



D4.1 – ECAC study transfer in Romania and Bulgaria Report

February 2025



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Project number: 101104432

Project name: Personalized CANcer Primary Prevention research through Citizen Participation and digitally enabled social innovation

Project acronym: 4P-CAN

Call: HORIZON-MISS-2022-CANCER-01-01

Version number	
Status	First draft
Dissemination level	Public
Due date of deliverable	20/02/2025
Actual submission date	20/02/2025
Project officer	Marianne Da Silva
Work package	WP 4 Targeted public health communication campaigns
Lead partner	IARC
Partner(s) contributing	INOMED, PU
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Statement of originality This deliverable contains original unpublished work except where clearly indicated otherwise. Acknowledgement of previously published material and of the work of others has been made through appropriate citation, quotation or both.

Version Tracker

Date	Version number*	Change
15/04/2024	0.1	Table of contents
18/04/2024	0.2	First Draft
25/04/2024	0.3	Reviews and comments
20/02/2025	0.4	Final, with reviews

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Figure 1 Countries where the IARC qualitative study on Perceptions of the European Code Against Cancer (4th Ed.) among the European Union population is taking place. Source: *Ariadna Feliu, BSc, BA, MPH, PhD; Postdoctoral scientist*
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List of Abbreviations

ECAC – European Code Against Cancer

4P-CAN – Personalized CANcer Primary Prevention research through Citizen Participation and digitally enabled social innovation

Executive Summary

Purpose: The purpose of this deliverable is to provide a comprehensive report detailing the extension of the International Agency for Research on Cancer (IARC) qualitative study on the European Code Against Cancer (ECAC) to Romania and Bulgaria as part of the 4P-CAN Project. This report aims to document the methodologies, data collection and transfer, specific to these new geographical contexts, contributing to the planned updates for the ECAC's 5th edition.

Objectives and Scope: This deliverable examines the implementation of the ECAC recommendations in Romania and Bulgaria, exploring the perceived barriers and facilitators to adopting cancer prevention actions. The study was guided by the COM-B model of behavior (Capability, Opportunity, Motivation), which identifies components of behavior change, and utilized the Behavior Change Wheel to frame the intervention strategies.

Intended Audience: The intended audience includes EU public health policymakers, implementers of the ECAC recommendations, healthcare providers, and stakeholders involved in health promotion and cancer prevention programs. Additionally, this report serves academic and research institutions studying public health intervention methodologies.

Methodology: The methodology involved conducting in-depth, semi-structured interviews with adults aged 18–65 years from Romania and Bulgaria, who have not been diagnosed with cancer. The participants were selected using quota sampling to ensure diversity in demographics. The study employed a two-stage analysis approach: thematic content analysis to identify prevalent themes and critical discourse analysis to delve deeper into behavioral insights.

Current status of research: Analysis phase.

Note on Project Delay: The delivery of this report was postponed by two months due to challenges encountered during fieldwork, including logistical complications and the need for additional translations of study materials into local languages. These issues have been resolved, ensuring thorough data collection and robust analysis.



Other: Additionally, the overall study design was submitted to and accepted for publication in the International Journal of Qualitative Methods. The paper benefited from the expertise of multiple experts and was validated by the ethics committee of IARC as well as the ethics committees of the local implementing partners.

Deliverable Introduction

1. Scope of the Deliverable within the 4P–CAN Project

- **Assess Current Engagement:** Provide a first evaluation on how populations from Romania and Bulgaria perceive and interact with the ECAC's 4th edition recommendations. This involves understanding public awareness, acceptance, and adherence to the recommended cancer prevention behaviors.
- **Identify Barriers and Facilitators:** Through qualitative research, identify the key barriers and facilitators that affect the adoption of the ECAC's recommendations. These insights will pinpoint what influences the public's ability and willingness to follow these prevention strategies.
- **Inform Future Interventions:** The findings from this deliverable are intended to partially inform the development of the updated edition of the ECAC, currently under development, exploring further how the population in the Eastern EU Consortium countries are adhering to cancer prevention recommendations.
- **Guide Communication Campaigns:** Data from this deliverable will also contribute to tailoring future public health communication campaigns in WP4 in Romania.

2. Scope of Extending the IARC Qualitative Study to Romania and Bulgaria

- **Expand Geographic Coverage:** By extending the IARC qualitative study to include Romania and Bulgaria, the research incorporates a broader demographic and cultural spectrum within the EU. This expansion helps to ensure that the findings and subsequent recommendations are applicable across a more diverse range of Eastern EU populations.
- **Deepen Understanding of Regional Differences:** The extension into these two countries allows the IARC team to capture unique regional insights that may affect public health behaviors and attitudes towards cancer prevention. Understanding these differences is crucial for creating targeted and effective interventions at the EU level.
- **Contribute to ECAC 5th Edition:** The insights gathered from Romania and Bulgaria will feed directly into the update of the ECAC's 5th edition. By incorporating data from these countries, the ECAC can offer more

inclusive and representative guidance, potentially increasing the overall effectiveness of its recommendations across the EU.

