

Working together for a quick diagnosis and better treatments for cancer within EEA & Norway Grants

Prof. Dr. Patriciu Achimaş-Cadariu



**"COMING TOGETHER IS A
BEGINNING
KEEPING TOGETHER IS
PROGRESS
WORKING TOGETHER IS A
SUCCESS."**



- 20% of women in Romania and 5% of Roma women living in Romania have been examined through screening for cervical carcinoma
- the need for a study of barriers to access to the organized cervical cancer screening program, particularly among the Roma population and other disadvantaged communities
- specific approaches for those in need and vulnerable due to socio-economic and geographical barriers. Such benefits of the project include greater equity in access to health services, better quality of life, and social capital conservation.

CerCcROM

- The overall objective of the project was to improve the health and welfare of Roma women and other disadvantaged groups (RODGs) by providing access to the cervical cancer control program.
- 1: Identifying barriers to participation in the cervical cancer screening program through a qualitative and quantitative study on access to cervical cancer screening of RODG.
- 2: Organizing institutional capacity to improve the quality of cancer data in the Northwest Region's Cancer Registry for better management of oncological healthcare in our region.
- 3: Integration of primary HPV screening of RODG in the Organized Cervical Cancer Screening Program by: determining the prevalence of dysplasia, invasive cancer and predominant genotypes in a population considered to be at high risk; Providing HPV testing equipment for the IOCN lab and integrating it into the NV cervical cancer screening program; Making recommendations for national policy on cervical cancer screening, based on the experience of the pilot study.

CerCcROM

- Final results of the project :
- Comprehensive report on the profile of Roma women and other disadvantaged groups and the hierarchy of barriers in participating in the screening program;
- Fully equipped lab that will provide HPV testing resources for the entire Northwest region of the country;
- The Online reporting portal for new cancer cases.
- The project has made it possible to carry out the first population-based study in Romania to integrate HPV testing into the organized screening program.

CEDICROM 1

- Increasing the capacity of the Romanian health sector to implement **organised cancer screening programmes** relevant to effective **early detection** interventions
- Project value 2.052.742 Euro;
9.067.987 RON

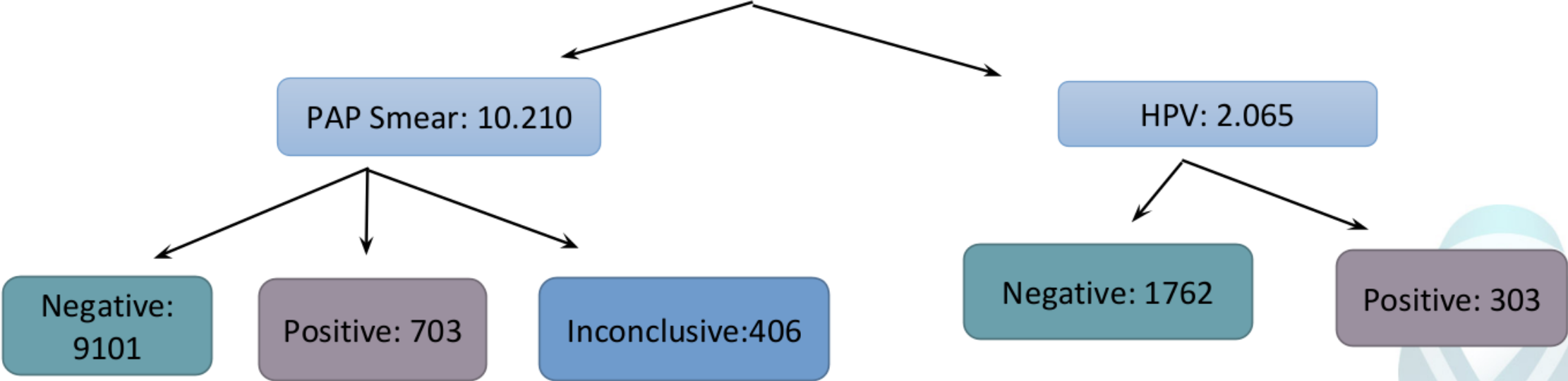


Results

- more than 10,000 Babes Pap tests
- 30 people trained to manage cancer screening programmes
- 3 mobile screening units in operation, which made more than 100 trips to the Roma and other isolated / disadvantaged communities
- 2000 HPV tests were completed
- 800 participants in two project conferences
- 2 consultation meetings with patients' associations in disseminating information

