



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

2020 ACTIVITY REPORT



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Report Summary

The 2020 activity evaluation pursued the degree of objective fulfilment for each of the three development directions as set within the Institutional Development Strategy of the National School of Public Health, Management and Professional Development, Bucharest (NSPHMPDB) between 2016 -2020: Providing and organizing programs of training and professional development relevant to the existent needs, and delivered at the highest possible quality, Developing the scientific research activity and improving the knowledge translation of research findings, and Strengthening the institutional capacity for scientific research and development of the NSPHMPDB.

Providing and organizing programs of training and professional development relevant to the existent needs, and delivered at the highest possible quality

Although the Covid-19 pandemic has imposed restrictions in regard to direct contact between individuals, public health and health management training activities provided by NSPHMPDB in 2019, through the Centre for Management and Health Promotion (CMHP) and the Centre of Health Services Research and Evaluation (CHSRE), did not suffer substantial adjustments as to the previous year in terms of the number of organized training series (24 vs. 24) nor in terms of the trained individuals (785 vs. 818). This fact indicated an exceptionally good organization and adaptation of the face-to-face training programs to the online format.

The training programs in other domains, organized by the National Centre for Professional Development in Health (NCPDH), due to the specific practical activities that had to be performed (at the patient's bedside, in the laboratory, etc.), were mostly rescheduled for the period in which the epidemiological situation would allow them to be performed, so that the total number of series decreased from 219 in 2019 to 115 in 2020, and the total number of participants, from 6120 to 2764.

In accordance with the established objectives, the existing programs were evaluated and adapted to fit the needs of the beneficiaries, being adjusted according to scientific progress and legislative changes in the fields of courses. The transition to the online format also required changes to the course regulations, teaching materials, evaluation tools of the course and to the participants evaluation method. Lecturers and course secretaries have participated in training sessions, and in the curriculum training programs, there were introduced online assistance sessions for students to complete the topics of the module and the preparation of end-of-course projects.

In 2020, three new programs have been developed that will be available on the PERFMED platform for both doctors and nurses: "*Implementation of Revised Sets of Medical and Functional Criteria in Assessing Functional Impairment and Adaptive Disability*", "*The Interpersonal Communication to Increase Vaccine Coverage*", "*Early Diagnosis of Digestive Neoplasms*". At the request of some beneficiaries, a short-term training program "*Ward Level Health Care Management - Care Plan*" and a seminar on "*Financing the Health System/Hospital Medical Services and Medicines Contracting and Reimbursement*" were carried out.

Developing the scientific research activity and improving the knowledge translation of research findings

The research and development activity of NSPHMPDB in 2020 was carried out through 6 projects financed by European programs. Two projects of the General Directorate for Health and Food Safety (DG SANTE) are financed through the Third EU Public Health Program (2014-2020), program 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;*
- JAHEE 2018-2021, *“Joint Action Health Equity Europe - JAHEE”.*

Two projects are carried out within two partnerships financed through the COST Program (European Cooperation in Science & Technology):

- EVBRES - CA17117 (2018-2022) - *“Towards an International Network for Evidence-based Research in Clinical Health Research”;*
- ERNST - CA19113 (2020-2024) - *“European Researchers Network Working on Second Victims”.*

One project is financed from Structural Funds through the Administrative Capacity Operational Program:

- CaPeSSCoSt - ID 129170, *“Improving Quality and Performance of the Hospital Services by Cost Assessment and Standardization”.*

One project is financed by the European Commission through the Erasmus+ Program, Strategic Partnerships:

- BENDIt-EU (2020-2023) - *“Burnout Education, Normative and Digital Tools for European Universities”.*

The data from the DRG_National database collected based on the contract concluded between the National Social Health Insurance Fund and NSPHMPDB was used for studies and analyses requested by the National Social Health Insurance Fund in order to improve the financing system of hospital services and increase the performance of these health service providers, for analyses and studies that were the basis for decision-making at the Ministry of Health or other decision-making level, as well as for studies and NSPHMPDB own interest research or at the request of various partners.

Research findings have been disseminated through 25 published scientific articles, of which 15 published in ISI indexed journals, five health technology assessment reports (HTA) elaborated within the EUnetHTA Joint Action, at which NSPHMPDB was co-author, one chapter in a specialized book, 15 active participations (oral presentations, discussing the papers, moderating sessions, contributing to the round tables, etc.) in national and international conferences.

The monitoring of the research dissemination activity on the Research Gate platform shows an increase of the Research Gate score for NSPHMPDB from 142.63 in 2019 to 189.84 in 2020, and the number of publications registered on this platform increased from 173 to 188.

Strengthening the institutional capacity for scientific research and development of the NSPHMPDB

During 2020, 12 NSPHMPDB employees participated in training and professional development events, in the form of courses, seminars, conferences, etc., the rest of the employees being involved in internal training and development activities.

Networking and collaboration with other institutions and organizations have included activities within the networks where NSPHMPDB is a member, namely: 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 institutions with which NSPHMPDB collaborated in 2020 were: the ESPAD group (carrying out the project on the survey on the use of alcohol and other substances in the European schools), Centre for Health Policies and Services, Aspen Institute Romania, Presidential Administration, Public Health Commission of the Romanian Senate, Commission for Health and Family of the Chamber of Deputies, Parliamentary Working Group for Combating Cancer, National Social Health Insurance Fund, Health Press Group, European Observatory for Health Systems and Policies, National Institute of Public Health, National Institute of Statistics, Romanian College of Physicians, Universities of Medicine and Pharmacy of Iași and Timișoara, Order of Nurses, Midwives and Medical Assistants in Romania, World Bank Office in Romania. The results of these collaborations have materialized in project proposals, participation in scientific events, working groups, publications, technical assistance activities or in information exchange.

One of the objectives regarding the strengthening of the institutional research and development capacity of NSPHMPDB for 2020, the improvement of the visibility of the training - research - development activity was achieved by permanently updating the institutional websites: <http://www.snspms.ro/>, <https://www.perfmed.ro/>, <http://www.drg.ro/>, as well as through its own scientific publication edited by NSPHMPDB: Management in Health journal, which included 9 original articles of authors or co-authors from NSPHMPDB.

I. **Providing and organizing programmes of training and professional development relevant to the existent needs, and delivered at the highest possible quality**

NSPHMPDB's training programs provision and organization were completed with related activities leading to the fulfilment of the general objectives established for this field in the development strategy of the NSPHMPDB for the period 2016-2020, respectively:

- Diversification of the training and professional development programs for more target groups of specialists from the health system;
- Starting new training and professional development programs in accordance with the training needs, identified as such;
- Updating the existing training programs in terms of content and/or facilitating methods of training and course organization (e.g. distance learning), in order to meet the specific needs of our trainees;
- Implementing the mechanisms and processes for continuous quality improvement of the training programs.

In addition to the standard activity of continuous evaluation of the training programs to adjust them to the needs of the beneficiaries, considering scientific progress and legislative changes in the fields, the year 2020 came with new challenges given the Covid-19 pandemic that involved the change in format of the courses and the type of interaction between lecturers and students, due to the measures of physical distancing.

Public health and health management training programs

Despite all the restrictions imposed by the pandemic, the *training programs in public health and health management* provided by the Centre of Management and Health Promotion (CMHP) and by the Centre of Health Services Research and Evaluation (CHSRE), in 2020, did not undergo substantial changes as to the previous year regarding the organized series and the trained persons, as can be seen from Table no. 1.

For the *Certification in Health Services Management Training Program* there were organized six series of courses from which, one began in 2019 and another will end in 2021, having in total 250 participants. Four series of courses were taught by lecturers from Bucharest, and another two were taught by our collaborators from the Department of Public Health and Health Management from "Gr. T. Popa" Faculty of Medicine and Pharmacy Iași, and from the Department of Public Health and Health Management at the "Victor Babes" Faculty of Medicine and Pharmacy Timișoara. The *Hospital Management Training Program* dedicated to hospital managers had four series, attended by 135 people. The *Hospital Management Training Program for Care Directors and Head Nurses* was conducted in two series of courses totalling 64 participants, and the *Training Program in Hospital Quality Management* organized for the employees of the quality management structures of the medical services within the hospitals, counted six series, having a total number of 177 participants.

In collaboration with the National Authority for Quality Management in Health (NAQMH), we conducted, in 2020, three series of the *Training Program for Hospital*

Evaluators, having a total number of 63 participants and one series of *Refresher Program for Hospital Evaluators*, which was attended by 10 evaluators.

NSPHMPDB also organizes short-term, on-demand training programs on various public health and management topics, tailored to the needs of applicants. In 2020, the program called "*Ward Level Medical Care Management - Care Plan*" was organized, at the request of Odorheiu Secuiesc Municipal Hospital directorate, which was attended by 20 nurses employed in the hospital.

The training program in the DRG field entitled: "*Reporting, Contracting and Reimbursing Hospital Services*", organized and provided by the Centre Health Services Research and Evaluation for the staff with responsibilities in the field of reporting and monitoring the clinical activity of the hospital, had in 2020 two series, one of which was held in Iași at the request of the private health network Arcadia - Hospitals and Medical Centres. The total number of participants in the DRG training programs was 66.

Table no. 1. Distribution of series and participants per public health and health management training programs, provided in 2020, in comparison with the ones provided in 2019

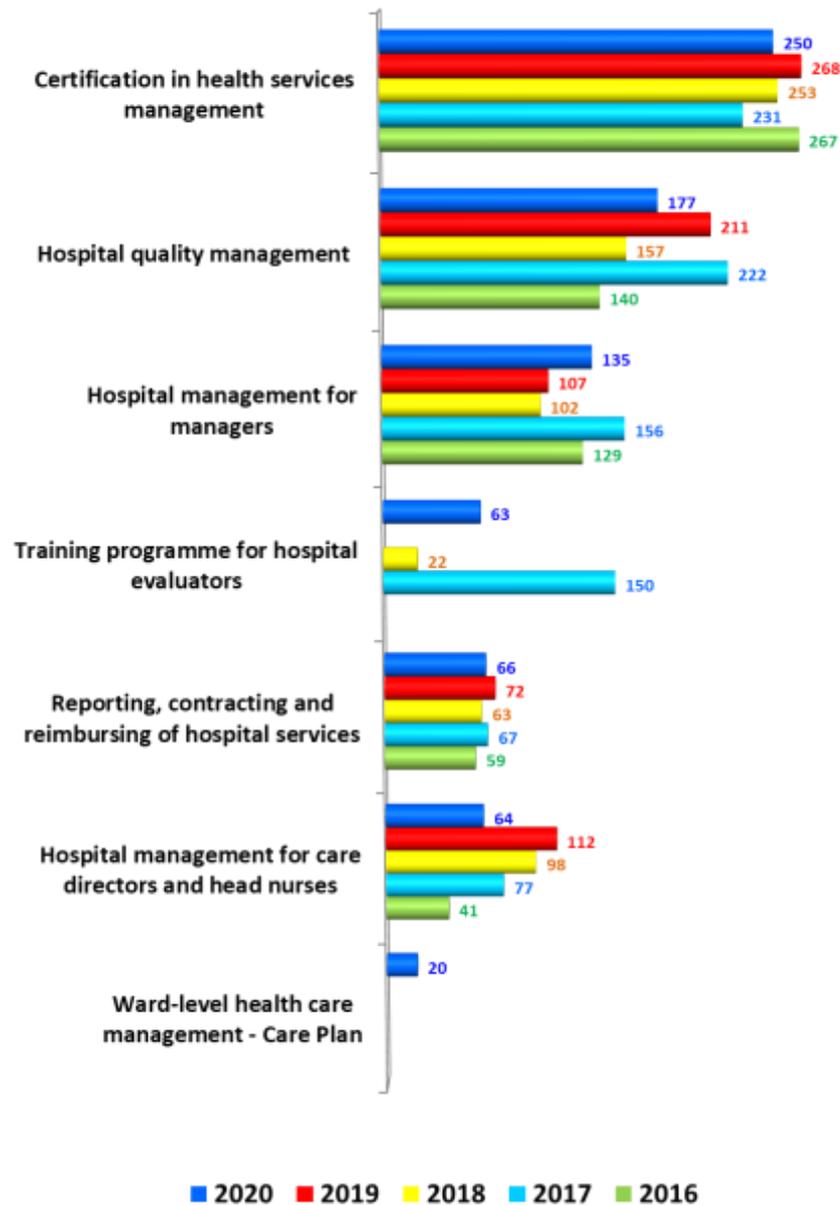
Training program	Number of series per program		Number of participants per program	
	2020	2019	2020	2019
Certification in Health Services Management Training Program for Specialist MDs	6	7	250	268
Hospital Management for Hospital Managers	4	3	135	107
Hospital Management Training Program for Care Directors and Head Nurses	2	4	64	112
Hospital Quality Management	6	6	177	211
Training Program for Hospital Evaluators	3	-	63	-
Refresher Program for Hospital Evaluators	1	2	10	48
Ward Level Medical Care Management - Care Plan - Odorheiu Secuiesc	1	-	20	-
Reporting, Contracting and Reimbursing Hospital Services (DRG)	2	2	66	72
Total	24	24	785	818

Data source: CMHP

In 2020, both the total number of series and total number of participants in NSPHMPDB's training programs in the public health and health management field, were comparable to those of 2019 (see Table no. 1). This was due to the organization and quick adaptation of the face-to-face training programs to the online format. The small variations registered were due to the number of requests and the ability to organize new series for each type of program, in the context in which the staff number within CMHP is much lower than the existing needs.

