

# ANNEX To the ESIP position paper on digital health<sup>1</sup>

## Example of actions from social insurers in the field of digital health

### Communications

Organisation Country	Digital health solution	Stage of development	Financing
Main Association of Social Security Institutions (HVB)  Austria	eSocialVersicherung  Portal of 80 different websites offering information and online services for insured people, healthcare providers and other partners	Already fully operational and available online. Added value measured through usage statistics, active user feedback, hotline, surveys	Financed by national social security institutions

#### Benefits for the user

- Electronic services and information available 24/7
- No need to go to local offices
- Accessible to all people with active social insurance in Austria
- Uses digital ID for registration

More information: [www.sozialversicherung.at](http://www.sozialversicherung.at)

Organisation Country	Digital health solution	Stage of development	Financing
Main Association of Social Security Institutions (HVB)  Austria	e-Card system  Innovative approach to health management in medium-sized companies	System rolled out 14 years ago and operational since then Evaluated with usage statistics, user feedback and surveys	Developed by the national health insurance institutions

#### Benefits for the user

- Efficient electronic processes between healthcare providers and national health insurance institutions

More information: [www.sozialversicherung.at](http://www.sozialversicherung.at) or [www.chipkarte.at](http://www.chipkarte.at)

<sup>1</sup> The Data provided in this document is from 2018.

Organisation Country	Digital health solution	Stage of development	Financing
National Healthcare Institute  The Netherlands	Zorginzicht website  Information on guidelines and quality indicators Public data on the quality of health care	Website already accessible Information on some domains of healthcare insurance still to be provided	Financed by the Ministry of Health

#### Benefits for the user

- Overview for healthcare professionals of relevant guidelines, quality indicators, information standards and best practices which meet the established criteria and are therefore authorized by patient organisations, health care providers and health care insurers
- Information to users on the quality of healthcare and the organisation of health systems

More information: [www.zorginzicht.nl](http://www.zorginzicht.nl)

Organisation Country	Digital health solution	Stage of development	Financing
French National Health Insurance Fund (CNAM)  France	Dossier Médical Partagé  Shared Individual eHealth Record  Electronic storage of patients' health records with patient control over who has access to the data	Nationwide implementation has started since October 2018	Financed by the National Health Insurance

#### Benefits for the user

For the insured person it offers the possibility to:

- easily share his/her medical record with a chosen healthcare professional
- Find his personal health history in a single place
- Control who accesses his own record.

For the physician, it enables a more precise and efficient medical follow-up and lowers the risk of duplications of prescription (examinations, medicines).

More information: [www.dmp.fr](http://www.dmp.fr) or <https://www.ameli.fr/assure/actualites/dossier-medical-partage-dmp-la-memoire-de-votre-sante>

Organisation Country	Digital health solution	Stage of development	Financing
DAK-Gesundheit  Germany	<p>Electronic patient record: Vivy</p> <p>Vivy is a digital health assistant app where patients can keep their health record.</p> <p>Vivy app provides patients with a complete overview of their medical data and documents. User is in direct contact with physicians and also receive an integrated health and fitness application.</p> <p>Focus is always customer oriented, ensuring less bureaucracy for them and making a real difference in life of Vivy users.</p>	<p>Developed by a start up in Berlin: Vivy GmbH</p> <p>Vivy GmbH won in spring 2018 an European tender issued by BITMARCK, a full service provider for more than 80 health insurance companies</p> <p>In summer 2018 Vivy started its service in Germany for potential 20 million insured persons</p>	<p>Financed by DAK-Gesundheit for their insured persons according to §68 SGB V</p>

#### Benefits for the user

- overview of their medical data and documents
- direct contact with physicians
- sharing medical documents with physicians
- integrated health and fitness application

More information: [www.dak.de](http://www.dak.de)

