The CONSORT-EHEALTH checklist is intended for authors of randomized trials evaluating webbased and Internet-based applications/interventions, including mobile interventions, electronic games (incl multiplayer games), social media, certain telehealth applications, and other interactive and/or networked electronic applications. Some of the items (e.g. all subitems under item 5 description of the intervention) may also be applicable for other study designs.

The goal of the CONSORT EHEALTH checklist and guideline is to be a) a guide for reporting for authors of RCTs, b) to form a basis for appraisal of an ehealth trial (in terms of validity)

CONSORT-EHEALTH items/subitems are MANDATORY reporting items for studies published in the Journal of Medical Internet Research and other journals / scientific societies endorsing the checklist.

Items numbered 1., 2., 3., 4a., 4b etc are original CONSORT or CONSORT-NPT (non-pharmacologic treatment) items.

Items with Roman numerals (i., ii, iii, iv etc.) are CONSORT-EHEALTH extensions/clarifications.

As the CONSORT-EHEALTH checklist is still considered in a formative stage, we would ask that you also RATE ON A SCALE OF 1-5 how important/useful you feel each item is FOR THE PURPOSE OF THE CHECKLIST and reporting guideline (optional).

Mandatory reporting items are marked with a red \*.

In the textboxes, either copy & paste the relevant sections from your manuscript into this form please include any quotes from your manuscript in QUOTATION MARKS, or answer directly by providing additional information not in the manuscript, or elaborating on why the item was not relevant for this study.

YOUR ANSWERS WILL BE PUBLISHED AS A SUPPLEMENTARY FILE TO YOUR PUBLICATION IN JMIR AND ARE CONSIDERED PART OF YOUR PUBLICATION (IF ACCEPTED). Please fill in these questions diligently. Information will not be copyedited, so please use proper spelling and grammar, use correct capitalization, and avoid abbreviations.

DO NOT FORGET TO SAVE AS PDF \_AND\_ CLICK THE SUBMIT BUTTON SO YOUR ANSWERS ARE IN OUR DATABASE !!!

Citation Suggestion (if you append the pdf as Appendix we suggest to cite this paper in the caption):

Eysenbach G, CONSORT-EHEALTH Group CONSORT-EHEALTH: Improving and Standardizing Evaluation Reports of Web-based and Mobile Health Interventions J Med Internet Res 2011;13(4):e126 URL: <u>http://www.jmir.org/2011/4/e126/</u> doi: 10.2196/jmir.1923 PMID: 22209829

\* Required

| 1 | Your name *    |
|---|----------------|
| ļ | First Last     |
|   | Suzanne Lokman |

| Primary Affiliation (short), City, Country |
|--|
| University of Toronto, Toronto, Canada     |

MSc, Utrecht, The Netherland

Your e-mail address \*

abc@gmail.com slokman@trimbos.nl

Title of your manuscript \*

Provide the (draft) title of your manuscript.

"Complaint-directed mini-interventions for depressive complaints: a randomised controlled trial of web-based self-help interventions."

#### Article Preparation Status/Stage \*

At which stage in your article preparation are you currently (at the time you fill in this form)

- not submitted yet in early draft status
- not submitted yet in late draft status, just before submission
- submitted to a journal but not reviewed yet
- submitted to a journal and after receiving initial reviewer comments
- submitted to a journal and accepted, but not published yet
- published
- Other:

#### Journal \*

If you already know where you will submit this paper (or if it is already submitted), please provide the journal name (if it is not JMIR, provide the journal name under "other")

- not submitted yet / unclear where I will submit this
- Journal of Medical Internet Research (JMIR)
- Other:

#### Manuscript tracking number \*

If this is a JMIR submission, please provide the manuscript tracking number under "other" (The ms tracking number can be found in the submission acknowledgement email, or when you login as author in JMIR. If the paper is already published in JMIR, then the ms tracking number is the four-digit number at the end of the DOI, to be found at the bottom of each published article in JMIR)

ono ms number (yet) / not (yet) submitted to / published in JMIR

### TITLE AND ABSTRACT

## 1a) TITLE: Identification as a randomized trial in the title

1a) Does your paper address CONSORT item 1a? \*

#### 8/30/2016

| 016 | CONSORT-EHEALTH (V 1.6.1) - Submission/Publication Form  |
|-----|--|
|     | I.e does the title contain the phrase "Randomized Controlled Trial"? (if not, explain the reason under "other")  |
|     | • yes  |
|     | Other:   |
|     |  |
|     | 1a-i) Identify the mode of delivery in the title   |
|     | Identify the mode of delivery. Preferably use "web-based" and/or "mobile" and/or "electronic game" in the title. Avoid ambiguous terms like "online", "virtual", "interactive". Use "Internet-based" only if Intervention includes non-web-based Internet components (e.g. email), use "computer-based" or "electronic" only if offline products are used. Use "virtual" only in the context of "virtual reality" (3-D worlds). Use "online" only in the context of "online support groups". Complement or substitute product names with broader terms for the class of products (such as "mobile" or "smart phone" instead of "iphone"), especially if the application runs on different platforms. |
|     |  |

1 2 3 4 5 subitem not at all important O O O O essential

#### Does your paper address subitem 1a-i? \*

Copy and paste relevant sections from manuscript title (include quotes in quotation marks "like this" to indicate direct quotes from your manuscript), or elaborate on this item by providing additional information not in the ms, or briefly explain why the item is not applicable/relevant for your study

| "a randomised controlled trial of web-based self-help interventions." |   |
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#### 1a-ii) Non-web-based components or important co-interventions in title

Mention non-web-based components or important co-interventions in title, if any (e.g., "with telephone support").

|                              | 1          | 2          | 3          | 4          | 5          |           |
|------------------------------|------------|------------|------------|------------|------------|-----------|
| subitem not at all important | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | essential |

#### Does your paper address subitem 1a-ii?

Copy and paste relevant sections from manuscript title (include quotes in quotation marks "like this" to indicate direct quotes from your manuscript), or elaborate on this item by providing additional information not in the ms, or briefly explain why the item is not applicable/relevant for your study

| No non-web based components or important co-interventions are applicable to the intervention. |          |
|---|----------|
|   |          |
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| 1a-iii) Primary condition or target group in the title  |          |
| Mention primary condition or target group in the title, if any (e.g., "for children w         | ith Tvr/ |

Mention primary condition or target group in the title, if any (e.g., "for children with Type I Diabetes") Example: A Web-based and Mobile Intervention with Telephone Support for Children with Type I Diabetes: Randomized Controlled Trial

1 2 3 4 5

subitem not at all important 🔘 🔘 🔘 🔘 essential

#### Does your paper address subitem 1a-iii? \*

Copy and paste relevant sections from manuscript title (include quotes in quotation marks "like this" to indicate direct quotes from your manuscript), or elaborate on this item by providing additional information not in the ms, or briefly explain why the item is not applicable/relevant for your study

"Complaint-directed mini-interventions for depressive complaints"

## 1b) ABSTRACT: Structured summary of trial design, methods, results, and conclusions

NPT extension: Description of experimental treatment, comparator, care providers, centers, and blinding status.

## 1b-i) Key features/functionalities/components of the intervention and comparator in the METHODS section of the ABSTRACT

Mention key features/functionalities/components of the intervention and comparator in the abstract. If possible, also mention theories and principles used for designing the site. Keep in mind the needs of systematic reviewers and indexers by including important synonyms. (Note: Only report in the abstract what the main paper is reporting. If this information is missing from the main body of text, consider adding it)

|                              | 1          | 2          | 3          | 4          | 5          |           |
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| subitem not at all important | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | essential |

#### Does your paper address subitem 1b-i?\*

Copy and paste relevant sections from the manuscript abstract (include quotes in quotation marks "like this" to indicate direct quotes from your manuscript), or elaborate on this item by providing additional information not in the ms, or briefly explain why the item is not applicable/relevant for your study

"Participants were randomised to either the web-based CDMIs or the nointervention waitlist control group. The CDMIs are online unguided selfhelp interventions, largely based on cognitive-behavioural techniques, that consist of 3 to 4 modules with up to 6 exercises per module. Participants are free to choose between the modules and exercises."

