



NATIONAL
ONCOLOGY
INSTITUTE

National Oncology Institute

Plan of activities
for the period
2021 — 2025

Background

The establishment of National Oncology Institute (NOI) was part of implementation of **National Oncology Program (NOP)** in order to carry out NOP priorities. NOI was founded within the National Cancer Institute (NCI) on August 1, 2018, as a part of its organizational structure.

An advisory body of NOI is NOI Scientific Council.

The establishment of NOI was crucial due to several reasons

None of the existing institutions has the purpose or the competences to comprehensively and independently carry out **NOP action plans in five determined areas**: epidemiology, prevention, diagnostics and treatment, supportive care and research. That is why it is necessary to supervise the activities following from the NOP in one institution which will be the expert implementer of the NOP. At the same time, it is important that there is an independent, expert platform of education for specialists, patients and lay-people within the areas of NOP in Slovakia.

An in-depth and comprehensive data analysis is in order, including external validation of **National Oncology Register (NOR)** data, for precisely defined planning and implementation needs of the NOP.

Improvement of oncological diseases prevention requires not only awareness campaigns and activities focused on primary prevention, but also implementation of systemic screening, which lacked in Slovakia as one of the last EU member states until 2019, and only took place opportunistically. **Population-wide, organized oncology screening programs** require coordination of all stakeholders as well as thorough processing and analysis of input data in order to create prospective predictions. It is necessary for this type of data analyses and evaluation to be carried out by an independent expert institution which would also coordinate the screening programs.

Strengthening of **research and development activities**, international cooperation and more effective implementation of EU grants is only possible if there is an institution which could apply for this type of grants and use them for targeted improvement of cancer care and oncology research in Slovakia.

Planned activities of NOI for the years 2021 — 2025

Within the implementation of NOP, the activities of NOI in the coming years will focus on **coordination of National Oncology Program (NOP) updates** in cooperation with MoH SR and the following specific tasks:

1. Epidemiology

Tasks:

- ◆ External validation of National Oncology Register (NOR) data
- ◆ In-depth analysis of validated NOR data for implementation of NOP
- ◆ Providing outputs for implementation of NOP

Priorities for 2021 — 2025

Adjustment and launch of external NOR data validation

Knowledge of **epidemiology of oncological diseases** is crucial in order to create national healthcare policies focused on improving the health condition of the population. Knowledge of the current epidemiological situation is also important for comparison of Slovakia with other countries and for research and development.

External validation of NOR epidemiological data is necessary because practice has shown that it is unsuitable to have only one institution to carry out all processes, from data collection and validation to in-depth data analyses. An external check and evaluation of NOR data in NOI enables to ensure

better quality of data and thus make more precise predictions and analyses of future development of oncological diseases.

The most important task for the coming years is to adjust rules of access to data by adopting an amendment to Draft Law No. 153/2013 Coll. on National Health Information System which will enable the National Health Information Center (NHIC) to **legally provide NOR data** as well as other strictly defined data to NOI for assessment. NOI needs access to NOR data also for assessment of oncology screening programs, which is a task legally determined in Law No. 577/2004 Coll.

Outputs from analyzed data are published at NOI website with the intention to provide them mainly to state authorities and professionals.

<https://www.noisk.sk/national-oncology-register/oncological-disease-epidemiology-in-slovakia>

2. Screening

Tasks:

Coordination and assessment of oncology screening programs in Slovakia is based on Law No. 577/2004 Coll. Oncology screening programs are supervised by the Ministry of Health of the SR (MoH SR) which also prepares methodological and legislative guidelines for the programs.

The following oncology screening programs are organized in Slovakia at the moment:

- ♦ Colorectal cancer
- ♦ Cervical cancer
- ♦ Breast cancer

What is more, screening program for lung cancer is now in preparation and under discussion.

Priorities for 2021 — 2025

Coordination and assessment of oncology screening programs

Screening is a tool of across-the-board detection of oncological diseases in asymptomatic population in order to identify them in an early and thus potentially curable stage. The main objective of implementation of across-the-board, organized screening is a reduction of mortality due to oncological diseases. A secondary objective in some cases is a decrease in incidence of oncological diseases. In case of organized and monitored screening programs, it is also possible to reduce overall healthcare expenses.

NOI is tasked with coordination of state-supervised oncology screening programs. The programs are guided methodologically and legislatively by the MoH SR.

Like the evaluation of National Oncology Register data, the role of NOI is **external validation and evaluation of National Screening Register data**.

The most important task for the coming years is to adjust rules of access to data by adopting an amendment to Draft Law No. 153/2013 coll. on National Health Information System which will enable the National Health Information Center (NHIC) to legally provide National Screening Register (NSR) data as well as other strictly defined data to NOI for assessment.

