



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

## **2021 ACTIVITY REPORT**



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## 2021 Activity in numbers

### TRAINING PROGRAMMES IN HEALTH MANAGEMENT SERVICES

**780** PARTICIPANTS  
**20** COURSE SERIES  
**2.260** TEACHING HOURS

### TRAINING PROGRAMMES, CONTINUOUS MEDICAL EDUCATION AND PROFESSIONAL DEVELOPMENT

**3.827** PARTICIPANTS  
**133** COURSE SERIES  
EXAMINATION OF **1,061** PARTICIPANTS **FROM 2020**

### 7 PROJECTS FINANCED THROUGH EUROPEAN PROGRAMMES

**24** PUBLISHED ARTICLES  
**18** PAPERS PRESENTED

**RESEARCH GATE SCORE 214.04**

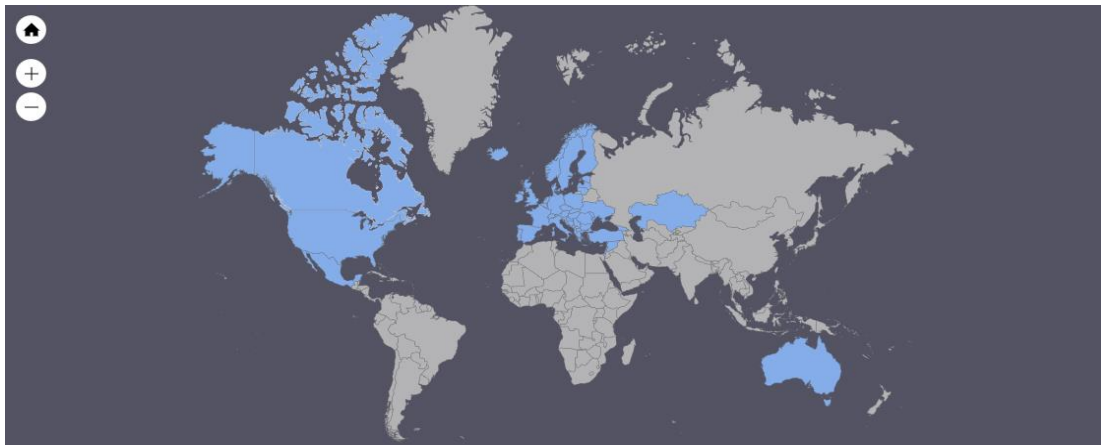
### RO\_DRG DATA BASE ANALYSIS

**12** QUARTERLY ANALYSIS IN THE CNAS CONTRACT  
**9** ANALYSIS CONTRACTS WITH OTHER PARTNERS

### CONSULTANCY AND TECHNICAL ASSISTANCE

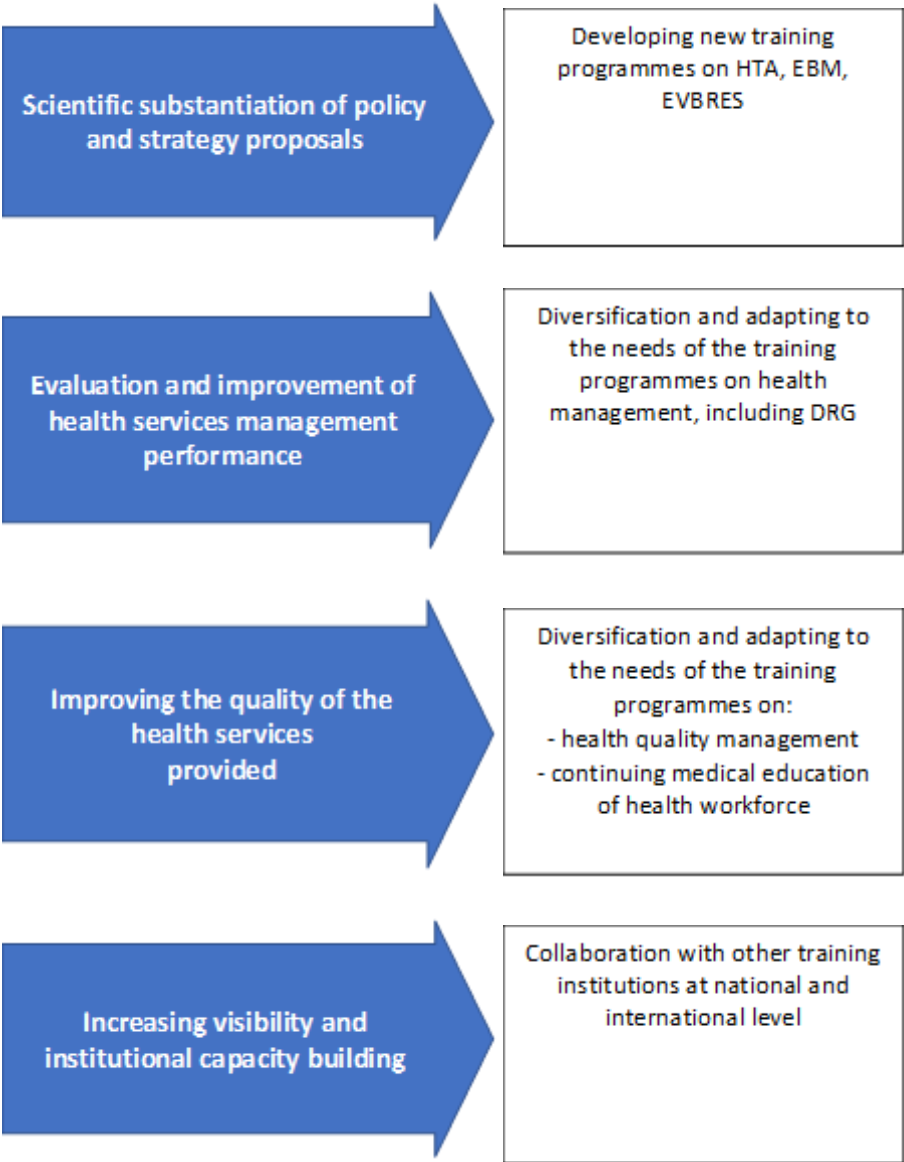
PARTICIPATION IN THE MEETINGS OF **11** TECHNICAL WORKING GROUPS  
ASSISTANCE OF **125** HOSPITALS PER MONTH

### COLLABORATION RELATIONS WITH PARTNERS IN OVER 48 COUNTRIES THROUGH NETWORKS AND CARRIED OUT PROJECTS



# Organizing and providing professional development training programmes

The training activity carried out by NSPHMPDB in 2021 was in accordance with the general objectives of each of the four directions of action set by the NSPHMPDB’s development strategy 2021-2025, for this field, respectively:



## Public health and health management training programmes

The training programmes in public health and health management provided by the Centre of Management and Health Promotion (CMHP) aim to contribute to improving the performance of healthcare facilities management and the quality of medical services provided to patients. In 2021 were provided five types of training programmes, namely:

- *Certification Training Programme in Health Services Management for Specialist MDs*, for doctors, dentists and pharmacists, with primary or specialist certification - training programme provided in seven series, from which two began in 2020 and one finished in 2022, counting in total for 300 participants. Five series of courses were taught by lecturers from Bucharest, one course series was taught by our collaborators from the Department of Public Health and Health Management from “Gr. T. Popa” Faculty of Medicine and Pharmacy Iasi, and another one by the Department of Public Health and Health Management at the “Victor Babes” Faculty of Medicine and Pharmacy Timisoara;

- *Hospital Management Training Programme for Hospital Managers*, programme in which not only managers can attend, but also people involved in the administrative structures (Ministry of Health, district public health authorities, Hospital and Medical Services Administration Bucharest, local councils, etc.) or any other higher education graduate who wants to apply for a manager position in the system - had seven course series, with a total of 242 participants; one of the course series started in 2020, and two course series finished in 2022;

- *The Hospital Management Training Programme for Directors of Care and Chief Nurses*, programme intended for nurses, midwives and general nurses with post-secondary education and primary graduation, and for those with higher education graduated with a diploma / license in the medical field, who wish to apply for a medical director position or head nurse. Within this programme were organized three course series with a total number of 119 participants;

- *Training Programme in Hospital Quality Management*, organized for the employees of the quality management structures of the medical services within hospital, but in which can participate any person who graduated secondary or higher education with interest in this particular field - within this programme, one course series was organized, counting 42 participants;

- *Training Programme for Hospital Evaluators*, organized upon request and in collaboration with the National Authority for Quality Management in Health (NAQMH) - had one course series attended by 34 participants.

The Centre of Health Services Research and Evaluation organized in 2021 one course series of the *training programme in the DRG field entitled: “Reporting, Contracting and Reimbursing Hospital Services”*, intended for the staff with responsibilities in the field of reporting and monitoring the hospital’s clinical activity, course which registered 43 participants.

In the context of the SARS-CoV-2 pandemic, all training programmes provided by NSPHMPDB were organized online on the Zoom application. In comparison with the previous year (see Table no. 1), although the total number of course series dropped, the number of participants did not suffer substantial modifications, due to online course organization, which

facilitated the participation of a higher number of people per course series, by eliminating financial and time costs related to course participation.

**Table no. 1. Distribution of series and participants per public health and health management training programmes, provided in 2021, in comparison with the ones provided in 2020**

Training programme	Number of series per programme		Number of participants per programme	
	2020	2021	2020	2021
Certification Training Programme in Health Services Management for Specialist MDs	6	7	250	300
Hospital Management for Hospital Managers	4	7	135	242
Hospital Management Training Programme for Directors of Care and Chief Nurses	2	3	64	119
Hospital Quality Management	6	1	177	42
Training Programme for Hospital Evaluators	3	1	63	34
Professional Development Programme for Hospital Evaluators	1	-	10	-
Ward Level Medical Care Management - Care Plan - Odorheiu Secuiesc	1	-	20	-
Reporting, Contracting and Reimbursing Hospital Services	2	1	66	43
<b>Total</b>	<b>25</b>	<b>20</b>	<b>785</b>	<b>780</b>

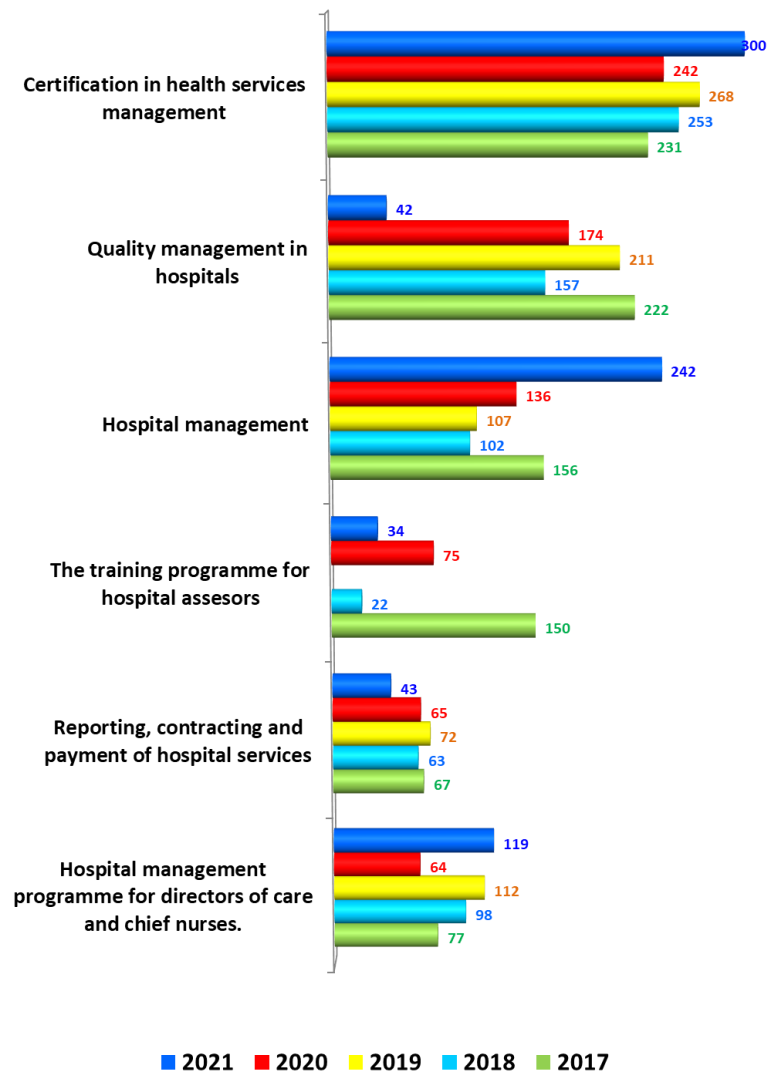
Data source: CMHP

Organizing a smaller number of course series in 2021 in comparison with 2020 is mainly because NSPHMPDB's lack of personnel, difficult to be covered in the context of the existing legislation. Hospital Quality Management training programme was organized for one course series, in comparison with six course series organized in 2020, the reason being the revision of the course curricula according with the existing training needs and with the National Authority for Quality Management in Health authorization demands.

The analysis of the course participants to the training programmes provided by NSPHMPDB between 2017-2021 (see Figure no. 1) shows that the Certification Programme in Health Services Management for Specialist MDs and Hospital Management for Hospital Managers registered a higher number of participants in 2021 in comparison with the previous years. The rest of the programmes had a lower number of participants: Hospital Quality Management, for which there is a waiting list and the training programme Reporting, Contracting and Reimbursing Hospital Services, both programmes had the maximum number of registered participants per training course, but organizing more course series was not

possible due to the updating of the first programme and the lack of personnel for the second, and the programmes for hospital evaluators are organized only upon the National Authority for Quality Management in Health request.

