

FULL CURRICULUM MODULE 1

	PLINARY AND INTERPROFESSIONAL COMMUNICATION DIGITAL TECHNOLOGY MANAGEMENT
SUBMODULES	Communication tools and strategies Data sharing and privacy, cybersecurity Ethical, deontological and legal considerations Change management in healthcare Innovation in eHealth The role of Artificial Intelligence in healthcare
GENERAL OBJECTIVES	The participant will be able to: -Employ diverse digital communication tools and strategies to facilitate interaction and engagement. -Understand and implement steps to protect data and devices and prevent cyber attacks. -Apply ethical principles and legal frameworks on the utilisation of eHealth technologies- -Comprehend and apply change management by engaging stakeholders and assessing transition proces. -Detect needs and opportunities for innovation in healthcare to promote behaviors aimed at innovating health organizations -Understand the importance and application of artificial intelligence in healthcare.
METHODS	Presentations Lectures Videos
ASSESSMENT METHODS	The sections are followed by self-assessment questions with feedback on responses. Final quiz covering all of the sections
CREDITS	Time: 25h



Submodule: Communication tools and strategies	
CONTENTS	Digital communication principles and strategies. Communication styles based on audience. Social media: overview as communication tool, risks and benefits.
COMPETENCIES	Employ diverse digital communication tools and strategies adapted to the specific audience to facilitate effective online interaction and engagement.
LEARNING OUTCOMES	The participant will be able to: - Comprehend and promote an adequate and effective communication using digital tools - Identify and assess different digital communication strategies - Detect and evaluate communication barriers and promote solutions.
METHODS	Presentations Lectures Videos
MATERIALS - TIME	3 lessons, each one: Presentation (15'), lectures (45'), test of knowledge with 12 questions (10') Videos – 1 hour
CREDITS	4h

Submodule: Data sharing and privacy, cybersecurity	
CONTENTS	Protect devices and data (antivirus, secure password practices, two- step verification protocols) Sharing vulnerable data: risks, limitations and strategies
COMPETENCIES	Understand and implement steps to protect data and devices implementing safe data-sharing practices and managing risks associated with digital health technologies to prevent cyber attacks.
LEARNING OUTCOMES	The participant will be able to: -Be familiar with the primary forms of cyberattack risks -Identify strategies to avoid cyber attacks -Assess and use strategies for safely sharing data and vulnerable information
METHODS	Presentations Lectures, case study Videos





MATERIALS	2 lessons, each one: Presentation (15'), lectures (45'), test of knowledge with 12 questions (10') Videos – 1 hour
CREDITS	4h
CREDITS	

Submodule: Ethical, deontological and legal considerations	
CONTENTS	Ethics and deontology on eHealth and digital health tools Legal framework on the utilisation of eHealth technologies
COMPETENCIES	Apply ethical principles and legal frameworks through established protocols and ethical clinical guidelines to maintain integrity in healthcare practices and data management.
LEARNING OUTCOMES	The participant will be able to: -Be familiar with the ethical and deontological aspects involved in digital health -Identify legal aspects for using digital tools in healthcare
METHODS	Presentations Lectures Videos
MATERIALS	2 lessons, each one: Presentation (15'), lectures (45'), test of knowledge with 12 questions (10') Videos – 1 hour
CREDITS	4h

Submodule: Change management in healthcare		
CONTENTS	Change management in healthcare: definitions, principles and implications. Strategies to adapt and support change in health organisations and risks of a wrong management. Role of people in a change of healthcare.	
COMPETENCIES	Understand and implement fundamental principles of change management in healthcare by engaging stakeholders and evaluating transition processes for organizational success.	





LEARNING OUTCOMES	The participant will be able to: -Enhance understanding of change management principlesRecognise the importance of engaging people in a change process and explore methods to achieve it -Assess transition processes and strategies to support it
METHODS	Presentations Lectures Videos
MATERIALS	3 lessons, each one: Presentation (15'), lectures (45'), test of knowledge with 12 questions (10') Videos – 1 hour
	4h
CREDITS	

Submodule: Innovation in eHealth	
CONTENTS	New technologies in healthcare The need for innovation in oncology: benefits and applications in practice
COMPETENCIES	Detect needs and opportunities for innovation in healthcare to actively adopt and promote behaviors aimed at innovating health organizations for enhanced patient care and organizational effectiveness.
LEARNING OUTCOMES	The participant will be able to: -Detect needs and opportunities for innovation in healthcare and identify priority applications for a particular setting. -Adopt and promote behaviours aimed to innovate health organisations
METHODS	Presentations Lectures Videos
MATERIALS	3 lessons, each one: Presentation (15'), lectures (45'), test of knowledge with 12 questions (10') Videos – 1 hour
CREDITS	4h



Submodule: The role of Artificial Intelligence in healthcare	
CONTENTS	Artificial Intelligence: what it is and how we use it. Myths and realities of AI in the current world. Future of AI in healthcare.
COMPETENCIES	Understand the importance and application of artificial intelligence in healthcare, identifying barriers and enablers for its use and potential to enhance healthcare assistance.
LEARNING OUTCOMES	The participant will be able to: -Know present application of artificial intelligence in healthcare -Identify barriers and enablers for AI use and its potential -Recognise importance of AI for improving healthcare assistance.
METHODS	Presentations Lectures Videos
MATERIALS	3 lessons, each one: Presentation (15'), lectures (45'), test of knowledge with 12 questions (10') Videos – 1 hour
CREDITS	5h



NON CLINICAL PROFESSIONAL PATHWAY MODULE 2

DIGITAL TRANSFORMATION

MODULE: DIGITAL TRANSFORMATION	
SUBMODULES	Digital technology management for oncology Data collection and analysis for management Digital tools and interventions implementation and evaluation
GENERAL OBJECTIVES	The participant will be able to: - Explain the concept and the impact of digital technologies in oncology management and their implementation Be familiar with diverse data collection processes.
METHODS	Presentation/videos
ASSESSMENT METHODS	Self assessment/case study
CREDITS	Time: 12h

