



**KSYOS**  
**TeleDermatology**

**Faster, better quality of care**

**Manual General Practitioner**

# Introduction

This manual for General Practitioners explains how to use the KSYOS TeleDermatology service. KSYOS TeleDermatology is a web application that runs in a secured web environment. Your data will be saved within this environment, instead of locally on your computer. Access is only granted by your username and password.

A major advantage of a web application is that it is accessible from every computer with an internet connection. KSYOS TeleDermatology is an easy, user-friendly digital service.

If you have any questions, please contact the KSYOS helpdesk by phone: +44(0)207 863 7970 or by e-mail: [info@ksyos.org](mailto:info@ksyos.org).

Enjoy TeleDermatology!

Kind regards,

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# Preparations

You have received a digital camera for the use of KSYOS TeleDermatology. Use this camera to take pictures of a patient's skin disorder. Include the pictures in the TeleDermatology service.

## 1.1 Charging the battery

Make sure the camera is fully charged before operating. To charge the battery, connect the USB-cable to the camera (side of the camera) and to the adapter. N.B.: make sure the camera is "Off".

Next insert the adapter into an electrical plug. The battery is charging when the light is red. As soon as the light is green, the battery is fully charged.

You can also charge the battery by connecting the camera to the computer. Therefore, connect the USB-cable to the camera (side of the camera) and to one of the free USB-ports on the computer. N.B.: make sure the camera is "Off".

## 1.2 Taking Pictures

### **LBP:**

- **Lighting:** lots of dispersed lighting: daylight or TL-light
- **Background:** pale, non-translucent, contrasting the skin (e.g. blue, green, or white)
- **Positioning:** the object of photography needs to be flat against the background, try to fixate the patient and the camera.

## The camera



1. Power button
2. Flash button

- **Off** (overview picture)



- **Automatic** (close-up)



3. Shutter button

## Taking pictures

Position the patient and switch on the camera.

**TIP:** Place a tape measure directly adjacent to the skin disorder to help the camera focus more easily and get sharper pictures.

## Focus

Press the Shutter button halfway to focus and set exposure. When the framing marks turn **[green]**, press the Shutter button completely down. When the framing marks turn **[red]**, the distance to the object is too short. Please take a bit more distance (5 cm each time) and try again.

## Instructions

Take at least one overview and 3 detailed pictures of the patient's skin disorder.

## Overview picture (1x)

- Flash off
- Distance +/- 50 cm



Figure 1. Overview Picture

## Close-up (3x)

- Flash off
- Distance > 10 cm (close as possible)

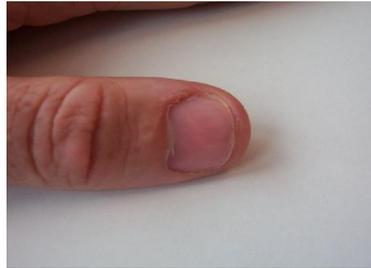


Figure 2. Detailed Picture

**TIP:** Take more than 4 pictures to increase the chance that you will end up with 4 good ones.

## 1.3 Import pictures to Computer

Importing the pictures onto your Computer only works if there are pictures on the camera.

1. Connect USB cable to camera and Computer
2. Turn the camera "On";
3. The pictures are imported by using the Wizard program into the folder "TeleDermatology". We advise that you to tick the box through which the pictures are automatically deleted from the camera after importing.

## **1.4 Selecting pictures**

Sometimes pictures are out of focus, overexposed, etc. It is therefore smart to check the pictures while the patient is still in the room. If the pictures are not the right quality, you are able to take new ones.

1. Check your pictures on your Computer instead of on the small LCD-screen of the camera. Go to the preferred location, which you have set before (see 1.1).
2. If the pictures are of poor quality, please take new ones and remove the poor ones from your Computer.

# Create a new TeleConsultation

## Procedure

A TeleDermatology Consultation consists of an online report, optional comments and pictures of a patient's skin disorder. To send a TeleConsultation a specific NHS Trust must be chosen. Optionally, a specific Consultant Dermatologist is chosen.

