

Fostering system readiness in cancer care

POLICY BRIEF



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With many thanks to our International Advisory Group members, who volunteered their time to review versions of this brief:

Dr Erik Briers, Patient Advocate, Europa Uomo; patient representative and member of Guidelines Committee on the treatment of prostate cancer, European Association of Urology, Belgium

Dr John Buscombe, Locum Consultant Physician in Nuclear Medicine, Barts Health NHS Trust, UK

Professor Martin Dreyling, Senior Physician, LMU Klinikum, Germany

Dr Boris Hadaschik, Head of Department and Full Professor, Department of Urology, Essen University Hospital, Germany

Professor Ken Herrmann, Chair, Department of Nuclear Medicine, Essen University Hospital, Germany

Nikie Jervis, Senior Patient Support, Information Nurse Specialist and Education Lead, Neuroendocrine Cancer UK

Dr Jolanta Kunikowska, Associate Professor and Nuclear Medicine and Internal Medicine Physician, Nuclear Medicine Department, Medical University of Warsaw; President, European Association of Nuclear Medicine, Poland

Josh Mailman, President, Northern California CarciNET Community, US

Professor Nicolas Mottet, Professor of Urology, University Jean Monnet, France

Professor Jens Siveke, Director, Bridge Institute of Experimental Tumor Therapy, German Cancer Consortium, Germany

Professor Hein Van Poppel, Adjunct Secretary General for Education, European Association of Urology; Professor of Urology, KU Leuven, Belgium

Lorna Warwick, Chief Executive Officer, Lymphoma Coalition, Canada

With many thanks to the following additional contributors:

George Wharton, Senior Lecturer in Practice in Health Policy, London School of Economics and Political Science, UK

Alex Filicevas, Executive Director, World Bladder Cancer Patient Coalition; President, All.Can International, Belgium

ABOUT THE HEALTH POLICY PARTNERSHIP

The Health Policy Partnership is an independent research organisation, working with partners across the health spectrum to drive the policy and system changes that will improve people's health.

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Executive summary

Timely integration of innovative approaches into clinical practice is vital to continue improving the lives of people with cancer across Europe. The past few decades have seen significant advances in cancer prevention, screening, diagnosis, treatment and care.¹⁻⁶ However, the pressure that the growing burden of cancer and increasing complexity of care are putting on health systems may hinder their ability to effectively embed advances in care pathways.⁷⁻⁹ The COVID-19 pandemic has exacerbated existing care challenges and created a backlog of cases,¹⁰⁻¹³ further threatening health systems' capacity to offer timely, high-quality cancer diagnosis and care to all.

As we look to post-pandemic recovery, we are presented with a unique opportunity to protect the sustainability and resilience of cancer care. The pandemic has accentuated the importance of health system readiness, not only to protect patient care from unprecedented shocks but also to ensure the sustainability of care in the long term, leaving nobody behind. To safeguard system readiness, we need to ensure the right policies, infrastructure and processes are aligned to keep pace with advances in all facets of cancer care, and integrate them appropriately.

Assessment frameworks can provide a useful tool to support a data-driven approach to planning for the future of cancer care.

They allow for a systems view of readiness, looking at how governance, regulation and funding, service delivery, workforce planning and infrastructure must align to ensure the right interventions are delivered safely, appropriately and equitably to people with cancer. The data generated by assessment frameworks can then be scrutinised to determine which aspects of a health system need to be adapted. These data can be an invaluable asset for policymakers, decision-makers and the clinical cancer community more broadly in their work to ensure health systems are ready for the future of cancer care.

With the right assessment tools and evidence, it is possible to ensure that optimal care is offered to everyone with cancer, today and in the future. We hope this policy brief motivates and supports the use of robust assessment frameworks to encourage a data-driven approach to planning future care, for the benefit of all people with cancer.

