

Cancerworld

Optimisation and Efficiency in Cancer Care

Adriana Albini / 15 March 2021



The Third SPCC Webinar entitled "[Optimisation and Efficiency in Cancer Care](#)" was held on February 10, 2021. The series of webinars is called "Spotlights on Improving Efficiency in Cancer Care" and includes 11 monthly meetings from December 2020 to October 2021.

The webinar was introduced by Lucia Ferrara, Lecturer of "Government, Health & Not for Profit" at SDA Bocconi School of Management and Bocconi University, and Researcher at Cergas (Center for Research on Health and Social Care Management), Milan, Italy; followed by Denis Lacombe, EORTC, Brussels, Belgium, Simon Oberst, OEI, Brussels, Belgium, and Cancer Research UK Cambridge Centre Cambridge, United Kingdom, and Georgios Margetidis of the European Commission - Consumers, Health, Agriculture and Food Executive Agency - Health & Food Safety Unit, Luxembourg.

European Cancer Organisation HSTO Health Systems and Treatment Optimisation

Denis Lacombe is Director General of EORTC. In his current position, he is involved in the coordination and administration of all EORTC activities in order to promote the EORTC as a major European Organization in Cancer Clinical and Translational Research, and is responsible for the organization of scientific activities, public relations, and medium-term strategies as defined by the

EORTC Board, as well as for internal and external communications.

In his talk “European Cancer Organisation Health Systems and Treatment Optimisation”, he reported on the work of a network that deals with treatment and health system optimization, of which he shares responsibility with Professor Yolanda Lievens (ESTRO) as co-chair. This panel is endeavouring to address the challenges raised by translating drugs and broader investigational approaches into treatments, when they are still in the development phase, and how they actually get authorized into the healthcare system as products.

The network goal is to find solutions to optimally perform studies aimed at optimising the treatments for patients, but also on how such optimisation studies can help healthcare systems to give access to treatments based on evidence for key questions in the clinic. This can cover a number of questions such as, but not limited to, duration, sequence combination, or even ensuring an appropriate clinical validation of biomarkers to better define the ultimate recipient populations. These are often referred to as de-escalation studies.

The oncology “treatments” available are not only anti-cancer drugs but also radiation oncology and surgery. Most of the treatments are a combination of approaches, for instance, surgery and adjuvant treatments including radiation and/or systemic treatments. One example given by Dr Lacombe is radiotherapy plus temozolomide, which is currently the standard care for glioblastoma. It is the remit of the pharmaceutical industry to bring anti-cancer agents to the market. Data sets needed to optimize treatments are usually delivered by the non-commercial sector, conducting independent research such as the EORTC. A new continuum must be established to inform drug development into health care. It is critical to find a balance between the commercial sector, the non-governmental sector and the public sector, in order to optimize cancer care.