**Figure no. 1 Distribution of course participants per training programmes between 2017-2021**



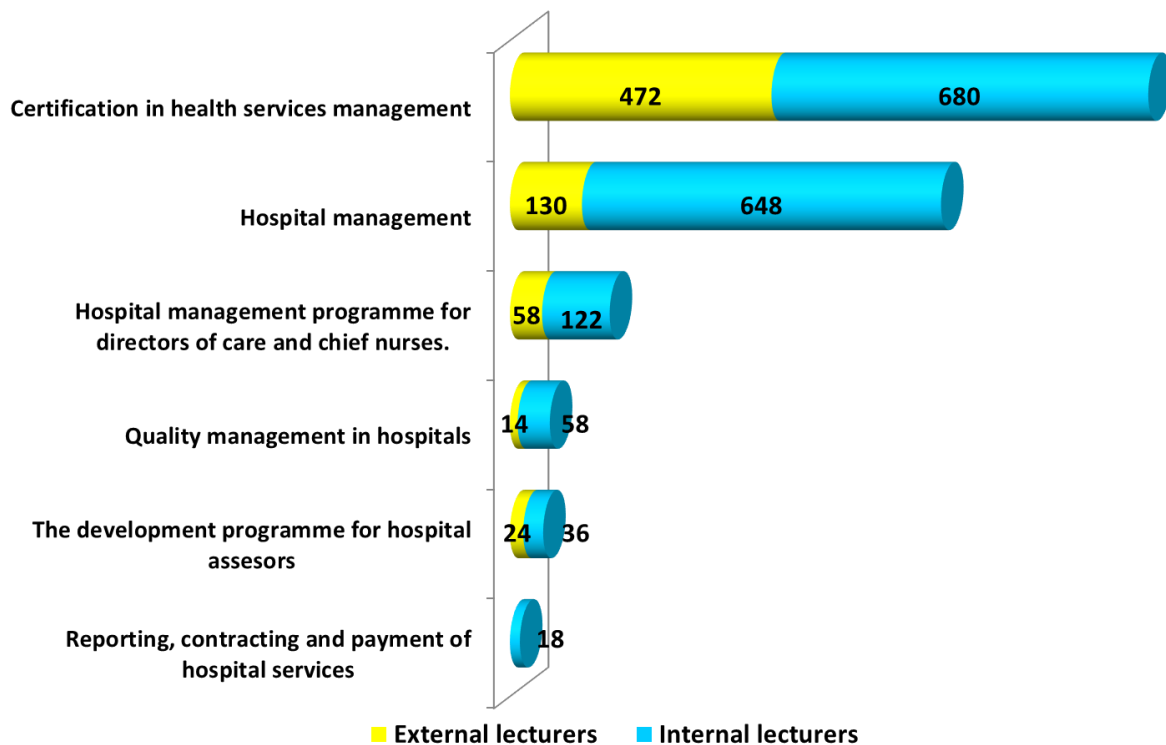
Data source: CMHP

The total number of teaching hours delivered by NSPHMPDB personnel in the public health and health management training programmes provided in 2021 was much higher than 2020 number of teaching hours, 2.260 vs. 1.902. This is explained by the higher number of course series in 2021 for the long-term training programmes (e.g., 7 vs. 6 course series for the Certification in Health Management programme, 7 vs. 4 course series for the Hospital Management programme). From the 2.260 teaching hours, 1.562 hours were taught by our own lecturers (69%), and 698 hours (31%) were taught by external collaborators (see Figure no. 2).

The proportion of the teaching hours delivered by the NSPHMPDB lecturers and the ones taught by external collaborators is identical with the one in 2020.

This situation refers to the effective taught hours, and do not include the hours dedicated to preparing participants, guiding students in preparing the final exam projects for: the Hospital Management, Certification in Health Management and Hospital Quality Management programmes, examining participants at the end of each training programme, as well as guiding in using the Zoom application in order to prepare the module homework, attending the written exam and presenting the projects.

**Figure no. 2. Distribution of taught hours per training programme and per lecturers in 2021**



Data source: CMHP

In order to achieve the goals on diversification and adaptation of the programmes to the health management services training needs, the actual programmes were analysed from perspective of the students needs, the legislative changes, the research findings, and the information exchange and collaboration at international level, and the following measures were taken:

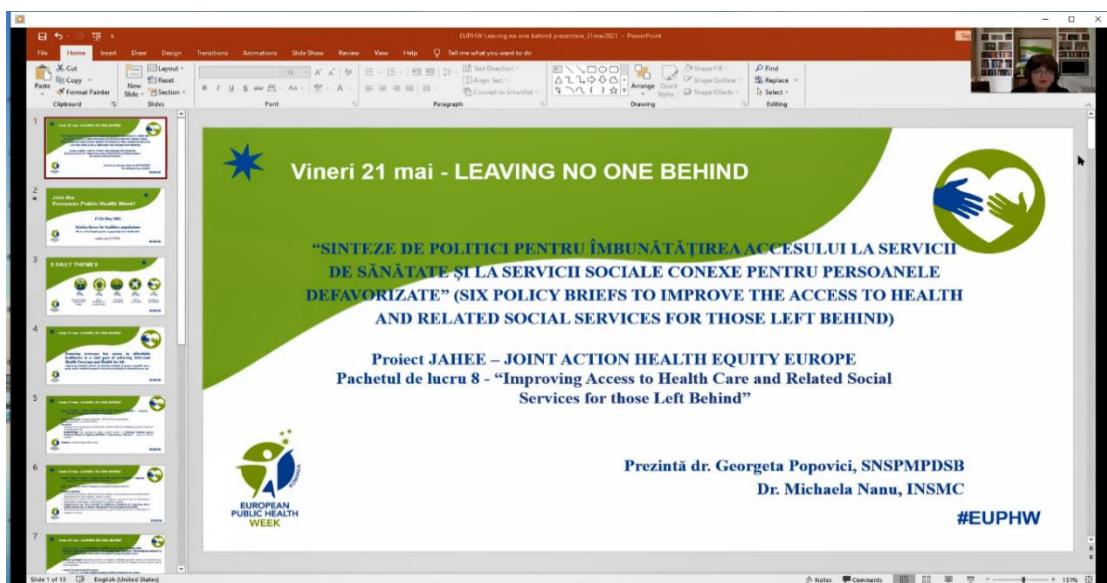
- Updating the Hospital Quality Management programme’s curricula and developing teaching materials for new topics (e.g., Event cause-effect analysis, Non-compliance management, Group forming and group attributions / quality core), as well as completing various teaching materials for various teaching modules (e.g., questionnaire structure analysis and deficiencies in its application in “Patience Satisfaction” module; work instructions in performing clinical audit in the hospital for the “Clinical Audit” module;



- Updating and writing new presentations for the Certification in Health Services Management (e.g., “Social Marketing” presentation and “Health Literacy”- new presentation, both of them for the “Health Promotion” teaching module;
- Adding a new topic “Management Principles” to the “General Management” module of the Hospital Management teaching programme and development of a case study for this topic - “Difficulties generated by management roles in the hospital”;
- Updating the DRG teaching modules in different teaching programmes with the 2021 applicable legislative provisions.

Within various projects and partnerships, designed for specific personnel categories, were organized courses and webinars as follows:

- In the project *“Improving Quality and Performance Hospital Services Through Costs Evaluation and Standardization” (CaPeSSCoSt)* financed through the Operational Programme “Administrative Capacity” (see “Projects and research activities” section) training programmes were organized in the field of data collection and continuous hospital care admissions, data cost collection and calculating hospital services costs and hospital services quality for the hospitals in which a new collection and cost calculation methodology will be applied;
- In a partnership with Janssen - Johnson & Johnson pharmaceutical companies, was organized, for the second year, a webinar on "Financing the Health System / Hospital Medical Services and Medicines Contracting and Settlement ";
- In European Public Health Week - Joining forces for healthier populations, was organized a webinar with the theme “Six policy briefs to improve the access to health and related social services for those left behind”, in which JAHEE results were presented (see “Projects and research activities” section).



Taking into account the needs of the healthcare system, but also the requests on training addressed to NSPHMPDB, it was elaborated and submitted to the Ministry of Health the curricula and the documentation needed for the approval of a Certification in Quality Health

Management Services programme and it was initiated the development of a new Clinical Audit training programme. In perspective, the experience gained in the international projects will be valued by developing training programmes on the following topics:

- Health Technology Assessment (see “Projects and research activities” section - EUnetHTA JA3);
- Health Equity (see “Projects and research activities” section - JAHEE);
- Evidence-based Research in Clinical Health Research (see “Projects and research activities” section - EVBRES).

Training programmes on these topics can support the scientific substantiation of health policies and strategies.

NSPHMPDB collaborated in the training field both with Romanian universities as well as with foreign ones, thus providing training programmes in partnership (e.g., Certification in Health Services Management training programme), or implementing projects in the training field or with training component (see “Projects and research activities” section). NSPHMPDB is an active member of ASPHER - Association of Schools of Public Health in the European Region.



### **Training and professional development programmes in health field**

NSPHMPDB organizes through the National Centre for Professional Development in Health (NCPDH) training and continuous professional development programmes for the healthcare personnel working in any sector, thus contributing to the growth of the quality of the provided healthcare services. The main programmes organized by NCPDH are: Certification Training Programmes for MDs, Nurses Specialization (Professional Reconversion and Skills Development), Continuous Medical Education training programmes for doctors, nurses, physiotherapists, emergency medical technicians and emergency operators/registrars, practical internships for nurses and training of trainers.

In 2021 were organized 59 training programmes with a total number of 133 course series for 3827 participants (see Table no. 2). The number of programmes as well as the number of course series and the total number of course participants were higher than the numbers

registered in 2020. This is the result of the fact that more of our collaborators adapted the conditions imposed by the pandemic and used for teaching the institution's platform [www.perfmed.ro](http://www.perfmed.ro) (PERFMED) or the Zoom application. On the PERFMED platform were organized nurses' specialization programmes in Nephrology, Laboratory, Radiology and Medical Imaging, Public Health and Hygiene, Nutrition and Dietetics; certification programmes for doctors in General Ultrasound, Musculoskeletal Ultrasound, Electromyography, as well as other e-learning Continuous Medical Education Programmes. On the Zoom platform the following training programmes took place: certification training programmes for nurses in Balneary-physiotherapy, CT/IRM Operator, Radiology and Medical Imaging, and certification programmes for doctors in Implantology and General Ultrasound.

Besides resuming the existing programmes, three new certification programmes were approved, programmes which began in 2021: Trans-oesophageal Ultrasound, Electrophysiology and Implantable pacemakers and defibrillators, and a new specialization training programme was finalized namely Community Care.

**Table no. 2. Number of programmes, series and participants per each type of training programme organized by the National Centre for Professional Development in Health in 2021, in comparison with 2020**

Training programme type	Number of programmes of each type		Number of series per each programme type		Total number of participants per each programme type	
	2020	2021	2020	2021	2020	2021
Certification Training Programmes for MDs	14	18	29	29	648	736
Continuous Medical Education (CME) for MDs/Dentists	3	3	9	8	220	336
CME for Nurses, Emergency Medical Technicians, Caregivers	10	10	23	29	702	955
CME for Physiotherapists	2	2	2	6	36	92
Training and Evaluation of Trainers	-	1	-	2	-	35
Nurses Specialization, Professional Reconversion, Skills	10	10	27	30	780	1061
Practical Internships for Nurses	4	4	16	18	25	30
CME e-learning	9	11	9	11	353	582
<b>Total</b>	<b>52</b>	<b>59</b>	<b>115</b>	<b>133</b>	<b>2764</b>	<b>3827</b>

*Data source: NCPDH*

Besides the training programmes scheduled in the postgraduate and continuous medical education specific training legislation, NCPDH organized training programmes within projects, as partner or subcontracted institution. Within the project “National Modular Programme for Increasing the Professional Level of Medical Personnel Working in the National System of Defence, Public Order and National Safety”- OPHC/91/4/8/108196, co-financed from the Social European Fund through Operational Programme Human Capital 2014-2020, conducted by “Prof. Dr. Dimitrie Gerota” Emergency Hospital of the Ministry of Internal Affairs Bucharest in collaboration with NSPHMPDB, “Dr. Carol Davila” University Emergency Central Military Hospital, “Prof. Dr. Agrippa Ionescu” Clinical Emergency Hospital (UM 0521) and the Medical Department of the Ministry of Internal Affairs, the Ministry of National Defence, Medical Department of the National Agency of Penitentiaries, the Medical Centre of the Protection and Guard Service, the Medical Centre of the Special Telecommunications Service, were organized the course on “Caring for the Patient Wearing Medical Devices” for nurses, and the course on “Early Diagnosis of Digestive Neoplasms” for specialists or consultant physicians from different specialties (General surgery, Oncology, Internal Medicine, Family Medicine, Haematology), working in the public order defence and national safety health system. The aim of this project is to increase the quality of the medical act in the system of defence and public order healthcare facilities through providing a unitary training programme implemented at national level, programme which will result in the growth of professional competences of the target group. The project’s initial duration of 30 months (26.02.2018-25.08.2020) was extended by the Operational Programme Human Capital’s Management Authority until April, 2021.

A continuous medical education programme on “Interpersonal Communication towards Increasing Vaccine Coverage”, on the Moodle platform, programme which took place in the project “Increasing Vaccine Coverage in Calarasi and Timis Counties by Improving Communication Between Primary and Community Care Staff and Parents/ Person of Contact”, funded by UNICEF Romania, developed by the Centre for Health Policies and Services Foundation. The aim of this project is to increase children vaccine coverage and to limit the effects of measles epidemic and to prevent other outbreaks of vaccine preventable diseases.

In 2021 was organized the graduation exam for the 10 specialization programmes for nurses carried out in 2020, for 1061 candidates based on the Ministry of Health’s Order No. 1076/2019. The exams were organized online, except Psychiatry and Paediatrics specializations for which the exam was organized in hybrid system.