Data analysis serves as the basis for evaluation of effectiveness of the screening program and for short-term and long-term strategy of further adjustment of oncology screening in Slovakia. NOI presents a report about the progress of screening programs to the supervisor, i.e. the MoH SR. This system takes into account the latest scientific knowledge and enables Slovakia to actively participate in international activities focused on evaluation of oncological burden on the population.

NOI also coordinates **the implementation of other oncology screening programs** based on clear evidence-based records as well as society-wide needs specific to Slovakia.

3. Diagnostics and treatment

NOI tasks:

- ♦ Work as an expert platform whose objective is to improve diagnostic and therapeutic cancer care in Slovakia.
- ♦ Coordinate the preparation of updated concepts of clinical, radiation and pediatric oncology.
- ♦ Provide expert consultations in order to standardize diagnostic and therapeutic processes in oncology.
- ♦ Ensure access to updated database of diagnostic and therapeutic processes for senior doctors, heads of clinics, chief and regional experts of MoH SR and NOI.
- ♦ Create and update a tool for evaluation of clinical benefit of innovative cancer drugs.

Priorities for 2021 — 2025

Lately, we have witnessed a significant acceleration of implementation of new knowledge in practical medicine as a whole and in oncology specifically. These findings confirm a clear clinical benefit for patients via evidence-based records regarding many innovative diagnostic and therapeutic processes as well as new processes related to supportive care in oncology. It is necessary to react flexibly and implement new findings in the context of healthcare for cancer patients also in Slovakia.

This is related to the role of NOI which is the creation and ongoing updates of a tool which would provide an updated list of innovative drugs and an evaluation of their clinical benefit. The main objective of the tool is to **raise**

awareness of innovative drugs and their clinical benefit according to evidence-based records and make it available to all stakeholders including HTA agency of the MoH SR.

NOI also coordinates the updates of concepts of clinical, radiation and pediatric oncology. The Institute also prepares continuous analyses of the need to expand the network of clinical and radiation oncology facilities in regions with inadequate coverage of oncological care and radiotherapy based on the current situation and in cooperation with chief experts for clinical and radiation oncology and regularly presents the analyses to the MoH SR.

NOI also cooperates with chief experts and Slovak Oncology Society committee and offers expert consulting to MoH SR related to standardization of oncology diagnostics and treatment in Slovakia.

4. Research

Tasks:

- ♦ Ensure the activities of Slovak Cooperative Oncology Group including international cooperation
- ♦ Run and continuously update Slovak Oncology Clinical Trials Register
- ♦ Get scientific grants for research funding
- ♦ Open calls for NOI grants for short-term international fellowships for oncologists

Priorities for 2021 — 2025

Clinical research in Slovakia is insufficient in comparison with the neighboring European countries and developed countries of the world; moreover, it is clinical and pre-clinical research that drives progress. In Slovakia, there is only one established Department of Clinical Trials in oncology in the

National Cancer Institute (NCI) which also includes the only Translational Research Unit in Slovakia. Both departments require support and development and can serve as an example to other institutions in Slovakia. It is necessary to understand **the need for systemic change** in this context, so as to have the importance of clinical research accepted by healthcare providers. This is related to the creation of positions of coordinators and clinical trials nurses as well as positions or departments responsible for the course of clinical trials in the healthcare facility. Based on the Order of the Minister No. 4/2018 prepared in cooperation with the Department of Clinical Trials at NCI and MoH SR, specific sections or positions for biomedical research and clinical trials with strictly defined tasks should have been created in subordinate organizations of the MoH SR. The implementation of this order is currently being evaluated in a survey by Research and Development Institute of the MoH SR, however, preliminary results show that the positions have not been created in all subordinate organizations. Another problem is insufficient expertise of these sections and positions, which is why it is important to ensure continuing education of their employees which is currently ongoing under the auspices of SLOVACRIN national research infrastructure and should be done in cooperation with NCI/NOI given the experience of NCI and position of NOI.

Slovak Cooperative Oncology Group (SCOG) was created within NOI in June 2019 and currently formally unites 27 oncology facilities which cooperate in order to implement mainly industry-initiated cancer clinical trials in Slovakia. The objective of SCOG is to carry out coordinated commercial and academic oncological research in Slovakia with the final goal to improve cancer care in Slovakia. NOI as the supervising organization of coordinated clinical research in Slovakia is supposed to ensure clinical trials within SCOG and also create room for interconnection of pre-clinical and clinical research in cooperation with scientific institutions in Slovakia. Another important task is to establish SCOG on international level to have the possibility to participate in international clinical trials.

