



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

## Call for proposals

*COMPAR-EU platform development*

Date

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## COMPAR-EU PROJECT OVERVIEW

COMPAR-EU is a multimethod, interdisciplinary project financed by the European Union research program Horizon 2020. It will contribute to improve the knowledge of different type of users (including patients and citizens) about what works better to improve self-management among people that suffer from chronic diseases ("Self-management interventions")

Self-management is defined as "that what individuals, families and communities do with the intention to promote, maintain, or restore health and to cope with illness and disability with or without the support of health professionals. It includes but is not limited to self-prevention, self-diagnosis, self-medication and self-management of illness and disability."

Self-management interventions (SMIs) are the specific support that is provided by professionals or other patients to help patients to have a better self-management. For example: providing education about how to improve lifestyle, helping patients to self-administrate medication, allowing patients to share decisions related with their own care or train them to self-monitor their symptoms or other markers (such as glycemia or blood pressure) to better management of their condition(s). COMPAR-EU aims to identify, compare, and rank the most effective and cost-effective self-management interventions (including preventive and management domains) in Europe for adults suffering from one or more of the four high-priority chronic diseases: type 2 diabetes, obesity, chronic obstructive pulmonary disease (COPD), and heart failure.

The project reviews the findings of 4000 randomised control trials (RCTs ) and applies network meta-analysis to identify and rank the most effective interventions. The work is based on a validated taxonomy of SMIs and prioritises outcomes from the patient's perspective. The project will also include the assessment of the cost-effectiveness of the most effective SMIs and the analysis of contextual factors associated with the SMIs implementation.

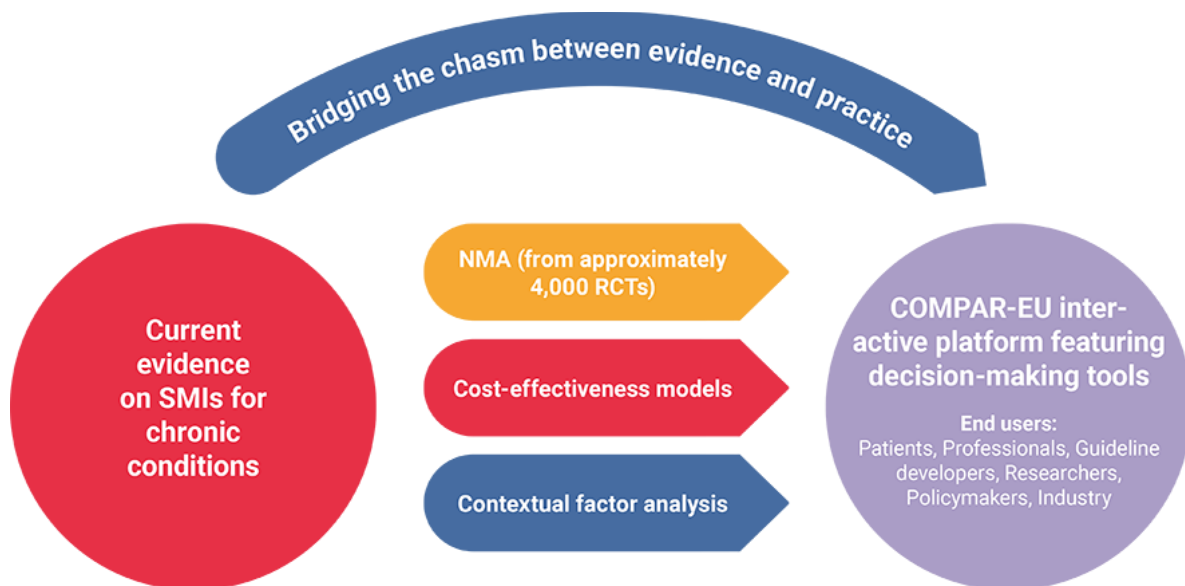
Ultimately, COMPAR-EU facilitates the knowledge on self-management and supports implementation of best practices in different health care contexts through an interactive platform.

The idea is to put all the results that emerge from the different phases of the project into an interactive platform that will be accessible for different types of stakeholders. From those that are specialist in these topics (i.e. researchers) to those people that will use it to make decisions in a more practical way (i.e. patients, health care professionals and policymakers).

Therefore, the platform will feature decision-making tools and other end products adapted to the needs of expected end users (member states policymakers, guideline developers and researchers, health care professionals, patients, carers and their organisations, and industry) (Figure 1)



Figure 1: Conceptual model of the overall COMPAR-EU project



Source: Illustration of the COMPAR-EU consortium

Key outputs of the project that will be part of the platform are:

- **Summary of Findings tables (SoF):**

The main objective of this tool is to help guideline developers and healthcare professionals to find and understand the main messages from systematic reviews, and to highlight the most important outcomes (both benefits and harms), the size of these effects, and the certainty of the supporting evidence.