The need for readiness in cancer care

Cancer care is constantly evolving, making integration of innovative approaches into practice indispensable for improving prevention, screening, diagnosis and care. More and more people are diagnosed with cancer every year in Europe,^{7,8} and innovation is essential if we are to continue improving their lives.^{4,14} Yet the growing prevalence of cancer, and demand for and complexity of cancer care, is putting pressure on health systems.⁹ In recent decades, remarkable advances have been made in cancer prevention and screening approaches, diagnostic procedures, surgery, radiotherapy and other medical treatments.¹⁻⁶ Digital health has enabled continuous monitoring of patients, creating greater continuity of care even after the phase of ‘active treatment’ is over.¹⁵ Cancer care has also become increasingly multidisciplinary, with specialties that have not traditionally been involved in cancer care working together.¹⁶ With cancer being a core mission of the European Commission¹⁷ and its ambitious Beating Cancer Plan,¹⁸ many opportunities are likely to emerge for embedding innovative prevention, screening, diagnostic and therapeutic interventions in health systems.¹⁹

The COVID-19 pandemic has highlighted and heightened existing deficits in cancer care, reinforcing the importance of health system readiness. Many countries experienced partial or complete disruption of cancer care services, with major ramifications in terms of delayed diagnosis and treatment.^{10-13, 20} The long-term impact of COVID-19 on cancer care is expected to be considerable, and in many countries a backlog of cases adds challenges to already stretched services.¹³ As we look to post-pandemic recovery, we must safeguard the sustainability of our health systems so that we can continue to effectively deliver and improve care for people with cancer, leaving nobody behind. To achieve this, health systems need to be ready to keep pace with the ever-evolving nature of cancer care.

Assessment frameworks can be essential tools to help decision-makers ensure health systems are ready for the future of cancer care. The European Commission’s Expert Group on Health Systems Performance Assessment and the Partnership for Health System Sustainability and Resilience, among others, call for the development of assessment tools to inform decisions on policy interventions and reforms aimed at building sustainable, resilient and prepared health systems.²¹⁻²³ In this policy brief, we offer perspectives on the value of assessment frameworks in measuring system readiness and generating evidence to inform future cancer care planning. Drawing from case studies of existing tools, we present the necessary components of effective assessment frameworks and highlight essential factors required to ensure findings derived from frameworks can translate into meaningful policy change.