#### 1b-ii) Level of human involvement in the METHODS section of the ABSTRACT

Clarify the level of human involvement in the abstract, e.g., use phrases like "fully automated" vs. "therapist/nurse/care provider/physician-assisted" (mention number and expertise of providers involved, if any). (Note: Only report in the abstract what the main paper is reporting. If this information is missing from the main body of text, consider adding it)

|                              | 1          | 2          | 3          | 4          | 5          |           |
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| subitem not at all important | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | essential |

Copy and paste relevant sections from the manuscript abstract (include quotes in quotation marks "like this" to indicate direct quotes from your manuscript), or elaborate on this item by providing additional information not in the ms, or briefly explain why the item is not applicable/relevant for your study

| The CDMIs are online unguided self-help interventions" |  |
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## 1b-iii) Open vs. closed, web-based (self-assessment) vs. face-to-face assessments in the METHODS section of the ABSTRACT

Mention how participants were recruited (online vs. offline), e.g., from an open access website or from a clinic or a closed online user group (closed usergroup trial), and clarify if this was a purely web-based trial, or there were face-to-face components (as part of the intervention or for assessment). Clearly say if outcomes were self-assessed through questionnaires (as common in web-based trials). Note: In traditional offline trials, an open trial (open-label trial) is a type of clinical trial in which both the researchers and participants know which treatment is being administered. To avoid confusion, use "blinded" or "unblinded" to indicated the level of blinding instead of "open", as "open" in web-based trials usually refers to "open access" (i.e. participants can self-enrol). (Note: Only report in the abstract what the main paper is reporting. If this information is missing from the main body of text, consider adding it)

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#### Does your paper address subitem 1b-iii?

Copy and paste relevant sections from the manuscript abstract (include quotes in quotation marks "like this" to indicate direct quotes from your manuscript), or elaborate on this item by providing additional information not in the ms, or briefly explain why the item is not applicable/relevant for your study

| "An open recruitment strategy was used."<br>"Assessments, using self-report questionnaires, took place at baseline,<br>and 3 and 6 months after baseline." |
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#### 1b-iv) RESULTS section in abstract must contain use data

Report number of participants enrolled/assessed in each group, the use/uptake of the intervention (e.g., attrition/adherence metrics, use over time, number of logins etc.), in addition to primary/secondary outcomes. (Note: Only report in the abstract what the main paper is reporting. If this information is missing from the main body of text, consider adding it)

|                              | 1          | 2          | 3          | 4          | 5          |           |
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| subitem not at all important | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | essential |

#### Does your paper address subitem 1b-iv?

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| "In total, 329 participants enrolled in the trial of which 165 we<br>randomised to the intervention group and 164 to the control g<br>Approximately three quarters of the intervention group actual<br>account. Of these participants, 91% logged into their chosen<br>least once during the three month intervention period, with a<br>times." | roup.<br>y created an<br>CDMI at  |
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|   |   |
| 1b-v) CONCLUSIONS/DISCUSSION in abstract for negativ  | e trials  |
| Conclusions/Discussions in abstract for negative trials: Discus<br>negative (primary outcome not changed), and the intervention<br>results are attributable to lack of uptake and discuss reasons. (<br>main paper is reporting. If this information is missing from the  | s the primary outcome - if the trial is<br>was not used, discuss whether negative<br>(Note: Only report in the abstract what tl |
| 1 2 3 4 5   |   |
| subitem not at all important 🔘 🔘 🔘 🔘 essential  |   |
| Does your paper address subitem 1b-v?   |   |
| Copy and paste relevant sections from the manuscript abstract<br>this" to indicate direct quotes from your manuscript), or elabora<br>information not in the ms, or briefly explain why the item is not   | ate on this item by providing additional  |
| "This study shows that the online self-help CDMIs have a po-<br>on various mental health outcomes. However, high attrition ra<br>that some form of (minimal) guidance, whether it is technolog<br>human, may be warranted to increase exposure to the interve<br>as its effectiveness."   | ates suggest<br>yy-based or   |

### **INTRODUCTION**

### 2a) In INTRODUCTION: Scientific background and explanation of rationale

#### 2a-i) Problem and the type of system/solution

Describe the problem and the type of system/solution that is object of the study: intended as stand-alone intervention vs. incorporated in broader health care program? Intended for a particular patient population? Goals of the intervention, e.g., being more cost-effective to other interventions, replace or complement other solutions? (Note: Details about the intervention are provided in "Methods" under 5)

|                              | 1          | 2          | 3          | 4          | 5          |           |
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#### Does your paper address subitem 2a-i? \*

The CDMIs are intended as stand-alone interventions, although they could be incorporated in a broader health care program. The goal of the CDMIs is to provide interventions "which could potentially reach a large number of people at low costs"

"we expect the preference-based and low-threshold nature of the CDMIs to be a novel and potentially effective approach to depression prevention"

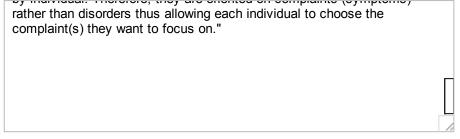
#### 2a-ii) Scientific background, rationale: What is known about the (type of) system

Scientific background, rationale: What is known about the (type of) system that is the object of the study (be sure to discuss the use of similar systems for other conditions/diagnoses, if appropiate), motivation for the study, i.e. what are the reasons for and what is the context for this specific study, from which stakeholder viewpoint is the study performed, potential impact of findings [2]. Briefly justify the choice of the comparator.

1 2 3 4 5 subitem not at all important O O O O essential

#### Does your paper address subitem 2a-ii? \*

Copy and paste relevant sections from the manuscript (include quotes in quotation marks "like this" to indicate direct quotes from your manuscript), or elaborate on this item by providing additional information not in the ms, or briefly explain why the item is not applicable/relevant for your study



## 2b) In INTRODUCTION: Specific objectives or hypotheses

#### Does your paper address CONSORT subitem 2b? \*

Copy and paste relevant sections from the manuscript (include quotes in quotation marks "like this" to indicate direct quotes from your manuscript), or elaborate on this item by providing additional information not in the ms, or briefly explain why the item is not applicable/relevant for your study

"The primary aim of the current trial is to evaluate the effectiveness of the web-based unguided self-help CDMIs in a sample of adults with mild to moderate depressive symptomatology, as compared to a waitlist control group. We hypothesised a greater reduction in depressive complaints for the participants using the online CDMIs. A secondary aim is to evaluate the effects of the CDMIs on stress, worry, sleep, and anxiety, and wellbeing."

### METHODS

## 3a) Description of trial design (such as parallel, factorial) including allocation ratio

Does your paper address CONSORT subitem 3a? \*

Copy and paste relevant sections from the manuscript (include quotes in quotation marks "like this" to indicate direct quotes from your manuscript), or elaborate on this item by providing additional information not in the ms, or briefly explain why the item is not applicable/relevant for your study

"A 2-armed randomised controlled trial was conducted" "Stratified block randomisation by level of education (2 blocks) and the preferred type of CDMI intervention (3 blocks: stress, sleep problems or worry) was used to guarantee an even distribution of participants with different complaints and education level per condition." "Randomisation to the intervention group or control group occurred automatically using a 1:1 ratio"

## 3b) Important changes to methods after trial commencement (such as eligibility criteria), with reasons

#### Does your paper address CONSORT subitem 3b? \*

Copy and paste relevant sections from the manuscript (include quotes in quotation marks "like this" to indicate direct quotes from your manuscript), or elaborate on this item by providing additional information not in the ms, or briefly explain why the item is not applicable/relevant for your study

| "Suicidal thoughts or plans as measured with item 18 of the IDS-SR were<br>a reason for exclusion (a score of >=1 was used; initially a score of >0<br>was used, but this was deemed too strict)." |
|--|
|  |

#### 3b-i) Bug fixes, Downtimes, Content Changes

Bug fixes, Downtimes, Content Changes: ehealth systems are often dynamic systems. A description of changes to methods therefore also includes important changes made on the intervention or comparator during the trial (e.g., major bug fixes or changes in the functionality or content) (5-iii) and other "unexpected events" that may have influenced study design such as staff changes, system failures/downtimes, etc. [2].