In this platform, the interactive summary of findings tables include the results from the NMA. This type of interactive summary of findings tables has been already developed by other companies for pairwise comparison and there are some recent developments for presenting results for multiple comparison (more than two).

- **Evidence to Decision frameworks (EtD)**

The purpose of this tool is to help policymakers and managers to make decisions about health system or public health interventions that are targeted at a population when there are more than two available options. EtD frameworks can inform about pros and cons of each intervention being compared, ensure that the criteria that determine a decision are considered, help to structure discussion and form the bases for decisions transparent to those affected by a policy decision.

- **Patient Decision Aids**

These tools are designed to help reaching a shared decision between a healthcare professional and a patient on the best course of action regarding treatment. These aids will be interactive, i.e. users are able to choose from a set of interactive settings the disease (and comorbidities) they are interested in, the key outcomes they



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want to improve, and contextual or individual factors that might influence the effectiveness of a SMI (gender, geographic area, healthcare system level, etc.).

- **Other products**

In addition to the decision-making tools, the COMPAR-EU platform will also include other key results of the project:

- A ranking of most effective SMIs (by outcome analysed and subgroups where possible): After analysing the results, we will obtain a list of interventions that will be organised from higher to lower effectiveness. These ranking will be different depending on the outcomes selected or other characteristics.  
For example, we may want to select the most effective interventions for improve patient knowledge, reduce weight, or improve physical activity.
- A list of the most cost-effective SMIs and a report of contextual factors influencing the implementation of SMIs: it will be a list of the SMIs organised in terms of their data on cost and other factors.
- A catalogue of interventions (taxonomy): a list of self-management interventions described based on different characteristics (i.e.: if they are delivered online or face-to-face, in group or individually...)
- Core Outcome Sets: We will have a list of outcomes used in our research for each disease. Users will be able to navigate on the different outcomes that were studied for each disease Each outcome should include a definition and then also allow to navigate on the different sections of the platform that include the selected outcome/s.
- A catalogue of self-management tools: tools are questionnaires or surveys used with patients to evaluate their improvement in some of the outcomes. User will have a list of tools to be explore in terms of different variables (ie. Authors, year of publication, scale used, etc.)
- A catalogue of RCTs: a list of RCT's described by different characteristics such as what interventions they analysed, in which countries, the number of patients, etc.

**Please note:**

More information on the project can be found [HERE](#).

See more explanation on specific topics in the [GLOSSARY OF TERMS](#).



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## COMPAR-EU PLATFORM TECHNICAL REQUIREMENTS

This document presents the technical requirements of each of the main sections of the COMPAR-EU platform. For each section we specify the requirements to both front-end and back-end. As a general principle, elements that allow autonomy of the COMPAR-EU consortium (contractor from now on) from the back-end functionalities will be valued positively.

All elements described here are MINIMUM REQUIREMENTS, except for those elements included under “Potential innovations”. Please notice that you can propose additional innovations to add value the proposal.

SECTION	TECHNICAL REQUIREMENTS
General	<p>The following requirements include general principles for the platform that should be considered in all sections of the platform.</p> <ul style="list-style-type: none"> <li>● The COMPAR-EU project is ongoing, started in 2018 and will finish in 2022. In this document we include a description of the foreseen technical requirements.</li> <li>● We foresee potential changes in some of the elements so proposals that are flexible and allow for future modifications will be evaluated positively.</li> <li>● After the end of this contract (October 2022) the platform will be updated as needed, therefore the general design should allow the COMPAR-EU consortium members to add information (documents, decision aids, EtDs..) in the future.</li> <li>● All proposals need to consider that in the COMPAR-EU platform navigation should be envisioned on the basis of:             <ul style="list-style-type: none"> <li>○ The type of end-user (patient; clinician; researcher; policy makers and managers; and Industry).</li> <li>○ The disease (Type 2 Diabetes, Obesity, Heart Failure and COPD). In the future additional diseases might be added, the design of the platform should allow for this.</li> </ul> </li> </ul> <p>Following this logic, COMPAR-EU consortium in the back office should be able to tag materials at least for both the type of end-users and diseases.</p> <ul style="list-style-type: none"> <li>● The platform must be multilingual, allowing for at least 6 languages. In case of translation, the bidding company would be responsible for translating menus and navigating instructions. The contractor would provide translated materials. It is expected that only specific sections of the web will be translated to several languages, such as the decision aid section. The bidding company can suggest automatization features such as translating plug-ins, which will be highly valued.</li> <li>● The platform should be prepared for data sharing, including the downloading of databases in at least formats of excel and csv files. Proposals that allow for users to select the specific variables that they want to download will be evaluated positively.</li> </ul>