Submodule: Digital technology management for oncology	
CONTENTS	Explore digital technology management in healthcare, particularly in oncology, understanding its conceptual framework and evaluating its impact on patient care quality and efficiency.
COMPETENCIES	Understanding terms and information related to digital technology tools in healthcare, specifically oncology, and recognize their importance, while developing the ability to analyze them critically.
LEARNING OUTCOMES	The participant will be able to: -Explain the concept and the impact of digital technologies in oncology management (e.g. for improved patient outcomes, for personalized treatment)Identify various digital tools available for non-clilnical professionals in the field of oncology





METHODS	Constructivist methodology to support active learning and reflection Learner-centered methods including activities with increased interactivity and immediate feedback whenever possible
MATERIALS	Presentation 15' Videos 5' Quiz Assessment 10'(multiple choice, true or false, matching)
CREDITS	4h

Submodule: Data collection and analysis for management	
CONTENTS	Healthcare data models: bases, foundations and comparisons between existing models, internal and external data sources Data: Instruments and techniques for preparing, analysing, storing and visualising them.
COMPETENCIES	Be familiar with analytical tools and techniques to interpret data from various sources, aiming to improve management and decision making processes.
LEARNING OUTCOMES	The participant will be able to: - Identify useful primary and secondary data sources - Be familiar with diverse data collection processes - Draw the appropriate evidence-based conclusions and communicate results
METHODS	Presentations Lectures Videos
MATERIALS	Presentations Lectures Videos
CREDITS	4h

Submodule: Digital tools and interventions implementation and evaluation	
CONTENTS	- Prerequisites for an effective adoption of digital tools and interventions for oncological healthcare transformation.





	- Empowering nonclinical professionals with expertise in implementing, evaluating, and strategically integrating digital tools and interventions in oncological healthcare management.
COMPETENCIES	Employ and understand the process for digital tools and interventions implementation and the assessment of the outcomes and impact in oncology healthcare management.
LEARNING OUTCOMES	The participant will be able to: - know various digital tools and interventions used in healthcare systems with particular emphasis on those which are important for oncological care - explain bases of the implementation of digital tools and interventions, use them effectivelyanalysis of their impact and assess/measure the outcomes will be familiar with digital tools and interventions as well as aligns them with organizational goals, mitigate associated risks and contributes to resource sharing and efficient collaboration among nonclinical professionals and healthcare personnel.
METHODS	 Presentations of cutting-edge digital tools and interventions (plenaries and individual). Group workshops, collaboration platforms, shared video presentations, case studies analyses where participants (nonclinical) liaise with medical specialists in decision-making process to simulate organizational processes related to patient care (seminars, discussions, own studies).
MATERIALS	 - Presentations, tutorials, showcases on approx. 6 tools x 20 min. each. - Own studies, workshops, simulations on approx. 2 cases x 60 min. each. The number of tools/cases may vary according to the finally agreed materials.
CREDITS	4h

MODULE: DIGITAL TRANSFORMATION Communication tools for healthcare teams Electronic medical records and Health information exchange





	Regulatory compliance Secure data sharing and patient privacy in digital environment
LEARNING OUTCOMES	The participant will be able to: - Know the bases of effective and safe communication in a digital environment - Identify barriers and enablers of eHealth and its tools for healthcare - Understand the present framework for the regulatory and privacy compliance.
METHODS	Presentation/videos
ASSESSMENT METHODS	Self assessment and case study
CREDITS	Time: 12h

Submodule: Communication tools for healthcare teams	
CONTENTS	Principles, techniques and outcomes of effective interprofessional communication in cancer care Tools and technologies for cancer care communication
COMPETENCIES	Identify communication tools and technologies and exemplify and quantify their effects on interprofessional teams and patients.
LEARNING OUTCOMES	The participant will be able to: -Identify the communication tools for an effective communication -Establish innovative communication patterns among teams of health professionals -Effectively communicate with external team members, coming from diverse professional and cultural backgrounds
METHODS	Presentations Lectures Videos
MATERIALS	Presentations Lectures Videos



	3h
CREDITS	

Submodule: Electronic medical records and Health information exchange		
CONTENTS	Platforms and databases for sharing patients information: EHR and HIE Information systems: interoperability and standard, overview Retrieving clinical information for reporting purposes	
COMPETENCIES	Acknowledge healthcare models and systems at an international level, the need of their integration, as well as their use in different situations and the information resulting.	
LEARNING OUTCOMES	The participant will be able to: -Know and understand platforms to share health information in a clinical setting -Recognise the need of communication between systems and their interoperability -Review patient records for coherence and accuracy -Be familiar with the European Health Data Space	
METHODS	Presentations Lectures Videos	
MATERIALS	Presentations Lectures Videos	
CREDITS	3h	

Submodule: Regulatory compliance		
CONTENTS	Healthcare Regulations and Standards Overview Introduction to regulatory frameworks in digital health standards governing healthcare compliance, security ar standards; Regulatory bodies and their roles) Compliance Measures for Digital Healthcare Systems (I of regulatory requirements, Auditing and monitoring for Penalties and consequences for non-compliance)	nd privacy





COMPETENCIES	Interpret and apply healthcare regulations and standards in a digital environment. Implement compliance measures to ensure adherence to regulatory requirements. Evaluate and manage risks associated with non-compliance in healthcare systems
LEARNING OUTCOMES	The participant will be able to: -Interpret and explain the main regulatory frameworks governing digital healthcareApply compliance measures to maintain adherence to regulatory requirementsAssess the legal implications of non-compliance, specifically regarding patient data.
METHODS	Methodology promoting active learning and consideration Learner-centered methods with interactive activities and immediate feedback Case examinations and practical scenarios
MATERIALS	Video presentation (~ 10-15 minutes) PowerPoint presentation (~30-50 minutes) Applicable articles (~ 30-50 minutes) Case examinations (~30-50 minutes)
CREDITS	3h