The distribution of the number of participants in the programs provided by NSPHMPDB during 2016-2020 is shown in Figure no. 1. Although there is a slight decrease in the number of participants for most programs, the year 2020 does not register the lowest number of participants in the last 5 years, for any of the programs.

Figure 1. Distribution of the course participants per training programs between 2016-2020

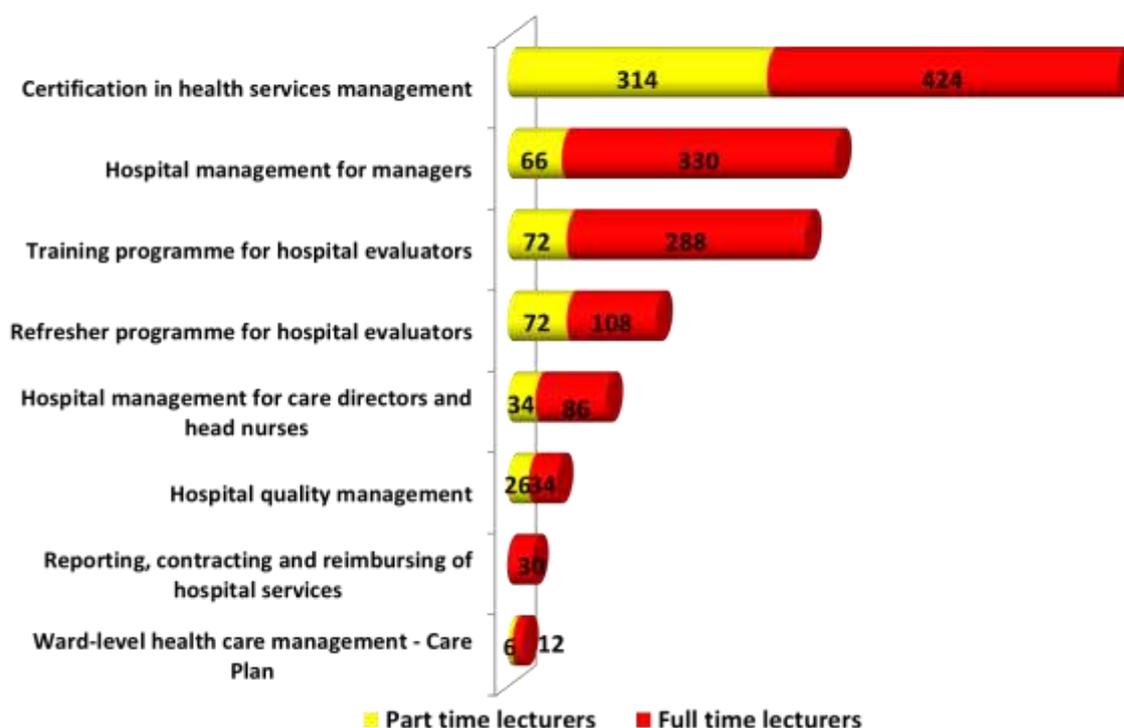


Data source: CMHP

The total number of teaching hours of the NSPHMPDB personnel involved in public health and health management training programs, in 2020, was comparable to the number of teaching hours in the previous year, 1,902 vs. 1,962, which is further proof that the training activity was not highly affected by the Covid-19 pandemic, due to rapidly switching to teaching these programs online. Out of the 1,902 teaching hours, 1,312 hours were taught by full time lecturers (69%), and 590 hours (31%) were taught by part time collaborators (Figure no. 2).

In the activity of the Centre, teaching hours are completed by hours dedicated to the preparation of the courses, tutoring students, guiding students in preparing the exam papers in the programs: "Hospital Management", "Certification in Health Services Management" and "Hospital Quality Management", as well as the examination of participants at the end of each training program.

Figure 2. Distribution of teaching hours per training program and per lecturers in 2020



Data source: CMHP

Given the context of the SARS-CoV-2 pandemic, all the programs and exams provided by NSPHMPDB took place online on the Zoom platform. To this end, the course and examination regulations for training programs, course timetables and formats, teaching materials, course and student evaluation tools have been amended and lecturers and course secretaries have been trained.

To meet the needs of the students, online assistance sessions were introduced in the training programs to support the course participants in completing the end of module assignments, and for conducting the final projects.

Also, the course curricula were revised for each program, in relation with the needs of the students, the legislative changes and with the results of the research activity or the information exchange and international partnerships. As a result:

- in the “*Hospital Management*” program for hospital managers, the curriculum of different modules was updated in accordance with the legislative changes, the current data, and the new approaches; new topics were introduced: *Adverse Events, Manager's Responsibility in Terms of Accreditation Standards*;
- in “*Hospital Quality Management*” program, the presentations on the topic *Methods and Tools of Quality and IAMA* (infections associated with the medical act) were modified;
- in “*Hospital Management for Care Directors and Head Nurses*” program, some presentations included aspects specific to the Covid-19 pandemic;
- additional modules on *Accreditation Standards (general notions on accreditation standards, description of standards with specific features)* and the CaPeSaRo application have been introduced in the *Training Program for Hospital Evaluators*.

In 2020, NSPHMPDB concluded collaboration agreements with 5 new hospitals and with the Order of Nurses, Midwives and Medical Assistants in Romania. Also, at the request of Johnson & Johnson Romania, NSPHMPDB organized a seminar for its employees, with the subject *Health System Financing/Contracting and Reimbursing Hospital Medical Services and Medicines*.

Organizing training and professional development programs in the health

The restrictions on face-to-face training programs, imposed by law, because of the Covid-19 pandemic, had an impact on the training and continuous professional development programs organized by the National Centre for Professional Development in Health (NCPDH). As presented in Table no. 2, during 2020, 52 programs were organized, compared to 85 programs organized in the previous year (33 fewer), just over half compared to the number of course series from last year (115 vs. 219), which was attended by less than half the students compared to last year (2764 vs. 6120). However, it should be noted that in 2019, a number of 1279 students, almost 1/5 of the total number of students were due to a continuing medical education program for nurses developed within a project funded by the Operational Program Human Capital (POCU), which has substantially increased, compared to previous years, the total number of participants in training programs.

Due to the conditions imposed by the pandemic, fewer continuing education programs were organized (e.g., transfusion medicine, training programs for ambulance care assistants), far fewer practice nurse trainings, and no training of trainers could be organized.

Some programs involving specific practical training planned to be carried out in 2020 were suspended due to the impossibility of organizing them in hospitals, but they would be carried out as soon as the epidemiological situation would allow to perform them. An example is the certification programs of complementary studies of "Pre-hospital Emergency Medical Care" from several university centres.

The measures in adapting to the working conditions imposed by the pandemic consisted of:

- the registration of the participants in most of the programs organized by NCPDH was done online, exclusively on the PERFMED platform;
- some programs that were organized by March 2020 in a direct, face-to-face system went online in the form of e-Learning programs: Continuous Medical Education (CME) programs on: *Medical Statistics, Occupational Exposure to Ionizing Radiation*; specializations on: *Oncology, Nutrition and Dietetics*, the theoretical specialization program on *Nephrology*; certification of complementary studies in: *Homeopathy, Acupuncture, General Ultrasound, Implantology*;
- organizing new programs on the PERFMED platform for both doctors and nurses: *"Application of the Revised Sets of Medical and Functional Criteria for Assessing Functional Impairment and Adaptive Disability"*, *"Interpersonal Communication to Increase Vaccine Coverage"*, *"Early Diagnosis of Digestive Neoplasms"*;
- some ongoing certification programs that could not be continued face-to-face were held through the Zoom platform: *Non-invasive Ventilation, General Ultrasound* practical part, *Implantology, Hepato-biliary-pancreatic Surgery, Musculoskeletal Ultrasound*;
- other programs were entirely organized on the Zoom platform: *CME on Radiation Protection*, transfusion medicine programs *"The Role of the Coordinating Doctor of the Transfusion Unit in Ensuring Safety Transfusion in the Hospital"*.

Table 2. Number of programs, series, and participants per each type of training program organized by the National Centre for Professional Development in Health, in 2020, in comparison with 2019

Training program type	Number of programs of each type		Total no. of series per each program type		Total no. of participants per each program type	
	2020	2019	2020	2019	2020	2019
Certification Programs for MDs	14	21	29	45	648	747
Continuous Medical Education (CME) for MDs /Dentists	3	8	9	16	220	491
CME for Nurses, Ambulance care assistant, Caregivers	10	14	23	60	702	2020
CME for Nurses (POCU)	-	1	-	17	-	1279
CME for Physiotherapists	2	3	2	7	36	97
Training of Trainers (ToT), Evaluation of Trainers	-	6	-	7	-	99
Nurses' Specialization, Professional Reconversion, Skills	10	10	27	27	780	1015
Practice Nurse training	4	14	16	32	25	95
Distance CME/E-learning	9	8	9	8	353	277
Total	52	85	115	219	2764	6120

Data source: NCPDH

In 2020, the graduation exam was organized for the 10 nurse's specialization programs which were carried out in 2019, in 28 training centres, based on the Order of the Health Ministry no. 1076/2019, at which applied 770 candidates. The exams were organized both directly and online. For the specialties of Psychiatry and Paediatrics, the practical and theoretical exam was held directly, face to face, but also online through on the Zoom platform, or, on the PERFMED platform, for the candidates that were in isolation. For the following specializations: Spa therapy, Palliative Care, Nephrology, the practical exams took place through the Zoom application and the theoretical exam on the PERFMED platform. For other specializations such as: Public Health and Hygiene, Laboratory, Radiology and Medical Imaging, Nutrition and Dietetics, Oncology, both the practical as well as the theoretical exam were given on the PERFMED platform. The examinations went outstanding, thus, both candidates and examiners suggested that this form of examination should be continued.

Also affected by the pandemic were the activities performed 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)**, coordinated by “Prof. Dr. Dimitrie Gerota” Emergency Hospital of the Ministry of Internal Affairs, in which NSPHMPDB is partner through NCPDH, alongside “Dr. Carol Davila” University Emergency Central Military Hospital, “Prof. Dr. Agrippa Ionescu” Clinical Emergency Hospital (UM 0521) and Medical Department of the Ministry of Internal Affairs, the Ministry of National Defense, Medical Department of the National Agency of Penitentiaries, Medical Centre of the Protection and Guard Service, Medical Centre of the Special Telecommunications Service (associated partners). As a result, the project with the initial

duration of 30 months (26.02.2018-25.08.2020), was extended by the Management Authority of the Operational Program Human Capital, until April 2021.



The aim of the project is to increase the quality of the medical act carried out in the medical units of the defense and public order system, by providing a unitary training program carried out at a national level, leading to an increase in the level of professional skills for the target group.

Specific objectives of the project:

- Improving the professional qualifications in the field of major noncommunicable diseases of 1300 medical staff from all regions of the country involved in the implementation of priority health programs in the field of safety, defense, and public order, through modular courses;
- Improving the professional qualifications in the field of major noncommunicable diseases of 60 healthcare professionals from all regions of the country involved in the implementation of priority health programs in the field of safety, defense, and public order, through experience exchange in Europe, especially in similar military hospitals.