#### Does your paper address subitem 3b-i?

Copy and paste relevant sections from the manuscript (include quotes in quotation marks "like this" to indicate direct quotes from your manuscript), or elaborate on this item by providing additional information not in the ms, or briefly explain why the item is not applicable/relevant for your study

No important changes were made on the intervention during the trial

### 4a) Eligibility criteria for participants

#### Does your paper address CONSORT subitem 4a? \*

"Participants were eligible for participation if they were adults (≥18 years old), had mild to moderate depressive symptoms, defined as a score of 14-38 on the Inventory of Depressive Symptomatology ([IDS-SR] [27,28]), had access to a computer with an Internet connection, had sufficient proficiency of the Dutch language and adequate computer skills to participate in the training. Suicidal thoughts or plans as measured with item 18 of the IDS-SR were a reason for exclusion" 4a-i) Computer / Internet literacy Computer / Internet literacy is often an implicit "de facto" eligibility criterion - this should be explicitly clarified. 1 2 3 4 5 subitem not at all important 🔘 🔘 🔘 🔘 essential Does your paper address subitem 4a-i? Copy and paste relevant sections from the manuscript (include quotes in quotation marks "like this" to indicate direct quotes from your manuscript), or elaborate on this item by providing additional information not in the ms, or briefly explain why the item is not applicable/relevant for your study "Participants were eligible for participation if they had...adequate computer skills to participate in the training" 4a-ii) Open vs. closed, web-based vs. face-to-face assessments: Open vs. closed, web-based vs. face-to-face assessments: Mention how participants were recruited (online vs. offline), e.g., from an open access website or from a clinic, and clarify if this was a purely web-based trial, or there were face-to-face components (as part of the intervention or for assessment), i.e., to what degree got the study team to know the participant. In online-only trials, clarify if participants were quasianonymous and whether having multiple identities was possible or whether technical or logistical measures (e.g., cookies, email confirmation, phone calls) were used to detect/prevent these. 1 2 3 4 5 subitem not at all important O O O O essential Does your paper address subitem 4a-ii? \* Copy and paste relevant sections from the manuscript (include quotes in quotation marks "like this" to indicate direct quotes from your manuscript), or elaborate on this item by providing additional information not in the ms, or briefly explain why the item is not applicable/relevant for your study recruitment (i.e. through relevant websites, messages on social media and messages in digital newsletters of the Trimbos Institute). People interested in participation were referred to a special study website where they were given more information about the study and could register to take part in the study" "Applicants were requested to complete the first part of the self-report online baseline questionnaire" Multiple identities were possible as participants registered using an 4a-iii) Information giving during recruitment

Information given during recruitment. Specify how participants were briefed for recruitment and in the informed consent procedures (e.g., publish the informed consent documentation as appendix, see also

item X26), as this information may have an effect on user self-selection, user expectation and may also bias results.

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#### Does your paper address subitem 4a-iii?

Copy and paste relevant sections from the manuscript (include quotes in quotation marks "like this" to indicate direct quotes from your manuscript), or elaborate on this item by providing additional information not in the ms, or briefly explain why the item is not applicable/relevant for your study

"People interested in participation were referred to a special study website where they were given more information about the study and could register to take part in the study by completing a written or an online informed consent form including name and email address. Once informed consent was given, the eligibility criteria were assessed. "

### 4b) Settings and locations where the data were collected

#### Does your paper address CONSORT subitem 4b? \*

Copy and paste relevant sections from the manuscript (include quotes in quotation marks "like this" to indicate direct quotes from your manuscript), or elaborate on this item by providing additional information not in the ms, or briefly explain why the item is not applicable/relevant for your study

"Applicants were requested to complete the first part of the self-report online baseline questionnaire" "Eligible participants received the second part of the online baseline questionnaire"

#### 4b-i) Report if outcomes were (self-)assessed through online questionnaires

Clearly report if outcomes were (self-)assessed through online questionnaires (as common in web-based trials) or otherwise.



#### Does your paper address subitem 4b-i? \*

Copy and paste relevant sections from the manuscript (include quotes in quotation marks "like this" to indicate direct quotes from your manuscript), or elaborate on this item by providing additional information not in the ms, or briefly explain why the item is not applicable/relevant for your study

| "Applicants were requested to complete the first part of the self-report online baseline questionnaire" |
|---|
|   |
|   |
|   |

#### 4b-ii) Report how institutional affiliations are displayed

Report how institutional affiliations are displayed to potential participants [on ehealth media], as affiliations with prestigious hospitals or universities may affect volunteer rates, use, and reactions with regards to an intervention.(Not a required item – describe only if this may bias results)

|                              | 1          | 2          | 3          | 4          | 5          |           |
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| subitem not at all important | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | essential |

#### Does your paper address subitem 4b-ii?

Copy and paste relevant sections from the manuscript (include quotes in quotation marks "like this" to indicate direct quotes from your manuscript), or elaborate on this item by providing additional information not in the ms, or briefly explain why the item is not applicable/relevant for your study

| The intervention website includes the logo of the Trimbos-institute. |
|--|
| Study affiliation was mentioned in the study information.            |

### 5) The interventions for each group with sufficient details to allow replication, including how and when they were actually administered

#### 5-i) Mention names, credential, affiliations of the developers, sponsors, and owners

Mention names, credential, affiliations of the developers, sponsors, and owners [6] (if authors/evaluators are owners or developer of the software, this needs to be declared in a "Conflict of interest" section or mentioned elsewhere in the manuscript).



#### Does your paper address subitem 5-i?

Copy and paste relevant sections from the manuscript (include quotes in quotation marks "like this" to indicate direct quotes from your manuscript), or elaborate on this item by providing additional information not in the ms, or briefly explain why the item is not applicable/relevant for your study

| "This study was made possible with financial support from the Ministry of  |
|--|
| Health, Welfare and Sport and the Trimbos-institute."                      |
| "The CDMIs are web-based self-help interventions without therapist         |
| guidance (www.snelbeterinjevel.nl), developed by the Netherlands institute |
| of Mental Health and Addiction, a nonprofit organisation."                 |
|  |

#### 5-ii) Describe the history/development process

Describe the history/development process of the application and previous formative evaluations (e.g., focus groups, usability testing), as these will have an impact on adoption/use rates and help with interpreting results.

|                              | 1          | 2          | 3          | 4          | 5          |           |
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| subitem not at all important | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | essential |

#### Does your paper address subitem 5-ii?

Copy and paste relevant sections from the manuscript (include quotes in quotation marks "like this" to indicate direct quotes from your manuscript), or elaborate on this item by providing additional information not in the ms, or briefly explain why the item is not applicable/relevant for your study

"The CDMIs were initially developed as group interventions and initial findings of a pilot study with a single group pre-post design showed reductions in symptoms of depression, sleep, stress and worry"

For the online CDMIs evaluations of the group interventions were used. The content was thus tested in a face-to-face format. The web-based format of the content was tested in this trial.

#### 5-iii) Revisions and updating

Revisions and updating. Clearly mention the date and/or version number of the application/intervention (and comparator, if applicable) evaluated, or describe whether the intervention underwent major changes during the evaluation process, or whether the development and/or content was "frozen" during the trial. Describe dynamic components such as news feeds or changing content which may have an impact on the replicability of the intervention (for unexpected events see item 3b).

|                              | 1          | 2          | 3          | 4          | 5          |           |
|------------------------------|------------|------------|------------|------------|------------|-----------|
| subitem not at all important | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | essential |

#### Does your paper address subitem 5-iii?

Copy and paste relevant sections from the manuscript (include quotes in quotation marks "like this" to indicate direct quotes from your manuscript), or elaborate on this item by providing additional information not in the ms, or briefly explain why the item is not applicable/relevant for your study

The first version of the intervention was used during the trial. The intervention did not undergo any major changes during the evaluation process, i.e. the development and content was "frozen" during the trial.

