

App KOOS - Manual

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1. GENERAL

1.1. The ACT registry

The ACT-registry consists of 3 surgeon forms (Surgery, Adverse Event, Follow-up) and the patient form “Knee Injury and Osteoarthritis Score (KOOS)”. While the entries of the surgeon forms are captured on the web application (<https://act.swissrdl.unibe.ch/>), the **KOOS questionnaire** can be answered using the **app on the provided tablets**.

A general registry manual and the KOOS-entry by paperform can be found on the registry homepage.

1.2. Study design / timepoints of survey completion

Each patient is asked to fill in the KOOS questionnaire during three occasions:

1. Before surgery (before biopsy)
2. 6 months post-surgery
3. 12 months post-surgery



Attention: the preoperative KOOS needs to be filled in at latest on the day of the knee biopsy. Questionnaires filled in after this date are not valid.

1.3. Tablets

Each center is provided with a tablet with the KOOS apps (live and demo-version) pre-installed. The iPads are managed by SwissRDL. They can only be used to access the KOOS apps and the camera – all other functions e.g., browser and email, and other apps are deactivated or removed.

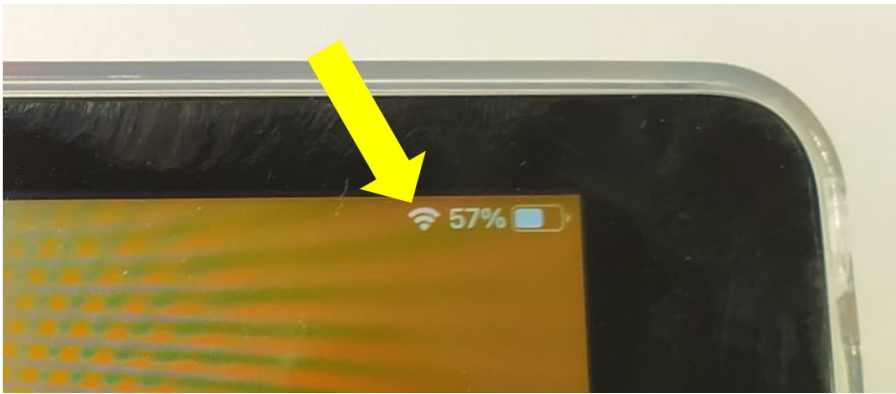
2. PREPARING THE TABLETS

2.1. Set up tablets – WLAN connection

The apps are pushed to the tablets automatically – there is nothing the user needs to do, except:

Enable access to local WLAN:

- Click on the grey Settings icon (swipe the screen to the left to see the icon, it's on the second screen)
- Click on Wi-Fi – choose your network
- Add the password
- Check if the connection is set up



2.2. Apps

For the ACT-registry, the following apps are installed:

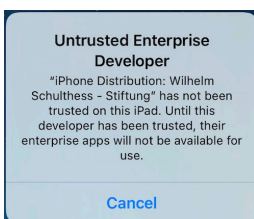
- KOOS Demo: to test the functionality of this patient form
- KOOS: send patient forms to live server

The demo version's functionality is identical to the live version of the KOOS app, with the following differences:

- no login needed, it's a demo account only
- data is not sent anywhere

2.3. Trust developer profile

In case you start the app and the following error message pops up:



Please, go to Settings, General, Profile & Device Management and select the Wilhelm Schulthess - Stiftung profile.

Click on Trust "Wilhelm Schulthess - Stiftung".



3. DATA CAPTURE

3.1. Login

To enter, submit and synchronize the data of the app with the live registry, you will need to login to the KOOS live app. The login information is provided by SwissRDL. Please note that_



- a) this login to the app is different to your login to the web-application
- b) there is only one login to the app per department

To log in, you need:

- Username
- Password
- WLAN connection of the tablet

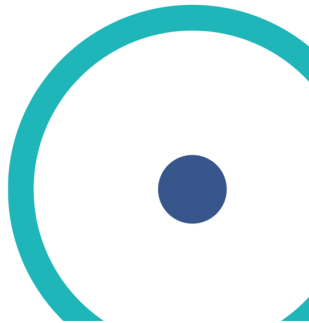
Please contact the SwissRDL support team (tel: +41 31 684 59 66 / e-mail: swissrdl.ispm@unibe.ch) for any support with login.



SELECT LANGUAGE

DE FR IT EN ES

USER NAME PASSWORD



Version 1.0.3



Please note: For security reasons, you are automatically logged out after 15 min of inactivity.

3.2. Basic data – demographic patient data

Basic surgery data and demographic data are filled in by the responsible data entry person.

If a patient does not exist yet on the system, the patient record is thereby automatically created. If a patient already exists, the record is automatically added to the patient.

The required information consists of:

- PID (unique hospital, clinic patient ID)
- Gender
- Year of birth
- The side (operated / to be operated)
- The timepoint of the evaluation
 - o The surgery date, for “Post-OP”-evaluations



Attention I: please enter the **patient ID (PID or MRN)** and **not the case-number (FID)**! If two different case numbers for the same patient are used, the system will automatically create two different patients.



Attention II: The date of operation is needed to calculate the exact follow-up time after surgery. Furthermore, if there is more than one surgery-form per patient, it allows to link the survey to the correct surgery.



The image shows two side-by-side screenshots of the KOOS app registration interface. Both screens feature the CODON logo and a 'Welcome, KOOS_App' message. The left screen is for 'Pre-OP' and has fields for PID (123), Gender (Male), and Year of Birth (1980). The right screen is for 'Post-OP' and includes an 'IMPLANTATION DATE' field (19.02.2022). Both screens show a 3D knee joint illustration and a 'CONTINUE' button.

