







Digital Transformation in Cancer Care: Empowering Europe's Workforce

Introduction & Context

Digital transformation is reshaping healthcare across Europe, especially in cancer care. New technologies such as telemedicine, artificial intelligence, virtual reality, electronic health records, and remote monitoring have enabled earlier diagnosis, more personalised treatment, and better continuity of care.

The COVID-19 pandemic accelerated the adoption of digital health tools but also revealed significant gaps in workforce readiness. Many healthcare professionals lacked the necessary digital skills, while hospitals and systems faced challenges with interoperability, infrastructure, and training capacity.

At the same time, Europe faces a growing health workforce crisis, with shortages of staff, increasing demands on services, and rising burnout. Ensuring that the workforce is digitally capable is essential to protect quality of care and efficiency.

The TRANSITION project was launched in 2023 to strengthen the digital skills of both clinical and non-clinical cancer care professionals. The goal was to ensure that digital health is not a barrier but a bridge to better, more patient-centred healthcare.



'Europe knows it has a challenge to meet in adopting new technologies efficiently across sectors. The EU supported TRANSITION project has shown the way. A pan European approach is enabling oncology professionals in every region and every country in Europe to access free top-level digital education, to an accredited level. We even see participation from China and beyond!'



Prof. Andreas Charalambous, Project Coordinator of TRANSITION

'As a long-standing advocate for strong EU cancer policy, it is a pleasure to see projects like TRANSITION come to fruition. Making meaningful contribution to pan-European challenges such as digital adoption in oncology, I am looking forward to our forthcoming event in the European Parliament where we will examine the policy recommendations from the project in greater detail.'



Loucas Fourlas, Member of the European Parliament

'To improve digital skills among healthcare workers, should not just be an opportunity, but a mandatory duty in all healthcare systems. Cancer care is an area where research and development are rapidly changing, and these skills are necessary.'



Penilla Gunther, Member of the EU Cancer Mission Board

'TRANSITION is an innovative project that advances two key objectives of the Mission on Cancer: achieving earlier diagnosis and treatment and enhancing the quality of life for patients and their families.'

Eleni Tolma, Member of the EU Mission on Cancer Board





Project Overview

TRANSiTION was implemented by a consortium of 24 partners from 14 EU Member States, coordinated by the Cyprus University of Technology. Partners included cancer centres, hospitals, universities, civil society groups, and patient advocacy organisations.

The project focused on co-creation, bringing together healthcare professionals, patients, policymakers, and educators to design training that was practical, evidence-based, and relevant to real-world settings.

Training modules were piloted in 13 countries and delivered in 12 languages. Over 600,000 people were reached through recruitment efforts, of whom a total of 1,879 professionals took part, including oncologists, nurses, general practitioners, managers, and coordinators. About one third acted as trainers, while two thirds were trainees.

13 Countries

600K Reach

Languages

Over **1,800**

Professionals Recruited

The Global Outreach of TRANSiTION



China Integrative Oncology Conference (CCHIO), 14-17 November 2024 China



Joint Awareness Event of TRANSITION and DESIPOC 16-17 October 2024 Cyprus



European Cancer Summit, 20-21 November 2024 Belaium



European Transcultural Nursing Association, 12-15 June 2024 United Kingdom



Hybrid TRANSITION Workshop, Universitat Oberta de Catalunya 16 February 2024 Spain



Seminar 'The Role of Technology in Cancer Patient Care', 10 April 2024 Cyprus



Achievements



Designed and piloted 18 modular training units, covering core digital competencies.



Created distinct tracks for clinical and non-clinical staff.



Delivered training in hybrid formats, combining asynchronous online content with live sessions.



Developed evaluation tools and a Digital Health Tool Guide.



Created micro-credentials to formally recognise learning.



Secured accreditation for training: 53 CME credits for oncologists and 57 CNE credits for nurses.



Established a Training of Trainers programme to ensure sustainability.