When sending a TeleConsultation to the Consultant Dermatologist, the system automatically sends an e-mail to the Consultant, alerting him or her to the newly presented TeleConsultation. The Consultant logs on to his or hers TeleDermatology Consultation service and views the TeleConsultation. Within 3 working days an answer must be send. When this happens, you will receive an automatic e-mail notifying you of the Consultant's reply.

In KSYOS TeleDermatology you can view the diagnosis and treatment recommendations of the Consultant. Based on the information received you can either close the TeleConsultation or refer the patient. If it is not clear or if the Consultant has asked a question, you can respond one more time. The procedure repeats itself. When you have received the final reply from the Consultant, you must close the TeleConsultation and decide if it is still necessary to refer the patient.

## 2.1 Log on to KSYOS TeleDermatology

After taking the pictures and saving them on your Computer, log on to the KSYOS TeleDermatology service in order to initiate, view or close the TeleDermatology Consultation.

1. Open your webbrowser and go to: [login.ksyos.co.uk](http://login.ksyos.co.uk)

2. Fill out your username and password to log on to your personal TeleDermatology service. N.B.: The system differentiates between upper and lower case.
3. If you have forgotten your username or password, please click on "Forgot your username/password?" to inform the KSYOS Helpdesk.

## 2.2 Create a new TeleConsultation

### Step 1. New TeleConsultation

1. Click on [New TeleConsultation] in the menu on the upper side.
2. Fill in the birth date and the NHS number of the patient.

### Step 2. Patient Data

Please fill out the patient data form (see Figure 3).

N.B.: only fields marked with a cross (\*) are mandatory.

New TeleConsultation TeleDermatology Welcome, T TEST HA UK

PATIENT DATA 01-01-2001 (13)

**Patient data**

Initials/Inset.	<input type="text"/>	<input type="text"/>	Insurance nr	<input type="text"/>	
Surname *	<input type="text"/>		Healthcare insurance	<input type="text" value="Choose One"/>	
Gender *	<input type="radio"/> Male <input type="radio"/> Female		NHS number	<input type="text"/>	
Birthdate *	<input type="text" value="01-01-2001"/>		E-mail adress	<input type="text"/>	
Address	<input type="text"/>			Telephone number	<input type="text"/>
Number/add.	<input type="text"/>	<input type="text"/>	Consent patient (or parent/guardian/authorized person) *	<input type="checkbox"/>	
ZIP code/City	<input type="text"/>	<input type="text"/>			

Figure 3. Patient Data

### Step 3. Adding the Pictures

Click on [Select files...] to include the pictures from your Computer. You can select and add a maximum of 4 pictures at once (see Figure 4).



Figure 4. Select files

1. Browse to the previously set folder in which the pictures are imported (e.g. Folder TeleDermatology) and select the pictures that need to be added.
2. Once you have selected all 4 pictures, press [Open] to collectively upload them into the TeleConsultation.

#### Step 4. Medication

Here you can include any relevant medication that the patient is using (see Figure 5). You can add medication fields by clicking on [Add].

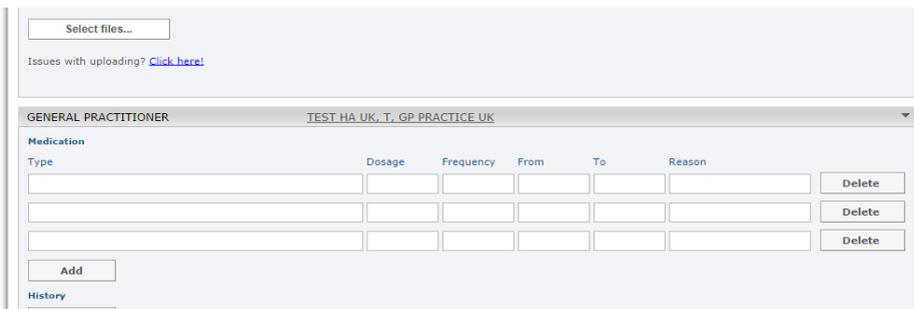


Figure 5. Medication

## Step 5. History

Add medical history information of the patient by clicking on [Add] below the field "History". You can optionally tick the boxes in three different Tabs (Figure 6).