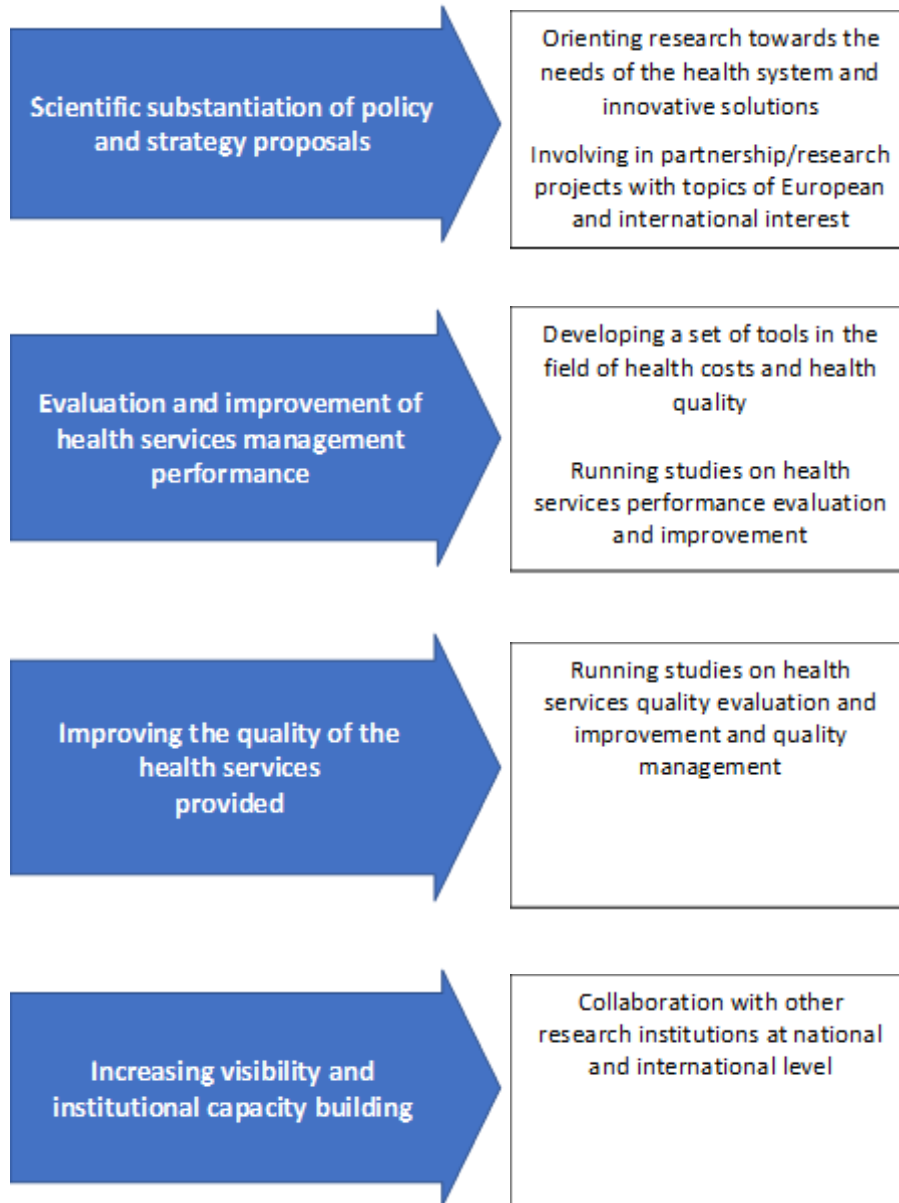
New specialization programmes for nurses have been also initiated. These programmes will be carried out in 2022, respectively: 5 professional reconversion programmes with a total number of 13 course series, for which applied 648 participants, and 5 skill development programmes with a total number of 17 course series, organized for 891 registered participants.

Based on the Government’s Decision No. 741/12.10.2016 on the approval of the Technical and Sanitary Norms on Funeral Services, Burial, Cremation, Transport, Exhumation and Reburial of Human Corpses, Cemeteries, Human Crematoria as well as the professional criteria that funeral service providers must meet and the level of the guarantee fund,

NSPHMPDB framed a draft order for the approval of the curriculum for preparation for autopsy, training curriculum for thanatopractors, as well as the methodology for organizing the training programmes and the exams in order to obtain the autopsy certification, respectively thanatopractor, in collaboration with the National Programme Manager appointed by the Specialist Commission of Forensic Medicine of the Ministry of Health for training programmes for forensic technicians and thanatopractors. The project was submitted for approval to the Ministry of Health.

## Projects and research activities

Research activity carried out within NSPHMPDB in 2021 met the general objectives corresponding to this field, objectives set for each of the four directions of action of NSPHMPDB's development strategy for the period 2021- 2025, namely:



NSPHMPDB's research activity is coordinated by the Centre of Health Services Research and Evaluation (CHSRE) and takes place both in externally funded projects, research partnerships and networks, as well as independently or at the request of interested entities, including national health authorities, by capitalizing on the DRG\_National database. The research topics covered in the projects correspond to health policy priorities at both European and national level, and the results of the research support the scientific basis of health policies and programmes.

### **Projects including research**

In 2021, 7 projects with funding from European programmes were underway. Two projects were financed through Third EU Public Health Programme (2014-2020) of the General Directorate for Health and Food Safety (DG SANTE), programme managed by the European Commission with support of the Consumers, Health, Agriculture and Food Executive Agency (CHAFEA):

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

Two projects are carried out within partnerships financed through the COST Programme (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".

Two projects are financed through the Erasmus+ Programme, strategic Partnerships:

- BENDIt-EU (2020-2023), "Burnout education, normatives and digital tools for European Universities";
- SANTE + (2021-2022), "Création d'une certification de formation européenne pour la gestion de la qualité des soins et des risques en santé".

One project is financed from Structural Funds through the Operational Programme Administrative Capacity (POCA):

- CaPeSSCoSt (2019-2022), "Improving Quality and Performance of the Hospital Services by Cost Assessment and Standardization."

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

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

Project duration: 5 years (2016-2021).

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.

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.

Strategic objectives of EUnetHTA JA3:

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

Expected results:

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

The major objective is to define and implement a permanent and sustainable network for collaboration in health technology assessment in Europe. Other objectives:

- Producing at least 50 HTA reports per year.
- Increasing the quality of reports, adaptation, and using at a national level these reports drafted in partnership.
- Improve resolutions and health policies 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 a better health state of the population.

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

WP4 – Joint Production;

WP5 – Life cycle approach to improve Evidence Generation;

WP6 – Quality Management, Scientific Guidance and Tools;

WP7 – National Implementation and Impact.

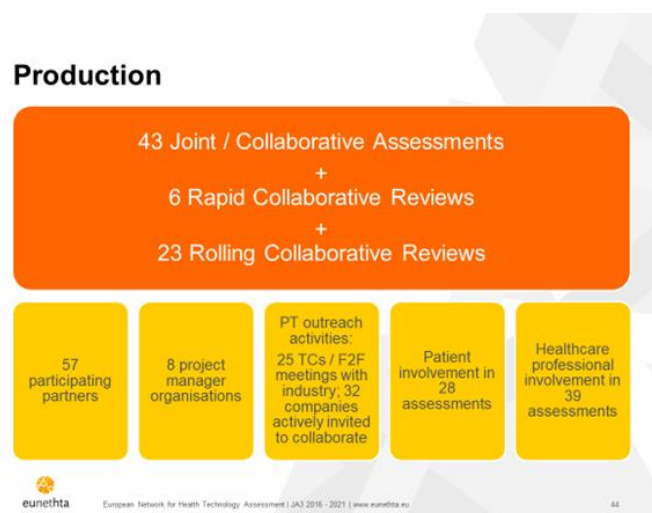


Because of the Covid-19 pandemic that led to the cancellation of some events, but also optimizing resources to Covid-19 related technologies, the project was extended from June 2020 to May 2021, considering the following, main activities for the added duration:

- Completion of activities that have been delayed;
- Completion of proposed technology assessments;
- Carrying out with priority the assessments of the technologies related to Covid-19;
- Continuing the activities initiated in various working groups;
- Finalizing the new cooperation model in the field of HTA.

NSPHMPDB participated in the production of six of the 43 non-pharmaceutical technology assessments carried out in collaboration by EUnetHTA member organizations (<https://www.eunetha.eu/rapid-reas/>):

- *Clinical utility of Point-of-care Tests (POCT): D-Dimer and Troponin;*
- *Rectum spacers (i.e., space OAR) to reduce toxicity during radiotherapy for prostate cancer;*
- *Hypoglossal nerve stimulation systems for treatment of obstructive sleep;*
- *Screening for osteoporosis in the general population;*
- *Bioresorbable Stents in cardiovascular indications (coronary artery disease);*
- *Antibacterial-coated sutures versus non-antibacterial-coated sutures for the prevention of abdominal, superficial and deep, surgical site infection (SSI).*

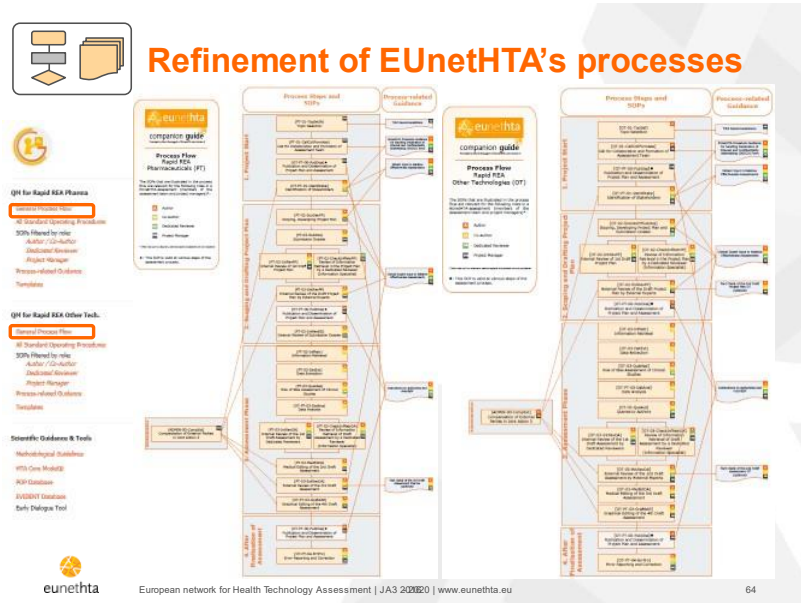


NSPHMPDB also participated as one of the authors of the document on *Recommendations for Horizon Scanning, Topic Identification, Selection and Prioritization for European Cooperation on Health Technology Assessment* (<https://eunetha.eu/wp-content/uploads/2020/04/200305-EUnetHTA-WP4-Deliverable-4.10-TISP-recommendations-final-version-1.pdf>), and contributed to the revision of other procedures and methodologies developed in the WP4.

Within the WP6 - Quality Management, Scientific Guidance and Tools, NSPHMPDB participated in the development or revision of documents intended to ensure the quality of processes and tools used in the health technology assessment, such as:

- *Quality Management training concept;*
- *Practical considerations when critically assessing economic evaluations* ([https://eunetha.eu/wp-content/uploads/2020/03/EUnetHTA-JA3WP6B2-5-Guidance-Critical-Assessment-EE\\_v1-0.pdf](https://eunetha.eu/wp-content/uploads/2020/03/EUnetHTA-JA3WP6B2-5-Guidance-Critical-Assessment-EE_v1-0.pdf));
- *Critical assessment of clinical evidence;*

- Development and update of 15 out of the 38 standard operational procedures (SOP):
  - *Call for collaboration and formation of assessment team PT;*
  - *Call for collaboration and formation of assessment team OT;*
  - *Identification of Stakeholders;*
  - *Scoping and Drafting the Project Plan;*
  - *External Review of 2nd draft Project Plan by external experts and patients;*
  - *Publication and Dissemination of Project Plan and Assessment Report;*
  - *Data Extraction;*
  - *Risk of bias assessment of clinical studies OT;*
  - *Risk of bias assessment of clinical studies PT;*
  - *Data analysis;*
  - *Queries to authors;*
  - *External review of 2nd draft project by external experts and patients;*
  - *Medical editing of draft assessment;*
  - *Graphical Editing of the 4th draft assessment;*
  - *Error reporting and correction.*



Also, in the WP6, NSPHMPDB participated to the development of a new report template for assessing technologies other than medicines, report based on the Core Model, but improved according to the experiences gained from joint production of reports in EUnetHTA JA3 (*EUnetHTA Core HTA of other technologies using the HTA Core Model*), to the development of the *Recommendations for production process of relative effectiveness assessments after Joint Action 3*, as well as to the completion of the comprehensive *EUnetHTA Companion Guide*, containing all elements of the quality management system: process map, standard operating procedures, forms, scientific tools and guides, training materials.

In the WP5 and WP7, NSPHMPDB participated in particular by providing information for the evaluations carried out within them, on the generation of evidence and the implementation of EUnetHTA collaboration at national level. Due to the fact that NSPHMPDB is not officially a health technology assessment agency, and has no requests in this regard from the authorities who make decisions on the technologies used in Romania, only the dissemination of reports prepared through international cooperation within EUnetHTA JA3 could be reported. This is the reason why the NSPHMPDB could not join the EUnetHTA network in the new project for which it has applied for EC funding and which aims to support EU health technology assessment agencies to carry out collaborative assessments.

***“Joint Action Health Equity Europe” (JAHEE)***

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

Project duration: 3 years and 6 months (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 EE Member States participate as affiliated or collaborator institutions. For this project, NSPHMPDB adjoints with "Alessandrescu - Rusescu" National Institute for Mather-and-Child Health (NIMCH), Bucharest– as affiliated institution.

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

The goal of this project is to improve the health status and well-being of the EU citizens and achieving a greater equity in health outcomes across all the society groups, in all participating countries, and in general in Europe.

Specific objectives:

- Providing a clear policy framework accompanied by a list of actions and recommendations for national, regional, and local implementation;
- Developing more effective policies at national, regional, and local level, and improving their monitoring, governance, implementation, and evaluation;
- Implementing “good practices” and facilitating experience exchange between the EU Member States, to acquire new knowledge and practices;
- Identifying success factors, barriers, and challenges, as well as ways to overcome them.