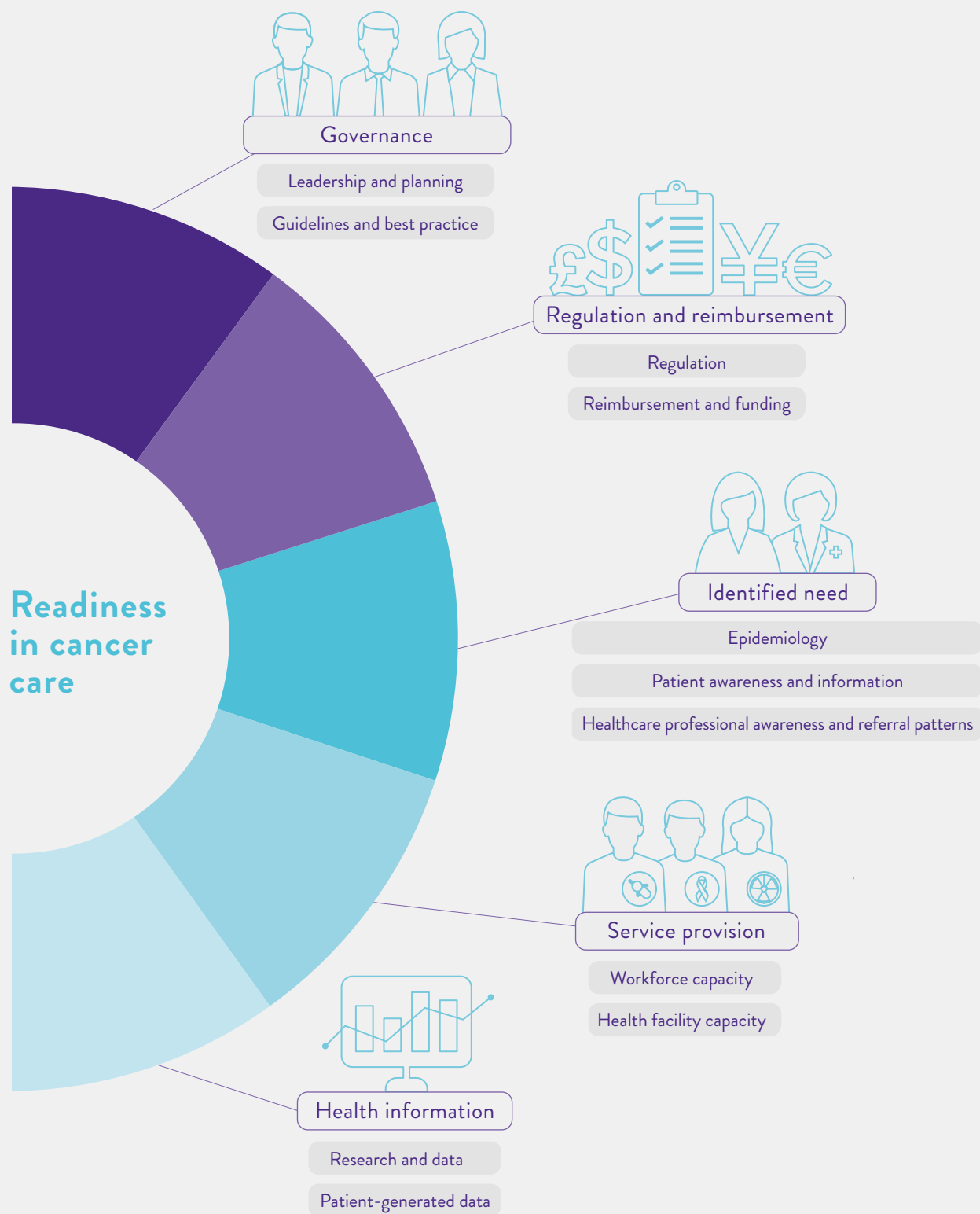


Defining readiness

Readiness in cancer care is the ability of a health system to rapidly and sustainably adapt policies, infrastructure and processes to support the integration of innovative approaches to care. This calls for a systems approach, looking at the different components of health systems (*Figure 1*).¹⁴ These components should be explored in isolation and also as interlinked elements of readiness. For example, for a new targeted treatment to be made available to patients, it needs to have gone through appropriate regulatory, reimbursement and funding approvals. The right infrastructure needs to be in place to ensure the treatment's safe delivery to patients (e.g. infusion chambers for intravenous treatments or lead-lined rooms for treatments using radiation). Workforce planning is needed to ensure sufficient and appropriately trained personnel are available for its delivery. Models of care need to be adapted to position this treatment within care pathways and protocols. And of course, information must be available to patients, treating professionals and decision-makers to monitor the treatment's safety and effectiveness in practice.

Put simply, for high-quality interventions to be integrated in a timely manner, the entire health system must be ready. Recognising the value of a ready health system is simple, but building one is more challenging; it requires a robust assessment approach to incite data-driven decision-making and proactive policy action.

FIGURE 1. Health system components that influence readiness



Measuring readiness

Despite increasing interest in measuring system preparedness and readiness in recent years, there is currently no standard approach to doing this in cancer care. A number of tools have been developed to evaluate and guide health systems in the integration of specific cancer programmes,^{22 24-28} but there is no standard approach for measuring readiness. To fill this gap, and drawing from a number of existing cancer care planning tools that focus on sustainability and resilience,^{22 24-28} we identified several components that are fundamental to the development of a robust assessment framework.

Based on this research, we have identified key attributes of effective readiness assessment frameworks to guide future cancer care (Box 1). This section presents examples that, while by no means exhaustive or representative of all potential readiness assessment tools across the cancer care spectrum, illustrate some foundational principles in looking at readiness in cancer care more broadly (Boxes 2–6).

