Department of Informatics and Telemedicine
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BEST/GOOD PRACTICE MODELS FOR TELEMEDICINE AND E-HEALTH

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The basic problem of telemedicine not lack of technology, but organizational problems and ignorance how to use technology

Prof.R.Wootton, JTT

















Good/Best Practice Model set of decisions (organizational, medical, technical, economical, etc.) on the basis of the generalized personal experience for achievement of the specific target in the field of telemedicine and e-Health

We have developed 4 Good Practice Models

- ✓ Best practice model for teleconsultation's theory
- ✓ Best practice model for telemedicine equipment
- ✓ Best practice model for telemedical law and ethics decisions for Eastern Europe
- ✓ Best practice model for teleconsultation in urgent trauma

One more – in progress...

Best practice model for teleconsultation in trauma and pathology of the hip

Background

Best/Good Practice Model

Main goals

Decisions

Contact info

BEST PRACTICE MODEL FOR TELECONSULTATION IN URGENT TRAUMA

by Department of Informatics and Telemedicine of Donetsk R&D Institute of Traumatology and Orthopedics (Donetsk, Ukraine)
http://www.telemed.org.ua

Background

The increasing of quality of treatment for traumatized and polytraumatized patients is one of the most important problems in modern medicine. Due to telemedicine not only the doctor in charge or the staff of the local hospital are concerned with treatment of the patient, but the "collective intellect" of all the physicians of our planet.

Main goals

- equipment and communication
- technologies

Decisions

Telemedical work station (TWS)

Main TWS for urgent trauma:

- PC, SVGA monitor, multimedia equipment, CDROM
- high quality scaner
- digital photocamera with short video clips
- printer
- modem
- sets of any equipment for diagnostic and treatment
- auxiliary equipment
- mobile GSM phone with camera and MMS technology Secondary TWS for urgent trauma;
- 1) Mobile 1:
- mobile GSM phone with camera and MMS technology
- 2) Mobile 2:
- PDA
- digital camera for PDA
- wi-fi card or mobile phone for GPRS

Communications' ways:

- direct Internet line (for big medical establishments)
- dial-up Internet line
- GPRS or Wi-Fi Internet line
- mobile phone+SMS+MMS line

Principal scheme for using of different kinds of TWSs is presented on fig.

Priority of different medical datas and technologies for teleconsultation in urgent trauma

Sceletal trauma:

- data digital x-rays (jpeg), locus morbi pictures (jpeg), CT, MRI (jpeg/dicom), short case history (important informations, tests etc only);
- technology e-mail+ICQ/MSN, SMS+MMS, web-application+urgent call

Maxillo-Facial trauma:

- data digital x-rays (jpeg), locus morbi pictures (jpeg), short case history (important informations, tests etc only), CT (jpeg/dicom).
- technology SMS+MMS, e-mail+ICQ/MSN, web-application+urgent call Polytrauma:
- data digital x-rays (jpeg), locus morbi pictures (jpeg), CT (jpeg/dicom), MRI (jpeg/dicom), short case history (important informations, tests etc only)
- technology videoconference, e-mail+ICQ/MSN, web-application+urgent call

Brain trauma:

- data CT (dicom), MRI (dicom), short case history (important informations, tests etc.
 only), digital x-rays, locus morbi pictures (ipeq)
- technology e-mail+ICQ/MSN, videoconference, web-application+urgent call Abdomen/Thorax trauma;
- data CT (dicom), short case history (important informations, tests etc only), MRI (ipeq/dicom), digital x-rays (ipeq)
- technology e-mail+ICQ/MSN, videoconference, web-application+urgent call

Non-emergency cases for teleconsultation (confirmation of treatment, determination of complication prevention methods, the patient doubting diagnosis, treatment and its results, complaint analysis, search for alternative solutions for clinical tasks) – web or special application, mailing lists, e-mail, second-opinion.

