platform24

User Manual – Content Studio

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Consult instructions for use: eIFU provided from within the product and via manufacturers web-page.

Table of Contents

1. Introduction

1.1. About this manual

This is the User Manual for Content Studio, Medical developer User Interface within Manage.

NOTE
The User Manual might not always be fully up to date regarding all User Interface (UI) elements. For example, smaller UI elements, such as updated names for buttons, fields etc. might not in themselves produce a new version of the User Manual. All UI changes will, however, be communicated in the Release Notes at the time of the update. All warnings will always be up to date in the User Manual, and, in addition, new warnings will be communicated in the Release Notes.

2. Contact details

2.1. Manufacturer

Address	**Platform24 Healthcare AB**
	Västra Järnvägsgatan 7
	SE-111 64 Stockholm
	Sweden
Website	https://platform24.com

2.2. Support

2.2.1. End user support

For questions about editing medical content, contact the Customer Success Manager at Platform24.

2.2.2. Urgent cases

For urgent support cases users should call the Platform24 support phone number below.

Phone: +46 (0) 10-140 23 21

2.2.3. Non urgent cases

For all non urgent support cases users should email the support email below.

E-mail: `<support@platform24.com>`

For questions regarding additional services or modules your organization may want to buy or activate, users should contact their *Customer Success Manager*, (*CSM*) at Platform24.

2.3. Feedback and questions regarding the user manual

For feedback and questions regarding the user manual, email the user documentation support email below.

E-mail: `<support@platform24.com>`

3. Symbols and admonitions

3.1. Symbols

	Manufacturer
	Consult instructions for use
	Warning

3.2. Admonitions

This section describes admonitions that are used in the user manuals.

WARNING

A warning indicates a hazardous situation that, if not avoided, could result in death or serious injury.

CAUTION

A caution indicates a hazardous situation that, if not avoided, could result in minor or moderate injury.

IMPORTANT

An important admonition indicates information that is important for the user to take note of.

NOTE

A note indicates information that the user should to take note of.

TIP

A tip indicates recommendations for the user.

4. Warnings

> ⚠️ **WARNING**
> Any changes regarding configuration (adaptations, texts, rules, medical content, etc.) are carried out in Manage in production but should be put through a review process before they are activated in production.

> ⚠️ **WARNING**
> With the product in *active mode*, Manage administers Clinic, where healthcare practitioners receive real patients and the Patient app, in which real patients pursue their digital journey. All changes must be reviewed before releasing them into production.

> ⚠️ **WARNING**
> Any changes to the medical content via Content Studio have essentially an impact on patient journeys. This puts high demands on everyone editing in Content Studio to ensure they have training in how the tool works and use this guide to further understand the functionality.

> ⚠️ **WARNING**
> The medical responsibility for content changes lies with the partner carrying out the changes. This means that responsibility to test that any changes made work as intended lies also with the partner.

> ⚠️ **WARNING**
> Make sure to test all changes made and identify any ensuing changes required to ensure patient-safe flows.

> ⚠️ **WARNING**
> Removing a component can pose a patient-safety risk unless a careful analysis of the effects is performed. Make sure to test any changes made and identify any ensuing changes required to ensure patient-safe flows.

WARNING

Editing and adding assessments can pose a patient safety risk unless a careful analysis of the effects is conducted. Make sure to test any changes made and identify any ensuing changes required to ensure patient-safe flows.

5. About Content Studio

5.1. Content Studio

Content Studio is the user interface which provides the customers the possibility to create their own non-routing questionnaires, i.e., assessment questionnaires, questionnaires for anamnesis and administrative questionnaires.

Assessment questionnaires are questionnaires that can be used to assess conditions for example mood (*MADRS-S*). These can be sent out continuously to the patient, which provides the possibility for the practitioner to see trends based on the answers from the assessment questionnaires.

Administrative questionnaires are questionnaires such as sick leave, contact with healthcare center or information before a visit.

Questionnaires can also be developed to gather the anamnesis and other relevant medical information form the patient.

The customer can use the medical content provided by Platform24 in parallel but they cannot have any dependencies.

5.2. Intended users for Content Studio

Medical content developers configuring questionnaires.

Details

Type of user	Professional
Age	>20 years old
Level of instructions	• User manual
	• Level *B1-B2* in the language supported in the product for the relevant market.
	• Undergone education and training for Content Studio.
	To ensure a safe development of medical product, Platform24 provides a recommended development process for the medical content that is described in "**Process description for Medical Content development in Content Studio**" (D092). This document is part of the educational material provided to new partners, and outlines the medical content development process recommended by Platform24. Partners are required to use this development process for medical content to safeguard the medical safety of the patients.
	To change existing medical content, or to produce new medical content, this process must be followed to ensure that medical and technical safety is maintained at all times.

5.3. Intended operational environment for Content Studio

Application	Manage
Interface	Content Studio
Environment	• Home/office environment with connection to internet
	• Normal ambient conditions

Frequency of use   From several times a day to one time a week

Platform   The product is used on a standard PC with the minimum requirements:

- Hardware; dual-core processor, 4 GB RAM
- Software; latest versions of Edge, Safari, Chrome or Firefox
- Data bandwidth; 300 kb/s (video) / 50 kb/s (voice)
- IT security; https

5.4. Terms and definitions

B1-B2   B1-B2 in the *Common European Framework of Reference* (CEFR) self-assessment scale. e.g. Independent user of the language.

Customer Success Manager (CSM)   A CSM (Customer Success Manager) is the customer's main strategic advisor. The CSM is also the customer's main contact person for any contractual, commercial questions/issues.The CSM is the first point of escalation for any unsolved questions/requests/issues

MADRS-S (MADRS)   The Montgomery–Åsberg Depression Rating Scale (MADRS) is a ten-item diagnostic questionnaire which psychiatrists use to measure the severity of depressive episodes in patients with mood disorders.

MADRS-S is a nine question self-rating version of the MADRS scale, often used in clinical practice.

6. What is Manage and Content Studio?

Manage is an application with the specific aim of managing users and configuring patient flows in the patient and healthcare provider apps included in Platform24. In addition to Manage, Platform24 also consists of Clinic (healthcare provider view) and the Patient app (or the Patient apps). Healthcare providers work in Clinic while patients make their digital journeys in the Patients apps.

Manage is the administration UI where healthcare providers can manage settings for Clinic, the Patient app and the medical content, as well as user roles and access rights in Manage and Clinic.

The area where users can manage the medical content in Manage is called Content Studio. This document describes Content Studio and how it can be used to edit questionnaires.

6.1. Platform24 Environments

There are two different environments in Platform24.

- **Demo environment**

  The Patient app and Clinic can be tested at will in the demo environment to learn how the platform works. It is also possible here to test any changes made in Content Studio before they are released into production.

- **Production environment**

  All applications (Manage, Clinic and the Patient app) in the production environment are in active mode.

> ⚠️ **WARNING**
>
> With the product in *active mode*, Manage administers Clinic, where healthcare practitioners receive real patients and the Patient app, in which real patients pursue their digital journey. All changes must be reviewed before releasing them into production.

> ⚠️ **WARNING**
>
> Any changes regarding configuration (adaptations, texts, rules, medical content, etc.) are carried out in Manage in production but should be put through a review process before they are activated in production.

6.2. Log in to Manage

All editing of medical content is carried out in Manage's production environment. Changes are saved in the demo environment before users can actively decide to publish them in the production environment for the Patient app and Clinic. Changes carried out in the production environment are tested in the demo environment.

- **Production environment:** Browse to https://manage.platform24.se/ and log in with the preferred authentication method.

> **NOTE**
> Some customers might have a unique environment link. Talk to your superuser at Platform24 if the link does not work.
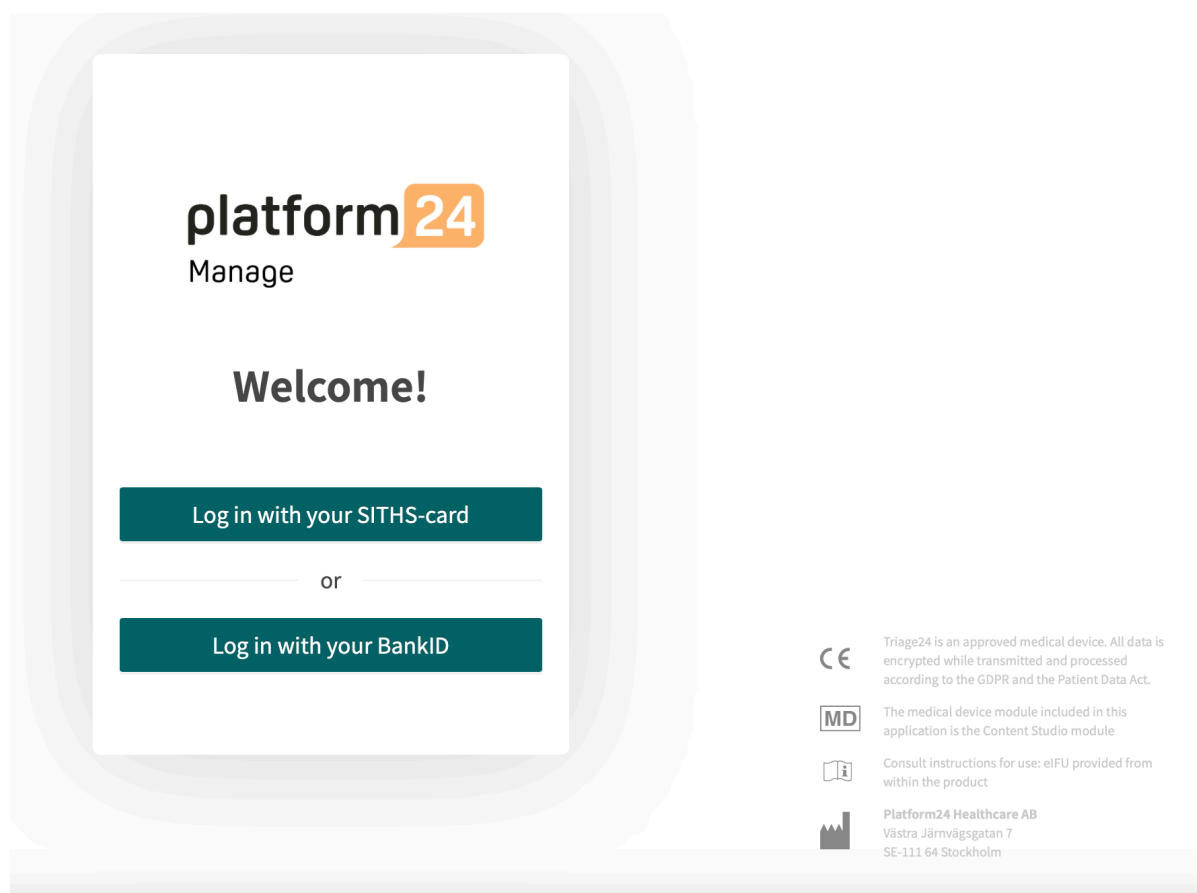
- Select in the next step which partner to manage and click on **Approve**.

