BEST TELEMEDICAL EQUIPMENT’S PRACTICE MODEL

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http://www.telemed.org.ua

Background
For anykind of telemedical procedures it’s necessary: 1) to create an effective telemedical work station (TWS) with adequate free or/and licensed software, 2) connect TWS to somekind of telecommunication line.
The basic requirements for telemedical equipment: an opportunity of processing of anykind of the medical information, cheapness, standartisation, availability, simplicity and reliability of use, technical and information safety.

Main goals
- equipment for telemedical work station
- telecommunication lines
- software

Decisions
Telemedical work station
We propose a few sets for TWS.
Classical set for TWS:
- basis PC, SVGA monitor, multimedia equipment, CDROM/CDRW/DVD, network adapter
- high quality scanner
- digital photocamera
- digital videocamera
- web-camera
- high quality color printer
- microphone, dynamics
- modem, connector to hospital information system
- sets of special digital equipment for diagnostic and treatment
- auxiliary equipment
Clinical set for TWS:
- basis PC, SVGA monitor, multimedia equipment, CDROM, network adapter
- digital photocamera
- printer
- modem
- auxiliary equipment
Minimal set for TWS:
- basis PC, SVGA monitor
- high quality scanner or digital photocamera
- modem
Optimal clinical set for TWS:
- basis PC, SVGA monitor, multimedia equipment, CDROM or CDRW
- high quality scanner
- digital photocamera
- web-camera
- printer
- modem
- auxiliary equipment

**Example:**
In daily clinical practice we use TWS: PC (1000 Mhz and more) with multimedia equipment, scanner (1200 dpi and more), digital photocamera (1,3-3 mpx), printer (laser, 600x600 dpi and more), film-viewer, web-camera.

**Telecommunication lines**
Best ways:
- direct and dial-up Internet lines for anykind of telemedical procedures;
- mobile phones services for emergency teleconsultations.

Direct Internet lines (256-384 Kb) intercity, interregional communications, communications between big regional hospitals and medical universities

Dial-up Internet lines (56 Kb and more) – for intraregional, intracity, rural-city communications

SMS/MMS services – for anykind of emergency teleconsultations

**Software**
It's possible to use special or non-special software for telemedical procedures. We prefer:
- standard licensed software from Microsoft™;
- web-application designed with open code (optimal for medical establishments with low financial support);
- special telemedical application on the base on Internet (for example, “Regional Telemedical System” ™).

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