Submodule: Secure data sharing and patient privacy in digital environment		
CONTENTS	Fundamentals of Patient Privacy and Data Security (including ways to safeguard patient privacy and risks associated with health data sharing) Encryption and Data Protection Technologies Secure Data Sharing Protocols and Practices	
COMPETENCIES	-Identify and implement secure data sharing practices -Identify and implement ways to safeguard patient privacy -Assess and manage risks associated with health data sharing	
LEARNING OUTCOMES	The participant will be able to: -identify secure data sharing practices in a digital healthcare environment -implement best practices for securing data in oncology (capacity building)	





	-explain the ethical and legal considerations surrounding patient information in a digital environmentidentify the potential risks and threats to patient data in oncology describe encryption techniques and their role in securing sensitive healthcare data.
METHODS	Constructivist methodology to support active learning and reflection Learner-centered methods including activities with increased interactivity and immediate feedback whenever possible
MATERIALS	Video presentation 10' Powerpoint presentation 30' Articles x2 30' Case study Self-assessment
CREDITS	3h





CLINICAL PROFESSIONAL PATHWAYS GENERAL MEDICINE

MODULE: DIGITAL TOOLS FOR ONCOLOGY PATIENTS REMOTE MANAGEMENT	
SUBMODULES	eHealth and patient empowerment Prevention and cancer control through digital tools Use of technologies in rural areas and vulnerable patients: barriers and possibilities
GENERAL OBJECTIVES	The participant will be able to: - Ability to empower patients through education and guidance on eHealth and digital tools in oncology care. - Understand and apply digital tools to promote cancer prevention and control. -Identify and assess obstacles faced by vulnerable patients/caregivers in utilizing technologies in rural areas
METHODS	Mix of presentations, reading papers and case studies
ASSESSMENT METHODS	The sections are followed by self-assessment questions with feedback on responses. Final quiz covering all of the sections
CREDITS	Time: 8h

Submodule: eHealth and patient empowerment		
CONTENTS	eHealth, digital tools and its application in patient empowerment in oncology care: understand benefits and limitations. Information and education in digital health technologies: skills and knowledge. The patient in the centre: empowerment of patients to use eHealth and digital tools.	





COMPETENCIES	Ability to empower patients through education and guidance on eHealth and digital tools in oncology care, ensuring understanding of both benefits and limitations, to a more personalized healthcare experience.
LEARNING OUTCOMES	The participant will be able to: -Know the importance of digital tools in cancer care to provide a personalised care; -Recognise the central role of the patients in the choice and use of digital tools or interventions; -Understand the importance and gain skills for supporting patients and caregivers for an efficient and favourable use of digital tools.
METHODS	Mix of presentations, reading papers and case studies
MATERIALS	 Research papers on effective patient empowerment Presentations including a summary of legal procedures for patients in digital tools Case studies on which digital tools to use for different patients/caregivers' needs Time: 2.5 hours
CREDITS	2,5hrs

Submodule: Prevention and cancer control through digital tools	
CONTENTS	Primary and secondary prevention and health promotion through digital tools and technologies. Tools/interventions available to increase health awareness and cancer prevention and control.
COMPETENCIES	Understand and apply digital tools to promote cancer prevention and control, assessing their relevance for various target groups and integrating them into patient care practices for enhanced health outcomes.
LEARNING OUTCOMES	The participant will be able to: -Identify and use digital tools for prevention and health promotion in cancer patients and general population; -Assess the adequate tools for targeting the correct group of people; - Understanding the applicability of these digital tools in patient care





METHODS	Mix of presentations, reading papers and case studies
MATERIALS	- Research papers - Presentations - Case studies Time: 3 hours
CREDITS	3h

Submodule: Use of technologies in rural areas and vulnerable patients: barriers and possibilities	
CONTENTS	How to maximise the use of technologies for and by vulnerable patients to improve their care. How to improve access to technologies in remote and rural areas.
COMPETENCIES	Identify and assess obstacles faced by vulnerable patients/caregivers in utilizing technologies, proposing solutions to enhance the use of digital tools for cancer care and treatment adherence in rural areas to avoid social exclusion.
LEARNING OUTCOMES	The participant will be able to: -Recognise and assess the obstacles that vulnerable patients/caregiver can face in the use of technologiesIdentify possible solutions to the use of digital tools in cancer care and treatment adherence in rural areas.
METHODS	Mix of presentations, reading papers and case studies
MATERIALS	- Research papers - Presentations - Case studies Time: 2.5 hours
CREDITS	2,5h



ONCOLOGY SPECIALISTS MODULE 5

MODULE: TECHNOLOGIES FOR CANCER DIAGNOSIS AND TREATMENT	
SUBMODULES	Digital tools and technologies for cancer diagnosis Cancer treatment planning and follow up through digital instruments Telemedicine and virtual consultation
GENERAL OBJECTIVES	The participant will be able to: - Understand and use technologies and tools to provide support in the process of diagnosis to help oncologists in their diagnostic process. - Identify and utilize technology to support the treatment planning and follow-up in cancer care. - Comprehend and utilize telemedicine and virtual consultation in oncology practice.
METHODS	Mix of presentations, reading papers and case studies
ASSESSMENT METHODS	The sections are followed by self-assessment questions with feedback on responses. Final quiz covering all of the sections
CREDITS	Time: 10h

Submodule: Digital tools and technologies for cancer diagnosis	
CONTENTS	Diagnosis: current tools and technologies to support cancer diagnosis. Use and benefits of technologies in the process of cancer diagnosis
COMPETENCIES	Understand and use technologies and tools to provide support in the process of diagnosis, ensuring their effective integration into clinical practice to help and support oncologists in their diagnostic process.
LEARNING OUTCOMES	The participant will be able to: - Identify the different tools available to support the diagnostic process -Assess and use the most appropriate tool depending on different factors (i.e. stage of cancer, type of cancer) -Integrate digital tools in cancer diagnosis.