Expected results:

- A framework for actions aimed to reduce health inequities in the EU and the Member States;
- Assessments and recommendations at national level on reducing inequities among the EU Member States;
- Report with lessons learned from case studies related to fighting inequalities and counteracting challenges in health inequalities – reports per each WP, and one final report;
- Results of this project will be translated in useful materials for political decision makers and stakeholders, such as: political briefs, graphic information, video materials and communication of evidence from EU to local level.

Project activities will be carried out within 9 working packages:

WP 1 – Action Management;

WP 2 - Dissemination of results;

- WP 3 – Evaluation;
- WP 4 - National Policies Integration and project Sustainability;
- WP 5 - Monitoring Health Inequalities;
- 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 working packages WP4, WP5, WP6, WP8, and WP9.

WP4 - it was assessed the inequity response capacity of the health systems in the countries participating in this project. In the case of Romania, the following were found:

- Lack of specific legislation to cover health inequities. There are only a few provisions that support fair access to services, there is legislation on the determinants of health, for example on social benefits, disadvantaged geographical areas, education, etc.
- Political support is another big issue, given the political instability with frequent changes of government, which is an impediment to the implementation of any health policy.
- Access to health services does not have an appropriate degree of equity, despite the existence of legislative provisions that protect the vulnerable. There is also no national strategy and system for monitoring health inequities.
- There are institutions with responsibility for ensuring equity in health, there is a legal framework for cross-sectoral collaboration and there are public initiatives, but there is also room for improvement, of both the governance and the health equity.



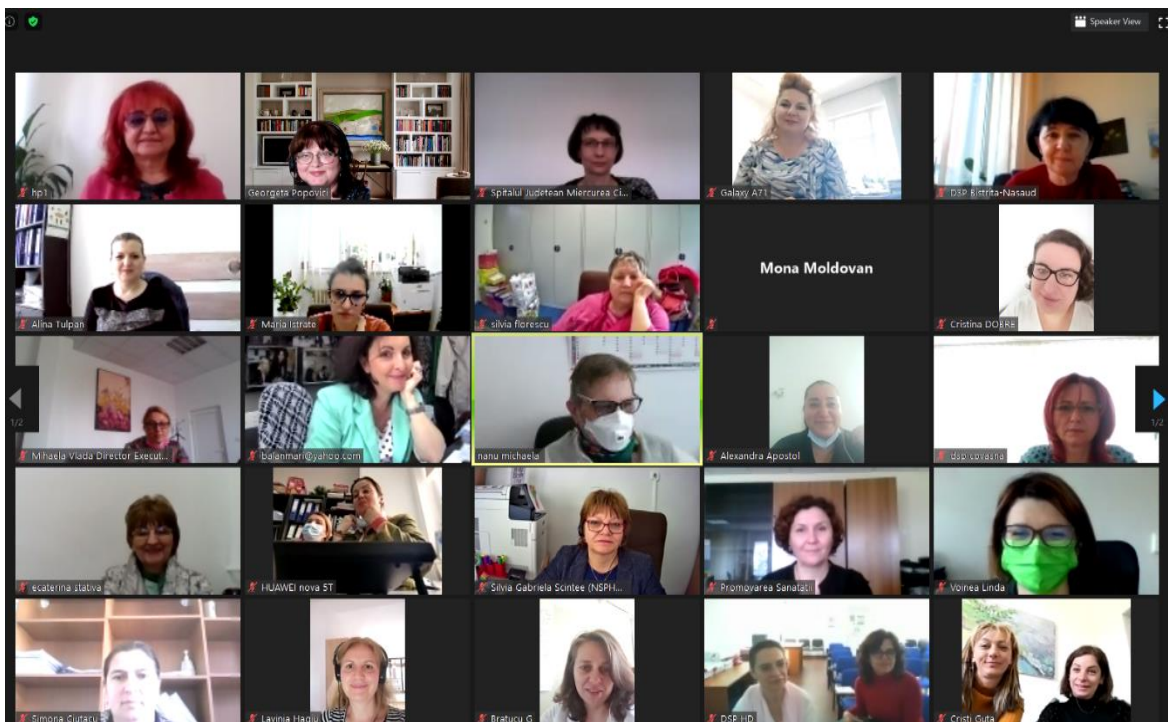
Given the findings, among the actions developed in the other work packages, the were chosen for implementation the ones that could have an impact on health policy-making (WP5 and WP9) and actions that can support the implementation of local policies (WP6 and WP8).

WP5 - Because Romania does not have a national system for monitoring health inequalities, the implementation of a system for monitoring inequalities in reproductive health has been chosen as a specific action. The choice is due both to the advantage of having as an affiliated institution the National Institute for Maternal and Child Health which coordinates the implementation of the National Maternal and Child Health Programme and could introduce in this programme a set of indicators for monitoring reproductive health inequalities, indicators which could be collected periodically, as well as for reasons related to available resources. During the implementation of the project, the system for monitoring inequalities in the field of

reproductive health was developed and the steps for its introduction in the National Maternal and Child Health Programme have been initiated by amending the government decision regulating the national health programmes. If the system is effective, it will be a model to be replicated in other health sectors or even across the entire health system.

WP9 - Another type of action to stimulate the development of health policies at national level was the long-term impact evaluation of a project implemented by NSPHMPDB between 2009-2012 in ten counties in central and western Romania and, in the event of a positive impact, the presentation of the report to the decision-makers, in order to support replication of the project in other counties as well. The project envisaged the establishment of 24 community centres whose medical and social services will contribute to improving the health of the population and reducing health inequities. The evaluation report has been prepared and is going to be submitted to the Ministry of Health.

WP6 - The action identified in this working package consisted in providing a physical education programme for young people in Bucharest, from 6 to 18 years of age, named “Upgrowth and health through sport”, by the Bucharest City Hall through Bucharest Sport for All Company. Due to the pandemic, the programme, which involved the physical presence of children in training, was temporarily stopped and replaced with the distribution to the children enrolled in the programme of a training kit containing, materials specific to the practice of a sport, a voucher for an individual training with personal trainer and 12 online training sessions. NSPHMPDB contributed to the development of information materials on healthy living, materials focused on the importance of a healthy diet and the importance of practicing sport, materials distributed to the children enrolled in the programme. NSPHMPDB contacted several public and private institutions serving children with a precarious financial situation and special needs, with the purpose to attract and enrol these children into the programme. By the end of the project, 60 children with disabilities had been enrolled in the programme.



WP8 – The action implemented in this working package on improving access to health and related social services, which also benefited from the collaboration with the National Institute for Maternal and Child Health, consisted in increasing the access of children from disadvantaged families who are not breastfed to medical and social services. Following the activities of informing the members of the communities included in the programme, of the identification of the target group benefiting from the milk formula and of training the medical and social staff at Community level on the role and professional interventions needed to facilitate the access of these children to the programme, by the time of the project closing conference, 2,500 children from disadvantaged backgrounds had been included in the programme. The programme will continue after the end of JAHEE project.

***“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, and own sources.

Project duration: 4 years (2018-2022).

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

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

The aim of the action is to encourage researchers and other stakeholders to use the concept of Evidence-Based Research in conducting or supporting clinical research - thus avoiding redundant research.

The specific objectives of the research coordination:

- Increasing the awareness and acceptance of these challenges by all relevant stakeholders;
- Developing training materials for Evidence-Based Research (EBR);
- Partnership between stakeholders to increase updating and systematic reviews efficiency;
- Creating a common vision on the EBR evaluation and implementation.

The specific objectives for capacity development:

- Identifying the significance of EBR approach for each stakeholder;
- Training researchers in using EBR;
- Describing systematic reviews processes and technologies that need further improvements;
- Establishing a common understanding on how to monitor EBR use in clinical research.

Working package structure:

WP 1. Dissemination and implementation;

WP 2. Development and teaching of methods to be evidenced-based when doing clinical research;

WP 3. Improving efficiency in producing and updating systematic reviews;

WP 4. Meta-research on EBR implementation.

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 advisory material for conferences and developing an online training manual 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 implementing these methods.

Activities carried out in 2021 to which NSPHMPDB has participated:

Within the WP2, respectively the training component of the project, NSPHMPDB participated in the development and delivery of the Evidence-Based Research training programme for young researchers. The programme was designed in two parts: basic training (modules 1-4), which took place in 2020 on the Moodle platform and advanced training (modules 5-14) that was planned with physical presence. As a result of the Covid-19 pandemic, the second part of the programme also took place online, on the Zoom and Moodle platforms, the latter made available by the Comenius University School of Medicine in Bratislava, Slovakia.

During January – March 2021, the course materials, the procedures regarding the registration of

the participants, course

evaluation and other technical

issues were completed, and

three training programmes

took place in April, May and

September.

NSPHMPDB

participated in

evbres  
Evidence-Based Research

The project is supported by

cost  
EUROPEAN COOPERATION  
IN SCIENCE & TECHNOLOGY

Funded by the Horizon 2020 Framework Programme  
of the European Union

EBR training school - Module 6

Steps to take before conducting a  
new study

Steps to take when the new results  
are achieved

Hrund Thorsteinsson, RN, PhD  
Silvia Gabriela Scintee, MD, MSc, PhD  
Raluca Sfetcu, MA, PhD

the teaching process by giving a presentation on the topic *The steps to take when the new results are achieved* delivered in Module 6. Evidence-based research process, coordinated together with the Nursing Faculty of the University of Iceland.

Within the WP 3, NSPHMPDB participated in the following research activities:

1. Carrying out a scoping review on the most resource consuming steps of performing a systematic review. Following the completion of the review, the article *Resource use during systematic review production varies widely: a scoping review* was developed and published (see Annex no. 1). The article inspired the writing of a letter to the publisher (Letter to the editor regarding ‘Resource use during systematic review production varies widely: a scoping review; <https://doi.org/10.1016/j.jclinepi.2021.10.008>) to which some of the authors of the article responded. In addition, the results were presented at two online scientific events: workshop organized by International Centre for Advance Studies and Research, (ICASR) and EBR conference (see Annex no. 2).

2. Carrying out a scoping review on the tools and methods that have the potential to streamline the process of achieving a systematic review. In 2021, the publications identified as potentially relevant by title and abstract were evaluated and the data from the studies included in the review were extracted. Preliminary results were presented at the two scientific events mentioned above, through two communications: *Improving Efficiency of Systematic Review Production* (ICSAR workshop) and *Improving efficiency of systematic reviews production through an exploration of available methods and tools – a scoping review* (EBR conference) (see Annex no. 2).

3. Conducting a qualitative study (30 interviews) that investigates the reasons why researchers consider certain steps to be more resource-intensive than other steps. In 2021, the interviews were completed, transcribed and coded. Preliminary results were also presented during the workshop ICASR (*Tools Systematic Reviewers Use and the Tools They Need; Selective Results from the EVBRES WG3 Qualitative Study*) and EBR conference (*Why systematic review production and update processes are resource-intensive: results from a qualitative study*) (see Annex no. 2).

4. Carrying out a Delphi-type study in order to establish the priority of the stages in the systematic review process for which investments are needed in order to develop methodologies and tools useful in increasing their efficiency. In 2021, the survey was piloted for the first stage, a database was organized with potential participants (i.e. experts who were involved in at least 3 systematic reviews).



NSPHMPDB was also involved in organizing the second EBR Conference “*The place of Evidence-Based Research in the Evidence Ecosystem*”, between 27-28 September 2021, by nominalization

of Ms. Raluca Sfetcu as Chairman of the Scientific Committee for this event. This role involved, among other things, organizing and moderating meetings of



## Welcome Address



the Scientific Committee, inviting keynote speakers, and organizing the registration, review, and selection of presentations included in the conference agenda.

Starting with November 2021, Mrs. Raluca Sfetcu took over the coordination of the WP3, being included in the Core Group responsible for the management of the EVBRES action.

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

Financing source: European Cooperation Programme for Science and Technology COST JA 2018-2022 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 (The Foundation for the Promotion of Health and Biomedical Research of Valencia Region).

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

The purpose of this action is to facilitate discussions and share scientific knowledge, perspectives and best practices on adverse events in medical institutions, to implement joint efforts to support secondary victims and to introduce an open dialogue between stakeholders on the consequences of the secondary victim phenomenon, based on a transnational 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 secondary victim phenomenon and developing a common understanding of its definition;
- Raising general awareness of the impact of adverse events 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 secondary victims;
- 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 adverse events, 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 secondary victim phenomenon by promoting a debate in healthcare to learn from other industries.

Specific objectives on capacity development:

- Creating a debate to promote a culture of transparency and legal certainty as a contribution to promoting the well-being of first-class healthcare staff, as part of the commitment to ensure quality;
- Combine management, social, legal, educational, and clinical expertise to further development of the theoretical conceptualization of the second victim;
- Providing a platform for the development of a research and implementation agenda involving stakeholders in the field of health care, to promote effective solutions and facilitate discussions on legal, ethical, social, and organizational issues;
- Creating a network for the integration of disparate initiatives, for identifying more effective measures, to promote knowledge exchange and disseminating research results;
- Encourage the development of support proposals for the second victims.

Working group structure:

WG1 - Network promotion

WG2 - Review and description of the current situation

WG3 - Implementation

WG4 - Facilitators and impediments

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.

NSPHMPDB participates to the WG2. Review and description of the current situation in the activity of scientific documentation and elaboration of the two systematic reviews: "*Systematic review of interventions in other sectors*" and "*Review of interventions that have been shown to be effective in supporting secondary victims*".

The partial results obtained in the WG2, as well as the results of the other groups, were presented and discussed in the following meetings:

- meetings of the action management committee;
- Core Groups meetings;
- the two international conferences - ERNST International Forum.

The activity of this action was disseminated and benefited from the collection of information in other events as well or scientific events, for example the launch event of the report "Patient safety in the medical care" of the Romanian Health Observatory or conferences / debates on patient safety organized by National Authority for Quality Management in Health.



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

Financing source: European Commission, Erasmus+ Programmeme, KA2: Cooperation for innovation and exchange of good practices, KA203: Strategic partnership for higher education

Project duration: 30 months (December 1<sup>st</sup>, 2020- May 21<sup>st</sup>, 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.

