










Piret Paal<sup>1,2</sup> , Stephen Mason<sup>3</sup> , Philip Larkin<sup>4</sup> , Minna Hökkä<sup>5</sup> , Guillaume Economos<sup>6</sup> , Leszek Pawłowski<sup>7</sup> , Sandra Martins Pereira<sup>8</sup> , Pablo Hernández-Marrero<sup>8,9</sup> , Gil Goldzweig<sup>10</sup> 

<sup>1</sup>Institute of Palliative Care, Paracelsus Medical University, Salzburg, Austria

<sup>2</sup>Department of Ethnology, Institute of Cultural Studies, University of Tartu, Tartu, Estonia

<sup>3</sup>Palliative Care Unit, Health and Life Sciences, Life Course and Medical Sciences, University of Liverpool, Liverpool, UK

<sup>4</sup>Palliative and supportive care service and Institute of Higher Education and Research in Healthcare, Lausanne University Hospital and University of Lausanne, Lausanne, Switzerland

<sup>5</sup>Department of Innovation and Development, Diaconia University of Applied Science, Finland

<sup>6</sup>Université Claude Bernard Lyon 1 (UCBL), Lyon, France

<sup>7</sup>Department of Palliative Medicine, Medical University of Gdansk, Gdańsk, Poland

<sup>8</sup>Universidade Católica Portuguesa, Católica Porto Business School, CEGE: Research Centre in Management and Economics, Ethics and Sustainability Research Area, Porto, Portugal

<sup>9</sup>Portuguese Nurses Association for Long-Term and Palliative Care (AECCP), Lisbon, Portugal

<sup>10</sup>The Academic College of Tel Aviv-Yaffo, Tel Aviv-Yafo, Israel

# Cultivating excellence in palliative care education and training: a network and thematic deep dive into CODE-YAA@PC-EDU initiatives

## Abstract

**Background:** In this study, a collaborative and participatory approach was employed, underpinned by pragmatic methodology, to explore and elucidate the interconnections within the research network of the COLlaboratively DEVELOped culturally APPropriate and inclusive Assessment tool for Palliative Care EDUCation the European Cooperation in Science and Technology Action. It is demonstrated how the analysis of the publicly available data, as well as the joint publication history of the core group members of this action, can accelerate understanding of collaborative dynamics, patterns of collaboration, and knowledge exchange within the group.

**Methods:** VOSviewer software was used to systematically map joint publications and further leveraged InfraNodus software to visualize and analyze the thematic content of the project proposal.

**Results:** The social network analysis revealed pivotal connections, fostering a robust research ecosystem that needs to expand geographically, scientifically, and linguistically. The application of InfraNodus software informs the present pursuit of culturally appropriate quality assessment tools for palliative care education, which are poorly developed and understood so far.

## Address for correspondence:

Piret Paal

Institute of Palliative Care, Paracelsus Medical University in Salzburg, Strubergasse 21, 5020 Austria

e-mail: [piret.paal@pmu.ac.at](mailto:piret.paal@pmu.ac.at)



Palliative Medicine in Practice

Copyright © 2024 Via Medica, ISSN 2545–0425, e-ISSN 2545–1359

DOI: 10.5603/pmp.100189

Received: 17.01.2024 Accepted: 13.04.2024 Early publication date: 15.04.2024

This article is available in open access under Creative Common Attribution-Non-Commercial-No Derivatives 4.0 International (CC BY-NC-ND 4.0) license, allowing to download articles and share them with others as long as they credit the authors and the publisher, but without permission to change them in any way or use them commercially.

**Conclusions:** The crux of the present research lies in gaining a deeper understanding of the relationships between researchers. This insight is pivotal to enhancing the effectiveness and inclusivity of the present work in developing culturally appropriate assessment tools for palliative care education as well as monitoring the global impact of this European Union-funded project.

*Palliat Med Pract*

**Keywords:** collaborative dynamics, social network analysis, palliative care education and training, culturally appropriate assessment tools, impact analysis

## Introduction

In the Fall of 2022, a group of palliative care education advocates and researchers came together to develop a project proposal that draws attention to palliative care education and the need for its further development in Europe. The proposal was submitted to the European Cooperation in Science and Technology (COST), a research and innovation network funding organization that helps connect researchers in emerging and promising research areas for building and strengthening research networks. COST funding is designed to launch initiatives for capacity building across Europe, simultaneously enabling researchers and innovators to develop their ideas across scientific and technological fields, sharing them with like-minded people. COST actions are bottom-up, four-year networks that promote research, innovation, and careers [1]. The funding was successfully obtained from this prestigious and competitive program. The COllaboratively DEveloped culturally Appropriate and inclusive Assessment tool for Palliative Care EDUcation (CODE-YAA@PC-EDU) project officially began on 1 November 2023 [2]. This international collaboration is set up for the upcoming four years (2023–2027). The core group was assembled, drawing upon existing connections within the palliative care community, leveraging Action Chairs' network as a seasoned expert in the field. Through online meetings and email exchanges, a process unfolded to establish the group's foundation. Goals were explicitly set, underlining the commitment to action. This approach ensured that the project targets were derived collaboratively, reflecting the collective vision and expertise of the team. The CODE-YAA@PC-EDU project is expected to develop a framework to help improve education and training in palliative care, highlighting the importance of cooperation and collaboration in this chronically underfunded and often underestimated area of care education.