METHODS	Mix of presentations, reading papers and case studies
MATERIALS	- Research papers - Presentations - Case studies Time: 3.5 hours
CREDITS	3,5h

Submodule: Cancer treatment planning and follow up through digital instruments	
CONTENTS	Technologies to support treatment: include digital health tools in planning and delivery. Cancer treatment follow-up through digital tools: benefits, limitations and solutions. Tools and interventions for treatment and follow-up (applications, databases, digital imaging).
COMPETENCIES	Identify and utilize technology to hold up the treatment planning and follow-up in cancer care, selecting the adequate tool or intervention based on patients' needs, to support treatment choice and facilitate the follow-up.
LEARNING OUTCOMES	The participant will be able to: - Know different tools to support the treatment planning in cancer care. - Recognise the benefits of using technology to support cancer care in different stages and understand how outcomes from digital tools can be used in clinical practice to adapt a cancer patient's treatment. -Identify the adequate tool or intervention based on patients' needs.
METHODS	Mix of presentations, reading papers and case studies
MATERIALS	 Research papers Presentations including a summary of legal procedures for patients in digital tools Case studies Time: 3.5 hours





CREDITS	

Submodule: Telemedicine and virtual consultation		
CONTENTS	Telemedicine and video consultation: support for oncology care. Adapt the tool to the patient/caregiver and their needs. Promotion of telemedicine and virtual consultation to support cancer care.	
COMPETENCIES	Understand the use of telemedicine and virtual consultation in oncology, selecting appropriate tools and identifying facilitators and barriers to provide remote healthcare access to individual patient's contexts.	
LEARNING OUTCOMES	The participant will be able to: - Understand the use of telemedicine and virtual consultation in oncology - Assess and choose the tool based on patient/caregiver needs, to promote an efficient and favorable use. - Identify facilitators and obstacles to provide effective telemedicine and virtual consultation given each specific patient's context and background	
METHODS	Mix of presentations, reading papers and case studies	
MATERIALS	 Research papers Presentations including a summary of legal procedures for patients in digital tools Case studies 	
CREDITS	Time: 3 hours	

MODULE: DIGITAL TOOLS FOR SHARED MEDICAL DECISION IN ONCOLOGY Digital Shared Medical Decision: tools and support platform Patient-centered care in digital settings





	Support and promote patients' empowerment and decision-making process in health
GENERAL OBJECTIVES	The participant will be able to: -Introduce concepts of decision support and how it fits with shared decision-making in digital settings. -Explore patients' decision needs and tailor decision support in oncology by using Ottawa Decision Support Framework -Search digital tools to support high quality patient decision making in oncology. -Discuss how to implement and evaluate decision support interventions using digital tools.
METHODS	Presentation Lectures Aid libraries searching Videos
ASSESSMENT METHODS	The sections are followed by self-assessment questions with feedback on responses. Final quiz covering all of the sections
CREDITS	Time: 10h

Submodule: DIGITAL TOOLS FOR SHARED MEDICAL DECISION IN ONCOLOGY	
CONTENTS	-Decision Support and Shared Decision Making in oncology: frameworks, evidence and impactConceptual Foundation: The Ottawa Decision Support Framework (ODSF) -Digital decision Tools and Decision Coaching in digital settings in oncology - Implmementation and evaluation of SDM digital tools and intervention in oncology practice/organization.
COMPETENCIES	Capability to implement and evaluate decision support interventions using digital tools for enhancing oncology patients' shared decision making.
LEARNING OUTCOMES	The participant will be able to: -Introduce concepts of decision support and how it fits with shared decision-making in digital settingsExplore patients' decision needs and tailor decision support in





	oncology using Ottawa Decision Support FrameworkSearch digital tools to support high quality patient decision making in oncologyDiscuss how to implement and evaluate decision support interventions using digital tools.
METHODS	Presentation Lectures, critical appraisal of the literature Decision aid libraries search Videos
MATERIALS	4 lessons, each one: Presentation (15'), lectures (45'), test of knowledge with 12 questions (10') Search of decision aid libraries – 2 hour Videos – 1 hour
CREDITS	10h

MODULE: LEARNING, RESEARCHING AND DEVELOPING IN ONCOLOGY	
SUBMODULES	Cancer management based on data Research and development in oncology using digital technologies Ongoing learning, professional development and networking in oncology
GENERAL OBJECTIVES	The participant will be able to: -Analyze cancer-related digital data using computational methods to optimize cancer management. -Utilize networking opportunities to exchange insights within the oncology community, fostering ongoing learning and professional development. -Design and execute IT-related R&D projects in oncology.
METHODS	Presentation Lectures Videos
ASSESSMENT METHODS	The sections are followed by self-assessment questions with feedback on responses. Final quiz covering all of the sections.
CREDITS	8h





Submodule: Cancer n	nanagement based on data
CONTENTS	-Digital data sources in cancer managementDigital methods for cancer data analysisApplications of digital data in cancer management
COMPETENCIES	- Analyze cancer-related digital data using computational methods to optimize cancer management.
LEARNING OUTCOMES	The participant will be able to: -Utilize various digital data sources relevant to cancer management, including electronic health records, etc. -Apply digital methods to analyze cancer data effectively. -Interpret and extract meaningful insights from digital data to support clinical practice in oncology.
METHODS	 Presentations of recent IT systems / technologies, databases (plenaries and individual). Thematic collaboration platforms (applying blogging/vlogging platforms, online journals and similar tools with options for users/readers comments). Shared video presentations based on self-studies and research papers analyses, where participants test recent IT systems / technologies in order to present developed cases, comment results, infer from the data, engage in observation, advice, decision-making, simulations for the treatment and patient care (seminars, discussions, own studies).
MATERIALS	 Presentations, tutorials, showcases. Own studies. The number of tools/cases may vary according to the finally agreed materials.
CREDITS	2,5h

Submodule: Research and development in oncology using digital technologies	
CONTENTS	-Exploring the process of designing and conducting R&D projects tailored to oncological challenges using digital tools and methodologies.





