\_21112019.pdf">https://www.eortc.org/app/uploads/2019/11/Manifesto\_EORTC\_21112019.pdf</a>); this document is a call to intensify the research and to adapt the existing legislation, in order to optimize the treatments through development of personalized medicine;
- participation, together with the Ministry of Health, the Presidential Administration, Public Health Commission of the Romanian Senate, Health and Family Commission of Romanian Chamber of Deputies, the National Social Health Insurance Fund, in the program of Aspen Institute Romania "Aspen Healthcare & Quality of Life Program" (<a href="http://aspeninstitute.ro/healthcare-quality-of-life-program/">http://aspeninstitute.ro/healthcare-quality-of-life-program/</a>), to support health reforms through discussions, debates and involvement of public and private sector, as well as civil society and the academia;
- participation in debates organized by the "Human Resources for health" Platform, created by the health commissions of the Romanian Parliament and the "Local American Working Group" Association, and attributing the catalyst role of debates on proposals for public policies and health legislative initiatives. The project has ended with elaboration of the paper "White charter of health innovation", comprising the summary of discussions, debates and recommendations made by the working groups (http://www.lawg.ro/files/assets/userfiles/files/Carta%20Alba%20a%20Inovatiei%20in%20Sanatate.pdf);
- participation in the working meeting organized by the Ministry of Health in collaboration with the Regional Office for Europe of the World Health Organization, in order to develop a strategic framework and an Operational plan for Reproductive and Sexual Health in Romania, for 2020-2030 period;
- participation in the conference de presentation a results of the Project SELFIE (Sustainable intEgrated care modeLs for multi-morbidity: delivery, FInancing and performancE), financed by the Horizon 2020 Programme, at the invitation of our colleagues from the Croatian Agency for Health Quality and Accreditation and Social Assistance, and from the Syreon Research Institute Hungary, and analyze the possibility to implement a model of integrated services proposed for managing the patients with multi-morbidity, in the Central and Eastern European countries.

Other activities during the year 2019, resulting in project proposals, participations la working groups, conferences and other professional/scientific events, publications, technical assistance or information exchange, have involved partner institutions of NSPHMPDB with

long term collaboration: European Observatory for Health Systems and Policies (the European Observatory for Health Systems and Policies), the National Social Health Insurance Fund, the National Authority of Quality Management in Health, the National Institute of Public Health, the National Institute of Statistics, the Romanian College of Physicians, the Romanian Order of General Nurses, Midwives and Medical Assistants, the World Bank Romanian Office.

Besides the collaboration with other institutions, partnerships, affiliations in international organizations, publications and participation in scientific events, the visibility of NSPHMPDB training - research - development activity is also ensured through our institutional websites <a href="http://www.snspms.ro/">http://www.snspms.ro/</a>, <a href="https://www.snspms.ro/">https://www.perfmed.ro/</a>, <a href="http://www.drg.ro/">https://www.drg.ro/</a>, as well as through the scientific publication edited by NSPHMPDB: the *Management in Health* journal (<a href="http://www.managementinhealth.com">http://www.managementinhealth.com</a>).

This is a quarterly bilingual publication, providing specialized information in general management and in health management. "Management in Health" journal is in B+ category of the scoring journals recognized by the National Council for Scientific Research of Higher education, and it is included in five international data basis: Google Scholar, Index Copernicus, (Directory of Open Access Journals), SCOPUS, and Elsevier, being in evaluation by the ISI Thompson. This journal is also credited by the Romanian College of Physicians, with 5 points per article. The registration process of "Management in Health" journal in the PubMed database of the US National Center for Bio-technology Information (NCBI), has been continued during the year 2019.