Organisation Country	Digital health solution	Stage of development	Financing
NHS England United Kingdom	<p>Local Health and Care Records Exemplars (LHCRE)</p> <p>Regional collaboration across health, care &amp; local authorities on shared health and care records</p> <p>Aim to design shared records for improving &amp; coordinating individual care: health and care professionals looking after an individual can access the right information, at the right time, regardless of the place of care (at GP, hospital, community hospital or even at home). LCRE will demonstrate how information can be shared safely and securely, and for what purposes, across different places of care within a region but for many people (in the millions). The five first-wave LHCRE sites are <a href="#">Greater Manchester</a>, <a href="#">Wessex and One London</a>, plus <a href="#">Thames Valley and Yorkshire and Humber</a>.</p>	<p>5 LHCRE are being rolled out and are expected to deliver a blueprint with standards and best practice for other regions across the UK.</p> <p>First focus: to create integrated health and care records for individual care. Other purpose: the 5 regions are also considering how shared health and care records could be used to support purposes such as improving health and services through research and planning.</p>	<p>Each LHCRE received up to 7.5 million GBPs from NHS England and will be expected to provide blueprints for other regions</p>

#### Benefits for the user

There are already many local integrated health and care records across England (e.g. the Dorset Care Record and Leeds Care Record) but, while creating better joined up care for hundreds of thousands of people, they are being designed and delivered independently of each other. The lack of common standards means there is a danger of developing new information silos that can't support care when an individual moves between areas, or when someone's needs might be best served at a wider geographical level, e.g. at a national centre for a rare disease. Together, the LHCRE will form the blueprints to explore how to extend local initiatives to a wider region.

More information:

<https://understandingpatientdata.org.uk/news/local-health-and-care-record-exemplars-announced>

<https://www.england.nhs.uk/2018/05/new-local-health-and-care-partnerships-could-save-lives/>

Organisation Country	Digital health solution	Stage of development	Financing
French National Health Insurance Fund (CNAM)  France	E-prescription software  Software allowing healthcare professionals to prescribe electronically to patients	E-prescription in France will begin in mid-2019 with drugs in pharmacies and will be widespread in health institutions in 2020	Financed by the National Health Insurance

#### Benefits for the user

E-prescription can support the activity of the healthcare professional and has the potential to improve the quality of care by

- Simplifying and securing the prescription pathway
- Easing and supporting exchanges between physicians
- Fostering coordination of care
- Making reimbursements more reliable
- Reducing the risk of falsification

More information: [http://www.securite-sociale.fr/IMG/pdf/cog\\_cnam20182022.pdf](http://www.securite-sociale.fr/IMG/pdf/cog_cnam20182022.pdf)

## Communications and prevention

Organisation Country	Digital health solution	Stage of development	Financing
French National Health Insurance Fund (CNAM)  France	Compte Améli  Personal account for all insured persons registered into the French national health insurance system.	Set up in 2007  Since 2007: <a href="#">31,000 000 insured people</a> have registered  Since 2013 and 2016: accessible on Appstore and Google Play	Financed and developed by national social security institutions, with dedicated staff

### Benefits for the user

- Vast amount of information on details and amounts of reimbursements, ordering of national and European Health insurance card, tracking of administrative procedures, and information on health promotion
- Allowing insured persons to be more autonomous, and saving time for insured persons and health insurance staff, allowing to focus more time on more complex issues
- Increasing awareness of insured persons in the field of prevention

More information: [https://assure.ameli.fr/PortailAS/appmanager/PortailAS/assure?\\_somt=true](https://assure.ameli.fr/PortailAS/appmanager/PortailAS/assure?_somt=true)

Organisation Country	Digital health solution	Stage of development	Financing
AOK-Bundesverband GBR  Germany	BGM-Wissensbilanz Innovative approach to health management: Combination of a mobile app for employees and health management workshops	The concept has won the AOK-Leonardo, the Health Award for Digital Prevention and is being promoted. A nationwide implementation is imminent.	Funded by the Prevention Budget for Occupational Health Promotion

### Benefits for the user

- Improvement of inclusion of all employees of medium-sized companies
- App-bound individual documentation of experiences combined with basic information on health promoting measures for realistic and operationally implementable, self-developed measures
- The jointly designed health management policy, through interactive workshops is highly accepted and integrated within a few weeks into the existing processes of the company, from all sectors.
- Contribution to the reduction of health stresses and frequency of illness in the company, and increase in productivity

More information: <http://www.aok-leonardo.de/wettbewerb-2014/preisverleihung-2014/>

Organisation Country	Digital health solution	Stage of development	Financing
AOK-Bundesverband GBR  Germany	AOK Fact boxes  Complex medical issues presented simply, with the best available evidence, benefits and risks of different medical options  Topics: Individual health services (IGeL), Vaccinations, Dietary supplements, Drugs, Sickness Insurance Benefits and other topics (Treatment error, Organ donation card, Care advice)	Regular operation since 2018 after the development of 20 fact boxes Goal of developing 10 fact boxes each year on medical treatments and services as well as information on delivery	Fact boxes are an element for prevention and fall under the legal mandate through the Social Security Statutes to uphold prevention services. The financing comes from members' contributions.