### Global perspectives on palliative care education

Educational recommendations and quality assessment criteria validated by high-level non-governmental

organizations, governments, or professional bodies are critical to advancing palliative care education. The model proposed by the World Health Organization (WHO) highlights six essential components needed for optimal palliative care provision for people experiencing serious health-related suffering [3]. One of these is the education and training of all healthcare professionals and volunteers who provide palliative care. According to the WHO, the quality indicators for palliative care education are the proportion of formal education in (1) undergraduate medical studies, (2) undergraduate nursing studies, and (3) specialization in palliative care for medical doctors. The latter seriously undermines the role and contribution of the wider professional team as total patient care relies heavily on nursing, and other health and social care professionals in the delivery of palliative care services [4]. To meet the values and address the needs of people with serious illnesses and their caregivers, countries need greater interprofessional and interdisciplinary resources than those currently identified solely for clinical medicine.

COST actions differ from other European funding schemes by putting the focus on funding the development of a network and building capacity for future endeavors in the chosen field. The impact of the network is a critical change agent. So far, in palliative care, there exists a qualitative model for knowledge transfer and evaluation of the research knowledge, which can be applied to research-focused projects. The validation of this model, called the Evidence-based Model for Transfer and Exchange of Research Knowledge (EMTReK), is ongoing [5, 6]. Due to the nature of the COST Action, it may be difficult to measure the project's real impact, as the results may come with numerous contextual, conditional, and cultural leakages that are difficult to control or monitor. Furthermore, the benefits of a collaborative international and interprofessional network can be difficult to predict and measure. The project may lead to enhanced collaborative research opportunities in palliative care, increase the diversity and significance of projects, and foster a sense of community and belonging [7, 8]. It is suggested that

measuring the impact of a network may need specific methods, namely: network analyses. The purpose of this article is to introduce the CODE-YAA@PC-EDU core group members and their research profiles in relation to the preliminary aims of the project. As Core Group members of this action, the authors considered the early deep dive into CODE-YAA@PC-EDU initiatives relevant to better identify and understand the present baseline standpoint to further build on the strengths and address the gaps and challenges.

## Methods

This is a collaborative participatory pragmatic methods study. Participatory studies prioritize the value of experiential knowledge for tackling problems caused by unequal social systems, and for envisioning and implementing alternatives [9], as inherent to this CODE-YAA@PC-EDU project. This participatory approach was deemed to be the most suitable to investigate, explore, and answer the aims of this study. A combination of two techniques was integrated and is presented as follows.

Firstly, Social Network Analysis (SAN) was applied to visualize and analyze the network impact to reveal the relations and patterns within the core group based on core group members' publication history. SAN has become a valuable tool in academic research, offering a more comprehensive view of academic performance [10]. The method's effectiveness in revealing hidden patterns and understanding information flow has been emphasized, with its adaptability to various fields and levels of analysis [11]. Social Network Analysis has been particularly useful in higher education research, providing unique insights into the connectivity patterns of individuals, institutions, and governments [12]. The final refined search of scientific publications by the core group members was conducted on 20 January 2024 via the Scopus database [13]. Scopus is a comprehensive abstract and citation database of peer-reviewed literature, including scientific journals, books, and conference proceedings, spanning various disciplines. The Scopus website was used to extract summaries of disciplines and affiliations (countries) of the research. Thus, the connection between the core group members (see Results, Participants) was analyzed and visualized based on joint publications using the VOSviewer software [14, 15]. Thus, in this analysis, the core group members are represented as nodes connected to each other based on joint publications.

Secondly, the InfraNodus software was used to analyze the basic text of the authors' grant application [16]. The InfraNodus analyses any text as a network, enables the identification of the main concepts and

topics, and reveals the relations between the ideas [17]. Texts are visualized as networks of interconnected nodes, where each node represents a word and the connections between them represent their co-occurrences within the text. This visualization helps in identifying the main topics, the relationships between them, and the structural gaps or blind spots within the discourse. The analysis lets us identify the discourse's structure through network modularity, distribution of influence, and narrative variability. Based on this representation, one can detect clusters of words or themes that belong together, identify the most influential elements, and reveal the gaps in a discourse.

## Ethical considerations

All data retrieved about the core group members and integrated into both the social network analysis and the InfraNodus software is publicly available. Therefore, this study did not require formal ethics approval from an ethics review board. In addition, all core group members gave their written informed consent to use this data retrieved from the internet after being informed about the aims of the study and the data collection procedure. They were free to comment on the final draft of this article that was sent to all core group members to obtain their consent to use their names, data, and findings in the article.

