



# **Massive Open Online Course (MOOC) for physiotherapists and other health professionals on delivering the Practical Intervention Methodology (deliverable D3.3)**

Contribution to WP3 – Design of the Pilot Programme Methodology  
and Tools



## **Authors**

- Outdoor Against Cancer (OAC)

## **With the Support of:**

- Europe Region of World Physiotherapy
- University of Sevilla
- University of Bologna (UNIBO)

## **DISCLAIMER**

**Funded by the European Union. Views and opinions expressed are however those of the author(s) only and do not necessarily reflect those of the European Union or EACEA. Neither the European Union nor the granting authority can be held responsible for them.**



Co-funded by  
the European Union

# INDEX

<b>1. Abbreviations and Acronyms .....</b>	<b>3</b>
<b>2. Introduction to UcanACT .....</b>	<b>4</b>
2.1 Project background and general objectives.....	4
2.2 Project activities .....	6
<b>3. Introduction to the UcanACT Massive Open Online Course .....</b>	<b>9</b>
3.1 MOOC definition and objectives .....	9
3.2 MOOC content .....	10
3.2.1 Introduction to the Practical Intervention Methodology .....	10
3.2.2 Introduction to the MOOC modules .....	11

# 1. Abbreviations and Acronyms

<b>CES</b>	Citizens Engagement Strategy
<b>CPPA</b>	Cancer Prevention Physical Activity
<b>HEPA</b>	Health Enhancing Physical Activity
<b>MOOC</b>	Massive Open Online Course
<b>PA</b>	Physical Activity
<b>PIM</b>	Practical Intervention Methodology
<b>PUGS</b>	Public Urban Green Spaces
<b>WHO</b>	World Health Organization

## 2. Introduction to UcanACT

The UcanACT project, "Urban ACTION for cancer prevention: adult and senior citizens practice physical activity within public urban green spaces to prevent cancer diseases," is an intersectoral initiative funded by the European Union. This initiative brings together physiotherapists, local authorities, non-profit organisations, higher education institutions, and research institutions from eight organisations in five EU countries. Coordinated by the Europe Region of World Physiotherapy, the UcanACT partnership aims to engage adults and senior citizens in practicing physical activity as a tool for cancer prevention within public urban green spaces (PUGS).

### 2.1 Project background and general objectives

The promotion of physical activity as a tool for cancer prevention has been given priority due to the high urgency and importance of this topic in European public health. According to the Eurostat data<sup>1</sup> 3.5 million people in the EU are diagnosed with cancer and 1.3 million deaths from it every year. Statistics data and numerous researches, presented in the World Cancer Report (WHO, 2020) show that between 30% and 50% of cancer deaths could be prevented by two ways:

- 1) modifying or avoiding key risk factors (among them: exercise regularly and maintaining healthy weight);
- 2) implementing evidence-based prevention strategies (one of them is practicing Health Enhancing Physical Activity (HEPA)).

---

<sup>1</sup> Eurostat Statistics Explained. (2023) "Cancer statistics" in European Commission. Available at: [https://ec.europa.eu/eurostat/statistics-explained/index.php/Cancer\\_statistics](https://ec.europa.eu/eurostat/statistics-explained/index.php/Cancer_statistics)

However, despite all efforts made by Member States in order to promote physical activity, there is still a significant lack of awareness-raising activities on the positive impact of physical activity, especially for cancer prevention among EU citizens. The World Health Organization (WHO) report on World Cancer (2020) also recognises the lack of practical guidelines for physiotherapists to provide cancer-preventive physical activity sessions, in spite of the growing number of scientific researches, proving that PA is a tool for cancer prevention and rehabilitation.

Moreover, existing recommendations on how to provide appropriate PA for cancer prevention are mainly done for clinical conditions (hospitals, rehabilitation centres) even though there are numerous scientific studies demonstrating that practicing PA within open nature environments increases positive effects of cancer prevention<sup>2</sup>, provides opportunities for social inclusion of cancer survivors and positively influences on their mental health and healthy lifestyle<sup>3</sup>. It is an important factor to consider when we know that around 80% of the European population is expected to live in urban areas (cities and towns) by 2030, according to the EC Urban Data Platform Plus<sup>4</sup>. In this regard, urban areas play a pivotal role in promoting and protecting health and well-being.