	-Identifying and adapting the specific requirements for digital research activities in oncologyTechniques for real-time assessment of the potential impact and feasibility of implementing digital R&D results in oncological settingsDeveloping interdisciplinary skills and careers through Digital R&D collaboration.
COMPETENCIES	Engage in IT-related research for oncology, tailoring projects to patient needs, evaluating real-time implementation for improved treatment outcomes and fostering career development through collaboration.
LEARNING OUTCOMES	The participant will be able to: -Know how to engage in R&D activities (particularly IT-related ones) i.e. how to design, conduct R&D projects as well as evaluate and deploy R&D results in operational environment, -Tailor research activities to meet the unique needs of oncological patients, -Assess the potential of R&D results implementation for the benefit of oncological patients, ensuring optimal treatment outcomes as well as patients' data privacy, -Know how to develop their skills and careers thanks to the interdisciplinary R&D collaboration.
METHODS	- Presentations of recent IT systems / technologies, databases (plenaries and individual).
MATERIALS	 - Presentations, tutorials, showcases. - Own studies. The number of tools/cases may vary according to the finally agreed materials.
CREDITS	3hrs

Submodule: Ongoing learning, professional development and networking in oncology	
CONTENTS	Utilise digital networking opportunities effectively to exchange experiences and insights within the oncology community, promoting ongoing learning for improved patient care and professional development.





COMPETENCIES	 Recognize the significance of ongoing learning in oncology for improving patient care and professional development. Demonstrate the ability to leverage networking opportunities to exchange experiences and insights, fostering collaborative learning within the oncology community.
LEARNING OUTCOMES	The participant will be able to: - know the resources, tools, and techniques to retrieve and apply information, particularly from online resources, - have proficiency in critical appraisal and application of evidence-based practices from online resources, - can integrate technologies and resources to offer a meaningful use for patient-centric care, - know how to liaise with relevant counterparts, expand network to cocreate and offer valuable oncology healthcare services.
METHODS	 - Presentations of recent IT systems / technologies, databases (plenaries and individual). - Videos, lectures
MATERIALS	- Presentations, tutorials, showcases. - Own studies, workshops, simulations.
CREDITS	2,5h





ONCOLOGY NURSES

MODULE: DIGITAL TO	OOLS FOR PATIENTS/CAREGIVERS EMPOWERMENT
SUBMODULES	Digital tools in oncology care Strategies for providing comprehensive patient education using digital resources Techniques for fostering effective nurse-patient/caregiver communication using digital platforms
GENERAL OBJECTIVES	The participant will be able to: -Develop a comprehensive understanding of digital tools utilized in cancer care, their applications, and their impact on patient outcomes. -Acquire skills to effectively utilize digital resources for providing comprehensive patient education, tailored to diverse needs and preferences. -Master techniques for fostering effective nurse-patient/caregiver communication using digital platforms, ensuring personalized care and promoting active participation and understanding.
METHODS	Pre-Recorded Lectures & Presentations. Text-based Materials. Videos Quizzes & Assessments Case Studies
ASSESSMENT METHODS	Assessment tests to asses factual knowledge and understanding of the key concepts and identify misconceptions by: Self-Assessment Tools to have insights into personal learning progression
CREDITS	Time: 8h

Submodule: Digital tools in oncology care	
CONTENTS	Introduction to digital tools: overview and importance. Integration of digital technologies in cancer care Impact of digital tools on patient outcomes and caregiver support.





COMPETENCIES	Evaluate and effectively employ digital tools in oncology care to optimise patient outcomes and support caregivers, demonstrating a comprehensive understanding of their role and impact, as well as critically analyse facilitators and barriers to the integration of digital technologies in daily oncology nursing practice and propose evidence-based strategies to enhance their effective utilisation, thus promoting continuous improvement in patient care.
LEARNING OUTCOMES	The participant will be able to: -Recognize the role of digital tools in oncology care and their impact on patient outcomes and caregiver support -Analyze facilitators and barriers to the integration of digital technologies in daily oncology nursing practice, and propose strategies to enhance their effective utilization
METHODS	Pre-recorded video lectures, presentations, literature, and instructional materials that the participants can access at their own pace and convenience. As an individual assignment, the participants can provide input in a reflection journal to foster their continuous learning and improvement.
MATERIALS	 Completing pre-submodule test – 15" Reading Text-based Materials – 45" Viewing the pre-recorded lectures, presentations and videos – 45" Personal assignment in reflection Journal – 60" Post-submodule test – 15 " Submodule Feedback survey – 5"
CREDITS	2,5h

Submodule: Strategies for providing comprehensive patient education using digital resources	
CONTENTS	Introduction to digital resources for patient and caregiver education: websites, mobile apps, videos, podcasts and social media. Selection criteria for digital technologies and resources for patient education. Designing digital educational content: techniques, best practices,
	accessibility and engagement Evaluation of digital patient and caregivers education programs: strategies, feedback, delivery methods