#### Benefits for the user

- Improving health literacy of the public, including people with lower levels of education e.g. with functional illiteracy, through the use of short films
- Give a more balanced picture than textual presentations
- Facilitate the simultaneous comparison of information about options
- Improve people's ability to extract relevant information and understand it using graphical elements as well as increasing their confidence in information
- Improve selection of a superior medication option based on benefits and harms
- Present simple depictions in comparison to or exceeding detailed tools
- Increase user knowledge after one-time reading in comparison to the standard information that is disseminated.

More information: <http://aok-bv.de/engagement/gesundheitskompetenz/faktenboxen/> and <http://www.bmj.com/content/357/bmj.j2460>

## Diagnosis and rehabilitation

Organisation Country	Digital health solution	Stage of development	Financing
DRV-Bund German Pensions Insurance  Germany	Reha Jetzt  A tool for self- assessment of rehabilitation needs  Access to a validated screening questionnaire and all necessary information about medical rehabilitation and application for rehabilitation	Website already accessible to all insured persons in Germany Ongoing research project on whether the website can increase applications for medical rehabilitation	Developed as part of a research project by the University of Lübeck (Prof. Matthias Bethge) Financed by the German Pensions Insurance

### Benefits for the user

- Improving health literacy of the public, including people with lower levels of education e.g. with functional illiteracy, through the use of videos
- Access to telemedicine procedures reimbursed by the statutory health insurance: teleconsultation of a patient with a practitioner, tele appraisal allowing a practitioner to ask another for advice and medical remote monitoring to allow a practitioner to remotely interpret data

More information: [www.reha-jetzt.de](http://www.reha-jetzt.de)



## Diagnosis and treatment

Organisation Country	Digital health solution	Stage of development	Financing
AOK Bayern  Germany	<p>TEMPiS</p> <p>Telemedical project for integrated stroke care in South East Bavaria</p> <p>More than 6,000 stroke patients treated annually in 20 regional clinics Providing the rural population with effective and qualified stroke treatment</p> <p>If a patient with suspected stroke arrives at one of the 20 TEMPiS cooperation clinics, a stroke expert will be connected to the emergency room by videoconference as support for the local doctor, interviewing and examining the patient directly. Examination results of the patient are transferred to the stroke centre within seconds for evaluation.</p>	<p>Pilot project launched in February 2003</p> <p>Since January 2006, part of the standard care and as a "telemedical project" 3 further regional telemedicine networks have been set up in Bavaria on the basis of this network model: STENO - stroke network with telemedicine in northern Bavaria, NEVAS - neurovascular care network southwest Bavaria and TRANSIT-Stroke - Transregional network for stroke intervention with telemedicine</p>	<p>Financed by the German health insurance institutions</p>

### Benefits for the user

- Significantly faster treatment of stroke patients
- Improvement of the whole stroke therapy and outcomes
- More frequent / earlier identification of the causes of stroke-like disease patterns and special stroke sub-types requiring surgical or interventional treatment
- Prognosis improvement for mortality, nursing home care and severe disability due to stroke
- Reduction of the likelihood of poor treatment outcomes by 37% without increasing hospital transfers while significantly reducing hospitalization
- Reduction of care level classifications
- Highly qualified care of stroke patients
- Expcted reduction of overall health economic costs through cost-effective networking of different levels of care

More information: [www.tempis.de](http://www.tempis.de)