The screenshot shows a web-based form with three tabs: "Findings general practitioner (0)", "Treatment general practitioner", and "Reason for referral (0)". The "Findings" tab is active and contains the following sections:

- Medical background:** A list of checkboxes for "DM", "COPD", "Hypertension", "CARA", and "Allergy, namely" followed by a text input field.
- Duration:** A text input field.
- Body part:** A text input field.
- Is the complaint a recurrence?:** Radio buttons for "Yes" and "No".
- Is the complaint chronic?:** Radio buttons for "Yes" and "No".
- Symptoms:** A list of checkboxes for "Itch", "Pain", "Bleeding", "Cosmetic", and "Efflorescence" followed by a text input field.
- Description of symptoms:** A large text area.
- Possible explanation for complaint(s):** A large text area.

At the bottom right of the form are "Clear fields" and "Save" buttons. Below the form is a "History" section with an "Add" button.

Figure 6. History

## Step 6. Questions and/or Remarks

Add any question and/or additional remarks to the TeleConsultation.

## Step 7. Select Institution and Consultant

Choose the Consultant for your TeleConsultation.

## Step 8. Save, Send or Delete

### Save

At any given moment you can save a TeleConsultation by clicking on the [Save] button. The TeleConsultation is saved and can be found in the "TeleConsultation"-list with the status "saved".

To return to the saved TeleConsultation, go to [TeleConsultation] in the upper menu and just click on the specific line in the list. When you have finished filling in the TeleConsultation, you can choose [Send] to send it to the Consultant Dermatologist.

## Send

When you have completed the TeleConsultation, click on [Send] to offer it to the Consultant Dermatologist. The Consultant directly receives the TeleConsultation in his or her "TeleConsultations"-list and receives an automatic notifying e-mail. Similar, the TeleConsultation can be found in your "TeleConsultations"-list.

## Delete

A saved TeleConsultation can be deleted. Go to "TeleConsultations"-list and open the saved TeleConsultation by clicking on it. At the bottom of the TeleConsultation you can choose [Delete] to erase the TeleConsultation (see **Fout! Verwijzingsbron niet gevonden.**).

Once a TeleConsultation has been sent, only KSYOS can remove a wrongfully sent TeleConsultation. Please contact KSYOS Helpdesk.

The screenshot shows a web interface for managing teleconsultations. It features a 'History' section with an 'Add' button. Below that is an 'Inquiry' section with two text input fields for 'Question:' and 'Remarks:'. The bottom section is a 'SEND' dropdown menu containing a 'Choose a consultant:' dropdown, a text input field for the caregiver/practice name, and a row of buttons: 'Print', 'Delete', 'Save', and 'Send'.

Figure 7. Questions/Remarks, Choose Consultant and Delete/Save/Send

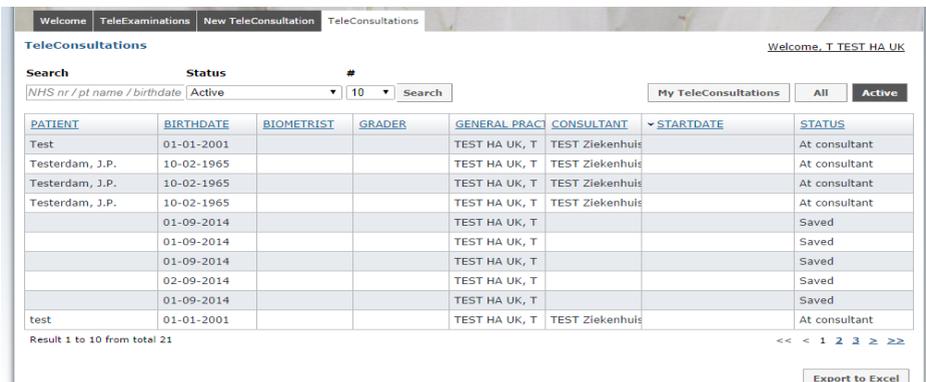
# Follow up TeleConsultation

The Consultant answers the TeleConsultation within three working days. When the Consultant sends his or her answer, you will receive an automatic e-mail notifying you to log on in order to view the Consultant's response.