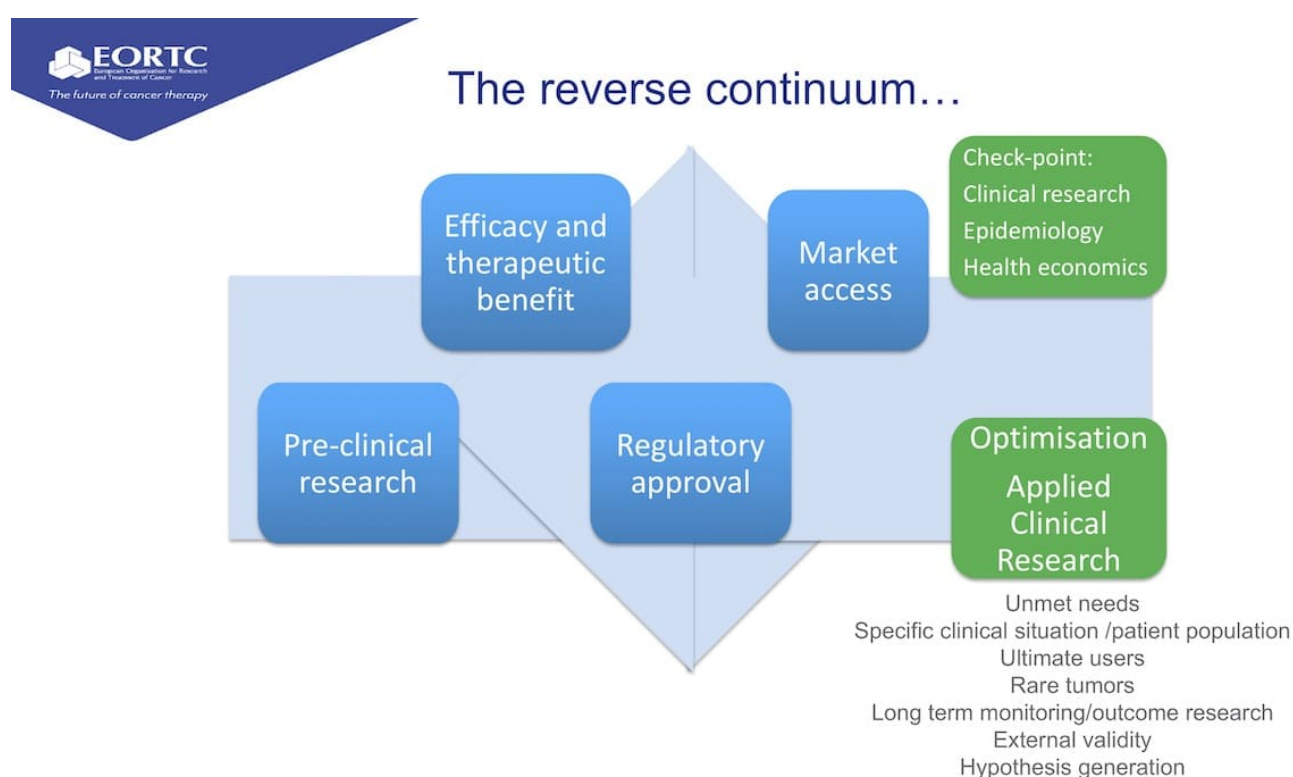
As already said, when drugs are made available, datasets need to be delivered in order to use them optimally in the healthcare system. In addition to de-escalation approaches, treatments of specific populations such with rare cancers or elderly patients are investigated.

An interesting example to illustrate the above statements is immuno-oncology, in particular with

checkpoint inhibitors. Despite their cost, we have not enough information about the optimal duration of the treatment. It can be postulated that if information regarding appropriate duration and schedule were delivered, costs could be reduced, leading to savings and possibly to better access. The same statement may apply with the clinical validation of multiple assays to document the proper cut-off values of biomarkers.

Similarly, some patients do not benefit, and these should be properly identified. Such type of trials can be very pragmatic and be conducted in real life settings. But today in Europe, there is no mechanism to carry on these studies in absence of public funding. There is no European mechanism available to collect this information rapidly for all the European patients, and deliver datasets to the health care systems.

It is obvious that a health economics dimension should today be embedded in pragmatic treatment optimisation studies and that an early gap analysis evaluation for access should be performed when a new treatment candidate is about to appear on the market. Consequently, the role of independent research should be promoted for accessing decisions in Europe.



Doctor Lacombe concluded that EORTC, with its active clinical research portfolio of about 45 clinical trials at any point in time in 40 countries, recruiting an average 3,000 new patients on a yearly basis, allows observations which should be used by society to build on such models.

To be truly patient centric:

- Society must develop the means to generate datasets such as comparative evidence aiming at documenting the optimal treatment for cancer patients through the integration of clinical research, free of commercial interest in the process of access to treatments and to inform healthcare systems.
- Society must re-engineer new models of partnership commercial/non-commercial research in the continuum of clinical science, regulatory science, into health technology assessment.
- Public health priorities need to command up stream research, to focus on innovation where needed and avoid multiplication of redundant agents of the same class.

