


Telehealth

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- Define Telehealth and Telemedicine
 - History of Telehealth
 - Definition
 - Architecture for Telehealth
 - Telehealth vs. Telemedicine

History of Telehealth



Period	Telegraph	Telephone application
1835	Telegraph	Used in the American Civil War to deliver casualty lists and order supplies. Later used to transmit x-ray images.
1876	Telephone	Initially used for voice communication. About 30 years later, used to transmit ECGs and EEGs.
1895	Radio	Used to supply medical advice to seafarers. In 1920 the Seaman's Church Institute of New York provided medical care using radio. The CIRM in Rome has been using radio to provide
Late 1960s	Video/ television	A two-way closed circuit television link was set up between the Nebraska Psychiatric Institute in Omaha and the state mental hospital in Norfolk for educational purposes.
1990s	Videoconferencing	Videoconferencing for health purposes became more common
Mid-1990s	Internet	Use of the internet for health purposes

Telehealth

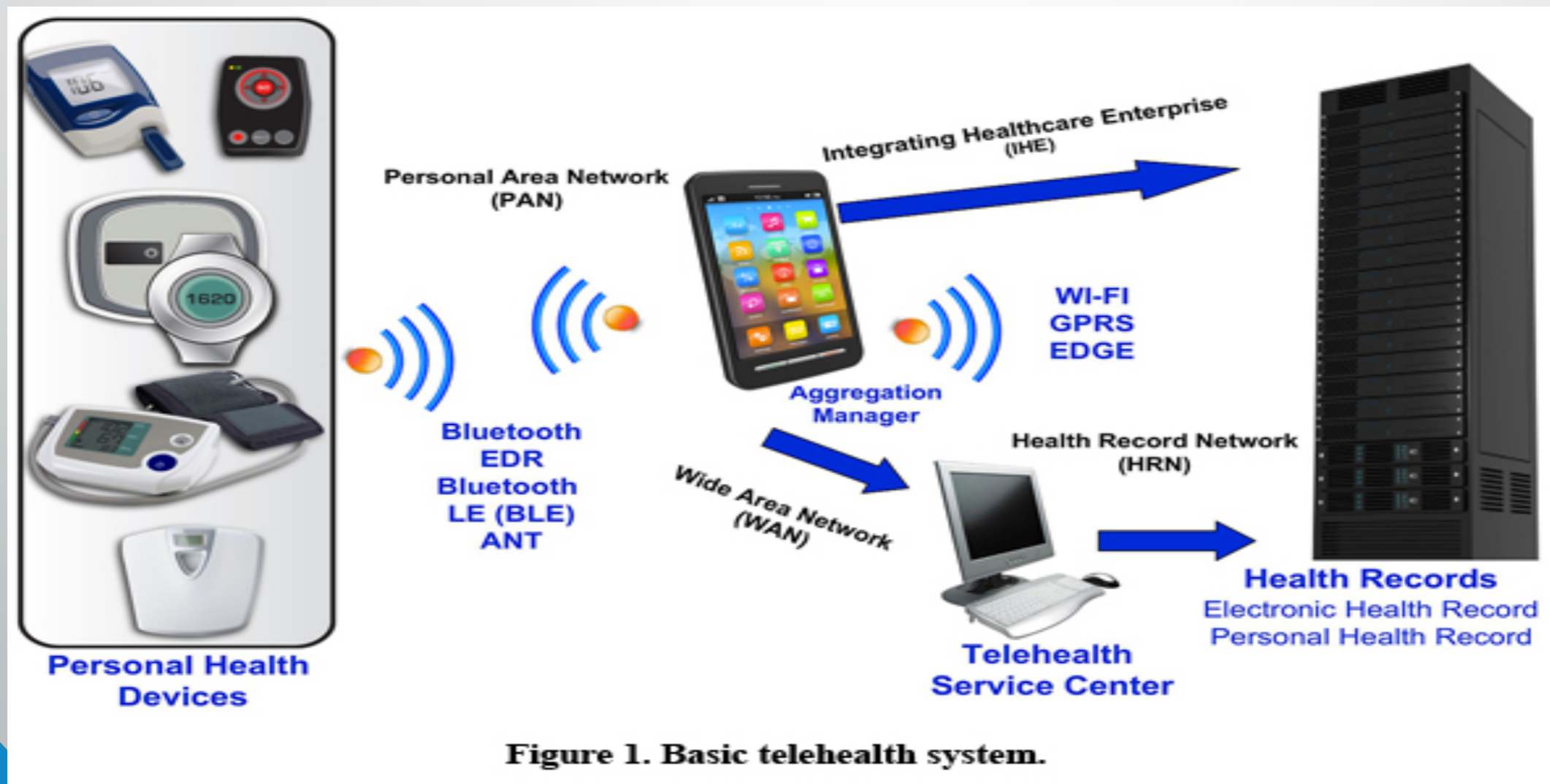
- Telehealth is defined as:
“The delivery of health-related services and information via telecommunications technologies”
- Could be: (nonclinical services)
 - Two healthcare professionals discussing a case over the phone;
 - Using videoconferencing between providers at facilities in two countries