NSPHMPDB is involved in activities aiming the first objective. Out of the 1300 beneficiaries of the training programs, in 2019, 1279 nurses were trained, and in 2020 was finalized the curriculum for a continuing medical education program with the subject "*Early Diagnosis of Digestive Neoplasms*". The program will train 30 doctors, and is already published on the platform www.perfmed.ro, where registrations can be made and is offered on the Moodle platform between January 3, 2021 - April 9, 2021.

Based on the savings made in the project, the proposal to conduct an additional course for nurses, with the subject "*Care for the Patients Connected to Medical Devices*" was sent for approval.

NCPDH also prepared a training program within the project "*Increasing Vaccine Coverage in Calarași and Timiș Counties by Improving Communication Between Primary and Community Care Staff and Parents/Turors*", funded by UNICEF Romania, developed by the Centre for Health Policies and Services Foundation. The program on *Interpersonal Communication to Increase Vaccine Coverage* aims to increase vaccine coverage in children to limit the effects of the measles epidemic and prevent other outbreaks of vaccine-preventable diseases and it is available on the Moodle platform between January 3, 2021 - March 31, 2021.

II. Developing the scientific research activity and improving the knowledge translation of research findings

The research activity carried out in 2020 addressed both priorities at European and national level, and considered the main objectives of NSPHMPDB's development strategy for the period 2016-2020 in the direction of developing the scientific research activity and improving the knowledge translation of research findings, namely:

- Selecting the scientific research themes in accordance with current needs of the Romanian health system, with priorities identified at European level, and with the NSPHMPDB field of expertise;
- Continuing current scientific research in the area of hospital services management, by carrying out new studies of topical interest and using expertise and experience of the NSPHMPDB, and also in accordance with the needs expressed by the main stakeholders (Ministry of Health, National Health Insurance Fund, National Authority for Quality Management in Health, hospitals);
- Assessing the training needs in the field of public health and health management and achieving impact studies to substantiate the future training programs to be delivered;
- Proper dissemination and capitalization of results acquired in the research studies and projects carried out by NSPHMPDB;
- Improving the methodologies, protocols and procedures associated with the scientific research practiced within the NSPHMPDB.

In 2020, the research and development activity of NSPHMPDB was performed within 6 projects that received funding from European programs, within partnerships and international research networks, as well as by capitalizing the DRG_National database. Two projects of the General Directorate for Health and Food Safety (DG SANTE) were funded within the EU's third program in the public health services (2014-2020), managed by the European Commission with the support of the Executive Agency for Consumers, Health, Agriculture and Food (CHAFEA):

- EUnetHTA JA3 2016-2020, "*European Network for HTA - Joint Action 3*";
- JAHEE 2018-2021, "*Joint Action Health Equity Europe - JAHEE*".

Two projects are carried out within partnerships funded by the COST Program (European Cooperation in Science & Technology):

- EVBRES - CA17117 (2018-2022) - "*Towards an International Network for Evidence-based Research in Clinical Health Research*";
- ERNST - CA19113 (2020-2024) - "*European Researchers Network Working on Second Victims*".

One project is financed from the Structural Funds through the Operational Program Administrative Capacity:

- CaPeSSCoSt – ID 129170 - "*Improving the Quality and Performance of Hospital Services Through Cost Assessment and Standardization*".

A project is funded by the European Commission through the Erasmus + Program, Strategic Partnerships:

- BENDIt-EU (2020-2023) - "*Burnout Education, Normative and Digital Tools for European Universities*".

“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 (Zorginstituut Nederland).

Website: <http://www.eunetha.eu/>

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

EUnetHTA JA3 Participants

81 partners consisting of national, regional and non-for-profit agencies that produce or contribute to HTA

Project Coordinator:
Dutch National Health Care Institute (ZIN)



Strategic Objectives of EUnetHTA JA3:

- Increase the use, quality and efficiency of joint HTA work at the European level;
- Develop a voluntary, sustainable European Collaboration on HTA, by supporting Member States in receiving HTA-relevant information that is objective, reliable, timely, and comparable;
- Develop a general strategy, principles and proposal for a scientific and technical mechanism of permanent sustainable European Collaboration on HTA in the light of the Article 15 of the Directive on Cross-border Healthcare;
- Collaborative production of structured HTA core information, including rapid HTAs;
- Alignment between HTA reports used for reimbursement decisions and clinical practice guidelines.

Expected results:

Current collaboration continues the previous projects EUnetHTA JA1 and JA2. This third phase builds on previous actions, where many tools needed for transnational collaboration activities between the HTA network members have already been defined and will result in HTA reports.

The main expected outcome is to form and implement a permanent and sustainable network for collaboration in health technology assessment in Europe. Additional expected results are:

- Producing at least 50 HTA reports per year;
- Increasing the quality, adaptation, and use at national level of the collaborative developed reports;
- Improving decision-making and health policies development at the Member States level, based on the disseminated information, as to protect their citizens against health technologies that are neither safe nor effective, this finally leading to better population health.

In this project, NSPHMPDB is engaged in 4 working groups:

WP4 - Joint Production

WP5 - Lifecycle Approach to improve Evidence Generation

WP6 - Quality Management, Scientific Guidance and Tools

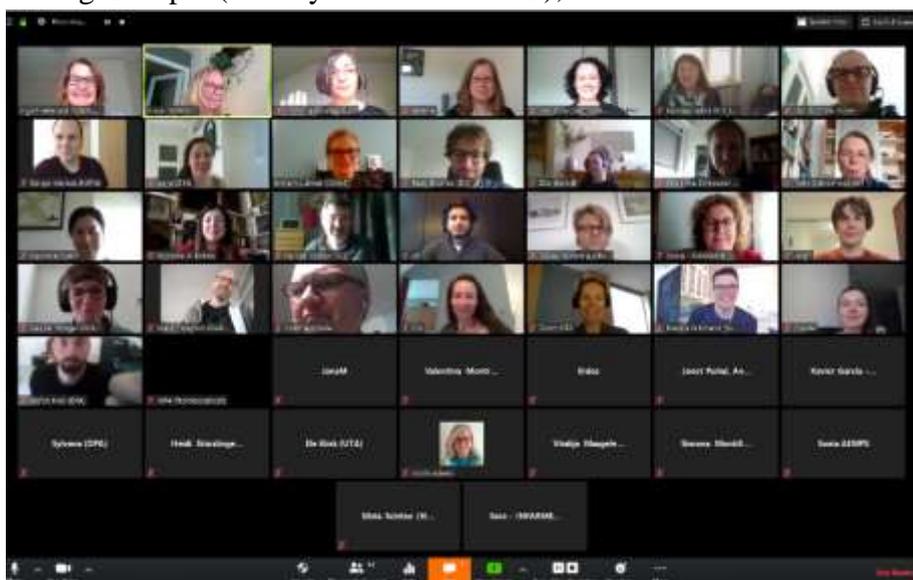
WP7 - National Implementation and Impact

Because of the Covid-19 pandemic that led to the cancellation of some events, but also reallocating resources to Covid-19 related technologies, the project was extended from June 2020 to May 2021, considering the following, main activities for the additional period:

- Completion of ongoing joint assessments;
- Assessment of planned technologies;
- Prioritizing Covid-19 related work;
- Completion of the activities initiated in various working groups;
- Finalizing the future model of cooperation on HTA.

In 2020, NSPHMPDB participated to the following activities:

- Development of the report on “*Recommendations for Horizon Scanning, Topic Identification, Selection and Prioritization for European Cooperation on Health Technology Assessment*” (<https://eunetha.eu/wp-content/uploads/2020/04/200305-EUnetHTA-WP4-Deliverable-4.10-TISP-recommendations-final-version-1.pdf>) in which NSPHMPDBB is co-author, together with other nine partners involved in the Working Group 4 (activity initiated in 2019);



- Rapid relative effectiveness assessment of two technologies: “*Hypoglossal Nerve Stimulation Systems for the Treatment of Obstructive Sleep Apnoea*” (https://eunetha.eu/wp-content/uploads/2020/06/EUnetHTA-OTCA21_Hypoglossal-Stimulation-for-Apnea.pdf) and “*Biodegradable Rectum Spacers to Reduce Toxicity During Radiotherapy for Prostate Cancer*” (https://eunetha.eu/wp-content/uploads/2020/07/EUnetHTA-Assessmente_OTCA23_July28_for-publication.pdf) (both started in 2019) - WP4;
- Development of the report on “*Recommendations for Production Process of Relative Effectiveness Assessments after Joint Action 3*” - WP4;
- The revision of two standard operational procedures (Standard Operational Procedures/SOP): “*Call for Collaboration and Formation of Assessment Team PT*” and “*Call for Collaboration and Formation of Assessment Team OT*” (procedures regarding both pharmaceuticals and other technologies) - WP6;

- Final revision of the report on *"Practical Considerations when Critically Assessing Economic Evaluations"* developed in 2019 within the WP6 (https://eunethta.eu/wp-content/uploads/2020/03/EUnetHTA-JA3WP6B2-5-Guidance-Critical-Assessment-EE_v1-0.pdf);
- Co-author of the final version of the new assessment report model (EUnetHTA Core HTA) of non-drug technologies, based on the initial model (HTA Core Model), yet improved according to the experiences gained from reporting in EUnetHTA JA3 (*"EUnetHTA Core HTA of other technologies using the HTA Core Model"*) - WP6;
- Offering input for drafting recommendations on how to collaborate in the field of HTA in the future (WP7);
- Dissemination at national level the results obtained within the EUnetHTA collaboration, respectively the collaborative rapid relative effectiveness assessment reports. Since NSPHMPDB is not officially an HTA agency and has no requests in this regard from the authorities regulating the use of these technologies in Romania, the implementation or adaptation of the EUnetHTA collaborative reports could not be reported (WP7).

"Joint Action Health Equity Europe" (JAHEE)

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 (Istituto Superiore di Sanita). Other 24 institutions from the EU Member States are participating or affiliated institutions. For this project, NSPHMPDB collaborates with "Alessandrescu - Rusescu" National Institute for Mother and Child Health (NIMCH), as affiliated institution.

Action website: <https://jahee.iss.it/>

The general objective of the Joint Action Health Equity Europe (JAHEE) is to contribute to achieve greater equity in health outcomes across all groups in society in all participating countries and in Europe at large and to reduce the inter-country heterogeneity in tackling health inequalities.

Specific objectives:

- Improve the planning and development of the policies to tackle health inequalities at European, national, regional and local level;
- Implement actions that provide the best opportunity to tackle health inequalities in each participating country;
- Strengthen a cooperative approach in tackling health inequalities and facilitate exchange and learning among participating countries (sharing and learning approach);
- Facilitate transferability of good practices.



Expected results:

- Improved collection of evidence-based actions aimed to reduce health inequities (a Policy Framework for Action for each thematic work package);
- Improved knowledge of the country scenarios in reducing health inequities and identification of key factors (Country Action for each participating Member State);
- Strengthened awareness of political decision-makers of the main gaps, barriers and strengths in the field of health inequities;
- Strengthened awareness among Member States on the added value of developing a cooperative approach;
- Improved the planning and monitoring of Member States actions to tackle health inequities;
- Improved country-based action on health inequities;
- Improved knowledge from lessons learned by the action developed during the JAHEE.