Volum XXIII No. 3 2007

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Volumes published in this journal in 2019 include 13 original articles written by NSPHMPDB

specialists as authors or co-authors. Most of these articles are study results from analysis data de activity ale hospitals as reported in the DRG\_National hospital database. The interviews published here have aimed at communicating issues facing the Romanian health system, such as needs of the hospital pharmaceutical system – interview with Mr. Ioan ANTOFIE, senior pharmacist and President of the National Association of Hospital Pharmacists in Romania; or dissemination activities carried out within projects in which NSPHMPDB is involved, as EVBRES Project (see section II. Develop the scientific research activity and improve the capitalization of scientific research outcomes) – interviews with Prof. Hans LUND, Professor at the Centre for Evidence-based Practice, Western Norway University of Applied Sciences, President of the Evidence-based Research Network, President al action EVBRES - COST 17117; and interview with Dr. Hrund THORSTEINSSON, Manager of the Landspitali Department of Education and Professional Development, University Hospital Reykjavik, Island, EVBRES group leader in charge with development of the training school in Evidence-based Research.

### Annex 1

### **Publications in 2019**

No.	Paper Title	Authors	Journal	Impact Factor ISI/SSCI	Others CNCSIS / IDB
1	Childhood generalized specific phobia as an early marker of internalizing psychopathology across the lifespan: results from the World Mental Health Surveys.	de Vries YA, Al-Hamzawi A, Alonso J, Borges G, Bruffaerts R, Bunting B, Caldas-de- Almeida JM, Cia AH, De Girolamo G, Dinolova RV, Esan O, Florescu S, Gureje O, Haro JM, Hu C, Karam EG, Karam A, Kawakami N, Kiejna A, Kovess-Masfety V, Lee S, Mneimneh Z, Navarro- Mateu F, Piazza M, Scott K, Ten Have M, Torres Y, Viana MC, Kessler RC, de Jonge P; WHO World Mental Health Survey Collaborators.	BMC Med. 2019 May 24;17(1):101. doi: 10.1186/s12916-019- 1328-3. https://www.ncbi.nlm.ni h.gov/pubmed/31122269	8.285	
2	Cross-national patterns of substance use disorder treatment and associations with mental disorder comorbidity in the WHO World Mental Health Surveys.	Harris, M., Bharat, C.I., Glantz, M., Sampson, N. Al- Hamzawi, A., Alonso, J., Bruffaerts, R., Caldas-de- Almeida, J., Cia, A., de Girolamo, G., Florescu, S., Gureje, O., Haro, J.M., Hinkov, H., Karam, E., Karam, G., Lee, S., Lépine, J.P., Levinson, D., Makanjuola, V., McGrath, J., Mneimneh, Z., Navarro- Mateu, F., Piazza, M., Posada- Villa, J., Rapsey, C., Tachimori, H., ten Have, M., Torres de Galvis, Y., Viana, M.C., Chatterji, S., Kessler, R.C., Degenhardt, L.	Addiction. 2019 Aug;114(8):1446-1459. doi: 10.1111/add.14599. Epub 2019 Jun 2. https://www.ncbi.nlm.ni h.gov/pubmed/30835879	6.851	
3	Concordance between the diagnostic guidelines for alcohol and cannabis use disorders in the draft ICD-11 and other classification systems: Analysis of data from the WHO's World Mental Health Surveys	Degenhardt L, Bharat C, Bruno R, Glantz MD, Sampson NA, Aguilar-Gaxiola S, Alonso J, Andrade LH, Bunting B, Caldas-de-Almeida JM, Cia AH, Gureje O, Karam EG, Khalaf M, McGrath J, Moskalewicz J, Lee S, Mneimneh Z, Navarro-Mateu F, Sasu CC, Scott K, Torres Y, Poznyak V, Chatterji S, Kessler RC; WHO World Mental Health Survey Collaborators.	Addiction. 2019 Mar;114(3):534-552. doi: 10.1111/add.14482. Epub 2018 Dec 9. https://www.ncbi.nlm.ni h.gov/pubmed/30370636	6.851	
4	A comparison of DSM-5 and DSM-IV agoraphobia in the World Mental Health Surveys.	Roest AM, de Vries YA, Lim CCW, Wittchen HU, Stein DJ, Adamowski T, Al-Hamzawi A, Bromet EJ, Viana MC, de Girolamo G, Demyttenaere K, Florescu S, Gureje O, Haro JM, Hu C, Karam EG, Caldasde-Almeida JM, Kawakami N, Lépine JP, Levinson D, Medina-Mora ME, Navarro-	Depress Anxiety. 2019 Jun;36(6):499-510. doi: 10.1002/da.22885. Epub 2019 Feb 6.  https://www.ncbi.nlm.nih.gov/pubmed/30726581	4.935	

