eHealth – eCommunication.
A Vision to Overcome the Gap between the Developed and the Underdeveloped World.

Multi-Infrastructure Services for enhanced eHealth delivery
Enabling eHealth Applications for Fixed and Wireless Infrastructures.

Hubert Haag

T · · Systems · Business flexibility

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Setting the scene:

- Socio-demographic challenges and infrastructure prerequisites

Bridging the gap:

- How eCommunication enables eHealth

Embracing the opportunities:

- Enhanced eHealth services by new technology developments

Deutsche Telekom.
CSR and sustainability policy.

- Deutsche Telekom‘s long term goal is to become a sustainable organization in a sustainable society:
  - Environmental friendly
  - Economically viable
  - Socially responsible

Setting the Scene.
The gap between high earning – and mid/low earning countries .

- Climate change
- Socio-demographic developments
- Health care provision
- eCommunication
  - Telecom infrastructure
  - PC and Internet availability and usage

The ‚digital divide' between high- and low/medium earning countries inhibits better eHealth exploitation and standards.

Setting the Scene.
Bridging the gap on the ‘digital divide’.

- Cell phone infrastructure in sub-Sahara counties is soaring
- SMS Health information services are introduced all over Africa
- Cross border tele-medical support for doctors in Panama

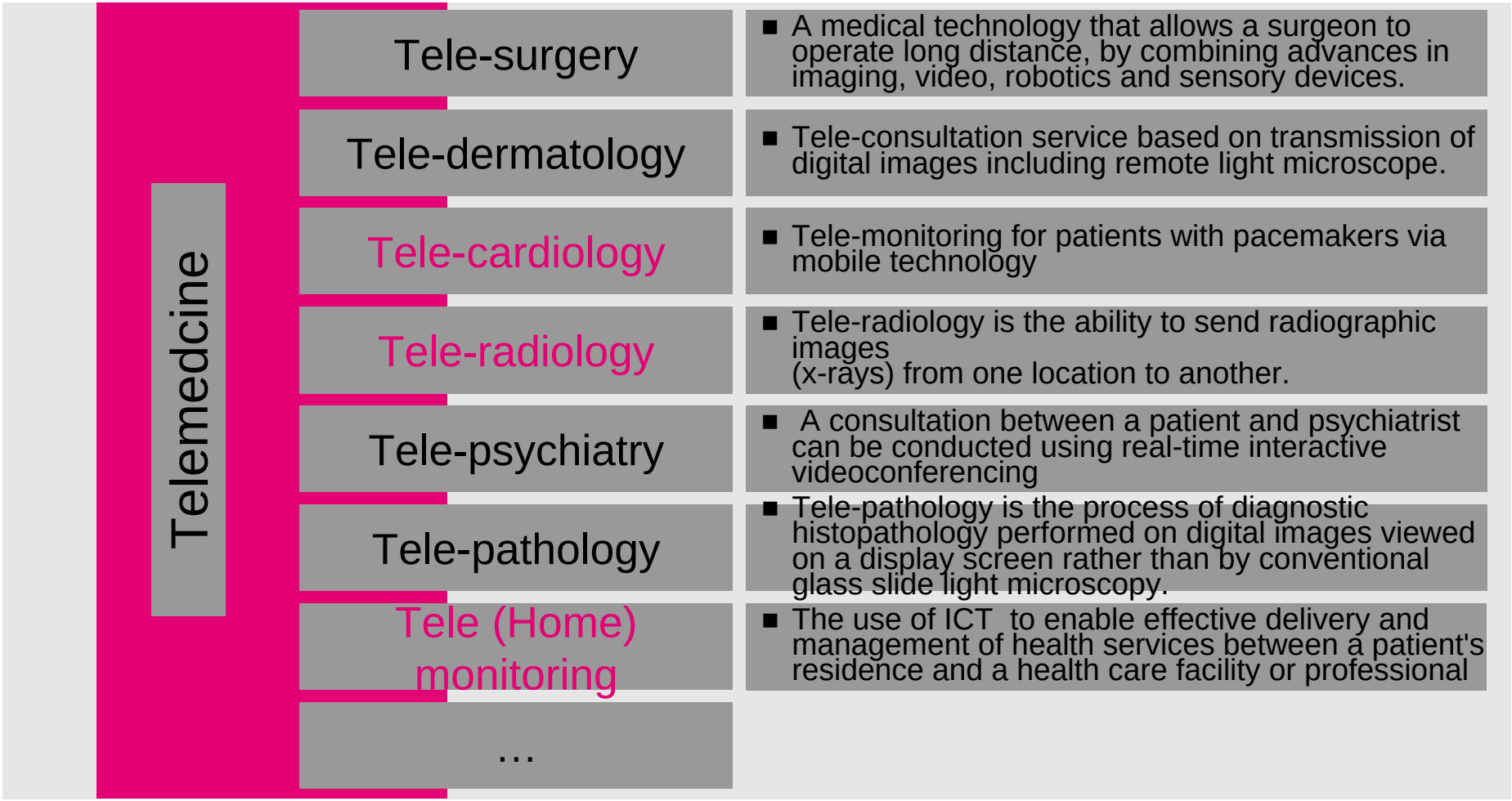
Wireless telecommunication infrastructure will close the ‚digital divide‘, quickly and cost effectively.

Bridging the Gap.
From eCommunication to eHealth.

- Healthcare provision in geographically remote areas
- eHealth provides care in low earning countries in the form of:
  - information , advice, interactive communication
- Tele-diagnostic applications from e.g. one country to another country

- Fixed and cellular systems opening new areas for health provision:
  - health maintenance and disease prevention
  - centralized diagnostic services
  - centralized medical data base

From eCommunication to eHealth.
Sample applications – Strategic plan telemedicine by T-Systems.



Aus: Medizintechnik und Informationstechnologie, TÜV Media, Armin Gärtner 2006

Trends in eHealth.
Technological platforms for new eHealth applications.

- Combinations of fixed-line, wireless and internet technologies are the basis for new eHealth solutions and applications
- Hybrid infrastructures providing platforms for new eHealth services:
  - Tele-consulting services, such as interactive voice communication
  - Tele-treatment, such as exchange of pictures and large volumes of data
- Area of application and its infrastructure requirements:
  - Tele-consultation → low bandwidth, voice based, mobile and land line
  - Tele-treatment → high bandwidth, normally a land line

Embracing Opportunities.
Vision.

- Virtual health care provision helps to improve health standards:
  - access for larger groups of the population
  - wider geographic scope
- Telemedicine is key for health care provisioning in low earning regions

Telecommunication infrastructure and intelligent IT systems provide
sustainable eHealth developments.

Thank you.