- Society must integrate independent multidisciplinary cancer clinical research through new mechanisms, to evaluate optimized therapeutic strategy trials into healthcare.

To help the health systems meet the decision-making challenges related to the new treatment options, members of the European Cancer Organisation have initiated many actions to assist. These include the [EORTC Treatment Optimisation Manifesto](#) and projects orientated towards bringing about more value-based approaches in respect to innovation uptake.

The Organisation of European Cancer Institutes (OECI) - Accreditation Programme for Cancer Centres

Simon Oberst is Chair of the Organisation of European Cancer Institutes's (OECI's) Accreditation & Designation Programme. He is also Director of Clinical Development, Cancer Research UK Cambridge Centre. The OECI program is developed to help cancer centres to implement a quality system for cancer care using selected standards and a peer review system. The Accreditation and Designation Programme was launched in 2002 by OECI to reduce unwanted variation in the organisation and quality of cancer care in Europe. It is a voluntary accreditation scheme that evaluates and certifies cancer centres based on a comprehensive list of standards.

The aims of the programme are to support equal access to high-quality cancer care across Europe, to implement a European quality system for cancer care, and to foster and accelerate improvements in cancer research.

At the moment, the OECI Accreditation and Designation quality network comprises 52 of the largest and leading Cancer Centres in Europe, and has the potential to go beyond Europe as well. The OECI centres have treated more than 1 million patients since their accreditation and produced about 12,400 international research papers every year. Their cancer research budgets amounts to more than 1 billion Euros a year. In the Programme there are two designations: the Comprehensive Cancer Centre and the Cancer Centre. The difference between the two designations is the volume of research that the Centre performs. OECI is not considering only separate Centres, but also a whole comprehensive network that serves the patients of an area. Indeed, they are about to accredit a first network in March. The accreditation is based on more than 300 quality standards, developed over the last 12 years in cooperation with patients' organizations and European societies of professionals. Part of the programme derives from the experience of non-EU countries, particularly the United States with the American College of Surgeons programme. Among those 300 standards, 100 core standards have been defined and [published in Lancet Oncology](#) last August.

The 100 standards published are absolutely fundamental to be achieved by every centre and are part of these 9 domains.

1. Domains of the Quality Standards
2. Governance of the Cancer Centre
3. Organisation of the Cancer Centre
4. Patient involvement and empowerment
5. Multidisciplinarity
6. Prevention and Early Detection
7. Diagnosis (Radiology, Nuclear Medicine, Pathology, Molecular diagnostics)
8. Treatment (Surgery, Radiotherapy, Medical Oncology, Nursing, Pain, Supportive disciplines, Survivorship, Rehabilitation, Palliative Care, End of Life Care.
9. Research (Basic, Translational, Clinical Research)
10. Education and Training in all disciplines.

The quality standards set a high bar for centres. Since not every centre manages to meet all the standards it is vital that an Improvement Action Plan is mutually agreed between OEI and the centre at the end of the process, and that OEI monitors the progress with this.



The 52 Centres within the Programme are shown in Figure. There are still a number of countries in Europe who have no accredited centres at all. The OEI programme will help implement the [EU Cancer Mission](#) and the [Europe's Beating Cancer Plan launched very recently](#).

Among the chapters of the quality standards of OEI, in the first place there is Governance. How is the Cancer Centre organised and directed? How are decisions made and budgets apportioned? How is the quality system organised and data reported?

Another crucial chapter is on patient involvement and empowerment. OEI focuses very strongly on the involvement of patients, not just in their own care, but in the co-design of services within that Cancer Centre.

Multidisciplinary teams (MDTs) are absolutely vital, not only inside the centre but also for the way in which they include patients and their clinicians in the wider network, ensuring equitable access to high quality care and clinical trials.