7. Basic Details - Content Studio

7.1. Working with Content Studio

Content Studio is used to edit the medical content included in the agreement with Platform24 and to create own questionnaires. Any changes that are made will only be valid for the partner who makes them.

The changes made to the medical content using Content Studio must be validated before it is used in the production environment with real patients. In addition to the validation steps that are built into the tool, it is up to each partner to develop a validation and test process for the medical changes.

When changes are made to the medical content in Content Studio, they can and should be checked in the partner's own Patient app and Clinic demo applications.

In addition to a partner's own validation and test processes, a technical review of the changes will be conducted when a partner believes that their own validations and tests are ready for release into production. The assessment is intended to check that any changes that are made will not affect the technical conditions that enable the questionnaires to be used. The technical assessment does NOT include checking the impact any medical changes may have, but only that they are done correctly in a way the system can handle. An example is to check that conditions are written correctly from a technical perspective to ensure steps are not missed.

All changes made after the previous production release will be included in the technical assessment. One recommendation for partners is that they continuously release changes into production as this reduces the extent of the technical assessments.

> ⚠️ **WARNING**
> Any changes to the medical content via Content Studio have essentially an impact on patient journeys. This puts high demands on everyone editing in Content Studio to ensure they have training in how the tool works and use this guide to further understand the functionality.

> ⚠️ **WARNING**
> The medical responsibility for content changes lies with the partner carrying out the changes. This means that responsibility to test that any changes made work as intended lies also with the partner.
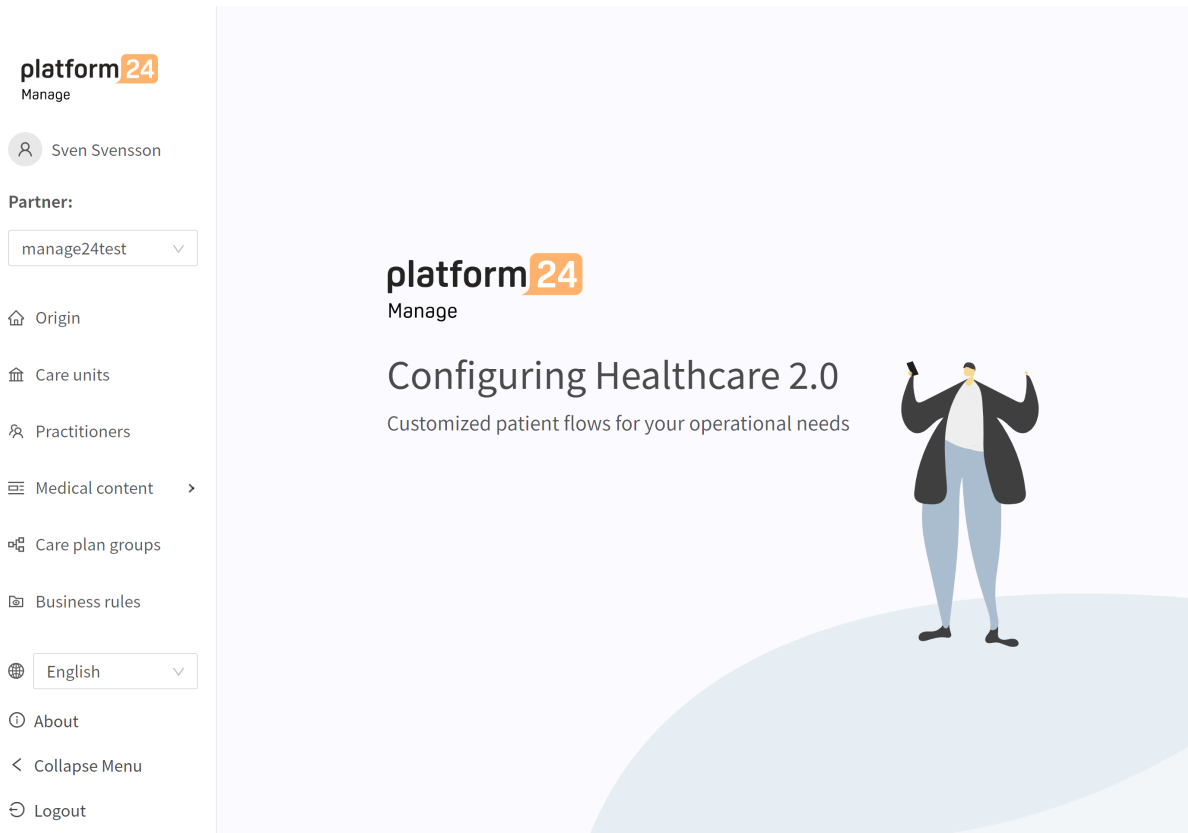
> ⚠️ **WARNING**
> Make sure to test all changes made and identify any ensuing changes required to ensure patient-safe flows.
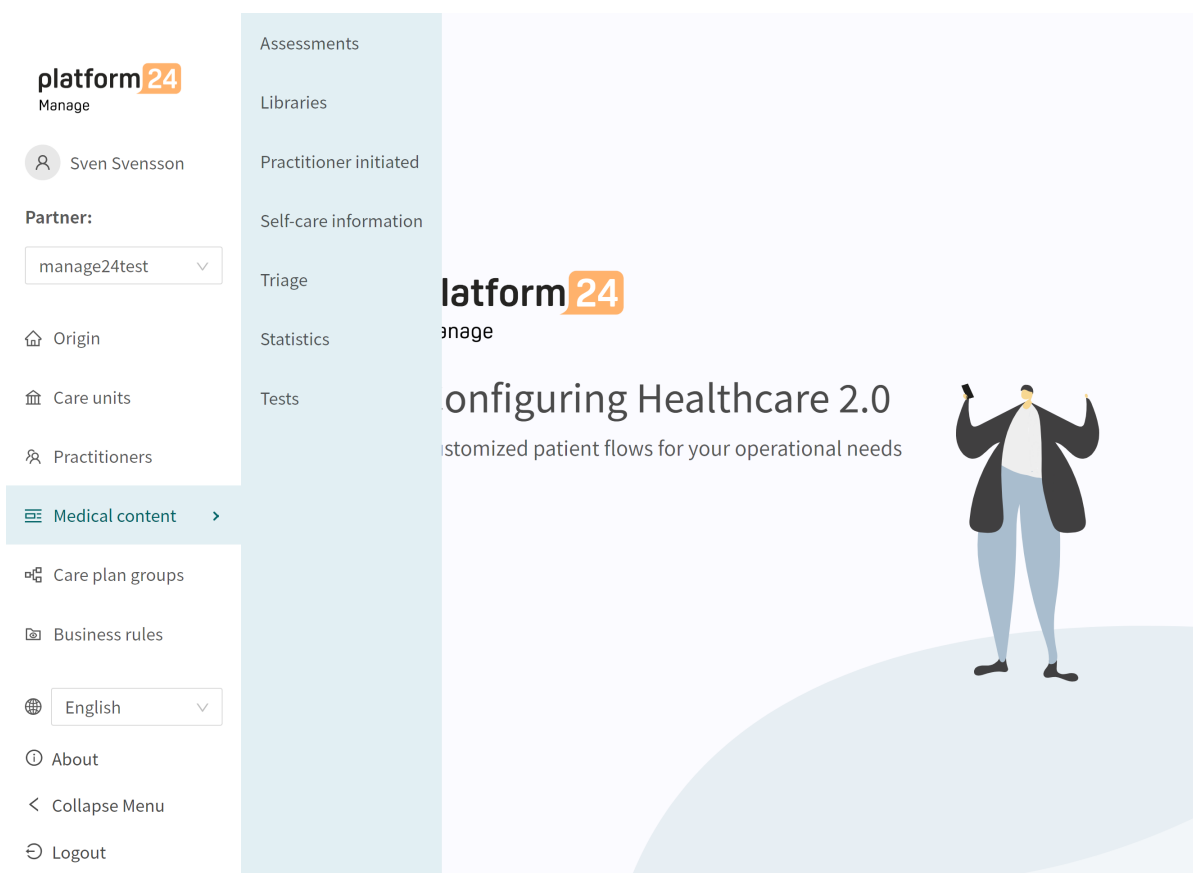
7.2. Access to Content Studio

A main menu is displayed on the left when you log into Manage.

- Drag the mouse over the **Medical content** heading.

- The various sub-menus under the Medical content heading contain various questionnaires. Select which **sub-menu** you want to open.

- **Assessments**: Contains questionnaires that can be used to assess conditions for example mood (*MADRS-S*). These can be sent out on a continual basis to the patient, which means that the healthcare practitioner can see trends based on the answers in the assessment questionnaires.

- **Libraries**: Not applicable.

- **Practitioner–initiated**: Not used.

- **Self-care information**: Not applicable.

- **Triage**: Contains all the questionnaires except the assessment questionnaires.

- **Statistics**: Not applicable.

- **Tests**: Not applicable.

7.3. Overview of questionnaires

An overview of the questionnaires available in each sub-menu is displayed under each sub-menu (**Assessments**, **Triage**).

Title The column shows the title the questionnaire has been given. This is language-specific and can therefore be available in several languages.

Id The `ID` given to the questionnaire. It is designated in English as far as possible because it should be viable to use the `ID` throughout the system and to also be the key to the questionnaire in other languages.

Category Specifies in which category the questionnaire is grouped. This is specified when a questionnaire is created.