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5	The epidemiology of	Mateu F, O'Neill S, Piazza M, Posada-Villa JA, Slade T, Torres Y, Kessler RC, Scott KM, de Jonge P; WHO World Mental Health Survey Collaborators. M Glantz, C Bharat, L	Addictive Behaviors	2.963
	alcohol use disorders cross nationally: Findings from the World Mental Health Surveys	Degenhardt, NA Sampson, K Scott, CCW Lim, A Al- Hamzawi, J Alonso, LH Andrade, G Cardoso, G De Girolamo, O Gureje, Y He, H Hinkov, EG Karam, G Karam, V Kovess-Masfety, V Lasebikan, S Lee, D Levinson, J McGrath, M Medina-Mora, C Mihaescu-Pintia, Z Mneimneh, J Moskalewicz, F Navarro-Mateu, J Posada- Villa, C Rapsey, JC Stagnaro, H Tachimori, MT Have, N Tintle, Y Torres, DR Williams, Y Ziv, R Kessler, on behalf of the WHO World Mental Health Survey Collaborators	Available online 16 September 2019, 106128 <a href="https://www.ncbi.nlm.ni">https://www.ncbi.nlm.ni</a> <a href="https://www.ncbi.nlm.ni">h.gov/pubmed/31865172</a>	
6	Gender differences in common mental disorders: a comparison of social risk factors across four European welfare regimes	Sarah Van de Velde, Anders Boyd, Gemma Villagut, Jordi Alonso, Ronny Bruffaerts, Ron De Graaf, <b>Silvia</b> <b>Florescu</b> , Josep Haro, Viviane Kovess-Masfety	European Journal of Public Health, Volume 29, Issue 3, June 2019, Pages 481–487, https://doi.org/10.1093/e urpub/cky240 Published: 28 November 2018 https://academic.oup.co m/eurpub/article- abstract/29/3/481/52143 47	2.234
7	Interventions to reduce stress, anxiety and depression symptoms in teenagers – a systematic review	S Florescu, C Mihăescu Pinția, M Ciutan, C Sasu, R Sfetcu, S G Scintee, C Vlădescu	European Journal of Public Health, Volume 29, Issue Supplement_4, November 2019, ckz186.581, https://doi.org/10.1093/e urpub/ckz186.581 Published: 13 November 2019	2.234
8	Appropriate approaches for improving health promotion literacy in adolescents – a systematic review	S Florescu, C Mihăescu Pinția, C Sasu, M Ciutan, SG Scintee, R Sfetcu, C Vlădescu	European Journal of Public Health, Volume 29, Issue Supplement_4, November 2019, ckz186.473, https://doi.org/10.1093/e urpub/ckz186.473 Published: 13 November 2019	2.234
9	Hospitalization patterns of uninsured as base for services and health need assessment	M Ciutan, S Florescu, M Dosius, SG Scintee, C Vlădescu	European Journal of Public Health, Volume 29, Issue Supplement_4, November 2019, ckz186.346, https://doi.org/10.1093/e urpub/ckz186.346	2.234