#### 5-iv) Quality assurance methods

Provide information on quality assurance methods to ensure accuracy and quality of information provided [1], if applicable.

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| subitem not at all important | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | essential |

#### Does your paper address subitem 5-iv?

#### 5-v) Ensure replicability by publishing the source code, and/or providing screenshots/screencapture video, and/or providing flowcharts of the algorithms used

Ensure replicability by publishing the source code, and/or providing screenshots/screen-capture video, and/or providing flowcharts of the algorithms used. Replicability (i.e., other researchers should in principle be able to replicate the study) is a hallmark of scientific reporting.

1 2 3 4 5 subitem not at all important O O O O essential

### Does your paper address subitem 5-v?

Copy and paste relevant sections from the manuscript (include quotes in quotation marks "like this" to indicate direct quotes from your manuscript), or elaborate on this item by providing additional information not in the ms, or briefly explain why the item is not applicable/relevant for your study

| "A more detailed account of the CDMIs (including screenshots found in Multimedia Appendix 2" | ) can be |
|--|----------|
|  |          |
|  |          |
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#### 5-vi) Digital preservation

Digital preservation: Provide the URL of the application, but as the intervention is likely to change or disappear over the course of the years; also make sure the intervention is archived (Internet Archive, <u>webcitation.org</u>, and/or publishing the source code or screenshots/videos alongside the article). As pages behind login screens cannot be archived, consider creating demo pages which are accessible without login.

|                              | 1          | 2          | 3          | 4          | 5          |           |
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| subitem not at all important | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | essential |

#### Does your paper address subitem 5-vi?

Copy and paste relevant sections from the manuscript (include quotes in quotation marks "like this" to indicate direct quotes from your manuscript), or elaborate on this item by providing additional information not in the ms, or briefly explain why the item is not applicable/relevant for your study

| www.snelbeterinjevel.nl |  |
|-------------------------|--|
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#### 5-vii) Access

Access: Describe how participants accessed the application, in what setting/context, if they had to pay (or were paid) or not, whether they had to be a member of specific group. If known, describe how participants obtained "access to the platform and Internet" [1]. To ensure access for editors/reviewers/readers, consider to provide a "backdoor" login account or demo mode for reviewers/readers to explore the application (also important for archiving purposes, see vi).

subitem not at all important 🔘 🔘 🔘 🔘 essential

Does your paper address subitem 5-vii? \*

Copy and paste relevant sections from the manuscript (include quotes in quotation marks "like this" to indicate direct quotes from your manuscript), or elaborate on this item by providing additional information not in the ms, or briefly explain why the item is not applicable/relevant for your study

with an activation code for creating an online account which gave them access to the CDMI of their choice. The account was valid for one year. Participants in the control condition were sent an e-mail with the outcome of the randomisation, including the message that the CDMI would become accessible to them after three months."

As the CDMI are online self-help interventions the participants could login to the intervention at any time.

## 5-viii) Mode of delivery, features/functionalities/components of the intervention and comparator, and the theoretical framework

Describe mode of delivery, features/functionalities/components of the intervention and comparator, and the theoretical framework [6] used to design them (instructional strategy [1], behaviour change techniques, persuasive features, etc., see e.g., [7, 8] for terminology). This includes an in-depth description of the content (including where it is coming from and who developed it) [1]," whether [and how] it is tailored to individual circumstances and allows users to track their progress and receive feedback" [6]. This also includes a description of communication delivery channels and – if computer-mediated communication is a component – whether communication was synchronous or asynchronous [6]. It also includes information on presentation strategies [1], including page design principles, average amount of text on pages, presence of hyperlinks to other resources, etc. [1].

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#### Does your paper address subitem 5-viii? \*

Copy and paste relevant sections from the manuscript (include quotes in quotation marks "like this" to indicate direct quotes from your manuscript), or elaborate on this item by providing additional information not in the ms, or briefly explain why the item is not applicable/relevant for your study

based on their personal needs and do not have to use CDMIs that are not relevant to their situation." "The content of the CDMIs is largely based on cognitive-behavioural techniques and incorporates elements from solution-focused therapy, mindfulness and positive psychology. The CDMIs are made up of 3 to 4 modules, each module consisting of 4 to 6 exercises. Some modules are relevant for sleep, stress and worry and are therefore part of all three CDMIs, for instance the module 'relaxation'. Fixed elements in

every CDMI are a home name a diary a list with the narticinant's

#### 5-ix) Describe use parameters

Describe use parameters (e.g., intended "doses" and optimal timing for use). Clarify what instructions or recommendations were given to the user, e.g., regarding timing, frequency, heaviness of use, if any, or was the intervention used ad libitum.



#### Does your paper address subitem 5-ix?

| "The amount of time advised to spend on each training is 2 to 3 hours a week for a period of at least 4 weeks" |   |
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|  |   |
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#### 5-x) Clarify the level of human involvement

Clarify the level of human involvement (care providers or health professionals, also technical assistance) in the e-intervention or as co-intervention (detail number and expertise of professionals involved, if any, as well as "type of assistance offered, the timing and frequency of the support, how it is initiated, and the medium by which the assistance is delivered". It may be necessary to distinguish between the level of human involvement required for the trial, and the level of human involvement required for a routine application outside of a RCT setting (discuss under item 21 – generalizability).

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#### Does your paper address subitem 5-x?

Copy and paste relevant sections from the manuscript (include quotes in quotation marks "like this" to indicate direct quotes from your manuscript), or elaborate on this item by providing additional information not in the ms, or briefly explain why the item is not applicable/relevant for your study

| "In case any assistance was needed a contact form on the website of the CDMIs could be used or participants could email or call one of the researchers." |
|--|
|  |

#### 5-xi) Report any prompts/reminders used

Report any prompts/reminders used: Clarify if there were prompts (letters, emails, phone calls, SMS) to use the application, what triggered them, frequency etc. It may be necessary to distinguish between the level of prompts/reminders required for the trial, and the level of prompts/reminders for a routine application outside of a RCT setting (discuss under item 21 – generalizability).

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#### Does your paper address subitem 5-xi? \*

Copy and paste relevant sections from the manuscript (include quotes in quotation marks "like this" to indicate direct quotes from your manuscript), or elaborate on this item by providing additional information not in the ms, or briefly explain why the item is not applicable/relevant for your study

No prompts/reminders were used with regard to the interventions. Only reminders for the questionnaires were sent to the participants. "At every assessment up to three reminder emails were sent and a reminder phone call was made in case participants did not complete the survey."

5-xii) Describe any co-interventions (incl. training/support)

Describe any co-interventions (incl. training/support): Clearly state any interventions that are provided in addition to the targeted eHealth intervention, as ehealth intervention may not be designed as stand-alone intervention. This includes training sessions and support [1]. It may be necessary to distinguish between the level of training required for the trial, and the level of training for a routine application outside of a RCT setting (discuss under item 21 – generalizability.