- Telehealth can promote:
 - Patient-provider communication
 - Patient self-management with provider feedback
 - Health literacy
 - Provider-provider consultants



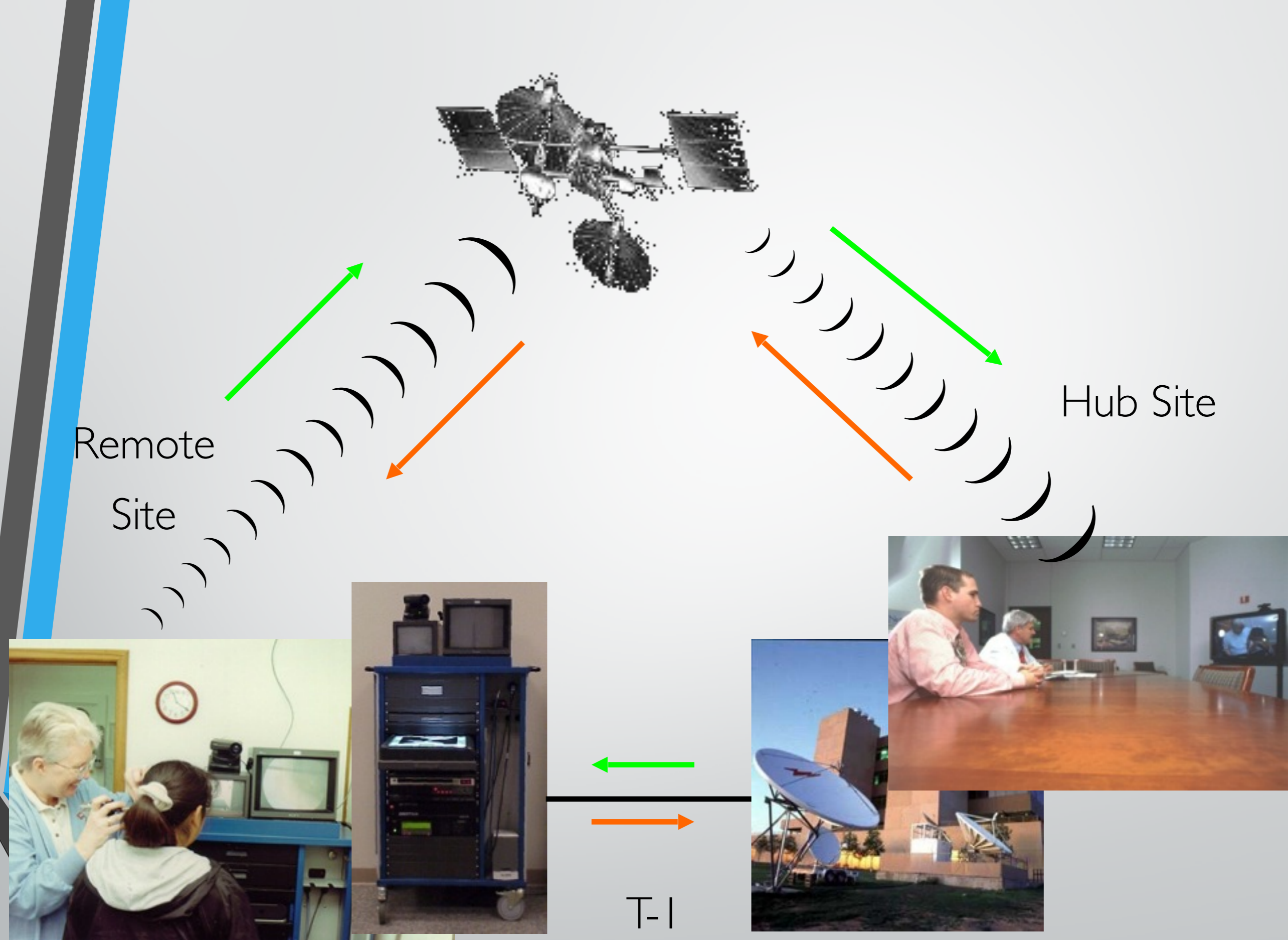
Telehealth System Overview

- Transmits data (Vital Sign) from home to a healthcare professional by use of ICT.



Types of telehealth interaction

- Real-time (for Emergency use)
 - Parties communicate simultaneously via a telecommunication network, also called synchronous or interactive
- Store and forward (Non- Emergency use)
 - Involves non-interactive transmission of information from on site to another.
 - Sometimes referred to as asynchronous or pre-recorded and involves information being captured and then transmitted to the other party for advice, opinion or specialist consultation



Telemedicine

- Telemedicine is defined as:
“the use of electronic information and communication technologies to provide and support health care when distance separates the participants ”
- Combination of:
 - Telecommunications Technology
 - Medicine (clinical services)



Categories of Telemedicine

- Patient Monitoring (Home care)
 - Blood pressure monitors
- Interactive Applications
 - Teleconsulting, Videoconferencing
- Store and forward applications
 - Medical images, lab results

Telehealth vs. Telemedicine