COMPETENCIES	Effectively select and implement digital tools and platforms for patient education, creating tailored content and engaging patients and caregivers to enhance their understanding and involvement in healthcare.
LEARNING OUTCOMES	The participant will be able to: -Understand the variety of digital tools and platforms available for patient and caregiver education -Apply selection criteria to choose appropriate digital technologies and resources for patient education, considering diverse needs and preferences. -Evaluate the effectiveness of digital patient and caregiver education programs and utilize patient/caregiver feedback for continuous improvement.
METHODS	Pre-recorded video lectures, presentations, literature, and instructional materials that the participants can access at their own pace and convenience. As an individual assignment, the participants can provide input in a reflection journal to foster their continuous learning and improvement.
MATERIALS	Completing pre-submodule test – 15" Reading Text-based Materials – 45" Viewing the pre-recorded lectures, presentations and videos – 45" Personal assignment in reflection Journal – 60" Post-submodule test – 15 " Submodule Feedback survey – 5"
CREDITS	2,5h

Submodule: Techniques for fostering effective nurse-patient/caregiver communication using digital platforms	
CONTENTS	Personalized communication techniques: strategies, active participation Communication modalities and strategies Setting expectations and guidelines Documentation and accountability Evaluation of communication effectiveness
COMPETENCIES	Effectively engage patients and caregivers through personalized communication on digital platforms, establish clear guidelines for urgent communication, and meticulously document interactions in





	EHRs or communication logs, ensuring continuity of care, accountability, and privacy.
LEARNING OUTCOMES	The participant will be able to: -Identify personalized communication techniques for engaging patients and caregivers on digital platforms, facilitating active participation and understanding. -Recognize the importance of establishing clear expectations and guidelines for urgent communication using digital technologies to ensure timely response and accountability in nurse-patient/caregiver interactions. -Understand importance of documenting all communication exchanges with patients and caregivers in electronic health records (EHRs) or communication logs, ensuring continuity of care, accountability, and privacy in accordance with ethical and legal standards.
METHODS	Pre-recorded video lectures, presentations, literature, and instructional materials that the participants can access at their own pace and convenience. Pre- and post-submodule questionnaires, and submodule feedback assessments using assessment management at the platform. As an individual assignment, the participants can provide input in a reflection journal to foster their continuous learning and improvement.
MATERIALS	 Completing pre-submodule test – 15" Reading Text-based Materials – 45" Viewing the pre-recorded lectures, presentations and videos – 45" Personal assignment in reflection Journal – 60" Post-submodule test – 15 " Submodule Feedback survey – 5" Overall module post-test – 30 "
CREDITS	3h

MODULE: DIGITAL TOOLS FOR REMOTE FOLLOW-UP	
SUBMODULES	Introduction to digital tools for remote follow-up in oncology nursing Understanding eHealth and remote monitoring Using digital tools for remote patients check-ins





GENERAL OBJECTIVES	The participant will be able to: -Develop a comprehensive understanding of digital tools utilized in remote follow-up care in cancer nursing, including their applications and significance in enhancing patient outcomes. -Gain insights into eHealth and remote monitoring systems, understanding their principles, components, and role in cancer care delivery. -Acquire proficiency in utilizing digital tools for remote patient checkins, including conducting comprehensive health assessments, applying effective communication strategies, and ensuring privacy and security
	-Apply knowledge gained from introduction to digital tools, understanding eHealth, and remote patient check-ins to optimize remote follow-up care delivery in cancer nursing practice.
METHODS	Asynchronous Learning:
ASSESSMENT METHODS	 Assessment tests to asses factual knowledge and understanding of the key concepts and identify misconceptions by: Multiple Choice Questions True/False Statements Self-Assessment Tools to have insights into personal learning progression by: Pre-submodule test Reflection Journal
	 Post-submodule test Post – module test Module/course Feedback: Feedback Surveys: Collect personalized feedback from learners through surveys to evaluate their satisfaction with the course content, structure, and delivery, and address areas for improvement.
CREDITS	Time: 8h



Submodule: Introduction to digital tools for remote follow-up in oncology nursing	
CONTENTS	-Use of known tools in -Advantages and limitations of digital tools for remote patient monitoringStrategies for effective remote communication
COMPETENCIES	Effectively employ digital technologies and tools for remote follow-up care in cancer nursing, leading to improved patient outcomes and optimized delivery of cancer care follow-up services across diverse healthcare settings.
LEARNING OUTCOMES	The participant will be able to: -Demonstrate an understanding of the various digital tools utilized in remote follow-up care in cancer nursing, including their functionalities and Applications. -Identify the advantages and limitations of digital tools for remote patient monitoring in follow-up care, and apply strategies to effectively communicate with cancer patients and their families remotely.
METHODS	The teaching and learning in this submodule can be effectively administered online through e-learning that facilitates remote education. Providing pre-recorded video lectures, presentations, literature, and instructional materials that the participants can access at their own pace and convenience. The learning progress and evaluation of this submodule can be monitored by administering pre- and post-submodule questionnaires, and submodule feedback assessments using assessment management at the platform.
MATERIALS	 Completing pre-submodule test – 15" Reading Text-based Materials – 45" Viewing the pre-recorded lectures, presentations and videos – 45" Personal assignment in reflection Journal – 60" Post-submodule test – 15 " Submodule Feedback survey – 5"
CREDITS	3h