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#### Does your paper address subitem 5-xii? \*

Copy and paste relevant sections from the manuscript (include quotes in quotation marks "like this" to indicate direct quotes from your manuscript), or elaborate on this item by providing additional information not in the ms, or briefly explain why the item is not applicable/relevant for your study

| No co-interventions were provided but usual care was allowed.<br>"Participants were allowed to use any other type of care besides the<br>online CDMIs." |    |
|---|----|
| "Participants in the control group were also free to use any other types care."   | of |

# 6a) Completely defined pre-specified primary and secondary outcome measures, including how and when they were assessed

#### Does your paper address CONSORT subitem 6a? \*

Copy and paste relevant sections from the manuscript (include quotes in quotation marks "like this" to indicate direct quotes from your manuscript), or elaborate on this item by providing additional information not in the ms, or briefly explain why the item is not applicable/relevant for your study

| intensity, excessiveness and uncontrollability of worry"               |
|--|
| "For assessing the severity of anxiety symptoms the Generalized        |
| Anxiety Disorder Scale ([GAD-7] was used'                              |
| "Well-being was measured with the Warwick-Edinburgh Mental Well-       |
| being Scale (WEMWBS"   |
| "Participants received online questionnaires at baseline (T0) and at 3 |
| and 6 months after baseline (T1 and T2)."                              |
|  |

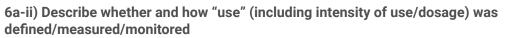
## 6a-i) Online questionnaires: describe if they were validated for online use and apply CHERRIES items to describe how the questionnaires were designed/deployed

If outcomes were obtained through online questionnaires, describe if they were validated for online use and apply CHERRIES items to describe how the questionnaires were designed/deployed [9].

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subitem not at all important 🔘 🔘 🔘 🔘 essential

**Does your paper address subitem 6a-i?** Copy and paste relevant sections from manuscript text

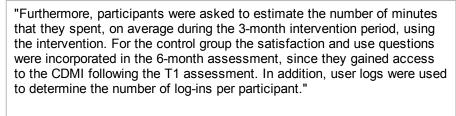


Describe whether and how "use" (including intensity of use/dosage) was defined/measured/monitored (logins, logfile analysis, etc.). Use/adoption metrics are important process outcomes that should be reported in any ehealth trial.

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#### Does your paper address subitem 6a-ii?

Copy and paste relevant sections from manuscript text



**6a-iii)** Describe whether, how, and when qualitative feedback from participants was obtained Describe whether, how, and when qualitative feedback from participants was obtained (e.g., through emails, feedback forms, interviews, focus groups).



#### Does your paper address subitem 6a-iii?

Copy and paste relevant sections from manuscript text

"At the 3-month assessment (T1), the participants in the intervention group received fifteen statements covering satisfaction with the content, effects, usefulness and overall satisfaction with the CDMIs. Suggestions for improving the intervention were also elicited." "For the control group the satisfaction and use questions were incorporated in the 6-month assessment"

## 6b) Any changes to trial outcomes after the trial commenced, with reasons

#### Does your paper address CONSORT subitem 6b? \*

Initially, the primary outcomes were defined as the specific complaints in the three CDMIs (sleep, stress, worry). However, as the overall aim of all three interventions is to reduce depressive symptomatology and all three interventions are evaluated simultaneously in our study design, we changed the primary outcome into depressive symptomatology. This

## 7a) How sample size was determined

NPT: When applicable, details of whether and how the clustering by care provides or centers was addressed

## 7a-i) Describe whether and how expected attrition was taken into account when calculating the sample size

Describe whether and how expected attrition was taken into account when calculating the sample size.



#### Does your paper address subitem 7a-i?

Copy and paste relevant sections from manuscript title (include quotes in quotation marks "like this" to indicate direct quotes from your manuscript), or elaborate on this item by providing additional information not in the ms, or briefly explain why the item is not applicable/relevant for your study

Attrition was taken into account in the analysis technique.

## 7b) When applicable, explanation of any interim analyses and stopping guidelines

#### Does your paper address CONSORT subitem 7b? \*

Copy and paste relevant sections from the manuscript (include quotes in quotation marks "like this" to indicate direct quotes from your manuscript), or elaborate on this item by providing additional information not in the ms, or briefly explain why the item is not applicable/relevant for your study

Not applicable

## 8a) Method used to generate the random allocation sequence

NPT: When applicable, how care providers were allocated to each trial group

#### Does your paper address CONSORT subitem 8a? \*

Copy and paste relevant sections from the manuscript (include quotes in quotation marks "like this" to indicate direct quotes from your manuscript), or elaborate on this item by providing additional information not in the ms, or briefly explain why the item is not applicable/relevant for your study

"Randomisation to the intervention group or control group occurred automatically using a 1:1 ratio" "A computer-generated random allocation sequence was obtained using www.random.org."

## 8b) Type of randomisation; details of any restriction (such as blocking and block size)

#### Does your paper address CONSORT subitem 8b? \*

Copy and paste relevant sections from the manuscript (include quotes in quotation marks "like this" to indicate direct quotes from your manuscript), or elaborate on this item by providing additional information not in the ms, or briefly explain why the item is not applicable/relevant for your study

"Stratified block randomisation by level of education (2 blocks) and the preferred type of training (3 blocks: stress, sleep problems or worry) was used to guarantee an even distribution of participants with different complaints and education level across the two study conditions."

9) Mechanism used to implement the random allocation sequence (such as sequentially numbered containers), describing any steps taken to conceal the sequence until interventions were assigned

#### Does your paper address CONSORT subitem 9? \*

Copy and paste relevant sections from the manuscript (include quotes in quotation marks "like this" to indicate direct quotes from your manuscript), or elaborate on this item by providing additional information not in the ms, or briefly explain why the item is not applicable/relevant for your study

"Stratified block randomisation by level of education (2 blocks) and the preferred type of training (3 blocks: stress, sleep problems or worry) was used to guarantee an even distribution of participants with different complaints and education level across the two study conditions. A computer-generated random allocation sequence was obtained using www.random.org which was performed and handled by an independent researcher outside of the research team."

10) Who generated the random allocation sequence, who enrolled participants, and who assigned participants to interventions

Does your paper address CONSORT subitem 10? \*

Copy and paste relevant sections from the manuscript (include quotes in quotation marks "like this" to indicate direct quotes from your manuscript), or elaborate on this item by providing additional information not in the ms, or briefly explain why the item is not applicable/relevant for your study

| "A computer-generated random allocation sequence was obtained using | ļ |
|---|---|
| www.random.org which was performed and handled by an independent    |   |
| researcher outside of the research team."                           |   |

# 11a) If done, who was blinded after assignment to interventions (for example, participants, care providers, those assessing outcomes) and how

NPT: Whether or not administering co-interventions were blinded to group assignment

#### 11a-i) Specify who was blinded, and who wasn't

Specify who was blinded, and who wasn't. Usually, in web-based trials it is not possible to blind the participants [1, 3] (this should be clearly acknowledged), but it may be possible to blind outcome assessors, those doing data analysis or those administering co-interventions (if any).

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#### Does your paper address subitem 11a-i? \*

Copy and paste relevant sections from the manuscript (include quotes in quotation marks "like this" to indicate direct quotes from your manuscript), or elaborate on this item by providing additional information not in the ms, or briefly explain why the item is not applicable/relevant for your study

| "The intervention could not be blinded as participants needed to be     |
|---|
| informed about whether they could start immediately after randomisation |
| or after 3 months."   |
|   |

## 11a-ii) Discuss e.g., whether participants knew which intervention was the "intervention of interest" and which one was the "comparator"

Informed consent procedures (4a-ii) can create biases and certain expectations - discuss e.g., whether participants knew which intervention was the "intervention of interest" and which one was the "comparator".

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#### Does your paper address subitem 11a-ii?

Participants were aware of the group they were randomised to: "Directly after randomisation, participants allocated to the experimental condition received an e-mail with an activation code for creating an online account which gave them access to the CDMI of their choice." "Participants in the control condition were sent an e-mail with the outcome of the randomisation, including the message that the CDMI would become accessible to them after three months."

## 11b) If relevant, description of the similarity of interventions

(this item is usually not relevant for ehealth trials as it refers to similarity of a placebo or sham intervention to a active medication/intervention)

#### Does your paper address CONSORT subitem 11b? \*

Copy and paste relevant sections from the manuscript (include quotes in quotation marks "like this" to indicate direct quotes from your manuscript), or elaborate on this item by providing additional information not in the ms, or briefly explain why the item is not applicable/relevant for your study

This item is not relevant for this study as the control condition did not receive a placebo or sham intervention.