## Results

### Participants

The core group consists of Action Chair Piret Paal (anthropologist, Austria/Estonia), Action Vice-Chair Sandra Martins Pereira (nurse and bioethicist Portugal), six Working Group Leads: Stephen Mason (psychologist, United Kingdom), Philip Larkin (nurse, Switzerland/Ireland), Gil Goldzweig (psychologist, Israel), Pablo Hernández-Marrero (nurse and health services researcher, Portugal), Minna Hökkä (nurse, Finland), Guillaume Economos (physician, France), and Grant Awarding Coordinator Leszek Pawłowski (lawyer, Poland).

### The publications and co-authorships of the core group members

The search in the Scopus database indicated that, overall, the core group members have published 404 documents cited 5409 times. The United Kingdom leads by publications by country, followed by Ireland and Israel. This is based on the account of all authors' countries of origin (Figure 1).

By disciplines, approximately half of the scientific publications come from medicine ( $n = 294$ , 49.4%), followed by nursing ( $n = 121$ , 20.3%), social sciences

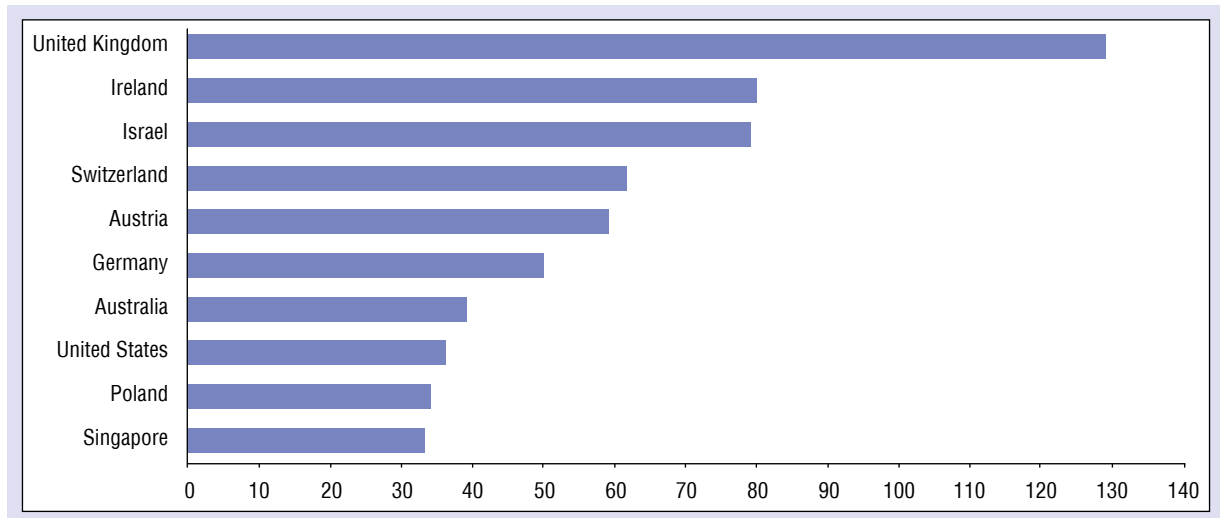


Figure 1. The number of documents by core group members

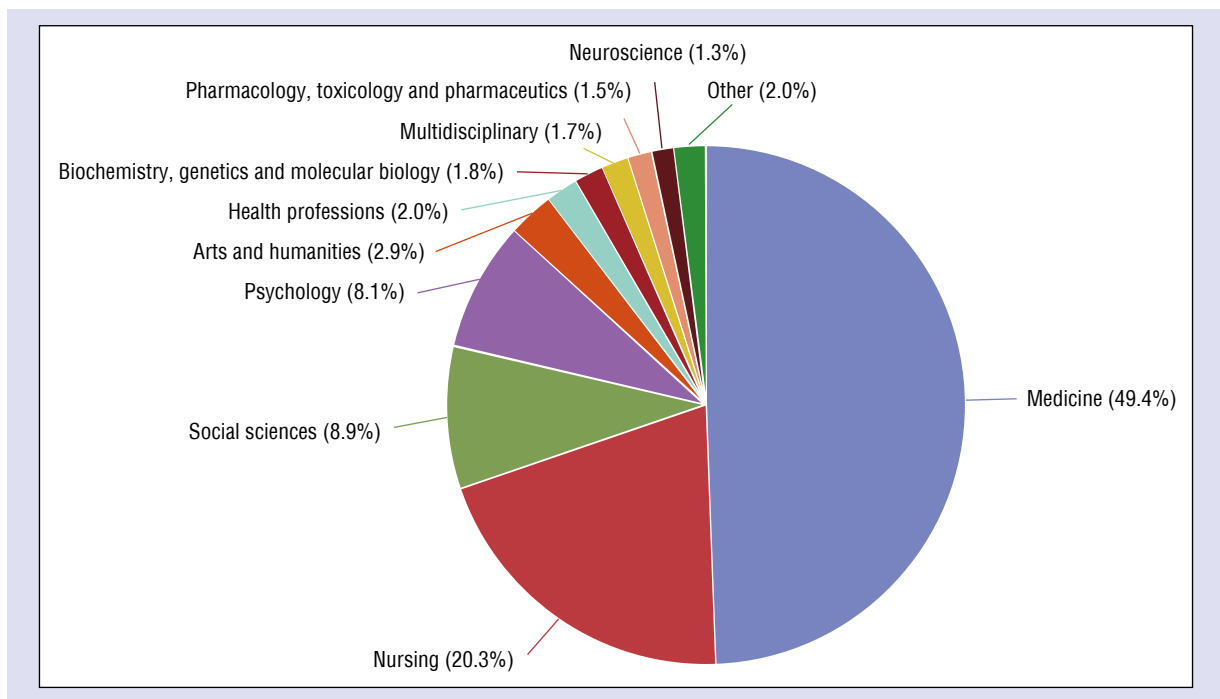


Figure 2. The disciplines of publications by core group members

