Final recommendation catalogue
Complete list of adopted competency and implementation recommendations

Key to the table

Recommendation ID	Identification number of each recommendation, as assigned in the final recommendation catalogue.
Recommendation	Wording of the recommendation. Four items were reworded during Round 3 consensus refinement and are shown here with their revised wording and level (level 3, as the revised wording was not quantitatively re-rated); see Additional file 6 for the original Round 2 wording of these items.
Level	Recommendation level (1-3; see Tables 3 and 4). Level 1 = highest evidence (consensus on both criteria); Level 3 = lowest of the retained levels.

This additional file reproduces the final recommendation catalogue in full: 97 competency recommendations (Digital Health Navigator competencies, adapted HDNT) and 77 implementation recommendations (implementation of the Digital Health Navigator role), 174 in total.

Digital Health Navigator competencies

M1.1: Basic smartphone skills

ID	Recommendation	Level
R-1_0_106	Connecting to Wi-Fi	1
R-1_0_101	Downloading an app	1
R-1_0_107	Making a call	1
R-1_0_105	Answering a call	1
R-1_0_104	Writing a new message	1
R-1_0_102	Replying to a message	1
R-1_0_108	Performing an internet search	1
R-1_0_103	Opening a specific web address	1
R-1_0_109	Creating user accounts	1
R-1_0_206	Understanding the difference between Wi-Fi and cellular data	2
R-1_0_205	Sending photos and videos	2
R-1_0_210	Sending messages to a group	2
R-1_0_212	Creating a new note	2
R-1_0_211	Editing a note	2
R-1_0_203	Setting a reminder	2
R-1_0_216	Setting an alarm	2
R-1_0_208	Setting a bedtime	2
R-1_0_215	Setting a timer	2
R-1_0_204	Creating a new calendar entry	2
R-1_0_213	Setting an alert for a calendar entry	2

R-1_0_207	Editing a calendar entry	2
R-1_0_209	Viewing step count	2
R-1_0_214	Recording distance walked	2
R-1_0_202	Viewing sleep data	2
R-1_0_201	Changing account settings	2
R-1_0_304	Ignoring a call	3
R-1_0_301	Viewing browser history	3
R-1_0_302	Different apps for listening to music	3
R-1_0_307	Playing a specific song	3
R-1_0_305	Creating a playlist	3
R-1_0_303	Taking a photo	3
R-1_0_306	Recording a video	3

M1.2: Health-related smartphone skills

ID	Recommendation	Level
R-1_1_104	Finding mindfulness exercises	1
R-1_1_107	Exercise and mental health	1
R-1_1_103	Creating a routine	1
R-1_1_106	Creating a schedule	1
R-1_1_108	Photos and videos for mental health	1
R-1_1_102	Guided meditation using a smartphone	1
R-1_1_105	Notes for mental health	1
R-1_1_101	Researching reliable sources	1
R-1_1_201	Creating an email account	2
R-1_1_202	Talking to family	2
R-1_1_203	Talking to telephone support systems	2
R-1_1_205	Finding podcasts	2
R-1_1_204	Watching videos	2
R-1_1_301	Creating playlists	3

M2: Basic technology troubleshooting

ID	Recommendation	Level
R-1_2_101	Problems downloading an app	1
R-1_2_103	Unknown account or password	1
R-1_2_108	Insufficient storage space on the smartphone	1
R-1_2_104	App compatibility issues	1
R-1_2_106	Notification problems	1
R-1_2_105	App crashes	1

R-1_2_102	Resetting a password	1
R-1_2_107	Problems with app permissions	1
R-1_2_201	Internet connection problems	2
R-1_2_202	Bluetooth connection problems with other devices (e.g. headphones, smartwatch)	2

M3: App evaluation

ID	Recommendation	Level
R-1_3_110	Platforms on which the app can be used	1
R-1_3_119	User reviews of the app	1
R-1_3_104	Test access for DHNs and HCPs	1
R-1_3_112	Privacy policy	1
R-1_3_115	What data the app collects	1
R-1_3_111	Option to opt out of specific data collection	1
R-1_3_109	Having data collected by the app deleted	1
R-1_3_116	Sharing of collected data with third parties	1
R-1_3_105	Compliance with data protection laws and regulations	1
R-1_3_118	How collected data is used	1
R-1_3_113	Who has access to which data	1
R-1_3_106	App functions	1
R-1_3_117	Scientific evidence on the benefit of an app (peer-reviewed evidence)	1
R-1_3_114	Potential risks of using the app (e.g. addictive potential, adverse effects when used with comorbidities)	1
R-1_3_103	Customisation options within the app (e.g. adapting exercises to the patient's abilities, creating an individual treatment plan)	1
R-1_3_101	Accessibility of the app for patients with impairments (e.g. colour-blind modes, text-to-speech)	1
R-1_3_102	Usability of the app (e.g. clarity, comprehensibility, intuitiveness)	1
R-1_3_107	In-app mechanisms for patients' mental health emergencies	1
R-1_3_108	How the DHN or HCP can access data collected by the app	1
R-1_3_120	Option to download data collected by the app	1
R-1_3_202	Cost of the app	2
R-1_3_203	Where data is stored	2
R-1_3_204	Options for interoperability with other applications (e.g. transferring smartwatch data such as heart rate or sleep into the app)	2
R-1_3_302	App developer	3
R-1_3_301	When the app was last updated	3

