



5G for Verticals:  
building and exploiting synergies  
**E-Health**

Adam Wolisz

Professor Emeritus, TU Berlin  
Fellow, Einstein Center Digital Future

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Data Communications and Networking /  
Telekommunikationssysteme (TKN)

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- Discussions with Members of the Medical Application Group at the ECDF

## ■ **First Advice**

- Work accidents / home Injuries
- Health Problems (pain, weakness, ...)

## ■ **Background support**

- For paramedics (first response, transportation)
- Consultation by experts
- Communication support (language, trust)

## ■ **Monitoring / Home assistance**

- Continuous supervision (hypertension, diabetes, oncology, drugs, exercising ...)
- Early symptom detection (Alzheimer, Parkinson)
- Mental health (social binding, Interactive family participation)

# What do e-Health Providers Need?

## ■ **Electronic Patient Record**

- Universally accessible (hospital, bed-side, home, ...)
- Minimal manual feed (e-input by: patient, devices)

## ■ **Audio /Video Communication**

- Basic Audio / Smart phone taken pictures...
- Video- Conferencing
- Ergonomic workplace

## ■ **Tele-monitoring**

- Reading of vitals (gadgets!), reading of home appliances
- Full body view / Movements
- Future: Augmented Reality

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## ■ **Avoid local wires!**

- Wireless measurement of vitals (hospital /home/ outdoors)
- Beyond the bell at the bed (remote contact to patient room)
- Seamless integration: Local wireless - long distance communication

## ■ **Technology: For the physician**

- Stable, high QoE (e.g. Video-Conf.) using VPNs, secure back-end services...
- Integrated software environment (no multiple log-ins, environments)
- Stability /unification of interfaces
- Reduced typing (automatic transfer of information, Tele-scribing?)

- **Training the medical staff!**
  - In usage of the Tele-health platform
  - In remote: examination / support / exercising
  - In legal aspects
  
- **Instrumenting / training the patients**
  - Lending equipment
  - Pre-installed software on tablets / phones
  - Home environment setting / Instrumentation
  
- **It is economy, stupid!**
  - Scope of coverage by insurances
  - Payment for treatment? → **Payment for health!**
  - Anonymized data for research?