Project activities will be carried out within 9 working packages:

WP 1 - Management of the Action

WP 2 - Dissemination

WP 3 - Evaluation

WP 4 - Integration in National Policies and Sustainability

WP 5 - Monitoring

WP 6 - Healthy living environments

WP 7 - Migration and health

WP 8 - Improving access to health and related social services for those left behind

WP 9 - Health and Equity in All Policies - Governance

NSPHMPDB participated in WP4, WP5, WP6, WP8, and WP9

The main activities carried out in 2020 by the NSPHMPDB team were the following:

- Developing an inequality monitoring system for reproductive health (WP5). The specific action implemented in Romania in collaboration with the National Institute for Mother and Child Health - "*Development of a reproductive health inequality monitoring system*" was documented through statistics analysis, the existing reports and was presented in the report "*Reproductive Health Profile in Romania*"; establishing -a set of inequality monitoring indicators in the reproductive health field, indicators that can be periodically monitored through the Mother and Child National Health Program; publishing the article "*Reproductive Health in Romania - Current State*"; participating alongside other partners in establishing a common set of indicators for inequalities monitoring at European Union level;
- Improving the access of children with special needs to the programme "*Citius, Altius, Fortius*" for young people from Bucharest aged 6 - 18 (WP6). In 2020, NSPHMPDB continued the collaboration with Bucharest City Hall's Sport for All Municipal Company, started in 2019; informative materials on healthy lifestyle were developed, focusing on the important role of healthy eating and sports, for children enrolled in the trainings; due to the general situation imposed by the pandemic, the program "*Growth and Health through Sport*", which assumed the presence of the children to trainings, was temporary stopped and, a new project was initiated, program called "*Citius, Altius, Fortius*", having the same goal for the same target group, children aged 6 - 18; the

program consists in distributing to the children enrolled in the program a training kit that contains, in addition to the specific materials when practicing sport, a voucher for an individual training with a personal trainer, as well as 12 online training sessions; the information on this program, together with printed informative materials, were disseminated by the NSPHMPDB to a number of public and private institutions that attend children with precarious financial situation and special needs, who further distributed the information to the children in need, and provided support for enrolling those interested in the program; after the completion of the registrations, at the end of October 2020, the Sport for All Bucharest Municipal Company distributed the training kits to the registered children;

- Medical-social services adapted to the disadvantaged infants which are not breastfed (WP8). The collaboration between NSPHMPDB and the National Institute for Mother and Child Health successfully continued throughout the year 2020, rescheduling certain activities due to the difficulties that appeared in the context of the Covid-19 pandemic, and due to the prolongation in implementing the Woman and Child National Health Program until 31st March, 2020; in this context, the National Institute for Mother and Child Health conducted activities of informing the members of the concerned communities on the components of the program, of identification of the target group to receive the intervention, namely: providing powdered milk formula for children who do not benefit from breast milk and come from disadvantaged areas, and of setting the actions to ensure access to medical and social services within the intervention; the next stage has been planned, namely the online training of medical and social staff at Community level on the role and professional interventions needed to facilitate the access of disadvantaged children who are not breastfed to the medical and social service to obtain the formula free of charge;
- Assessing the impact on the vulnerable population, of the community centers set up in

JAHEE WP9 Meeting



Extension of the community healthcare centers in Romania



Dr. Mona Moldovan, MD, MPH



10 counties in the Center and West of Romania (WP9). The action consists in the long term impact evaluation of a project implemented during 2009 – 2012 by the NSPHMPDB, in 10 counties from Central and Western Romania,

and, in case of a positive impact, presenting the report to decision makers for supporting replication of the project in other counties; in 2020 data regarding project implementation was gathered and questionnaires and interviews were processed; a report on the implementation status was presented during the WP9 meetings; in the context of the Covid-19 pandemic, the calendar for this action was modified by extending completion deadlines.

“Towards an International Network for Evidence-based Research in Clinical Health Research” (EVBRES - CA17117)

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

Project duration: 4 years (2018-2022).

Partners: research institutions from 37 European countries. NSPHMPDB participates in this action alongside “Spiru Haret” University. Coordinating institution is Western Norway University of Applied Sciences in Bergen, Norway.

Action website: <https://evbres.eu/>

The goal of this action is to encourage researchers and other stakeholders to use an Evidence-Based Research (EBR) approach while carrying out and supporting clinical research – thus avoiding redundant research.

The specific objectives of the research coordination:

- Raise awareness and acceptance of the challenge among all relevant stakeholders;
- Prepare teaching material to teach Evidence-Based Research;
- Catalyse collaboration between relevant stakeholders to increase the efficiency of updating and preparing SRs;
- Create a common agreement of how to evaluate the implementation of the EBR approach.

The specific objectives of capacity building:

- Formulate implications of an EBR approach for relevant stakeholders;
- Teach researchers how to be evidence-based while doing Research;
- Describe working processes and technologies used when preparing a SR that could be improved;
- Establish a common understanding of how to monitor the EBR approach in clinical Research.

Working groups structure:

WG 1. Dissemination and Implementation

WG 2. Development and Teaching of Methods to be Evidence-Based when doing Clinical Research

WG 3. Improving Efficiency in Producing and Updating Systematic Reviews

WG 4. Meta-Research on EBR Implementation

Main expected results:

- Conducting a Delphi study on the involvement of ethics committees, funding agencies and scientific medical journals in EBR;
- Identifying obstacles, difficulties and necessary knowledge, through a Delphi study; an awareness rising material for conferences and an online training manual will be developed based on study results;
- Identifying areas for possible efficiency improvements in producing and updating systematic reviews, through Delphi method;
- Conducting a Delphi study to identify clinical research practice evaluation methods and to initiate the implementation of these methods.



Activities that were carried out in 2020 by NSPHMPDB:

Within the working group 2, the training component, NSPHMPDB participated in the review of the Evidence-Based Research training program for young researchers and rescheduling it to be delivered in 2021, in online format due to the Covid-19 pandemic.

Within the working group 3 - Improving efficiency in producing and updating systematic reviews, NSPHMPDB was involved in:

- Conducting a scoping review on Resource use during systematic review production: elaboration of the study protocol, identifying specialty literature, scanning 3820 titles and abstracts, and selecting 60 publications to be included in the analysis; creating a template for data extraction that was subsequently piloted; data extraction from 60 selected studies and writing the first draft of a scientific publication;
- Conducting a scoping review on Improving efficiency of systematic reviews production through an exploration of available methods and tools: elaboration of the study protocol, identifying specialty literature, starting the publications scanning process by title and abstract;
- Conducting a qualitative study on *Why conducting and updating systematic reviews are resource intensive*; within this activity, Mrs. CSIII Raluca Sfetcu participated to



a Short Term Scientific Mission (STSM) at Ben-Gurion University in Israel, between 20.01.2020 - 01.02.2020 in which the qualitative study was prepared; the study aims to interview experienced reviewers about the factors that make a certain stage of systematic reviews more resource-intensive; for this STSM the emphasis was on the development of the methodology for the qualitative study (interview guide, selection criteria and the development of a short survey for potential interviewees, data analysis strategy); during the STSM period, the study protocol was finalized and it was prepared to be published, the pilot test of the interview guide was performed; as a result of this STSM, NSPHMPDB became the activity leader and coordinated the data collection phase; during 2020 a team of 5 researchers from four different countries (Romania, Austria, Israel, Russia) conducted 30 interviews with experts in systematic reviews; the preliminary results of this study were presented at the first EVBRES conference held online, on 16-17 November 2020 (see Annex II).

” European Researchers Network Working on Second Victims” (ERNST - CA19113)

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

Project duration: 4 years (2020-2024)

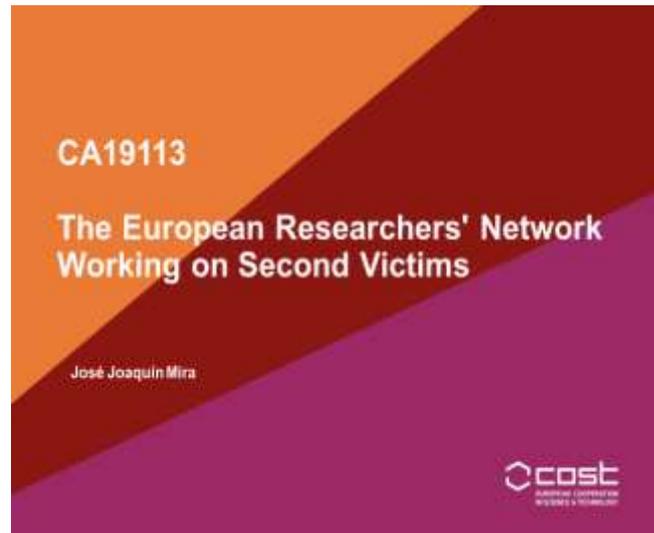
Partners: 46 research institutions from 27 European countries, and worldwide researchers. The coordinating institution is Fundacion para el Fomento de la Investigacion Sanitaria y Biomedica de la Comunitat Valenciana.

Action website: <https://cost-ernst.eu/>

The aim of the Action is to facilitate discussion and share scientific knowledge, perspectives, and best practices concerning adverse events (AEs) in healthcare institutions to implement joint efforts to support second victims (SV) and to introduce an open dialogue among stakeholders about the consequences of this phenomenon based on a cross-national collaboration that integrates different disciplines and approaches.

Specific research objectives:

- Encouraging discussion of the meaning of the fourth criterion (Quadruple Aim) and its implications for healthcare organizations;
- Further developing the theoretical conceptualization of the SV phenomenon and developing a common understanding of its definition;
- Raising general awareness of the impact of AEs on healthcare professionals (considering gender differences) and their consequences in personal, professional, social, legal, economic, and labour terms;
- Achieving changes in rules and regulations facilitating discussion of the legal, ethical, and organizational gaps while promoting a common understanding of factors underlying the interventions designed to support SVs;
- Understanding of the causes of clinical errors disseminating the results of the research and experiences to stakeholders (patient associations, professional societies, trade unions, healthcare manager associations, policy makers) and the general public;
- Introducing new metrics on the system level that should be used to improve health workforce policy;
- Encouraging inclusion of the consequences of mistakes on care providers and the implications for health sciences in the field studies curricula;
- Agreeing what to do after occurring AEs, sharing knowledge about research evidence and methods to tackle this phenomenon, progressing beyond the state of the art and promoting innovation;
- Learning to tackle with the consequences of the SV phenomenon by promoting a debate in healthcare to learn from other industries.



Specific objectives on capacity building:

- To lead a debate to promote a culture of transparency and legal certainty as a contribution to furthering the wellbeing of frontline medical staff as part of its commitment to quality assurance;
- To bridge management, social, legal, educational, and clinical expertise to further develop the theoretical conceptualisation of the second victim phenomenon;
- To provide a platform to develop a research and implementation agenda involving relevant stakeholders in the healthcare context to promote effective solutions and facilitate discussion of the legal, ethical, social, and organisational issues;
- To create a network for the integration of fragmented initiatives, identifying more effective measures, applying lessons learned and to foster knowledge exchange and dissemination of research results;
- To encourage the development of proposals to support second victims by overcoming the current fragmentation of rules, approaches, and policies, including experiences from other industries.

Work groups structure:

WG1 - Network promotion

WG2 - Review and description of the State-of-the-Art

WG3 - Making it happen

WG4 - Facilitators and barriers

Expected results:

- Website, corporative image, annual and final reports, final technical report;
- Systematic review of interventions conducted in other industries; review of proven interventions aimed at supporting second victims;
- Case Study, training manual; observational study on approaches to address the second victim phenomenon in Europe; technical report on analysis of interventions implemented in participating countries to address the second victim's phenomenon;
- Analysis of gaps training healthcare workforce; observational study based on qualitative techniques on the main gaps in the health professions' curriculum to incorporate patient safety into training requirements across Europe.

The project was initiated in September 2020, through an online meeting with all representatives of the participant institutions, in which the ERNST Action was introduced, the



implementation methodology of the COST program actions was presented, the coordination structures for the project implementation were chosen, and the activity plan and the budget of the first stage of the project

were submitted for debate.

The NSPHMPDB team will be involved in the development of the WG2 - Review and description of the State-of-the-Art, which aims to review and disseminate the concepts of secondary victims, interventions, measurements, and scientific instruments, including experiences in other industries. The activity of this work group will address three specific research objectives:

- Encouraging discussion of the meaning of the fourth criterion (Quadruple Aim) and its implications for healthcare organizations;
- Further developing the theoretical conceptualization of the SV phenomenon and developing a common understanding of its definition;
- Learning to tackle with the consequences of the SV phenomenon by promoting a debate in healthcare to learn from other industries;

and a specific objective on capacity development:

- To bridge management, social, legal, educational, and clinical expertise to further develop the theoretical conceptualisation of the second victim phenomenon.

WG2 activity in 2020 consisted of scientific documentation for the elaboration of the two papers that will represent the results: “*Systematic review of interventions conducted in other industries*” and “*Review of proven interventions aimed at supporting second victims*”.

“Improving Quality and Performance of Hospital Services Through Costs Evaluation and Standardization” (CaPeSSCoSt – 108196)

Financing source: Structural Funds – the Operational Program Administrative Capacity (OPAC), and own sources.

Project duration: 3 years (2019-2022).

Partners: the project is coordinated by the Ministry of Health, and it is carried out in partnership with the National Social Health Insurance Fund (NSHIF), the National Authority for Quality Management in Health (NAQMH), and the National School of Public Health, Management and Professional Development Bucharest (NSPHMPDB).

Goal

Improving quality and efficiency of the public health services in Romania, by supporting the sectorial decentralization process, promoting public integrity and accountability in spending public funds.

