

GUIDELINES FOR TELEMEDICAL CONSULTATIONS

1. Registration of subjects in teleconsultations

Registered subjects are bound to comply with the guidelines for telemedical consultations of the Online community for telehematological and other telemedical consultations and practice telemedicine within the community accordingly.

Further questionnaires may be offered to registered subjects in order to evaluate telemedical knowledge or current practice.

All information given to the Online community moderator or owner will be kept confidential, but may be used for scientific research, evaluation and development of telemedical service.

The identity of teleconsultants, members of the Online community will not be revealed to any interested party at any time, unless the individual member approves such action by a written agreement sent to the Online community moderator. Such agreement may refer to the identity disclosure at the level of the entire Online community, or serve as approval for contacts with individual members of the community.

Registration is free. The Online community reserves the right to introduce a membership fee. The Online community reserves the right to request a reimbursement for its services.

2. Membership within the Online community

Activities of the online community are co-ordinated by the Online community moderator. Moderator's duties include public relationship, registration and questionnaires, website hosting, help and suggestions in resolving telemedicine related problems within the community, development planning, teleeducation, reports to the community, etc.

Members can be appointed duties within the Online community, according to the fields of their interest. Such duties may include co-ordinating specific activities within the community, public presentations, working on hematological and medical aspects of telemedicine, guidelines for telehematological diagnostics and follow-up, outpatient treatment protocols, assisted decision making, interdisciplinary collaboration, medicolegal aspects of telehematology and other.

3. Teleconsultations and communication modalities

Communication between community members can be done through private contacts, web announcements or the Online community mailing list: «Telehematology & Telemedicine» at <http://groups.yahoo.com>,

During teleconsultations, teleconsultants may choose suitable communication modalities that comply with standards of data acquisition, systematization, transfer and archiving, in order to preserve diagnostic quality and data accuracy.

Communication modalities include store-and-forward communication, real-time communication (audio-visual) or hybrid modalities (e.g. PACS+real time audio). Teleconsultations should be standardized according to the International Telecommunication Union – Telecommunication Standardization Sector (ITU-T).

4. Data acquisition

Digital images should be taken by quality brand digital cameras, or acquired from medical devices according to the current guidelines in teleradiology, telepathology, teleultrasound and other specializations. Diagnostic quality must be preserved at all times, except while illustrating previous specialist findings (included), with digital images of informative value. Recommended resolutions should remain above 3 megapixels for

diagnostic images, and JPG compression 1:10, 1:20 may be used. Digitalization of radiological films should be done at 150 dpi, or by digital photography from negatoscope (informative images only). DICOM standardization should be implemented.

Resolution of ultrasound images of 500x500 pixels is recommended. Real-time teleultrasound is a valuable diagnostic method, if cost-effective. High frame rate and image quality may be obtained at 384 kbps when available. 3D ultrasound sequences and models allow better visualisation, while 4D sequences or real-time 4D ultrasound may offer certain advantages and can be transferred through relatively small bandwidth due to relatively low framerate.

Digital images, audio, video and/or other signals - must not disclose patient identity.

5. Data sistematization and archiving

While PACS systems often rely on telemedical software and databases, teleconsultations by email or teleconferencing should include appropriate data sistematization and archiving of all transmitted data and diagnostic materials. All materials should be stored in digital form, as transmitted/received. Printed materials should be stored in additional archives and handed out to the patient.

6. Informed consent

Appropriate time should be spent to deliver basic understanding of telemedicine to the patient before obtaining a signed informed consent. Informed consent is obligatory since there are risks that could lead to possible negative consequences of telemedical practice. Patient should be aware of these risks and may be offered data and results of papers that evaluated such risks in similar telemedical settings. The expected benefits of teleconsultations should be explained in detail. The Online community informed consent form is an integral part of these Guidelines.