(n = 53, 8.9%) and psychology (n = 48, 8.1%). In this search, the allocation of the discipline was based on journals' declarations. It was observed that the core group collaborates within Europe (mostly West), and a very low collaboration with the United States, and interestingly some collaboration with Singapore. Further analysis indicates that participants from Poland and France are not linked to the core group via publications (Figure 2).

The social networks generated by the VOSviewer demonstrate that the Action Chair has long-term collaborations with most of the core group members, which

have resulted in publications in journals listed in the Scopus database. There are also strong independent relations between the core group members, which is an indication of a strong social network (Figure 3).

**The themes and nodes in the basic description of the CODE-YAA@PC-EDU project**

In the analysis nodes (concepts) that appear in the same context more often are aligned into clusters on a two-dimensional plane, community detection algorithm

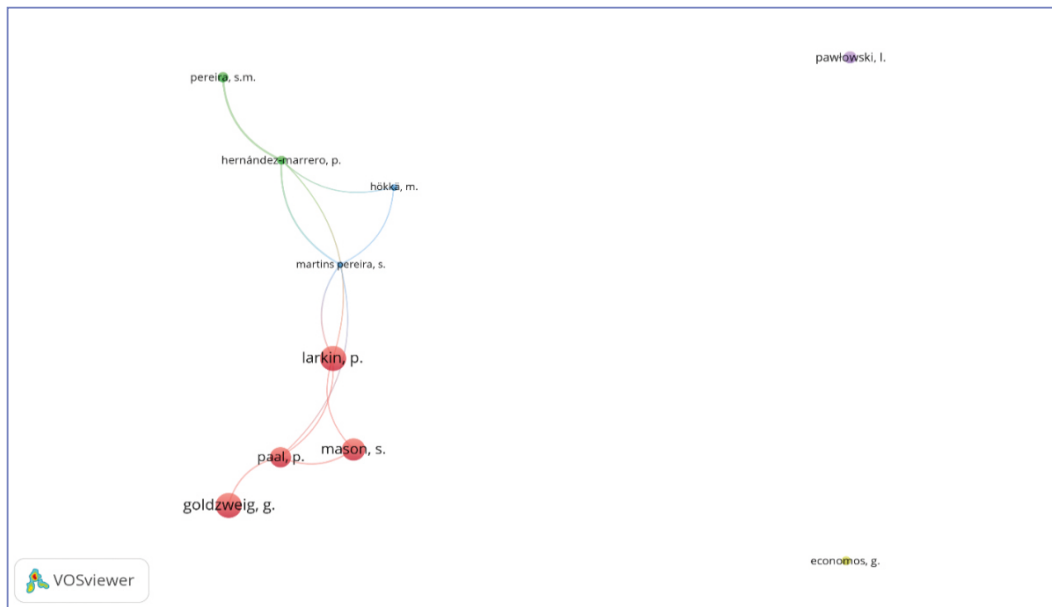


Figure 3. The co-authorships of Core Group Members; visualization were generated using VOSviewer version V 1.6.20

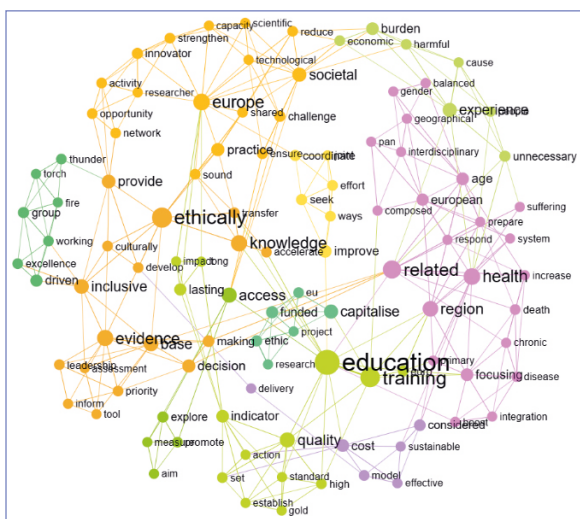


Figure 4. The themes of the CODE-YAA@PC-EDU project; visualization were generated using VOSviewer version V 1.6.20

is used to cluster the nodes into topical groups. This enabled the identification of important concepts, topics, and pathways for meaning circulation, revealing the deep structure of the text. In the CODE-YAA@PC-EDU project description, the top ten themes are:

- ethical decision-making,
- high-quality education,
- health integration,
- European innovation,
- harm reduction,
- EU research funding,
- access promotion,

- sustainable delivery,
- joint coordination, and
- group-driven excellence.

In Figure 4 different colors and their shades indicate the nodes that relate to specific themes.

## Discussion

This study explored, measured, and described the intricate web of collaborative efforts within the CODE-YAA@PC-EDU COST Action [18]. The present findings illuminate critical aspects of palliative care education and network dynamics, such as collaborative synergy, network impact, and global relevance. Based on the network and thematic deep dive into CODE-YAA@PC-EDU initiatives, it is argued that there is a need for more linguistic, geographical, and scientific variety in research and advocacy in terms of international and interdisciplinary collaborations [19, 20] In terms of sustainability, investing in young researchers interested in palliative care education, research, and service development is paramount. The Cost Action Chair together with the core group needs to promote interactions across the group to increase the social networks, especially focusing on collaborations with Easter-European, emerging scholars, and focusing on scientific outputs that are widely disseminated in national languages.

Per definition, cultural appropriateness and interdisciplinary approach are a core element of palliative care [21]. In health research, there is a strong focus on medical, pharmacological, and, to some extent,

nursing research. The role of behavioral and cultural insights is to ensure that the health service makes sense to the community regarding local social, cultural, and economic realities [22]. There is a need to strengthen the network and build the capacity for introspection and understanding complex webs of causalities that affect human health behaviors regarding palliative care. CODE-YAA@PC-EDU project embraces interdisciplinarity and hopes to create culturally and ethically appropriate approaches to palliative care education and training, including developing quality indicators for palliative care education that would resonate with local possibilities and service users' needs [23–25].

The social network analysis demonstrates that the core group is well interlinked via scientific publications in medicine, social sciences, psychology, and nursing. In terms of improvements, it is important to widen the network geographically. The Scopus database algorithm calculates the country by all authors' country of origin. The results indicate the geographical dominance of the United Kingdom. This also means that people prefer collaboration with English-speaking researchers, whereas Europeans prefer the United Kingdom to the United States. This certainly affects how palliative care is presented and understood in Europe. The geographical expansion is a strength, which helps to focus on one of the COST Action premises on the inclusiveness of target countries to understand and discuss the country-specific needs of palliative care. The inclusion of countries that are not usually involved in international advocacy and research is seen as a central task, equal to understanding cultural components in the introduction of new care pathways or curricula, which are frequently overlooked in clinical education research. Appropriate national palliative care terminology is needed for service development, implementation, and even uptake among the service users [26].