Project website: <https://bendit-eu.eu/>

The aim of the project is to develop a comprehensive set of resources to address the issue of burnout in health and allied universities (e.g., nursing, psychology, social care, etc.), at three distinct levels: organizational, collective, and individual, as well as the development of general information for the use of all stakeholders.

The strategic objectives of BENDIt-EU are:

- Raise awareness on academic burnout by providing on a wide range of up-to-date, evidence-based information for the most effective identification, prevention, and effective intervention on academic burnout;
- Improving the well-being of medical and allied health students who are at risk of developing burnout or suffer from mild, moderate and severe forms of burnout;
- Improving the skills of staff working in university support services who directly address or refer to cases of academic burnout;
- Providing recommendations to academic management for developing normatives and regulations designed to address and prevent academic burnout.

Expected results:

- A burnout manual - pocket edition with state-of-the-art information on identification, prevention, and the most effective interventions for managing academic burnout;
- Burnout web platform - a digital tool for the self-assessment of burnout and self-help for students (based on the manual) that will give students the opportunity to self-assess their burnout and based on their results, receive advice and suggestions for additional 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 university support services; the course will be an addition to the online web application and consists of a five-day, face-to-face programme based on experiential learning for students and a short training programme 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 recommendations that medical and health allied universities could apply, to reduce academic burnout in students.

In 2021, NSPHMPDB coordinated, together with the Carol Davila University of Medicine and Pharmacy, Bucharest, the elaboration of the pocket manual for burnout management. The handbook provides essential information about burnout, such as its

identification and prevention, as well as effective interventions in burnout management, especially burnout in an academic context. It is structured in three chapters, NSPHMPDB being responsible for the elaboration of the third chapter. The structure of the chapters is presented below.

The first chapter - "Burnout Diagnosis" - provides information on how to identify and diagnose burnout, including definitions, evolution, burnout alarms, the consequences of burnout on mental health and well-being, a list of which most common burnout self-assessment tools, as well as a list of risk and protective factors.

The second chapter - "Prevention of burnout" - describes the main ways in which its occurrence can be prevented, both individually and organizationally. Individual prevention methods focus on strategies to reduce stress and increase individual recharging capacity, while organizational prevention is found, for example, in peer support groups, career counselling and guidance centres, but and in legislation and various protection regulations.

The third chapter - "Burnout Interventions" - presents a set of effective activities to alleviate the symptoms of burnout, such as those that focus on health and fitness, relaxation strategies, self-knowledge activities, the development of coping skills. problems and situations, but also on solutions for seeking social support. In addition, this chapter discusses examples of academic context-specific interventions offered by universities in the prevention of burnout.

The manual is available at: <https://bendit-eu.eu/resource/Burnout-Manual-online.pdf>

***"Development of a European training certification for the management of the quality of care and health risks" / "Création d'une certification de formation européenne pour la gestion de la qualité des soins et des risques en santé"***  
(SANTÉ+)

Financing source: European Commission, Erasmus+ Programmeme, KA2: Cooperation for innovation and exchange of good practices, KA203: Strategic partnership in education and professional training.

Project duration: 24 months (December 15<sup>th</sup>, 2020 - December 14<sup>th</sup>, 2022)



The project is carried out by a consortium of 10 partners from 3 countries (National Authority for Quality Management in Health; NSPHMPDB; Partner Association Initiative Group for Local Development; "Iuliu Hațieganu" University of Medicine and Pharmacy Cluj-Napoca; Cluj County Emergency Clinical Hospital; Université Côte d'Azur, Nice; Centre Hospitalier Universitaire de Nice, Franța; University of West Attica (Panepistimio Dytikis Attikis); Kek Euroergasiaki SA and Dimos Athinaion, Greece) and is coordinated by the National Authority for Quality Management in Health.

The aim of the SANTE + project is to support a deep change in professional practices by developing and implementing a continuous training system, transversal to the professions in the medical sector, aimed at managing the quality of healthcare and risks. The training programme will be certified at European level, creating a new qualification in the medical sector, respectively in the field of quality management of health services and the risks associated with them, which would facilitate occupational mobility in the European Union.

Specific objectives:

1. Developing and implementing a continuous training system, transversal to the professions in the medical sector, aimed at managing the quality of healthcare and the health risks;
2. Training of 45 trainers and 150 medical staff.

Project activities:

- A.1 Analysis of the care processes within the health institutions, identification and classification of training needs on types of skills, and establishment of a list of training modules to be developed;
- A.2 Elaboration, in each partner country, of a detailed descriptive fiche for each module and presentation in tabular form;
- A.3 Development of the necessary educational resources for each of the modules, of which at least 25% in open (optional) and distance learning;
- A.4 Establishing a committee – Boarding Committee No. 2 for the validation of the modular system and educational resources and the preparation of the intermediate report;
- A.5 Development of a list of reference activities and competencies and a certification reference system for healthcare quality management. The work will be coordinated to achieve a common European curriculum and in line with the European Qualifications Framework (EQF);
- A.6 Development of the two references through a competency-based approach and respecting the EQF. In each country, professional and training organizations will be mobilized for the activity reference system as well as for the certification system;
- A.7 Formalizing the structure of a short-term distance training programme in the quality management of healthcare based on national definitions, methodologies and tools existing in each of the partner countries to achieve a common European structure and in accordance with the EQF;

- A.8 Development of a short-term basic training system and development of a correlation table with levels 5, 6 and 7 certifications (EQF) existing in each country using grids and methodologies validated by a competency-based approach in accordance with the EQF and the Bologna Process;
- A.9 Delivery of an experimental training programme for 200 students and development of a set of recommendations (at least 50 trainees will be trained in the training centres of the project partners or in the training centres that are members of the national support groups). The training will focus on one or more of the modules created, the choice of training modules will be the result of the choice of students and institutions and the available institutional funding;
- A.10 Organizing a seminar to disseminate the results in each of the partner countries as an amplification of the dissemination that will continue until the end of the project followed by a one-day seminar in each partner country addressed to all potential users of the project results (professionals concerned with the quality management of healthcare, social partners, representatives of central and local authorities, training centres in the medical and medico-social sector, etc.).

Expected results:

- Strengthen the development of national partnerships between different actors:
  - Medical institutions that want and need to improve the quality of services provided by the qualification of their staff;
  - Social partners supporting the employment of medical staff;
- New certification, developed in line with national and European standards, which will facilitate the recognition of competences at European level and allow for flexible and secure courses;
- 45 trainers will be trained in the implementation of the new training offer;
- 150 people from the medical staff will benefit from this training.

In 2021, documentation activities were carried out and was initiated the development of the modular system of continuous training (FTLV - *Formation Tout au Long de la Vie*) transversal basis for the medical professions in the field of quality management of care and health risks (GQSRS - *gestion de la qualité des soins et des risques en santé*). Respectively:

- analysis of the competencies needed by health professionals to overcome the challenges in the field of quality-of-care management and health risks (GQSRS) in Romania and the classification of these requirements / competencies;
- elaboration of an inventory of the existing trainings in Romania;
- establishing partnerships with training bodies and actors in the Romanian medical sector;
- developing a needs and skills assessment in the field of quality management and health risks (GQSRS);
- elaboration of a list of training modules to cover, in addition to the existing ones, the training needs for Romania;

- elaboration of a common model of presentation grid of each existing module in Romania;
- validation of the training needs classification, of the list of the corresponding training modules and of the presentation grid model of each module for Romania;
- developing proposals to adapt the training needs classification, the list of corresponding training modules and the presentation grid model;
- writing the training and configuration content of a modular device in matrix form, superimposing the activities and levels of intervention in the medical field over the existing training areas in Romania with reference to the management of the quality of care and health risks (GQSRS).

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

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

Project duration: 3 years (2019-2022)

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

The goal of this project is to improve the quality and efficiency of the public services provided within Romanian healthcare system, by supporting the sectorial decentralization process, promoting public integrity and accountability in spending public funds.

Specific objectives:

- Increasing capacity of decentralized health institutions to 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 implementation of the 2008-2010 National Anti-corruption Strategy coordination mechanisms, and the further anti-corruption strategic documents;
- Limiting misappropriation of health system funds through public procurement procedures and contracting fraud, the misappropriation of property goods and associated corruption;
- Strengthening cooperation between the institutions involved in developing, implementing, and controlling decentralization health policies.

Project activities:

- A.1. Project Management.



- A.2. Information and promotion.
- A.3. Hospital mapping cost and data collecting.
- A.4. Developing a hospital software for cost data collecting and processing.
- A.5. Collecting and processing cost data from pilot hospitals.
- A.6. Developing hospital cost calculation methodology and defining costing elements.
- A.7. Implementing the cost calculation methodology in 50 pilot hospitals.
- A.8. Calculating relative values for the hospital cases discharged from pilot hospitals.
- A.9. Elaborating the methodology for updating the DRG grouping system for continuous hospital care cases.
- A.10. Setting cost standards for the first 20 most frequent pathologies discharged from hospitals.
- A.11. Elaborating the methodology for implementation of the International Classification of Diseases system – version ICD 11.
- A.12. Corelating the International Classification of Diseases – version ICD 11 system, with the RO\_DRG system.
- A.13. Elaborating the course curriculum and the technical specifications for the Hospital Quality Management Services manual.
- A.14. Writing the Hospital Quality Management Services manual.
- A.15. Periodical interinstitutional consultations in the development process of the manual.
- A.16. Publishing the manual and disseminating results.
- A.17. Organizing the drafting process of the Normative Code on Health Quality Management Services.
- A.18. Developing the Normative Code on Health Quality Management Services.
- A.19. Normative Code on Health Quality Management Services approval and publishing.
- A.20. Training of 150 persons.

Expected results:

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

In 2021 several activities were completed that led to the following results:

- Procurement of software development services and development of the software for data collection and processing; testing the software at NSPHMPDB level and in two

pilot hospitals and adapting the software accordingly; installing the software in pilot hospitals; as a result of the pandemic situation which imposed restrictions on human interaction and hospital visits, the software was web-based, so the installing consisted in the transmission of the login passwords and the verification of the hospitals capacity to connect to the software (A.4);

- Development of the unitary methodology for calculating hospital costs at patient level (A.6);
- Training of staff in pilot hospitals to use the software (A.7);
- Completing the translation into Romanian of the ICD-11 classification and coding standards; mapping of ICD-10 with ICD-11 (A.11);
- Carrying out a study on the need for training in hospital services quality management and the development of the curriculum and technical specifications for the hospital services quality management manual (A.13).

As part of the activities that continue in 2022, the following have been achieved:

- Writing and revising the hospital management manual (A.14 and A.15);
- Identifying the normative acts necessary to be modified in the process of elaborating the Normative Code regarding the quality management of health services (A.18);
- Development of course materials, series planning and support of the first three series of training programmes on the topics: data collection and coding of inpatient cases; collecting cost data and calculating the costs of hospital services; quality management of hospital services (A.20).

Also, in order to disseminate the activities and results obtained within the project:

- 291 sets of promotional materials were distributed to: 64 pilot hospitals, 42 district public health authorities, 42 district health insurance houses, the Ministry of Health, the National Health Insurance House and to the National Authority for Quality Management in Health;
- four NSPHMPDB team members (Adina Geană, Simona Muşat, Cristina



Lupan and Constanța Mihaescu-Pinția) delivered oral presentations at the meeting with private hospitals organized by the Ministry of Health, to raise awareness on the project and attract as many private hospitals as possible in the costing exercise;

- the paper with the title” *The components of the CaPeSSCoSt project and the changes generated in the reporting and payment system*” was presented at the National Conference on Pharmacoeconomics and Health Management (see Annex no. 2).

### **Research activities within research partnerships and networks**

Within NSPHMPDB operates the National Centre for Evidence-Based Public Health - a centre affiliated with the network coordinated by the Joanna Briggs Institute (JBI) (<https://jbi.global/global-reach/collaboration>). JBI is a research institution of the Faculty of Medical Sciences, University of Adelaide, South Australia, which has set up an international cooperation network with more than 75 institutions from 40 countries, to promote and support the synthesis, transfer and use of scientific evidence by identifying feasible, appropriate, meaningful and effective practices that contribute to the improvement of global healthcare. At the same time, the Joanna Briggs Institute provides training programmes in the field of evidence-based medicine through a group of experts with specific training in the field.

The collaboration with JBI during 2021 resulted in the revision of five systematic reviews/systematic review protocols, the presentation of two scientific papers at the conference *Engaging Evidence 2021: Evolving approaches* organized by JBI in collaboration with Cochrane, GRADE (Grading of Recommendations Assessment, Development and Evaluation) and GIN (Guidelines International Network) networks (see Annex no.2) and publication of an article (*Teams for sustainability of evidence implementation*) in an ISI-listed journal (see Annex no. 1).

Given the interest of many collaborators in the health system response capacity to the COVID-19 pandemic and its effects on the health of the population, as well as health services, research activities have been carried out in this field, at the request or in collaboration with various partner institutions.

Within the collaboration with *European Observatory for Health Systems and Policies*, NSPHMPDB contributed with information to a dedicated web platform that monitored the health systems responses to the pandemic crisis and used the collected information for comparative studies and analyses - *COVID-19 Health System Response Monitor* (HSRM) (<https://eurohealthobservatory.who.int/monitors/hsrcm/overview>). NSPHMPDB participated in the preparation of a report in the series Policy Brief of the European Observatory for Health Systems and Policies on *Use of digital health tools in Europe: before, during and*



after COVID-19”. Policy Brief 42 and to the publication of an article on the financial adjustments that were made to pay health care providers in the pandemic (*Balancing financial incentives during COVID-19: a comparison of provider payment adjustments across 20 countries*) (see Annex no. 1). Other issues are under research (e.g. comparing the response of health systems in Bulgaria, Croatia, and Romania to the COVID-19 pandemic; the role of the family doctor in the pandemic; mental health services, etc) and the results are going to be published.

NSPHMPDB studies and analyses on hospital morbidity and mortality in the context of the COVID-19 pandemic, attracted the interest of the Academy of Medical Sciences, which organized a conference entitled The first year of the COVID\_19 pandemic. Scientific evidence. Own experiences. (see Annex no. 2).

