

Good teledermatology

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Recommendations for Health Services

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1. Background

Teledermatology is electronic exchange of digital images of skin accompanied by electronic referrals and replies, for the purpose of supporting cooperation on patients between GPs, dermatologists and dermatology hospital wards.

In connection with MedCom's activities to extend the use of teledermatology and in keeping with its other communications projects, MedCom has compiled a set of recommendations for the health sector with a view to ensuring uniform use of MedCom standards throughout Denmark.

These recommendations include

- Image transmission to specialists
- Accompanying referrals
- Specialists' replies to photographs and referrals

The recommendations refer to the MedCom EDIFACT standards for "Good discharge reports"¹, "Good referrals", and "The good MedBin".

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¹ The same guidelines apply to good specialists' replies.

2. Image transmission

The MedCom MedBin standard is recommended for image transmission for the following reasons:

- 1) it enables secure communication via the Danish health net, in contrast to the open Internet
- 2) it ensures unambiguous connection between images and accompanying referrals for the recipient.

Referrals should include images from a distance as well as close-ups. Images from a distance should show distribution on the body, close-ups representing the morphology, and preferably an image of an individual characteristic element. Close-ups should indicate measurements.

Digital cameras capable of taking JPG images with a resolution of 2 million pixels as a maximum are recommended, as far lower image resolution will often provide images of sufficiently high quality for the recipient.

The following groups of illnesses are NOT recommended for teledermatology:

- naevi (birthmarks) and pigmented skin tumours will always require traditional consultation
- temporary and light rashes which do not photograph well
- various types of blistering diseases (pemphigus, bullous pemphigoid, etc.)
- certain hair and nail diseases
- diseases characterized by structural alterations in the skin, e.g. scleroderma.

3. Referral

An electronic referral is sent with the image via the health net. The image is identified by the sender with a surgery identification code, image series number, and an image number.

The referral should contain as much relevant information as possible, with emphasis on the significance of allergies, information on medication, and medical history.

The GP's information to the specialist is entered in accordance with the guidelines listed below from the MedCom publication "The good specialist - referral".

- Diagnosis/problem
- Relevant medical history – previous and current, also including information concerning any inherited predisposition, exposure, and time factors.
- Objective findings
- Relevant test results
- Relevant current medication
- Special patient needs
- GP's wishes and expectations to the specialist.

The appearance of the rash is described by

1. Symmetrical/asymmetrical number of elements (less than 10, between 10 and 50, more than 50)
2. Monomorphic/polymorphic
3. Possible classic primary descriptions (maculae, papulae, pustules, etc.)

4. Specialists' replies

The reply from the specialist is sent via the health data net. The patient is still being treated by the GP who obtains advice from a specialist via the electronic medium.

The MedCom publication "Good discharge letters" recommends the guidelines listed below, which also apply to specialists' replies.

1. Image number
Identified by original sender (surgery identification code, image series number and image number)
2. Image description
Macro
Micro
Quality (technical inadequacies, possible request for additional images)
3. Description of clinical diagnosis of images
4. Suggestions for diagnosis (possible diagnosis code) and possible differential diagnostic considerations
5. Suggestions for treatment
Good advice regarding treatment, possible post-treatment care and check-up intervals
In cases of re-referral or inclusion of other partners in treatment (home-care services)
Where/Who/When/How
6. Suggestions for medication
Possibly indicated as a prescription, product, strength, dosage, indication, length of time, etc.
7. Suggestions regarding possible compensation claims (work accident, side effects of drugs)
8. Recommended information for patients
Patient guidelines, possible referral to a home page/health site
9. Suggestions regarding
possible supplementary tests (microscopy, microbiology, clinical chemistry)
check-up, possible supplementary tests (state intervals)
 - Teledermatology check-up
 - Clinical check-up