Hidden Specifies if the questionnaire is hidden from patients in the Patient app and hidden for practitioners in Clinic or not. The questionnaire will automatically be created with the value "`False`", which means that the questionnaire is not hidden from patients and practitioners. This can be set for each questionnaire if you click on them.

> **NOTE**
> This is not available under the **Self-care information** sub-menu.

Status Questionnaires can have two values for this field:
Local copy = questionnaire only created once for the partner.
Empty = questionnaire is unchanged compared to Platform24's questionnaire.

7.4. Questionnaire Details

A specific questionnaire can be opened by clicking on it in the overview in the **Triage** or **Assessments** sub-menus.

The following information is presented in the questionnaire overview.

Metadata — Each questionnaire contains a section called **Metadata** with content that can be seen at the top of the questionnaire. **Metadata** is basic information that is used to set basic setting for the questionnaire. Refer to the Metadata section [39] for more information.
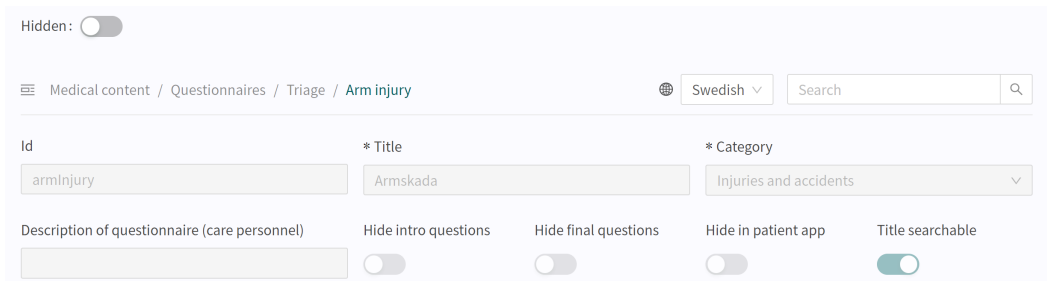
Hidden — Specifies if the questionnaire is hidden from patients in the Patient app and hidden for practitioners in Clinic or not. The questionnaire will automatically be created with the value "`False`", which means that the questionnaire is visible to patients and practitioners. This can be set for each questionnaire if you click on them.
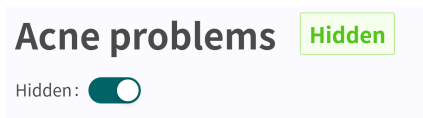
Visualize — It is possible in each questionnaire to visualize what the questionnaire looks like with each of its components.

Click the **Visualize** button to open the interactive visualization.
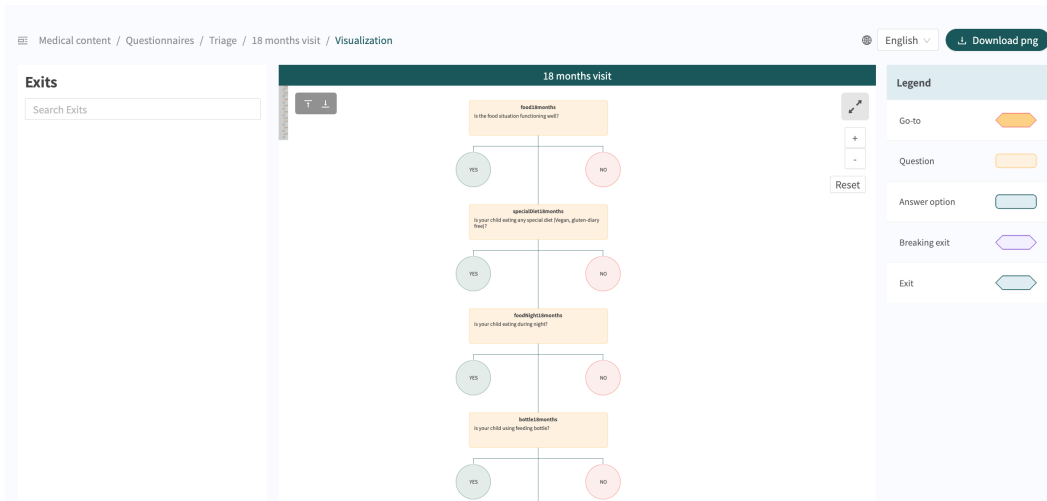
You can click on "**Download png**" to download the file and view it locally. It is also possible to change the language in the content (if the partner has questionnaires in several languages).

Scrolling allows you to zoom in and out in the visualization. Click and drag to move the window. Click on the expand symbol to maximize and enlarge the visualization in the window.

Clicking on a component in the visualization area displays the dependencies and conditions for the specific component. For example, a prior affirmative answer to a question may be required in order for this specific question to be activated for the patient.

When a change is made to the questionnaire, the visualization will be updated, making it a good tool for determining changes and to be used as part of the validation before changes are released into production.

7.5. History, latest changes and testing

Latest update

Specifies which user has made the most recent change for the partner. If a status is not visible here, it is because changes have not been made since the last production release.
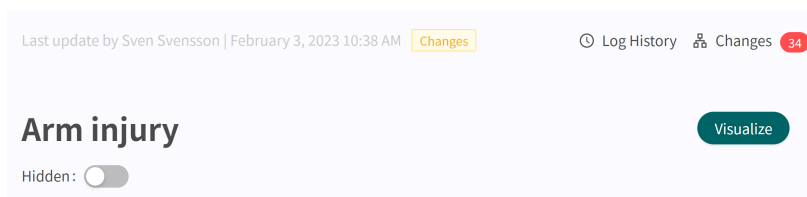

If the partner has an ongoing production release, it will be listed here and no further changes can be made until the production release is complete.
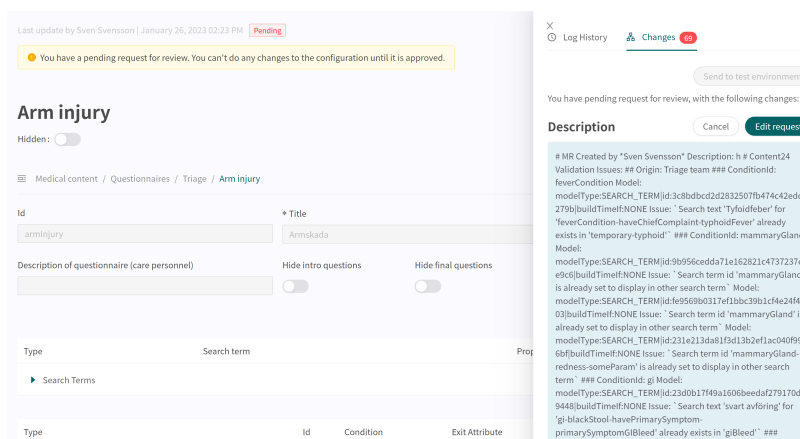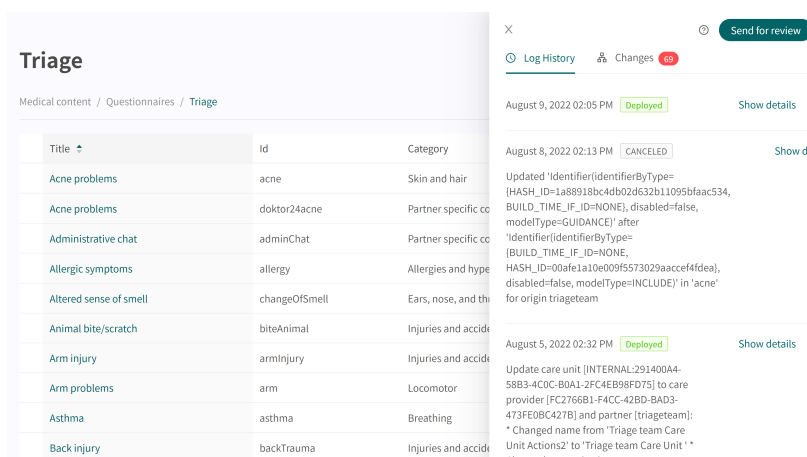

Log history, **Changes**, **Send to test environment** and **Send for review**

Any changes made for the partner since the last production release will be displayed in the list. What the change was, who made the change, what date and time and whether the change has been saved correctly can be seen under **Changes**. The number of changes is displayed and listed in the red box. The most recent changes are given a status that informs users if the changes have "`Passed`" or "`Failed`". It is always the most recent (at the top) change that is valid. If the top one has passed, all the underlying ones have also been saved correctly. If "`Failed`" is displayed for the three most recent changes, contact the implementation manager or support at Platform24 for further help.
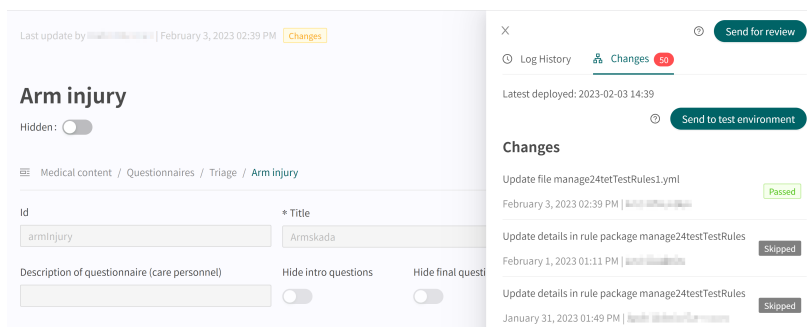
Information about previous production releases is available under the **Log history** tab. More information about what the production release involves (under **Show details**) is available here and status showing whether the production release was successful or not.

In order for changes in Content Studio/Manage to be updated in the demo application for the Patient app and Clinic (demo/test environment) one must actively upload the changes. When the button "Send to test environment" is green (within the Change log tab), there are new changes that can be sent out to the demo environment. To upload the changes made in Content Studio/Manage, click on "**Send to test environment**". All the changes that were added since the last update to the demo environment will be sent out when clicking on that button. All updates that are listed under a change with "Passed" status have been successfully uploaded to the test environment. If the button "Send to test environment" is gray, there are no new updates to upload to the test environment.

To release the changes made for the partner into production, click on "**Send for review**", describe what changes have been made and the required impact of the changes. Send the request and wait for the technical review to be completed and it has been released into production.

You can cancel the request by clicking **Cancel**, if a review of further changes has to be carried out for the partner.