Regarding cancer prevention and early detection, many centres focus mostly on oncogenetics services, and the prevention of recurrence of cancer for their patients. Now there is an increasing focus on early detection of cancer, early diagnosis and even more, pre-symptomatic detection of cancer based on risk.

OEI standards cover the whole range of diagnostics, including molecular diagnostic, all modalities of treatment, and nursing. Other aspects that are increasingly important are pain relief and supportive care disciplines. Survivorship and how patients are supported in their ongoing journey is part of the programme, as well as rehabilitation. OEI has standards on Palliative Care and [End of Life Care](#).

A large chapter is dedicated to research and this is what makes OEI's Programme unique among

accreditation programmes in cancer, not only in Europe, but all over the world. The organisation and infrastructures for basic, translational and clinical research are covered in the OECI standards, as well as integration of research into patient care and changes of clinical practice.

There are also standards on education and training for professionals in all the disciplines treated in the Cancer Centre, and patient education.

In the end, the whole process of achieving the standards aims to improve outcomes for our patients. This is why the Improvement Action Plan is a fundamental part of the cycle. None of the OECI centres starts with more than 95% compliance with the standard; every centre has the possibility to improve.

The OECI process is an independent peer review that has demonstrated success in monitoring equity of access for all patients and the importance of networking, which are key parts of Europe's Beating Cancer Plan and the EU Cancer Mission.

OECI's usual model of external assessment is an on-site peer review, with the centre's self-assessment and scoring having been uploaded onto an e-tool. However, during COVID-19 the Programme is using video-conferencing for three-day virtual audits of the Cancer Centres. It is not like taking an exam Oberst says, it is about developing a quality culture with professionals and patients.

The standards are a tool to help centres to improve from the inside. The webinar showed some examples of improvements which were spurred on by the accreditation process. Some centres increased their collaborations between hospitals and universities. Some others used the OECI report to obtain more funding to improve radiotherapy. One centre developed a comprehensive survivorship support programme in response to the report results. Another centre started a patient consultation group reporting to the board of that Cancer Centre.

In summary, the OECI Accreditation and Designation Programme aims:

- To drive improved outcomes for patients – the Improvement Action Plan is critical
- To provide an independent and objective external quality assessment of centres/networks
- To provide quality standards which are ambitious but unambiguous – across research, education and care
- To accelerate integration of research into patient care
- To help showcasing and implementation of best practices
- To drive equity of access for all patients
- To increase patient involvement and empowerment in all centres
- To encourage collaboration and the establishment of Comprehensive Cancer Networks
- To provide vital benchmarks for centres/networks

The OECI Accreditation & Designation Process follows a standard format

- A self-assessment by the centre
- An objective and independent external peer review
- A full report and recommendations, moderated by the A&D Board independently of the peer review team
- An improvement plan mutually agreed with the centre
- A designation as a Comprehensive Cancer Centre or Cancer Centre
- Accreditation lasts 5 years.

The process of preparing for the review is one of the most important parts of the OECI accreditation

programme. Its success depends on the hard work performed by many different professionals and patients, and this group activity and motivation is what generates the improvements in cancer research, education and care.

EU policies and funding for health: an opportunity (and a challenge) for fighting cancer

Georgios Margetidis is Project manager (CHEFEA) Consumers, Health and Food Executive Agency; Scientific project officer for the implementation of the EU Public Health Programme covering the area of health information and knowledge actions. He spoke about EU policies and funding for health.

He underlined that a key-element of the role of the EU in Public Health is subsidiarity. The first need of EU health policy is actions to improve health. There is a treaty article (168) related to public health: a high level of human health shall be ensured in all policies. Union action should complement the national policies and be directed to improving Public Health preventing physical and mental illness, and of course, eliminating sources of danger to physical and mental health.

