



Harnessing the power of conversational e-Coaches

Harnessing the power of conversational e-Coaches for health and well-being through Swiss-Portuguese Collaboration

Mara Guerreiro, Leonardo Angelini & Elena Mugellini, on behalf of the eCCo team



Team

- Dr. Ana Paula Cláudio, PhD (FCUL)
- Bruno Venâncio, MSc candidate (ESEL)
- Dr. Cristina Baixinho, PhD (ESEL)
- Professor Elena Mugellini, PhD (HES-SO, Swiss Lead, Project Management Team)
- Dr. Helga Rafael, PhD (ESEL)
- Isa Félix, PhD candidate (ESEL)
- Dr. João Balsa, PhD (FCUL)
- Dr. Leonardo Angelini, PhD (HES-SO, Project Management Team)
- Karl Daher, PhD candidate (HES-SO)
- Mafalda Padinha, MPharm candidate (IUEM)
- Dr. Mara Guerreiro, PhD (ESEL, Portuguese Lead, Project Management Team)
- Dr. Maria Beatriz Carmo, PhD (FCUL, Third Party Institution Contact Person)
- Professor Maurizio Caon, PhD (HES-SO)
- Mira El Kamali, PhD candidate (HES-SO)
- Professor Omar Abou Khaled, PhD (HES-SO)

■
1 | Objectives

■
2 | Key milestones and deliverables

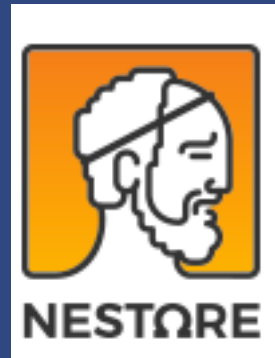
■
3 | Short-term impact and follow-up activities

Overview of the presentation

01

Overarching objective

- Accelerate joint work on conversational e-coaches for health and well-being, by connecting international and national research at HES-SO and ESEL



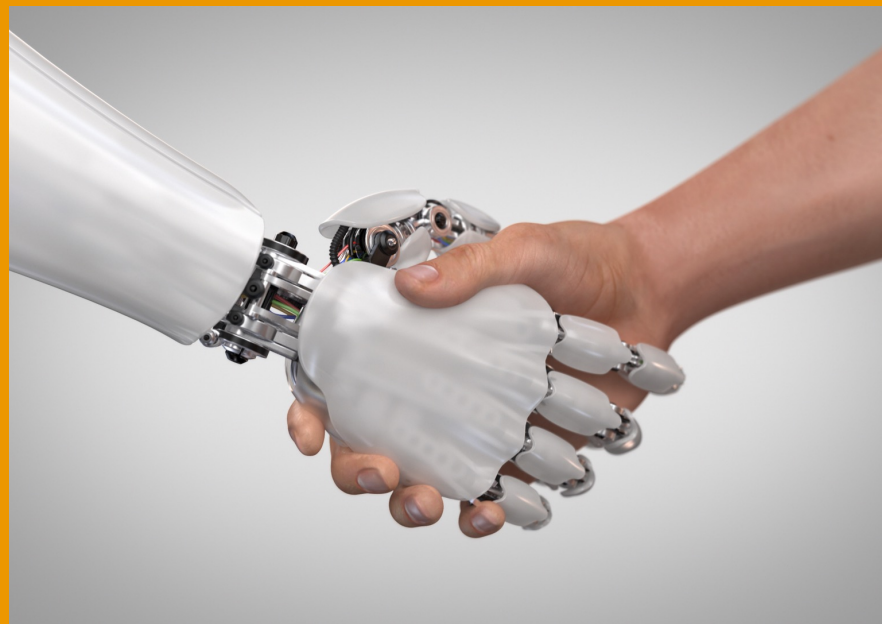
<https://nestore-coach.eu/home>



<https://vaselfcare.esel.pt>

Specific objectives

- Conducting a mapping review on conversational e-coaches for health and well-being
- Consensualising a taxonomy on conversational e-coaches for health and well-being