7.6. Warnings

7.6.1. Overall warnings

A red exclamation mark 🔴 will appear next to the questionnaire title, if any changes have been made to the questionnaire which interrupt the logic. The exclamation mark will appear in the list showing all the questionnaires and at the specific component where the logic is interrupted.

Information about the specific error is shown if you place the mouse pointer over the exclamation mark. This can for example be specifying an incorrect condition that does not exist. The images below show all views where the exclamation mark is shown

The image below shows the exclamation mark warning in the **Triage** view.

Triage ⚠️

Medical content / Questionnaires / Triage

Title ⬍	Id
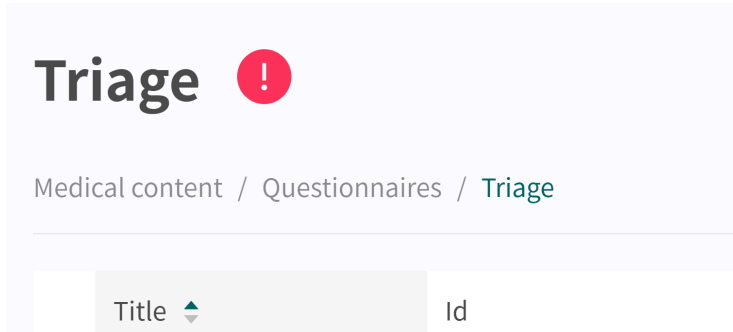
The image below shows the exclamation mark at the questionnaire where the logic is interrupted.

	Animal bite/scratch	biteAnimal	Injuries and accidents	⊗ False
⚠️	Arm injury	armInjury	Injuries and accidents	⊗ False
	Arm problems	arm	Locomotor	⊗ False

The image below shows the exclamation mark within a specific questionnaire.

Last update by ▓▓▓▓▓ | January 27, 2023 04:13 PM   Changes

Arm injury ⚠️

There are validation errors in the condition. Please double check.

Hidden : ⬤○

☰ Medical content / Questionnaires / Triage / Arm injury

Id

armInjury

* Title

Armskada

Description of questionnaire (care personnel)

Hide intro questions

○⬤
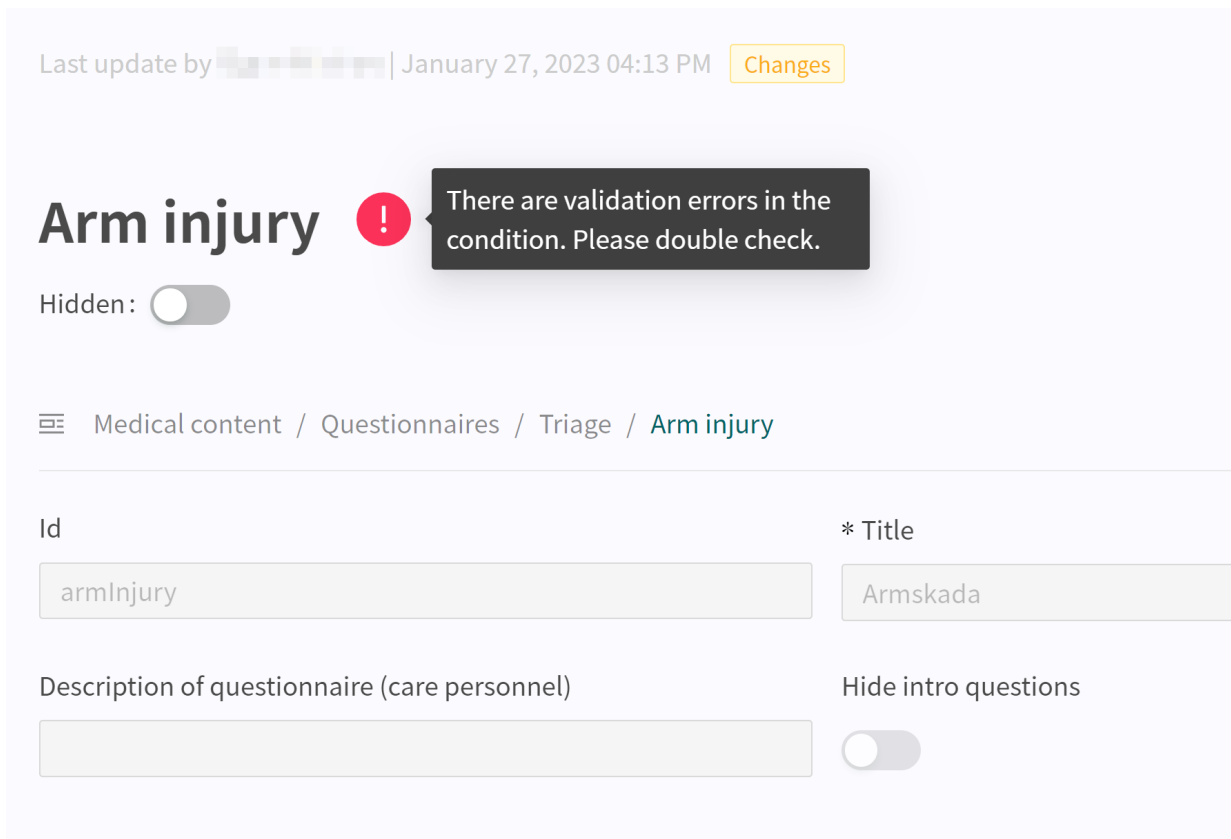
The image below shows the exclamation mark at the specific component where the logic is inter-rupted.
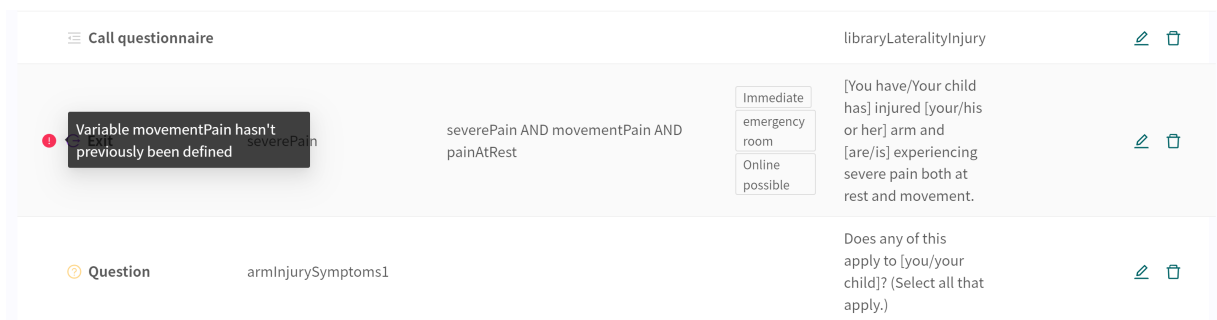
To ensure the questionnaire does not contain any broken logic, always make sure that the questionnaire has no red exclamation marks and conduct thorough tests in the Patient app to rule out errors and patient risks. To trigger a new validation, press on the button "**Run Validation**". "**Run Validation**" is done in the **Triage** view and starts a validation of all questionnaires.
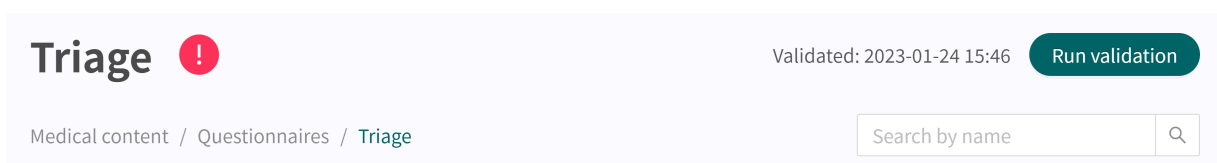
7.6.2. Warning in the event of changes

If changes are made to conditions in the components, a warning message is displayed when saving the change. This is to remind users that any changes have been made may result in a risk for patients. The warning appears each time changes have been made to the conditions.

7.7. Languages

Questionnaires can be created and provided to a patient in several different languages. The languages agreed on to use in Platform24 will be displayed and selectable for the various Content Studio components.

1. Start by selecting which language to use in Manage in the lower left corner.

2. To edit a questionnaire in another language, select the `language` in the overview to change the language in language-dependent fields (e.g. the field **Description**).

3. To change the language in a component, for example when editing a **Question**, click on the field and select the language in which the text should be displayed.

> **NOTE**
> The application texts will be displayed in the languages selected in step 1, but the **Question** content will be displayed in the selected language in this step.

7.8. Deleting and undoing component changes

Questionnaires cannot be completely deleted. They can however be deactivated in the Patient app and in Clinic by setting them to "**Hidden**" (refer to the Overview section for more information) or "**Hide in patient app**" (refer to Metadata section for more information).

7.8.1. Deleting and recalling components

⚠️ **WARNING**

Removing a component can pose a patient-safety risk unless a careful analysis of the effects is performed. Make sure to test any changes made and identify any ensuing changes required to ensure patient-safe flows.

The components in a questionnaire can be deleted/removed to adapt the questionnaire to a partner's operations. Click on the "**Rubbish bin**" 🗑 icon next to the "**Pen**" ✏ icon to delete a component.

Type	Id	Condition	Exit Attribute	Content	Status	Actions
▼ ⌂ Pre-triage						⊕
☰ Go to another questionnaire		infant		notYetForInfants		✏ 🗑
⊙ Question	previousDiagnosis			[Have/Has] [you/your child] ever been diagnosed with asthma?		✏ 🗑
⊙ Question	ongoingRespiratory			[Do you/Does your child] currently have breathing problems?		✏ 🗑
☰ Go to another questionnaire		NOT previousDiagnosis AND ongoingRespiratory		breathing		✏ 🗑
⊙ Question	respiratory	previousDiagnosis AND ongoingRespiratory		How severe are [your/your child's] breathing problems?		✏ 🗑
⊙ Question	criticalRespiratory	respiratory.severe		Are [your/your child's] breathing problems so severe that [you/he or she] [are/is] experiencing pronounced shortness of breath/breathlessness?		✏ 🗑

🟠 Sure to delete? Cancel **OK**

8. Grouping and using questionnaires and self-care information

8.1. Assessments

Assessments are codified rating scales such as **MADRS-S**, **Dudit** and **Audit**. The assessments always have the category: **Assessments** and are sent from Clinic to the patient.