Organisation Country	Digital health solution	Stage of development	Financing
French National Health Insurance Fund (CNAM)  France	<p>Telemedicine</p> <p>Reimbursement of telemedicine consultations</p> <p>Based on a secured video transmission system, any physician is now able to propose teleconsultations to his patients when deemed necessary</p> <p>Tele expertise will be launched to allow doctors to remotely request a colleague's advice on a particular medical situation, because of his/her academic background or his/her specific competence</p>	<p>A nationwide law for the reimbursement of telemedicine consultations was adopted early 2018, it has officially started on the 15th of September 2018. The national health insurance reimburses these consultations under certain conditions. Tele-expertise starts in February 2019.</p>	<p>Financed by the National Health Insurance</p>

#### Benefits for the user

- Improving health literacy of the public, including people with lower levels of education e.g. with functional illiteracy, through the use of videos
- Access to telemedicine procedures reimbursed by the statutory health insurance: teleconsultation of a patient with a practitioner, tele appraisal allowing a practitioner to ask another for advice and medical remote monitoring to allow a practitioner to remotely interpret data

More information: <https://www.ameli.fr/espace-presse/communiqués-et-dossiers-de-presse/les-derniers-communiqués-de-la-caisse-nationale/detail-d-un-communiqué/3618.php> or <https://solidarites-sante.gouv.fr/soins-et-maladies/prises-en-charge-specialisees/telemedecine/article/la-telemedecine>

## Treatment and care

Organisation Country	Digital health solution	Stage of development	Financing
Main Association of Austrian Social Security Institutions  Austria	<p>e-Medikation</p> <p>Electronic storage of a patient's prescribed and dispensed medication (for 1 year)</p> <p>Data on prescribed medicines and over-the-counter drugs (when relevant for interactions)</p> <p>Patients can decide which data is saved and who can access it, have a possibility to follow the log attached to every prescription and see who and when has accessed the data</p> <p>Doctors, pharmacies, hospitals and patients themselves (via ELGA Citizen Portal) can access the data is allowed only when the contact with the patient has been confirmed by using the health insurance card, the e-card (exception: hospital)</p>	<p>Pilot project (3 test regions) in 2011 which has been scientifically evaluated. According to the findings of this evaluation the final application has been developed.</p> <p>Pilot in 2016, right now rollout is being prepared and shall start in February 2018 (a legal regulation is in preparation).</p>	Financed by the Austrian government and social security institutions

### Benefits for the user

- Allows evaluation of the interaction of pharmaceuticals prescribed by different doctors, and prevent multiple prescriptions
- Availability of standardised medication data (IHE Standards)
- Nationwide connection through the ELGA infrastructure and access to a full medication list for all the involved health professionals
- Patient empowerment through the ELGA Citizen Portal

More information:

<http://www.chipkarte.at/portal27/ecardportal/content?contentid=10007.678580&viewmode=content> and <https://www.gesundheit.gv.at/elga/was-ist-elga/e-medikation>

## Rehabilitation

Organisation Country	Digital health solution	Stage of development	Financing
AOK- Bundesverband  Germany	<p>Digitrain app</p> <p>Digital training programme to help patients with backpain to ensure the success of their therapy after rehabilitation. An individual training program is provided for home, and an interactive motivating trainer (avatar). Within the framework of a scientific evaluation, acceptance and usability, quality of life as well as important parameters of the physical and psychosocial health are to be examined.</p>	<p>In the case of positive evaluation results, the digital training program "DigiTrain" is also to be used in further rehabilitation clinics. The program could be extended to other indications (e.g., arthrosis, rheumatic diseases) and indicative areas (e.g., neurology, cardiology).</p>	<p>The project DigiTrain was developed by Fraunhofer Fokcus, Marcus Klinik GmbH &amp; Co. KG, Bad Driburg, AOK NordWest and the AOK Federal Association.</p>

### Benefits for the user

- Follow-up database for physicians and therapists to check whether suitable rehab aftercare is available for rehabilitants.
- Information to insured persons about the aftercare services in their home region in a user-friendly web portal
- Provision of crucial information for the preparation and recommendation of rehabilitation aftercare

More information: [https://www.innovationszentrum-telehealth.de/go/telehealth\\_digitrain](https://www.innovationszentrum-telehealth.de/go/telehealth_digitrain)

Organisation Country	Digital health solution	Stage of development	Financing
German Federal Pension Insurance  Germany	Nachderreha.de  Website with an integrated database for rehabilitation aftercare, allowing users to search for aftercare services. It includes care providers' profile descriptions (contact, equipment, appointments). Data is collected via a self-report portal.	The website was released in December 2016 and can be used by rehabilitation facilities and insured persons. It comprises more than 2000 entries of rehabilitation aftercare services in Germany.	The website was established through a research project (2011-2014) funded by the German Pension insurance. With further funding (project 2015-2016), the database was expanded, optimized and published. The current project is to record all rehabilitation aftercare offers with the database.