## 3.1 Viewing Consultant's Response

To view the response of the Consultant:

1. Log on to TeleDermatology ([login.ksyos.co.uk](http://login.ksyos.co.uk)) with your username and password
2. Go to [TeleConsultations] in the top menu (see Figure 4)
3. To open/view the specific TeleConsultation, please click on the horizontal line in the list.



The screenshot shows a web application interface for 'TeleConsultations'. At the top, there are navigation tabs: 'Welcome', 'TeleExaminations', 'New TeleConsultation', and 'TeleConsultations'. Below the tabs, the page title is 'TeleConsultations' and the user is logged in as 'Welcome, T TEST HA UK'. There is a search bar with the text 'Search' and a dropdown menu for 'Status' set to 'Active'. A 'Search' button is next to it. To the right, there are buttons for 'My TeleConsultations', 'All', and 'Active'. Below this is a table with the following columns: PATIENT, BIRTHDATE, BIOMETRIST, GRADER, GENERAL PRAC, CONSULTANT, STARTDATE, and STATUS. The table contains 10 rows of data. The first row is 'Test' with birthdate '01-01-2001' and status 'At consultant'. The next three rows are for 'Testerdam, J.P.' with birthdate '10-02-1965' and status 'At consultant'. The next three rows are for 'Testerdam, J.P.' with birthdate '01-09-2014' and status 'Saved'. The last row is for 'test' with birthdate '01-01-2001' and status 'At consultant'. At the bottom left, it says 'Result 1 to 10 from total 21'. At the bottom right, there are navigation arrows and a button labeled 'Export to Excel'.

PATIENT	BIRTHDATE	BIOMETRIST	GRADER	GENERAL PRAC	CONSULTANT	STARTDATE	STATUS
Test	01-01-2001			TEST HA UK, T	TEST Ziekenhuis		At consultant
Testerdam, J.P.	10-02-1965			TEST HA UK, T	TEST Ziekenhuis		At consultant
Testerdam, J.P.	10-02-1965			TEST HA UK, T	TEST Ziekenhuis		At consultant
Testerdam, J.P.	10-02-1965			TEST HA UK, T	TEST Ziekenhuis		At consultant
	01-09-2014			TEST HA UK, T			Saved
	01-09-2014			TEST HA UK, T			Saved
	01-09-2014			TEST HA UK, T			Saved
	02-09-2014			TEST HA UK, T			Saved
	01-09-2014			TEST HA UK, T			Saved
test	01-01-2001			TEST HA UK, T	TEST Ziekenhuis		At consultant

Figure 4. In the list 'TeleConsultations' you will find the answer of the Consultant Dermatologist.

The TeleConsultation will open and you can view the answer of the Consultant Dermatologist (Figure 9).

The screenshot displays a web-based interface for a teleconsultation. At the top, a header bar shows 'CONSULTANT' on the left, the date '29-09-2014' in the center, and 'TEST DERMATOLOGIST, T, TEST HOSPITAL' on the right. Below this, the main content area is divided into two columns. The left column contains 'Description of findings' (mole) and 'Diagnosis' (normal mole). The right column contains 'Additional questions' (no additional questions), 'Treatment recommendations' (no medication needed), and 'Physical examination needed?' with radio buttons for 'Yes', 'No' (which is selected), and 'Not applicable'. Below the main content area, a second header bar shows 'GENERAL PRACTITIONER' on the left, the date 'TEST HA UK, T, GP PRACTICE UK' in the center, and a dropdown arrow on the right. Below this, there are two large empty text boxes labeled 'Answer/question' and 'Remarks'. At the bottom of the interface, there are three buttons: 'Print', 'Save', and 'Send 2nd round', followed by a 'Close' button.