	<ul style="list-style-type: none"> <li>Proposals that include web accessibility requirements, particularly facilitating navigation of people with visual impairments, will be evaluated positively. All proposals should include at least the option to enlarge font size.</li> <li>Links to external resources should open in a new navigation tab.</li> <li>Some sections of the platform might be presented as protected site; therefore, the design of the platform should allow for the possibility of requiring registration and/or installing a paywall. The backoffice of all platform sections should allow admin users to identify if the material should be publicly accessible, under registration or under payment.</li> <li>The general visual design (colours, etc.) of the platform should follow the design of the current project website: <a href="https://self-management.eu/">https://self-management.eu/</a></li> <li>The platform should be able to include a variety of formats such as: pdf's, excels, videos, podcast, eBooks.</li> </ul>
<p>Search Engine</p>	<p>The COMPAR-EU platform should have a search engine that allows searching of relevant content within the platform. This should include:</p> <ul style="list-style-type: none"> <li>A simple and an advanced search <ul style="list-style-type: none"> <li>Simple: search for key words (tags)</li> <li>Advanced: allowing for simultaneous search of multiple criteria (through combinations of drop-downs, radio buttons, etc): disease, stakeholder, type of product, year, intervention, or outcome among other aspects.</li> </ul> </li> <li>Predictive text functionality</li> </ul>
<p>Repositories of documents</p>	<ul style="list-style-type: none"> <li>Documents are pdfs, word, excel files, images or other formats of reports or manuscripts.</li> <li>There should be an option to tag documents to facilitate identification (e.g. disease, topic, target stakeholder).</li> <li>The documents should be searchable through the search engine (at least in title and other variables in database and via tags). The option to search the text of the documents and articles pdfs will be valued positively.</li> <li>The platform should have the option to host a considerable amount of information in the form of documents, etc.</li> <li>The user will see linked to each document related areas or products of the COMPAR-EU platform that might be of interest (those would be provided in the moment of uploading each document).</li> </ul> <p><b>Back office specifications (or specification of admin functionalities):</b></p> <p>Administrators should be able to:</p> <ul style="list-style-type: none"> <li>Upload documents (preferably multiple documents at once).</li> <li>Tag documents (preferably allowing for tagging at the moment of upload,</li> </ul>



	<p>assigning tag(s) to multiple documents at once).</p> <ul style="list-style-type: none"> <li>• Select if links to other platform section should appear for each specific document (preferably allowing for assigning relevant sections at the moment of upload and assigning section(s) to multiple documents at once).</li> </ul>
<p>Repository of RCTs</p>	<ul style="list-style-type: none"> <li>• This section will include basic info on published studies (RCTs) presented both in a list format (including link to external webs) and link to individual pages within the platform for each RCT. For an example see <a href="#">A</a> for a general list and <a href="#">B</a> for an example of specific entry within the list.</li> <li>• The general appearance of this section should be of a list of RCTs with key information (title, author, year of publication, and key words. This information will be provided by the COMPAR-EU consortium in a database).</li> <li>• The list should allow for:             <ul style="list-style-type: none"> <li>○ Interactive ordering of the list in each column.</li> <li>○ Filters: all key variables included in the search engine capacity:</li> <li>○ Be able to search by disease, intervention type, per intervention component (all components from taxonomy), expected behaviours, per outcomes (and for those effective for that outcome), tools, year of publication, countries of implementation.</li> <li>○ Users should be able to download a selection of references of RCTs and related information based on selection criteria for each of the columns of basic info (provided in a database by the COMPAR-EU consortium).</li> </ul> </li> <li>• Users should be able to click on a specific entry of the list (one RCT) that would take them to a specific page for that RCT that should include:             <ul style="list-style-type: none"> <li>○ Basic info of the RCT (provided in a database by the COMPAR-EU consortium).</li> <li>○ Link to the relevant sections of the platform.</li> <li>○ Link to external website – the specific entry in the PubMed website (<a href="#">see here as example</a>).</li> </ul> <p>RCT's can be uniquely identified through a code, known as DOI. The COMPAR-EU consortium has a database with the DOIs. Proposals that foresee an automatic search of the link to PUBMED page based on DOI will be valued positively.</p> </li> <li>• RCTs should be searchable through the search engine (both tags and info on the RCTs included in a database to be provided by the COMPAR-EU consortium).</li> </ul> <p><b>Back office specifications (or specification of admin functionalities):</b></p> <p>Administrators should be able to:</p> <ul style="list-style-type: none"> <li>• Upload information directly from a database in Excel, csv files or other common formats after consultation and approval by the contractor.</li> <li>• Tag RCTs (preferably allowing for tagging at the moment of upload, assigning</li> </ul>





