1. Physicians have had the option of prescribing digital health applications to patients since 2020. The aim of these digital health applications is to contribute towards improvement in diagnosing and treating disease as well as in preventive medicine. These particular applications are considered as medical products in contrast to ordinary health apps freely available to patients without prescription. The German Federal Institute for Drugs and Medical Devices (BfArM) audits potential digital health applications and, if they pass the audit, adds them to the DiGA-Verzeichnis, a directory of health applications covered by the German national health system.

Did you already know that such DHAs exist, or is this the first time you have heard this?

◯ I already knew it ◯ I hear this for the first time

2. Regardless of whether you were aware that DHAs exist: Do you generally think such prescribable medical apps are a good thing, or are you rather skeptical about them?

◯ Good thing ◯ Rather skeptical ◯ Undecided

3. As mentioned at the beginning, DHAs are evaluated in detail in a systematic process by the German Federal Institute for Drugs and Medical Devices (BfArM). This requires DHA manufacturers to submit applications for approval; a number of criteria need to be met for the application to be included in the directory, which include standards on data protection and privacy as well as information security, medical information quality, usability, app robustness, and patient safety. The app's usefulness and added value (effect on healthcare) require adequate documentation. (For example, a reduction in pain can be a positive effect in patient care, but also greater knowledge of a disease, enabling its better management.)

Regardless of whether you have already had personal experience with DiGA or not: Do you assume that such digital health applications tested by the BfArM are reliable programs that a doctor can recommend and prescribe to patients if necessary? (What this question means is your fundamental trust that such an evaluation process can create a selection of reputable programs that can be recommended by doctors without concern or objection.)

I… ◯ strongly assume so ◯ rather assume so ◯ rather do not assume so ◯ do not assume so at all ◯ Undecided

4. Do you assume that there is sufficient legal certainty for doctors when prescribing and using DHAs in everyday patient care (with regard to questions of risk and liability), or do you not assume so?

I… ◯ strongly assume so ◯ rather assume so ◯ rather do not assume so ◯ do not assume so at all ◯ Undecided

5. In your opinion or in your experience, what contribution can DHAs make to the health care and/or recovery of patients – provided they are used correctly? Do you consider the contribution that DHAs can make…

◯ very large ◯ rather large ◯ rather small ◯ no contribution

6. In which of the following areas of application do you think DHAs are useful and can have a positive effect on patients?

	Very useful	Rather useful	Rather not useful or not useful at all	Hard to say, undecided
Prevention, e.g. self-monitoring of risk factors (weight, blood pressure, blood sugar, etc.) or health data (steps taken, amount drunk, diet, etc.)	◯	◯	◯	◯
Monitoring and treatment of chronic diseases (diabetes, asthma, pain, etc.)	◯	◯	◯	◯
Lifestyle, adherence to a health-promoting lifestyle (diet, smoking, psyche, etc.)	◯	◯	◯	◯
Support for physical measures (movement exercises, etc.)	◯	◯	◯	◯
Reminder to take medication regularly, reminder of vaccination and preventative care appointments	◯	◯	◯	◯
Other, namely: _____	◯	◯	◯	◯

7. Which of the following statements do you tend to agree with? Please tick the respective items.

◯ DHAs take the burden off doctors and nursing staff as they no longer need to deal with collecting health data and measurements.

◯ DHAs are too complicated for many patients, which leads to health data errors being collected or treatment failure in extreme cases.

◯ DHAs reinforce patient motivation to improve their health.

◯ DHAs give patients the sense of having more control over their health and keeping healthy (empowerment).

◯ I do not think that DHAs provide adequate data privacy.

◯ The additional information that DHAs collect make it possible to treat patients in a more individual and effective way.

◯ DHAs are too time-consuming for patients and doctors to use.

◯ DHAs facilitate doctor-patient communication.

◯ DHAs cause floods of data not relevant or beneficial to effective treatment.

◯ DHAs help schedule doctors' appointments more effectively.

◯ DHAs reinforce patient compliance.

◯ DHAs make the doctor-patient relationship less personal.

◯ DHAs help increase patient awareness for health and disease issues.

◯ DHAs cause more rather than less work for doctors, as they give doctors more responsibilities to tend to.

◯ DHAs facilitate rapid disease and disease risk recognition and diagnosis.

◯ DHAs lead to patients taking their diagnosis and treatment into their own hands.

◯ DHAs make it possible to reach new patient groups.

8. Do you assume that DiGA will advance the digitalization of healthcare and medical practices in a positive and meaningful way, or do you not assume so?

I… ◯ strongly assume so ◯ rather assume so ◯ rather do not assume so ◯ do not assume so at all ◯ Undecided

9. Have you already prescribed DHAs to patients, or are you planning to do so in the future, can you imagine this in principle, or is prescribing DHAs fundamentally out of the question for you?

◯ Already prescribed ◯ Planning to do => Please go directly to question 17

◯ I can imagine that => Please go directly to question 17

◯ Fundamentally out of the question => Please go directly to question 18

10. You have stated that you have already used DiGA or prescribed it to patients. We would like to ask you a few questions about your experiences so far.

How often has it happened that when talking to patients you have mentioned the possibility of support through health apps or DHAs to support prevention or disease management?

◯ Often ◯ Occasionally ◯ Rarely ◯ Never ◯ Hard to say, undecided

11. How often has it happened that you have recommended patients to use certain health apps for prevention and/or therapy? (This does not just include DHAs, but all types of health apps.)

◯ Often ◯ Occasionally ◯ Rarely ◯ Never ◯ Hard to say, undecided

12. In which areas of application have you used DHAs with your patients? For the respective area of application, please also indicate how you assess the overall benefits you have experienced of the respective DHAs.

