

**Acronym:**

COMPAR-EU

**Title of project:**

Comparing the effectiveness and cost-effectiveness of self-management interventions in four high priority chronic conditions in Europe

**Timeframe:** 2018-2021

**Project key words:** Self-management, chronic diseases, decision-making, good practices

**Project summary:**

COMPAR-EU aims to identify, compare, and rank the most effective and cost-effective self-management interventions (SMIs) for adults in Europe within four high-priority chronic conditions: type 2 diabetes, obesity, chronic obstructive pulmonary condition, and heart failure. The project will provide support for policy-makers, guideline developers and professionals to make informed decisions for the adoption of the most suitable self-management interventions (SMI) through an IT platform featuring decision-making tools adapted to the needs of a wide range of end users (including also researchers, patients, and industry).

**Objectives:**

To **identify, compare, and rank the most effective and cost-effective self-management interventions** (including preventive and management domains) for adults living with four high-priority chronic diseases: type 2 diabetes, obesity, chronic obstructive pulmonary disease (COPD), and heart failure.

**Specific Objectives:****Preparatory research development:**

- To validate a taxonomy of SMIs to inform the research steps that follow, ensuring both homogeneity and comparability.
- To identify and prioritise SMI outcomes from patients' perspectives.

**Analysis:**

- To synthesise existing evidence on SMIs from randomised clinical trials (RCTs)
- To compare the relative effectiveness of SMIs in each of the four chronic diseases considered through both systematic reviews and NMAs
- To model the impact of SMIs from the perspective of cost-effectiveness
- To analyse contextual and implementation factors with the ultimate goal of improving the implementation of SMIs

**Decision-making tools**

- To develop and pilot decision-making tools to facilitate and disseminate the use of the most effective SMIs to key target end users through the COMPAR-EU technology information platform
- To conduct a comprehensive dissemination, communication, and exploitation plan to maximise the impact of the COMPAR-EU project

## Target stakeholders

- Patients, patient organisations, and caregivers
- Healthcare providers and managers
- Industry (SMEs, insurance companies)
- Guideline developers
- The research community

## Phases and main activities:

### ✧ Preparatory research development:

- Theoretical framework and data collection preparation.  
Previous standardisation activities are key to a proper synthesis of the existing literature and further comparison of SMIs as they will ensure internal and external validity based on quality criteria. This phase of the project will include all relevant methods needed to prepare further work.
- Involvement of patients to establish priorities and preferences.  
Active involvement of service users in research can lead to research of greater quality and relevance owing to the unique perspective that users can bring to a research project. In COMPAR-EU, patient involvement has been built into the research design from an early stage and will be integrated in an iterative fashion. Furthermore, this process will be led by the European Patients' Forum.

### ✧ Analysis:

- Data search, extraction, and synthesis of the evidence.  
This is a key stage of the project in which we will identify existing RCTs on SMIs, extract key information for further evaluation, and establish methods for ensuring the quality of the data and summarising the information on SMIs and SMI outcomes.
- Evaluating and comparing interventions.  
In this phase of the project we will compare interventions using NMA, which is a sophisticated method for statistically combining direct and indirect evidence from RCTs in a single analysis. Additional cost-effectiveness modelling will be conducted for the most effective interventions, and contextual factors will be applied to better inform on implementation issues.

### ✧ Decision-making tools

- Development and piloting of the COMPAR-EU information technology platform.  
Many problems facing health care systems today are due not to a lack of knowledge but rather to gaps between what we know and what we do. The process from innovation to clinical practice is complex but it could be facilitated by summarising and tailoring existing evidence to different end users and producing tools focused on easier, better-informed decision making. This phase will focus on the development of a technological platform where tried-and-tested tools will be used to integrate the information and evidence synthesised during the different phases of COMPAR-EU to facilitate decision making for the target end users (patients, healthcare professionals, policymakers, researchers, and SMEs). The tools will incorporate the new knowledge produced, mainly from the network meta-analysis and cost-effectiveness analysis. For example in the case of decision aids the evidence about the relative effectiveness and associated certainty for the relevant comparisons will be incorporated in this presentation format. In the case of the Evidence to Decision (EtD) frameworks we will populate them with both effectiveness and cost-effectiveness information. These tools have already been developed with funding from previous EU-based projects.

We will also equip these tools with new features and design new tools to exploit the research results. These tools will be based on the GRADE approach, widely used as a system of reference to characterise evidence base recommendations according to the quality of the supporting evidence and the balance between desirable and undesirable consequences of the alternative management options.

- Dissemination and exploitation.

Substantial efforts will go into implementing innovative activities to increase the impact of the research findings. These will include research activities and activities directly targeting the exploitation of the proposed decision-making tool.

### Expected results

- Validated and refined taxonomy of SMIs for four chronic conditions
- Lists of most relevant patient-important outcomes, Core Outcome Sets (COS)
- Summary of evidence for each SMI organised by condition, outcome, and population subgroup [comorbidities, gender and socioeconomic dimensions] (including details of quality of the evidence and strength of the related recommendations)
- List of SMIs organised by condition and outcome measures and ranked according to relative effectiveness
- Ranking of SMIs according to their relative cost-effectiveness.
- List of facilitators and barriers to the implementation of SMIs
- COMPAR-EU technology information platform featuring tailored decision-making tools targeting policy makers, guideline developers and researchers, healthcare professionals, patients and industry tested across five European countries
- Identification of relevant policy areas, workshops with industry partners, multi-pronged approaches to dissemination including all stakeholders, and a strategy for knowledge management of data beyond the project timeframe.

### Partners of the Project:

- Fundació Avedis Donabedian (FAD), Spain
- European Patients' Forum (EPF), Belgium
- Institute for Medical Technology Assessment (iMTA), The Netherlands
- Netherlands Institute for Health Services Research (NIVEL), The Netherlands
- Fundació Privada Institut de Recerca de l'Hospital de la Santa Creu i Sant Pau (IR-HSCSP), Spain
- OptiMedis AG, Germany
- University of Ioannina (UOI), Greece

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