Given this context, the UcanACT project will be implemented within three pilot territories from three different EU Member States: Bologna (Italy), Kilkenny (Ireland) and Munich (Germany). They all represent very diverse urban contexts in terms of geography, mobility, density and population. These specificities will facilitate creating research and insights for the wider European urban, health and

---

<sup>2</sup> Thompson Coon, J., Boddy, K., Stein, K., Whear, R., Barton, J., & Depledge, M. H. (2011). Does participating in physical activity in outdoor natural environments have a greater effect on physical and mental wellbeing than physical activity indoors? A systematic review. *Environmental science & technology*, 45(5), 1761-1772. [6] Zijlema et al., 2017

<sup>3</sup> Siqueira, K. M., Barbosa, M. A., & Boemer, M. R. (2007). Experiencing the situation of being with cancer: some revelations. *Revista latino-americana de enfermagem*, 15(4), 605-611.

<sup>4</sup> <https://urban.jrc.ec.europa.eu/#/en>

physical activity sector, based on actual data gathered via the evaluation of the UcanACT project.

In addition, considering that cancer is the leading cause of death for both men and women between the ages of 55 and 74 years, the UcanACT project focuses on individuals younger than 55 years old to maximize impact by reducing physical inactivity levels and informing EU citizens about the positive benefits of physical activity for cancer prevention. The primary target group therefore includes adults and senior citizens over the age of 50 who have never suffered from cancer (primary prevention), those diagnosed with cancer (secondary prevention), or cancer survivors (tertiary prevention).

## 2.2 Project activities

To apply physical activity as a tool for cancer prevention, a set of actions, methods and recommendations will be developed to improve physiotherapists' knowledge and skills on providing cancer-preventive physiotherapy practice.

The project partners first reviewed scientific research demonstrating the positive benefits of physical activity for cancer prevention among adults and senior citizens, with a specific focus on outdoor physical activity sessions. This research is collected in the document "Desk Study on recent scientific evidence of PA for cancer prevention for adults and senior citizens." The partners also identified efficient ways of organising cancer-preventive physical activity (CPPA) within PUGS, documented in the report "Desk Research on good practices in organising PA sessions for cancer prevention for adults and senior citizens within urban environments." The project consortium also identified barriers and issues that adults and senior citizens might face when participating in CPPA actions within PUGS, as detailed in the "NEEDs analysis report."

These research activities formed the foundation for two key project deliverables: the Citizens Engagement Strategy (CES) and the Practical Intervention Methodology (PIM). These tools are crucial for the implementation phase of the UcanACT project, which consist of kick-off trainings and executing Pilot CPPA actions to test and validate the physical activity exercises developed during the preparation phase. This phase will be supported by two additional core deliverables: the UcanACT App and the Massive Open Online Course (MOOC) that is being introduced and presented in the present deliverable.

Kick-off trainings will be delivered within a one-day programme prior to the Pilot CPPA actions in the three project pilot territories - namely Bologna (Italy), Kilkenny (Ireland), and Munich (Germany). Developed PIM and CES will be introduced respectively to physiotherapists to be involved in the implementation of the Pilot CPPA actions, and to communication managers from each of the pilot territories. The sessions will both develop new skills among physiotherapists to deliver the Methodology, and teach communication managers how to enable the project target groups (mainly adults and senior citizens) to actively take part in the cancer-preventive physical activity actions.

These stakeholders will be responsible for implementing Pilot CPPA actions - defined as a combination of exercises (planned, structured, repetitive and intentional movements) aimed at prevention of cancer diseases - from 2024. They will be organised within two rounds in Bologna, Kilkenny and Munich for about 12 weeks. The first Pilot round will be aimed at testing and validating PIM with a special focus on adjusting it to the three project pilot territories and PUGS, and at testing the UcanACT App in terms of its functionality and target groups needs. This useful tool will aim to support adults and senior citizens engaged in CPPA exercises within PUGS by providing them video guidelines of CPPA exercises that can be practiced within PUGS (and if necessary, at home), a map indicating PUGS suitable for engaging in CPPA, etc... The main objective is that users do



physical activity autonomously through the use of this Mobile App, with no physiotherapists to guide them.

Within the second Pilot round, the PIM and the UcanACT App will be validated for their further use by other municipalities interested in promotion of physical activity for cancer prevention.