Submodule: Understa	anding eHealth and remote monitoring
CONTENTS	-Introduction to eHealth in cancer care -Principles and components of eHealth and remote monitoring systemsTechnologies and platforms used in remote monitoring -Benefits and challenges of remote follow-up care -Data management, privacy and security considerations
COMPETENCIES	Demonstrate a comprehensive understanding of eHealth technologies, remote monitoring systems, and their applications in follow-up care, while acquiring the knowledge and skills necessary to navigate the complexities of eHealth implementation and leverage remote monitoring solutions effectively to improve patient follow-up care delivery.
LEARNING OUTCOMES	The participant will be able to: -Gain an understanding of eHealth's significance in cancer care delivery, including its principles, components, and the role of wearable devices and sensors in remote monitoring. -Evaluate the benefits, challenges, and ethical considerations associated with remote follow-up care in cancer management, while grasping data management principles, privacy, and security considerations in eHealth applications.
METHODS	The teaching and learning in this submodule can be effectively administered online through e-learning that facilitates remote education. Providing pre-recorded video lectures, presentations, literature, and instructional materials that the participants can access at their own pace and convenience. The learning progress and evaluation of this submodule can be monitored by administering pre- and post-submodule questionnaires, and submodule feedback assessments using assessment management at the platform.
MATERIALS	 Completing pre-submodule test – 15" Reading Text-based Materials – 45" Viewing the pre-recorded lectures, presentations and videos – 45" Personal assignment in reflection Journal – 60" Post-submodule test – 15 " Submodule Feedback survey – 5"
CREDITS	2,5h



Submodule: Using di	gital tools for remote patients check-ins
CONTENTS	-Importance of Remote Patient Check-ins in cancer nursing follow-up careDigital tools and platforms for remote check-ins -Remote patient interactions -Strategies for effective communication and support during remote check-ins
COMPETENCIES	Effectively utilize digital tools for conducting remote patient check-ins, demonstrating expertise in remote patient interactions, applying effective communication strategies, and providing supportive care to optimize patient follow-up in cancer nursing.
LEARNING OUTCOMES	The participant will be able to: -Recognize the importance of remote patient check-ins in cancer nursing follow-up care and identify the digital tools and platforms available for conducting themUnderstand how to conduct remote patient interactions using digital tools and platforms, including the application of effective communication strategies and support provision during check-ins.
METHODS	The teaching and learning in this submodule can be effectively administered online through e-learning that facilitates remote education. Providing pre-recorded video lectures, presentations, literature, and instructional materials that the participants can access at their own pace and convenience. The learning progress and evaluation of this submodule can be monitored by administering pre- and post-submodule questionnaires, and submodule feedback assessments using assessment management at the platform.
MATERIALS	 Completing pre-submodule test – 15" Reading Text-based Materials – 45" Viewing the pre-recorded lectures, presentations and videos – 45" Personal assignment in reflection Journal – 60" Post-submodule test – 15 " Submodule Feedback survey – 5" Overall module post-test – 30 "
CREDITS	2,5h





MODULE: DIGITAL INTERVENTIONS IMPLEMENTATION	
SUBMODULES	Implementing digital interventions in daily practice Challenges of digital intervention in oncology care Assessment and evaluation of digital interventions based on data
GENERAL OBJECTIVES	The participant will be able to: -Understand the importance of properly implementing digital interventions in cancer care, emphasizing their impact on enhancing accessibility and quality of care provision. -Recognize and critically assess the utilization of digital tools in daily oncological practice, discerning their advantages as well as their limitations when applied as interventions. -Identify healthcare transformations resulting from the integration of digital technologies in cancer care, with a specific focus on enhancing patient experience and optimizing clinical outcomes through targeted digital interventions. -Gain insight into the intricacies of cancer care delivery in remote settings and effective strategies to overcome challenges and leverage opportunities in the context of digital interventions.
METHODS	Presentation/videos/problem solving activities/articles
ASSESSMENT METHODS	Assessment methods: self assessment/case study
CREDITS	Time: 8h

Submodule: Implementing digital interventions in daily practice	
CONTENTS	Digital tools or interventions: definitions and differences; Implementing a technology in daily practice: changes in care and job organisation(requirements, facilitators, barriers, strategies)
COMPETENCIES	Understand the implementation process of a tool/intervention, how it can affect in short/medium/long term the care given, identify possible barriers or limitations as well as their possible solutions.





LEARNING OUTCOMES	The participant will be able to: -Understand the importance of an adequate implementation of digital technologies; -Recognise and assess the use of digital tools in daily practice; -Identify change in care due to the use of digital tools and interventions in cancer care.
METHODS	Power point presentation with virtual presentation create an interaction so that the participant can himself/herself design a project of implementation
MATERIALS	Power point presentation with virtual presentation create an interaction so that the participant can himself/herself design a project of implementation
CREDITS	3h

Submodule: Challenges of digital intervention in oncology care	
CONTENTS	Complexity of cancer care and use of digital tools. Barriers and limitations while caring for cancer patients or caregivers.
COMPETENCIES	Understanding the reality and complication of oncology care can (multimorbidity, complications, quality of life reduction, emotional and psychological complications, ie) and the barrier these can create in the use of digital interventions or tools.
LEARNING OUTCOMES	The participant will be able to: -Know the complexity of cancer care in a remote setting; -Identify the correct tools and interventions for oncology patients and caregivers; -Detect limitations and barriers for digital technologies in cancer care.
METHODS	Presentation, case study
MATERIALS	powerpoint presentations with audio recording with virtual presentation; case studies evaluation will be done through multiple choice questions on case studies questions
CREDITS	2,5h



Submodule: Assessment and evaluation of digital interventions based on data	
CONTENTS	Digital intervention and digital tools evaluation. How to know if your intervention or tool is successful: indicators, scales and data.
COMPETENCIES	Assess and evaluate digital intervention based on evidence collected from users, assess effectiveness based on indicators and data. Identify, evaluate technological solutions that provide the greatest value and are the most appropriate for cancer care in all its aspects.
LEARNING OUTCOMES	The participant will be able to: -Know the different tools to assess digital interventions correctly; -Identify indicators and scales to be used in each situation; -Recognise the value of adequate assessment and evaluation of digital interventions.
METHODS	powerpoint presentation with virtual presentation articles case studies databases analysis
MATERIALS	evaluation: setting a series of variables to evaluate a digital intervention multiple choice questions on a data assessment of a digital intervention
CREDITS	2,5h