## Development of the DRG\_National database

NSPHMPDB, through the Centre of Health Services Research and Evaluation (CHSRE), manages the DRG\_National database. Based on the contract concluded with the National Health Insurance House (NHIH), all hospitals in Romania that have a contractual relationship with NHIH transmit monthly to CHSRE data on clinical activity, which are subsequently validated and patients are classified into diagnostic groups. The data are used for studies and analyses requested by NHIH in order to improve the financing and to increase the performance of hospitals, for analyses and studies to document the decision-making at the level of the Ministry of Health or other decision-makers (see section Consulting and technical assistance activities), as well as for studies and research of own interest of NSPHMPDB or at the request of various partners.

The screenshot displays the NSPHMPDB website interface. At the top left is the logo and name: "SNSPMPDSB CENTRUL DE CERCETARE SI EVALUARE A SERVICIILOR DE SANATATE". The main content area features a large "dr g" logo and a navigation menu with links such as "Raport anual acreditarea spitalelor", "Legislatie", "Informatiile spitale noi", "Indicatori realizati de spitalele rambursate prin tarif pe caz rezolvat in anul 2012", "Despre noi", "Despre noi", "Activitate desfasurata in cadrul centrului", and "2007-2013 SNSPMPDSB". A sidebar on the left contains "Noutati" (News) with dates like "31 ianuarie 2022" and "28 ianuarie 2022". A sidebar on the right contains "Sistemi colaboratori" and "Sistemi colaboratori". At the bottom, there is contact information for the "Societatea Nationala de Sanatate Publica, Management si Perfectionare in Domeniul Sanitar".

In 2021, the DRG\_National database was used to develop five scientific papers that were published in the own journal of NSPHMPDB, for three other articles published in other journals and for evidencing a scientific oral presentation (see Annex no. 1):

- Descriptive study on the situation of malnutrition hospitalization episodes in Romania in the last decade;
- Descriptive study regarding obesity hospitalization episodes in Romania, in the last decade;

- Study on the role of unitary recording of cost data in decision making in the Romanian health system;
- Descriptive study on the situation of vitamin deficiency hospitalization episodes, in Romania, in the last decade;
- Analysis of hospitalizations by osteoporosis in Romania, in the period 2008-2020;
- Retrospective analysis and time series forecasting with automated machine learning of ascariasis, enterobiasis and cystic echinococcosis in Romania;
- The Use of Minimal Invasive Surgery versus Open Approach in Hospitalized Cases. A Study Analysis of the DRG Romanian Database 2008-2018;
- Colorectal Cancer Trends of 2018 in Romania-an Important Geographical Variation Between Northern and Southern Lands and High Mortality Versus European Averages;
- Comparative analysis of hospitalizations and deaths in the pre-pandemic (2018-2019) and pandemic (2020) period.

The DRG database is also used to perform analyses requested by third parties under service contracts or collaboration agreements. In 2021, the following studies and analyses were performed:

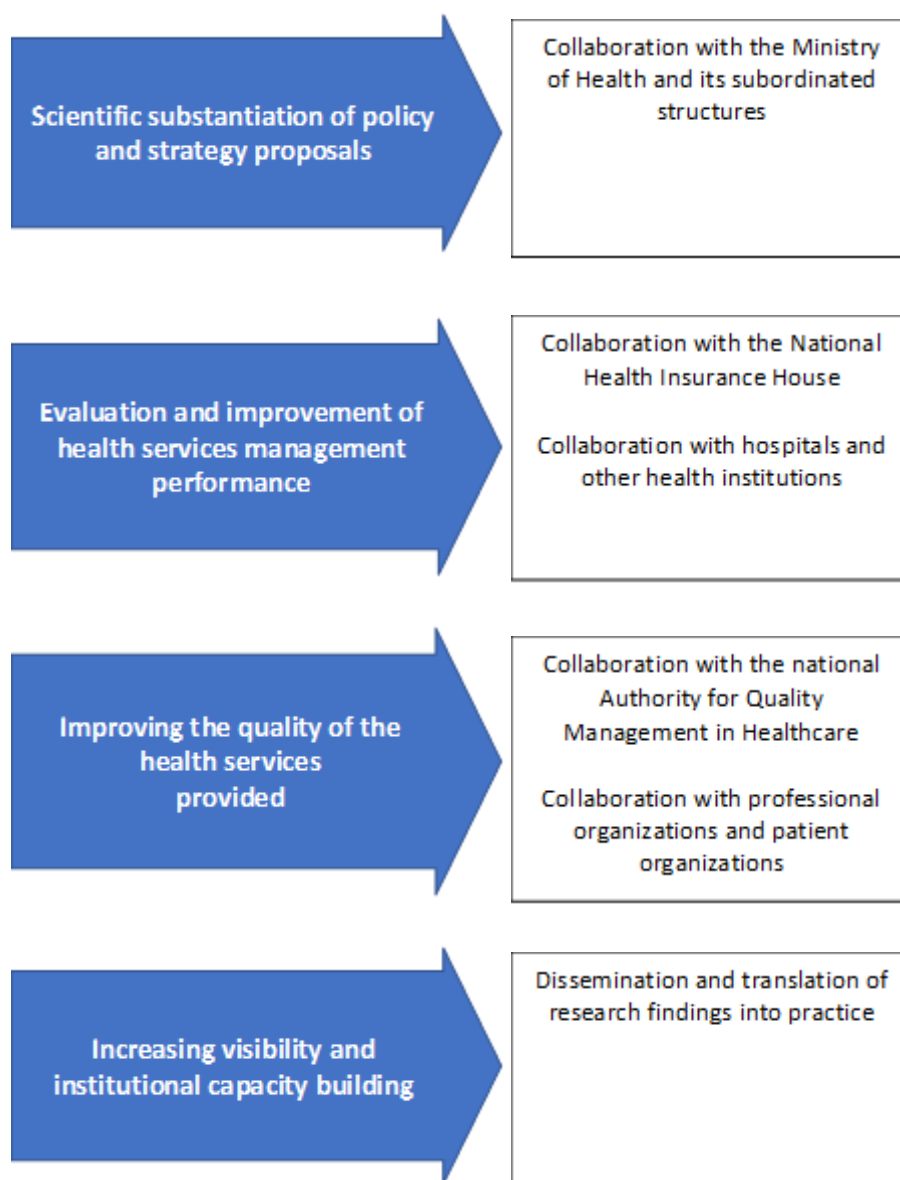
- Analysis of cases with diabetic neuropathy and other types of neuropathies reported in the period 2010-2019 (for the Romanian Society of Neuropathy);
- Analysis of cases with amputation in people with diabetes in the period 2010-2014, cases with amputation for malignant tumours in the period 2010-2019, cases with traumatic amputations in the period 2010-2019 and cases of amputations in people with arteriosclerosis / embolism / thrombosis reported in the period 2010-2019 (Romanian Society of Neuropathy);
- Analysis on the situation of hospitalized premature babies with a diagnosis of respiratory infection and the value of hospitalization reimbursement in premature babies, by degrees of prematurity (Astra Zeneca);
- Analysis of surgical procedures at the hospital level, for 2019 (Johnson & Johnson);
- Analysis on the indicators of use of hospital services by hospitalized patients in continuous and day hospitalization, with documented atherosclerotic cardiovascular disease, for 2019, at national level (Novartis);
- Analysis of hospitalizations of children and pregnant women, in the period 2011-2020 in support of measuring the impact of the COVID-19 pandemic (WHO Romania office);
- Analysis on the indicators of use of hospital services by patients admitted in continuous and day hospitalization, with heart failure, for the period 2015-2019, at national level (Novartis);
- Analysis of indicators for the use of hospital services in 2019, by hospital and ward (Babeş-Bolyai University);
- Analysis of the use of hospital services for children in 2019, by hospital and ward (Babeş-Bolyai University).

The results of research and studies conducted by NSPHMPDB in 2021 were disseminated through 24 scientific articles, out of which 16 were published in ISI-listed journals (*International Scientific Indexing*) (see Annex no. 1) and 18 active participations (presentations, discussion of papers, moderation, contribution of round tables, etc.) to international and national conferences (see Annex no. 2).

Monitoring the dissemination of research on the Research Gate platform shows an increase in the Research Gate score for NSPHMPDB from 189.84 in 2020 to 214.04 in 2021, and the number of publications registered on this platform has increased from 188 to 201.

## Consultancy and technical assistance activities

The consultancy and technical assistance activity carried out within the NSPHMPDB in 2021 reached the general objectives corresponding to this area established for each of the four directions of action of the NSPHMPDB development strategy for the period 2021-2025, respectively:



## **Technical assistance for the Ministry of Health**

NSPHMPDB supported the Ministry of Health in decision making, through available expertise or through the findings of various studies and analyses. In addition to the technical materials submitted to the Ministry of Health and the development or revision of various documents, in 2021, NSPHMPDB participated in lucrative meetings or sessions of various technical working groups, including:

- Participation in the meeting organized by the Ministry of Health for the development of the Implementation and Monitoring Plan of the Strategy for Sexuality and Reproductive Health 2021-2024;
- Calculation of management indicators that evaluate the managers of the hospitals subordinated to the Ministry of Health;
- Participation in the working group for the development of the methodology regarding health technology assessment, organized at the level of the Ministry of Health, at the request of ANMDM;
- Participation in the technical working meeting organized by the Ministry of Health, to identify financing solutions for COVID-19 cases treated in hospitals;
- Participation in the working group, organized at the level of the Ministry of Health, for the analysis of the “Reform Strategy” of the medical services in the view of operationalizing the regional emergency hospitals Iași, Cluj and Craiova;
- Participation in the technical working group organized at the level of the Ministry of Health, for updating the regional master plans;
- Participation in the technical working group nominated by the Minister of Health Order no. 1665/25.08.2021 constituted within the subcomponent 2.2 "Improving and supporting the implementation of the health technology assessment" from Part B "Improving the administration and governance of the health sector" of the Project on Health Sector Reform - Improving the quality and efficiency of the health system - Loan no. 8362RO;
- Participating in the monitoring and evaluation of the implementation of the National Health Strategy 2014-2020;
- Participation in the Permanent Working Group of the National Commission for the Supervision of the Health Information System and for Reporting to the O.E.C.D;
- Participation in the consultation of the Draft “Strategic Research and Innovation Agenda” of the “Transforming health and care systems” European Candidate Partnership;
- Participation, by nomination by Ministerial Order of Prof. Dr. Cristian Vlădescu, as Chairman of the Commission for Clinical and Epidemiological Management of COVID-19.

Other requests from the Ministry of Health for information and analyses to support the decision making regarded: abortions on request (procedures performed); hospital classification and management indicators; monthly analysis of COVID-19 inpatient cases for 2020 and 2021; analysis on the situation of hospitalized burn patients in the period 2018-2020; analysis on abortion procedures in the period 2018-2021; analysis of hospitalizations due to autism



spectrum disorders in the period 2018-2020 and January 2021; the situation of the chronically ill during the current COVID-19 pandemic; the situation of deaths through COVID-19; the situation of dialysis patients diagnosed with COVID-19.

### **The activity performed within the service contract concluded with CNAS**

In 2021, three analyses and six reports on the issues with a potential impact on reimbursement of hospital services were conducted on a quarterly basis, as follows:

- Analysis “Top 50 hospitals that had the highest proportion of expensive DRG groups out of all reported and validated discharges”;
- Analysis of reporting and coding errors that signal problems with impact on reimbursement;
- Analysis of the first 10 surgical procedures that generate the largest differences in the classification of cases, in terms of weighted cases;
- Report on the proportion of patients with the admission criterion of "emergency", by hospitals and wards;
- Report on the 20 most common types of cases and services reported in day hospitalization;
- Report on the ICM realized by hospitals, compared to the value published in the Norms for the application of the Framework Contract;
- Report on the variation of the complexity index realized by each word of the hospitals, compared to the national average calculated for the respective specialty;
- Report on the evolution of cases readmitted at 48 hours for the same pathology, in the same type of care;
- Report on medical procedures and laboratory tests performed in day hospitalization, by type of service.

Based on the 12 quarterly analyses on the issues with potential impact on reimbursement of hospital services and the 9 contracts for analysis concluded with various partners, several proposals for increasing the performance of health care providers were sent to the National Health Insurance House. On a quarterly basis, some indicators for evaluating the activity of hospitals were calculated and were posted on the website [www.drg.ro](http://www.drg.ro) to support the hospitals in the self-evaluation process.

Activities have also been carried out to improve the system for collecting and reporting DRG data; the changes required by the legislative additions and updates have been integrated in the DRG\_National data collection software and in the data import and processing softwares; technical assistance and methodological support were provided to an average of 125 hospitals per month, by telephone (average 100 calls / month), and e-mail (average 25 / month).

### **Other consultancy and/or technical assistance activities**

Within the collaboration agreement with the National Institute of Statistics, NSPHMPDB supported this institution in 2021 with the necessary data and analyses to fill in:

- OECD/EUROSTAT/WHO Questionnaire on Non-Monetary Health Statistics;
- Reports needed for the “2021 Hospitals Purchasing Power Parity (PPP) Survey” within the Eurostat-OECD PPP Programme.

At the request of National Authority for Quality Management in Health, analyses were performed in order to complete the OECD Questionnaire - Health Care Quality and Outcomes (HCQO), 2019-2021 Data Collection, and at the request of the Romanian Society of Cardiology, assistance was provided for the elaboration of the European Atlas of Cardiology.