BOX 1

Key attributes of readiness assessment frameworks

An effective readiness assessment framework needs:



A clear aim, scope, target audience and intended use



Relevant domains, subdomains, indicators, metrics and contextual factors



To be feasible, useful and credible



A transparent explanation of its potential limitations



To encourage a tangible 'next step'

What makes an effective assessment framework?

First and foremost, an assessment framework should convey a clear aim and have an explicit scope, target audience and intended use.

Aims should clearly express the purpose of the framework and how it can be applied (Box 2). The scope should also be clear, as it specifies the parameters within which the framework is applied. The target audience and intended use should be clearly defined to convey which stakeholders may find the framework most useful and for which purpose(s) they can use the data it contains.

BOX 2

Readiness assessment toolkit for lung cancer screening

In 2020, the Canadian Partnership Against Cancer developed a toolkit to determine readiness for implementing lung cancer screening programmes.²⁴ The toolkit aims to assist the development of such programmes, looking at all aspects from recruitment to follow-up. It is intended to be used by regional decision-makers at cancer agencies, as well as by provincial and territorial ministry departments responsible for prevention and delivery of cancer care. The toolkit enables programmes to identify strengths and address gaps in order to enhance readiness and capacity for the implementation of lung cancer screening programmes.

An assessment framework should also consider relevant domains, subdomains, indicators, metrics and contextual factors to be sure it is collecting all relevant information to inform readiness. Structuring a framework into different components helps to make it comprehensive, logical and manageable to use (Box 3). It also allows users to focus on applying certain areas, rather than the entire framework.

BOX 3

Framework to assess readiness for a new cancer therapy

The Radioligand Therapy Readiness Assessment Framework, developed by The Health Policy Partnership, aims to evaluate system-level integration of radioligand therapy into cancer care to encourage evidence-based planning for the approach.²⁸ Radioligand therapy is a highly targeted cancer therapy that delivers radiation directly to cancer cells, leaving healthy cells largely unaffected.^{29,30} The framework was developed to evaluate the positioning of radioligand therapy in different domains of a health system. It assesses the current integration of radioligand therapy and future readiness across five domains: governance, regulation and reimbursement, identified need, service provision and health information. Each domain is organised into subdomains and then indicators, which are targeted questions that assess specific components.²⁸ Indicators are further broken down into metrics and contextual factors that help evaluate each indicator using both quantitative and qualitative information.

Components of the framework



An assessment framework must be feasible, useful and credible.

The use of a grounded theory approach in developing and refining a framework based on available data can be helpful in ensuring that it is feasible to complete and can be adapted to evolving landscapes and national contexts. This renders it useful and timeless, increasing its utility in the future (*Box 4*). The architecture of a framework – as well as the data it contains – should be validated by experts from different disciplines and reflect multiple perspectives to ensure a multi-sectoral, comprehensive view is taken of what is important to determine readiness.

BOX 4**Assessment framework for health system sustainability and resilience**

The Partnership for Health System Sustainability and Resilience (PHSSR), initiated by the London School of Economics and Political Science, the World Economic Forum and AstraZeneca, developed and piloted a framework to assess countries' overall health system sustainability and resilience in light of their responses to the COVID-19 pandemic.²² The PHSSR's Steering Committee developed the framework in collaboration with relevant experts in different countries. The framework was validated through an iterative process of feedback and consultation and was piloted in eight countries: England, France, Germany, Italy, Poland, Spain, Russia and Vietnam. This allowed for analysis of the framework's feasibility and utility, as well as the development of country-specific descriptions of health system resilience and sustainability. Findings from the pilot phase are being used to refine the framework so it can be applied to more countries in future.

Potential limitations in assessment frameworks should be clearly stated. It is important for a framework to be transparent about the data, analyses, methods and interpretive choices underlying its claims. This allows evidence to be easily replicated and ensures that any data obtained are not subject to misinterpretation (*Box 5*).