			Published:		
			13 November 2019		
10	Using national electronic health care registries for comparing the risk of psychiatric re-hospitalisation in six European countries: opportunities and limitations	Heinz Katschnig, Christa Straßmayr, Florian Endel, Michael Berger, Günther Zauner, Jorid Kalseth, <b>Raluca</b> <b>Sfetcu</b> , Kristian Wahlbeck, Federico Tedeschi, Lilijana Šprah, on behalf of the CEPHOS-LINK study group	Health Policy. Volume 123, Issue 11, November 2019, Pages 1028-1035 https://www.sciencedire ct.com/science/article/ab s/pii/S016885101830370 1	2.075	
11	Integrated care models for managing and preventing frailty: A systematic review for the European Joint Action on Frailty Prevention (ADVANTAGEJA)	Hendry A, Vanhecke E, Carriazo AM, López- Samaniego L, Espinosa JM, Sezgin D, O'Donovan M, Hammar T, Ferry P, Vella A, Bacaicoa OA, Braga M, Ciutan M, Velivasi A, Lamprini Koula M, Van der Heyden J, Liew A, O'Caoimh R-on behalf of all Work Package 7 partnersof the ADVANTAGE Joint Action.	Translational Medicine @ UniSa -ISSN 2239- 97472019, 19(2): 5-10 http://www.unisa.it/uplo ads/14684/02.pdf		Web of Science
12	Why conducting and updating systematic reviews are resource intensive: a phenomenological qualitative study protocol	Moriah Ellen, <b>Raluca Sfetcu</b> , Eduard Baladia, Barbara Nußbaumer-Sthreet	Management in Health, XXIII/4/2019; (in publishing)		BDI CNCSIS B+
13	Behaviour science: theoretical domains framework representation within nursing implementation studies	Craig Lockwood, Anna Pearce, <b>Raluca Sfetcu</b> , Zoe Jordan	Management in Health, XXIII/3/2019; pp. 3-6		BDI CNCSIS B+
14	Hepatitis - the frequency of the continuous hospitalization episodes and their spatial distribution in Romania - analysis of the last 5 years	Carmen Sasu, Marius Ciutan, Simona Muşat	Management in Health, XXIII/3/2019; pp. 19-26		BDI CNCSIS B+
15	Developing Multiorgan Transplant Center in Romania: managerial premises	Narcis Copcă, Constanța Mihăescu-Pinția	Management in Health, XXIII/2/2019; pp. 19-28		BDI CNCSIS B+
16	Hospital morbidity by iron deficiency anemia, in Romania	Marius Ciutan, Mihnea Dosius	Management in Health XXIII/2/2019, pg. 13-18		BDI CNCSIS B+
17	Analysis of Colorectal Cancer hospitalized morbidity and estimates of their financial implication at national level, 2016-2018	Constanța Mihăescu-Pinția, Simona Mușat, Mirela Ionescu	Management in Health, XXIII/2/2019; pp. 3-7		BDI CNCSIS B+
18	Evolution of the hospitalization episodes in adults with cancer aged 18+, in public Romanian hospitals between 2013-2017	Carmen Sasu, Marius Ciutan, Simona Muşat	Management in Health, XXII/1/2018; pp. 18-25		BDI CNCSIS B+

19	Multi-organ	Narcis Copcă, Constanța	Sciendo – Proceedings	Sciendo,
	Transplantation Center	Mihăescu-Pinția	of the 13th International	De Gruyter
	in Romania: a story of	ŕ	Conference on Business	-
	persuasion for a		Excellence "Sustainable	
	controverted issue		business models and	
			innovation in the	
			Knowledge economy"	
			Volume 13: Issue 1	
			Published online: 29	
			Nov 2019	
			Pages: 421–434, ISSN	
			2558-9652	
			DOI:	
			https://doi.org/10.2478/p	
			icbe-2019-0037	

