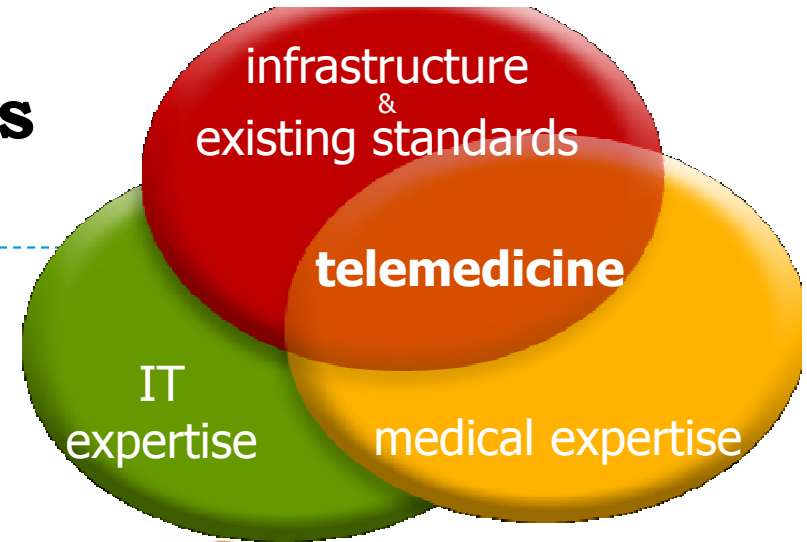


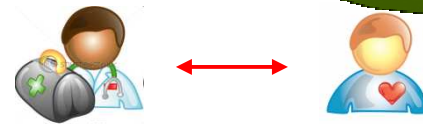
# TeleDICOM – remote medical collaboration

**Łukasz Czekerda**, Department of Computer Science, AGH University  
**Andrzej Gackowski**, The John Paul II Hospital in Kraków

# Context and areas of telemedicine



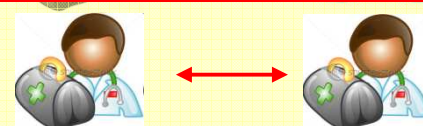
▶ Telediagnosics



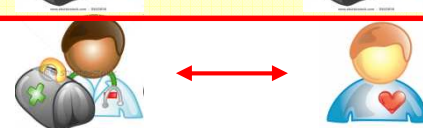
▶ Teletreatment



▶ Teleconsultations



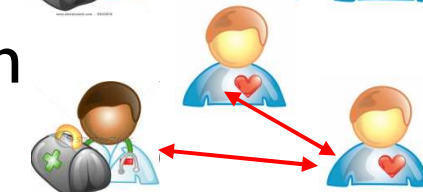
▶ Telemonitoring



▶ Telerehabilitation



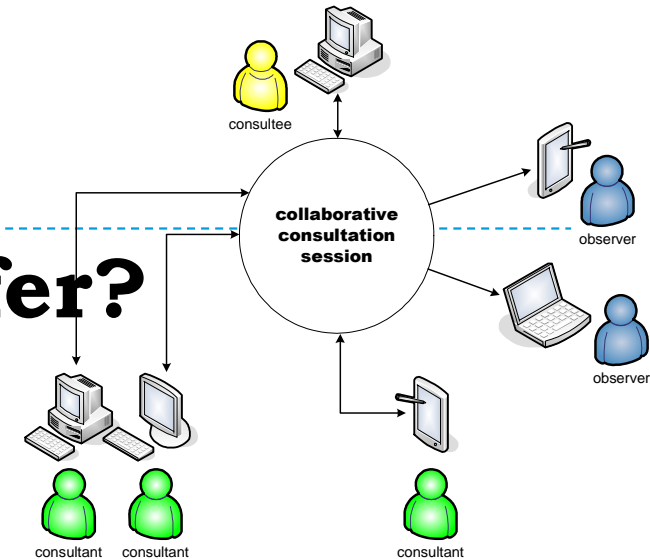
▶ Teleeducation, promotion of a healthy lifestyle



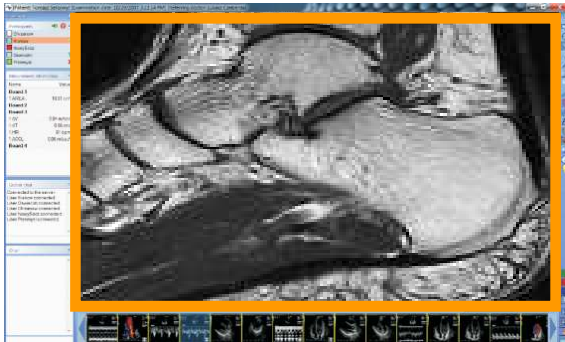
# What we propose?