MODULE: PROBLEM-SOLVING DIGITAL SKILLS FOR ONCOLOGY NURSES	
SUBMODULES	Developing critical thinking skills for data analysis in the digital care landscape Techniques for identifying and resolving issues with digital healthcare tools Ensuring continuous functionality of essential digital resources





GENERAL OBJECTIVES	The participant will be able to: -Develop a comprehensive understanding of the role and application of digital tools in oncology nursing practice, recognizing their importance in enhancing patient care quality and clinical process efficiency. -Acquire practical skills to select, evaluate, and effectively use specific digital tools within the oncology care context, applying the nursing process systematically and adapting to individual patient needs. -Foster a proactive and problem-solving attitude towards identifying and addressing technical issues and challenges associated with digital tools in clinical practice, prioritizing patient safety and data integrity. -Strengthen critical thinking skills and data analysis abilities among oncology nursing professionals, facilitating informed decision-making and continuous improvement of patient care through the effective utilization of digital tools. -Promote awareness and understanding of security and fraud risks associated with the use of digital tools in oncology care, and develop strategies to mitigate these risks and safeguard patient data confidentiality and privacy.
METHODS	Presentation/videos
ASSESSMENT METHODS	Self assessment/case study
CREDITS	Time: 8h

Submodule: Developing critical thinking skills for data analysis in the digital care landscape	
CONTENTS	Critical thinking skills: Why are they important for oncology nurses? Applying critical thinking in data analysis in digital care
COMPETENCIES	Apply critical thinking skills to select and utilize data-driven digital tools, thereby optimizing patient care in oncology nursing practice
LEARNING OUTCOMES	The participant will be able to: -recognise the importance of critical thinking skills for data analysis in oncology





	-compare different digital processes/tools (based on data) to select the most appropriate one depending on oncology patients' problems
METHODS	Constructivist methodology to support active learning and reflection Learner-centered methods including activities with increased interactivity and immediate feedback whenever possible
MATERIALS	Video 5' Powerpoint presentation 40' Articles x2 30' Self-assessment (Materials used for teaching the course and minimal amount of time needed by the learner to read/watch the material)
CREDITS	4h

Submodule: Techniques for identifying and resolving issues with digital healthcare tools	
CONTENTS	-Usability of digital tools in oncology practise (such as Electronic health records, mobile applications, wearable devices)Issues of digital tools in oncology practiceRecommendations for possible issues are provided for each digital tool of this submoduleRelevant article and videos for the participantsHands on use of tools like eCAN JA mobile app and others
COMPETENCIES	Identify, diagnose, and effectively resolve issues related to use of digital healthcare tools in oncology nursing practice, optimizing the usability of such tools to enhance patient care and facilitate interdisciplinary collaboration.
LEARNING OUTCOMES	The participant will be able to: -Demonstrate an understanding of the functions of digital healthcare tools and their applications in nursing clinical practiceDevelop a proactive attitude in providing effective support to patients experiencing challenges with digital healthcare toolsIdentify and diagnose problems associated with digital healthcare tools.
METHODS	Constructivist methodology to support active learning and reflection Learner-centered methods including activities with increased interactivity and immediate feedback whenever possible





MATERIALS	Video presentation 10' Powerpoint presentation 30' Article 30' (one or two) (Materials used for teaching the course and minimal amount of time needed by the learner to read/watch the material)
CREDITS	4h





TRAIN THE TRAINERS CURRICULUM

MODULE: TEACHING AND LEARNING IN AN ONLINE SETTING	
SUBMODULES	Communication tools and strategies for eLearning Promote learners participation Tools for remote teaching
GENERAL OBJECTIVES	-Know tools and strategies to support the learners in a digital setting -Identify tools and strategies to promote remote learning
METHODS	Presentations, video.
ASSESSMENT METHODS	Quiz
CREDITS	Time: time the learner will spend to complete the module/course, corresponding to credits/microcredential: will be determined based on the minimal hours needed by the learner to read/watch the material

Submodule: Communication tools and strategies for eLearning	
CONTENTS	Teaching in a digital setting: communication. Tools and strategies to promote communication with eLearners. Communication barriers and enablers in a digital setting.
COMPETENCIES	Be able to identify the importance of learner-teacher communication, identify the limitations of a remote course and find solutions to promote it.
LEARNING OUTCOMES	-Know the tools to support the communication between learner and trainer -Detect possible issues or difficulties and identify solutionsIdentify the tools to support learners and their learning process.
METHODS	Presentations Articles Self assessment, quiz
MATERIALS - TIME	Materials used for teaching the course and minimal amount of time needed by the learner to read/watch the material i.e.





CREDITS

Based on time the learner will spend to complete the module/course

Submodule: Promote learners participation		
CONTENTS	Participation in teaching/learning remotely Strategies to improve participation and involvement in learners.	
COMPETENCIES	Know the relevance of participation in a digital environment and asynchronous teaching landscape. Identify different strategies to improve the participation with different learners and "needs".	
LEARNING OUTCOMES	-Identify strategies to support a participating environment digitally; -Know different learning styles and support them; -Assess possible barriers and limitations to participation and find solutions.	
METHODS	Presentations Articles Self assessment, quiz	
MATERIALS	Presentations Articles Self assessment, quiz	
CREDITS	Time: time the learner will spend to complete the module/course, corresponding to credits/microcredential	

Submodule: Tools for remote teaching		
CONTENTS	Tools for remote teaching: apps, sharing platforms. Resources of different tools	
COMPETENCIES	Know and use different tools in different situations, to provide the best teaching through digital tools.	
LEARNING OUTCOMES	-Know different tools and solution to teach remotely; -Assess and identify the best tool for different topics (toolkit)	
METHODS	Presentations Articles Self assessment, quiz	



MATERIALS	Presentations Articles Self assessment, quiz
CREDITS	Time: time the learner will spend to complete the module/course, corresponding to credits/microcredential