**Books/ Book chapters/ Reports** 

_	Books/ Book cnapters/ Reports						
No.	Book / chapter Title / Report	Authors	Editor/Coordina tor	Publisher / website			
1	Point-of-care	Author	EUnetHTA	12.12.2019			
	Tests (POCT): D-	LBI-HTA (Austria): Gregor Goetz, Louise	Joint Action 3	https://eunethta.eu/wp-			
	Dimer and	Schmidt, Judit Erdos	WP4	content/uploads/2019/1			
	Troponin	Co-author		2/POCT POCT final.			
	· <b>r</b>	NSPHMPDB (Romania): Marius Ciutan,	Project ID:	pdf			
		Silvia Florescu, Carmen Sasu, Silvia	OTCA22	<del></del>			
		Gabriela Scintee					
		Dedicated reviewers					
		SNHTA(Switzerland): Heike Raatz					
		HVB (Austria): Lena Glöckner, Noemi Kiss					
2	Screening for	Author	EUnetHTA	20.09.2019			
	osteoporosis in the	Institut für Qualität und Wirtschaftlichkeit	Joint Action 3	https://eunethta.eu/wp-			
	general population	im Gesundheitswesen (IQWiG), Germany.	WP4	content/uploads/2019/0			
		Co-authors		9/2019-09-			
		Swiss Network for HTA (SNHTA),	Project ID:	13_OTCA19_Screenin			
		Switzerland	OTCA19	g-for-			
		Dedicated reviewers		osteoporosis final.pdf			
		Agency for Health Quality and Assessment		*			
		of Catalonia (AQuAS), Spain					
		Gesundheit Österreich GmbH (GÖG),					
		Austria					
		National School of Public Health,					
		Management and Professional					
		Development (NSPHMPD), Romania					
3	Bioresorbable	Author	EUnetHTA	31.01.2019			
	Stents in	Institute for General Practice and Evidence-	Joint Action 3	https://www.eunethta.e			
	cardiovascular	based Health Service Research (IAMEV)	WP4	<u>u/otca16-</u>			
	indications	Co-author		bioresorbable-stents-			
	(coronary artery	National School of Public Health,	Project ID:	in-cardiovascular-			
	disease)	Management and Professional	OTCA16	indications-coronary-			
	Rapid assessment	Development Bucharest		artery-disease-project-			
	of other	(NSPHMPDB)/Romania		plan-now-available/			
	technologies using	Dedicated reviewers					
	the HTA Core	French National Authority for					
	Model® for Rapid	Health (HAS)					
	Relative	Health Service of Canary					
	Effectiveness	Islands (SESCS)					
	Assessment						

### Annex 2

## Participation in scientific events during 2019

## **Participation in international events**

No.	Activity	Authors/Participants	Event	Organizers	Date
1	Participation in EPHA preconference, Seminar "Healthy Places: Research, Strategies and Policies, towards Healthy Places and healthy people", presentation: "Daylight and urban living – a mixed method review"	Silvia Florescu, Constanța Mihăescu- Pinția, Carmen Camelia Sasu, Daniela-Georgeta Popovici, Silvia Gabriela Scintee, Cristian Vlădescu	12 <sup>th</sup> European Public Health Conference on "Building bridges for solidarity and public health"	EUPHA, sections: Environment and health, Mental health, Urban health	November 20–23, 2019 Marseille, France
2	Poster presentation, section Research services de health: "Hospitalization patterns of uninsured as base for services and health needs assessment"	M. Ciutan, S. Florescu, M. Dosius, S.G. Scintee, C. Vlădescu	12 <sup>th</sup> European Public Health Conference on "Building bridges for solidarity and public health"	EUPHA	November 20–23, 2019 Marseille, France
3	Poster presentation, section Healthy lifestyle and health promotion: "Appropriate approaches for improving health promotion literacy in adolescents – a systematic review"	S Florescu, C Mihăescu Pinția, C Sasu, M Ciutan, S G Scintee, R Sfetcu, C Vlădescu	12 <sup>th</sup> European Public Health Conference on "Building bridges for solidarity and public health"	EUPHA	November 20–23, 2019 Marseille, France
4	Poster presentation, Mental Health section: "Interventions to reduce stress, anxiety and depression symptoms in teenagers – a systematic review"	S Florescu, C Mihăescu Pinția, C Sasu, R Sfetcu, SG Scintee, C Vlădescu	12 <sup>th</sup> European Public Health Conference on "Building bridges for solidarity and public health"	EUPHA	November 20–23, 2019 Marseille, France
5	Participant to the debate on: Quality management of medical services – strategic development and human resources Paper presented: Management of major processes in hospital	Adina Geană	International Conference "Quality Management of medical services – at stake for strategic development"	PARTNER Association - Initiative Group for Local Development, in cooperation with National Authority for Quality Management in Health	November 15-16, 2019, Iaşi, Romania
6	Coordinator of the Workshop "Quality Management Systems applied to medical services"	Adina Geană	International Conference "Quality Management of medical services – at stake for strategic development"	Association PARTNER - Group de Initiative for Local Development, in cooperation with the	15-16 November 2019, Iași, Romania