These questionnaires contain questions where the answers are rated according to international or national standards. The system totals the user's points, which in turn in its clinical context provides a subset of information about the patient's current wellbeing to healthcare practitioners in Clinic.

⚠️ **WARNING**

Editing and adding assessments can pose a patient safety risk unless a careful analysis of the effects is conducted. Make sure to test any changes made and identify any ensuing changes required to ensure patient-safe flows.

8.1.1. Editing existing questionnaires

To edit an existing assessment, click on the "**Assessment**" sub-menu under the "**Medical content**" menu. Then select the assessment you want to edit. Existing assessments in the status column are not selected.

Click on the questionnaire to be edited (click on the title that is displayed in the "**Questionnaire**" column).

Assessments always have the "**Assessment**" category and always have the "**Health test**" section where the components are available. Click the plus ⊕ icon to add a new component to the section or click the **pen** ✎ for a component to edit the existing component.

8.1.2. Creating new questionnaires

New assessments, which can be sent to patients during an appointment, are created in the "**Assessments**" section under the "**Medical content**" menu option.
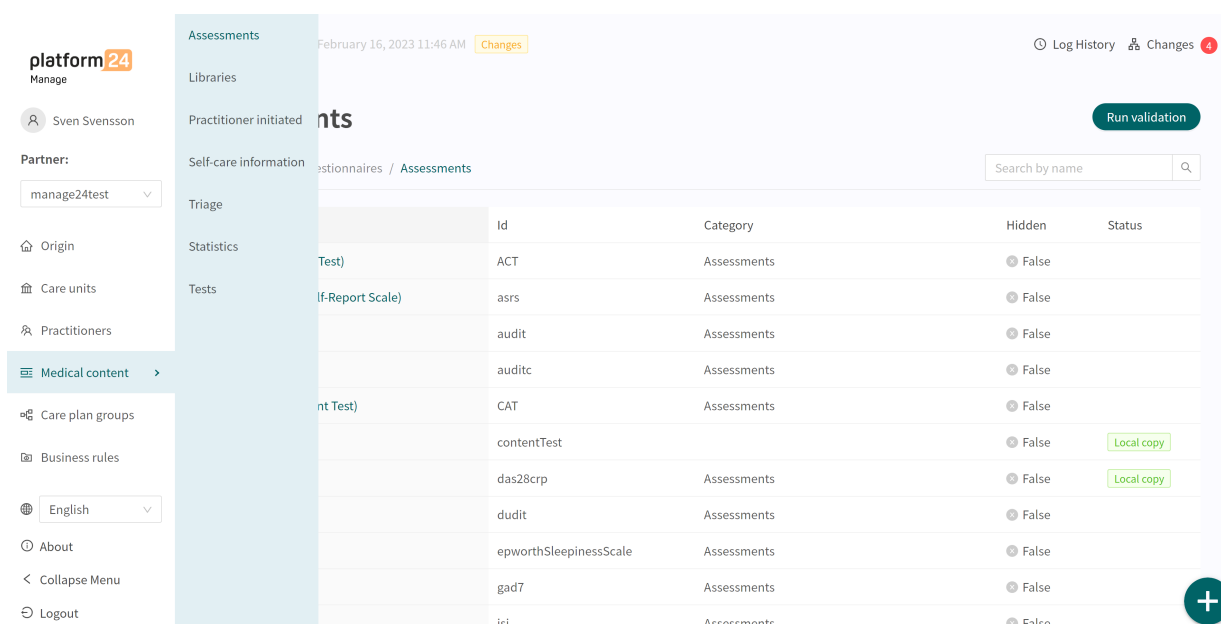
Click the plus sign ⊕ in the lower right corner to add a new assessment. In the window that opens, enter a name for the new questionnaire according to valid values:

a-z, A-Z, 0-9 (a-z uppercase and lowercase letters and numbers, no special characters).

Click on "**Save**". The questionnaire will automatically be set to hidden in the Patient app (**Hide in patient app** slider selected).

When the questionnaire has been created, fill in a description of what the questionnaire contains in the **Description** field. Click again on the "**Save**" button. Then click on the plus button ⊕ to add statements to the "**Health test**" section.

Components are added to the "**Health test**" section by clicking on the plus ⊕ sign in the "**Health test**" row and selecting which component type to add in the window that opens. Standard components in **Assessments** are "**Questions**".

8.1.3. Replacing existing questionnaires

To replace an existing questionnaire, go to the questionnaire overview in the **Assessments** section and click on the large plus ⊕ sign in the lower right corner.
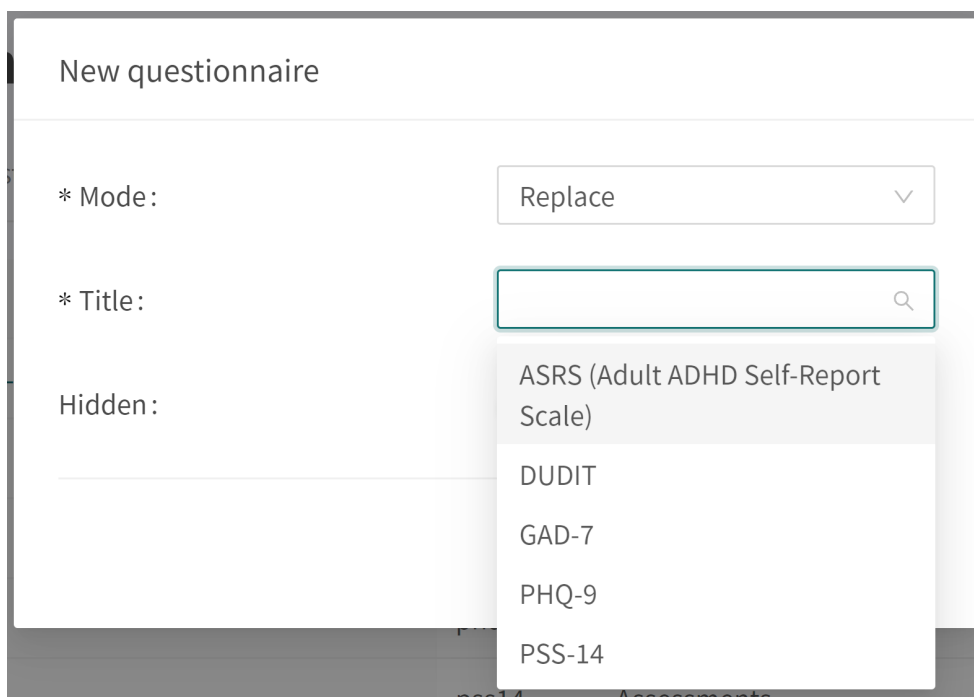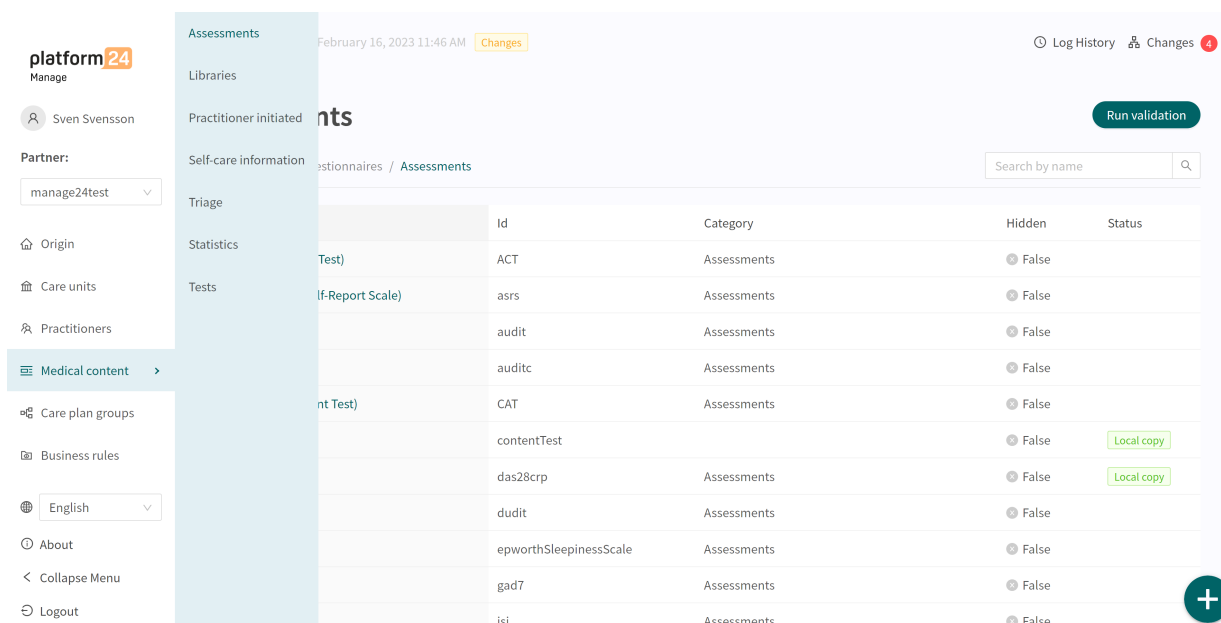
Select "**Replace**" in the **Mode** field and which of the existing questionnaires you want to replace in the **Name** field. It is only possible to replace existing questionnaires, meaning that any questionnaires without changes will not be displayed in the list. If a questionnaire must be replaced, delete all changes and then carry out the above steps again. When a questionnaire is replaced, it's **Id** and components are reused and this opens the way to also edit the questionnaire's metadata.

Replaced questionnaires can be edited just like New questionnaires. Refer to the Creating new questionnaires [29].

8.2. Triage

The questionnaires available in the **Triage** section are the questionnaires that are not assessment questionnaires.

> ⚠️ **WARNING**
>
> Editing and adding to questionnaires in the **Triage** sub-menu can pose a patient-safety risk if a careful analysis of the effects is not performed. Make sure to test any changes made and identify any ensuing changes required to ensure patient-safe flows.