CEDICROM 1 Preview

Test Performed: 12.275



CEDICROM 2

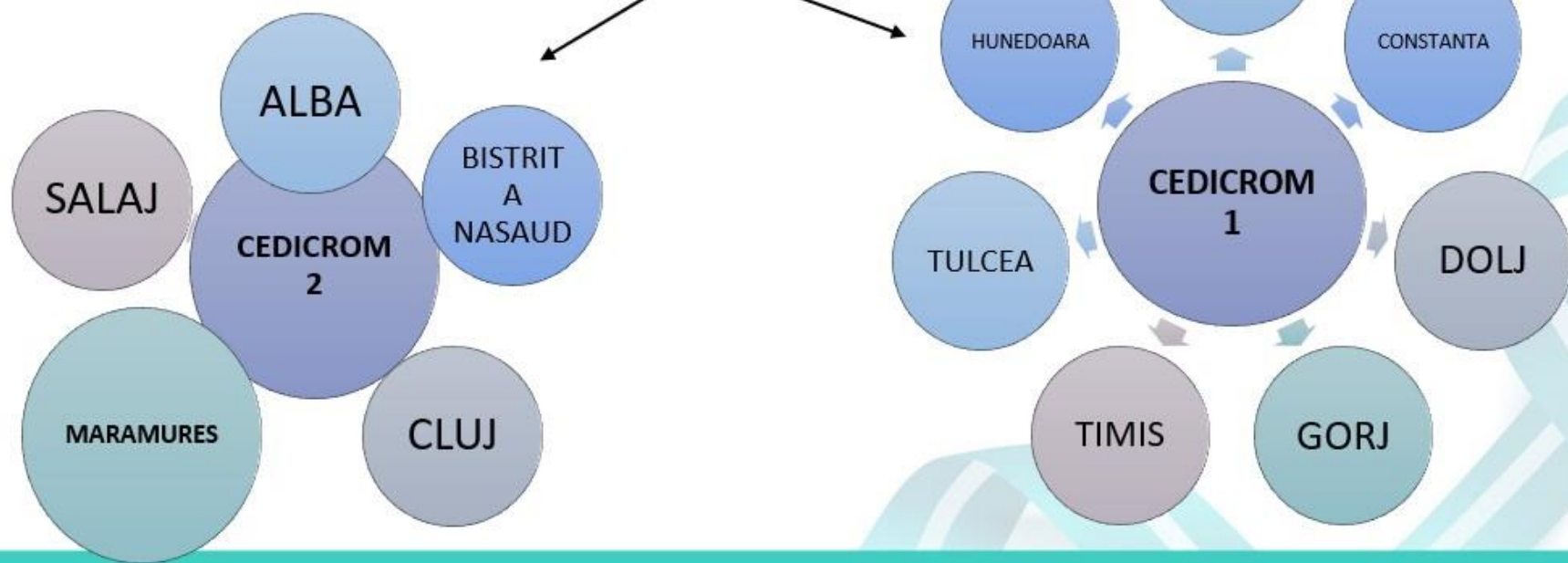


- Strengthening at national level the capacity of the Romanian health sector to implement **screening programmes** for cancers suitable for effective **early detection interventions**
- Cancer Early Detection Increased Capacity in Romania (CEDICROM)

The counties targeted for testing and vaccination:



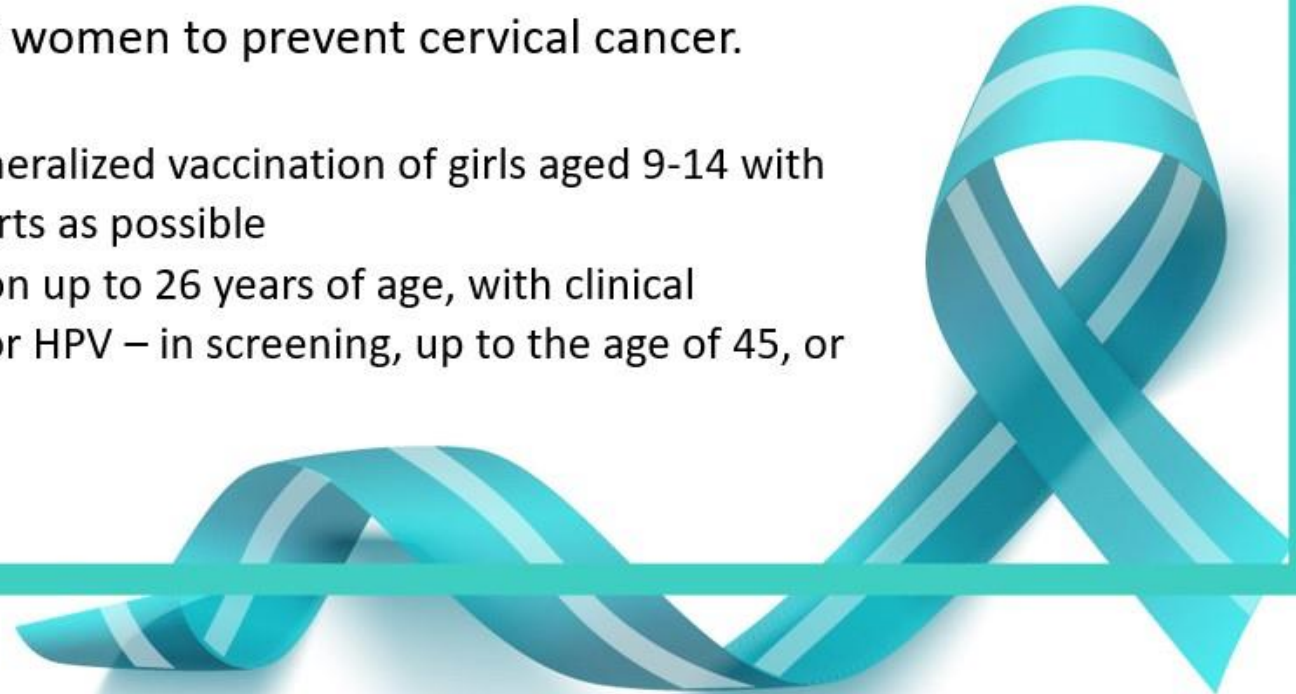
The counties targeted for follow-up activities:



In the CEDICROM II project, we are studying the feasibility of association to the HPV screening of some type strategies/protocols HPV-FASTER according to the concept released in 2016= the potential to combine HPV screening and vaccination of middle-aged women to prevent cervical cancer.

HPV-FASTER Strategy

1. Continuation of routine generalized vaccination of girls aged 9-14 with inclusion of as many age cohorts as possible
- 2 Extending routine vaccination up to 26 years of age, with clinical variants (e.g. women tested for HPV – in screening, up to the age of 45, or regardless of HPV status)

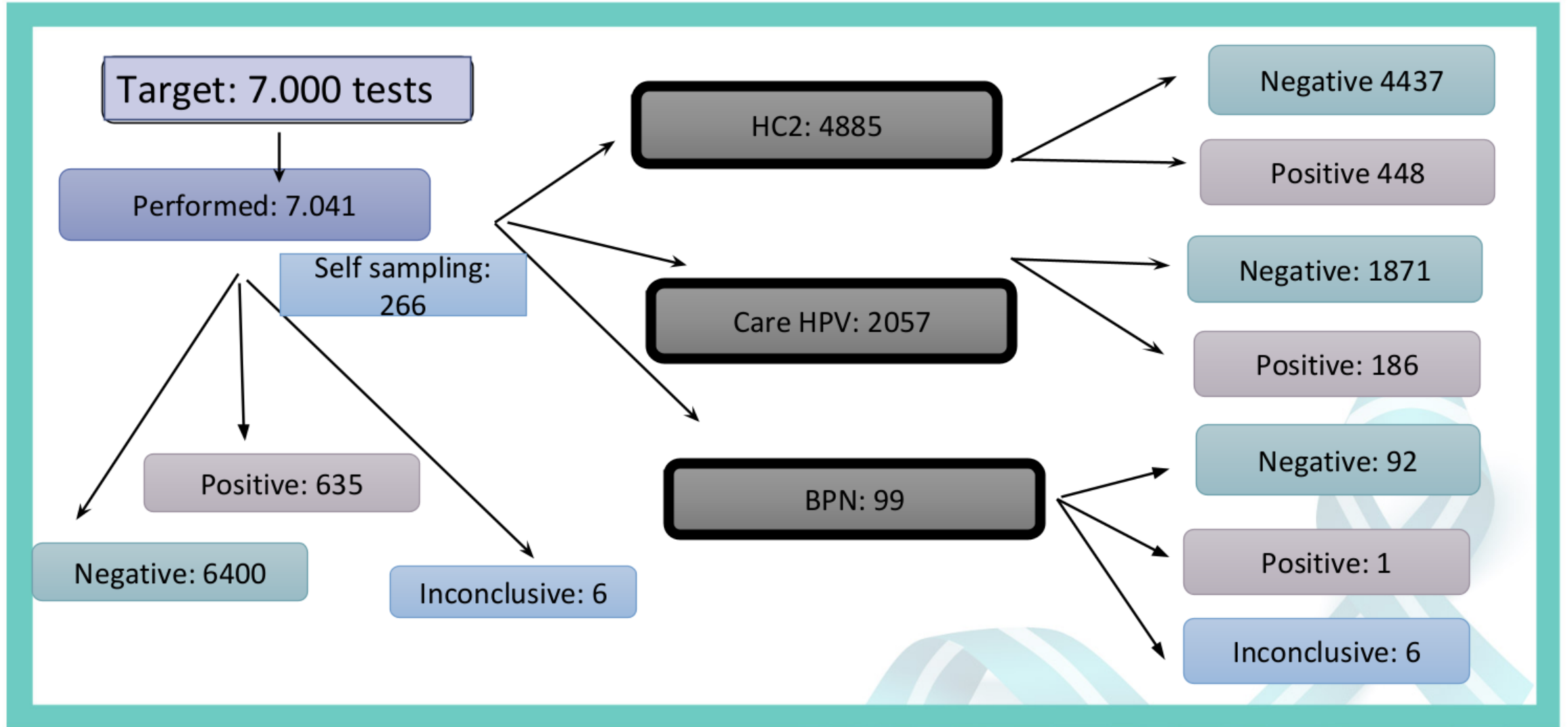


CEDICROM2 OVERVIEW

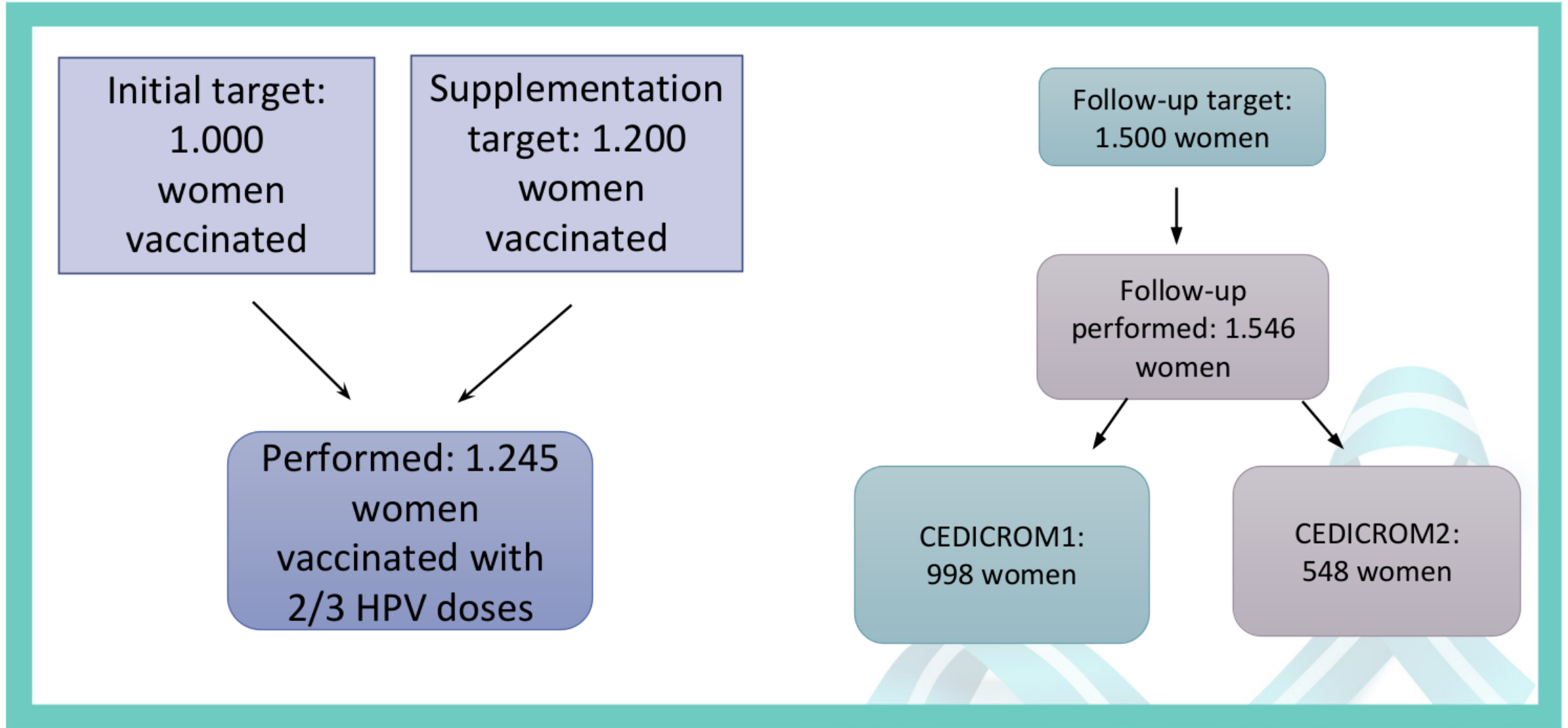
- **Programme area: PA 6 European Public Health Challenges**
- **Project promoter: The Oncology Institute „Prof. Dr. Ion Chiricuța”
Cluj-Napoca**
- **Donor project partner: Oslo UNIVERSITETSSYKEHUS HF /
KREFTREGISTERET**
- **Project budget: 1.999.889 €**
- **Project duration: 39 months (2019 June – 2022 September)**