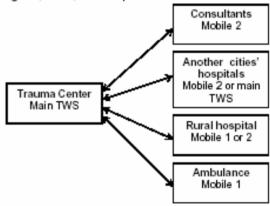


Fig. Scheme for using of different kinds of TWSs

NB! During usage of open technologies (mailing lists, forums, ICQ, MSN etc) it is necessary to pay special attention for confidentiality and anonymity of the medical information (patients consent, anonymisation, encryption, digital signature etc)

Contact

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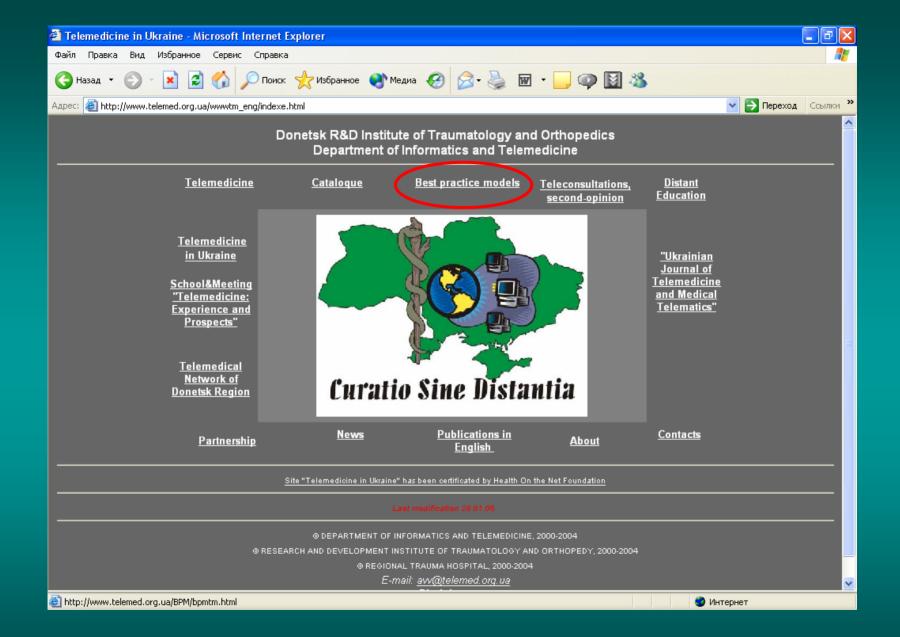