8.2.1. Editing existing questionnaires

An existing questionnaire in the **Triage** section can be edited by clicking on the questionnaire you want to edit. In the questionnaire you can select to edit an existing component by clicking on the **pen** ✎ , or to add a new component by clicking on the ⊕ button in the desired section.
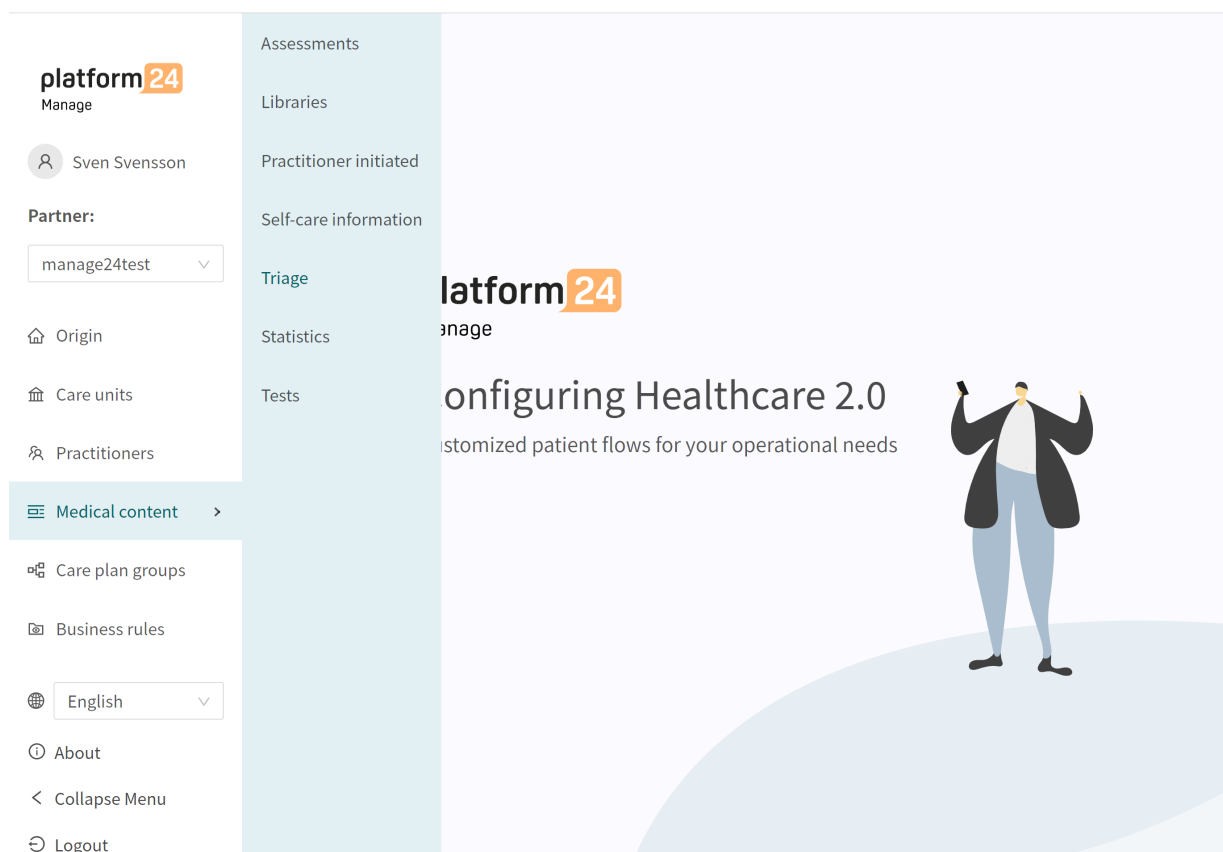
Triage

Validated: 2022-10-03 10:50   **Run validation**

Medical content / Questionnaires / **Triage**

Search by name

Title ⬍	Id	Category	Hidden	Status
Acne problems	acne	Skin and hair	⊗ False	
AddNew	AddNew	Administrative	⊗ False	Local copy
Administrative chat	adminChat	Partner specific conditions	⊗ False	

Arm problems

Visualize

Hidden: ⬤

Medical content / Questionnaires / Triage / **Arm problems**

🌐 Swedish ⌄   Search

Id	* Title	* Category
arm	armbesvär	Locomotor

Description of questionnaire (care personnel)

| Hide intro questions	Hide final questions	Hide in patient app	Title searchable
⬤	⬤	⬤	⬤

Save

Type	Search term	Properties	Actions
▶ Search Terms			⊕

Type	Id	Condition	Exit Attribute	Content	Actions
▼ 🏠 Pre-triage					⊕
≣ Go to another questionnaire		infant		notYetForInfants	✎ 🗑
ⓘ Question	armAreaLocalisation	properties.jointElbow == null		Where are [your/your child's] problems? (Select all that apply.)	✎ 🗑
≣ Formula	haveElbow	armAreaLocalisation.elbow OR properties.jointElbow			✎ 🗑
≣ Formula	haveHand	armAreaLocalisation.hand			✎ 🗑
≣ Formula	notHaveElbow	NOT armAreaLocalisation.elbow AND properties.jointElbow == null			✎ 🗑
≣ Formula	haveWrist	armAreaLocalisation.wrist			✎ 🗑

8.2.2. Creating new questionnaires

A new questionnaire is created in the questionnaire overview in the **Triage** section. Click on the large ⊕ sign in the lower right corner to open the dialog for creating new questionnaires.

In the window that opens, enter a name **Id** for the new questionnaire using valid characters: **a-z, A-Z**, select which category the questionnaire belongs to, select **Create post-triage section** and click on "**Save**".

New questionnaire

* Mode :   New   ⌄

* Title :   [   ]

* Category :   Administrative   ⌄

Hidden :   ◯

☐ Create pre-triage section

☐ Create post-triage section

Cancel   Save

The newly created questionnaire will be visible straightaway on the screen and additional details can be entered or changed, for example a questionnaire **Description**, **Category**, settings if intro and final questions should be asked, etc.

Begin constructing the newly created questionnaire by clicking on the plus ⊕ buttons in the post-triage section.

All newly created questionnaires (as well as replaced ones) will have **Local copy** status in the **Medical questionnaires** overview section.

Constipation	constipation	Gastrointestinal	⊘ False	
Consult a psychologist	seeAPsychologistInterim	Psychological problems	⊘ False	
Contact tracing Sars-CoV-2	contactTracingCovid	Administrative	⊘ False	
ContentTest	contentTest		⊘ False	Local copy
Coronavirus	covidPortal	Infections	⊘ False	
Cough	cough	Breathing	⊘ False	
COVID-19	covidShort	Infections	⊘ False	
Cramp	cramp	Bifurcation	⊘ False	
Crying infant	infantCry	Health risks	⊘ False	

8.2.3. Replacing existing questionnaires

Existing questionnaires can be replaced in the questionnaires overview in the triage section by clicking on the large plus ⊕ sign in the lower right corner.

Select "**Replace**" in the first drop-down list and which of the existing questionnaires you want to replace in the second drop-down list. Select also which category the replaced questionnaire must belong to (can also be changed afterwards). When a questionnaire is replaced, it's **Id** and components are reused and this opens the way to also edit the questionnaire's metadata.

Replaced questionnaires can be edited just like New questionnaires. Refer to the Creating new questionnaires [34].

9. Components in Questionnaires

Questionnaires can consist of many different components. Here is a description of what different components do and should be used for and what attributes exist for each component.

9.1. Metadata

Each questionnaire contains a section called **Metadata** with content that can be seen at the top of the questionnaire. **Metadata** is basic information that helps to identify the questionnaire.

9.1.1. Attributes and values in Metadata

> **NOTE**
> All attributes are not valid for all types of questionnaires.

Id	All questionnaires have an **Id**. The **Id** needs to be in English and may contain the following characters (no numbers or special characters): • a-z • A-Z
Title	Questionnaire free text title. This must be stated for all languages the questionnaires will be displayed in. Switch language for the questionnaire to edit the **Title** field in another language.

Category	All questionnaires are divided into categories. Certain categories can only be selected within certain sections, for example, only questionnaires in the **Libraries** section can have the **Libraries** category. Categories can only be selected and edited when users create a new or replaces an existing questionnaire in the triage section. In the other sections, system categories are defined based on section.
Description of questionnaire	A free text field where a description of the questionnaire can be added. This description will be visible in Clinic for practitioners. Switch language for the questionnaire to edit the **Description of questionnaire** field in another language.

Hidden	A setting that hides the questionnaire. The questionnaire will not be visible in Clinic or in the Patient app.
Hide intro questions	A setting that enables intro questions from the `libraryTriage-Boot` library to be asked or not asked. They are always automatically asked in questionnaires.
Hide final questions	A setting that enables final questions from the `libraryTriage-Boot` library to be asked or not asked. They are always automatically asked in questionnaires once the triage is concluded.
Hide in patient app	Not applicable.
Title searchable	A setting that enables questionnaire descriptions to be generated as search terms in the Patient app.

9.2. Sections

9.2.1. Pre-triage

This section should not be used.

9.2.2. Post-triage

This section is used to define the components in questionnaires for anamnesis or questionnaires for administrative matters.

9.2.3. Health tests

Occurs in questionnaires with the questionnaire category "**Assessment**" and, in certain cases, "**Libraries**" categories. Questionnaires with the "**Assessment**" section very rarely have logic-driving components, but are static and straightforward with the most questions. An example is the *MADRS-S* questionnaire

9.3. Search terms

This section should not be used.

9.4. Questions

The core functionality of the triage is to ask patient some questions. In this section, more detailed information about how questions are created is given.

Questions must always contain:

• **ID**

• **Question type**

• **Category** (if the question is to be included in the medical history summary in Clinic)

• **Question**

• **Response** (for Single choice and Multiple choice question type)

• **Medical term** (if the question is to be included in the medical history summary in Clinic)

9.4.1. Attributes and values in Questions

ID

All questions have an **ID**.

The **ID** needs to be in English and may contain the following characters (no special characters):

• a-z

• A-Z

• 0-9

Question type	Different types of questions to ask can be selected.