CEDICROM 2



CEDICROM 2



Conclusions CEDICROM 1 & 2

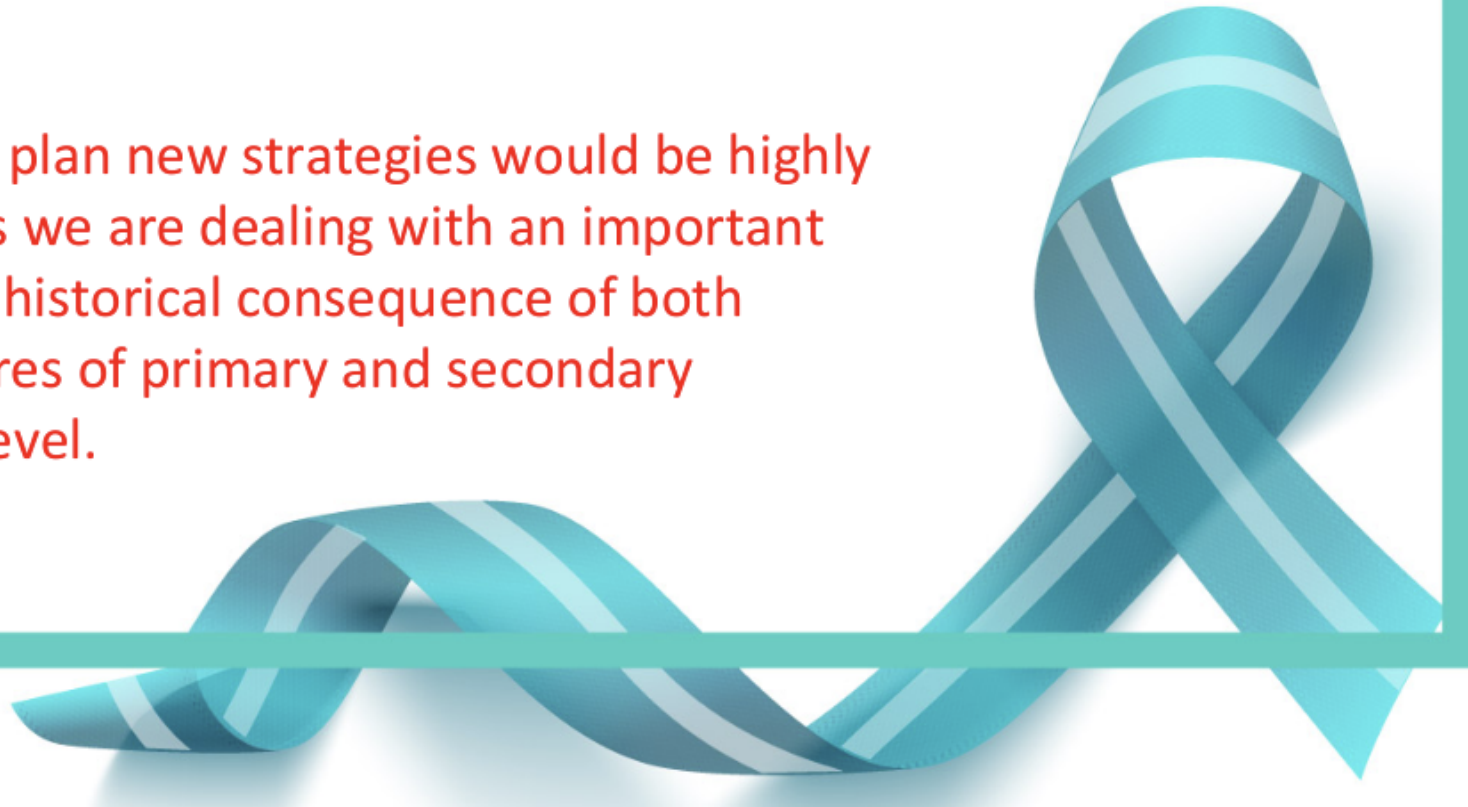
Improving quality assurance of follow-up of lesions found within cervical cancer screening programme.

In CEDICROM 1, women living in rural and remote areas were previously to CEDICROM 2 BP/HPV tested, some being detected with precancerous lesions. These women were referred to follow-up according to insurance house rules. There were few to none records on follow-up of these women due to no compulsory by law feed-back data on treatment to screening registries.

CEDICROM 2 aims to check and complete follow-up of women detected positive within CEDICROM 1 found untreated, according to follow-up protocols. All women tested in CEDICROM 2 with abnormal screening test results were followed-up according to CEDICROM 2 follow-up protocols

Most states are currently making efforts to recover missing HPV vaccine doses and screening visits disrupted by COVID, planning new HPV screening and vaccination strategies that are as effective and cost-effective as possible.

For Romania, such efforts to plan new strategies would be highly recommended and urgent as we are dealing with an important burden of cervical cancer , a historical consequence of both ineffective organized measures of primary and secondary prevention at populational level.