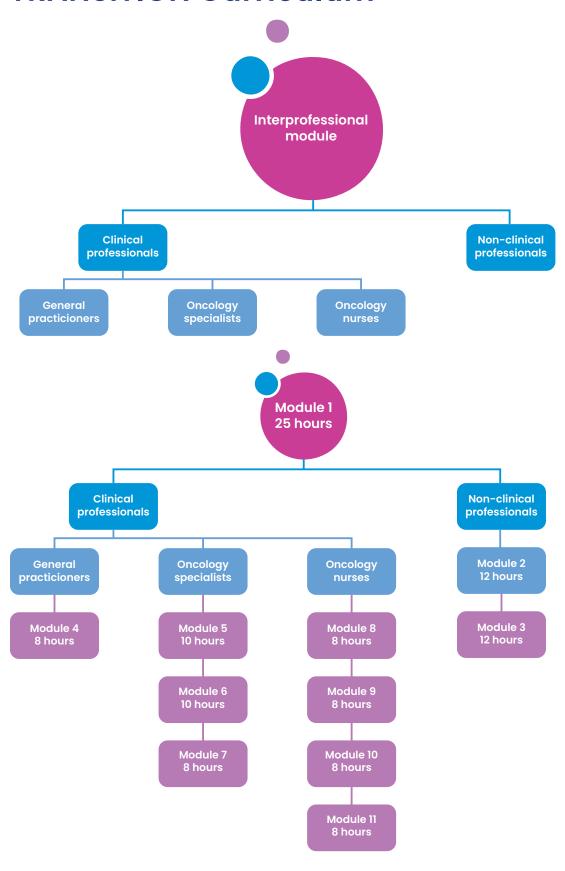


Integrated the training programme into the Cyprus University of Technology's Moodle platform in 2025, enabling remote access and long-term continuation.





Quickfire presentation of the TRANSiTION Curriculum





Lessons Learned

The pilots across Europe provided valuable insights into what works in digital training for healthcare.

- Localisation is crucial: adapting modules to national languages and contexts increased engagement.
- Designing and implementing effective digital skills training requires a thorough understanding of the needs of the target healthcare professionals.
- Flexibility is essential: blended learning and modular formats made participation possible for busy professionals.
- Trainers must be well prepared not only in technical knowledge but also in teaching methods.
- Digital equity remains a challenge: rural areas and less resourced countries faced greater barriers to participation.
- Retention was difficult due to workload and lack of institutional incentives, although accreditation and micro-credentials encouraged participation.

These lessons highlight that training must be more than content delivery: it should be user-centred, context-sensitive, and institutionally supported.

Key Findings

The project identified critical digital skills gaps across Europe's cancer care workforce.

- Clinicians often lacked hands-on training in using electronic health records, telemedicine platforms, and mobile applications for patient monitoring and follow-up.
- Non-clinical professionals, including managers and system planners, needed better understanding of interoperability, digital governance, workflow optimisation, and data use for planning and evaluation.
- Patients and caregivers prioritised communication and empowerment skills, showing the importance of aligning professional training with patient needs.
- Many professionals reported lack of awareness of available digital tools, limited confidence, and uncertainty about ethical and legal implications.

Overall, the key gap is not only in learning how to use digital tools, but in knowing which tool to use, when, why, and to what effect.





Policy Recommendations

The Blueprint sets out recommendations to support digital transformation across Europe.



Establish a Pan-European Digital Competence Framework for Healthcare, aligned with EU standards but adapted to clinical and non-clinical realities.



Integrate digital skills into undergraduate, postgraduate, and continuing education for all healthcare professions.



Provide protected training time and financial incentives to encourage participation.



Invest in secure, interoperable IT systems to support real-world use of digital tools.



Promote peer-led training and identify digital champions within institutions to build trust and engagement.



Establish centres of excellence at national or EU level to share best practices, update content, and support innovation.



Involve patients and communities in co-design of tools and training to ensure inclusivity, accessibility, and equity.



Embed balanced learning into the work environment, fostering continuous learning aligned with EU CPD/CME/CNE requirements without causing burnout. Institutionalise mental health initiatives in policies to ensure a consistent approach that prioritises well-being across the workplace.

These lessons highlight that training must be more than content delivery: it should be user-centred, context-sensitive, and institutionally supported.







Consortium Partners























































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