

## PRESS RELEASE

### ***App-to-date* hospital – digital solutions that enhance patient safety**

Counting steps, monitoring calories, analysing sleep and optimising breathing: health apps that shall promote general health consciousness and strengthen fitness are popular with Germans. Every second smart phone owner uses at least one of the 259 000 health apps currently available.

Most of the offers are still intended for self-optimisation – only around 20 % of the eHealth solutions are used professionally. Experts like Urs-Vito Albrecht, Hanover Medical School, Germany however, particularly see benefits in medical apps that, for example, improve the care of chronically sick people. In fact, in Germany, 43 % of women and 38 % of men – and counting – suffer from a chronic disease.

Under the supervision of Prof. Klemens Budde, Charité University Medicine in Berlin, Germany has developed a new eHealth approach: the MACSS (Medical Allround-Care Service Solutions) research project offers a digital platform that links chronically sick patients after kidney transplant, registered physicians and the attending clinic to increase the safety of the patient. The improved communication and availability of data already produces benefits and could be a model for digitally supporting other chronically ill patients.

#### **Digital solutions for infection protection**

The BODE SCIENCE CENTER identified the potential that eHealth solutions offer for patient safety at an early stage: already back in 2013, the scientific centre of excellence for hygiene and infection protection of the HARTMANN GROUP in Heidenheim, Germany developed hand hygiene e-learning tools. 97 % of the healthcare workers surveyed in an American study confirmed that e-learning programmes increase hand hygiene compliance. In BODE SCIENCE CENTER-own surveys on its e-learning tools, 93 % of the respondents stated that they could translate the contents of the “5 Moments E-Learning Tool” into practice successfully. 83 % said they could recognise the right moment for hand disinfection. And in hand disinfection, the right indication is the decisive factor for patient safety.

In addition to e-learning applications, the BODE SCIENCE CENTER’s eHealth package also includes apps for observing and evaluating hand hygiene. Just recently, in September 2017, an upgraded version of the observation tool “Observe” was launched. The eHealth application allows the user to observe hand hygiene behaviour, provide feedback and create evaluations, and offers an



interface to the HAND-KISS application of the German National Reference Centre for the Surveillance of Nosocomial Infections (NRZ).

Together with providing feedback, directly observing hand hygiene is considered a crucial element for promoting hand hygiene compliance. The World Health Organization (WHO) regards this measure as “gold standard” and in the past year even enhanced the status of monitoring and feedback with the category “strong recommendation”. In Germany, – as stipulated by the Institute for Quality Assurance and Transparency in Health Care (IQTiG) – healthcare facilities are required to monitor the compliance during postoperative wound management as quality indicator for the prevention of nosocomial infection.

### **Meaningful insights thanks to direct observation**

BODE SCIENCE CENTER’s digital solution for the compliance observation helps clinics implement infection control measures in an easier, more efficient and more contemporary way.

The “Observe” eHealth app cannot only collect an unlimited amount of data used for assessing the hygiene situation. A lot of differing assessment scenarios, for example by indication or professional group, allow to draw a differentiated picture of the hand hygiene status quo. Additionally, the digitisation of the data transmission and evaluation saves time. Experience shows that the digital solution reduces the time needed for data transmission by more than 90 %.

Pilot clinics such as Medizin Campus Bodensee GmbH also appreciate the observation tool’s high data quality, providing a clear picture of the compliance in the wards and valid information for hygiene commissions and the clinic management. Under the professional management of Brigitte Rüstau, Medizin Campus Bodensee GmbH was able to conduct more observations thanks to the BODE SCIENCE CENTER’s eHealth application. So, in addition to the quality, also the quantity of data convinces. The representative data volume contributes to strengthening the importance of hygiene at the institutional level. And the results in a Spanish clinic shows that a multimodal programme including the “Observe” eHealth app can increase hand hygiene compliance directly: the staff’s willingness to perform hand hygiene correctly increased from 38 % to 70 % thanks to the digital observation and evaluation as part of a multimodal programme.