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7	"Manazina Co.'ll. '	Zanfa Milai Xi	Tutana di sala	National Authority for Quality Management in Health	Na
7	"Managing frailty in elderly patients with cognitive impairment"	Zamfir Mihai-Viorel, Botezat Antonescu Ileana, Ciutan Marius, Panait Carmen Lavinia, Bozdog Maria-Elena, Pîrlog Radu	International Conference "Alzheimer Disease – a challenge for contemporary world. Medical, psychologic, social research and intervention"	"Iuliu Haţieganu" University of Medicine and Pharmacy Cluj-Napoca, Babeş-Bolyai University Cluj-Napoca, Romanian Alzheimer Society – Napoca Subsidiary	November 8-9, 2019, Cluj Napoca, Romania
8	Poster presentation: "Sleep disorders – a scoping review"	Silvia Florescu, Constanța Mihăescu Pinția, Carmen Camelia Sasu, Marius Ciutan, Silvia Gabriela Scintee, Cristian Vlădescu	23rd World Congress of Social Psychiatry "The Social Determinants of Health, Mental Health and Access to Care"	World Association of Social Psychiatry	October 25-28, 2019, Bucharest, Romania
9	Poster presentation: "Quality of life affected by dermatological disorders – a systematic review"	DG Popovici, S Florescu, M Gălăon, C Mihăescu Pinția, SG Scintee, C Vlădescu	7th UMP Scientific Congress with international participation	"Carol Davila" University of Medicine and Pharmacy Bucharest	October 10-12, 2019, Bucharest, Romania
10	Poster presentation: "Telemedicine projects in Europe – a systematic review"	Silvia Florescu, Constanța Mihăescu Pinția, Carmen Camelia Sasu, Ciutan Marius, Daniela Georgeta Popovici, Silvia Gabriela Scintee, Cristian Vlădescu	7th UMP Scientific Congress with international participation	"Carol Davila" University of Medicine and Pharmacy Bucharest	October 10-12, 2019, Bucharest, Romania
11	Poster presentation: Tackling frailty in Romania through strategic planning: ADVANTAGE JA grant (poster, ID 216)	Mihai-Viorel Zamfir, Antonescu Ileana Botezat, Marius Ciutan, Mihaela Gălaon, Carmen Lavinia Panait, Maria- Elena Bozdog, Radu Pîrlog	7 <sup>th</sup> UMP Scientific Congress with international participation	"Carol Davila" University of Medicine and Pharmacy Bucharest	October 10-12, 2019, Bucharest, Romania
12	Paper presentation: "Comparative analysis on hospital sector reforms in ten Central and Eastern Europe countries"	Dubas-Jakóbczyk K, Albreht T, Behmane D, Bryndova L, Dimova A, Džakula A, Habicht T, Murauskiene L, Scintee G, Velkey Z, Quentin W	Annual meeting of Health Systems and Policy Monitor network	European Observatory on Health Systems and Policies	October 17-18, 2019, Valetta, Malta
13	Paper presentation: "Public health law as an important determinant of access to healthcare – Romania case study"	SG Scintee, C Vlădescu	ASPHER annual Deans' and Directors' Retreat	ASPHER	May 26- 29, 2019, Erice, Italy

14	Panel discussion. Hospital services research as support for decision-making <a href="https://eupha.org/euphw-page.php?c=RO">https://eupha.org/euphw-page.php?c=RO</a>	Adina Geană, Mihnea Dosius, Marius Ciutan	European Public Health WEEK	NSPHMPDB	May 15, 2019, Bucharest, Romania
15	Paper presentation: Multi-organ Transplantation Center in Romania: a story of persuasion for a controverted issue	Narcis Copcă, Constanța Mihăescu- Pinția	13th International Conference on Business Excellence (ICBE) "Sustainable business models and innovation in the Knowledge economy"	ASE, SBE, UNESCO	March 21- 22, 2019, Bucharest, Romania