7. Confidentiality, identity protection and security issues

Patient's confidentiality and identity protection should be preserved at all times. Identity protection can be accomplished by email encryption, web security protocols, and other available safety measures. ID marks on digital images, audio, video and other files should be hidden and identifying textual data replaced by non-identifiable marks when encryption is not used. Privacy issues in audiovisual communication, videoconferencing netiquette and authorization of physicians deserve special attention. Specific solutions implemented often depend on technical and medicolegal aspects determined by different telemedical settings, practices and legislation, therefore an agreement should be achieved between physicians (and patient) in advance. Antivirus protection is obligatory, virus definitions and search methods should be updated automatically.

8. Other

Due to the lack of telemedical legislation in some countries, or differences between national telemedical legislations, teleconsultations may result in medical findings and opinions of different medical or legal value. This fact should be taken into consideration before proceeding with further diagnostics, treatment, follow up or teleeducation proposed according to the results of teleconsultations.

Teleconsultants should state additional obligations and/or important aspects of their local/national telemedical practice and legislation. Such issues could be discussed with the Online community moderator, chosen collaborator in teleconsultations, as well as at the Telehematology & Telemedicine mailing list.

Registration form for physicians and medical staff involved in telemedical consultations

I hereby confirm my understanding and compliance with the Guidelines for telemedical consultations published by the Online community for telehematological and telemedical consultations, and I will conduct my telemedical practice within the community accordingly.

I will inform the Online community moderator of any problems encountered during my telemedical practice within the Online community.

I may refuse to participate in teleconsultations arranged contrary to the Guidelines, security and other principles that contribute to diagnostic and data safety. In such situations, I will offer my help in resolving problems, or contact the Online community moderator.

I will review the incoming teleconsultation materials and answer teleconsultant(s) requests within 24h, (a.s.a.p for emergencies), offering my opinion, diagnostic, treatment or follow up guidelines, or suggesting alternative options of patient management. Teleconsultants may contact and inform me about incoming materials by instant messaging or mobile phone during the hours of my telemedical practice. In case of inability to respond to incoming teleconsultation requests, I will contact my colleagues or the Online community moderator in advance.

I understand and accept the obligation to discuss, explain all aspects of telemedical practice that my patients may be interested in, before obtaining the obligatory written patient informed consent. Every teleconsultation must contain necessary data about the signed informed consent form, or the document itself if different from the Online community Informed consent form.

I expect a similar conduct from my colleagues collaborators in telemedical consultations.

Physician – Teleconsultant's Name: _____

Title / Specialisation / Scientific degree: _____

Medical institution / facility (incl. Address): _____

Physician's Email: _____ Phone: _____

Mobile phone _____ Web: _____

Please state the appropriate hours for teleconsultants to contact you: _____

Physician's Licence issued by: _____ No. _____

Signature: _____ In: _____ , date _____.

Please complete the form and send to:

Mira Sever-Prebilić, MD PhD, Dept. of Hematology, Internal Medicine Clinic, Clinical Hospital Center Rijeka,
Kresimirova 42, HR-51000 Rijeka, Croatia

..or if you use digital signature: save and send by email to: prebilic@medri.hr

Informed consent for telemedical consultations

Patient name: _____ Date of birth: _____

Location of patient: _____ Medical facility Other

Physician name (in direct contact with the patient): _____

Title / Degree / Specialization: _____

Hospital / Medical institution: _____

Address: _____

Teleconsultant:	Hospital / City	Teleconsultation No.
_____	_____	_____
_____	_____	_____
_____	_____	_____

Information for the patient:

Telemedicine involves the use of medical and computer equipment, as well as electronic communications to enable health care providers at different locations to transfer and share individual patient medical information for the purpose of improving patient care. Subjects of teleconsultations may include primary care practitioners / GPs, specialists and subspecialists, residents, medical and technical support personnel. Patients' data (including patient records, medical images, audio and video recordings, output data from medical devices and other) are reserved for medical personnel and may be used in planning and performing diagnostics, treatment, follow-up, teleeducation and scientific research. Patient's confidentiality and identity is protected either by transfer of data that does not identify the patient, or by using network and software security protocols and/or data encryption.