Specific Objectives

- Increasing capacity of decentralized health institutions to take over all the specific functions of the healthcare system;
- Promoting quality and integrity in services provided by the Romanian health care system;
- Supporting the functioning of the 2008-2010 National Anti-corruption Strategy coordination mechanisms, and future anti-corruption strategic documents;

- Limiting the possibilities of embezzling public health funds by fraud in public procurement and contracting, misappropriation of patrimonial assets and associated corruption;
- Strengthening cooperation between the institutions involved in developing, implementing, and controlling decentralization health policies.

Activities:

- A.1. Project Management
- A.2. Information and promotion
- A.3. Mapping hospital collected cost data
- A.4. Hospital cost data collecting and processing software development
- A.5. Collecting and processing cost data from pilot hospitals
- A.6. Developing the costing methodology and elements for pilot hospitals
- A.7. Implementing the costing methodology in 50 pilot hospitals
- A.8. Calculating the relative values of inpatient cases from pilot hospitals
- A.9. Elaborating the methodology for updating the DRG system for continuing inpatient cases
- A.10. Setting the cost standards for the first 20 most frequent pathologies
- A.11. Developing a methodology for implementing the International Classification of Diseases – version ICD-11
- A.12. Correlating the International Classification of Diseases – version ICD-11, with the RO_DRG system
- A.13. Developing the course curriculum and technical specifications for the Hospital Quality Management handbook
- A.14. Writing the Hospital Quality Management handbook
- A.15. Periodical interinstitutional consultations for the handbook development
- A.16. Publishing the handbook and disseminating the results
- A.17. Organizing the process of elaborating the Normative Code on Quality Management in Health Services
- A.18. Elaborating the Normative Code on Quality Management in Health Services
- A.19. Normative Code on Quality Management in Health Services approval and publishing
- A.20. Training of 150 persons.

Expected results:

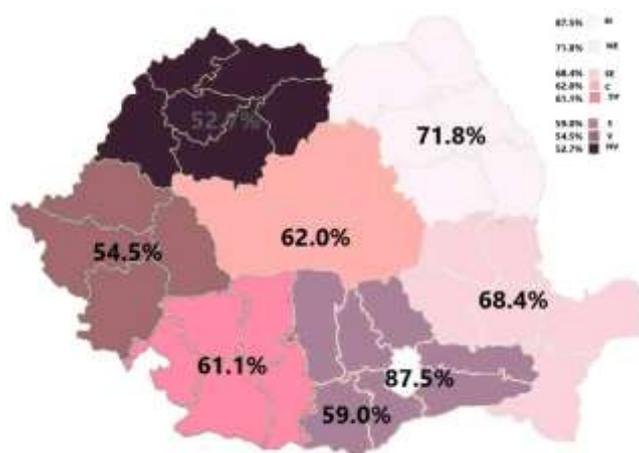
- A unitary and updated methodology for cost data collection, developed and implemented in Romanian hospitals;
- A unitary, adequate and tailored to the Romanian healthcare system hospital costing methodology, developed and applied to the first 20 most frequent pathologies;
- A methodology to update the DRG system for continuing inpatient acute cases;
- Cost standards for the hospital services;
- Unitary procedural framework created to implement in Romanian hospitals, the ICD-11;
- A Hospital Quality Management handbook.

In 2020, NSPHMPDB participated in the following activities:

- Development of project planning, organization, coordination, monitoring and evaluation tools (A.1);
- Development of informative and promotional materials and presentation of a scientific paper (see Annex 2) which described the purpose and objectives of the

CaPeSSCoSt project and the implications of its implementation to the increase of the efficiency of the Romanian hospital system (A.2);

- Mapping of the cost data collected at hospital levels; developing the data collection template; drafting a Ministerial Order for the approval of the data collection methodology and the selection criteria of the pilot hospitals; organizing 8 regional webinars for public and private hospitals representatives, county public health



authorities, county health insurance houses, regional offices of NAQMH, and local authorities, in order to complete the information on the cost data collected in hospitals, but also to introduce the purpose and objectives of the project and to make the representatives of the hospitals aware of the need to carry out this project; the adjacent image shows the interest of the hospitals in the 8 regions to participate in this project

(A.3);

- Initiation of the procurement procedure for developing a software for data collection and processing (A.4);
- Procurement of international consulting services and initiation of the process of developing the costing methodology at the level of pilot hospitals (A.6);
- Translation of the International Classification of Diseases – version 11 (A.11);
- Documentation and needs assessment for the development of the training curriculum in the field of hospital quality management (A.13).

"Burnout education, normative and digital tools for European Universities" - BENDIt-EU

Financing source: Project financed through the ERASMUS+ Program.

Project duration: 30 months (December 1st, 2020 - May 21st, 2023)

Partners: The project is carried out by a consortium of 7 partners from 6 countries (Romania, Bulgaria, Cyprus, Italy, Portugal, and Spain) and is coordinated by” Carol Davila” University of Medicine and Pharmacy in Bucharest.

The aim of the project is to develop a comprehensive set of resources to address the issue of emotional exhaustion in health universities (the "academic burnout" phenomenon) and related fields (e.g., nursing, psychology, social care, etc.), at three distinct levels: organizational, collective, and individual, as well as the development of general information usable by all stakeholders.

The strategic objectives of BENDIt-EU are:

- Raise awareness on burnout at academic level by providing on a wide scale of up-to-date, evidence-based information for the most effective identification, prevention, and intervention on academic burnout;
- Improving the well-being of medical and related fields students who are exposed to the risk of burnout or who suffer from mild, moderate, and severe forms of burnout;

- Improving the skills of staff working in university counselling services that directly address cases of academic burnout;
- Providing recommendations for the university's management involved in the development of norms and regulations designed to address and prevent academic exhaustion.

Expected results:

- An academic burnout handbook - pocket edition with state-of-the-art information on identifying, preventing, and selecting the most effective interventions for managing academic burnout;
- Online tools - a self-screening and self-help web application for students (based on the developed handbook) that will give students the opportunity to self-assess their burnout and based on their results, receive advice and suggestions for collateral reading, training, or other forms of skills development in preventing or addressing burnout;
- Curriculum for the prevention and management of academic burnout - prevention of experiential exhaustion for students, as well as a package of resources for staff working in counselling services and/or with academic tutoring roles; the course will be a complement to the online web-application and consists of a five-day, face-to-face program based on experiential learning for students and a short training program for the support staff;
- International Policy Implementation Toolkit - The toolkit for addressing academic burnout will summarize international best practice and will provide a set of measures that medical and related universities could put in place, to reduce academic burnout in students.

The project was initiated in December 2020, within partner's meetings, which had the purpose to clarify everyone's roles and responsibilities.

Exploiting DRG_National database

NSPHMPDB based on the contract concluded with the National Social Health Insurance Fund, through the Centre of Health Services Research and Evaluation (CHSRE), collects data on the clinical activity of all hospitals in Romania, hospitals which are in contractual relationship with the National Social Health Insurance Fund, validates the data and classifies patients by diagnostic groups. The data thus collected is used for studies and analyses requested by the National Social Health Insurance Fund to improve the financing system of hospital services and to increase the performance of these health service providers, for analyses and studies supporting the decision making of the Ministry of Health or of other decision makers, as well as for studies and research of own interest of NSPHMPDB, or at the request of various partners.

Studies and analyses requested by the National Social Health Insurance Fund

In 2020, within the service contract concluded with the National Social Health Insurance Fund, three analyses and six reports on issues with potential impact on the reimbursement of hospital services were carried out on a quarterly basis, hereunder:

- “Top 50 hospitals accounting for the highest proportion/share of expensive DRGs in total reported and validated hospital discharged cases” analysis;
- Analysis of reporting and coding errors that signal problems with impact on clearing;
- Analysis of the top 10 surgical procedures that generate the largest differences in case classification, in terms of weighted cases;
- Report on the proportion of patients admitted to hospital as “Emergencies”, per hospitals and per hospital wards;
- Report on the 20 most frequent types of cases and services reported as day hospitalization;
- 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.

Based on these quarterly analyses, as well as on other studies and research conducted through the exploitation of the database, proposals were made aiming at: increasing the performance of hospitals, developing patient classification systems, methodology for calculating weight case rates. Also, some indicators for evaluating the activity of hospitals were calculated quarterly and were displayed on the www.drg.ro website.

In addition to the analysis, processing and reporting of data collected from hospitals, according to the provisions of the contract with the National Social Health Insurance Fund, to ensure the reliability of the DRG_National database, activities were carried out to improve the data collection and reporting system, integrating changes imposed by legislative additions and updates. In the context of the Covid-19 pandemic, identifiers for this type of pathology were introduced, both in the “Special situations” section of the General Clinical Observation Sheet and by adding the codes U07.1- COVID-19, identified virus and U07.2 - COVID-19, unidentified virus. Also, for the proper functioning of the data collection and reporting system, technical assistance and methodological support were provided to an average of 125 hospitals per month, by telephone (on average 100 calls/month), and e-mail (in average 25/month).

Analyses and studies supporting the decision-making

At the request of the Ministry of Health, the DRG database was used for the purpose of conducting studies and analyses that substantiated the decisions taken at this level. For the same purpose, through its representatives with expertise in specific fields, NSPHMPDB was part of various working groups organized at the level of the Ministry of Health or inter-ministerial. Thus, the topics of interest for 2020 were:

- the analysis of COVID-19 cases and mortality in infectious disease hospitals, and the participation, through the nomination by Ministerial Order of Professor Doctor Cristian Vlădescu, to the Commission for Clinical and Epidemiological Management of COVID-19;
- the analysis of data on the activity of hospitals in the fields of obstetrics - gynaecology, neonatology, and endocrinology, necessary for the Specialized Commissions of the Ministry of Health to regulate the national programs of

- gynaecological oncology, thoracic surgery, cardiovascular surgery, neurological oncology, urological oncology, digestive cardiology, oncology;
- the activity of the hospitals in each region necessary for the Technical Working Group and the Interinstitutional Decision-Making Group, which also included representatives of the NSPHMPDB, set up to update the regional health master plans;
 - the activity of the hospitals from the Centre region necessary for the Technical Working Group, of which a representative of NSPHMPDB was part, constituted to support the achievement of the investment objective” Brasov Regional Emergency Hospital”;
 - providing data and information to the Ministry of Health about osteoporosis cases reported in continuous hospitalization;
 - management indicators performed by the hospitals, to evaluate the managers of the healthcare facilities subordinated to the Ministry of Health;
 - participation in monitoring and evaluation of the 2014-2020 National Health Strategy implementation;
 - participation in the debate on the e-Health project and on the proposal of Romania's National e-Health Strategy.

Own interest studies and research conducted by NSPHMPDB on specific topics, or at the request of various partners

NSPHMPDB continued in 2020 a study which began in 2019, study conducted in partnership with the University from Heidelberg, Germany, with the *"Applying the automated learning machine for ICD-10 coded data registrations of patients hospitalized in Romania during the past 10 years"* project. The purpose of the study 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.

The objectives of the study:

- Identifying 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.

The results of the study were published in an international journal listed ISI - International Journal of Environmental Research and Public Health (see Annex 1).

The DRG_National database was used to develop seven more studies. The results of five of these studies were published in the NSPHMPDB journal, and the other two were published in other journals (Annex no. 1).

Upon request, under several service contracts or collaboration agreements, in 2020 the following studies and analyses were performed:

- Analysis of the number of admissions for thyroid pathology during January- June 2019;
- Analysis of continuous and day hospitalizations of pregnant women;

- Analysis of hospitalization episodes from 2009 to 2019;
- Analysis of cases of lower limb amputation in patients with diabetes;
- Analysis of cases with multiple myeloma in 2019;
- Analysis of hospitalized cases in continuous and day hospitalization in 2019.

In the context of using the data from the DRG_National database for studies and analyses performed at European level, NSPHMPDB collaborates with other institutions on a continuous or punctual basis. Thus, in 2020, based on the collaboration agreement with The National Institute of Statistics, which covers the exchange of data for research and reporting activities to the international bodies, analyses have been carried out to fill:

- the 2019 OECD/EUROSTAT/WHO Questionnaire on Non-Monetary Health Care Statistics, Reports needed for the “*2019 Hospitals Purchasing Power Parity (PPP) Survey*” within the Eurostat-OECD PPP Program;
- statistics on health spending and sources of health financing, as requested by the Health Accounts Methodology, in accordance with Commission Regulation (EU) 2015/359 of 4 March 2015 implementing Regulation (EC) No 1338/2008 of the European Parliament and of the Council as regards statistics on healthcare expenditure and financing.