## 12a) Statistical methods used to compare groups for primary and secondary outcomes

NPT: When applicable, details of whether and how the clustering by care providers or centers was addressed

#### Does your paper address CONSORT subitem 12a? \*

Copy and paste relevant sections from the manuscript (include quotes in quotation marks "like this" to indicate direct quotes from your manuscript), or elaborate on this item by providing additional information not in the ms, or briefly explain why the item is not applicable/relevant for your study

"Linear mixed models were used to estimate the effects of the CDMI intervention on the primary and secondary outcomes"

"The 6-month follow-up data were analysed separately for the intervention and control group (i.e. only within group changes analysed) as by that time the control group had gained access to the CDMI intervention. Linear growth curves were fitted to examine whether any effects in the intervention group remained or increased at 6-months"

#### 12a-i) Imputation techniques to deal with attrition / missing values

Imputation techniques to deal with attrition / missing values: Not all participants will use the intervention/comparator as intended and attrition is typically high in ehealth trials. Specify how participants who did not use the application or dropped out from the trial were treated in the statistical analysis (a complete case analysis is strongly discouraged, and simple imputation techniques such as LOCF may also be problematic [4]).

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#### Does your paper address subitem 12a-i? \*

Copy and paste relevant sections from the manuscript (include quotes in quotation marks "like this" to indicate direct quotes from your manuscript), or elaborate on this item by providing additional information not in the ms, or briefly explain why the item is not applicable/relevant for your study

"Analyses of the effectiveness of the CDMIs were carried out according to the intention-to-treat principle. Linear mixed models were used to estimate the effects of the CDMI intervention on the primary and secondary outcomes. This technique allows for the correlation between longitudinal

data and uses all available data points, thus not discarding cases due to a

## 12b) Methods for additional analyses, such as subgroup analyses and adjusted analyses

#### Does your paper address CONSORT subitem 12b? \*

Copy and paste relevant sections from the manuscript (include quotes in quotation marks "like this" to indicate direct quotes from your manuscript), or elaborate on this item by providing additional information not in the ms, or briefly explain why the item is not applicable/relevant for your study

See 12a.

### X26) REB/IRB Approval and Ethical Considerations [recommended as subheading under "Methods"] (not a CONSORT item)

#### X26-i) Comment on ethics committee approval

subitem not at all important O O O O essential

#### Does your paper address subitem X26-i?

Copy and paste relevant sections from the manuscript (include quotes in quotation marks "like this" to indicate direct quotes from your manuscript), or elaborate on this item by providing additional information not in the ms, or briefly explain why the item is not applicable/relevant for your study

| al Ethics Committee of the University Medical Center Utrecht e study protocol in 2014" |
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#### x26-ii) Outline informed consent procedures

Outline informed consent procedures e.g., if consent was obtained offline or online (how? Checkbox, etc.?), and what information was provided (see 4a-ii). See [6] for some items to be included in informed consent

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Copy and paste relevant sections from the manuscript (include quotes in quotation marks "like this" to indicate direct quotes from your manuscript), or elaborate on this item by providing additional information not in the ms, or briefly explain why the item is not applicable/relevant for your study

"People interested in participation were referred to a special study website where they were given more information about the study and could register to take part in the study by completing a written or an online informed consent form"

#### X26-iii) Safety and security procedures

Safety and security procedures, incl. privacy considerations, and any steps taken to reduce the likelihood or detection of harm (e.g., education and training, availability of a hotline)

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#### Does your paper address subitem X26-iii?

Copy and paste relevant sections from the manuscript (include quotes in quotation marks "like this" to indicate direct quotes from your manuscript), or elaborate on this item by providing additional information not in the ms, or briefly explain why the item is not applicable/relevant for your study

The information sheet and website contained details about privacy considerations, the Medical Ethics Committee and contact information of the researchers. The information sheet also provided contact information of an independent professional, in case advice about participation to the trial was requested.

### RESULTS

### 13a) For each group, the numbers of participants who were randomly assigned, received intended treatment, and were analysed for the primary outcome

NPT: The number of care providers or centers performing the intervention in each group and the number of patients treated by each care provider in each center

#### Does your paper address CONSORT subitem 13a? \*

"a study population of 329 participants of which 165 were randomised to the experimental condition and 164 to the control condition. Of the 165 participants in the experimental condition, 59 participated in the sleep CDMI, 45 participated in the Stress CDMI and 61 participated in the worry CDMI. Figure 1 shows the flow of participants during the trial." "At T1, data were available for 237 participants (drop-out rate 28%)." "At T2, 150 participants completed the questionnaire (drop-out rate 54%).

## 13b) For each group, losses and exclusions after randomisation, together with reasons

## Does your paper address CONSORT subitem 13b? (NOTE: Preferably, this is shown in a CONSORT flow diagram) \*

Copy and paste relevant sections from the manuscript (include quotes in quotation marks "like this" to indicate direct quotes from your manuscript), or elaborate on this item by providing additional information not in the ms, or briefly explain why the item is not applicable/relevant for your study

| "Figure 1 shows the flow of participants during the trial." |   |
|---|---|
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|   |   |
|   |   |
|   | "Figure 1 shows the flow of participants during the trial." |

#### 13b-i) Attrition diagram

Strongly recommended: An attrition diagram (e.g., proportion of participants still logging in or using the intervention/comparator in each group plotted over time, similar to a survival curve) or other figures or tables demonstrating usage/dose/engagement.

|                              | 1          | 2          | 3          | 4          | 5          |           |
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#### Does your paper address subitem 13b-i?

Copy and paste relevant sections from the manuscript or cite the figure number if applicable (include quotes in quotation marks "like this" to indicate direct quotes from your manuscript), or elaborate on this item by providing additional information not in the ms, or briefly explain why the item is not applicable/relevant for your study

No attrition diagram is available for this study. However, the manuscript includes a flowchart with recruitment and attrition numbers with reasons.

### 14a) Dates defining the periods of recruitment and followup

#### Does your paper address CONSORT subitem 14a? \*

| "Participants were recruited from June 2014 until January 2015 via open<br>recruitment (i.e. through relevant websites, messages on social media and<br>messages in digital newsletters of the Trimbos Institute)."<br>"Participants received an email with a personal link to online<br>questionnaires at baseline (T0) and at 3 and 6 months after baseline (T1<br>and T2)." |
|--|
| 14a-i) Indicate if critical "secular events" fell into the study period  |
| Indicate if critical "secular events" fell into the study period, e.g., significant changes in Internet resources available or "changes in computer hardware or Internet delivery resources"   |
| 1 2 3 4 5  |
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|  |
| <b>Does your paper address subitem 14a-i?</b><br>Copy and paste relevant sections from the manuscript (include quotes in quotation marks "like this" to indicate direct quotes from your manuscript), or elaborate on this item by providing additional information not in the ms, or briefly explain why the item is not applicable/relevant for your study                   |
| No critical 'secular events' are applicable.   |
|  |
|  |
|  |
| 14b) Why the trial ended or was stopped (early)  |

#### Does your paper address CONSORT subitem 14b? \*

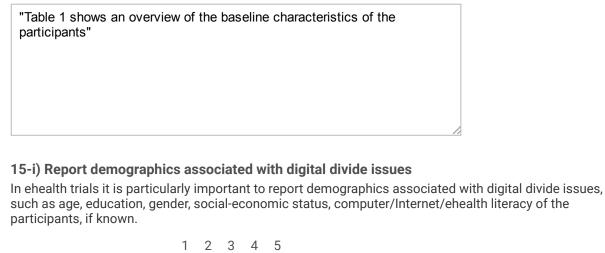
Copy and paste relevant sections from the manuscript (include quotes in quotation marks "like this" to indicate direct quotes from your manuscript), or elaborate on this item by providing additional information not in the ms, or briefly explain why the item is not applicable/relevant for your study

Not applicable

## 15) A table showing baseline demographic and clinical characteristics for each group

NPT: When applicable, a description of care providers (case volume, qualification, expertise, etc.) and centers (volume) in each group

#### Does your paper address CONSORT subitem 15? \*



such as age, education, gender, social-economic status, computer/Internet/ehealth literacy of the

subitem not at all important 🔘 🔘 🔘 🔘 essential

#### Does your paper address subitem 15-i? \*

Copy and paste relevant sections from the manuscript (include guotes in guotation marks "like this" to indicate direct quotes from your manuscript), or elaborate on this item by providing additional information not in the ms, or briefly explain why the item is not applicable/relevant for your study

"Table 1 shows an overview of the baseline characteristics of the participants" Age, gender, education, employment and income are included as characteristics in the table.