Ped1 - Improving the services provided in the field of haematology and paediatric oncology in Romania, through the acquisition of goods, services and specialised works

Primary Objectives:

- **Providing basic infrastructure in the field of haematology and paediatric oncology for 4 regional centres in the country.**
- **The project aims to control the most accurate diagnosis of paediatric haematology and oncology cases, using the modern infrastructure to be acquired by the project.**

Results

3 MRI machines (Bucharest, Iasi, Cluj)	
o 3 remote monitoring systems (Bucharest, Iasi, Cluj)	
o 3 anaesthesia machines (Bucharest, Iasi, Cluj)	
o Remote monitoring and anaesthesia system for radiotherapy and CT for treatment plan (Bucharest, Iasi, Iasi, Cluj)	
o Portable EKG (Bucharest)	
o Portable ultrasound scanner (Timisoara)	
o Cryo-cylinder for liquid nitrogen storage and feeding (Timisoara)	
o Apparatus for plasma levels dosing (Timisoara)	
o Bone densitometer (Iasi)	
o Toxicological analyser (Iasi)	

Ped2

Project: Increase performance regarding diagnosis and treatment of cancers in children by improving technical equipment, purchase of modern devices, medical personnel training and development of guidelines

PROGRAMME AREA: EUROPEAN PUBLIC HEALTH CHALLENGES
EEA FINANCIAL MECHANISM 2014-2021

PROJECT PROMOTER:

The Oncology Institute *Prof. Dr. I. Chiricuta*, Cluj-Napoca

DONOR PROJECT PARTNER:

The Norwegian Directorate of Health

PARTNERS:

Louis Turcanu Children's Emergency Hospital, Timisoara

The Regional Institute of Oncology, Iasi

Institute of Oncology *Prof. Dr. Al Trestioreanu*, Bucharest



1. Basic project information

Project title: Increase performance regarding diagnosis and treatment of cancers in children by improving technical equipment, purchase of modern devices, medical personnel training and development of guidelines

Programme area: European Public Health Challenges

Project promoter: The Oncology Institute "Prof. Dr. I. Chiricuta", 34-36 Republicii Street, RO-400015 Cluj-Napoca.

Donor project partner(s): The Norwegian Directorate of Health

Romanian partners:

1. "Louis Turcanu" Children's Emergency Hospital, Timisoara
2. The Regional Institute of Oncology, Iasi
3. Institute of Oncology "Prof. Dr. Al Trestioreanu", Bucharest

Purchases

- one tomography computer (CT) with simulation capacity of radiotherapy treatments;
- two automatic dilution devices for preparing automatically the substances used in chemotherapy;
- one IMRT software for the existing radiotherapy equipment in order to increase the efficiency of the radiotherapy treatments;
- two anaesthesia machines used during the CT exploration of children;
- 4 portable ultrasounds for the diagnostic and monitoring procedures especially related to thyroid and soft parts cancers;
- 2 gamma probe devices for diagnostic and treatment procedures (during the “sentinel ganglion technique”);
- two Eco Doppler ultrasounds for diagnostic and monitoring procedures of different types of cancers (especially related to blood vessels);
- 3 computers and 2 multifunctional printers to be used by the medical staff in the usual medical activity (creating, editing, printing, scanning and copying relevant documents: medical reports, medical letters, hospitalization documents etc.).

Guide to diagnosis, treatment and monitoring of paediatric and adolescent cancers in Romania.

The guide can be downloaded using the **QR** code below.

GHID DE DIAGNOSTIC, TRATAMENT ȘI MONITORIZARE

A CANCERELOR LA COPII ȘI ADOLESCENȚI ÎN ROMÂNIA

coordonatori:

Rodica Voichița Cosnarovici

Anca Coliță

Dana Michaela Cernea

Monica Desiree Dragomir

**Ghidul poate fi descărcat folosind
acest cod QR**



Creation, Operational and Development of the National Center of Competence in the field of Cancer (NCCC/CNCC_(RO))

Competence Center title: Competence Center in Cancer

Complex RDI Project acronym: CNCC

Complex Project Coordinator: Prof. Dr. Patriciu Achimaş-Cadariu

General aim of this project

Developing and implementing a Competence Center in Cancer entitled: **Creation, Operational and Development of the National Center of Competence in the field of Cancer (NCCC)** is focused *on improving the management of cancer patients by developing integrated programs based on the recent advances in personalized medicine, telemedicine, molecular tumor characterization, imaging systems and artificial intelligence through integrative research.*

NCCC – aims to develop a collaborative interconnected research network during 5 RDI projects and 11 partners, whose research aims are according to the EU Mission of Cancer and focused on *Understanding, Prevention, Diagnosis and treatment, and Quality of life* of cancer patients. NCCC will develop an integrative research infrastructure collaboration using state-of-the-art technologies in genomics and genetics with public and private know-how support in bioinformatics, data analysis, integrative biology, and AI.

