MEDICAL APPS – HARNESSING THEIR HEALTHCARE POTENTIAL

There are now hundreds of medical apps for smartphones that make healthcare provision easier and more transparent – from blood glucose trackers, and heart rate monitors to apps that will test your vision. They can help patients – for example by reminding them to take their medication – and thereby complement treatment regimes. But in order to avoid undesirable side effects medical apps have to be properly used and monitored.

Health apps in the

Fitness/active

pursuits

Lifestyle

Diet

narrower sense

In 2015, the German government passed the E-Health Act in order to accelerate the digitalisation of healthcare provision. However, Germany is still lagging behind when it comes to this important innovation. It still lacks a functioning digital platform that doctors and health insurance providers can use to exchange patient data securely and in compliance with data protection laws. At the same time, more and more private-sector providers are offering health and medical apps. Many of these apps can improve the treatment and health of patients, but are not deemed part of standard care. That means they will rarely be prescribed by doctors nor paid for through the public health service. This is partly because the market for these apps is opaque and unregulated. Unless they have been approved as a medical device, which has happened only rarely thus far, the apps are not subject to checks against a standardised set of quality criteria.

The potential offered by medical apps has not yet been sufficiently harnessed. Legislators and the statutory health insurance providers need to show a greater level of commitment so that patients can benefit from high-quality offerings.

Data sharing apps

Provide access to

data (e.g. electronic health files) or allow patients

to feed in medical

data that they ge-

nerate themselves

Medical apps

Diagnosis

Treatment

For patients

and/or doctors

APPS FOR HEALTH

Health apps in the wider sense are all apps that are related to health, from diet and fitness apps through to apps for the treatment of chronic illnesses.

Source: Freiburg University Hospital, clinical studies centre, 'Gesundheits- und Versorgungs-Apps – Hintergründe zu deren Entwicklung und Einsatz' ('Health and data sharing apps – backgrounds to their development and use'), p. 6–10

··· Ż VZBV'S POSITION

Mandatory approval as a medical device: Sensible medical apps can supplement and improve the day-today provision of healthcare in Germany. In order for this to work, they have to be prescribed by doctors, reimbursed universally by the statutory health insurance, and be subject to approval as a medical device. The approval process could be carried out easily by an official authority that would test the medical apps for medical efficacy, technical performance and compliance with quality standards and data protection laws.

Central website for full transparency: Consumers must have access to a national website that tells them which apps have been approved as medical devices, what benefits these apps offer and which health insurance providers reimburse them. Such a website could also enable consumers to access their own medical data.

Greater focus on patients' interests: When consumers use medical apps, they must also be able to access their medical data via the app and determine who else has access to it. Consumers must have the option of refusing the use of medical apps. Greater focus should be placed on patients' interests at the development stage of apps.

verbraucherzentrale Bundesverband

FACTS AND FIGURES

Even if there is no definitive definition for a health app, a medical product or a medical app, the following distinction can be made. Health apps are generally aimed at healthy users who are looking for help in their efforts to lead a healthy lifestyle. Medical apps are for patients who are looking for a digital aid to help them cope better with day-to-day living, for example if they have a chronic illness. Both can be placed on the market as a medical device if they can be used to prevent, treat or diagnose illnesses and if this has been verified by an EU conformity assessment. These apps must bear a CE mark. So far, only ten out of a total of 7,500 German-language health and medical apps have been approved as medical devices.¹

The "Initiative Präventionspartner" has tested 20 apps for their suitability as practical aids for healthcare provision. The result: Almost one in two apps tested offers a function that can remind the user about vaccination and medical appointments or to take medication. One in five apps visualises the results that it generates, showing, for example, how people's BMI or blood pressure has changed over a particular period.²

According to a study conducted by research-2guidance in 2015, apps make up 12 per cent of the digital services that are used in the context of healthcare provision for chronic illnesses. Obesity apps are particularly prevalent (29 per cent), as are apps for diabetics (20 per cent).³

A survey by Forsa reveals that 82 per cent of consumers are somewhat or even very concerned that data relating to their health could be accessed by unauthorised parties.⁴

***** PREVENTING EMERGENCIES WITH A SMARTPHONE**



It wasn't so long ago that the now 15-year-old Henry had to carry around a small notebook everywhere he went. Keeping proper records is key for the treatment of his haemophilia. If a bleeding occurs he administers a preparation containing the coagulants that he is unable to produce himself. He has to record the units that he injects and how he feels afterwards in exact detail in his book. For a number of years now, the teenager has been able to treat himself in this way. However, he often forgot the book or made entries only half-heartedly. In addition, his doctor only got to see the information it contained every couple of months or so. All this could have had fatal consequences. In the worst-case scenario a dangerous case of gastric bleeding could have been completely overlooked.

Everyday assistance for the chronically ill

There's no danger of that happening any more, because Henry now uses a medical app to communicate automatically with his doctor. Instead of writing in a notebook, Henry enters all the data into an app. He has his smartphone with him all the time anyway. By periodically monitoring the data from the app, Henry's doctor is able to tell when and where Henry's bleedings occurred and what his blood values are. If there are any anomalies, he picks up the phone and tells Henry or his parents. For Henry this means fewer emergency situations and less time dealing with his illness. The doctor, meanwhile, is happy that he has enhanced the therapy. He wants telemedical care for the chronically ill to be used more widely and for the costs of the app to be paid for by health insurance providers.

1 https://www.healthon.de/de/2016/03/10/gesundheits-medizin-apps-appsalsmedizinproduktdefinition-relevanz

4 Forsa survey, Große Sorgen um Gesundheitsdaten' (Big concerns about health data) commissioned by the Federation of German Consumer Organisations (vzbv), April 2015, http://www.vzbv.de/pressemitteilung/umfrage-verbraucher-sorgen-sich-um-resundheitsdaten

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^{2 ,}Gesundheits- und Vorsorge-Apps. Hintergründe zu deren Entwicklung und Einsatz⁴ (JHealth and healthcare apps – backgrounds to their development and use⁹), Freiburg University Hospital, 2015, page 54, https://www.tk.de/centaurus/servlet/contentblob/ 724464/Datei/143235/Studie-Gesundheits-und-Versorgungs-Apps.pdf

³ Chancen und Risiken von Gesundheits-Apps? (Opportunities and risks of healthapps?) (CHARISMHA), published by Hannover Medical School, 2016, page 69, http://www.bmg.bund.de/fileadmin/dateien/Downloads/A/App-Studie/CHARISMHA_ gesamt_V.01.3-20160424.pdf