It is worth mentioning that, after the finishing of the first round, it will start an evaluation period of a few months. During this period, all data regarding the PIM, CES and the UcanACT App will be analysed. Using the results from this analysis, improvement strategies for the Pilot Round 2 will be designed. During this period, all the changes necessary for the improved strategies will be prepared and implemented.

## 3. Introduction to the UcanACT Massive Open Online Course

### 3.1 MOOC definition and objectives

The Massive Open Online Course (MOOC) is a central component of the UcanACT project designed to provide comprehensive training for physiotherapists. It capacitates them on delivering the project Practical Intervention Methodology, which provides conceptual and methodological bases for the implementation of pilot CPPA actions for adults and senior citizens within PUGS. As a result, it is important that physiotherapists complete the UcanACT MOOC before the project implementation activities will start. Completion is mandatory before participating in the kick-off training and Pilot program.

To ensure the quality of the Methodology implementation, the UcanACT MOOC equips physiotherapists with the necessary knowledge and skills to deliver cancer-preventive physical activity effectively. It ensures that they can conduct the CPPA actions with confidence and competence, aligning with the project's primary aim of engaging adults and senior citizens in practicing physical activity as a tool for cancer prevention within public urban green spaces. To meet these objectives, course materials, video presentations, readings and online quizzes will be available through the UcanACT MOOC for an enhanced learning experience.

The MOOC is accessible through the online platform WIX and is open to every physiotherapist, free of charge. Participants will be required to complete a 40-question exam, achieving at least a 70% score to successfully finish the course and receive the UcanACT badge and certificate for completing the MOOC.

## 3.2 MOOC content

The UcanACT MOOC is based on the findings and preceding work from the partners, namely in developing the Practical Intervention Methodology after a Needs Analysis of the target group was done through focus groups in Kilkenny and Bologna as well as questionnaires conducted in Munich. This course serves as a vertical and horizontal map for quick access to the PIMs most important content. The MOOC is mainly based on Chapter 4 of the Methodology, which serves as a training curriculum for delivering CPPA sessions in PUGS.

### *3.2.1 Introduction to the Practical Intervention Methodology*

The Practical Intervention Methodology is the first core project deliverable that provides conceptual and methodological bases for the implementation of pilot CPPA actions for adults and senior citizens within PUGS, in accordance with emerging scientific research evidence on cancer prevention. This methodology is also strongly supported by the effective Health Enhancing Physical Activity (HEPA) methodologies, and the outputs and knowledge from the preparation phase.

As previously noted, the PIM will be used and implemented during the Pilot CPPA actions by physiotherapists. They will have access to the Methodology through the Massive Open Online Course, and throughout the project implementation activities to be able to expand on this information if they wish. They will be provided with a means of contact with the project partners in charge of the implementation of the Pilot CPPA actions so that they can resolve their doubts about the methodology of the project at any time.

### 3.2.2 Introduction to the MOOC modules

The MOOC includes the following modules:

- 1) **Introduction to the Project:** outlines the background and objectives of the UcanACT project. Participants will gain a clear understanding of how the MOOC aligns with the project's goals, ensuring they comprehend why and how it contributes to meeting these objectives.
- 2) **Benefits of Physical Activity:** delves into the various benefits of physical activity, especially in the context of cancer prevention. Physiotherapists will explore the positive impact of physical activity on overall health and well-being.
- 3) **Barriers and Facilitators for Exercise:** understanding the challenges and opportunities related to exercise is crucial. This module explores common barriers and facilitators for individuals engaging in physical activity, helping healthcare professionals navigate these factors.
- 4) **Engagement, Environment & Safety:** focuses on creating a safe and engaging environment for physical activity, especially within public urban green spaces. Physiotherapists will learn strategies for ensuring the safety and well-being of participants.
- 5) **Training / Exercise Sessions:** provides practical guidance on delivering cancer-preventive physical activity exercises. It equips physiotherapists with the knowledge and skills required to conduct successful CPPA sessions.
- 6) **Video tutorials:** provides insights and information on how to provide CPPA exercises for adults and senior citizens within PUGS.

- 7) **Questionnaire:** a comprehensive assessment designed to evaluate physiotherapists understanding of the key concepts and essential principles necessary for effective participation in the UcanACT implementation activities. This exam consists of 40 questions, each with single-choice answers.

[Click here to complete the UcanACT MOOC](#)