## Annex no. 1

### 2021 Publications List

No.	Paper title	Authors	Journal	Impact factor ISI/SSCI	Other CNCISIS / IDB
1	Previous disorders and depression outcomes in individuals with 12-month major depressive disorder in the World Mental Health surveys	Roest, A.M., de Vries, Y.A., Al-Hamzawi, A., Alonso, J., Ayinde, O., Bruffaerts, R., Bunting, B., Caldas-de-Almeida, J.M., de Girolamo, G., Degenhardt, L., <b>Florescu, S.</b> , Gureje, O., Haro, J.M., Hu, C.Y., Karam, E.G., Kiejna, A., Kovess-Masfety, V., Lee, S., McGrath, J.J., Medina-Mora, M.E., Navarro-Mateu, F., Nishi, D., Piazza, M., Posada-Villa, J., Scott, K.M., Stagnaro, J.C., Stein, D.J., Torres, Y., Viana, M.C., Zarkov, Z., Kessler, R.C., de Jonge, P., on behalf of the WHO World Mental Health Survey collab.	<i>Epidemiol Psychiatr Sci.</i> 2021 Nov 11;30:e70. doi: 10.1017/S2045796021000573. <a href="https://pubmed.ncbi.nlm.nih.gov/34761736/">https://pubmed.ncbi.nlm.nih.gov/34761736/</a>	5.876	
2	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., <b>Florescu, S.</b> , 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> , Volume 51, Issue 12, September 2021, pp. 2104 - 2116 DOI: <a href="https://doi.org/10.1017/S0033291720000884">https://doi.org/10.1017/S0033291720000884</a>	5.813	
3	Antidepressant Use in Low- Middle- and High-Income Countries: A World Mental Health Surveys Report.	Kazdin, A.E., Wu, C.S., Hwang, I., Puac-Polanco, V., Sampson, N.A., Al-Hamzawi, A., Alonso, J., Andrade, L.H., Benjet, C., Caldas-de-Almeida, J.M., de Girolamo, G., de Jonge, P., <b>Florescu, S.</b> , Gureje, O., Haro, J.M., Harris, M.G., Karam, E.G., Karam, G., Kovess-Masfety, V., Lee, S., McGrath, J.J., Navarro-Mateu, F., Nishi, D., Oladeji, B.D., Posada-Villa, J., Stein, D.J., Üstün, T.B., Vigo, D.V., Zarkov, Z., Zaslavsky, A.M., Kessler, R.C., and the WHO World Mental Health Survey collab.	<i>Psychological Medicine</i> . Published online by Cambridge University Press: 23 September 2021 DOI: <a href="https://doi.org/10.1017/S0033291721003160">https://doi.org/10.1017/S0033291721003160</a>	5.813	
4	Resource use during systematic review production varies	B. Nussbaumer-Streit, M. Ellen, I. Klerings, <b>R. Sfetcu</b> , N. Riva, M. Mahmić-Kaknjo, G. Poulentzas, P. Martinez, E. Baladia, L.E.	<i>J Clin Epidemiol.</i> 2021 Nov;139:287-296.	4.952	

	widely: a scoping review	Ziganshina, M.E. Marqués, L. Aguilar, A.P. Kassianos, G. Frampton, A.G. Silva, L. Affengruber, R. Spjker, J. Thomas, R.C. Berg, Meropi Kontogianni, M. Sousa, C. Kontogiorgis, G. Gartlehner on behalf of working group 3 in the EVBRES COST Action ( <a href="https://evbres.eu">https://evbres.eu</a> )	doi: 10.1016/j.jclinepi.2021.05.019. Epub 2021 Jun 4. <a href="https://pubmed.ncbi.nlm.nih.gov/34091021/">https://pubmed.ncbi.nlm.nih.gov/34091021/</a>		
5	Perceived helpfulness of treatment for specific phobia: findings from the World Mental Health Surveys.	de Vries, Y.A., Harris, M.G., Vigo, D., Chiu, W.T., Sampson, N.A., Al-Hamzawi, A., Alonso, J., Andrade, L.H., Benjet, C., Bruffaerts, R., Bunting, B., Caldas-de-Almeida, J.M., de Girolamo, G., <b>Florescu, S.</b> , Gureje, O., Haro, J.M., Hu, C.Y., Karam, E.G., Kawakami, N., Kovess-Masfety, V., Lee, S., Moskalewicz, J., Navarro-Mateu, F., Ojagbemi, A., Posada-Villa, J., Scott, K., Torres, Y., Zarkov, Z., Nierenberg, A., Kessler, R.C., de Jonge, P., and on behalf of the WHO World Mental Health Survey collaborators.	<i>Journal of Affective Disorders</i> , 2021 Jun 1; 288:199-209. PubMed Abstract <a href="https://pubmed.ncbi.nlm.nih.gov/33940429/">https://pubmed.ncbi.nlm.nih.gov/33940429/</a>	4.839	
6	Perceived helpfulness of treatment for alcohol use disorders: Findings from the World Mental Health Surveys	Degenhardt, L., Bharat, C., Chiu, W.T., Harris, M., Kazdin, A.E., Vigo, D.V., Sampson, N., Alonso, J., Andrade, L.H., Bruffaerts, R., Bunting, B., Cardoso, G., de Girolamo, G., <b>Florescu, S.</b> , Gureje, O., Haro, J.M., Hu, C.Y., Karam, A., Karam, E.G., Kovess-Masfety, V., Lee, S., Makanjuola, V., McGrath, J.J., Medina-Mora, M.E., Moskalewicz, J., Navarro-Mateu, F., Posada-Villa, J., Rapsey, C., Stagnaro, J.C., Tachimori, H., ten Have, M., Torres, Y., Williams, D.R., Zarkov, Z., Kessler, R.C., and on behalf of the WHO World Mental Health Survey collab.	<i>Drug Alcohol Depend.</i> 2021 Dec 1;229(Pt B):109158. doi: 10.1016/j.drugalcdep.2021.109158. Epub 2021 Nov 1. <a href="https://pubmed.ncbi.nlm.nih.gov/34784556/">https://pubmed.ncbi.nlm.nih.gov/34784556/</a>	4.492	
7	Retrospective analysis and time series forecasting with automated machine learning of ascariasis, enterobiasis and cystic echinococcosis in Romania	Benecke J, Benecke C, <b>Ciutan M, Dosius M, Vladescu C</b> , Olsavszky	<i>PLoS Negl Trop Dis.</i> 2021 Nov 1;15(11):e0009831. doi: 10.1371/journal.pntd.0009831. eCollection 2021 Nov. <a href="https://pubmed.ncbi.nlm.nih.gov/34723982/">https://pubmed.ncbi.nlm.nih.gov/34723982/</a>	4.411	
8	Romanian GPs Involvement in Caring for the Mental Health Problems of the Elderly Population: A Cross-Sectional Study	<b>Raluca Sfetcu</b> , Daciana Toma, Catalina Tudose, <b>Cristian Vlădescu</b>	<i>Front. Neurol.</i> , 24 June 2021   <a href="https://doi.org/10.3389/fneur.2021.641217">https://doi.org/10.3389/fneur.2021.641217</a>	4.003	

9	Perceived helpfulness of treatment for post-traumatic stress disorder: findings from the World Mental Health Surveys	Dan J. Stein, Meredith G. Harris, Daniel V. Vigo, Wai Tat Chiu, Nancy Sampson, Jordi Alonso, Yasmin Altwaijri, Brendan Bunting, José Miguel Caldas-de-Almeida, Alfredo Cía, <b>Marius Ciutan</b> , Louisa Degenhardt Oye Gureje, Aimee Karam Elie G. Karam, Sing Lee 8Maria Elena Medina-Mora, Zeina Mneimneh, Fernando Navarro-Mateu, José Posada-Villa, Charlene Rapsey, Yolanda Torres, Maria Carmen Viana, Yuval Ziv, Ronald C. Kessler, the WHO World Mental Health Survey Collaborators	<i>BMC Psychiatry</i> volume 21, Article number: 392 (2021) <a href="https://bmcp psychiatry.biomedcentral.com/articles/10.1186/s12888-021-03363-3">https://bmcp psychiatry.biomedcentral.com/articles/10.1186/s12888-021-03363-3</a>	3.388	
10	Sexual behavior of Roma women in Romania	M Nanu, E Stativa, I Nanu, A Kozma, M Otelea, A Nanu, <b>S Scantee, M Ciutan, G Popovici</b>	<i>European Journal of Public Health</i> , Volume 31, Issue Supplement_3, October 2021, ckab165.562, <a href="https://doi.org/10.1093/eurpub/ckab165.562">https://doi.org/10.1093/eurpub/ckab165.562</a> Published: 20 October 2021	3.367	
11	Societal Cost of Ischemic Stroke in Romania: Results from a Retrospective County-Level Study	Strilciuc, S., Grad, D.A., Mixich, V., Stan, A., Buzoianu, A.D., <b>Vlădescu, C.</b> , Vintan, M.A.	<i>Brain Sci.</i> 2021, 11, 689. <a href="https://doi.org/10.3390/brainsci11060689">https://doi.org/10.3390/brainsci11060689</a> Received: 20 April 2021 Accepted: 21 May 2021 Published: 24 May 2021	3.332	
12	N-Pep-12 supplementation after ischemic stroke positively impacts frequency domain QEEG	Livia Livint Popa, Mihaela Iancu, Gheorghe Livint, Maria Balea, Constantin Dina, Vitalie Vacaras, <b>Cristian Vladescu</b> , Laura Balanescu, Anca Dana Buzoianu, Stefan Strilciuc & Dafin Muresanu	<i>Neurol Sci.</i> 2021 Jun 25. doi: 10.1007/s10072-021-05406-9. Online ahead of print. <a href="https://pubmed.ncbi.nlm.nih.gov/34173086/">https://pubmed.ncbi.nlm.nih.gov/34173086/</a>	3.307	
13	Balancing financial incentives during COVID-19: a comparison of provider payment adjustments across 20 countries	Ruth Waitzberg, Sophie Gerkens; Antoniya Dimova; Lucie Bryndová; Karsten Vrangbæk; Signe Smith Jervelund; Hans Okkels Birk; Selina Rajan; Triin Habicht; Liina-Kaisa Tynkkynen; Ilmo Keskimäki; Zeynep Or; Coralie Gandré; Juliane Winkelmann; Walter Ricciardi; Antonio Giulio de Belvis; Andrea Poscia; Alisha Morsella; Agnè Slapšinskaitė; Laura Miščikienė; Madelon Kroneman; Judith de Jong; Marzena Tambor; Christoph Sowada; <b>Silvia Gabriela Scintee</b> ;	<i>Health Policy</i> Available online 6 October 2021 <a href="https://doi.org/10.1016/j.healthpol.2021.09.015">https://doi.org/10.1016/j.healthpol.2021.09.015</a>	2.980	

		<b>Cristian Vladescu</b> ; Tit Albreht; Enrique Bernal-Delgado; Ester Angulo-Pueyo; Francisco Estupiñán-Romero; Nils Janlöv; Sarah Mantwill; Ewout Van Ginneken; Wilm Quentin			
14	“Top-Three” health reforms in 31 high-income countries in 2018 and 2019: an expert informed overview	Polin K, Hjortland M, Maresso A, van Ginneken E, Busse R, Quentin W, the HSPM network (Gracia Armesto S, Behmane D, Blümel M, Bryndova L, Burke S, Dayan M, Tsung-Mei Cheng M, Dimova A, Fattore G, Figueras J, Figueiredo Augusto G, Gáal P, Gandré C, Gerkens S, Habicht T, Habimana K, Janlöv N, Kandilaki D, Kantaris M, Keskimäki I, Kowalska-Bobko I, Kroneman M, Lessof S, Ljungvall Å, Lindman AS, Mantwill S, Marchildon G, Azzopardi Muscat N, Miščikienė L, Or Z, Pazitny P, Angulo Pueyo E, Rainer L, Saunes I, Rice T, <b>Scintee SG</b> , Smatana M, Štelemėkas M, Tynkkynen LK, Vočanec D, Vrangbæk K, Waitzberg R)	<i>Health policy</i> , 2021 Jul;125(7):815-832. doi: 10.1016/j.healthpol.2021.04.005. Epub 2021 Apr 15. <a href="https://pubmed.ncbi.nlm.nih.gov/34053787/">https://pubmed.ncbi.nlm.nih.gov/34053787/</a>	2.980	
15	Teams for sustainability of evidence implementation	<b>R Sfetcu</b> , C Lockwood	<i>JBI Evid Implement.</i> 2021 Aug 23;19(3):217-218. doi: 10.1097/XEB.0000000000000293. <a href="https://pubmed.ncbi.nlm.nih.gov/34491921/">https://pubmed.ncbi.nlm.nih.gov/34491921/</a>	2.548	
16	To what extent is Romania prepared to join Health Technology Assessment cooperation at European level	<b>Silvia Gabriela Scintee, Marius Ciutan, Cristian Vlădescu</b>	<i>Med. Surg. J. – Rev. Med. Chir. Soc. Med. Nat., Iași</i> 2021, 125(1): 146-153 doi: 10.22551/MSJ.2021.01.19 <a href="https://www.revmedchir.ro/index.php/revmedchir/article/view/2356/1740">https://www.revmedchir.ro/index.php/revmedchir/article/view/2356/1740</a>	1.044	
17	The Use of Minimal Invasive Surgery versus Open Approach in Hospitalized Cases A Study Analysis of the DRG Romanian Database 2008-2018	<b>Cristian Vladescu</b> , Catalin Copaescu	<i>Chirurgia eCollection</i> 2021 August 04 Copyright© Celsius <a href="http://dx.doi.org/10.21614/chirurgia.116.eC.2422">http://dx.doi.org/10.21614/chirurgia.116.eC.2422</a>		BDI CNCSIS B+
18	Colorectal Cancer Trends of 2018 in Romania-an Important Geographical Variation Between Northern and Southern Lands and High Mortality Versus European Averages	Elena Mirela Ionescu, Cristian George Tieranu, Dana Maftai, Adriana Grivei, Andrei Ovidiu Olteanu, Tudor Arbanas, Valentin Calu, <b>Simona Musat, Constanta Mihaescu-Pintia</b> , Ionut Cristian Cucu	<i>J Gastrointest Cancer.</i> 2021 Mar;52(1):222-228. doi: 10.1007/s12029-020-00382-3. <a href="https://pubmed.ncbi.nlm.nih.gov/32152824/">https://pubmed.ncbi.nlm.nih.gov/32152824/</a>		BDI CNCSIS B+