# **Participation in national events**

No.	Activity	Authors /Participants	Events	Organizers	Time and Date
1	Interview: Vaccination issue goes beyond the health system, to the social one	Cristian Vlădescu	Ro Health Review. Strategies, Economics & More https://rohealthreview.ro/prof-dr- cristian-vladescu-problema- vaccinarii-merge-dincolo-de- system-sanitar-tine-de-cel-social/	Health Press Group	December 21, 2019 Bucharest, Romania
2	Interview: Pressure on the Emergency Care Units of Romanian hospitals	Cristian Vlădescu	Ro Health Review. Strategies, Economics & More https://rohealthreview.ro/interview- prof-dr-cristian-vladescu-despre- presiunea-pusa-pe-unitatile-de- primiri-urgente-ale-hospitals-din- romania/	Health Press Group	December 7, 2019 Bucharest, Romania
3	Interview: Health inequalities and inequities in Romania.	Cristian Vlădescu	Health Academy broadcast https://www.dcmedical.ro/prof-dr- cristian-vladescu-explica-ii-despre- accesarea-greoaie-a-banilor- europeni-in-sanatate 611491.html https://www.dcmedical.ro/prof-dr- cristian-vladescu-inechita-i-i inegalita-i-in-sanatatea-din- romania-academia-de- sanatate_611468.html	DC Medical RO	October 28, 2019 Bucharest Romania
4	Interview: Measuring the health status of a country. The most recent WHO Health Report	Cristian Vlădescu	Health Academy broadcast https://www.dcmedical.ro/cum-se- masoara-sanatatea-unei-ari-cel-mai- recent-report-al-oms 611361.html https://www.dcmedical.ro/prof-dr- cristian-vladescu-sanatatea-in- romania-date-din-report-oms- academia-de-sanatate 611259.html	DC Medical RO	October 21, 2019 Bucharest Romania
5	Participation in the debate: Evolution of the drug market and its perspectives, current regulations on drug market.	Cristian Vlădescu	HEALTH ROMANIA II: Romanian Drug Market facing challenges. Major changes are being prepared https://www.dcmedical.ro/health-romania-cristian-vladescu-desprepolitica-medicamentului-poate-deavut-in-vedere-ar-fi-o-restructurare_610986.html	DC Average Group	October 11, 2019 Bucharest, Romania

6	Moderator for the debate: Develop partnerships to secure funding for strategic priorities	Cristian Vlădescu	Aspen Healthcare Forum: Universal Health Coverage: Making an Impact on People's Health <a href="http://aspeninstitute.ro/event/aspen-healthcare-forum-2019/">http://aspeninstitute.ro/event/aspen-healthcare-forum-2019/</a>	Aspen Institute Romania	October 3 <sup>rd</sup> , 2019 Bucharest, Romania
7	Participation in debate: which are the challenges of year 2019 (legislation, investments, innovation etc.) in healthcare system and how may the patient have a better access to medical services?	Cristian Vlădescu	HEALTH ROMANIA: Radiography of the health system in 2019 https://www.dcmedical.ro/cristian-vladescu-in-sanatate-foarte-multe-in-de-factors-precum-stil-de-via-agenetica-sau-economie_609032.html https://www.dcmedical.ro/health-romania-radiografia-systemui-de-sanatate-in-2019-agenda-evenimentului_609005.html	DC Average Group	July 10, 2019 Bucharest, Romania
8	"Advantage: confront frailty!"	Mihai-Viorel Zamfir, Ileana Botezat, Marius Ciutan, Lavinia Panait, Mihaela Galaon, Elena Bozdog, Radu Pîrlog	Scientific communication session - the University of the Third Age / "Dunărea de Jos" University of Galați	"Dunărea de Jos" University of Galați	April 05, 2019 Galaţi, Romania
9	Workshop coordinator	Adina Geană	Conference "Clinical Risk Management"	Amphitheatre Foundation, the National Authority for Quality Management in Health	March 20, 2019, Bucharest