

# **Good e-mail consultation**

April 2004

## **Recommendations for Health Services**

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## 1. Background

Various forms of e-mail consultation currently exist in use in Denmark, and experience suggests that e-mail consultation would also be logical and beneficial for GPs in some situations.

At present, patients can consult their GP by telephone between 8 a.m. and 9 a.m., they can go to their GP's surgery by appointment or, if necessary, GPs can go to patients' homes. GPs can provide a number of prophylactic services. Not everyone who needs to see a GP is necessarily ill. Some people are at work or on their way to work during telephone consultation hours. Getting through to a GP by telephone can often be difficult due to the number of people attempting to reach the same person during the short period of time available. Patients and GPs can all benefit from e-mail consultation through improved service and a more flexible working day. The same is true of communications between municipal home-care services and GPs.

On the subject of e-mail consultation between GPs and patients, the national labour agreement for general practitioners of May 2000 states, "The use of e-mail in communication between doctor and patient is not included in the services laid down in the agreement, for which reason there is no payment for this service."

On 13 October 2002, the Negotiating Committee of the Danish National Health Service and the Danish GP organization agreed to change the description of the duties of general practitioners in the national labour agreement. This new agreement became effective on 1 April 2003.

The change in the national labour agreement means that, under certain circumstances, payment may be made for consultations between GPs and patients. The specific circumstances for e-mail consultation and payment for it are described in the labour agreement guidelines

*Good e-mail consultation* has been compiled with a view to providing suppliers of home pages for GP surgeries and/or GP computer systems with a set of common recommendations for technical solutions, in order to encourage the use and ensure the quality of e-mail consultations by GPs.

The project was implemented by MedCom in cooperation with the Danish GP organization, and is supported by the Central Quality Development Committee.

*Good e-mail consultation* includes recommendations for the way in which surgery home pages and GP computer systems should administrate e-mail consultations,

as well as suggestions for standard replies to patients. *Good e-mail consultation* has been compiled by a working group whose members were:

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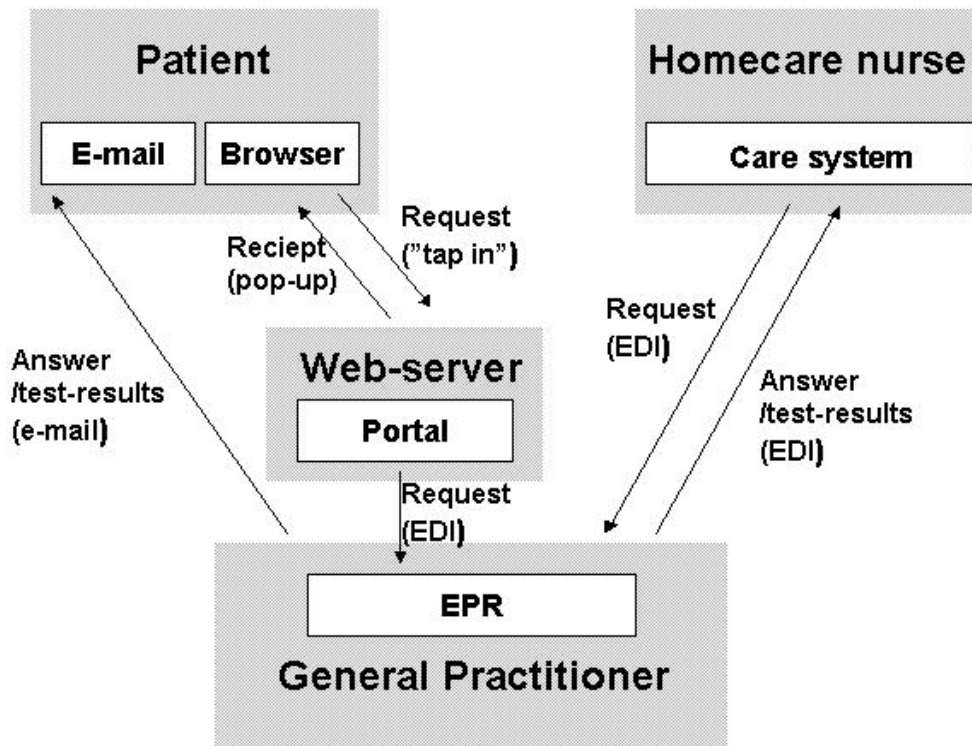
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## 2. Objectives

In interaction between GPs and patients/home-care services, some question-and-answer situations do not necessarily require telephone conversations or appointments, but can be effectuated as e-mail consultations. Thus the concept of e-mail consultation covers four (4) types of communication.

