

Co-funded by the Erasmus+ Programme of the European Union 	BeWell – AI Considerations for General Practitioners Matrix		
EQF Level	6	ESCO	Principles of artificial intelligence (Knowledge)¹ Machine learning (knowledge)² Utilise machine learning (skill)³
Aggregated Units of Learning Outcomes	BeWell – NEOP 5		AI Considerations for General Practitioners

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Generic Title of the Training programme:	NEOP 5 – AI Considerations for General Practitioners	

¹ **Description:** The artificial intelligence theories, applied principles, architectures and systems, such as intelligent agents, multi-agent systems, expert systems, rule-based systems, neural networks, ontologies and cognition theories.

² **Description:** The principles, methods and algorithms of machine learning, a subfield of artificial intelligence. Common machine learning models such as supervised or unsupervised models, semi- supervised models and reinforcement learning models.

³ **Description:** Use techniques and algorithms that are able to extract mastery out of data, learn from it and make predictions, to be used for program optimisation, application adaptation, pattern recognition, filtering, search engines and computer vision.

Description:	This Training programme explores the role of Artificial Intelligence (AI) in general practice, equipping learners with the ability to critically assess AI applications in health and care. It covers AI fundamentals, practical implementations, ethical and regulatory considerations, and strategies for fostering trust in AI-assisted medical decision-making.		
EQF Level:	6		
Learning Outcomes			
NEOP 5 – AI Considerations for General Practitioners	Training Module # in MOOC	Competence (Autonomy and responsibility)	
		KnowledgeSkills	
5.1 Exploring AI Applications and Future Innovations in Health and Care	Module 1 - Lesson 1 & Lesson 2	Is able to explain the fundamentals of artificial intelligence, such as machine learning, natural language processing, and robotics, and assess their relevance to health and care.	
		Is able to assess the current state and future potential of AI in health and care, including its role in diagnostics, administrative efficiency, and patient engagement.	
		Knows the core processes of AI, including learning, reasoning, self-correction, and decision-making.	Differentiates between Narrow AI and General AI in health and care.
			Identifies key AI technologies such as machine learning, deep learning, NLP, and robotics.

		Understands historical developments and current AI applications in health and care.	Evaluates how AI improves diagnostics, patient monitoring, and administrative workflows.
		Knows the future potential of AI in health and care, including predictive diagnostics and virtual health assistants.	Explores emerging AI technologies and evaluates their applicability in patient care.
5.2 Navigating Ethical and Regulatory Challenges in AI Adoption	Module 1 - Lesson 1 and lesson 3	Is able to identify and address regulatory and ethical considerations surrounding AI, such as data privacy, algorithmic bias, patient safety, and legal liabilities.	
		Knows the importance of data privacy and security in AI adoption.	Implements best practices for safeguarding patient data under GDPR and other regulations.
			Identifies and mitigates risks related to algorithmic bias and transparency.
		Understands the ethical dilemmas associated with AI in medical decision-making.	Evaluates strategies to maintain patient trust and clinician oversight in AI-driven systems.
			Assesses the role of AI in patient safety and understand how to balance AI's capabilities with human clinical oversight.

		Knows the legal and liability considerations of AI in health and care.	Ensures compliance with evolving health and care AI regulations.
5.3 Leveraging AI for Diagnostic Support and Clinical Decision-Making	Module 2 - Lesson 1	Is able to evaluate practical applications of AI in general practice, including its use in diagnostic tools, clinical decision support systems, and the management of electronic health records.	
		Knows the differences between knowledge-based and non-knowledge-based clinical decision support systems (CDSS).	Identifies when to use knowledge-based vs. non-knowledge-based CDSS.
			Recognises the benefits of knowledge-based CDSS in following clinical guidelines.
			Explores how non-knowledge-based CDSS detect patterns in complex cases.
		Understands the integration of AI tools in patient diagnosis.	Implements AI in diagnostic workflows to enhance clinician decision-making and improve diagnostic accuracy.
			Evaluates the reliability of AI-assisted diagnostics in fields such as radiology and dermatology.

5.4 Streamlining Administrative Processes with AI in Health and Care	Module 2 - Lesson 2	Is able to optimise general practice operations using AI-driven tools and automation.	
		Knows how AI streamlines administrative tasks, including scheduling and electronic health record (EHR) management.	Uses AI-driven scheduling systems to improve workflow, optimise capacity and reduce no-show rates.
			Implements AI-based data entry and documentation tools to enhance accuracy.
		Understands how AI enhances patient interactions and clinic operations.	Recognises how AI can personalise patient interactions, offering tailored scheduling options, reminders, and post-care follow-ups to enhance patient satisfaction.
			Uses voice-driven recognition tools for efficient documentation, ensuring precise data entry directly within EHRs.
			Identifies how AI can support compliance with health regulations by standardising data entry and documentation processes.

			Assesses how AI-driven administrative processes contribute to a more patient-centred approach in general practice, fostering trust and improving care outcomes.
5.5 Advancing Personalised Medicine with AI-Driven Solutions	Module 2 - Lesson 3	Is able to implement AI-driven personalised and precision medicine by using patient-specific data to tailor treatment plans and improve care outcomes.	
		Knows how AI analyses genetic, lifestyle, and medical history data for personalised treatments.	Identifies AI-driven precision medicine approaches based on molecular and genetic information, including targeted treatment recommendations.
			Assesses AI's ability to generate patient-specific treatment recommendations based on real-time patient data.
		Understands the limitations and challenges of AI in personalised medicine.	Addresses concerns related to patient privacy, bias, and transparency in AI-driven medical recommendations.
			Ensures AI-driven interventions align with human clinical expertise and patient needs.
	Module 3 - Lesson 1	Is able to address concerns about AI adoption in general practice by ensuring transparency, accountability, and patient trust.	

5.6 Building Trust and Addressing Concerns in AI Integration		Knows common concerns regarding AI use in health and care, including existential anxiety, data misuse, and diagnostic bias.	Identifies key concerns about AI adoption and evaluates their impact on patient trust and care.
			Develops strategies to mitigate fears and misconceptions about AI among health and care providers and patients.
			Discusses the role of GPs in ensuring patient data privacy and addressing concerns about data misuse.
		Understands the principles of transparency, accountability, and collaboration in AI systems.	Explains how AI can enhance the physician-patient relationship by reducing administrative burdens and enabling meaningful interactions.
			Implements strategies to promote accountability in AI-driven medical decision support.
			Proposes strategies to identify and reduce algorithmic bias in AI-assisted diagnostics.
	Module 3 - Lesson 2	Is able to critically evaluate AI recommendations, ensuring they align with clinical judgment and maintain the physician's role as the ultimate decision-maker.	

5.7 Defining Minimum Standards for AI Adoption in Health and Care		Is able to foster collaboration and trust in AI systems by ensuring transparency, accountability, and open communication with patients and developers, enhancing the integration of AI into general practice.	
		Knows the minimum requirements for adopting AI systems, such as ensuring time efficiency, diagnostic quality, data security, economic viability, transparency, and autonomy.	Evaluates AI efficiency and diagnostic quality using performance indicators.
			Assesses economic and operational factors influencing AI implementation in health and care.
		Knows the principles of ensuring clinical autonomy in AI-assisted care.	Ensures AI adoption supports, rather than overrides, clinical judgment.
			Advocates for transparency and explainability in AI-driven decision support tools.