	<p>tag(s) in a database).</p> <ul style="list-style-type: none"> <li>• The tags should allow multiple concepts including disease, per intervention component (all components from taxonomy), expected behaviours, per outcomes, tools, year of publication, countries of implementation (the initial information for those tags will be provided by the COMPAR-EU consortium).</li> <li>• Select if links to other platform section should appear for each specific RCT (preferably allowing for assigning relevant sections at the moment of upload, assigning section(s) directly from database).</li> </ul>
<p>Repository of tools</p>	<ul style="list-style-type: none"> <li>• This section would include basic info on <a href="#">tools</a> presented in list and individual sites + link to external website.</li> <li>• The general appearance of this section should be a list of tools with basic information (name, author, year, disease (specific disease or generic), outcome of relevance, target group, reliability and validity (yes/no), form of delivery, cost/licence) information will be provided by the COMPAR-EU consortium in a database).</li> <li>• The list should allow for:             <ul style="list-style-type: none"> <li>○ Interactive ordering of the list in each column.</li> <li>○ Filters: all key variables included in the general search engine capacity, extendable to be able to search by disease, outcome, intervention type, per intervention component (all components from taxonomy), expected behaviours, per outcomes (and for those effective for that outcome), year of publication, RCTs that have used it.</li> <li>○ Users should be able to download a selection of references to tools based on selection criteria for each of the columns of basic info (provided in a database by the COMPAR-EU consortium).</li> </ul> </li> <li>• Users should be able to click on a specific entry of the list (one tool) that would take them to a specific page for that tool that should include:             <ul style="list-style-type: none"> <li>○ Basic info of the tools (that described in the list plus several other variables (scale, direction and a brief description of the tool)</li> <li>○ Link to the relevant sections of the platform, specially to the documents of COS.</li> <li>○ Link to external website – the specific entry in the PubMed website (see as one <a href="#">example</a>.)</li> <li>○ RCT's can be uniquely identified through a code, known as DOI. The COMPAR-EU consortium has a database with DOI for the initial thousands of RCTs to be included in the platform. Proposals that foresee an automatic search of the link to PUBMED page based on DOI will be valued positively.</li> </ul> </li> <li>• Tools should be searchable through the search engine (both tags and info on the tools included in a database to be provided by the COMPAR-EU consortium).</li> </ul>



	<p><b>Back office specifications (or specification of admin functionalities):</b></p> <p>Administrators should be able to:</p> <ul style="list-style-type: none"> <li>● Upload information directly from a database in excel, csv or other common formats accepted by the COMPAR-EU Consortium.</li> <li>● Tag tools (preferably allowing for tagging at the moment of upload, assigning tag(s) in a database).</li> <li>● Tagging should allow each tool to have multiple tools, such as disease, per intervention component (all components from taxonomy), outcome, measures, year of publication, countries of implementation (the initial information for those tags will be provided by the COMPAR-EU consortium).</li> <li>● Select if links to other platform section should appear for each specific tool (preferably allowing for assigning relevant sections at the moment of upload, assigning section(s) directly from database).</li> </ul>
<p>Repository of interventions</p>	<ul style="list-style-type: none"> <li>● This section would include basic info on <a href="#">interventions</a> presented in list and individual sites + link to external website.</li> <li>● The general appearance of this section should be a list of information with basic information (name, results in terms of effectiveness, cost-effectiveness and contextual, number of RCTs that analyse that intervention, information will be provided by the COMPAR-EU consortium in a database).</li> <li>● The list should allow for: <ul style="list-style-type: none"> <li>○ Interactive ordering of the list in each column.</li> <li>○ Filters: all key variables included in the general search engine capacity, extendable to be able to search by disease, outcome, intervention type, per intervention component (all components from taxonomy), expected behaviours, per outcomes (and for those effective for that outcome), year of publication, RCTs that have used it and other variables.</li> <li>○ Users should be able to download a selection of interventions based on selection criteria for each of the columns of basic info (provided in a database by the COMPAR-EU consortium).</li> </ul> </li> <li>● Users should be able to click on a specific entry of the list (one intervention) that would take them to a specific page for that intervention that should include: <ul style="list-style-type: none"> <li>○ Basic info of the interventions (that described in the list plus several other variables established for 3 main types of results: <ul style="list-style-type: none"> <li>– Overall → conclusion of EtD and link to the specific EtD (<i>see that section</i>)</li> <li>– Effectiveness: results per outcome analysed, position of the intervention in the ranking generated by the NMA and other variables, all provided by the COMPAR-EU Consortium in a database.</li> </ul> </li> </ul> </li> </ul>