- 1) **The patient contacts the GP** via the National Health Portal enters personal data and describes the problem or reason for contacting the doctor. The message is sent from the home page to the GP computer system. The home page acknowledges receipt of the message. The GP decides if an e-mail consultation is appropriate, or if another form of consultation is necessary. The reply is sent by e-mail.
- 2) **The GP contacts the patient** by e-mail from the GP computer system. This ought only to take place after prior agreement with the patient and in connection with providing information on the results of blood tests, x-rays, cultures, etc.
- 3) **The home care services** contact the doctor via the message function (DIS91 *The good letter*) generated in the home-care computer system. The GP decides if e-mail consultation is appropriate. The reply is sent via the message function (DIS91).
- 4) **The GP contacts the home care services** via the message function (DIS91 – *The good letter*) generated in the GP computer system. GPs may send messages concerning test results, the effects or side effects of a drug, observations to be made, etc.

The communication flows are illustrated below. Please note that EDI<sup>1</sup> between the home-care computer system and the GP computer system are subject to negative receipt requirements. See the MedCom communication and syntax regulations.



E-mail consultation via the home page enables the GP to guide the patient by means of check-up questions and entering check-up information, thus ensuring the quality of the individual e-mail consultation.

To ensure the quality of communication, E-mail consultation via the message function between the home care service and GPs should be accompanied by agreements between these parties.

On the surgery Portal, patients enter their description of the reason for the message, as well as their national identity number and sender information. Recipient and time are added automatically by the message function.

The home-care computer system automatically transfers the national identity number, sender's name, recipient's name, time and text.

<sup>1</sup> Electronic Data Interchange

Messages generated on the home page as well as messages generated in the home-care computer system are received by the correspondence module of the GP computer system.

### 3. Recommendations for GP home pages

**Introduction of e-mail consultations is based on the assumption that the individual GP alone determines when an e-mail consultation is medically appropriate. Therefore, the following recommendations are made.**

- a) On a surgery home page it must be possible for the GP to exclude e-mail consultations entirely.
- b) Information must be provided for patients regarding the purposes for which e-mail consultations can and cannot be used. (Not for acute cases. The GP can always choose to ask the patient to phone or make an appointment.)

**The quality of an e-mail consultation depends largely upon the success with which patients are guided through the process of formulating their messages. The suggestions below will help ensure successful message formulation.**

- c) Use of the home page must be intuitive. The patient must be guided through the home page to ensure completion of all sections.
- d) The system must draw unequivocal attention to any incomplete information.
- e) There must be a section for selecting various types of e-mail consultations.
- f) It must be possible to add supplementary information to the individual types of e-mail.
- g) Selecting the individual type of e-mail consultation must generate supplementary choices or questions which the patient must complete on the home page.
- h) It must be possible to print information materials or questionnaires from the home page in connection with the individual types of e-mail consultations.

#### **Practical**

- i) It must be possible to limit the size of text sections to avoid lengthy e-mails. It must be possible for the GP to exclude the possibility of patients sending attached enclosures/photographs.
- j) It must be possible for patients to cancel a request for an e-mail consultation.
- k) In the event that patients cannot expect a reply from the GP due to holidays or similar reasons, the system must provide this information in connection with processing

requests for a consultation. It must be possible to open and close for e-mail consultations or to forward e-mail consultations to a colleague.

- l) The home page must contain information as to when replies to the various types of messages may be expected.
- m) Legal provisos must be duly presented for patients.
- n) The system must display a screen acknowledging receipt of a message, including exact information regarding responsibility and reply times. It must also instruct patients to use other means of contact in acute cases or emergencies. Patients should also be instructed to renew their message in the event that reply times are exceeded, as patients' messages and GPs' replies can be lost due to technical problems.

#### **4. Recommendations for GP computer systems**

To ensure functional solutions for surgery administration of e-mail consultations, the following recommendations are made to suppliers of GP computer systems.

##### **Receipt of messages in the GP computer system**

- 1) The system must signal the arrival of e-mail consultations, preferably in a manner which ensures that only relevant persons receive the signal.
- 2) When closing the GP program, a signal must indicate any unopened/unanswered e-mails.
- 3) Arriving e-mails must be collected in an inbox in the GP computer system containing all unanswered messages.
- 4) The GP computer system must be able to handle three (3) archives for e-mail consultations: *unanswered messages* (are also always in the individual patient's case notes); *answered messages* (are also always in the individual patient's case notes); and *archived replies* (are kept for a week, then only in the patient's case notes).
- 5) E-mails from patients must be available in the individual patient's case notes.
- 6) It must be possible to access e-mails by national identity number and date.
- 7) A signal must indicate national identity numbers not registered in the GP computer system.
- 8) At surgeries with more than one doctor, arriving e-mails must indicate the name of the doctor for whom the message is intended.

- 9) At partnership surgeries, incoming e-mails must indicate if a message is for a specific GP.

## **Replies**

- 10) Simple standard replies must be easily accessible. See section 6 in *Good e-mail consultation*.
- 11) It must be possible to edit standard replies prior to sending them.
- 12) Copying and pasting to and from case notes must be possible in replying to e-mails.
- 13) Prior to sending a reply to the patient, the GP must indicate in the computer system if the contact is to be reimbursed.
- 14) It must be possible to include materials such as patient manuals or links to other web sites in GP replies.