BOX 5**Limitations of a system integration tool**

The Paediatric Oncology System Integration Tool (POSIT) was developed in 2019 to analyse the integration and performance of childhood cancer programmes within health systems.²⁵ In discussing its limitations, authors explicitly state that any framework will be unable to wholly capture the complexity of childhood cancer systems and their contexts. They also note limitations in their literature search strategy and synthesis of qualitative literature, although the latter was mitigated by expert consultation. The authors also clarify that, in settings with limited resources, it will be difficult to find adequate research capacity to focus on all health system dimensions of childhood cancer care. Nevertheless, they hope POSIT will facilitate international collaboration and encourage research focused on system-level determinants of childhood cancer programme integration.

Finally, an assessment framework should encourage a clear ‘next step’. Whether this relates to evidence-based planning, changing policy and practice, or reassessing the landscape after a certain amount of time has passed, it is important that a framework is used for more than just a one-off assessment (*Box 6*).

BOX 6**Long-term goals of a radiotherapy health economics project**

The Health Economics in Radiation Oncology (HERO) project was initiated by the European Society for Radiotherapy and Oncology in 2010 to develop a knowledge base for health economics in radiotherapy at the European level.²⁶⁻³¹ The overall aim was to provide solid data to the radiotherapy community to engage with governments and decision-makers, and advocate for better funding and resource planning for radiotherapy.³¹ The project launched a questionnaire to collect information on resource availability, guidelines and reimbursement of radiotherapy across Europe,³² and analysed the distribution of radiotherapy staffing, equipment and guidelines.³³⁻³⁵ These analyses became a foundation for creating a cost-accounting programme for radiotherapy.³⁶ In 2021, the project is developing a robust framework to define and assess the value of radiotherapy innovations in supporting clinical implementation and equitable access within a sustainable health system.³⁷

Fostering readiness: the way forward

Safeguarding the sustainability of cancer care requires a systems approach. Cancer care is confronted with significant and growing pressures in terms of rising prevalence, complexity and costs. To continuously improve outcomes for patients, Europe's health systems must be ready to effectively integrate new approaches to prevention, screening, diagnosis and care to ensure they reach all people who need them in a timely manner. This requires flexibility to adapt to cancer care over time, data to inform what changes need to be put in place, and mechanisms to drive data-driven changes across the entire health system.

Assessment frameworks can inform this process and help us proactively prepare for the future of cancer care. Several attributes are required to enable a framework to effectively assess and plan for health system readiness. While multiple assessment tools feature these important attributes, many remain academic exercises and do not translate their findings into policy and system change.

To create a shift from research to policy, assessment frameworks must be matched with:

- **an open dialogue with people with cancer and advocates** to ensure their needs and preferences are at the heart of cancer planning decisions
- **effective leadership from policymakers and decision-makers,** who should act on evidence-based framework findings and address gaps in the health system to ensure all people with cancer are offered the best possible care
- **multidisciplinary consensus and collaboration from the clinical cancer community** to implement evidence-based recommendations across the entire cancer care pathway
- **multi-sectoral support and coordination from professional societies and national health bodies;** they need to readily and sustainably adapt governance structures, regulatory and funding mechanisms, training processes, infrastructure, data systems, guidelines and educational materials to accommodate emerging innovations.

COVID-19 has demonstrated the dynamism of health systems in their ability to rapidly adapt to new circumstances – for example, the adoption of remote multidisciplinary cancer clinics. The pandemic has the potential to act as a catalyst for innovative change in the future planning and delivery of healthcare. Policymakers, decision-makers and the clinical cancer community thus have a unique opportunity to build more sustainable cancer care, leaving nobody behind. Now is the time to use data-driven and proactive policy change to improve the lives of people with cancer across Europe.

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The
Health Policy
Partnership

Contact information

The Health Policy Partnership Ltd
68–69 St Martin's Lane, London WC2N 4JS, United Kingdom

For more information, please see www.radioligandtherapy.com or contact Christine Ridout, Programme Lead for health system readiness at The Health Policy Partnership: christine.ridout@hpolicy.com

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