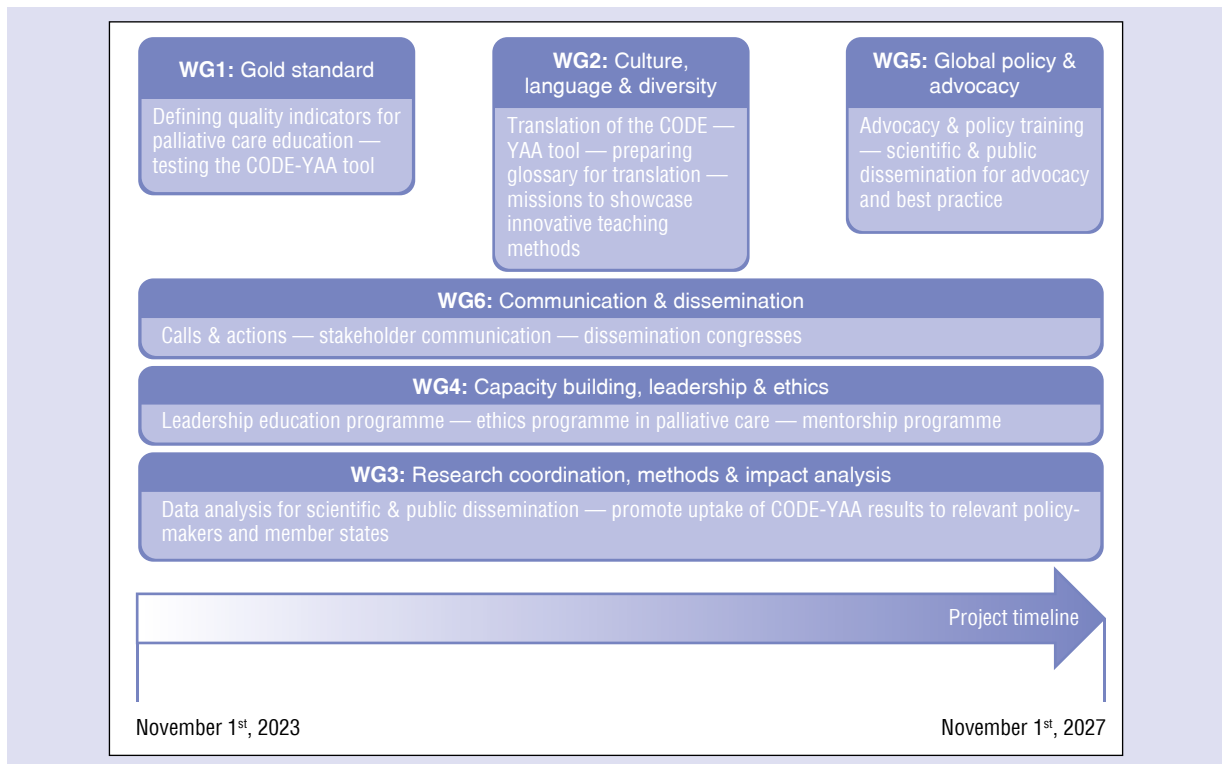
The CODE-YAA@PC-EDU project will help pave the way for an international publication to present the problems that service developers face locally. The overall dominance of publications written in English and originating from the United Kingdom, indicates that the palliative care language and terminology need to be checked, revised, and adapted in national and cultural contexts. CODE-YAA@PC-EDU project will be responsible for collaboration and group consensus to manage linguistic diversity. A glossary of key terms will be developed in English and adapted to host languages through content validation. This will generate data and discussions on linguistic challenges in palliative care and will help to elaborate the critical question of cultural appropriateness of palliative care educational models and training.

To increase the sustainability of these efforts the inclusion of young scholars is of particular importance. Building a network of people interested in investing in palliative care education and training can be a powerful tool to invest in new leaders, and force sustainability and professionalism in palliative care training and education. Many people who work in palliative care are celebrated as champions or pioneers in their field, yet the continuum of health and social care professionals, who can continue with their clinical research and teaching tasks once retired, is scarce [4]. CODE-YAA@PC-EDU project is investing in young scholars. However, among the core group members; there currently is only one scholar under 40 years of age, which indicates that there is a need to focus on building the legacy. This pathway will be supported by ethically conducted research, virtual coaching, one-to-one mentoring, short-term exchange opportunities, congress grants, and topical summer schools.

The overall dissemination agenda of this COST Action will be based on the theory of multiple streams, which states that policies move forward when three streams — 'the problem', 'the potential solution' and 'political and public opinion' — come together to enforce policy change [27]. To achieve a social impact network connectivity, its design and performance are seen as significant in societal and human activity [28]. To excel in its goals, vision, and mission, the authors structured the CODE-YAA@PC-EDU COST Action around six intertwined Working Groups (WGs):

- WG1. Gold Standard Working Group;
- WG2. Culture, Language and Diversity Working Group;
- WG3. Research Coordination, Methods & Impact Analysis Working Group;
- WG4. Capacity Building, Leadership and Ethics Working Group;
- WG5. Global Policy and Advocacy Working Group; and
- WG6. Communication and Dissemination (see Figure 5)

The CODE-YAA@PC-EDU COST Action will set quality indicators to establish a gold standard for high-quality education and training in palliative care. Furthermore, CODE-YAA@PC-EDU will coordinate joint efforts to seek ways to improve palliative care education and training to accelerate the knowledge transfer of ethically sound practices that will reduce the societal and economic burden and harmful experiences caused by people experiencing unnecessary health-related suffering. Key to this COST Action is the development of a culturally and ethically appropriate inclusive evidence-based self-assessment tool — the CODE-YAA. This is an online resource for



**Figure 5.** The goals, vision, and mission of the CODE-YAA@PC-EDU COST Action Working Groups

anyone wishing either to develop initial education and training in palliative care or to assess gaps to strengthen their existing education and training in palliative care. The CODE-YAA self-assessment tool can be used by a range of stakeholders, including governments, clinicians, educators, researchers, policymakers, and health service users. Open dialogue and discussion will be encouraged by asking stakeholders to consider: (i) where they are now in relation to palliative care education and training, (ii) where they want to be in the future, and (iii) what actions they need to take to achieve this. The authors raise these questions across a range of issues: palliative care provision, initial education and training of health and social care professionals, access to programs, curricula (general, theory, and practice), academic faculty, resources, clinical learning, and regulation of education. The CODE-YAA tool will also include a response section to summarize the discussions and a section with links to useful resources.