02

Key milestones and deliverables



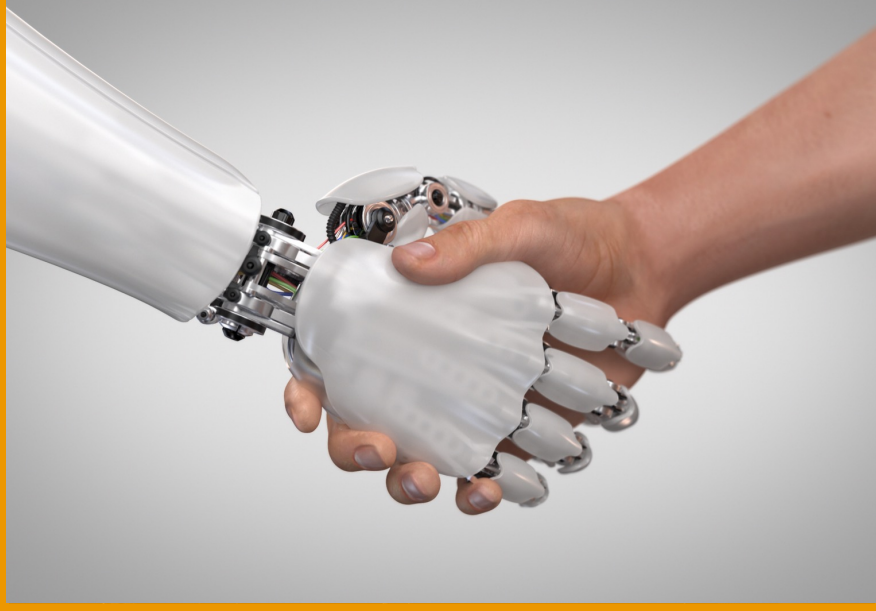
Project
Management Team



Pandemic

Conversational agents

- Computer programmes designed to simulate two-way human conversation using language (speech and/or text), potentially supplemented with non-language modalities (Guerreiro et al., 2021)
- Able to be integrated in multiple solutions (e.g. mobile phones, web-based, robots), with a range of goals (e.g. disease prevention, self-management of chronic disease)



Mapping review on conversational agents for health and well-being

- Systematic search revealed a significantly higher number of hits than expected
 - 16351 records identified from databases
 - 8022 papers screened
 - Around 1300 primary studies and 150 secondary studies sought for retrieval and full text perusal
- More effort allocated to this activity, including the submission for publication of the mapping review protocol
- Manuscript of the mapping review is under preparation

JMIR RESEARCH PROTOCOLS

Guerreiro et al

Protocol

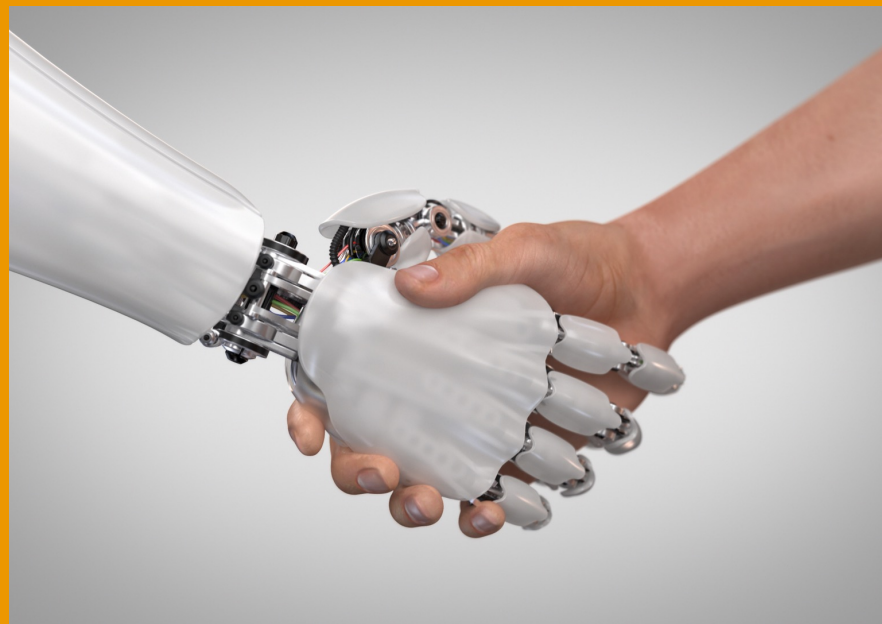
Conversational Agents for Health and Well-being Across the Life Course: Protocol for an Evidence Map

Mara Pereira Guerreiro^{1,2}, PhD; Leonardo Angelini³, PhD; Helga Rafael Henriques¹, PhD; Mira El Kamali³, MSc; Cristina Baixinho^{1,4}, PhD; João Balsa⁵, PhD; Isa Brito Félix¹, MSc; Omar Abou Khaled³, PhD; Maria Beatriz Carmo⁵, PhD; Ana Paula Cláudio⁵, PhD; Maurizio Caon³, PhD; Karl Daher³, MSc; Bruno Alexandre⁶, BSc; Mafalda Padinha⁷, BSc; Elena Mugellini³, PhD

<https://doi.org/10.2196/26680>

Taxonomy on conversational agents for health and well-being

- An initial draft of the taxonomy was produced



Ambient Assisted Living (AAL) Grant Application

- Proposal coordinated by HES-SO, in collaboration with ESEL, two companies and two University Hospitals
- The project aimed at empowering older adults at risk of fall, through a technological solution able to provide health metrics that are easy to understand both for primary and secondary users



[This Photo](#) by Unknown Author is licensed under [CC BY-ND](#)

03

Short-term impact and follow-up activities

- The project has strengthened partners position at an international level in the area of conversational e-coaches
- Searchable database on conversational agents is expected to foster collaboration, tackle fragmentation and unwanted redundancy
- Other follow-up activities include further EU grant applications



Thank you
for your
attention

<https://ecco.esel.pt>