Partners

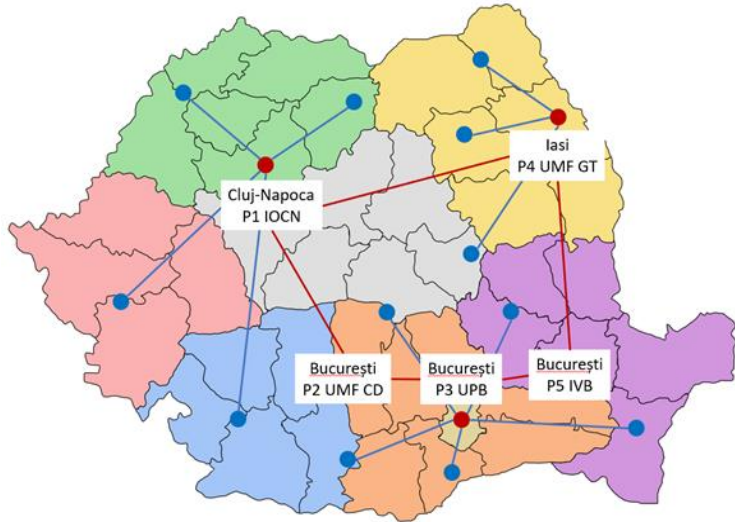
NCCC has a geographical distribution that covers three major administrative divisions of Romania, including **5 public research organizations**:

1. The Oncology Institute Prof Dr. Ion Chiricuta Cluj-Napoca (**IOCN**)
2. Carol Davila University of Medicine and Pharmacy (**UMFCD**)
3. Polytechnic University of Bucharest (**UPB**)
4. "Grigore T. Popa" University of Medicine and Pharmacy Iași (**UMFGT**)
5. Victor Babes Institute (**IVB**)

and 6 private companies (medical services, IT):

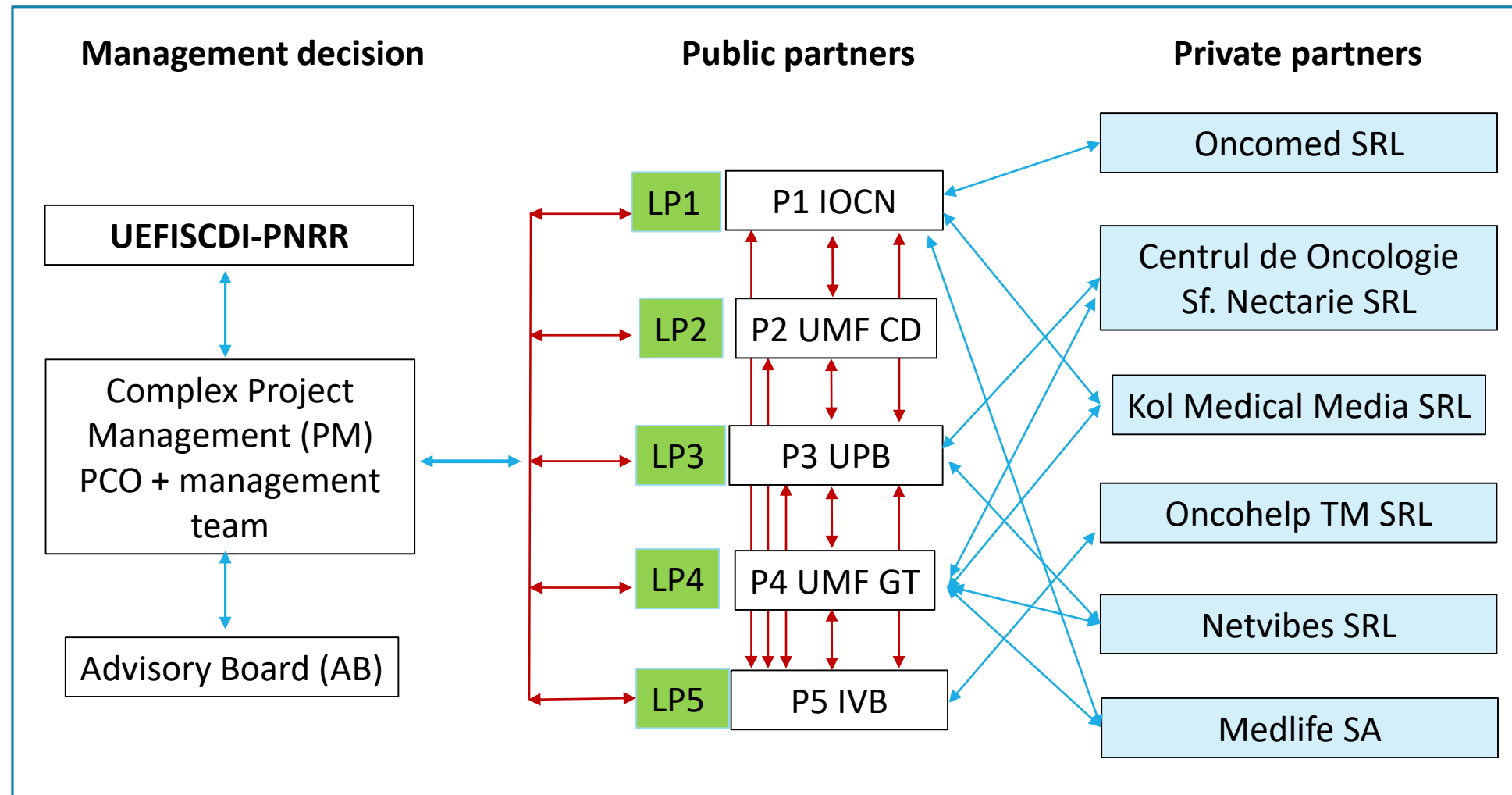
6. St Nectarie -Oncology Center - SRL
7. Kol Medical Media SRL (KOL MEDICAL)
8. ONCOHELP TM SRL,
9. ONCOMED SRL,
10. NETVIBES SRL,
11. MED LIFE SA,