### Limitations to this study

The Scopus database was used for this analysis, which certainly has its limitations. Yet, Scopus is widely used also across scientific fields to identify a researcher's impact in the research community, which makes it more attractive as solely medical databases.

### Conclusions

The CODE-YAA@PC-EDU project thrives on vision, commitment, and collaboration. By analyzing joint publication histories, the authors witnessed the power of collective knowledge exchange among core group members. The authors employed VOSviewer software to map the collaborative landscape and measure the network impact. This analysis revealed pivotal connections, fostering a robust research ecosystem that needs to expand geographically, scientifically, and linguistically. The application of InfraNodus software informs the present pursuit of culturally appropriate assessment tools for palliative care education, but the work on quality indicators has just begun. The following work transcends the European borders; as the authors monitor the impact of this initiative, they contribute to advancing palliative care education worldwide. CODE-YAA@PC-EDU has the potential to address diverse local and national challenges that exist in palliative care education provision, level and at the same time, provide a cohesive and workable response to establishing a sound basis for academic and clinical preparation for practice. In summary, the CODE-YAA@PC-EDU project exemplifies excellence in collaborative research, propelling palliative care education and training forward.

## Article information and declarations

### Acknowledgments

None.

### Data availability statement

All data retrieved about the core group members and integrated in both the social network analysis and the InfraNodus software is publicly available.

### Ethics statement

All data retrieved about the core group members and integrated into both the social network analysis and the InfraNodus software is publicly available. Therefore, this study did not require formal ethics approval from an ethics review board. In addition, all core group members gave their written informed consent to use this data retrieved from the internet after being informed about the aims of the study and the data collection procedure. They were free to comment on the final draft of this article that was sent to all core group members to obtain their consent to use their names, data, and findings in the article.

### Author contributions

The idea for this study came from GG, who conducted the analysis and provided the evidence for further consultations with all authors. PP and GG drafted the outline of the manuscript. SMP helped with finding the relevant literature. GE designed the Figure 5. All authors were involved in finalizing the paper.

### Conflict of interest

Authors have no competing interest to disclose.

### Funding

This work was funded by the European Union Cooperation in Science and Technology (COST) Programme, CA22127: COLlaboratively DEveloped culturallY Appropriate and inclusive Assessment tool for Palliative Care EDUcation (CODE-YAA@PC-EDU).

### Supplementary material

None.