- **Enhance Public Health Strategies:** Indirectly, the study aids in refining broader EU cancer prevention strategies by identifying successful elements and common challenges faced in new regions. This information is vital for policymakers and health authorities to develop more responsive and effective public health policies and initiatives that resonate well with the broader EU populace.

Together, these scopes within the 4P-CAN project and the IARC study extension form a comprehensive approach to enhancing the ECAC's framework and effectiveness in cancer prevention across the EU. By focusing on direct engagement with the public and understanding diverse regional needs, the project aims to foster a more robust foundation for the upcoming revisions of the ECAC and its implementation strategies.

Content of the Deliverable

- **Background and Rationale:** Outlines the significance of cancer as a public health issue in Europe, the role of the ECAC, and the necessity for its periodic update.
- **Study Aims and Research Questions:** Details the specific aims of the study and the key research questions it seeks to answer, focusing on barriers, facilitators, and motivations related to cancer prevention behaviors.
- **Theoretical Framework:** Describes the COM-B model of behavior used to analyze behavioral changes necessary for the adoption of preventive measures.
- **Methods:** Explains the study design, including participant selection, recruitment methods, data collection techniques, and ethical considerations.
- **Data Analysis:** Describes the two-stage process of thematic content analysis and critical discourse analysis to be used to interpret interview data, as part of a pan-European analysis of the data to be carried out in the future within the IARC study.
- **Relation to ECAC Updates:** Discusses how the findings will contribute to the upcoming 5th edition of the ECAC, aiming to make the recommendations more relevant and actionable for diverse EU populations.

Summary of the *Perceptions towards the adoption of multi-risk factors cancer prevention educational tool among European Union citizens: a multi-country qualitative study protocol*

Background

Cancer remains a significant public health challenge in Europe, with more than 4 million new cases and 1.9 million deaths reported in 2020. Approximately 40% of these cases could potentially be prevented through effective primary and secondary prevention strategies. The European Code Against Cancer (ECAC) is an initiative of the European Commission launched in 1987 that serves as a cornerstone in educating the public about cancer prevention. The last update (the 4th edition) was coordinated by the International Agency for Research on Cancer (IARC), institution that has also been commissioned the new edition. The latest edition of ECAC, adopted in 2014, informs the public about how to avoid or reduce exposures to established causes of cancer, adopt healthy behaviors to reduce cancer risk, and participate in vaccination, screening, and early detection programs. The impending update to the 5th edition of ECAC, slated for 2025, aims to enhance public health literacy and refine cancer prevention strategies across Europe, especially in light of Europe's Beating Cancer Plan introduced in 2021.

Commented [AFJ1]: Not sure about this sentence. IARC has only been commissioned the update of the 4th and 5th edition of the ECAC.

Aim and Research Questions

The study investigated the perceived capability, opportunity, and motivation (COM-B model) among EU citizens to adopt cancer prevention measures recommended by the ECAC. The main research questions focus on:

- Identifying the primary barriers and facilitators affecting the adoption of these measures.
- Understanding the motivations behind changing unhealthy behaviors.
- Examining variations in perceptions across different countries, social groups, and age brackets.

Theoretical Framework

The study leverages the COM-B model of behavior, which posits that behavior change results from an interaction between capability, opportunity, and motivation. This framework helps pinpoint the necessary conditions for adopting cancer preventive behaviors, integrating both psychological and physical components of capability, the influence of physical and social opportunities, and the complex motivations driving behavior.

Methods

Study Design

A narrative-based, exploratory multi-country qualitative study was designed to capture how individuals perceive and react to the ECAC's messages and how these perceptions align with their past and anticipated future experiences.

Study Population

The study included adults aged 18 to 65 from nine EU member states (MS), ensuring a representative cross-section of the EU's diverse regions. These states include Bulgaria, Croatia, France, Germany, Ireland, Poland, Portugal, Romania, and Spain.