The following question types are available:

- **Multiple choice** – must contain at least one response option and several answers can be selected by the patient
- **Single choice** – must contain at least one response option and one answer can be selected by the patient
- **Yes/No** – the system auto-generates the Yes and No response options
- **Yes/No/Maybe** – the system auto-generates the Yes, No and Maybe response options
- **Number** – a minimum and maximum value can be specified to indicate within which range the patient can answer the question
- **File** – used when the patient is asked to upload an image or a pdf file. Supported file formats are jpg, png, jpeg and pdf. The question can be made optional using the "**skippable**" field.
- **Medication** – Prescription renewal uses this question type.
- **Date** – displays a calendar view to the patient in question. The question can be made optional using the "**skippable**" field.
- **Free text** – the patient can answer using free text. The question can be made optional using the "**skippable**" field.
- **Range** – provides the patient with a slider in the patient app to interact with when providing an answer. Min and Max values, Step and Unit headings are stated in the question. Step indicate how many decimals are allowed in the answer, i.e., how detailed the answer can be.

Category	**Category** can be specified for questions. The category specifies how and under which category the question should be summarized in the medical history summary in Clinic. There is a table and instructions (refer to the smartText User Manual) which specify how categories for each question type should be specified.
Build time if	Do not use.

Condition

Conditions for when a component will be activated for the patient. For example, a response to a question is required for the next question to be asked.

If the condition is to validate that a patient has answered a certain answer, the following syntax is specified:

```
<questionId>.<responsId>
```

If the condition is to validate that a patient answered **Yes** (yes/no question) the following is used:

```
<questionId>
```

If the condition is to validate that the patient answered **No** (yes/no question) the following is used:

```
NOT <questionId>
```

If the condition is based on **answer points**, the following is used:

```
<questionId>.points
```

If the question has to be answered but the answer to the question does not affect the logic but only THAT the question is answered:

```
vars.<questionId>
```

```
vars.<questionId>.<responsId>
```

Conditions can be based on dates. A date can come from three sources:

- Properties (`properties.creationDate, properties.startedDate, healthDataValue.date`)
- Answers to date questions, using the `questionId` of the date question.
- Static dates (using the syntax `date(YYYY-MM-DD)`.

Dates should have format YYYY-MM-DD.

To get days/months/years:

```
day(someDate)
```

```
month(someDate)
```

```
year(someDate)
```

To get the amount of days/weeks/months/years between to dates:

```
days(someDate, someOtherDate)
```

```
weeks(someDate, someOtherDate)
```

```
months(someDate, someOtherDate)
```

```
years(someDate, someOtherDate)
```

It is also possible to write conditions based on:

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`systemBirthDate` (the birth date of the patient)

`systemAge` (the age of the patient)

`systemGender` (the gender of the patient)

Conditions can contain several validations and answers to previous questions or questionnaires where the following can be used to bind the conditions together and check the value:

Binding conditions:

`AND` = and

`OR` = or

What has to be fulfilled:

"`!=`" = not equal to

"`==`" = equal to

If no value can exist:

`null` = no value

> **NOTE**
> The `Free Text`, `Medication` and `File` question types cannot be used in conditions.

Question

The text that the patient sees in the patient app. The following `[… /…]` syntax can be used here to direct the question to the correct person seeking medical care which is [You /your child] by default.

This `[… /… /… /…]` syntax can also be used to direct the question based on answers to previous questions and properties. Enter the conditions in the "**Choose first [ ] alternative if**" to specify which of the options should be used.

Choose first [ ] alternative if	If a logic other than default `[You/Your child]` has to be used, other conditions can be used to control whether the first or second option in the syntax should be used.
	For example, if the question:
	""[Have the problems arisen/Did the problems arise] in connection with exposure to the cold?""
	is displayed in the "**Question**" field, the parameter `ongoing` has to be specified in the "**Choose first [ ] alternative if**" field, where "`ongoingAllergy`" is a parameter from a search term that accompanies the patient in their patient journey if they sought help e.g. for "Ongoing allergic reaction"" If `ongoingAllergy` exists, the first option in "`[  ]`" will be used, and if ongoing is not specified for the patient, the second option will be displayed in the question.

Medical term	The text that will be used in the medical history summary of the interview and displayed in Clinic. Refer to the smartText User Manual for more information.
Points (if answer is yes)	Points that can be set for Yes/No question types. The points are generated if a patient answers Yes to a question and this can be used in the questionnaire to calculate a total score or control other flows in the questionnaire.
Points (for response options)	For **Single choice** and **Multiple choice** question types, one or more response options must be added and points can be set for each answer option, which are then generated if the patient answered exactly with that answer in the interview.
Information	Information text that is displayed under a question if the questionnaire is sent from Clinic.
Explanation title	Information title that is displayed under a question if patients themselves search for the questionnaire using the Patient app. This text is clickable and leads to **Explanation text** (see below).
Explanation text	Information text that is displayed under a question if patients themselves search for the questionnaire using the Patient app. Displayed if a patient has clicked on the title (**Explanation title**).

9.5. Formulas

A formula is a complex expression of normally several, longer expressions (e.g., answers to questions). Formulas can also be used to create calculations for assessments.

When a **Formula** is set, it can be used again in the questionnaire, for example as a question condition to avoid a repeat of all expressions.

Formulas must always contain values for following attributes:

- **Formula ID**
- **Condition**

9.5.1. Attributes and values in Formulas

Formula ID   All formulas have an **ID**.

The **ID** needs to be in English and may contain the following characters (no special characters):

- a-z
- A-Z
- 0-9

Condition   Conditions for when formulas are activated for a patient. For example, if a specific answer to a question is to activate the formula. The **Formula ID** can then be used again in the questionnaire.

If the condition is to validate that a patient has answered a certain answer, the following syntax is specified:

```
<questionId>.<responsId>
```

If the condition is to validate that a patient answered **Yes** (yes/no question) the following is used:

```
<questionId>
```

If the condition is to validate that the patient answered **No** (yes/no question) the following is used:

```
NOT <questionId>
```

If the condition is based on **answer points**, the following is used:

```
<questionId>.points
```

If the question has to be answered but the answer to the question does not affect the logic but only THAT the question is answered:

```
vars.<questionId>
```

```
vars.<questionId>.<responsId>
```

Conditions can be based on dates. A date can come from three sources:

- Properties (`properties.creationDate, properties.startedDate, healthDataValue.date`)
- Answers to date questions, using the `questionId` of the date question.
- Static dates (using the syntax `date(YYYY-MM-DD)`.

Dates should have format YYYY-MM-DD.

To get days/months/years:

```
day(someDate)
```

```
month(someDate)
```

```
year(someDate)
```

To get the amount of days/weeks/months/years between to dates:

```
days(someDate, someOtherDate)
```

```
weeks(someDate, someOtherDate)
```

```
months(someDate, someOtherDate)
```

```
years(someDate, someOtherDate)
```

It is also possible to write conditions based on:

`systemBirthDate` (the birth date of the patient)

`systemAge` (the age of the patient)

`systemGender` (the gender of the patient)

Conditions can contain several validations and answers to previous questions or questionnaires where the following can be used to bind the conditions together and check the value:

Binding conditions:

`AND` = and

`OR` = or

What has to be fulfilled:

"`!=`" = not equal to

"`==`" = equal to

If no value can exist:

`null` = no value

It is important to have spaces between the first value, the minus sign and the next value to write a formula with subtraction (`-`). If this is not done, the formula is interpreted as a name instead of an equation.

- **OK**: `23 - someVariable`
- **Not OK:** `23-someVariable`

`If Then Else` conditions

`IF someVariable THEN someValue ELSE someOtherValue`

If the condition `someVariable` is met, `someValue` will be used, but if the condition `someVariable` isn't met, `someOtherValue` will be used.

Example:

Type		
Formula		⌄

* Formula ID	* Condition	Build time if
twoArms	IF bothArms THEN disabilityArms ELSE leftOrRight	

Cancel   Save

> **NOTE**
> The `Free Text`, `Medication` and `File` question types cannot be used in conditions.

In the above expression, laterality is the question's ID, and left and right are the answer's ID in the question you want to include.

Answers can also be negated in a formula.

Where **Formula Id** = `isNotItching`

Condition = `NOT allergySymptoms.itching AND properties.itching == null`

Here the user must not have answered itching on the question `allergySymptoms`, hence the `NOT` is written, and the property `itching`, which comes from a search term, is not true i.e. `== null`.

9.6. Import data

Import data is a statement that can be used in questionnaires where logic has to be based on values in the health database for patients. The value retrieved from the health database can then be checked with different conditions to drive logic in the patient flow. It is possible to write conditions that define if the value is greater or less than X. It is possible to drive logic based on how old the result is, i.e. when it was added to the health database. It is also possible to create different types of equations using the value that can drive logic.

Examples of data imports that can be carried out in questionnaires are the importing of values from analyses (lab) conducted for patients and then defining when results are still valid or not in formulas. There may for instance be formulas that indicate how old the test may be, what the

result was or if there is a value or not. In the continuation of the questionnaire, the formula is then used to drive logic for the questions.

☰ **Formula**	haveReducedMovement	armInjurySymptoms1.reducedMovement		✎ 🗑
☰ **Import data**	score_phq9		Local copy	✎ 🗑
☰ **Formula**	noReducedMovement	NOT armInjurySymptoms1.reducedMovement		✎ 🗑
☰ **Include**	haveSwelling		library	✎ 🗑

The following checks on results from Importing data can be conducted (the tsh test example):

- `tsh.ageInDays` – to import number of days since the test was done
- `tsh.value` – to import test result

Greater than (`>`), less than (`<`), not equal to (`!=`), equal to (`==`) can be checked for both call-ups.

9.6.1. Attributes and values in Import data

Condition　Conditions for when importing data from selected source.

Type　Drop-down list with selectable values to import from specified source.

Source　The database from which values are imported.

Local name　Imported values can be given a local value name for reuse in the questionnaire under conditions. For example, P-glucose can have the local name: glucose to simplify using the value.

Mandatory　Check box indicating whether a value has to be imported from the database.

9.7. Export data

Export data is a component that can be used in questionnaires where logic has to be based on values in the health database for patients. Values that are exported from the health database can then be used to create visualizations in Clinic (trends, etc.) but can also be used if patients return with a new case. The **Formula** component also works well with **Export data**, for example to calculate values to export into the health database.

Export data		⊕ English ⌄
Condition	*** Integer or variable (eg. 2 or age)**	*** Destination**
	madrss_score	healthdata
* Type	**Mandatory**	
Total score MADRS-S ⌄	☐	
		Cancel　Save

An example is where answers provided by patients in assessments are converted into a formula and exported to the health database.