#### Benefits for the user

- Follow-up database for physicians and therapists to check whether suitable rehab aftercare is available for rehabilitants.
- Information to insured persons about the aftercare services in their home region in a user-friendly web portal
- Provision of crucial information for the preparation and recommendation of rehabilitation aftercare

More information:

[www.nachderreha.de](http://www.nachderreha.de) and [http://www.deutsche-  
rentenversicherung.de/Allgemein/de/Inhalt/3\\_Infos\\_fuer\\_Experten/01\\_sozialmedizin\\_forschung/03\\_reha\\_wissenschaftern/03a\\_forschungsprojekte/projekte/laufend/einzelprojekte\\_AVENA.html](http://www.deutsche-<br/>rentenversicherung.de/Allgemein/de/Inhalt/3_Infos_fuer_Experten/01_sozialmedizin_forschung/03_reha_wissenschaftern/03a_forschungsprojekte/projekte/laufend/einzelprojekte_AVENA.html) and [www.reha-nachsorge-dr.de](http://www.reha-nachsorge-dr.de)

## Long-term care

Organisation Country	Digital health solution	Stage of development	Financing
AOK Nordost  Germany	<p>ESYSTA®-system</p> <p>Telemonitoring and treatment through the wireless transfer of patient data from home to a telemedical care center.</p> <p>Transfer of patient data from a glucometer and a special insulin-pen via a "switchboard" to a telemedical care center, monitoring blood glucose level and dose of insulin during injection. In addition, technical coaching of patients via telephone securing continuous recording of data, hotline for patients and continuous case reporting to treating physicians as well as patients based on an electronic medical record.</p>	<p>The solution targets insulin-dependent diabetics with a problematic metabolism and a Hb1c &gt; 8,0% in at least two quarters of the last 12 month, and who fulfil at least one of the following criteria: daily doses of insulin of at least 40 units, or BMI &gt; 30, or at least one hospitalisation because of diabetes in the last 12-month s. It has been rolled out and is available to all insured with diabetes and the fore-mentioned criteria in the states of Berlin, Brandenburg and Mecklenburg-West Pomerania.</p>	<p>The product is reimbursed as a part of the payment for medical treatment of each patient.</p>

### Benefits for the user

- Stabilization of patients' metabolism
- Lowering of Hb1c-indicator level and optimizing of therapy through better data
- Prevention of secondary diseases (e.g. diabetic foot syndrome)

More information: <https://www.emperra.com/en/>

## Monitoring

Organisation Country	Digital health solution	Stage of development	Financing
AOK- Nordost  Germany	<p>Plefdge@Quartier</p> <p>In cooperation with GESOBAU AG, thirty flats were equipped with various technical aids, to support people in need of nursing care living autonomously in their homes.</p> <p>Some aids focus on the prevention of falls, e.g. motion sensors and light strips from the bedroom to the bathroom are installed to recognize critical situations and alert a predetermined person. A key card automatically shuts down the stove, lights and sockets when removed. A special doorbell sends visual signals for people with hearing impairment.</p>	<p>Pflege@Quartier is a three-year model projekt funded by the German National Association of Statutory Health Insurance Funds (GKV-Spitzenverband). By the end of the year thirty flats in the north of Berlin are equipped.</p> <p>The participants were involved from the very beginning of the project until the installation of the technical assistance systems. In qualitative interviews they were asked where support is needed, to what extent they are interested in technology and about their willingness to pay. They will be subject for continuous improvement measures during the whole lifespan of the project.</p>	<p>The model project is funded by the German National Association of Statutory Health Insurance Funds (GKV-Spitzenverband) and partly financed by the GESOBAU AG.</p>

### Benefits for the user

- Joint project of different industries working together for the same aim: to support care-dependent people to be able to live as long as possible in their familiar environment.

More information: <https://www.gesobau.de/mieterinfos/mieterservice/pflege-quartier/>