The article 168 (ex Article 152 TEC) states:

- A high level of human health protection shall be ensured in the definition and implementation of all Union policies and activities
- Union action, which shall complement national policies, shall be directed towards improving public health, preventing physical and mental illness and diseases, and obviating sources of danger to physical and mental health

The article explains how such actions should be shaped. Promoting research is a key-aspect of the fight against the major health problems and cancer is one of them. The Union can encourage cooperation in complementarity of health systems and services in cases of cross-border care because the responsibility of health policies and the responsibility for organizing health services and for delivering health services is the remit of the member states.

There are competences that have been given to the EU in Public Health, in very specific areas. For example, following aspects are led by the Union: the quality and safety of organs and substances of human origin, measures in the veterinarian phytosanitary field and measures setting high-standards of quality and safety for medicinal products and devices for medical use. However, Public Health is a responsibility of the member States.

How does the EU manage the response to pandemics? It does not run through the national health systems, it does not carry the vaccination programmes directly and it does not decide on the pricing and reimbursement of medicines. EU complements and supports the national efforts in those specific areas where the member States see added value in collaborating. We see how crucial the central role of the Union is in this pandemic period.

A new impulse has been given by the EU in the area of cancer. The [Europe Beating Cancer Plan](#) was presented on the 3rd of February. There are actions that focus across the entire disease-pathway: from prevention to the survivorship in life, encompassing early diagnosis, treatment and palliative care. What is the Cancer Plan and what is the Cancer Mission? The logic of the [Cancer Mission](#) is to provide a different framework in the funding that goes into mostly research. It is linked to Horizon Europe which is the new Research Programme that follows Horizon 2020. The idea is that the Cancer Plan, which is wider than the Cancer Mission, will use the funding that will go through Horizon Europe to share best practices. The Cancer Plan has strategic access, but evidence needs to

be provided by the member states to continue the common action and to foster the uptake and the results of research innovation. The European Beating Cancer Plan provides a spectrum of funding some of the different flagship initiatives that are to be found under the European Beating Cancer Plan.

Two important recommendation of the Cancer mission are:

- Recommendation 5: Advance and implement personalised medicine approaches for all cancer patients in Europe.
Advance, scale up, implement and optimise current personalised medicine approaches for cancer, deepening our understanding of cancer complexity, i.e. the role of the host, the impact of the outer environment on cancer initiation, and the evolution of cancer over time, to increase the number of patients for whom effective personalised approaches can be found
- Recommendation 8: Create a European Cancer Patient Digital Centre where cancer patients and survivors can deposit and share their data for personalised care
 - i.e. a virtual network of patient-controlled (national) health data infrastructures, in which cancer patients and survivors can deposit their health data provided by their medical care providers (e.g. imaging, genetics, blood markers, clinical and lifestyle data) in a standardized, ethical and interoperable manner.

The inequalities and issues related to access are also very important. The concept of the National Comprehensive Cancer Centre and the building of an EU Network of National Comprehensive is one of the flagship initiatives under the Europe Beating Cancer Plan. The Registry on inequalities is important from a policy perspective. We also have to flag issues related to paediatric care.

Another target, which is the topic of this webinar, is efficiency of care. An initiative to launch is the “Cancer Diagnostic and Treatment for All” to improve access to innovative diagnostic technologies and also treatments.

The full picture of funding shows that there are around 15 billion of spending available to support health (sector/stakeholders), Cohesion policy (ESF and ERDF), Research (Horizon Europe), Digitalisation and innovation (Digital Europe, Connecting Europe Facility & InvestEU). Financial sustainability (Structural reform) and Crisis response (Emergency Support Instrument).

There are different financing instruments which are given to the member states to support their National Cancer Plans.

The key-message is that policy, collaboration, and funding go hand-in-hand. Most important are the actions that are going to be taken to support transnational networks, networking through European reference networks, the Comprehensive Cancer Centres, the digital transformation and the creation of a European Health Data Space. The logic of the data generation of the digital transformation goes beyond what any individual centre can generate, by identifying needs for training healthcare professionals to improve the quality in the delivery of care.