Expected benefits include:

- improved access to health services by enabling a patient to remain in his local doctor's office or at a remote site while the physician obtains consults from healthcare practitioners at distant sites.
- support from distant specialists in multidisciplinary remote diagnostics and follow-up
- medical service for patients isolated by weather and transport conditions
- improved quality and/or frequency of health care, improved cost-effectiveness and time saving
- improved triage or medical management
- other

Possible risks:

Telemedicine related risks have been evaluated within different systems, specializations and communication modalities, compared to the expected and achieved benefits, and generally found acceptable in most telemedical applications.

Guidelines for telemedical consultations – Registration – Informed Consent
Online community for telehematological and other telemedical consultations

Telemedical practice includes, but is not limited to the following potential risks:

- collected and transmitted information may not be sufficient to allow for appropriate medical decision making by the physician and consultant(s);
- medical, technical, or other limitations in obtaining, processing, presenting and/or understanding patient data may result in inappropriate decision(s) (e.g. inability to collect all relevant medical information, diagnostic limitations, limited performances of medical devices or computer equipment / available communication lines, compression or lower resolution of digital images, indirect contact with patient and other reasons);
- delayed evaluation of patient's condition due to failures or deficiencies of equipment may influence the quality of telemedical service;
- prearranged consultants' time schedules and availability may influence time-to-response and decision making;
- patient's condition may vary in time necessary for teleconsultation and relevant (tele)medical procedures;
- in rare instances, telemedical practice algorithms, security protocols and integrity of medical data could be affected or damaged by changes in services, intentional or unintentional actions of any subject involved in teleconsultations (incl. technical support, telecommunication software and hardware providers), or by third parties (hackers, computer viruses), causing a breach of privacy, loss of personal medical information, or other undesirable consequences;
- in rare cases, lack of access to complete medical records may result in adverse drug interactions or allergic reactions, other judgment errors or unexpected medical conditions;

By signing this form I confirm the following:

I have been informed about potential benefits and risks of teleconsultations in an acceptable and satisfactory way. Teleconsultations will be arranged in order to facilitate and/or improve medical management of my condition, or for other desirable purpose (teleeducation, access to research or clinical trials, etc.). All aspects of my interest concerning teleconsultations have been discussed and explained. I reserve the right to withhold or withdraw my consent to the use of telemedicine in the course of my care at any time, without affecting my right to future care or treatment. I understand that a variety of alternative methods of medical care may be available to me, and that I may choose one or more of these at any time. I understand that I have the right to inspect all information obtained and recorded in the course of a telemedicine interaction, and may receive copies of this information for a reasonable fee. I have been informed in advance of any parts of teleconsultation service that may not be reimbursed by my health insurance, and/or any other expenses that may result from teleconsultations (including copies of telemedical documents, archiving of telemedical records / consultation materials, etc.), and I accept to refund these costs up to the amount stated in advance on a separate invoice. I agree on the transfer of my personal and medical information to other physicians in the country or abroad in order to obtain the expected help in diagnostics, treatment, follow-up of my condition, disease control and prevention, health improvement and/or teleeducation. I understand that I may expect the anticipated benefits from the use of telemedicine in my care, but that no results can be guaranteed or assured, therefore I will not hold responsible the subjects of teleconsultations for any negative consequences due to telemedicine related risks and/or unpredictable or undesirable situations. I accept the fact that given medical opinion(s) may have a limited value due to differences or lack of telemedical legislation in some countries, as well as due to limitations of telemedical services. Therefore teleconsultants' advices may not represent conclusive findings, but a contribution given in order to achieve the expected benefits – improved health care, quality of life, complete multidisciplinary management, differential diagnostics, teleeducation, and other.

I hereby give my informed consent for telemedical consultations and use of telemedicine in my medical care.

Patient's signature _____

(or person authorized to sign for patient – if authorized signer please state relationship to patient – and witness)

In _____, date _____.

I have been offered a copy of this consent form (patient's initials): _____