NOI also runs and updates **Slovak Clinical Trials Register** which ensures awareness and, in turn, supports the availability of clinical trials in Slovakia.

The role of **NOI Scientific Council**, an advisory body of NOI for clinical research, is to define the priorities of clinical research in Slovakia for the given year and present them to MoH SR. The objective of the defined priorities is to consolidate them with calls for support of clinical research opened within MoH SR.

NOI opens calls for **NOI grant** for short-term international fellowships twice a year. Oncologists have a great opportunity to acquire cutting-edge medical knowledge, get to know the latest trends in their specialty in prestigious international oncology facilities and bring them to Slovakia and thus support international cooperation. The oncologists themselves can choose a prestigious facility, broaden their professional network and use their new experience from the fellowship in practice after they return to Slovakia. NOI grant applications are evaluated by NOI Scientific Council. The criteria for applications and their evaluation are published at NOI website: <https://www.noisk.sk/professional/research-and-development/noi-grants>

5. Platform of education

Tasks:

- ♦ Platform of education for doctors, patients and laypeople
- ♦ Interdisciplinary and intersectoral cooperation
- ♦ International cooperation

Priorities for 2021 — 2025

Increase health literacy of the public and professionals as one of the important keystones of improvement of effective prevention and healthcare in Slovakia.

The role of NOI is to serve as a **platform of education** not only for experts, but also for patients and lay public. NOI also strives to participate in educational activities focused on primary prevention with an emphasis on three most important risk factors of oncological diseases at the moment, which are smoking, obesity and inactivity.

NOI ensures the existence of a valid **information platform** via continuously updated website and educational materials.

Another important mission of NOI as a platform of education is an established and fruitful **cooperation with European Society for Medical Oncology (ESMO)** as well as **patients' organizations** on the creation of informational and educational materials for patients and the public (such as <https://www.noisk.sk/patient/oncological-diseases/patient-guides>)

Regarding awareness campaigns and educational activities, NOI organizes interdisciplinary **educational events** in cooperation with expert associations and intersectoral education mainly in cooperation with the Ministry of Education of the SR as well as other stakeholders.

NOI staffing as of September 1, 2020:

Mária Rečková, M.D., PhD. — Director
 Patrícia Kubicová, MBA — Specialist Officer
 Kristína Bubelínyová, MBA — Specialist Officer
 Dr. Janka Trautenberg-Ricová — Screening Coordinator
 Roman Novota — Analyst
 Dr. Zuzana Bárđyová, PhD. — Analyst
 Dr. Katarína Staněk — Clinical Trials Register Coordinator
 Gabriela Gogová, M.D. — Consultant for Innovative Cancer Treatment
 Ľudmila Kutáková, M.D. — Epidemiologist
 Prof. Dr. Róbert Babela, PhD., MBA, MSc (HTA) — Pharmacoeconomist

Alena Kallayová, M.D. — Head of Working Group for Breast Cancer Screening
 Rudolf Hřčka, M.D., PhD. — Head of Working Group for Colorectal Cancer Screening
 Andrej Orságh, M.D. — Consultant for Colorectal Cancer Screening
 Oliver Sadovský, M.D. — Head of Working Group for Cervical Cancer Screening
 Lucia Kocová, M.D. — Consultant for Cervical Cancer Screening

External consultants:

Dagmar Hroncová, MBA et MBA — Innovative Cancer Treatment Analyst
 Assoc. Prof. Alexandra Bražinová, M.D., PhD. — Consultant, Epidemiologist
 Zuzana Behúnová, M.D. — Consultant for Breast Cancer Screening

Financial expenses on NOI activities for 2021 — 2025

	2021	2022	2023	2024	2025
Salaries	200,000	200,000	220,000	220,000	250,000
NOP (NOI activities, including contractors)	60,000	80,000	80,000	100,000	100,000
NOI grants – fellowships	23,500	23,500	23,500	23,500	23,500
SCOG, academic clinical trials (including continuation of already approved clinical trials)	120,000	140,000	140,000	140,000	140,000
UpToDate database	20,000	20,000	20,000	20,000	20,000
Operation	70,000	50,000	30,000	30,000	30,000
Total	493,500	513,500	513,500	533,500	563,500

State of Oncology in Slovakia: Annual Report for 2018:

https://www.noisk.sk/files/2019/2019-05-09-noi_vyrocka_ii_final_epub_stranky_03.pdf

State of Oncology in Slovakia: Annual Report for 2019:

<https://www.noisk.sk/files/2020/2020-06-03-vs-stav-onkologie-na-slovensku-2019-noi-en.pdf>



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