In collaboration with other institutions, NSPHMPDB:

- was represented in the Permanent Working Group of The National Surveillance and Reporting Committee on Health Informational System of OECD;
- conducted analyses to fill in the OECD Questionnaire - Health Care Quality and Outcomes (HCQO), 2018-19 Data Collection;
- analysed and provided the available data to fill in the questionnaire prepared by the World Health Organization which prepares the first *Global Status report on Health data systems and capacity* using a standard SCORE methodology (Survey, Count, Optimize, Review, Enable).

The results of the research and studies conducted by NSPHMPDB are disseminated through articles published in *Management in Health* journal (see pages 31- 32) or in other specialized publications, and by participating in scientific events. In 2020, NSPHMPDB specialists participated in the publication of: 25 scientific articles, of which 15 in ISI-listed journals (Annex no. 1); five reports, out of which two HTA reports developed under the EUnetHTA Joint Action, co-authored by NSPHMPDB; a chapter in a specialized book.

As well, dissemination was realized through active participation of NSPHMPDB specialists to 15 scientific events (Annex no. 2).

The monitoring of the research dissemination activity on the Research Gate platform shows an increase of the Research Gate score for NSPHMPDB from 142.63 in 2019 to 189.84 in 2020, and the number of publications registered on this platform increased from 173 to 188.

III. Strengthening the institutional capacity for scientific research and development of the NSPHMPDB

The objectives on strengthening institutional capacity for scientific research and development of NSPHMPDB in 2020, according to the 2016-2020 NSPHMPDB Development Strategy were the following:

- Training and continuous professional development of the specialized personnel in order to broaden the areas of excellence and increase the performance of training and scientific research in the field of public health and health management;
- Continue networking with reference experts and organizations in the field of education and scientific research in public health and health management, at national and European/international level;
- Providing technical facilities needed for modern processes of training and primary and secondary scientific research (such as: platforms for distance learning, software packages for statistical analysis, access to databases and information sources etc);
- Improving the visibility of NSPHMPDB activity of training and scientific research and development, including by the institutional websites.

In 2020, seven employees from NSPHMPDB attended training courses, as hereunder:

- one person attended the course organized by WHO Geneva, Switzerland, with the theme "EndNote BASIC Course" in the field of research methodology (searching for sources, creating a reference library, organizing and storing references, creating and editing citations, sharing the research);
- one person attended the "Hospital Quality Management" training program, one person attended the "Hospital evaluator" training program, four people attended the course on "E-learning developer", given the need to change the format of the courses in the online version.

Also, 5 NSPHMPDB employees participated in sessions and webinars as part of the following scientific events:

- International Conference on New Approaches to Dementia entitled "Hope in the age of dementia, New Science. New knowledge. New solutions; Alzheimer's Disease", 10-12 December 2020;
- The 8th edition of the "Carol Davila" University of Medicine and Pharmacy Congress in Bucharest, November 26-28, 2020;
- The VIII Conference of the College of Physicians of Bucharest, June 25-27, 2020;
- The 46th National Congress of the Romanian Society of Diabetes, Nutrition and Metabolic Diseases, September 2-8, 2020.

The networking activities of NSPHMPDB are carried out through institutional collaborations within research projects (see section II. Developing the scientific research activity and improving the knowledge translation of research findings), by participating in actions of the networks in which NSPHMPDB is a member: ASPHER - Association of Schools of Public Health in the European Region; EUPHA - European Public Health Association; JBI – Joanna Briggs Institute, and through other punctual collaborations.

The activities carried out in 2020 within ASPHER consisted mainly in participating in several studies carried out by the association or members of the association, either in the field of public health training (presence of climate change topics in the public health training curriculum), or the measures taken in the context of the Covid-19 pandemic (the role of public health schools in controlling the pandemic, the use of masks in schools, preparing for their return in classrooms). NSPHMPDB also participated in the consultations on the elaboration of the ASPHER 2025 Strategy and is among the signatories of the “ASPHER Declaration on the state of emergency induced by the disease caused by the new coronavirus (Covid-19)” (<https://www.aspher.org/aspher-covid19-statement-signatories.html>).

NSPHMPDB participated at the 16th World Congress on Public Health (WCPH2020) held online between 12-16 October 2020, organized by EUPHA together with the World Federation of Public Health Associations and the Italian Society of Hygiene, Preventive Medicine and Public Health, being represented by Dr. Silvia Florescu - member of the International Scientific Committee (<https://doi.org/10.1093/eurpub/ckaa163>).

The activity within the collaboration with the Joanna Briggs Institute - the international research and development network of the Faculty of Medical Sciences of the University of Adelaide, South Australia, in which NSPHMPDB, through the National Centre for Evidence-Based Public Health is an affiliated group, consisted of 18 protocol reviews or systematic reviews and participation in the 64th online meeting that took place online on 18 November 2020.

Other collaboration activities consisted of:

- participation in the ESPAD group (European School Survey Project on Alcohol and Other Drugs) and to the Conference of launching the ESPAD 2019 report "The European School Survey Project on Alcohol and other Drugs (ESPAD): new results and stakeholder feedback", which took place online on the 12th of November 2020;
- concluding a partnership with the Centre for Health Policies and Services, to provide a training program within the project "Increasing vaccine coverage in Calarași and Timiș counties by improving communication between primary and community health care staff and parents/tutors of children", funded by UNICEF Romania;
- participating alongside the Ministry of Health, Presidential Administration, Committee for Public Health of the Romanian Senate, Committee for Health & Family of the Romanian Chamber of Deputies, Working Group for Combating Cancer in the Romanian Parliament, National Health Insurance House, at the 2020 Edition of the “Aspen Healthcare & Quality of Life Program” (<http://aspeninstitute.ro/healthcare-quality-of-life-program/>), which aims to support health reforms through debate and the involvement of both the public and private sectors, as well as civil society and the academic environment;

- participation in organizing the 1st Edition of PUBLIC HEALTH FORUM event in partnership with Sănătatea Press Group, Public Health Commission of the Romanian



Senate, the Committee for Health and Family of the Chamber of Deputies; Public Health Forum aims to facilitate cross-sectoral discussions

between decision makers in the areas of health, economics, finance, education, social - health professionals, education, social - local authorities - civil society - media, to identify potential solutions to improve and strengthen the capacity of intervention in disease prevention, health protection and health promotion.

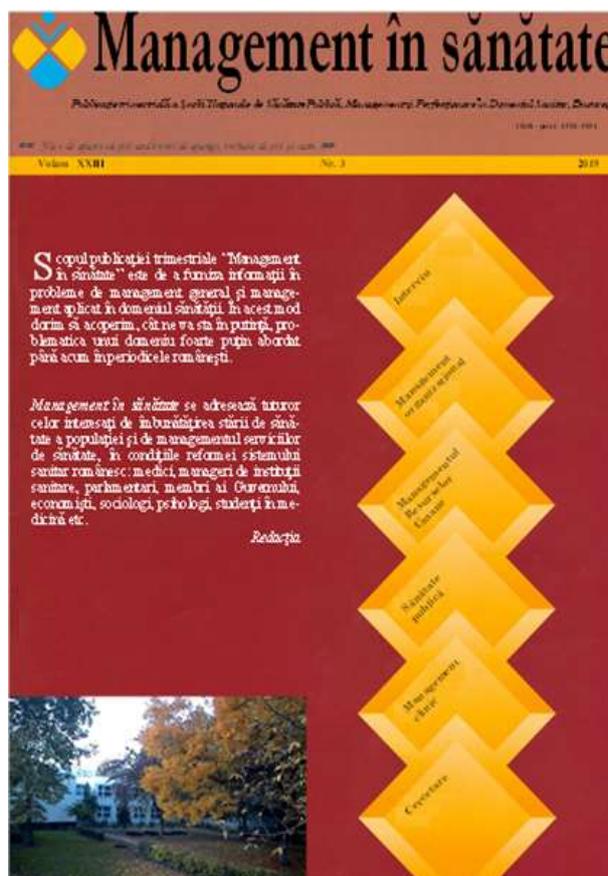
Other collaboration activities which took place in 2020, were realized with partners with whom NSPHMPDB has a long-term institutional relationship: European Observatory for Health Systems and Policies, National Institute of Public Health, Romanian College of Physicians, Universities of Medicine and Pharmacy in Iași and Timișoara, which resulted in project proposals, participation in working groups, publications, technical assistance activities or information exchange.

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 <http://www.snspsms.ro/>, <https://www.perfmed.ro/>, <http://www.drg.ro/>, as well as through the scientific publication edited by NSPHMPDB: the **Management in Health** journal (<http://www.managementinhealth.com>).

The journal is a quarterly bilingual, specialized publication, that addresses all those interested in improving the general health of the population and in health services management: doctors, health institutions managers, high level decision-makers, economists, sociologists, psychologists, medical students, and so on. "Management in Health" journal is included in the B+ category classification of the National Council for Scientific Research of Higher Education as well as in five international data bases: Google Scholar, Index Copernicus, DOAJ (Directory of Open Access Journals), SCOPUS and Elsevier. This journal is also credited by the Romanian College of Physicians, with 5 points.

The issues published in 2020 included 9 original articles authored or co-authored by NSPHMPDB specialists. The articles present, in general, results of the studies on the activity of hospitals that report in the DRG_National database, results of research projects conducted by NSPHMPDB, or systematic reviews. Each issue of the journal publishes a Newsletter to the editor, or an interview with famous public health or health management specialists. The issues from 2020 included interviews with:

- Doctor Moriah ELLEN - Associate Professor at Ben Gurion University, Negev, Israel; member of the European Advisory Committee on Health Research (EACHR) launched by World Health Organization in 2011, to promote and strengthen the use of research evidence for public health decision-making and to inform policies for the development of health research in the region; the theme of the interview was evidence informed policy;
- Professor Shaun TREWEEK - Professor of Health Services Research in the Health Services Research Unit at the University of Aberdeen, UK; Editor for “Trials” journal - leading an initiative called Trial Forge; the theme of the interview was streamlining randomized clinical trials to obtain more valid scientific evidence;
- Associate Professor Doctor Geza MOLNAR - famous Romanian epidemiologist, with a prolific field, academic and decision-making activity; Honorary President of the Romanian Society of Epidemiology; the topic of the interview was current concerns in the field of epidemiology, in the context of the Covid-19 pandemic.