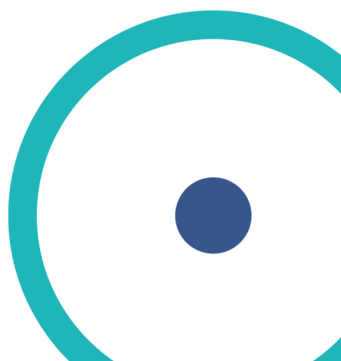
3.3. Consent to survey

After entering the basic information, the app is handed over to the patient who first must consent to the survey. If the patient does not consent, the questionnaire will not be started, and no data will be transferred to the registry.

WELCOME

This survey asks for your view about your knee. This information will help us keep track of how you feel about your knee and how well you are able to perform your usual activities. Answer every question by ticking the appropriate box, only one box for each question. If you are unsure about how to answer a question, please give the best answer you can.

I consent to the survey Yes No



3.4. Filling in the questionnaire

Each question needs to be answered by tipping on the corresponding button. After completing all the questions of the page, tap “Next” on the bottom-right corner.



Stiffness

The following questions concern the amount of joint stiffness you have experienced during the last week in your knee. Stiffness is a sensation of restriction or slowness in the ease with which you move your knee joint.

	None	Mild	Moderate	Severe	Extreme
How severe is your knee joint stiffness after first wakening in the morning?	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
How severe is your knee stiffness after sitting, lying or resting later in the day?	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>



← Prev Next →

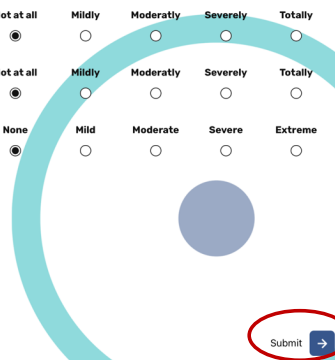
3.5. Submit the questionnaire

When all questions of the survey are answered, tab “Submit” on the bottom-right corner of the last page of the survey.



Quality of Life

How often are you aware of your knee problem?	Never	Monthly	Weekly	Daily	Constantly
	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Have you modified your life style to avoid potentially damaging activities TO YOUR KNEE?	Not at all	Mildly	Moderately	Severely	Totally
	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
How much are you troubled with lack of confidence in your knee?	Not at all	Mildly	Moderately	Severely	Totally
	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
In general, how much difficulty do you have with your knee?	None	Mild	Moderate	Severe	Extreme
	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>



← Prev Submit →

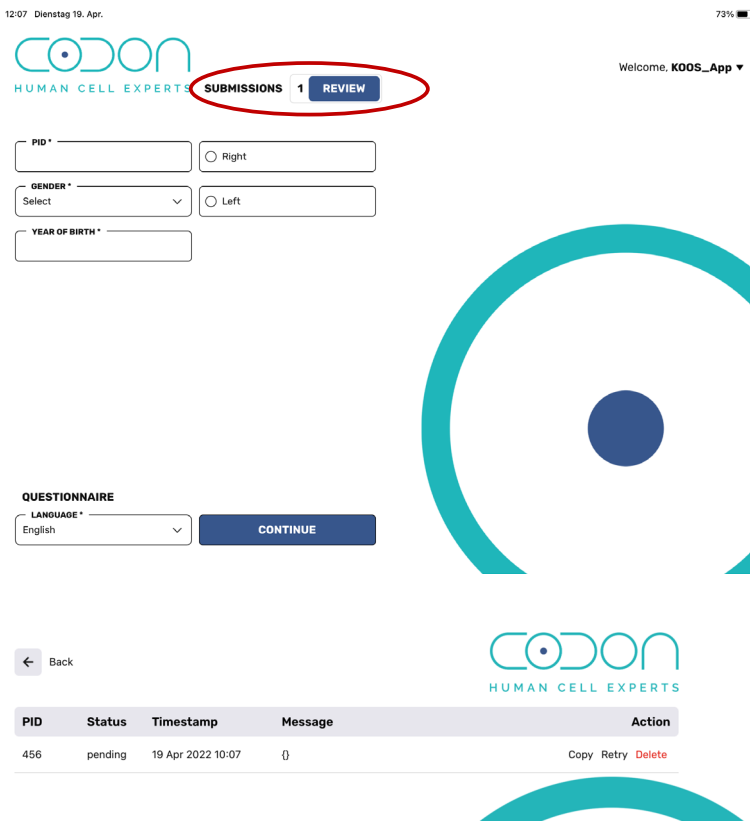
If the data has successfully been synchronized with the registry, the following page appears and by tapping “Next” another questionnaire can be started; by tapping “Exit”, the session will be interrupted:



It is possible to collect another survey by tapping on “Next”, or to interrupt the session by clicking “Exit”. The data will be stored locally and will be synchronized once the WLAN connection is re-established.

3.9. Review of submissions

If there is a problem – e.g. currently no WLAN connection, the issue(s) can be reviewed by tapping “REVIEW” on the top of the first page of the app. Please note that this box disappears as soon as all the issues have been resolved.



If the form has not been transferred because of lacking internet connection, reactivate WLAN, and click “Retry”. Please be aware that this issue should disappear in any case shortly after re-establishing the connection.

In case of other errors preventing the transaction of the data, please take a picture of the error message and send it to the support team of SwissRDL (e-mail: swissrdl.ispm@unibe.ch).



Attention: Please check regularly if there are any issues with your submissions.

4. SUPPORT AND DOCUMENTS

For further support, please contact the support team at SwissRDL:

swissrdl.ispm@unibe.ch, +41 31 684 59 66

User manual for the ACT registry can be found here:

<https://act.swissrdl.unibe.ch>