⑦ **Question**	willToLive	This question relates to your zest for life and whether you have experienced Weltschmerz. Do you have thoughts of suicide, and if so, to what extent do you feel this is a real way out?	✎ 🗑
≣ **Formula**	madrss_score	sadness.points + tension.points + sleep.points + appetite.points + concentration.points + initiative.points + interest.points + pessimism.points + willToLive.points	✎ 🗑
≣ **Export data**	score_madrss		✎ 🗑

9.7.1. Attributes and values in Exporting data

Condition   Conditions for when exporting data to the health database.

Local name   The formula or value that is given in the questionnaire and which is exported to the database. The **Local name** component will only accept allowed values for the specific Type. The statement will guide what type of value is expected, e.g., integer, decimal or Snomed CT code.

Destination The database to which values are exported. Only one database can be currently selected.

Type   Drop-down list with selectable values to export to the database.

Mandatory   Check box indicating whether a value has to be exported to the database in order for the questionnaire to be valid for patients to complete.

9.8. Flags

The flag component displays additional information to a healthcare professional when a patient fulfills certain symptoms or answers. In Content Studio, the medical content developers can add one or more flags in questionnaires. A flag can be seen by the practitioner in Clinic if the patient, in the triage, fulfills the conditions of that flag.

Example of use case for Flags: "*You have an ongoing COVID-19 infection and it is important to be aware of current guidelines. Read more about testing and isolation at Folkhälsomyndigheten.*"

> 🗒 **NOTE**
> Flags must NOT be used to diagnose (including making statements of a diagnostic nature) or to recommend treatment for an individual patient. Flags are to be used at a common level and applied to a group of patients.

9.8.1. Attributes and values in flags

Condition   Conditions for when a component has to be activated for the patient. For example, if the option that a response to a question is required before the next one is asked has been selected to activate and display flags in Clinic.

If the condition is to validate that a patient has answered a certain answer, the following syntax is specified:

```
<questionId>.<responsId>
```

If the condition is to validate that a patient answered **Yes** (yes/no question) the following is used:

```
<questionId>
```

If the condition is to validate that the patient answered **No** (yes/no question) the following is used:

```
NOT <questionId>
```

If the condition is based on **answer points**, the following is used:

```
<questionId>.points
```

If the question has to be answered but the answer to the question does not affect the logic but only THAT the question is answered:

```
vars.<questionId>
```

```
vars.<questionId>.<responsId>
```

Conditions can be based on dates. A date can come from three sources:

- Properties (`properties.creationDate, properties.startedDate, healthDataValue.date`)
- Answers to date questions, using the `questionId` of the date question.
- Static dates (using the syntax `date(YYYY-MM-DD)`.

Dates should have format YYYY-MM-DD.

To get days/months/years:

```
day(someDate)
```

```
month(someDate)
```

```
year(someDate)
```

To get the amount of days/weeks/months/years between to dates:

```
days(someDate, someOtherDate)
```

```
weeks(someDate, someOtherDate)
```

```
months(someDate, someOtherDate)
```

```
years(someDate, someOtherDate)
```

It is also possible to write conditions based on:

`systemBirthDate` (the birth date of the patient)

`systemAge` (the age of the patient)

`systemGender` (the gender of the patient)

Conditions can contain several validations and answers to previous questions or questionnaires where the following can be used to bind the conditions together and check the value:

Binding conditions:

`AND` = and

`OR` = or

What has to be fulfilled:

"`!=`" = not equal to

"`==`" = equal to

If no value can exist:

`null` = no value

It is important to have spaces between the first value, the minus sign and the next value to write a formula with subtraction (`-`). If this is not done, the formula is interpreted as a name instead of an equation.

- **OK**: `23 - someVariable`
- **Not OK:** `23-someVariable`

> **NOTE**
> The `Free Text`, `Medication` and `File` question types cannot be used in conditions.

Medical term	Flag text displayed to healthcare practitioners in Clinic for patients who have fulfilled the flag condition (see **Condition**).
Code	A code that can be specified if apply additional logic to the business rules.
Symptom	One or more symptoms patients have fulfilled, meaning the current flag has been defined.

Flag

English ∨

* Condition

patient18orAbove

Medical term

If the patient is troubling, consider providing suitable advice.

Code

Symptoms

+Add symptom

Cancel   Save

Flag

English ∨

* Condition

true

Medical term

If the patient has gained weight, remember that this also could affect the mental health of the patient.

Code

Symptoms

+Add symptom

Cancel   Save

06 February 2023

You must receive the appointment before you can start the chat

⊘ Din sjukvårdshistorik
⊘ Din läkemedelslista

Receive

APPOINTMENT (SYNC PHASE), MANAGE24TEST

Overweight

Consult

Origin	Triage ⊙	Non Medical Info

Flags

Alarming Symptoms

Recommendation

If the patient has gained weight, remember that this also could affect the mental health of the patient

Alarming Symptoms

Recommendation

If the patient is troubling, consider providing suitable advice

weight but with no success. Not suffering from being overweight.

General health: Not asked about general health.

10. Frequently occurring attributes

Certain attributes and values occur in several different questionnaire components. A more detailed description of what this entails is shown below.

10.1. ID

Formulas, components, response options etc. have an ID that is used to drive logic.

The **ID** needs to be in English and may contain the following characters (no special characters):

- a-z
- A-Z
- 0-9

Numbers, 0-9, may be used in Question and Formula IDs. Other IDs use only letters.

10.2. Patient

The questions that patients see in the patient app can be formatted according to the following options and commands:

- `\n\n` = line break
- `*italic*` = italic
- `**bold**` = bold
- `\n\n*` = bullet point list
- `\n\n**1.Text...\n\n**2.Text\n\n**3.Text...\n\n*` = bullet point list with numbers.

10.3. Build time if

Do not use.

10.4. Condition

Conditions for when a component has to be activated for the patient. For example, if a specific answer to a question is to activate the component.

If the condition is to validate that a patient has answered a certain answer, the following syntax is specified:

```
<questionId>.<responsId>
```

If the condition is to validate that a patient answered **Yes** (yes/no question) the following is used:

```
<questionId>
```

If the condition is to validate that the patient answered **No** (yes/no question) the following is used:

```
NOT <questionId>
```

If the condition is based on **answer points**, the following is used:

```
<questionId>.points
```

If the question has to be answered but the answer to the question does not affect the logic but only THAT the question is answered:

`vars.<questionId>`

`vars.<questionId>.<responsId>`

Conditions can be based on dates. A date can come from three sources:

- Properties (`properties.creationDate, properties.startedDate, healthDataValue.date`)
- Answers to date questions, using the `questionId` of the date question.
- Static dates (using the syntax `date(YYYY-MM-DD)`.

Dates should have format YYYY-MM-DD.

To get days/months/years:

`day(someDate)`

`month(someDate)`

`year(someDate)`

To get the amount of days/weeks/months/years between to dates:

`days(someDate, someOtherDate)`

`weeks(someDate, someOtherDate)`

`months(someDate, someOtherDate)`

`years(someDate, someOtherDate)`

It is also possible to write conditions based on:

`systemBirthDate` (the birth date of the patient)

`systemAge` (the age of the patient)

`systemGender` (the gender of the patient)

Conditions can contain several validations and answers to previous questions or questionnaires where the following can be used to bind the conditions together and check the value:

Binding conditions:

`AND` = and

`OR` = or

What has to be fulfilled:

"`!=`" = not equal to

"`==`" = equal to

If no value can exist:

`null` = no value

platform 24

It is important to have spaces between the first value, the minus sign and the next value to write a formula with subtraction (-). If this is not done, the formula is interpreted as a name instead of an equation.

- **OK**: `23 - someVariable`
- **Not OK:** `23-someVariable`

> **NOTE**
> The `Free Text`, `Medication` and `File` question types cannot be used in conditions.

10.5. Choose first [ ] alternative if

If a logic other than default `[You/Your child]` has to be used, other conditions can be used to control whether the first or second option in the syntax should be used.

For example, if the question:

"[Have the problems arisen/Did the problems arise] in connection with exposure to the cold?"

is displayed in the "**Question**" field, the parameter ongoing has to be specified in the **Choose first [ ] alternative if** field, where "`ongoingAllergy`" is a parameter from a search term that accompanies the patient in their patient journey if they sought help e.g. for "Ongoing allergic reaction". If `ongoingAllergy` exists, the first option in "`[ ]`" will be used, and if `ongoing` is not specified for the patient, the second option will be displayed in the question.

Question				English ⌄
* Id	*** Type**	Category	Build time if	Condition
coldAllergy	Yes or no	Other		(doesHaveRash OR haveItching) AND notPossibleCrossReactivity AND NOT medicine AND (vars.severeAllergySymptoms.wantsToContinueOnline == null OR vars.severeAllergySymptoms.wantsToContinueOnline == false)
* Question		Medical term		Practitioner text (if answer no)
[Have your problems arisen/Did your problems arise] when exposed to the cold? (e.g. on hands and face or ingesting cold drink or food)		the problems arose due to exposure to cold		
Point (if answer yes)		Choose first [ ] alternative if		Explanation title
Explanation text				

Cancel   Save

10.6. Properties

Do not use.

10.7. Response options

- **Type**: **Response**
- **ID**, refer to ID [56] above
- **Condition**: refer to Condition [56] above
- **Choose first [ ] alternative if**: refer to Choose first [ ] alternative if [58] above
- **Patient response**: what the response option is called for the patient
- **Health practitioner response**: how the response option is displayed in the medical history summary in Clinic
- **Negate to show response in Clinic**: refer to the smartText User Manual
- **Points** (only for `multiple choice`, `single choice` and `yesNo` questions)

10.8. Points

Points can be specified per question or response option in the following question types:

- **Multiple choice** questions
- **Single choice** questions
- **Yes or no** questions

The points can be used to sum up a score from a questionnaire and can be both integers and decimals. Points can also be used to write conditions in the questionnaire statements.

11. Versions

Versions of the Content Studio User Manual.

#	Date	Description
1.0	2023-09-22	1st version.
2.0	2024-01-11	• Section 10.8 updated and information added that points can be both integers and decimals. • Support email for user manuals updated.

12. References

Title	Description
User Manual - smartText in Content Studio	The smartText User Manual gives more information about smartText and how it is configured. smartText is the text summary for practitioners that is generated after a patient interview.