Annex 1

2020 Publications

No.	Paper title	Authors	Journal	Impact factor ISI/SSCI	Other CNCISIS / IDB
1	Findings from World Mental Health Surveys of the Perceived Helpfulness of Treatment for Patients with Major Depressive Disorder	Harris, M., Kazdin, A.E., Chiu, W.T., Sampson, N.A., Aguilar-Gaxiola, S., Al-Hamzawi, A., Alonso, J., Altwajri, Y., Andrade, L.H., Cardoso, G., Cía, A., Florescu, S. , Gureje, O., Hu, C., Karam, E.G., Karam, G., Mneimneh, Z., Navarro-Mateu, F., Oladeji, B., O'Neill, S., Scott, K., Slade, T., Torres, Y., Vigo, D., Wojtyniak, B., Zarkov, Z., Ziv, Y., Kessler, R.C., on behalf of the WHO World Mental Health Survey Collaborators.	<i>JAMA Psychiatry</i> . 2020;77(8):830-841. doi:10.1001/jamapsychiatry.2020.1107 https://jamanetwork.com/journals/jamapsychiatry/article-abstract/2766445	17.471	
2	Successful Caregiver Communication and Everyday Situation Support in dementia care (SUCCESS): Using technology to support caregivers: Other innovative programs and practices	Sienna Caspar, Markus Garschall, Raluca Sfetcu , Julia Himmelsbach, Flora Fassel	<i>Alzheimer's Dement.</i> 2020;16(Suppl. 8):e041310. https://doi.org/10.1002/alz.041310	17.127	
3	Comorbidity within mental disorders: a comprehensive analysis based on 145,990 survey respondents from 27 countries.	McGrath, J. J., Lim, C. C. W., Plana-Ripoll, O., Holtz, Y., Agerbo, E., Momen, N.C., Mortensen, P.B., Pedersen, C.B., Abdulmalik, J., Aguilar-Gaxiola, S., Al-Hamzawi, A., Alonso, J., Bromet, E.J., Bruffaerts, R., Bunting, B., Caldas de Almeida, J.M., de Girolamo, G., De Vries, Y.A., Florescu, S. , Gureje, O., Haro, J.M., Harris, M.G., Hu, C.Y., Karam, E.G., Kawakami, N., Kiejna, A., Kovess-Masfety, V., Lee, S., Mneimneh, Z., Navarro-Mateu, F., Orozco, R., Posada-Villa, J., Roest, A.M., Saha, S., Scott, K.M., Stagnaro, J.C., Stein, D.J., Torres, Y., Viana, M.C., Ziv, Y., Kessler, R.C., de Jonge, P.	<i>Epidemiology and Psychiatric Sciences</i> , 2020; 29: e153. Published online 2020 Aug 12. doi: 10.1017/S2045796020000633 https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7443806/	5.876	
4	Intermittent Explosive Disorder subtypes in the general population: association with comorbidity, impairment, and suicidality.	Scott, K.M., de Vries, Y.A., Aguilar-Gaxiola, S., Al-Hamzawi, A., Alonso, J., Bromet, E.B., Bunting, B., Caldas-de-Almeida, J.M., Cía, A., Florescu, S. , Gureje, O., Hu, C-Y., Karam, E.G., Karam, A., Kawakami, N., Kessler, R.C., Lee, S., McGrath, J., Oladeji, B.,	<i>Epidemiology and Psychiatric Sciences</i> , 2020; 29: e138. Published online 2020 Jun 23. doi: 10.1017/S2045796020000517 https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7327434/	5.876	

		Posada-Villa, J., Stein, D.J., Zarkov, Z., de Jonge, P. on behalf of the World Mental Health Surveys collaborators			
5	Transdiagnostic development of internalizing psychopathology throughout the life course up to age 45: A World Mental Health Surveys Report.	De Vries, Y.A., Al-Hamzawi, A., Alonso, J., Andrade, L.H., Benjet, C., Bruffaerts, R., Bunting, B., De Girolamo, G., Florescu, S. , Gureje, O., Haro, J.M., Karam, A., Karam, E.G., Kawakami, N., Kovess-Masfety, V., Lee, S., Mneimneh, Z., Navarro-Mateu, F., Ojagbemi, A., Posada-Villa, J., Scott, K.M., Stagnaro, J.C., Torres, Y., Xavier, M., Zarkov, Z., Kessler, R.C., de Jonge, P.	<i>Psychol Med.</i> 2020 Nov 10;1-10.doi: 10.1017/S0033291720004031. Online ahead of print. https://pubmed.ncbi.nlm.nih.gov/33168122/	5.813	
6	Patterns of care and dropout rates from outpatient mental healthcare in low-, middle- and high-income countries from the World Health Organization's World Mental Health Survey Initiative.	Fernández, D., Vigo, D., Sampson, N.A., Hwang, I., Aguilar-Gaxiola, S., Al-Hamzawi, A., Alonso, J., Andrade, L.H., Bromet, E.J., de Girolamo, G., de Jonge, P., Florescu, S. , Gureje, O., Hinkov, H., Hu, C., Karam, E.G., Karam, G., Kawakami, N., Kiejna, A., Kovess-Masfety, A., Medina-Mora, M.E., Navarro-Mateu, F., Ojagbemi, A., O'Neill, S., Piazza, M., Posada-Villa, J., Rapsey, C., Williams, D.R., Xavier, M., Ziv, Y., Kessler, R.C., Haro, J.M., and on behalf of the World Health Organization World Mental Health Survey collaborators.	<i>Psychological Medicine</i> , 2020 Apr 28;1-13. doi: 10.1017/S0033291720000884. Online ahead of print. https://pubmed.ncbi.nlm.nih.gov/32343221/	5.813	
7	Towards measuring effective treatment coverage: critical bottlenecks in quality- and user-adjusted coverage for major depressive disorder.	Vigo, D.V., Haro, J.M., Hwang, I., Aguilar-Gaxiola, S., Alonso, J., Borges, G., Bruffaerts, R., Caldas-de-Almeida, J.M., De Girolamo, G., Florescu, S. , Gureje, O., Karam, E.G., Karam, G., Kovess-Masfety, V., Lee, S., Navarro-Mateu, F., Ojagbemi, A., Posada-Villa, J., Sampson, N.A., Scott, K., Stagnaro, J.C., ten Have, M., Viana, M.C., Wu, C.S., Chatterji, S., Cuijpers, P., Thornicroft, G., Kessler, R.C., and on behalf of the WHO World Mental Health Survey collaborators.	<i>Psychological Medicine</i> . 2020 Oct 20;1-11. doi: 10.1017/S0033291720003797. Online ahead of print. https://pubmed.ncbi.nlm.nih.gov/33077023/	5.813	
8	Perceived helpfulness of treatment for post-traumatic stress disorder: findings from the World Mental Health Surveys	Stein, D.J., Harris M.G., Vigo D.V., Chiu W.T., Sampson N., Alonso J., Altwaijri Y., Bunting B., Caldas-de-Almeida J.M., Cía A., Ciutan M. , Degenhardt L., Gureje O., Karam A., Karam E.G., Lee S., Medina-Mora	<i>Depression and Anxiety</i> , 2020 Oct;37(10):972-994. doi: 10.1002/da.23076. Epub 2020 Jul 15. https://pubmed.ncbi.nlm.nih.gov/32667096/	4.702	

		M.E., Mneimneh Z., Navarro-Mateu F., Posada-Villa J., Rapsey C., Torres Y., Viana M.C., Ziv Y., Kessler R.C., the WHO World Mental Health Survey Collaborators			
9	The epidemiology of alcohol use disorders cross-nationally: Findings from the World Mental Health Surveys.	Glantz, M.D., Bharat, C., Degenhardt, L., Sampson, N.A., Scott, K.M., Lim, C.C.W., Al-Hamzawi, A., Alonso, J., Andrade L.H., Cardoso, G., De Girolamo, G., Gureje, O., He, Y., Hinkov, H., Karam, E.G., Karam, G., Kovess-Masfety, V., Lasebikan, V., Lee, S., Levinson, D., McGrath, J., Medina-Mora, M.E., Mihaescu-Pintia, C. , Mneimneh, Z., Moskalewicz, Z., Navarro-Mateu, F., Posada-Villa, J., Rapsey, C., Stagnaro, J.C., Tachimori, H., Ten Have, M., Tintle, N., Torres, Y., Williams, D.R., Ziv, Y., Kessler, R.C., on behalf of the WHO World Mental Health Survey Collaborators.	<i>Addictive Behaviors</i> , 2020 Mar;102:106128. doi: 10.1016/j.addbeh.2019.106128. Epub 2019 Sep 16. https://pubmed.ncbi.nlm.nih.gov/31865172/	3.645	
10	Heart failure, frailty, and pre-frailty: A systematic review and meta-analysis of observational studies	Alessandra Marengoni, Alberto Zucchelli, Davide L Vetrano, Gaetano Aloisi, Vincenzo Brandi, Marius Ciutan , Carmen Lavinia Panait , Roberto Bernabei, Graziano Onder, Katie Palmer	<i>Int J Cardiol.</i> Volume 316, P161-171, October 01, 2020 Published: April 19, 2020 DOI: https://doi.org/10.1016/j.ijcard.2020.04.043	3.229	
11	'If we would change things outside, we wouldn't even need to go in...' supporting recovery via community-based actions: A focus group study on psychiatric rehospitalization	Johanna Cresswell-Smith, Valeria Donisi, Laura Rabbi, Raluca Sfetcu , Lilijana Šprah, Christa Straßmayr, Kristian Wahlbeck, Marian Ådnanes	<i>Health Expect.</i> 2020 Sep 9. doi: 10.1111/hex.13125. Online ahead of print. https://pubmed.ncbi.nlm.nih.gov/32909367/	3.008	
12	Time Series Analysis and Forecasting with Automated Machine Learning on a National ICD-10 Database	Victor Olsavszky, Mihnea Dosius , Cristian Vlădescu , Johannes Benecke	<i>Int. J. Environ. Res. Public Health</i> 2020, 17(14), 4979; https://doi.org/10.3390/ijerph17144979 Received: 31 May 2020 / Revised: 29 June 2020 / Accepted: 7 July 2020 / Published: 10 July 2020	2.849	
13	Aggressive Behaviors among 15–16-Year-Old Romanian High School Students: Results from Two Consecutive Surveys Related to	Adina Bucur, Sorin Ursoniu, Constantin Caraion-Buzdea, Virgil Ciobanu, Silvia Florescu , Cristian Vlădescu	<i>Int. J. Environ. Res. Public Health</i> 2020, 17(10), 3670; https://doi.org/10.3390/ijerph17103670	2.849	

	Alcohol and Other Drug Use at the European Level		Received: 24 April 2020 / Revised: 14 May 2020 / Accepted: 19 May 2020 / Published: 22 May 2020		
14	Hospital reforms in 11 Central and Eastern European countries between 2008 and 2019: a comparative analysis	K. Dubas-Jakóbczyk, T. Albrecht, D. Behmane, L. Bryndova, A. Dimova, A. Džakula, T. Habicht, L. Murauskienė, S.G. Scîntee , M. Smatana, Z. Velkey, W. Quentin	<i>Health Policy</i> Available online 20 February 2020 Volume 124, Issue 4, April 2020, Pages 368-379 https://www.sciencedirect.com/science/article/pii/S0168851020300385	2.212	
15	Cross-Sectional Study on Hospital Admission for Asthma Patients in Romania, 2008-2018	Cristian Vlădescu, Marius Ciutan, Raluca Sfetcu	<i>Revista de Cercetare și Intervenție Socială/ Journal of Research and Social Intervention</i> March 2020 68:198-214 DOI: https://doi.org/10.33788/rcis.68.14	0.736	
16	Colorectal Cancer Trends of 2018 in Romania-an Important Geographical Variation Between Northern and Southern Lands and High Mortality Versus European Averages	Ionescu EM, Tieranu CG, Maftai D, Grivei A, Olteanu AO, Arbanas T, Calu V, Muşat S, Mihăescu-Pinția C, Cucu IC.	<i>J Gastrointest Cancer.</i> 2020 Mar 9. doi: 10.1007/s12029-020-00382-3. [Epub ahead of print] https://www.ncbi.nlm.nih.gov/pubmed/32152824		PubMed
17	Descriptive study about hospitalization episodes caused by measles in Romania	Carmen Sasu, Marius Ciutan, Simona Muşat	<i>Management in Health,</i> XXIV/4/2020		BDI CNCSIS B+
18	The role of unitary cost data records for decision making in the Romanian health system	Marius Ciutan, Adina Geană	<i>Management in Health,</i> XXIV/4/2020		BDI CNCSIS B+
19	The management of people with cognitive impairment during the pandemic	Daciana Toma, Mihaela Daniela Baltă, Raluca Sfetcu	<i>Management in Health,</i> XXIV/4/2020		BDI CNCSIS B+
20	Descriptive study about hospitalization episodes in the case of patients infected with human immunodeficiency virus in Romania	Carmen Sasu, Marius Ciutan, Simona Muşat	<i>Management in Health,</i> XXIV/3/2020; pp.21-27		BDI CNCSIS B+
21	The reproductive health in Romania – status	Marius Ciutan, Silvia Gabriela Scîntee , Michaela Nanu, Ecaterina Stativă, Cristian Vlădescu	<i>Management in Health,</i> XXIV/3/2020; pp.12-20		BDI CNCSIS B+
22	Tuberculosis - frequency of hospitalization episodes in Romania, 2015-2019	Carmen Sasu, Marius Ciutan, Simona Muşat	<i>Management in Health,</i> XXIV/2/2020; pp. 14-21		BDI CNCSIS B+
23	2019 Analysis of the use of hospital services by the elderly in Romania	Carmen Sasu, Marius Ciutan, Simona Muşat	<i>Management in Health,</i> XXIV/2/2020; pp. 22-28		BDI CNCSIS B+

24	Neurodegenerative diseases - hospitalized morbidity in Romania, 2015-2019	Carmen Sasu, Marius Ciutan, Simona Mușat	<i>Management in Health, XXIV/1/2020; pp. 23-30</i>	BDI CNCSIS B+
25	Telemedicine in current health care – general considerations and possibilities of use in the field of rehabilitation	Mihaela Gălăon, Marius Ciutan	<i>Management in Health, XXIV/1/2020; pp. 6-13</i>	BDI CNCSIS B+