which extends the NCCC connections to a national network



Established partnerships - Engagement with citizens, local authorities and NGOs - **key priority**

NCCC partners- management and collaboration



NCCC- RDI projects

RDI nr	Title	Coordinator
1	Increasing the capacity of oncology centers by implementing the EDA components within the RNCR (personalized medicine, telemedicine, molecular tumor board, imaging systems), piloting using multi-omics data within the IOCN CLUJ.	IOCN
2	From cancer prevention and screening measures to personalized patient-centered strategies for certain adult and pediatric malignancies through a better understanding of disease determinants.	UMFCD
3	Development of the Romanian Network for Cancer Research (RNCR).	UPB
4	Interventions for improving healthcare experience and quality of life for patients accessing oncology and palliative care services.	UMFGT
5	Standardizing steps and automating the process for precision early diagnosis and predictive testing in colorectal cancer to optimize the timeline to final result.	IVB

Conquering cancer: mission possible

Cancer Mission Recommendations

Recommendation 1 - Launch UNCAN.eu – a European Initiative to Understand Cancer

Recommendation 2 - Develop an EU – wide research programme to identify (poly-) genic risk scores

Recommendation 3 - Support the development and implementation of effective cancer prevention strategies and policies within Member States and the EU

Recommendation 4 - Optimise existing screening programmes and develop novel approaches for screening and early detection

Recommendation 5 - Advance and implement personalised medicine approaches for all cancer patients in Europe

Recommendation 6 - Develop an EU-wide research programme on early diagnostics and minimally invasive treatment

Recommendation 7 - Develop an EU-wide research programme and policy support to improve the quality of life of cancer patients and survivors, family members and carers, and all persons with an increased risk of cancer

Recommendation 8 - Create a European Cancer Patient Digital Centre where cancer patients and survivors can deposit and share their data for personalised care

Recommendation 9 - Achieve Cancer Health Equity in the EU across the continuum of the disease

Recommendation 10 - Set up a network of Comprehensive Cancer Infrastructures within and across all EU Member States to increase quality of research and care

Recommendation 11 - Childhood cancers and cancers in adolescents and young adults: cure more and cure better

Recommendation 12 - Accelerate innovation and implementation of new technologies and create Oncology – focused Living Labs to conquer cancer

Recommendation 13 - Transform cancer culture, communication and capacity building

Addresses the key pillars of the European Cancer Plan and Cancer Mission recommendations

RDI project 1 - Cancer Mission Recommendations 1, 5, 7, 8, 9, 10, 13

RDI project 2 - Cancer Mission Recommendations 1, 3, 4, 9, 11

RDI project 3 - Cancer Mission Recommendations 1, 2, 5, 6, 12

RDI project 4 - Cancer Mission Recommendations 7, 9

RDI project 5 - Cancer Mission Recommendations 1, 2, 5, 12

Implementation of the NCCP (National Cancer Control Plan)

National Cancer Control Plan incorporates all Cancer Mission recommendations, NCCC (CNCC) will be the first implementation tool for the National Cancer Control Plan (Law 293 / 2022).

Many NCCC members participated to the co-creation process of the Law of the National Cancer Control Plan



Collaboration with project ECHoS (Establishing of National Cancer Mission Hubs: Network and Synergies)



ECHoS

Establishing of National Cancer Mission Hubs:
Networks and Synergies



NCCC will collaborate with recently approved Coordinated and Support Action project ECHoS aiming to build network of Cancer Mission Hubs and synergies between Member States

Conclusions

Research Strategy:

- Developing and applying state-of-the-art approaches to improve the management of cancer patients (pathways, survival, quality of life, treatment costs, etc) for **screening, diagnosis, prognosis, treatment, and palliative care services** in accordance with European guidelines
- Developing and implementing the concept of a ***Tumor Molecular Board and personalized medicine in the care process of oncology patients***, integrating multi-omics data
- **Developing human resources and transferring the know-how** to other research groups involved in cancer research into NCCC network and beyond it.

Collaborative infrastructure:

- Developing a strong **partnership with private medical and IT companies, as well as civil society** for developing and applying state-of-the-art digitized medical services.
- Developing a **digitized regional cancer research infrastructure** in connection with the "**Electronic File**" of the cancer patient, scalable to national digitized regional cancer.