19	Analysis of hospitalizations by osteoporosis in Romania, in the period 2008-2020	<b>Carmen SASU, Marius CIUTAN</b>	<i>Management în sănătate / Management in health</i> XXV/4/2021; pp. 17-23	BDI CNCSIS B+
20	Descriptive study on the situation of vitamin deficiency hospitalization episodes, in Romania, in the last decade	<b>Carmen SASU, Marius CIUTAN</b>	<i>Management în sănătate / Management in health</i> XXV/3/2021; pp.23-30 <a href="http://journal.managementinhealth.com/index.php/rms/article/viewFile/598/1484">http://journal.managementinhealth.com/index.php/rms/article/viewFile/598/1484</a>	BDI CNCSIS B+
21	Mindfulness and subjective vitality as mediators of the relationship between depression, anxiety, stress and emotional eating	<b>Raluca SFETCU, Dragoș ILIESCU</b>	<i>Management în sănătate / Management in health</i> XXV/3/2021; pp. 4-10 <a href="http://journal.managementinhealth.com/index.php/rms/article/viewFile/594/1474">http://journal.managementinhealth.com/index.php/rms/article/viewFile/594/1474</a>	BDI CNCSIS B+
22	Descriptive study regarding obesity hospitalization episodes in Romania, in the last decade	<b>Carmen SASU, Marius CIUTAN</b>	<i>Management în sănătate / Management in health</i> XXV/2/2021; pp. 20-25 <a href="http://journal.managementinhealth.com/index.php/rms/article/viewFile/590/1466">http://journal.managementinhealth.com/index.php/rms/article/viewFile/590/1466</a>	BDI CNCSIS B+
23	Descriptive study on the situation of malnutrition hospitalization episodes in Romania in the last decade	<b>Carmen SASU, Marius CIUTAN, Simona MUȘAT</b>	<i>Management în Sănătate/Management in health,</i> XXV/1/2021; pp. 10-15 <a href="http://journal.managementinhealth.com/index.php/rms/article/viewFile/584/1455">http://journal.managementinhealth.com/index.php/rms/article/viewFile/584/1455</a>	BDI CNCSIS B+
24	Caring for people with cognitive impairment (CI) during the COVID-19 pandemic	<b>Daciana TOMA, Raluca SFETCU, Daniela Georgeta POPOVICI, Mihaela Daniela BALTA</b>	<i>Management în sănătate/Management in health,</i> XXV/1/2021; pp. 16-19 <a href="http://journal.managementinhealth.com/index.php/rms/article/viewFile/585/1457">http://journal.managementinhealth.com/index.php/rms/article/viewFile/585/1457</a>	BDI CNCSIS B+

## Books/Chapters/Reports

No.	Chapter title / Book title / Report	Authors	Editor / Coordinator	Publishing house / website
1	Burnout Manual. Pocket Edition	Ovidiu Popa-Velea, Liliana Veronica Diaconescu, Alexandra Mihăilescu, <b>Raluca Sfetcu, Cristian Vladescu</b> , Miroslava Petkova, Bilyana Petrova, Pedro Gamito, Ricardo Pinto, Mariano Meseguer de Pedro, Mariano García Izquierdo, Francisco A. González Díaz, M. Isabel Soler Sánchez, M. Belén Fernández Collados, Lefki Kourea, Marios Constantinou	“Carol Davila” University of Medicine and Pharmacy, Bucharest, National School of Public Health, Management and Professional Development Bucharest	Erasmus+ Project: Burnout Education, Normative and Digital Tools for European Universities <a href="http://www.snspsms.ro/images/download/materiale/burnout%20manual.pdf">http://www.snspsms.ro/images/download/materiale/burnout%20manual.pdf</a>
2	Use of digital health tools in Europe: before, during and after COVID-19  Policy Brief 42	Nick Fahy, Gemma A Williams, Triin Habicht, Kristina Köhler, Vesa Jormanainen, Markku Satokangas, Liina-Kaisa Tynkkynen, Hendrikje Lantzsich, Juliane Winkleman, Fidelia Cascini, Antonio Giulio de Belvis, Alisha Morsella, Andrea Poscia, Walter Ricciardi, Andrea Silenzi, Dana Farcasanu, <b>Silvia Gabriela Scintee, Cristian Vladescu</b> , Enrique Bernal Delgado, Ester Angulo Pueyo, Francisco Estupiñán Romero	Editors Nick Fahy, Gemma A Williams, COVID-19 Health System Response Monitor Network Reference numbers Print ISSN 1997-8065 Web ISSN 1997-8073	World Health Organization 2021 (acting as the host organization for, and secretariat of, the European Observatory on Health Systems and Policies)



## Annex no. 2

### 2021 Scientific events attendance

No.	Action	Authors / Participants	Event	Organizers	Period
1	Presentation: Integration and Sustainability Plans (ISP) at country level: gaps, results, possible future Commitment. Romania	<b>Silvia Gabriela Scintee</b>	JAHEE General Assembly: Final Results	Istituto Superiore di Sanità, Italy – coordonator JAHEE	16 November 2021 Online
2	Presentation: Romanian Health System Performance	<b>Prof. Dr. Cristian Vlădescu</b>	Building the Post-Pandemic World: The path to a more sustainable, resilient and safe society – 6th edition of the Conference on the Theme "Together we protect Romania"	MediaUno Media Group and the Romanian National Institute of Statistics	1-12 November 2021 online
3	Poster: Sexual behavior of Roma women in Romania,	M. Nanu, E. Stativa, I. Nanu, A. Kozma, M.Otelea,, <b>S. Scintee</b> , <b>M.Ciutan</b> , <b>G.Popovici</b>	"14th European Public Health Conference 2021 - Public health futures in a changing world"	European Public Health Association (EUPHA)	10-12 November 2021 online
4	Presentation: JBI Implementation Case Studies: the role of education and training as an implementation strategy	Craig Lockwood, Alexa McArthur, Alex Mignone, Lucylynn Lizarondo, Hanan Khalil, <b>Raluca Sfetcu</b>	Engaging Evidence 2021: Evolving approaches	Cochrane, JBI, GRADE, GIN	9-11 November 2021 online
5	Presentation: JBI's approach to systematic reviews of textual evidence: narrative, expert opinion or policy	Alexa McArthur, Zoe Jordan, <b>Silvia Florescu</b> , Adam Cooper, Hu Yan, Jitka Kligarova, Daphne Stannard and Alan Pearson	Engaging Evidence 2021: Evolving approaches	Cochrane, JBI, GRADE, GIN	9-11 November 2021 online
6	Psychosocial intervention for malnutrition prevention in infancy - a step for health equity promotion. Study performed in the frame of JAHEE feasible action.	Michaela Nanu, Ioana Nanu, Călin Popovici, <b>Georgeta Popovici</b> , <b>Gabriela Scintee</b> , <b>Marius Ciutan</b> , Andrei Kozma	Twelfth International Symposium of Corpus Humankind and Fat. Attraction, Repulsion, Health and Politics	International Group for the Cultural Study of the Body & Centre for Applied Linguistics and Comparative Cultural Studies, University of Medicine and Pharmacy Timișoara	27-29 October 2021 Timisoara online

7	A New Expertise Centre for PKU and other Metabolic Diseases to be Organised in the National Institute for Mother and Child Health	Michaela Nanu, Ioana Nanu, Călin Popovici, <b>Georgeta Popovici, Gabriela Scîntee, Marius Ciutan</b> , Andrei Kozma	Twelfth International Symposium of Corpus Humankind and Fat. Attraction, Repulsion, Health and Politics	International Group for the Cultural Study of the Body & Centre for Applied Linguistics and Comparative Cultural Studies, University of Medicine and Pharmacy Timișoara	27-29 October 2021 Timișoara online
8	Moderator for the debate: Improving access to medical services for chronic patients in the context of the SARS-COV-2 pandemic	<b>Cristian Vlădescu</b>	Aspen Healthcare Forum 10th Edition <a href="https://aspeninstitute.ro/event/aspen-healthcare-forum-2021/">https://aspeninstitute.ro/event/aspen-healthcare-forum-2021/</a>	Aspen Institute Romania's Healthcare & Quality of Life Programme	19 October 2021 București online
9	Moderators: Discussion on the WHO study: Can people afford to pay for health care in Romania? New evidence on financial protection	<b>Cristian Vlădescu, Silvia Gabriela Scîntee</b>	National Conference on Pharmacoconomics and Health Management, 8th edition <a href="https://cnfms.ro/programme-preliminar/">https://cnfms.ro/programme-preliminar/</a>	University of Medicine, Pharmacy, Science and Technology Târgu Mureș – Health Policy and Management Research Center, Sapientia University and SURYAM Association	14-16 October 2021 online
10	The components of the CaPeSSCoSt project and the changes generated in the reporting and payment system	<b>Adina Geană</b>	National Conference on Pharmacoconomics and Health Management, 8th edition <a href="https://cnfms.ro/programme-preliminar/">https://cnfms.ro/programme-preliminar/</a>	University of Medicine, Pharmacy, Science and Technology Târgu Mureș – Health Policy and Management Research Center, Sapientia University and SURYAM Association	14-16 October 2021 online
11	Co-author of the presentation: Improving efficiency of systematic reviews production through an exploration of available methods and tools – a scoping review	Lisa Affengruber, Miriam van der Maten, Lotty Hooft, Barbara Nussbaumer-Streit, Mersiha Mahmić-Kaknjo, María E. Marqués, Eduard Baladia, Moriah Ellen, <b>Raluca Sfetcu</b> , Panagiotis-Nikolaos Lalagkas, Georgios Poulentzas, Nicoletta Riva, Käthe Gooßen, Lucia Kantorova, Michele Sassano, Angelo Maria Pezzullo, Patricia Martinez, Gerald	2nd Evidence-Based Research Conference: The place of Evidence-Based Research in the Evidence Ecosystem	The Evidence Based Research Network <a href="https://evbres.eu/wp-content/uploads/2021/09/Abstract-Book_2nd-EBR-Conf-2021_FINAL.pdf">https://evbres.eu/wp-content/uploads/2021/09/Abstract-Book_2nd-EBR-Conf-2021_FINAL.pdf</a>	27-28 September 2021 online

		Gartlehner, René Spijker			
12	Co-author of the presentation: Resource use during systematic review production: a scoping review	Barbara Nussbaumer-Streit, Moriah Ellen, Irma Klerings, <b>Raluca Sfetcu</b> , Nicoletta Riva, Mersiha Mahmić-Kaknjo, Georgios Poulentzas, Patricia Martinez, Eduard Baladia, Liliya Ziganshina, Maria Marques, Luis Aguilar, Angelos Kassianos, Geoff Frampton, Anabela Silva, Lisa Affengruber, Rene Spjker, Thomas James, Rigmor Berg, Meropi Kontogiani, Monica Sousa, Christos Kontogiorgis, Gerald Gartlehner	2nd Evidence-Based Research Conference: The place of Evidence-Based Research in the Evidence Ecosystem	The Evidence Based Research Network <a href="https://evbres.eu/wp-content/uploads/2021/09/Abstract-Book_2nd-EBR-Conf-2021_FINAL.pdf">https://evbres.eu/wp-content/uploads/2021/09/Abstract-Book_2nd-EBR-Conf-2021_FINAL.pdf</a>	27-28 September 2021 online
13	Presentation: Why systematic review production and update processes are resource-intensive: results from a qualitative study	<b>Raluca Sfetcu</b> , Lisa Affengruber, Liliya Eugenevna Ziganshina, Barbara Nussbaumer-Streit, Moriah Ellen	2nd Evidence-Based Research Conference: The place of Evidence-Based Research in the Evidence Ecosystem	The Evidence Based Research Network <a href="https://evbres.eu/wp-content/uploads/2021/09/EVBRES_PROGRAMME_24.09.2021.pdf">https://evbres.eu/wp-content/uploads/2021/09/EVBRES_PROGRAMME_24.09.2021.pdf</a>	27-28 September 2021 online
14	Conference Chair	<b>Raluca Sfetcu</b>	2nd Evidence-Based Research Conference: The place of Evidence-Based Research in the Evidence Ecosystem	The Evidence Based Research Network <a href="https://evbres.eu/wp-content/uploads/2021/09/Abstract-Book_2nd-EBR-Conf-2021_FINAL.pdf">https://evbres.eu/wp-content/uploads/2021/09/Abstract-Book_2nd-EBR-Conf-2021_FINAL.pdf</a>	27-28 September 2021 online
15	Theme presentation: Health inequalities - a European approach	Michaela Nanu Andrei Kozma, <b>Georgeta Popovici</b>	National online conference Fashion and patterns in infant nutrition	National Institute for Mother and Child Health	3 June, 2021 Bucharest, Romania
16	Webinar: Six policy briefs to improve access to health and related social services	<b>Georgeta Popovici</b> , Michaela Nanu	European Public Health WEEK Joining forces for healthier populations Friday 21 May - Leaving no one behind <a href="https://eupha.org/euphw_page.php?p=HW74">https://eupha.org/euphw_page.php?p=HW74</a>	National School of Public Health, Management and Professional Development, Bucharest, National Institute for Mother and Child Health	21 May, 2021 Bucharest, Romania

17	Presentation: Romanian health system where to?	<b>Cristian Vlădescu</b>	Online conference: The Romanian health system. Problems. Performance. Perspectives. <a href="https://www.facebook.com/academiadestiintemedicale/videos/507131663977906">https://www.facebook.com/academiadestiintemedicale/videos/507131663977906</a>	Medical Sciences Academy	19 May, 2021 Bucharest, Romania
18	Presentation: Hospital morbidity and mortality in the context of the COVID-19 pandemic	<b>Cristian Vlădescu</b>	Live conference: The first year of the COVID_19 pandemic. Scientific evidence. Own experiences. <a href="https://www.facebook.com/academiadestiintemedicale/videos/909957323099107">https://www.facebook.com/academiadestiintemedicale/videos/909957323099107</a>	Medical Sciences Academy	19 March, 2021 Bucharest, Romania