Books/ chapters/ reports/ interviews

No.	Chapter/Book title/Report	Authors	Editor/ Coordinator	Publishing house/data/site
1	ESPAD Report 2019: Results from the European School Survey Project on Alcohol and Other Drugs,	<u>ESPAD Group</u> Sabrina Molinaro, Julian Vicente, Elisa Benedetti, Sonia Cerrai, Emanuela Colasante, Sharon Arpa, Pavla Chomynová, Ludwig Kraus, Karin Monshouwer, Stanislas Spilka, Ársæll Már Arnarsson, Olga Balakireva, Begoña Brime Beteta, Elin Kristin Bye, Anina Chileva, Luke Clancy, Zamira Hyseni Duraku, Tatijana Đurišić, Ola Ekholm, Zsuzsanna Elekes, Silvia Florescu , Biljana Kilibarda, Anna Kokkevi, Elsa Lavado, Tanja Urdih Lazar, Martina Markelić, Alojz Nociar, Silvana Oncheva, Kirsimarja Raitasalo, Liudmila Rupšienė, Janusz Sierosławski, Julian Strizek, Lela Sturua, Johan Svensson, Diāna Vanaga, Kyriakos Veresies, Sigrid Vorobjov, Pál Weihe, Rodolfo Cotichini, Loredana Fortunato and Kateřina Škařupová <u>ESPAD Coordination</u> Sabrina Molinaro and Julian Vicente <u>Steering Committee</u> Sharon Arpa, Pavla Chomynová, Ludwig Kraus, Sabrina Molinaro, Karin Monshouwer, Stanislas Spilka and Julian Vicente	The European School Survey Project on Alcohol and Other Drugs (ESPAD)	EMCDDA Joint Publications, Publications Office of the European Union, Luxembourg 12 November 2020 http://www.espad.org/espad-report-2019
2	Rectum spacers (i.e., space OAR) to reduce toxicity during radiotherapy for prostate cancer	Author: The Norwegian Institute of Public Health, Norway Julia Bidonde, Stijn Van de Velde Co-author: National School of Public Health, Management and Professional Development, Romania, Marius Ciutan, Cristian Vlădescu, Geta Popovici, Silvia Florescu Dedicated reviewers: State Health Care Accreditation Agency under the Ministry of Health of the Republic of Lithuania, Vitalija Mazgelė, Kristina Grigaite Swiss Network for HTA, Switzerland, Heike Raatz, Matthias Menig National Institute for Health and Care Excellence, United Kingdom, Rebecca Brookfield, Neil Hewitt	EUnetHTA JA3 WP4 Project ID: OTCA23	EUnetHTA 28.07.2020 https://eunethta.eu/otca23/
3	Hypoglossal nerve stimulation systems for treatment of obstructive sleep apnoea	Author: Agencia de Evaluación de Tecnologías Sanitarias-Instituto de Salud Carlos III, Spain: Mario Cárdbaba Arranz, Jesús González-Enríquez, Esther E. García-Carpintero, María Sánchez González, Juan P. Chalco-Orrego, Iñaki Imaz-Iglesia. Co-author: National School of Public Health, Management and Professional Development, Romania: Silvia Gabriela Scîntee, Marius Ciutan, Silvia Florescu, Cristian Vlădescu Dedicated reviewers: National Institute of Public Health, Romania: Alexandra Maria Cucu, Claudia Dima Swiss Network for Health Technology Assessment, Switzerland: Matthias Menig, Heike Raatz	EUnetHTA Joint Action 3 WP4 Project ID: OTCA21	EUnetHTA 18.06.2020 https://eunethta.eu/otca21/

		Servicio de Evaluación del Servicio Canario de la Salud –Fundación Canaria Instituto de Investigación Sanitaria de Canarias, Spain: Tasmania del Pino-Sedeño, Lidia García-Pérez, Leticia Rodríguez-Rodríguez		
4	When will the pandemic end: scientist’s hypothesis and why will not just the medical facts matter	Interview with: Professor Doctor. Cristian Vlădescu , Professor Doctor Alexandru Rafila	Health from A to Z Oana Antonescu	SmartLiving 14.05.2020 https://smartliving.ro/cand-se-termina-pandemia-de-ce-nu-vor-conta-doar-motivele-medicale/
5	When will we get back to normal life? Optimistic and pessimistic scenarios for Romania	Interview with: Professor Doctor. Cristian Vlădescu , Professor Doctor Alexandru Rafila, Vlad Mixich, Raed Arafat	Health from A to Z Oana Antonescu	SmartLiving 12.04.2020 https://smartliving.ro/izolare-coronavirus/
6	Practical considerations when critically assessing economic evaluations. Guidance document.	Author: Mattias Neyt (KCE, Belgium) Co-authors: Martin Eriksson (SBU, Sweden), Lidia García-Pérez (SESCS-FUNCANIS, Spain), Pia Johansson (SBU, Sweden), Fabienne Midy (HAS, France), Conor Teljeur (HIQA, Ireland) Dedicated Reviewers: Marius Ciutan (NSPHMPDBB, Romania) , Silvia Florescu (NSPHMPDBB, Romania) , Emer Fogarty (NCPE, Ireland), Judith Gibbert (IQWIG, Germany), Anna Kaczorek-Juszkiewicz (AOTMIT, Poland), Saskia Knies (EUR, Netherlands), Miriam Luhnén (IQWIG, Germany), Boglarka Mikudina (NICE, United Kingdom), Peter O’Neil (NICE, United Kingdom), Kinga Orzel (AOTMIT, Poland), Ingrid Rosian (GÖG, Austria), Anja Schwalm (IQWIG, Germany), Vassilia Verdiel (NICE, United Kingdom), Alicja Wojcik (AOTMIT, Poland)	EUnetHTA JA3 WP6B2-5	EUnetHTA Diemen (The Netherlands) 09/03/2020 https://eunethta.eu/wp-content/uploads/2020/03/EUnetHTA-JA3WP6B2-5-Guidance-Critical-Assessment-EE_v1-0.pdf
7	Recommendations for Horizon Scanning, Topic Identification, Selection and Prioritization for European Cooperation on Health Technology Assessment.	Lauvrak V, Arentz-Hansen H, Di Bidino R, Erdos J, Garrett Z, Guilhaume C, Migliore A, Scîntee SG , Usher C, Willemsen A.	EUnetHTA Joint Action 3 WP4 Deliverable 4.10	EUnetHTA Oslo 05.03.2020 https://eunethta.eu/services/horizon-scanning/
8	An Overview of Mental Health in Romania / In book: Mental Health in Central and Eastern Europe. Improving Care and Reducing Stigma — Important Cases for Global Study	Raluca P Sfetcu , Marius Ungureanu	Edited By: Richard M Scheffler, Martha Shumway, Răzvan M Chereches World Scientific Series in Global Health Economics and Public Policy: Volume 7 © 2020 World	Scientific Publishing Co Pte Ltd February 2020 https://www.worldscientific.com/worldscibooks/10.1142/11424

Annex 2

2020 Scientific events attendance

No.	Activity	Authors / Participants	Event	Organizers	Duration
1	Presentation on: Laparoscopic vs. Classical Surgical Intervention, Romania, 2008-2018	Cristian Vlădescu	The XIIth National Symposium of Bariatric and Metabolic Surgery The IInd National Symposium of Robotic Surgery 2020 Challenges of Robotic and Metabolic Surgery in Romania	Romanian Association of Endoscopic Surgery https://ralcom.eventsair.com/scbm-2020/	10-12 December 2020 (online)
2	Presentation on: Increasing the Value of Research by Improving the Efficient Production and Updating of Systematic Reviews	Sfetcu R, Affengruber L	1st Evidence-Based Research Conference “Increasing the Value of Research”	EVBRES – COST Action CA17117	16-17 Noiembrie 2020 (online)
3	Presentation on: Country Policies in Response to Covid-19. Key Findings and Lessons Learned from Balkan Countries Group (Bulgaria, Croatia, Romania)	Banadinovic M, Dimova A, Džakula A, Farcasanu D, Lukačević Lovrenčić I, Rechel B, Robinsons S, Rohova M, Sagan A, Scîntee G, Spranger A, Vlădescu C	Health Systems and Policy Monitor Network Annual Meeting	European Observatory on Health Systems and Policies	27-30 October 2020 (online)
4	Presentation on: The Measuring the Hospital Services Cost Project in Romania Project -significance in the health system / HTA	Cristian Vlădescu	National Conference on Pharmacoeconomics and Health Management https://cnfms.ro/program-preliminar/	University of Medicine, Pharmacy, Science and Technology Targu Mures – Health Policy and Management Research Centre, Sapientia University and SURYAM Association	8-9 October 2020 (online)
5	Mediator in the debate SARS-COV-2 pandemic’s effects on the healthcare workforce and uninterrupted and universal access to healthcare services	Cristian Vlădescu	Aspen Healthcare Forum: Prevention – Key Pillar for the Sustainability of Public Health Systems	Aspen Institute Romania https://aspeninstitute.ro/bucharest-forum-2020	8-16 October 2020 (online)
6	Attendance to the online debate:” Preparation for the second wave starts now!”	Cristian Vlădescu	Online debate: ”Preparation for the second wave starts now!”	DC Media Group https://www.dcnws.ro/dezbatere-online-pregatirea-pentru-valul-doi-incepe-acum-	10 July 2020 (online)

				video 758765.html	
7	Presentation: Hospital management in the context of the Covid-19 Pandemic	Adina Geană	National Conference "Health Quality Days"- 2 nd Edition Health Quality Management in the COVID-19 Era	Health Quality Management Association (AMCS)	10-11 July 2020 (online)
8	Attendance to the online debate: " Public health systems resilience"	Cristian Vlădescu	Debate in the Aspen Dialogues organized within Aspen Healthcare & Quality of Life public policy program	Aspen Institute Romania	12 June 2020 (online)
9	Attendance to the online debate: ""World Immunization Week - the week of hope in the fight against epidemics"	Cristian Vlădescu	World Immunization Week - the week of hope in the fight against epidemics	DC Media Group https://www.dcbu.siness.ro/saptamana-imunizarii	24 April 2020 (online)
10	Attendance to the online debate: "Public policies: the cause or the solution for the medicine crisis"	Cristian Vlădescu	Public policies: the cause or the solution for the medicine crisis	DC Media Group https://www.dcm.edical.ro/cristian-vlădescu-covid-19-ce-se-incearca-la-noi-ca-tratament-e-cel-incercat-in-restul-lumii_615584.html	19 March 2020 (online)
11	Attendance to the online debate: "HEALTH ROMANIA – 3 rd Edition: Healthcare system financing. Money follows the patient	Cristian Vlădescu	HEALTH ROMANIA – 3 rd Edition: Healthcare system financing Money follows the patient	DC Media Group https://www.dcm.edical.ro/health-romania-edi-ia-a-iii-a-finan-area-sistemului-de-sanatate-eveniment-organizat-de-trustul-de-presad-c-media-group_614845.html	27 February 2020 (online)
12	Theme presentation: Public Health- current and future challenges	Silvia Gabriela Scîntee	PUBLIC HEALTH FORUM, 1 st Edition	Sănătatea Press Group, NSPHMPDB, Public Health Commission of the Romanian Senate, the Committee for Health and Family of the Chamber of Deputies	25 February 2020 Bucharest Romania
13	Theme presentation:	Marius Ciutan	PUBLIC HEALTH FORUM, 1 st Edition	Sănătatea Press Group, NSPHMPDB,	25 February

	Present and future challenges determined by aging population.			Public Health Commission of the Romanian Senate, the Committee for Health and Family of the Chamber of Deputies	2020 Bucharest Romania
14	Theme presentation: Intersectoral collaboration premise for citizen health improvement	Georgeta Popovici	PUBLIC HEALTH FORUM, 1 st Edition	Sănătatea Press Group, NSPHMPDB, Public Health Commission of the Romanian Senate, the Committee for Health and Family of the Chamber of Deputies	25 February 2020 Bucharest Romania
15	Attendance to the debate: Patient safety-expectations and perspectives	Cristian Vlădescu	Round table: Patient safety-expectations and perspectives	National Authority in Health Quality Management	14 January 2020 Bucharest Romania