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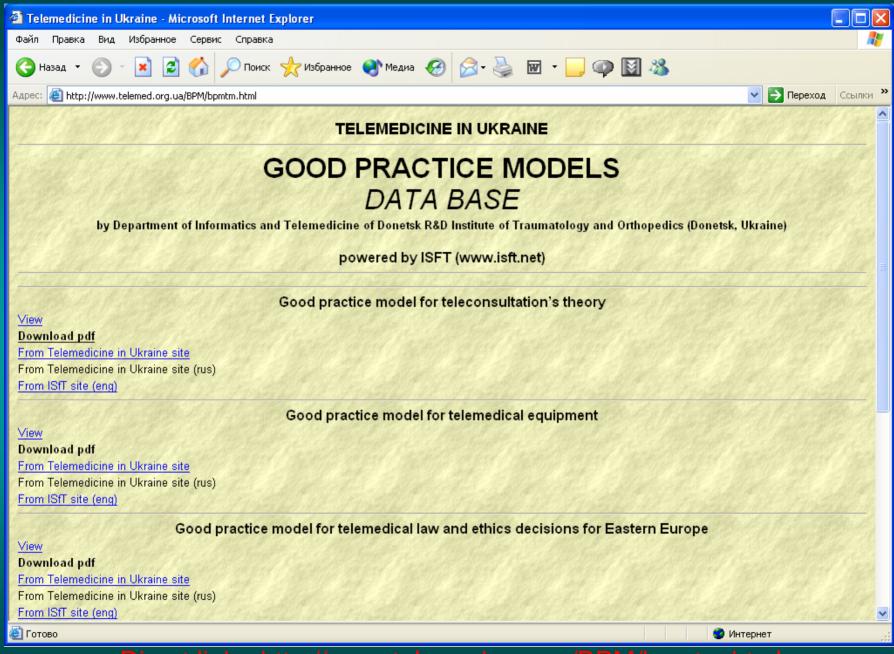
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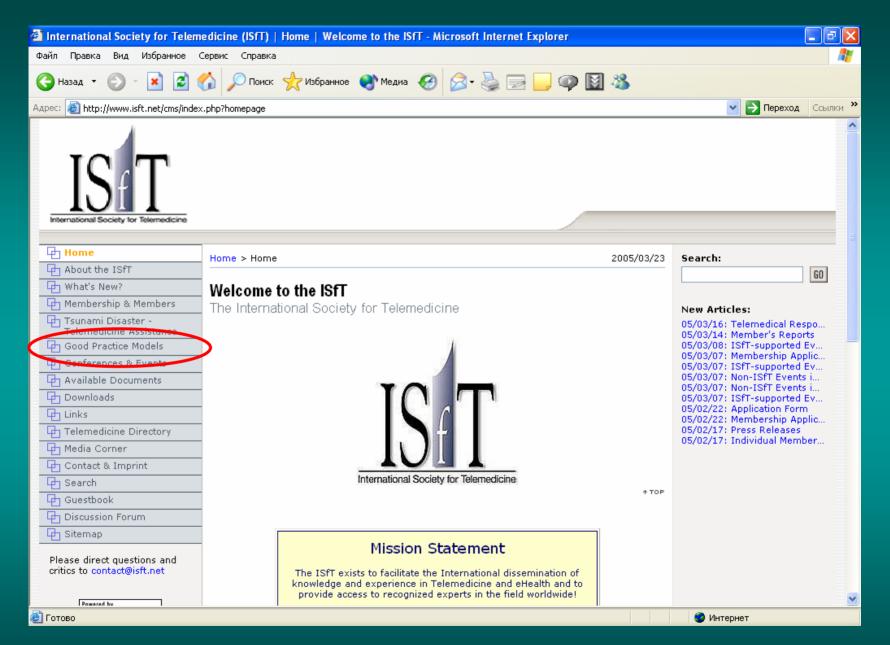
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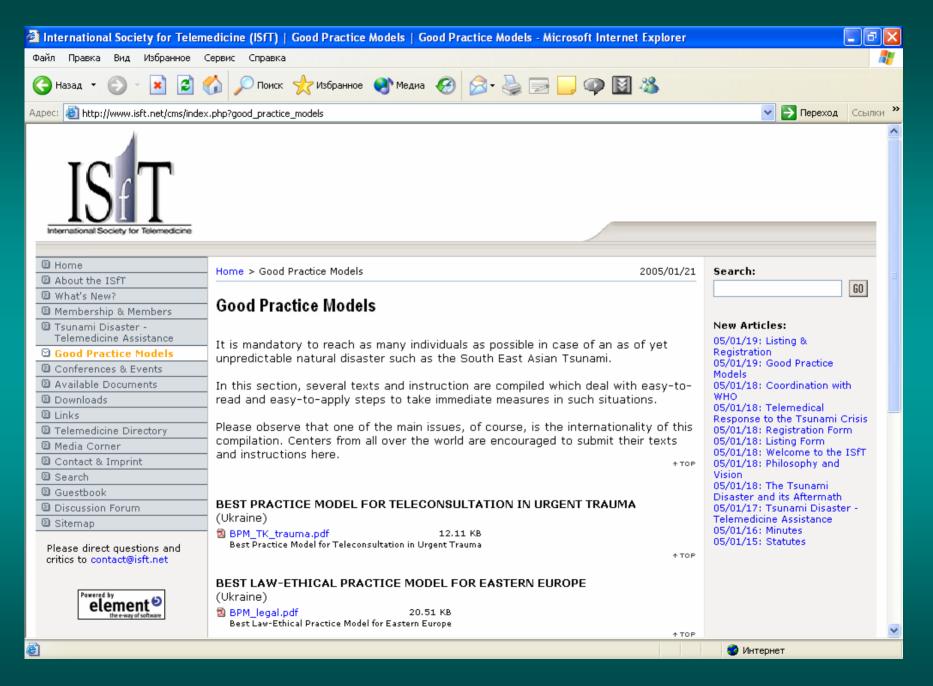
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THANK YOU VERY MUCH!