Figure 5. Viewing the answer of the Consultant Dermatologist.

## 3.2 Second Request (optional)

If you have a second request or you want to answer a Consultant's question, then you can do so by filling in the 2nd round-boxes (beneath answer of Consultant) and press [Send 2<sup>nd</sup> round].

Of course if the answer of the Consultant is clear after the first response, you can close the TeleConsultation (see 3.3).

N.B.: The 2<sup>nd</sup> reply of the Consultant is final, so afterwards please close the TeleConsultation.

## 3.3 Closing a TeleConsultation

When you are satisfied with the Consultant's answer, you can close the TeleConsultation:

1. Open the TeleConsultation in the TeleConsultations“-list
2. And press [Close] at the bottom of the TeleConsultation (see Figure 5)
3. When you close a TeleConsultation, three “Evaluation questions” pop up (see Figure 6). Please answer them to help evaluating the effects of TeleDermatology Consultation
4. The “Status” of the TeleConsultation will then move from “Saved” to “Answered” in the “TeleConsultations“-list, where it will remain permanently.

The screenshot displays a software interface for a medical consultation. At the top, it shows the user 'GENERAL PRACTITIONER22-09-2014' and the practice 'TEST HA UK, T. GP. PRACTICE UK'. The main area is divided into sections: 'History' (Findings: general practitioner, Itch), 'Inquiry' (Question: , Remarks:), 'CONSULTANT' (29-09-2014), 'Description of findings' (mole), and 'Diagnosis' (normal mole). A central 'Evaluation' dialog box is open, containing the question: 'Will you still, having performed TeleDermatology, refer this patient to secondary care?' with two radio button options: 'Yes' and 'No'. Below the dialog, there are two large text input fields labeled 'Answer/question' and 'Remarks'. At the bottom of the interface, there are four buttons: 'Print', 'Save', 'Send 2nd round', and 'Close'.

Figure 6. The evaluation questions are used to evaluate the effects of TeleDermatology Consultation.

## 3.4 Save/Print TeleConsultation

You have the possibility to digitally save or print a closed TeleConsultation.

1. Log on to KSYOS TeleDermatology Consultation service;

2. Go to “TeleConsultations”-list (see Figure 8)
3. Select the TeleConsultation you like to save or print
4. In the selected TeleConsultation you will find a print-button at the bottom (see Figure 9)
5. Press [Print] to save or print the selected TeleConsultation
6. Now you have the opportunity to save the PDF-file to your PC, or to print it. N.B.: all information is included (patient data, text of GP’s and Consultant, and the pictures).

### **3.5 Search TeleConsultations**

In the “TeleConsultation” list you can filter on several search terms (NHS nr, pt name, birth date or TeleConsultation status) to search for specific TeleConsultations (see Figure 8).

### **3.6 Settings**

Within the KSYOS TeleDermatology Consultation service, you can edit your personal information in the Settings-menu (see Figure 11).

#### **Adjust Username and Password**

Adjust personal information like address, telephone number, username and password.

#### **Choose NHS Trust**

When several Trusts are participating in TeleDermatology, then it will be possible to select the ones to which you would like to refer.

**KSYOS** TeleMedical Centre TXCS Acceptatie 1.0@alpha(en) Settings Help Logout

Welcome TeleExaminations New TeleConsultation TeleConsultations

**Settings** [Welcome, T TEST HA UK](#)

**USER DETAILS**

Name	T TEST HA UK
Gender	Male
Care provider registration ID	<input type="text"/>
BIG- / KP- nummer	<input type="text"/>
E-mailadress 1 *	<input type="text" value="info@ksyos.org"/>
E-mailadress 2	<input type="text"/>
E-mailadress 3	<input type="text"/>
Emergency Number	<input type="text"/>

Figure 11. Settings menu