## **Administration of e-mail addresses**

- 15) The automatic reply address that accompanies patients' e-mails must be archived automatically by the system as basic patient information.
- 16) New e-mail reply addresses must replace old addresses automatically, possibly following confirmation of the change by the patient.
- 17) It must be possible to register patients' e-mail addresses manually in the GP computer system.

## **Contacts from GP to patient**

- 18) It must be possible to generate e-mails to patients without replying to existing e-mails (e.g. to provide information on cell, laboratory or urine tests).
- 19) It must be possible to indicate temporarily that a patient wishes to receive a reply regarding an examination by e-mail. It must be possible to delete the indicator once the e-mail has been sent.
- 20) This indicator must be visible on the screen where the GP views arriving EDI replies. From this screen, it must be easily possible to generate an e-mail reply to the patient that includes any comments.
- 21) It must be possible to view and/or print a reminder list of patients indicated by the system as awaiting e-mail replies regarding an examination.

- 22) For all series of tests for which e-mail replies are to be sent, it must be possible to file the tests as: test results not yet received; test results normal; test results abnormal; test results forwarded.
- 23) All test results must be accessible by date and national identity number.

**Storage/case notes**

- 24) E-mails and replies received must be stored in the patient's case notes. Danish law requires that case notes be retained for 10 years.

## 5. Security

In the draft report prepared by the National Board of Health regarding *IT Security Guidelines for Hospitals* (consultation version, August 2001) the following recommendations are made regarding exchange of information that is traceable to an identifiable person.

"Transfer of information that is traceable to an identifiable person on open networks such as the Internet must be effectuated by means of strong encryption. The identity of senders must also remain confidential, e.g. by use of digital (electronic) signatures. The PKI<sup>2</sup> that is being developed in Denmark is worth consideration and might possibly be used." (Page 39)

In the recommendations made by the National Board of Health, strong encryption generally means 128-bit encryption. (Page 38)

With regard to security in e-mail consultations, it is recommended that the recommendations of the National Board of Health be followed. Attention is drawn to the to the following issues:

- 1) secure and functional administration of e-mail consultations requires the forwarding of national identity numbers, whereby messages contain sensitive data which can be traced to an identifiable person
- 2) standardization of encryption and a digital signature for use on the open Internet should not apply to the health sector alone, but should await the results of the general national initiatives
- 3) communication on the open Internet between patients and GPs should be made secure in local security solutions through encryption and maintaining the confidentiality of senders' identity. An alternative could be the use of secure lines, based on Internet technology (VPN<sup>3</sup>) etc.
- 4) personal passwords are recommended to ensure that only the correct receiver can read a reply.

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<sup>2</sup> Public Key Infrastructure

<sup>3</sup> Virtual Private Network

## **6. Standard replies**

### **a) Replies to messages from patients**

#### **Confirmation of receipt**

Your request for an e-mail consultation has been sent. If you should need acute medical attention, please telephone our surgery between (times) at xxx-xxxx. At all other times of day or night, please contact the doctor currently on call at xxx-xxxx. State when the reply may be expected.

#### **The patient's national identity number is not in the GP computer system**

Thank you for your e-mail. Our computer cannot process the information you have entered because you have not previously registered with our surgery. Please phone the surgery at xxx-xxxx.

#### **The doctor does not wish to reply to a message electronically**

Thank you for your e-mail. Your doctor wishes to speak to you personally. Please phone the surgery for an appointment at xxx-xxxx.

### **b) Examples of replies from GP to patient**

Easily accessible standard replies should be compiled covering all significant situations, including the seriousness of the illness test reports may reveal.

It must be easy to edit standard replies and to enter supplementary information. In practical use, the phrases listed below should be targeted according to the specific need, such as blood tests and cultures.

- 1) Unfortunately, your test was not successful and must be repeated. This will require new specimens. Please make an appointment by clicking *Appointments* or by phoning the surgery at xxx-xxxx weekdays between (times).
- 2) The results of your tests are normal and you do not need further treatment.
- 3) The results of your tests do not indicate illness. As a matter of routine however, the test should be repeated again in x months' time. Please make an appointment by clicking *Appointments* or by phoning the surgery at xxx-xxxx weekdays between (times).
- 4) The results of your tests indicate that you should be treated for xx. In accordance with your request, your prescription has been forwarded to the (name) Chemists.

- 5) The results of your tests indicate that you should be treated for xx. Please make an appointment for further consultation either by clicking *Appointments* or by phoning the surgery at xxx-xxxx weekdays between (times).
- 6) We have received the results of your tests. Please contact us for further consultation at telephone xxx-xxxx weekdays between (times). (*For complicated cases*)