		If used,…		
	DHA(s) used	Very useful	Rather useful	Rather not useful or not useful at all
Prevention, e.g. self-monitoring of risk factors (weight, blood pressure, blood sugar, etc.) or health data (steps taken, amount drunk, diet, etc.)	◯	◯	◯	◯
Monitoring and treatment of chronic diseases (diabetes, asthma, pain, etc.)	◯	◯	◯	◯
Lifestyle, adherence to a health-promoting lifestyle (diet, smoking, psyche, etc.)	◯	◯	◯	◯

Support for physical measures (movement exercises, etc.)	◯	◯	◯	◯
Reminder to take medication regularly, reminder of vaccination and preventative care appointments	◯	◯	◯	◯
Other, namely: _____	◯	◯	◯	◯

13. If you still know: Which DHAs did you primarily prescribe to patients? Please provide 1-3 examples if possible (name of application).

_____

_____

14. The list below shows positive effects on health. Which of these have you already observed as a result of your patients using DHAs? (Multiple answers possible)

◯ Improved health awareness and education
◯ Increased compliance, such as taking medications and keeping to treatment
◯ Improved self-management such as in chronic disease
◯ Weight reduction such as BMI, abdominal circumference, waist circumference
◯ Consistent decrease in blood sugar (HbA1c)
◯ Improvement in metabolic syndrome
◯ Decrease in psychological issues or sequelae such as depression
◯ Prevention of complications such as diabetic foot syndrome and CHD
◯ Reduced complications such as hypoglycemia
◯ Avoidance of treatment escalation, such as insulin therapy
◯ Increased mobility
◯ Full recovery
◯ Other: _____

15. If you look at your previous experience with DHAs: What should be further improved in the context of DHAs, what would you like to see? (Please provide your critical feedback here.)

_____

_____

_____

16. Assuming that the points you stated were implemented: Under these conditions, would you be willing to take DHAs into account in patient care more than before?

◯ Yes, significantly more ◯ Yes, slightly more ◯ No ◯ I did not provide any wishes or suggestions

⇨ Please go directly to question 18

17. You stated that you have not yet used DHAs. In which of the following application areas could you imagine using DHAs in the future?

	I can imagine that very well	I can imagine that rather good	I can hardly imagine that or not at all
Prevention, e.g. self-monitoring of risk factors (weight, blood pressure, blood sugar, etc.) or health data (steps taken, amount drunk, diet, etc.)	◯	◯	◯
Monitoring and treatment of chronic diseases (diabetes, asthma, pain, etc.)	◯	◯	◯
Lifestyle, adherence to a health-promoting lifestyle (diet, smoking, psyche, etc.)	◯	◯	◯
Support for physical measures (movement exercises, etc.)	◯	◯	◯
Reminder to take medication regularly, reminder of vaccination and preventative care appointments	◯	◯	◯

18. **In your opinion, what does a DHAs have to fulfill in order for you to recommend these to patients? What is particularly important to you? Please name 1-5 criteria.**

_____

_____

19. **What would you say: How many of your patients use health apps and/or other digital tools for health prevention or disease management, at least temporarily?**

◯ Less than 5% ◯ 5-10% ◯ 10-15% ◯ 15-20% ◯ 20-25% ◯ More than 25% ◯ I do not know

20. **If you look at your patient population as a whole: How many patients do you estimate would be fundamentally interested in using DHAs for prevention or disease management?**

ca. _____ %

21. **How often has it happened that patients have asked you about DHAs?**

◯ Often ◯ Occasionally ◯ Rarely ◯ Never

22. **In your opinion, is it okay for doctors to rely on data collected from patients using health apps when planning a therapy, or do you think that such data should be viewed critically for therapy planning?**

◯ It is okay ◯ It should be viewed critically ◯ Hard to say, undecided

23. **How often do you search for information about DHAs, health apps and/or other digital tools?**

◯ Often ◯ Occasionally ◯ Rarely ◯ Never => Please go directly to question 25

24. **Which sources (e.g. websites) do you use to find out more about DHAs, health apps and/or other digital tools?**

_____

_____

25. **How do you rate your knowledge or competence when it comes to overviewing the range of available health apps and other digital tools?**

◯ Very good ◯ Rather good ◯ Rather bad ◯ Very bad

26. How do you rate your knowledge or competence when it comes to distinguishing good from bad health apps?

◯ Very good ◯ Rather good ◯ Rather bad ◯ Very bad

27. How do you rate your knowledge or competence when it comes to advising patients on health apps and other digital tools, for example to support prevention and/or therapy?

◯ Very good ◯ Rather good ◯ Rather bad ◯ Very bad

To conclude this questionnaire, we'd like you to provide us with a few statistics. As with the rest of this survey, this data will naturally be treated as strictly confidential and anonymised.

Gender:

◯ Male ◯ Female ◯ Other

Your **age**: _____

Where is your practice located? In a town/city with…

◯ more than 100,000 ◯ 20,000 to 100,000 ◯ 5,000 to 20,000 ◯ fewer than 5,000 residents

Which practice type most accurately describes your practice?

◯ Single-handed practice (you are the only GP) ◯ Single-handed practice employing other doctors
◯ Group practice ◯ Primary care network ◯ Other

How many patients does your practice treat on a quarterly basis?

◯ 500–750 ◯ 751–1000 ◯ 1001–1500 ◯ 1501–2000 ◯ More than 2000

Thank you for taking part!

Is there anything else you'd like to say?
Please use this space for feedback, comments and criticism.

_____

_____