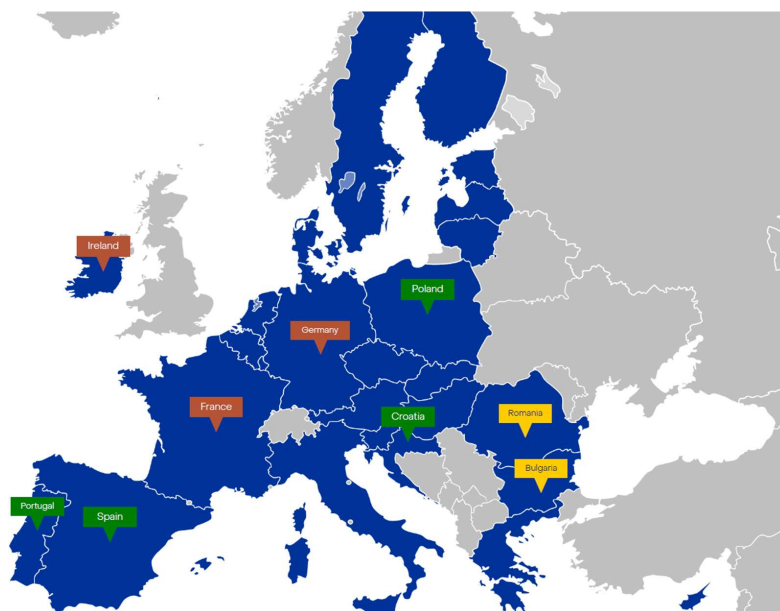


Figure 1 Countries where the IARC qualitative study on Perceptions of the European Code Against Cancer (4th Ed.) among the European Union population is taking place. Source: Ariadna Feliu, BSc, BA, MPH, PhD; Postdoctoral scientist Presentation

Recruitment and Data Collection

Participants were recruited through various channels such as social media, local community centers, and direct outreach in public spaces. A quota sampling method was employed to ensure diversity in sex, age, and socioeconomic status. In-depth semi-structured interviews were conducted either in-person or via online platforms like Zoom, depending on logistical and participant comfort considerations.

Rigor and Ethical Considerations

To ensure the study's integrity, strategies were implemented to maintain the credibility, dependability, transferability, and confirmability of the research findings. Ethical considerations were meticulously observed, with a focus on maintaining anonymity, securing informed consent, and ensuring the inclusion of vulnerable groups. Participants provided oral consent, and interviews were conducted using audio-only encrypted recording devices to safeguard confidentiality.

Data Management and Analysis

Interviews were encrypted, transcribed, and translated into English using AI-assisted tools, with translations verified by local research teams. A two-stage analysis will be utilized: **Thematic Content Analysis (TCA)** and **Critical Discourse Analysis (CDA)**.

Implications

The results from this study will inform the ongoing update of the ECAC, aiming to make its recommendations more accessible and actionable across different segments of the EU population. By addressing the identified barriers and leveraging facilitators, the ECAC aims to enhance its effectiveness in reducing cancer incidence through better-informed public health strategies.

Conclusion

This comprehensive study not only sheds light on the current perceptions of cancer prevention in the EU but also sets the stage for more tailored and effective public health initiatives as part of the upcoming 5th edition of the ECAC. By aligning cancer prevention strategies with the complex realities of EU citizens' lives, the ECAC aims to significantly impact cancer prevention across Europe.

Summary of the Questionnaire Used

Overview

This summary details the questionnaire structure and topics covered prior to conducting in-depth interviews with participants as part of the qualitative study exploring perceptions related to the European Code Against Cancer (ECAC). The questionnaire is divided into two primary sections: A) Sociodemographic Variables and B) Previous Knowledge about the ECAC.

Section A: Sociodemographic Variables

Purpose: To gather basic demographic information before the interview.

Questions include:

- **Gender:** Male, Female, None of the above/Nonbinary/do not recognize yourself in above categories.
- **Age Groups:** 18–30 years, 31–45 years, 46–65 years.
- **Education Level:** Primary or less, Secondary education, Higher education.
- **Residential Setting:** Rural area, Town, City, Unsure.
- **Financial Difficulty:** Frequency of difficulties paying bills over the last twelve months.
- **Personal Cancer Experience:** Whether the participant or someone close has been diagnosed with cancer.

Section B: Previous Knowledge about the ECAC

Purpose: To assess participants' baseline awareness and attitudes towards cancer prevention. **Questions include:**

- **Perception of Cancer Prevention:** Using a 5–point Likert scale, participants rate their agreement with the statement regarding the effectiveness of preventive actions in reducing cancer risk.
- **Awareness of the ECAC:** Whether participants have previously heard of the ECAC.

Semi-Structured Interview Topics

Guidelines for Interviewers:

- **Introduction:** Interviewers provide a brief overview of the ECAC.

- **Bias Mitigation:** Strategies are outlined to prevent interviewer and respondent biases, including the use of neutral probes and avoidance of leading questions.
- **Capability Inquiry:** Questions explore the participant's ability to adopt recommended cancer prevention actions, discussing barriers, enablers, and personal experiences related to these actions.
- **Opportunity Assessment:** Discussion revolves around the physical and social opportunities that support or hinder the adoption of ECAC recommendations.
- **Motivation Evaluation:** Probes into both reflective and automatic motivations influencing the participant's willingness and ability to follow the ECAC recommendations.

Interviewer Notes

- **Document Presentation:** ECAC guidelines are either handed out or displayed depending on the interview format (in-person or online).
- **Concluding the Interview:** Interviewers are reminded to allow for final comments, thank participants for their contributions, and reassure them of the confidentiality and research-only use of their responses.

This structured approach ensured a comprehensive assessment of factors influencing the adoption of cancer prevention behaviors as recommended by the ECAC, providing valuable insights for the ongoing development and refinement of public health campaigns.

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