M4: Clinical terminology & data

ID	Recommendation	Level

R-1_4_106	Common psychiatric and somatic comorbidities	1
R-1_4_105	Mental health conditions treatable with digital health applications, and their symptoms	1
R-1_4_103	Warning signs indicating an acute mental health crisis	1
R-1_4_101	When DHNs need to seek help	1
R-1_4_102	Where DHNs can seek help	1
R-1_4_104	Working in accordance with data protection regulations	1
R-1_4_201	Types of data and when they are collected	2

M5: Engagement techniques

ID	Recommendation	Level
R-1_5_106	Politely asking patients to clarify or specify their concern	1
R-1_5_107	Asking open, non-leading questions	1
R-1_5_103	Motivational interviewing, i.e. communication techniques to strengthen intrinsic motivation for behaviour change	1
R-1_5_101	Referring patients with problems to appropriate services	1
R-1_5_102	Stating one's own boundaries and communicating the limits of support	1
R-1_5_104	Recognising when patients need help and providing assistance	1
R-1_5_105	Understanding one's role as a DHN within the clinical team	1
R-1_5_108	Clear documentation of patient data and communication within the clinical team	1
R-1_5_201	Basics of trauma-informed care approaches	2

Implementation of the Digital Health Navigator role

Teaching content on DiGAs

ID	Recommendation	Level
R-2_1_101	DHNs must be able to provide an overview of commonly used DiGAs.	1
R-2_1_102	DHNs should be able to support both Android and iOS devices.	1
R-2_1_103	DHNs should be able to install and set up commonly used DiGAs.	1
R-2_1_104	DHNs should have the ability to familiarise themselves independently with DiGAs.	1
R-2_1_105	DHNs should be familiar with the prescription and redemption process for DiGAs.	1
R-2_1_106	DHNs should have knowledge of the indications and contraindications of a DiGA.	1
R-2_1_107	DHNs should have access to a user account for all DiGAs beyond the training itself, to test and evaluate them.	1
R-2_1_108	DHNs must know how to process data collected by DiGAs (e.g. to produce reports for the clinical team/HCP).	1
R-2_1_109	DHNs should know the content of commonly used DiGAs.	1
R-2_1_110	A basic understanding of DiGA data processing is entirely sufficient for the DHN role.	1
R-2_1_111	Training for DHNs should focus on technical support for DiGAs.	1

R-2_1_201	DHNs should be able to explain the treatment plans generated within DiGAs.	2
R-2_1_202	DHNs should have the ability to independently fill knowledge gaps about DiGAs.	2
R-2_1_203	DHNs should be required to know DiGA-specific information on data processing/security.	2
R-2_1_204	DHNs should be aware of the evidence base for a DiGA.	2
R-2_1_303	DHNs must have a general overview of what digital health applications exist. (wording refined in Round 3; see Additional file 6)	3
R-2_1_301	If a DHN has only limited knowledge of a DiGA, this reduces confidence in the DHN's competence.	3
R-2_1_302	It is sufficient for DHNs to have particularly good knowledge of at least one DiGA per condition for which a DiGA exists.	3

Integration into patient care

ID	Recommendation	Level
R-2_2_101	The DHN should approach patients with a benevolent attitude.	1
R-2_2_102	The DHN should have a sense of a patient's level of functioning and adapt their interaction accordingly.	1
R-2_2_103	The DHN should foster a good and motivating working atmosphere during meetings with patients.	1
R-2_2_104	The DHN should maintain a neutral stance towards patients and their data.	1
R-2_2_105	Information materials on commonly occurring technical problems and their solutions should be made available to patients.	1
R-2_2_106	Knowledge about DiGAs should be conveyed to the clinical team by the DHN.	1
R-2_2_107	The DHN should be able to provide more in-depth knowledge about a specific DiGA where needed.	1
R-2_2_108	The DHN should base their interaction with patients solely on diagnosis.	1
R-2_2_201	HCPs should have an overview of DiGAs, just as they should have an overview of the medications they prescribe.	2
R-2_2_301	The DHN must not make decisions regarding diagnosis.	3
R-2_2_302	The DHN must not make decisions regarding treatment planning; the initiative always remains with the HCP.	3
R-2_2_303	The DHN's technical competence is just as important as their interpersonal manner with patients.	3
R-2_2_304	DHNs are only obliged to provide technical support insofar as this contributes to treatment of the condition.	3