## What does TeleDICOM offer?

- ▶ **Mobile** teleconsultation service (anytime, anywhere...)
  - ▶ Able to be run on ordinary PC/tablet
    - ▶ Good performance (large images, single consultation: 200-600 MB)
    - ▶ Rich diagnostic functionality
  - ▶ Support for existing standards (DICOM) and guidelines (security, privacy, etc.)
- ▶ **Collaborative** teleconsultation service
  - ▶ Conducting **interactive** medical consultations
  - ▶ Distributed experts' teams – necessary in many cases



# Client application during consultation



- ▶ One or four images
- ▶ Control panels
  - ▶ Navigation panel (*left*)
    - ▶ Participants
    - ▶ Measurements performed
    - ▶ Chat
  - ▶ Toolbar panel (*right*)
    - ▶ Pan, tilt, zoom
    - ▶ Selection and shapes
    - ▶ Specialized tools (Hounsfield, area, volume)
- ▶ File thumbnail list (*bottom*)
- ▶ Context menus and mouse make the interface quite user-friendly

## Possible applications

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- ▶ Regular hospital service – teleconsultations between medicine doctors (including non-interactive ones)
- ▶ Medical conferences and workshops – online discussion with remote experts
- ▶ Education of medicine students
- ▶ Dissemination of expert knowledge and best practices in medicine

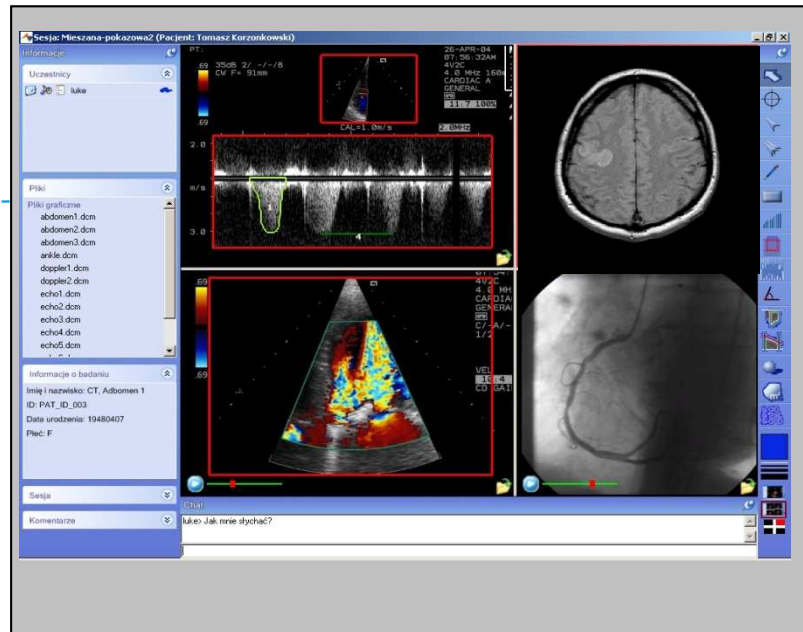
# TeleDICOM in cardiology

ca. 1500-1700 teleconsultations/year

20-25% of operated patients

but

age increasing  
multiple co-morbidities



...

# Cooperation

Krakowski  
Szpital  
Specjalistyczny  
im.  
Jana  
Pawła II



- ▶ TeleDICOM has been implemented in cooperation with specialists from John Paul II Hospital in Kraków
- ▶ TeleDICOM deployments
  - ▶ John Paul II Hospital in Kraków
  - ▶ American Heart of Poland
  - ▶ Collegium Medicum of Jagiellonian University
- ▶ Maybe **you** need this software?



Thank you for you attention!

*Questions?*