## References

1. COST European Cooperation in Science and Technology. <https://www.cost.eu/> (9.04.2024).
2. START — codeyaa.eu. <https://codeyaa.eu/> (9.04.2024).
3. World Health Organization (2021a) Assessing the Development of Palliative Care Worldwide: A Set of Actionable Indicators. Geneva: WHO. Google Scholar.
4. Paal P, Brandstötter C, Elsner F, et al. European inter-professional postgraduate curriculum in palliative care: A narrative synthesis of field interviews in the region of Middle, Eastern, and Southeastern Europe and Central and West Asia. *Palliat Support Care*. 2022 [Epub ahead of print]: 1–10, doi: [10.1017/S1478951522001651](https://doi.org/10.1017/S1478951522001651), indexed in Pubmed: [36545761](https://pubmed.ncbi.nlm.nih.gov/36545761/).
5. Payne C, Brown MJ, Guerin S, et al. EMTRek: an evidence-based model for the transfer & exchange of research knowledge-five case studies in palliative care. *SAGE Open Nurs*. 2019; 5: 2377960819861854, doi: [10.1177/2377960819861854](https://doi.org/10.1177/2377960819861854), indexed in Pubmed: [33415246](https://pubmed.ncbi.nlm.nih.gov/33415246/).
6. Constien T, Guerin S, Payne C, et al. Knowledge transfer in palliative care research: emtrek – an evidence-based model evaluation. Retrieved from [osf.io/z3p57](https://osf.io/z3p57).
7. Madaan G, Jolad S. Evolution of scientific collaboration networks. In 2014 IEEE International Conference on Big Data (Big Data) (pp. 7–13). IEEE.
8. Hou H, Kretschmer H, Liu Z. The structure of scientific collaboration networks in Scientometrics. *Scientometrics*. 2007; 75(2): 189–202, doi: [10.1007/s11192-007-1771-3](https://doi.org/10.1007/s11192-007-1771-3).
9. Simmons JA, Anderson LJ, Bowne DR, et al. Collaborative research networks provide unique opportunities for faculty and student researchers. *Council on Undergraduate Research Quarterly*. 2016; 36(4), doi: [10.18833/curq/36/4/4](https://doi.org/10.18833/curq/36/4/4).
10. Cornish F, Breton N, Moreno-Tabarez U, et al. Participatory action research. *Nat Rev Meth Prime*. 2023; 3(34), doi: [10.1038/s43586-023-00214-1](https://doi.org/10.1038/s43586-023-00214-1).
11. Molina J, Ferrer A, Iñiguez D, et al. Network analysis to measure academic performance in economics. *Empirical Economics*. 2018; 58(3): 995–1018, doi: [10.1007/s00181-018-1546-0](https://doi.org/10.1007/s00181-018-1546-0).
12. Dzwigol H. Network analysis as a research method. *E3S Web of Conferences*. 2023; 456: 03001, doi: [10.1051/e3sconf/202345603001](https://doi.org/10.1051/e3sconf/202345603001).
13. Shields R. (2015). Operationalizing Network Analysis for Higher Education Research. In: Huisman, J, de Boer H, Dill DD, Souto-Otero, M. (eds) *The Palgrave International Handbook of Higher Education Policy and Governance*. Palgrave Macmillan, London. [https://doi.org/10.1007/978-1-137-45617-5\\_12](https://doi.org/10.1007/978-1-137-45617-5_12).
14. Scopus Database. <https://www.scopus.com/> (9.04.2024).
15. van Eck NJ, Waltman L. Software survey: VOSviewer, a computer program for bibliometric mapping. *Scientometrics*. 2010; 84(2): 523–538, doi: [10.1007/s11192-009-0146-3](https://doi.org/10.1007/s11192-009-0146-3), indexed in Pubmed: [20585380](https://pubmed.ncbi.nlm.nih.gov/20585380/).
16. Shumate M, Cooper KR. (2021). Networks for Social Impact. <https://www.vosviewer.com/> (9.04.2024).
17. InfraNodus: Generate Insight with AI and Network Thinking. <https://infranodus.com/> (9.04.2024).
18. Memorandum of Understanding Action CA22127 – COST. <https://www.cost.eu/actions/CA22127/> (9.04.2024).
19. Walshe C, Ahmed F, Preston N. Do journals contribute to the international publication of research in their field? A bibliometric analysis of palliative care journal data. *Palliat Med*. 2020; 34(4): 541–546, doi: [10.1177/0269216319897536](https://doi.org/10.1177/0269216319897536), indexed in Pubmed: [31973638](https://pubmed.ncbi.nlm.nih.gov/31973638/).
20. Kaasa S, Hjermstad MJ, Loge JH. Methodological and structural challenges in palliative care research: how have we fared in the last decades? *Palliat Med*. 2006; 20(8): 727–734, doi: [10.1177/0269216306072620](https://doi.org/10.1177/0269216306072620), indexed in Pubmed: [17148527](https://pubmed.ncbi.nlm.nih.gov/17148527/).
21. EURO-IMPACT and IMPACT. The European Declaration on Palliative Care 2020. The Final Conference of the two EU-Funded Projects EURO-IMPACT and IMPACT. Brussels.
22. Hoefler R. The multiple streams framework: understanding and applying the problems, policies, and politics approach. *J Policy Pract Res*. 2022; 3(1): 1–5, doi: [10.1007/s42972-022-00049-2](https://doi.org/10.1007/s42972-022-00049-2).
23. Dahlin C, Coyne P, Goldberg J, et al. Palliative care leadership. *J Palliat Care*. 2018 [Epub ahead of print]:



- 825859718791427, doi: [10.1177/0825859718791427](https://doi.org/10.1177/0825859718791427), indexed in Pubmed: [30111270](https://pubmed.ncbi.nlm.nih.gov/30111270/).
24. Bagaragaza E, Pujol N, Evin A, et al. Méthodologies de la recherche en soins palliatifs : les défis de l'interdisciplinarité. *Santé Publique*. 2021; Vol. 33(2): 199–209, doi: [10.3917/spub.212.0199](https://doi.org/10.3917/spub.212.0199).
  25. Kirkpatrick AJ, Donesky D, Kitko LA. A systematic review of interprofessional palliative care education programs. *J Pain Symptom Manage*. 2023; 65(5): e439–e466, doi: [10.1016/j.jpainsymman.2023.01.022](https://doi.org/10.1016/j.jpainsymman.2023.01.022), indexed in Pubmed: [36736863](https://pubmed.ncbi.nlm.nih.gov/36736863/).
  26. Noonan K, Horsfall D, Leonard R, et al. Developing death literacy. *Progr Palliat Care*. 2016; 24(1): 31–35, doi: [10.1080/09699260.2015.1103498](https://doi.org/10.1080/09699260.2015.1103498).
  27. Fecher B, Hebing M. How do researchers approach societal impact? *PLoS One*. 2021; 16(7): e0254006, doi: [10.1371/journal.pone.0254006](https://doi.org/10.1371/journal.pone.0254006), indexed in Pubmed: [34242271](https://pubmed.ncbi.nlm.nih.gov/34242271/).
  28. Ross-Hellauer T, Tennant JP, Banelytė V, et al. Ten simple rules for innovative dissemination of research. *PLoS Comput Biol*. 2020; 16(4): e1007704, doi: [10.1371/journal.pcbi.1007704](https://doi.org/10.1371/journal.pcbi.1007704), indexed in Pubmed: [32298255](https://pubmed.ncbi.nlm.nih.gov/32298255/).