

Mapping existing digital skills training in oncology across Europe

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Background: Healthcare systems in Europe are undergoing a digital transformation, which is a political commitment to turn the tide against cancer and act as a stepping stone towards a strong European Health Union. Healthcare professionals (HCPs) and non-HCPs (health managers) play a crucial role as they utilise digital solutions to provide high quality services. The EU funded TRANSITION Project was developed to foster up-skilling and reskilling in the context of digital health solutions for the oncology workforce. Part of the TRANSITION Project was to identify the existing training programmes for HCPs and health managers on digital skills.

Methods: An online survey that incorporated a mixed-methods approach was conducted during May-June 2023. Experts purposively identified from 14 European states provided data about the existing training programmes. The assessment followed the Kirkpatrick model.

Results: 57 training programmes were found, of which 47.9% addressed to HCPs, 29.2% to health managers, and only 4.2% were specifically targeted the oncology workforce. However, in the 95.8% of the cases, both HCPs and health managers were required to use digital solutions.

Table 1. Countries' rank according to Kirkpatrick's model analysis .

Country	Overall	Reaction	Learning	Behavior	Results
1. Italy	1.46	2.00	1.50	1.00	1.33
2. Greece	1.41	1.00	1.80	1.00	1.83
3. Slovenia	1.36	1.00	1.75	1.19	1.50
4. Croatia ¹	1.13	1.00	1.00	1.00	1.50
5. Poland ²	1.13	1.00	1.20	1.25	1.08
6. Spain ³	1.08	1.00	1.00	1.00	1.33
7. Portugal ⁴	1.00	1.00	1.00	1.00	1.00
8. Belgium ⁵	0.94	0.00	1.00	1.75	1.00
9. Cyprus	0.89	0.50	1.00	1.00	1.04
10. Romania	0.82	1.00	0.60	1.00	0.67
11. France ⁶	0.52	0.00	1.00	0.75	0.33
12. Germany	0.35	0.00*	0.26	0.37	0.77
13. Bulgaria	0.00	0.00	0.00	0.00	0.00
14. Lithuania	0.00	0.00	0.00	0.00	0.00

¹ Osijek-Baranja County region ; ² Central (Masovian District) ; ³ Regions of Andalusia, Galicia and Catalonia ; ⁴ Region of Porto ; ⁵ Flemish region ; ⁶ Brittany region ; * N/A

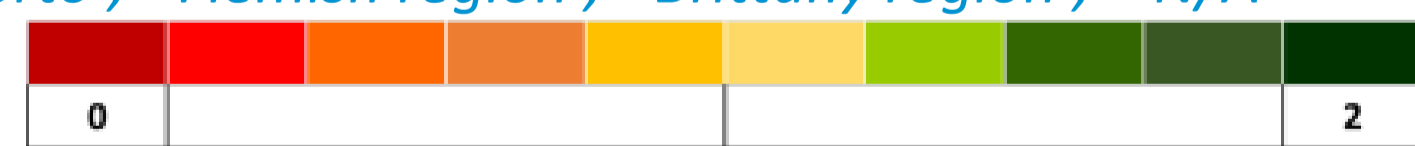
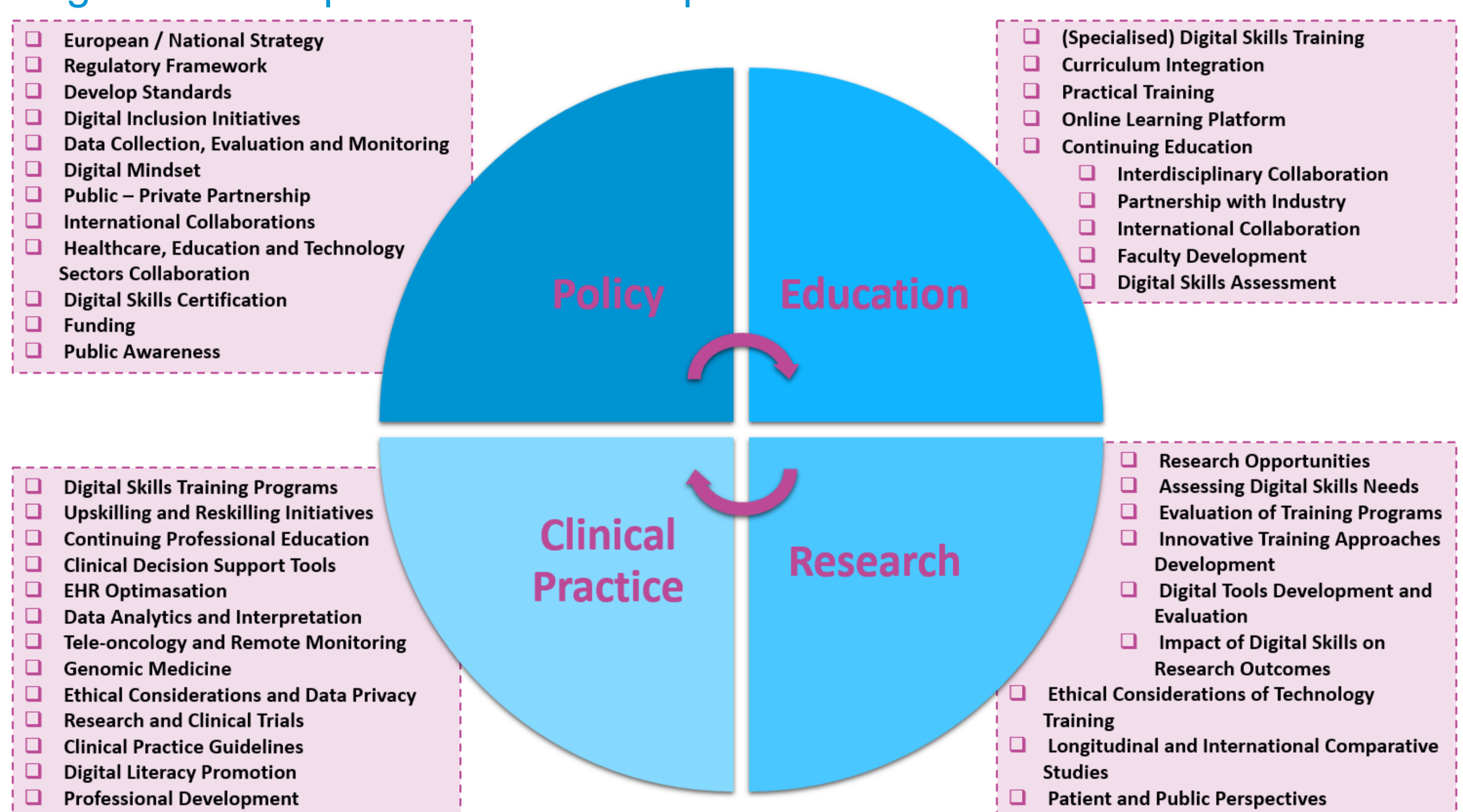


Figure 1. Recommendations for digital skills training development and digital index improvement in Europe.



Conclusions: The mapping identified needs and gaps in digital training in oncology across Europe for HCPs and health managers. This mapping alongside the overall work of the TRANSITION Project will serve to build a comprehensive training programme in oncology across the disease pathway. Additionally, it will foster a multi-stakeholder approach in synergy with other relevant Union actions to support actions to address continuing training requirements, inequalities in health, to improve safety, quality of care and cross-border healthcare, and supporting actions for the improvement of the surveillance, diagnosis and treatment of cancer.