	<ul style="list-style-type: none"> <li>– Cost-effectiveness: overall calculation of the cost-effectiveness (for patients and societal perspectives) of the intervention for specific disease.</li> <li>– Contextual: summary of judgement per key contextual factors for the intervention for the specific disease.</li> </ul> <ul style="list-style-type: none"> <li>○ Link to the relevant sections of the platform, specially to the interactive documents of NMA, EtDs section.</li> <li>○ Link to external website – the specific entry in the Pubmed website of the RCTs that have analysed the intervention (see as one <a href="#">example</a>)</li> <li>○ RCT's can be uniquely identified through a code, known as DOI. The COMPAREU consortium has a database with DOI for the initial thousands of RCTs to be included in the platform. Proposals that foresee an automatic search of the link to PUBMED page based on DOI will be valued positively.</li> </ul> <ul style="list-style-type: none"> <li>● Interventions should be searchable through the search engine (both tags and info on the tools included in a database to be provided by the COMPAREU consortium).</li> <li>● Interventions should be tagged per disease, intervention component (all components from taxonomy), outcome, measures, year of publication, countries of implementation (the initial information for those tags will be provided by the COMPAREU consortium).</li> </ul> <p><b>Back office specifications (or specification of admin functionalities):</b></p> <p>Administrators should be able to:</p> <ul style="list-style-type: none"> <li>● Upload information directly from a database in excel, csv or other common formats accepted by the COMPAREU Consortium.</li> <li>● Tag interventions (preferably allowing for tagging at the moment of upload, assigning tag(s) in a database).</li> <li>● Select if links to other platform section should appear for each specific intervention (preferably allowing for assigning relevant sections at the moment of upload, assigning section(s) directly from database).</li> </ul>
<p>Recommendations per disease</p>	<p>This section will present a summary of key recommendations for each of the four diseases/diseases of interest of the project (diabetes type 2, obesity, heart failure and COPD and expandable to others in the future) (<b>figure 2</b>).</p> <p>It would include the following:</p> <ul style="list-style-type: none"> <li>● Display of recommendations per disease, including summary of texts and some tables and images.</li> <li>● The information should be presentable in different layers and details, probably organised by tabs (see example <a href="#">here</a>). Those tabs will include in some cases links to other sections of the platform. For example, tabs that take users to the</li> </ul>



	<p>justification (simple or detailed [“See more” option]), summary of findings table, Evidence to Decision (EtD) framework.</p> <p><b>Back office specifications (or specification of admin functionalities):</b></p> <p>Administrators should be able to:</p> <ul style="list-style-type: none"> <li>• Upload information directly from a database in excel, csv or other common formats accepted by the COMPAR-EU Consortium.</li> <li>• Tag the recommendations for diseases, interventions, etc. (preferably allowing for tagging at the moment of upload, assigning tag(s) in a database).</li> <li>• Select if links to other platform section should appear for each specific recommendation (preferably allowing for assigning relevant sections at the moment of upload, assigning section(s) directly from database).</li> </ul>
<p>Summary of findings (SoF) tables</p>	<ul style="list-style-type: none"> <li>• Summary of findings (SoF) tables: these tables can help a variety of decision makers in their decisions, including recommendations. They can help for example guideline developers but also healthcare professionals to understand the main findings from systematic reviews of the evidence, by including the most important outcomes (both benefits and harms), the size of these effects, and the certainty.</li> <li>• The platform should allow to complete and display <a href="#">summary of findings tables</a> for the results of the network metaanalysis for each disease. <ul style="list-style-type: none"> <li>- The format should be similar to the one published by GRADE in 2019 (see <b>figure 3</b>).</li> <li>- The tables should include a similar degree of interactivity to the interactive iSoF tables (<a href="#">see link</a>).</li> </ul> </li> <li>• The table should also be able to display a matrix with a summary of judgments about the superiority of interventions across outcomes. <ul style="list-style-type: none"> <li>- The tables should be able to be displayed in different devices (e.g. PC, tablet and phone).</li> <li>- The tables should be able to be exported and printed as Word, HTML and PDF documents.</li> </ul> </li> </ul> <p><b>Relationship with other areas or products in the web (internal links):</b></p> <ul style="list-style-type: none"> <li>• The tables should be able to be embedded in different places in the platform in different sizes (e.g. inside the desirable and undesirable cell of the Evidence to Decision [EtD] frameworks).</li> </ul> <p><b>Main stakeholders of interest:</b></p> <ul style="list-style-type: none"> <li>• all groups except patients</li> </ul>



