



# MODULE 4. DIGITAL HEALTH

## Introduction and summary

The importance of patient involvement in medicines R&D is commonly acknowledged and offers benefits for all involved parties. Patients should have access to knowledge and experiences that enable effective participation. EUPATI training responds to the need for educated patients in the current medicines R&D system and allows patients to develop their capacity to collaborate and engage with other stakeholders as equal partners.

This module corresponds to the [EUPATI Open Classroom Digital Health module](#)

The **Digital Health** module gives an overview of digital health and its regulatory framework, classification and impact as well as different examples of Artificial Intelligence (AI). It also delves into the applications, infostructure and infrastructure of digital health, and the development processes in the field. The content of the module also focuses on the transformation and challenges in the field of digital health and the roles of the different stakeholders.

## Learning and Assessment

The objective of EUPATI is to provide appropriate academic and rigorous training, yet presented in a way that enables concrete and applicable learning outcomes for the patient community, leading to measurable impact in medicines development.

Each on-demand training unit has a short multiple choice assessment that is available to learners wanting to receive a certificate for the training unit.

**Training** is delivered through the **EUPATI Open Classroom**, a Moodle workplace learning management system that includes instructional text content, infographics, videos and case studies. The learner has also access to an online **toolbox and glossary**.

The **Toolbox** is an online library on the A-Z of medicines research and development (R&D) and patient involvement. The purpose of the Toolbox is to provide access to well-structured, comprehensive, scientifically reliable, and user-friendly educational materials for patients on a variety of topics in these areas. The information is not medicine- or disease-specific, but is applicable to the majority of diseases and/or medicines.

The **Glossary** is integrated into the content and allows learners to read keyword descriptions as they go through the learning process.

Learning is **modular, flexible and on-demand**, supported by the EUPATI team. The Trainees can access learning materials at their own pace and convenience. Once they finish a course or module, the certificates is generated automatically after successfully completed assessment.

The **assessments** are made for each course and are problem-based multiple-choice questions. Assessments are used to determine the competency of the established learning outcomes for each course in the module.

During the course learners are encouraged to:

- Make connections between what they have learned and their personal and professional situation.
- Think of opportunities to apply the training in their personal and professional life.

## Learning and assessment strategies

EUPATI Open Classroom uses the following learning strategies to effectively deliver educational content to trainees in a digital environment:

- **Asynchronous Learning:** Trainees can access learning materials at their own pace and convenience. They can read course materials including lectures and infographics, watch videos, listen to audios and complete assignments without being constrained by a specific schedule.
- **Microlearning:** Breaking down complex content on medicines R&D into small, easily digestible units allows trainees to absorb information more effectively. The content is separated into different pages with short text lessons that are combined with images, infographics, and videos.
- **Gamification:** Open Classroom uses badges after the completion of each module. Learners get rewards for completing their profile or finishing modules which can boost their engagement and progress. They can also share these badges on LinkedIn and get public recognition of their learning.
- **Self-assessment and feedback:** The online modules include self-assessment quizzes at the end of each course. This module includes 6 courses, therefore, to obtain the certificate for this module it is necessary to complete 6 quizzes. Along the lines of microlearning, Open Classroom encourages frequent, small-quantity assessments that help learners calibrate their understanding of the material. Immediate feedback on their performance helps learners identify areas for improvement and reinforces their understanding of the content.
- **Multimedia integration:** The modules offer multimedia elements, such as videos, images, infographics, to enhance the presentation of content and meet different learning styles. User-friendly content is available on different devices such as desktops, tablets and cell phones.
- **Real-world application:** Incorporating real-world examples and case studies as part of the content helps learners understand how the knowledge they acquire can be applied in practical life situations.
- **Accessibility and Inclusion:** The content meets the accessibility features to ensure that learners with disabilities can fully participate in the learning process.

## Curriculum

The module of Digital Health in Open Classroom is composed of 5 courses

Completion of all **5 courses** is mandatory to obtain the **Digital Health module**

Courses	Hours*
Digital Health: Introduction - Classification - Impact	8
Digital Health Applications – Infostructure, Infrastructure	8
Digital Health Development Process	8
Legal, Regulatory, and Health Technology Assessment (HTA) Concepts of Digital Health	8
Digital Health Transformation and challenges	8
<b>Total</b>	<b>40 hours</b>

\*This is an estimate based on the volume of content, although the actual hours required vary on an individual basis.

# Learning Outcomes per course

The learning outcomes of the different courses of this module are:

COURSES	LEARNING OUTCOMES
<b>Digital Health: Introduction - Classification - Impact</b>	<ul style="list-style-type: none"> <li>• Understand and discuss the major classifications in the field of digital health.</li> <li>• Outline the impact of digital health across the health ecosystem and main stakeholders.</li> <li>• Describe the scope of digital health solutions.</li> </ul>
<b>Digital Health Applications – Infostructure, Infrastructure</b>	<ul style="list-style-type: none"> <li>• Explain, with examples, the value of digital health solutions for different patient interactions with the health system.</li> <li>• Recognise the importance of both Infostructure and Infrastructure in digital health solutions.</li> <li>• Understand the development of Infostructure and Infrastructure in digital health solutions.</li> </ul>
<b>Digital Health Development Process</b>	<ul style="list-style-type: none"> <li>• Summarise the development process of digital health solutions and its different stages.</li> <li>• Understand how stakeholders, across the health ecosystem, offer insights that are vital to the development of digital health solutions.</li> </ul>
<b>Legal, Regulatory, and Health Technology Assessment (HTA) Concepts of Digital Health</b>	<ul style="list-style-type: none"> <li>• Identify the prerequisites for the European Health Data Space to operate.</li> <li>• Understand basic concepts in information governance, e.g. EU digital health policy, regulatory and compliance, real-world data/evidence (Big data), data protection &amp; data privacy.</li> <li>• Discuss the impact of digital health solutions in the HTA process.</li> </ul>
<b>Digital Health Transformation and challenges</b>	<ul style="list-style-type: none"> <li>• Understand the steps which enable successful digital health transformation and how patients can be involved throughout.</li> <li>• Discuss the steps required, main stakeholders, and the environment that supports and nurtures digital health transformation.</li> <li>• Recognise the conditions that support and nurture digital health transformation.</li> <li>• Understand how digital health transformation, directly and indirectly, impacts patients to foster their empowerment.</li> <li>• Identify the main challenges patients and other stakeholders face enacting digital health transformation.</li> </ul>