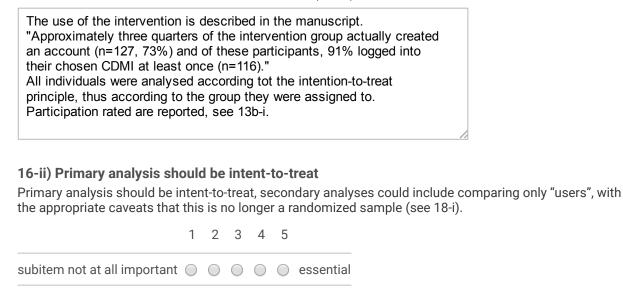
### 16) For each group, number of participants (denominator) included in each analysis and whether the analysis was by original assigned groups

#### 16-i) Report multiple "denominators" and provide definitions

Report multiple "denominators" and provide definitions: Report N's (and effect sizes) "across a range of study participation [and use] thresholds" [1], e.g., N exposed, N consented, N used more than x times, N used more than y weeks, N participants "used" the intervention/comparator at specific pre-defined time points of interest (in absolute and relative numbers per group). Always clearly define "use" of the intervention.



#### Does your paper address subitem 16-i? \*



#### Does your paper address subitem 16-ii?

Copy and paste relevant sections from the manuscript (include quotes in quotation marks "like this" to indicate direct quotes from your manuscript), or elaborate on this item by providing additional information not in the ms, or briefly explain why the item is not applicable/relevant for your study

| "Analyses of the effectiveness of the CDMIs were carried out according to the intention-to-treat principle." |
|--|
|  |
|  |

### 17a) For each primary and secondary outcome, results for each group, and the estimated effect size and its precision (such as 95% confidence interval)

#### Does your paper address CONSORT subitem 17a? \*

Copy and paste relevant sections from the manuscript (include quotes in quotation marks "like this" to indicate direct quotes from your manuscript), or elaborate on this item by providing additional information not in the ms, or briefly explain why the item is not applicable/relevant for your study

| The results for each group, including estimates and confidence intervals,  |
|--|
| are shown in table 2 and table 3.  |
| "The observed and estimated marginal means (estimated means adjusted       |
| for all factors in the model) for all outcomes at baseline and -3month     |
| follow-up are presented in Table 2. The results of the linear mixed models |
|  |

#### 17a-i) Presentation of process outcomes such as metrics of use and intensity of use

In addition to primary/secondary (clinical) outcomes, the presentation of process outcomes such as metrics of use and intensity of use (dose, exposure) and their operational definitions is critical. This does not only refer to metrics of attrition (13-b) (often a binary variable), but also to more continuous exposure metrics such as "average session length". These must be accompanied by a technical description how a metric like a "session" is defined (e.g., timeout after idle time) [1] (report under item 6a).

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#### Does your paper address subitem 17a-i?

Copy and paste relevant sections from the manuscript (include quotes in quotation marks "like this" to indicate direct quotes from your manuscript), or elaborate on this item by providing additional information not in the ms, or briefly explain why the item is not applicable/relevant for your study

"Approximately three quarters of the intervention group actually created an account (n=127, 73%) and of these participants, 91% logged into their chosen CDMI at least once (n=116). During the three month intervention period, the participants logged in a median of 3 times (range: 0 - 166). Of the 75 participants in the intervention group who completed the use and satisfaction questions, a majority (61%) reported that they spent an average of 30 minutes or more a week on the CDMIs. Five percent of participants spent 2 hours or more a week

## 17b) For binary outcomes, presentation of both absolute and relative effect sizes is recommended

#### Does your paper address CONSORT subitem 17b? \*

Copy and paste relevant sections from the manuscript (include quotes in quotation marks "like this" to indicate direct quotes from your manuscript), or elaborate on this item by providing additional information not in the ms, or briefly explain why the item is not applicable/relevant for your study

| Not applicable | Э |
|----------------|---|
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# 18) Results of any other analyses performed, including subgroup analyses and adjusted analyses, distinguishing pre-specified from exploratory

#### Does your paper address CONSORT subitem 18? \*

Copy and paste relevant sections from the manuscript (include quotes in quotation marks "like this" to indicate direct quotes from your manuscript), or elaborate on this item by providing additional information not in the ms, or briefly explain why the item is not applicable/relevant for your study

they seem to be of a quite similar magnitude as those found between T0 and T1 in the intervention group (see Table 4). However, there were some notable exceptions. Stress complaints showed a similar pattern of change in both groups: the greatest reduction between T1 and T0 (which is also reflected in the non-significant difference in the effectiveness analysis, see above), and a smaller reduction between T1 and T2. Moreover, anxiety complaints also seemed to decrease a little more between T0 and T1 than between T1 and T2 in the control group."

#### 18-i) Subgroup analysis of comparing only users

A subgroup analysis of comparing only users is not uncommon in ehealth trials, but if done, it must be stressed that this is a self-selected sample and no longer an unbiased sample from a randomized trial (see 16-iii).

1 2 3 4 5 subitem not at all important O O O O essential

#### Does your paper address subitem 18-i?

Copy and paste relevant sections from the manuscript (include quotes in quotation marks "like this" to indicate direct quotes from your manuscript), or elaborate on this item by providing additional information not in the ms, or briefly explain why the item is not applicable/relevant for your study

No subgroup analysis of only users has been conducted.

## 19) All important harms or unintended effects in each group

(for specific guidance see CONSORT for harms)

#### Does your paper address CONSORT subitem 19? \*

Copy and paste relevant sections from the manuscript (include quotes in quotation marks "like this" to indicate direct quotes from your manuscript), or elaborate on this item by providing additional information not in the ms, or briefly explain why the item is not applicable/relevant for your study

| No unintended harms or effects were reported or detected in the groups.     |
|---|
| Moreover: "In case any assistance was needed a contact form on the          |
| website of the CDMIs could be used or participants could email or call one  |
| of the researchers. Participants were allowed to use any other type of care |
| besides the online CDMIs."  |
|   |

#### 19-i) Include privacy breaches, technical problems

Include privacy breaches, technical problems. This does not only include physical "harm" to participants, but also incidents such as perceived or real privacy breaches [1], technical problems, and other unexpected/unintended incidents. "Unintended effects" also includes unintended positive effects [2].

1 2 3 4 5 subitem not at all important O O O O essential

#### Does your paper address subitem 19-i?

Copy and paste relevant sections from the manuscript (include quotes in quotation marks "like this" to indicate direct quotes from your manuscript), or elaborate on this item by providing additional information not in the ms, or briefly explain why the item is not applicable/relevant for your study

| There were no privacy issues. |  |   |
|-------------------------------|--|---|
|                               |  |   |
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|                               |  |   |
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|                               |  | 1 |

#### 19-ii) Include qualitative feedback from participants or observations from staff/researchers

Include qualitative feedback from participants or observations from staff/researchers, if available, on strengths and shortcomings of the application, especially if they point to unintended/unexpected effects or uses. This includes (if available) reasons for why people did or did not use the application as intended by the developers.

1 2 3 4 5 subitem not at all important O O O O essential

#### Does your paper address subitem 19-ii?

Copy and paste relevant sections from the manuscript (include quotes in quotation marks "like this" to indicate direct quotes from your manuscript), or elaborate on this item by providing additional information not in the ms, or briefly explain why the item is not applicable/relevant for your study

"A frequently given suggestion by participants to improve the intervention was to add reminders. Other suggestions were (among others): to add more exercises, add exercises with more depth, additional information and more structure."