	<p><b>Potential innovations:</b></p> <ul style="list-style-type: none"> <li>● Develop if not available yet as a GRADE product the summary of judgments across outcomes.</li> </ul> <p><b>Back office specifications:</b></p> <ul style="list-style-type: none"> <li>● To be able to update or develop the novo tables ourselves.</li> </ul>
<p>Evidence to Decision frameworks</p>	<ul style="list-style-type: none"> <li>● Evidence to Decision (EtD) frameworks: the EtD frameworks are a presentation format that is used by panels to make decisions, including recommendations. They have been developed by the GRADE working group (<a href="#">see example here</a>).</li> <li>● The platform should allow to complete and display Evidence to Decision (EtD) frameworks.</li> <li>● The frameworks should be able to be displayed in different devices (e.g. PC, tablet and phone).</li> <li>● Ability to import SoF tables into the EtD frameworks.</li> <li>● Ability to export and print as Word, HTML and PDF files.</li> <li>● It would be desirable that the platform has the ability for:             <ul style="list-style-type: none"> <li>○ online editing-voting of panellists in the EtD frameworks. See example <a href="#">here</a>.</li> <li>○ adaptation/adoption of the frameworks by other organisations. EtD frameworks being reutilised by organisations interested in their adoption or adaptation (see related reference <a href="#">here</a> and example <a href="#">here</a>)</li> </ul> </li> <li>● The tables should include a similar degree of interactivity to the interactive iSoF tables (<a href="#">see link</a>)</li> <li>● Ability to display in different devices (e.g. PC, tablet and phone).</li> </ul> <p><b>Main stakeholders of interest</b></p> <ul style="list-style-type: none"> <li>● Panels making recommendations or decisions (e.g. to implement), policy makers.</li> </ul> <p><b>Back office specifications (or specification of admin functionalities):</b></p> <ul style="list-style-type: none"> <li>● Be able to edit online.</li> </ul>



<p>Electronic decision aids</p>	<ul style="list-style-type: none"> <li>● Decision aids (DAs) are designed to help reaching a shared decision between a healthcare professional and a patient on the best course of action regarding treatment. These aids will be interactive, i.e. users are able to choose from a set of interactive settings the disease (and comorbidities) they are interested in, the key outcomes they want to improve, and contextual or individual factors that might influence the effectiveness of a SMI (gender, geographic area, healthcare system level, etc.).</li> <li>● DAs should allow completing and displaying for two or more interventions the associated probabilities and certainty of evidence for a series of outcomes. It should also include information about other practical aspects related with the interventions of interest (e.g. inconvenience, burden, etc.).</li> <li>● DAs should allow the interaction between the patient and the physician. Should be interactive promoting/facilitating a conversation (e.g. outcome driven that the patient prioritises).</li> <li>● Ability to export and print as Word, HTML and PDF. Possibility for patients to take home and consult it there printed or online.</li> <li>● Ability to display in different devices (e.g. PC, tablet and phone).</li> </ul> <p><b>Main stakeholders of interest:</b></p> <ul style="list-style-type: none"> <li>● Patients and physicians</li> </ul> <p><b>Back office specifications (or specification of admin functionalities):</b></p> <ul style="list-style-type: none"> <li>● Be able to edit online</li> </ul>
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<p>Interactive cost-effectiveness tool</p>	<p>This section should allow the user to select from different prespecified scenarios and perspectives to view the results of the economic modelling.</p> <p>Depending on the selected context the tool would give data on:</p> <ul style="list-style-type: none"> <li>● For both a short- and long-term horizon: <ul style="list-style-type: none"> <li>- the incremental costs of the SMI</li> <li>- the incremental health effects of the SMI</li> <li>- the incremental cost-effectiveness of the SMI</li> </ul> </li> <li>● The societal impact of the SMI, in including its impact on: <ul style="list-style-type: none"> <li>- the use of informal care</li> <li>- changes in productivity</li> <li>- future medical costs</li> <li>- future non-medical costs</li> </ul> </li> <li>● The results of the economic evaluations will be stored in a database. By selecting different settings for a number of parameters, data from the database will be shown in tables and visualised in graphs. The <a href="#">NHS SPP ROI tool</a> gives an example of the type of data, tables and graphs that would be presented in the cost-effectiveness tool.</li> <li>● All this data will be provided by the COMPAR-EU consortium in a database.</li> </ul> <p><b>Back office specifications:</b></p> <ul style="list-style-type: none"> <li>● Admin can update the contents of the database containing the results of the economic modelling.</li> </ul>
<p>Network (community of practice)</p>	<p>This section could integrate social networking option such as Drupal where the user could:</p> <ul style="list-style-type: none"> <li>● Register as a user</li> <li>● Create a forum by topic (users and administrators can create new topics)</li> <li>● Users can “like” other users’ comments</li> <li>● Comments can be tagged (user can create tags)</li> </ul> <p><b>Back office specifications (or specification of admin functionalities)</b></p> <ul style="list-style-type: none"> <li>● Admin can merge and edit existing tags, censor some comments (following rules of the network) see list of users and download lists of registered users.</li> </ul>
<p>Alive review (update)</p>	<ul style="list-style-type: none"> <li>● Integrate the project “extraction form” in the COMPAR-EU platform.</li> <li>● Allow to introduce new data (registered users controlled by admin).</li> </ul>