Course of DiGA-based treatment

ID	Recommendation	Level
R-2_3_101	Basic prerequisites patients must bring to DiGA use include available resources (e.g. a suitable device, internet connection) and motivation.	1
R-2_3_102	The first meeting between DHN and patient should be used for installing, setting up, and introducing the prescribed DiGA.	1

R-2_3_103	DHNs should be briefed by the HCP about the patient and their condition before the first joint meeting.	1
R-2_3_104	That patients' devices may be incompatible with the offered DiGAs represents a realistic barrier.	1
R-2_3_105	Data collected through DiGAs should be incorporated into the patient's treatment.	1
R-2_3_106	The process by which a patient is enrolled in DiGA treatment should be defined individually by each clinic.	1
R-2_3_107	The HCP should be informed by the DHN about a patient's psychological status before a meeting.	1
R-2_3_108	Meetings between DHN and patient should be documented by the DHN.	1
R-2_3_201	The following would be a sensible example process for enrolling a patient in DiGA treatment: 1. HCP identifies the patient's potential for DiGA treatment; 2. DHN assesses the patient for technical competence; 3. DHN reports back to the HCP and, where applicable, gives a DiGA recommendation; 4. HCP prescribes the DiGA; 5. DiGA treatment begins.	2
R-2_3_202	The DHN should be informed by the HCP about a patient's psychological wellbeing before a meeting.	2
R-2_3_203	Documentation of meetings between DHN and patient should only take place with the patient's permission.	2
R-2_3_204	The DHN evaluates the data collected through the DiGA together with the patient.	2
R-2_3_301	There is no need for a fixed schedule for exchanges between HCP and DHN regarding a patient.	3

Information resources

ID	Recommendation	Level
R-2_4_101	The website should also work well on smartphones.	1
R-2_4_102	The website should allow DiGAs with the same indication to be listed together.	1
R-2_4_103	The website should indicate any additional equipment required for a DiGA (e.g. VR headset, heart-rate monitor).	1
R-2_4_104	The website should provide an overview of the conditions for which DiGAs exist.	1
R-2_4_105	The website's design should intuitively guide users on how to find a suitable DiGA.	1
R-2_4_106	From a given condition, users should be able to reach an overview of all DiGAs that can be used to treat it.	1
R-2_4_107	The website should include information on the prescription and redemption process for DiGAs.	1
R-2_4_108	DiGAs should be findable through a filter function.	1
R-2_4_109	DiGAs should be findable through a search function.	1
R-2_4_110	There should be an option to display the website in plain language (e.g. without technical terms for conditions).	1
R-2_4_111	A filter function should allow different mental health conditions to be distinguished.	1
R-2_4_112	DiGA descriptions on the website should not be written by the manufacturer, to avoid the risk of advertising.	1
R-2_4_113	A detailed view should exist that lists all relevant information about a DiGA.	1
R-2_4_114	The website should enable a direct comparison between DiGAs.	1
R-2_4_115	A filter function should be designed so that all filter options can be seen at a glance.	1
R-2_4_116	DiGA descriptions on the website should be as neutral as possible and based on scientific criteria.	1

R-2_4_117	The detailed view of a DiGA should convey a sense of what using it is like, e.g. through a demo or screenshots.	1
R-2_4_118	The PZN (pharmaceutical central number) for a DiGA should be easy to find.	1
R-2_4_119	The website should indicate the time investment required to use a DiGA.	1
R-2_4_120	Information for professionals should be listed after information for patients in a DiGA's description.	1
R-2_4_121	The website should display user reviews for each DiGA.	1
R-2_4_122	User reviews displayed on the website should be verified beforehand to ensure their quality.	1
R-2_4_123	DiGAs should be comparable in a table based on hard facts such as platform, indication, and functions (e.g. as in online product comparisons).	1
R-2_4_201	A filter function should always show which filter settings are currently selected.	2
R-2_4_202	The website should include a pros/cons list for every DiGA.	2
R-2_4_203	A guided-selection function should help users find recommended DiGAs by answering a series of questions.	2
R-2_4_204	External websites should be linked in the same language as the website itself.	2
R-2_4_302	There should be a separate website for patients and professionals.	3
R-2_4_301	There should be a separate view of the website for patients and professionals.	3

Training framework

ID	Recommendation	Level
R-2_5_103	Manufacturers of DiGAs should be encouraged to contribute, at least partly, to the funding of DHN training.	1
R-2_5_201	Completing training courses or continuing education is an entirely sufficient qualification for the DHN role.	2
R-2_5_101	Certification and competence of DHNs should be renewed through mandatory continuing education. (wording refined in Round 3; see Additional file 6)	3
R-2_5_102	The quality of training should be ensured through exercises such as case-based simulations. (wording refined in Round 3; see Additional file 6)	3