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Editorial

Europe's beating cancer plan: Opening avenues for radiation oncology

Traditionally, healthcare policy and administration in the European Union (EU) have been firmly positioned under the remit of its Member States based on the principle of subsidiarity. However, in recent years, the division between European and national competencies in health care has become more porous, as evidenced by initiatives like the joint purchasing of vaccines for COVID-19 and the establishment of European Reference Networks for Rare Diseases (ERN) [1]. It is significant that the first EU healthcare plan focuses on cancer, underlining its high priority for countries and the shared perspective that European efforts in areas such as oncology can lead to significant improvements in the survival and quality of life for cancer patients in our countries.

In 2021, the EU approved Europe's Beating Cancer Plan (EBCP), complete with a battery of initiatives to organise cancer control and prevention [2]. The EBCP complements the national cancer plans implemented in the vast majority of EU countries since the turn of the century and provides an overall vision of priorities for the EU as a whole. With nearly 3 million new cases of cancer a year, disparities in survival rates for different types of cancer between and within countries, and significant variations in the quality of care and access to timely treatment, the challenges posed by cancer in Europe are clear. These and other disparities are documented in one of the Plan's flagship initiatives, the Knowledge Centre on Cancer, which collects all available population data on incidence, mortality, survival and prevalence, as well as cancer prevention, in a clear and graphically appealing way, together with reports for each country and how they compare to the EU average, which has quickly established it an essential source for information [3]. Alongside this initiative, the EBCP includes nine others covering the areas of prevention, information systems, research, and treatment.

One initiative is of particular interest to the radiation oncology community: establishing comprehensive cancer centres (CCCs) as a healthcare model for European countries. By 2030, 90 % of eligible patients diagnosed in Europe should have access to treatment in these centres of excellence. This ambitious goal has created a buzz around the acronym CCC and has clearly highlighted the centrality of the organisational aspects of cancer diagnosis, treatment and follow-up for improving the quality of cancer care, access to state-of-the-art therapies, and innovation and clinical research throughout Europe.

To develop and implement this initiative, two consecutive Joint Actions, CraNE and EUnetCCC, span the period from 2023 to 2028, involving all EU Member States plus Norway, Moldova, Ukraine, and Iceland. CraNE defined the objectives and standards that CCCs must meet; EUnetCCC, which kicked off in late 2024, is focused on implementing the CCC model in Europe [4].

This model has a long tradition in oncology, articulated both as stand-alone cancer centres focused exclusively on cancer care and as referral centres with a specialised cancer care area, integrating cancer treatment strategies with clinical research and specialised training programmes. There are notable examples of these highly specialised centres in Europe, many of which are part of the Organisation of European Cancer Institutes (OECI). This experience constitutes an invaluable headstart on the CCC implementation process in Europe. However, it also brings into relief the significant differences in the geographical distribution of CCCs between and within countries, which emerges as the defining challenge of this initiative: how to improve equity of access to high-quality centres in Europe. This dilemma augurs significant challenges for implementation, which will need to be discussed as it is rolled out in practice. Some of the most relevant points will necessarily include the following:

- How to achieve 90 % coverage of eligible patients receiving treatment in CCCs by 2030. This objective clearly demonstrates the ambition of the Plan but also raises thorny questions, including what is meant by 'eligible patients', whether treatments can be shared between centres within the same network associated with a reference CCC, and, last but not least, how coverage will be measured.
- The challenge of defining a CCC based on a set of common standards across highly diverse health care systems and funding contexts. This underscores the maxim that 'one size does not fit all'. There is no easy solution to this challenge if we try to accommodate the diverse realities of all EU health systems.
- Certification of quality and compliance with standards of care, research, training and innovation by an external auditor. How much flexibility should CCCs be allowed, and should adherence to standards among different health services and research systems be assessed? There are substantial differences in key indicators of cancer care outcomes, for instance 5-year survival [3]. Certainly, the EU plan aims to reduce inequalities, but these are inseparable from factors like the availability of resources, access to innovation, and the organization of care delivery, among others. The question is how to aim for similar standards of quality and resources across different health system contexts.