	<p><b>Guidance for new RCTs:</b></p> <ul style="list-style-type: none"> <li>Interactive section to design an RCT considering the advances of COMPAR-EU (taxonomy, COS). This would include a guided procedure through several steps (selection of outcomes from a given list, selection of intervention components from a given list, etc), format to be further specified.</li> </ul>
Application programming interface	<ul style="list-style-type: none"> <li>The platform should offer an application programming interface to facilitate the exchange of data with other applications and use cases. For typically API examples, please see <a href="https://app.magicapp.org/docs/index.html">https://app.magicapp.org/docs/index.html</a></li> </ul>
Innovations	Innovations, from those suggested in each section plus those additionally proposed by the IT company.

Figure 2: Example of key recommendations

#### 4 Initiation and Dosing of Opioids in Patients with Chronic Noncancer Pain View section text

**Recommendation 1: When considering therapy for patients with chronic non-cancer pain** ⓘ ↗

**Strong recommendation**

We recommend optimization of non-opioid pharmacotherapy and non-pharmacological therapy, rather than a trial of opioids

Research evidence Key info Rationale Practical info References Feedback

**Recommendation 2: For patients with chronic noncancer pain, without current or past substance use disorder and without other active psychiatric disorders, who have persistent problematic pain despite optimized nonopioid therapy** ⓘ ↗

**Weak recommendation**

We suggest adding a trial of opioids rather than continued therapy without opioids.

By a trial of opioids, we mean initiation, titration, and monitoring of response, with discontinuation of opioids if important improvement in pain or function is not achieved. The studies that identified substance use disorder as a risk factor for adverse outcomes characterized the conditions as alcohol abuse and dependence, and narcotic abuse and dependence, and sometimes referred to ICD-9 diagnoses. The mental illnesses identified in studies as risk factors for adverse outcomes were generally anxiety and depression, including ICD-9 definitions, as well as "psychiatric diagnosis", "mood disorder", and post-traumatic stress disorder.

Research evidence Key info Rationale Practical info Decision Aids References Feedback

**Recommendation 3: For patients with chronic noncancer pain with an active substance use disorder** ⓘ ↗

**Strong recommendation against**

Source: Image from [MAGICApp](#)



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Figure 3: Summary of findings table for a network meta-analysis