### DISCUSSION

# 22) Interpretation consistent with results, balancing benefits and harms, and considering other relevant evidence

NPT: In addition, take into account the choice of the comparator, lack of or partial blinding, and unequal expertise of care providers or centers in each group

## 22-i) Restate study questions and summarize the answers suggested by the data, starting with primary outcomes and process outcomes (use)

Restate study questions and summarize the answers suggested by the data, starting with primary outcomes and process outcomes (use).

1 2 3 4 5



#### Does your paper address subitem 22-i? \*

Copy and paste relevant sections from the manuscript (include quotes in quotation marks "like this" to indicate direct quotes from your manuscript), or elaborate on this item by providing additional information not in the ms, or briefly explain why the item is not applicable/relevant for your study

The CDMIs did not significantly reduce stress complaints, but reductions were seen in both the intervention and control groups. At 6month follow-up the improvements in the intervention group were generally sustained. The control group, who started with the CDMIs after three months, experienced significant improvements at the 6month follow-up as compared the 3-month follow-up for all outcome variables but stress. In general, participants were moderately to highly satisfied with the CDMIs."

**22-ii) Highlight unanswered new questions, suggest future research** Highlight unanswered new questions, suggest future research.

1 2 3 4 5

subitem not at all important 🔘 🔘 🔘 🔘 essential

#### Does your paper address subitem 22-ii?

Copy and paste relevant sections from the manuscript (include quotes in quotation marks "like this" to indicate direct quotes from your manuscript), or elaborate on this item by providing additional information not in the ms, or briefly explain why the item is not applicable/relevant for your study

"Integration of our online preventive intervention with face-to-face consultations in primary care, thus creating a blended delivery format, may be a useful next step. Alternatively, combining online coaching services with our interventions may offer an efficient way of boosting adherence. In both instances, a human touch is added".

## 20) Trial limitations, addressing sources of potential bias, imprecision, and, if relevant, multiplicity of analyses

#### 20-i) Typical limitations in ehealth trials

Typical limitations in ehealth trials: Participants in ehealth trials are rarely blinded. Ehealth trials often look at a multiplicity of outcomes, increasing risk for a Type I error. Discuss biases due to non-use of the intervention/usability issues, biases through informed consent procedures, unexpected events.

subitem not at all important 🔘 🔘 🔘 🔘 essential

#### Does your paper address subitem 20-i? \*

Copy and paste relevant sections from the manuscript (include quotes in quotation marks "like this" to indicate direct quotes from your manuscript), or elaborate on this item by providing additional information not in the ms, or briefly explain why the item is not applicable/relevant for your study

course of the study. "

"A second limitation is that participants could not be blinded" "Another limitation of the study is the limited use of the intervention" "Finally, as mentioned in the introduction, the CDMIs were developed to also suit a range of target groups, including the low-SES population, but participation in the CDMIs and indeed in this study was not restricted to individuals with a low SES"

1 2 3 4 5

## 21) Generalisability (external validity, applicability) of the trial findings

NPT: External validity of the trial findings according to the intervention, comparators, patients, and care providers or centers involved in the trial

#### 21-i) Generalizability to other populations

Generalizability to other populations: In particular, discuss generalizability to a general Internet population, outside of a RCT setting, and general patient population, including applicability of the study results for other organizations

subitem not at all important 🔘 🔘 🔘 🔘 essential

1 2 3 4 5

Does your paper address subitem 21-i?

Copy and paste relevant sections from the manuscript (include quotes in quotation marks "like this" to indicate direct quotes from your manuscript), or elaborate on this item by providing additional information not in the ms, or briefly explain why the item is not applicable/relevant for your study

respect to males and other educational levels remains to be determined." "The baseline characteristics indicate that 72% of the participants had a high educational level. This means that without specific efforts aimed

at inclusion of low-SES people, the usage of the intervention among this group will be relatively low. Future research is needed to gain insights into the most optimal strategies for reaching low-SES populations and engaging them in preventive interventions."

## 21-ii) Discuss if there were elements in the RCT that would be different in a routine application setting

Discuss if there were elements in the RCT that would be different in a routine application setting (e.g., prompts/reminders, more human involvement, training sessions or other co-interventions) and what impact the omission of these elements could have on use, adoption, or outcomes if the intervention is applied outside of a RCT setting.

|                              | 1          | 2          | 3          | 4          | 5          |           |
|------------------------------|------------|------------|------------|------------|------------|-----------|
| subitem not at all important | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | essential |

#### Does your paper address subitem 21-ii?

Copy and paste relevant sections from the manuscript (include quotes in quotation marks "like this" to indicate direct quotes from your manuscript), or elaborate on this item by providing additional information not in the ms, or briefly explain why the item is not applicable/relevant for your study

Apart from the study itself (e.g. randomisation, questionnaires, etc.), there were no elements in the RCT that would be different in a routine application setting.

### OTHER INFORMATION

## 23) Registration number and name of trial registry

#### Does your paper address CONSORT subitem 23? \*

Copy and paste relevant sections from the manuscript (include quotes in quotation marks "like this" to indicate direct quotes from your manuscript), or elaborate on this item by providing additional information not in the ms, or briefly explain why the item is not applicable/relevant for your study

"The Medical Ethics Committee of the University Medical Center Utrecht approved the study protocol in 2014, and the trial was registered at the Netherlands Trial Register (NTR) under number 4612."

## 24) Where the full trial protocol can be accessed, if available

#### Does your paper address CONSORT subitem 24? \*

Cite a Multimedia Appendix, other reference, or copy and paste relevant sections from the manuscript (include quotes in quotation marks "like this" to indicate direct quotes from your manuscript), or elaborate on this item by providing additional information not in the ms, or briefly explain why the item is not applicable/relevant for your study

"The trial was registered at the Netherlands Trial Register (NTR) under number 4612." The protocol can be requested from the authors.

## 25) Sources of funding and other support (such as supply of drugs), role of funders

#### Does your paper address CONSORT subitem 25? \*

Copy and paste relevant sections from the manuscript (include quotes in quotation marks "like this" to indicate direct quotes from your manuscript), or elaborate on this item by providing additional information not in the ms, or briefly explain why the item is not applicable/relevant for your study

"This study was made possible with financial support from the Ministry of Health, Welfare and Sport and the Trimbosinstitute."

## X27) Conflicts of Interest (not a CONSORT item)

#### X27-i) State the relation of the study team towards the system being evaluated

In addition to the usual declaration of interests (financial or otherwise), also state the relation of the study team towards the system being evaluated, i.e., state if the authors/evaluators are distinct from or identical with the developers/sponsors of the intervention.



#### Does your paper address subitem X27-i?

Copy and paste relevant sections from the manuscript (include quotes in quotation marks "like this" to indicate direct quotes from your manuscript), or elaborate on this item by providing additional information not in the ms, or briefly explain why the item is not applicable/relevant for your study

| "The interventions that were used in this study were developed by the                    |
|--|
| Trimbos-institute, the Netherlands institute of Mental Health and Addiction,             |
| a non-profit organisation. The authors declare that there are no conflicts of interest." |

## About the CONSORT EHEALTH checklist

As a result of using this checklist, did you make changes in your manuscript? \*

- yes, major changes
- yes, minor changes
- 🔵 no

What were the most important changes you made as a result of using this checklist?

Additions to the methods section (e.g. to the 'recruitment and procedure'and to the 'intervention').

How much time did you spend on going through the checklist INCLUDING making changes in your manuscript \*

| 8 hours |  |
|---------|--|
|---------|--|

As a result of using this checklist, do you think your manuscript has improved? \*

| ullet      | yes                |  |  |
|------------|--------------------|--|--|
| $\bigcirc$ | no                 |  |  |
|            | Other <sup>.</sup> |  |  |

#### Would you like to become involved in the CONSORT EHEALTH group?

This would involve for example becoming involved in participating in a workshop and writing an "Explanation and Elaboration" document

- yes
- 🖲 no
- Other:

#### Any other comments or questions on CONSORT EHEALTH

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