The institutional framework underpinning the field of oncology, including care and research, is changing rapidly, and for most health systems, it is the European dimension that is driving the evolution. The current situation evokes some of the changes that occurred two decades ago but responds to the obvious limitations (and frustrated expectations) of using clinical practice guidelines as the main lever for improving the quality of care. Since then, there has been a proliferation of pub-

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lications and declarations of all kinds (e.g. standards, requirements, policy criteria) regarding what cancer care should look like, and this has given rise to valuable shared frameworks of understanding, such as with multidisciplinary teams [5]. However, Europe is no longer just a place for reaching a consensus and common understanding of what cancer care requires: it is prioritising implementation.

While much of the effort is still focused on the need to develop innovative concepts and generate evidence through 'extensive synergies', the Mission on Cancer's obvious modus operandi, other actors are focusing on change and the need to harmonise oncology instruments and structures at European level. The discourse – once based on benchmarking and common understanding arising from Joint Actions and European projects – is now giving way to institutional change and implementation through high-impact processes at the national level. Clearly, Joint Actions such as EUnetCCC, or Joint Action on Networks of Expertise (JANE-2) [6] and the emerging Joint Action on Personalised Cancer Medicine aim to build the future backbone of oncology for all European healthcare systems. Specifically, the establishment of CCCs throughout Europe sets the stage for embedding and accelerating collaboration through networks of expertise, but it should also serve as a springboard for developing personalised medicine while providing an umbrella of institutional support to ERN units. Strikingly, this space for convergence and intervention is not redundant: European collaboration has long been normalised at the level of scientific societies, governments, public bodies and patient associations, but until now, this was not the case for the settings where everything actually happens: hospitals.

The crystallisation of the process described here is a call for all medical sectors to step up. If hospitals are posited as the gamechangers on a new playing field, professionals and specialists must play on it by default. Thus, radiation oncologists and medical physicists' perspective, traditionally focused on their service and on an understanding of quality of care that hinges on available technology, must now dovetail into a broader vision. Examining cancer care through a European lens can enable these professionals to rethink their objectives and, above all, their approach. The larger scope of European policies and structures encompasses dimensions that cannot be addressed at the local level alone, such as the introduction and evaluation of innovations or how to improve equity when countries have different healthcare service organisations. In fact, the Plan presents both challenges and opportunities for radiation oncology. First, the future of the specialty depends on recognizing as integral the organisation of care delivery within the context of the CCC and the network associated with it. For instance, it is critical to consider the role of multidisciplinary teams, how to make clinical decisions that minimise patients' need to travel, or how to organise satellite units in this context. Second, access to innovation is not only related to technology, but also to organisational aspects of procedures and service delivery [7], all of which require performance assessments. Thus, the repositioning of radiation oncology should also consider the dimension of cancer care organisation, as described recently [8]. Notably, the EBCP does not view CCCs as islands of excellence within healthcare systems; instead, regional integration must be considered alongside CCC development.

The requirement for openness as to CCCs' establishment should be also complementary to other flagship initiatives of EBCP that also pointed out to the needed comprehensiveness on cancer care and research. A good example is the flagship 'Better life for cancer patients', which, like EUnetCCC Standards, aimed at enhancing patients' post-treatment quality of life by improving the information available to cancer survivors and proposed several measures such as developing a 'cancer survivor card' to improve coordination of care and follow up, assessing obstacles to returning to work, promoting re-skilling programmes, or to effectively implement the 'right to be forgotten' for a cancer survivor in aspects such as access to financial services.

The road ahead will by no means be straight. It is undeniable, however, that Member States and European institutions are committed to a Europe that shares structures and not just objectives; that accepts the differences between health systems as natural and works from there. The EBCP objectives open new avenues for radiation oncologists, enabling them to work in a dimension that goes beyond the multidisciplinary perspective. This includes contributing to the definition of the CCC care model but extends to the network of coordinated centres in the territory and the organisation of service delivery and care based on multidisciplinary clinical decision-making. Access to innovation, reimbursement policy [9], performance assessments, and research support will likewise be integral issues to discuss as the practical definition of the CCC care model is refined and adapted in each care setting.

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Declaration of competing interest

The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

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