**Table 4.** NMA-SoF table format reporting information about multiple treatment comparisons and multiple outcomes

Estimates of effects, credible intervals, and certainty of the evidence for chemoprevention of colorectal cancer in individuals with previous colorectal neoplasia							
Patient or population: Individuals with previous colorectal neoplasia							
Interventions: Low and high dose aspirin, nonaspirin non-steroidal anti-inflammatory drugs (NSAIDs), calcium, vitamin D, folic acid							
Comparison: Placebo							
Settings: Outpatient, range of follow up between three to five years							
Outcome	Effects and confidence in the estimate of effects						Comments
	Nonaspirin NSAIDs		Aspirin, low dose		Aspirin + calcium + vitamin D		
<b>Prevention of neoplasia</b>							
Follow up: range from 24 months to 60 months							
<b>Placebo Comparator</b>	OR 0.37 (0.24 to 0.53) Network estimate	47 fewer per 1000 (56 fewer to 35 fewer)	OR 0.71 (0.41 to 1.23) Network estimate	21 fewer per 1000 (44 fewer to 17 more)	OR 0.71 (0.18 to 2.49) Network estimate	21 fewer per 1000 (61 fewer to 110 more)	None of the ranking treatments between placebo versus other NSAIDs, calcium, vitamin D, or folic acid were highest from the ones we reported. Therefore, we did not include other comparisons in the table.
74 per 1000 <sup>1</sup> (7.4%)	⊕⊕⊕⊕ High Confidence in estimate		⊕⊕⊕⊕ Low Confidence in estimate due to Imprecision <sup>2,3</sup>		⊕⊕⊕⊕ Low Confidence in estimate due to Imprecision <sup>2,3</sup>		
<b>Rank</b> 7 (4 to 9)	Rank <sup>4</sup> 1 (1 to 2) Based on 3,486 participants (4 RCT)		Rank 3 (2 to 9) Based on 823 participants (3 RCT)		Rank 3 (1 to 10) Based on 427 participants (1 RCT)		
<b>Serious adverse events</b>							
Follow up: range from 24 months to 60 months							
<b>Placebo Comparator</b>	OR 1.23 (0.95 to 1.64) Network estimate	34 more per 1000 (8 fewer to 87 more)	OR 0.78 (0.43 to 1.38) Network estimate	35 fewer per 1000 (54 more to 97 more)	OR 0.90 (0.54 to 1.51) Network estimate	15 more per 1000 (71 more to 77 fewer)	Interventions reported for harm outcome were chosen based on the interventions included for beneficial outcome. Therefore, we did not include other comparisons in the table.
74 per 1000 <sup>1</sup> (7.4%)	⊕⊕⊕⊕ Low Confidence in estimate due to Imprecision <sup>2,3</sup>		⊕⊕⊕⊕ Low Confidence in estimate due to Imprecision <sup>2,3</sup>		⊕⊕⊕⊕ Low Confidence in estimate due to Imprecision <sup>2,3</sup>		
<b>Rank</b> 4 (2 to 7)	Rank 2 (1 to 9) Based on 3,964 participants (3 RCT)		Rank 8 (3 to 10) Based on 12,098 participants (1 RCT)		Rank 4 (2 to 7) Based on 714 participants (1 RCT)		
<b>NMA-SoF table definitions</b>							
Lines in the network graphic represent direct comparisons							
Estimates are reported as odds ratio. CrI: credible interval. Results are expressed in credible intervals as opposed to the confidence intervals (9) since a Bayesian analysis has been conducted.							
The basis for the <b>assumed risk</b> (e.g. the median control group risk across studies) is provided in footnotes. The <b>corresponding risk</b> (and its 95% confidence interval) is based on the assumed risk in the comparison group and the <b>relative effect</b> of the intervention (and its 95% CI).							
CrI: Credible interval; OR: Odds ratio;							

Source: J.J. Yepes-Nuñez et al. / Journal of Clinical Epidemiology 115 (2019) 1e13



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## GLOSSARY OF TERMS

The following terms have been prepared to describe some key terms in an easy way. Not necessarily corresponds to the formal definition.

- **Self-management** is defined as “what individuals, families and communities do with the intention to promote, maintain, or restore health and to cope with illness and disability with or without the support of health professionals. It includes but is not limited to self-prevention, self-diagnosis, self-medication and self-management of illness and disability.”.
- **Self-management interventions** are the specific support that is provided by professionals or other patients to help patients to have a better self-management. For example: providing education about how to improve lifestyle, helping patients to self-administrate medication, allowing patients to share decisions related with their own care or train them to self-monitor their symptoms or other markers (as glycemia or blood pressure) to better management or their condition(s)Randomised Control Trial: one of the highest quality type of study that is used to evaluate the effectiveness of interventions (pharmacological or non-pharmacological). In COMPAR.-EU, all of them are focused on SMI.
- **Taxonomy of interventions:** standardise language use to homogenise self-management interventions. The taxonomy includes different domains: patient behaviours (example: doing physical activity), type of interventions (example: train about losing weight) , type of population to address these interventions (example: older people) and expected outcomes to be improved (example: reducing hospitalisations). As the interventions are classified and described in different ways in the studies, the taxonomy will help to organise some sections of the platform.
- **Tools:** in this context tools are referred to surveys and questionnaire that patients answer to measure their improvement or worsening in a specific outcome, for example a questionnaire on quality of life, a questionnaire on patient satisfaction with care.
- **Network metanalysis (NMA):** statistic method that allow the comparison of three or more interventions (for COMPAR-EU, self-management interventions) simultaneously in a single analysis. This is performed by combining both direct (based on studies that actually have tested interventions) and indirect evidence across a network of studies (based on estimations).
- **Systematic review:** It is a research methodology using a thorough and detailed review of existing literature on a particular topic, designed to address a specific question.



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