



### **COMES® - COgnitives ME**dizinisches System

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## **COMES® System, Sensors** and Interfaces

COMES® is a mobile diagnosis and therapy-platform for a healthy and self-determined life. As an intelligent telemedical assistant system accompanies users at any time in any place. A multimodal sensor platform which is able to collect and transport a great number of physiological data as blood pressure, ECG, blood glucose, weight and activity, has been integrated in COMES®. Patient uses commercial medical measuring instruments. These sensors are equipped by a radio module, e.g. Bluetooth or ANT+. Graphical Interfaces are a mobile phone or a Set-Top-Box.



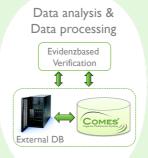
#### **COMES® Medical Call Center**

In collaboration with established partners, COMES® provides competent medical professionals, who give medical advice on demand. In combination with the dialogue-orientated telemedical service center, offers COMES® demonstrably innovative assistance for personalized diagnostic, therapy and assistance regarding all kind of medical issues.



Feedback

Data Mining









# COMES® Trust Center and Data Transfer

Measurements carried out by the patients themselves in their authentic environment are automatically sent via Bluetooth to a mobile end-device and directly and safely transmitted into the COMES® database. As soon as the values are transferred successfully to the smartphone or Set-Top-Box, they will immediately be assigned through the internet, via SOAP (Simple Object Access Protocol), upon the COMES® Trust Center. There, they will be available in a very short term, to further usage for the doctor, the patient himself or an attending relative. A web front end supports the user and display all readings in tabular and graphics.

Online Analytical Processing

#### COMES® Expert System

It organizes the individual feedback through intelligent, context-sensitive, dialogue oriented algorithms and processes. Basis are the regularly taken biomedical data in correlation with external knowledge database. Customized and specific interventions for the

user are made possible. This can simply be information for background or motivation or for the improvement of quality of life. Time series analysis and behaviour management are further tools. The system works as an medical analysis-, rule- and guiding center for individual feedback. In case of need, the patients will get both, enough information and immediate help

COMES® ist eine Idee, Entwicklung und eingetragenes Markenzeichen des Heinz Nixdorf-Lehrstuhls für Medizinische Elektronik der Technischen Universität München

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