



METRICS AND QUESTIONNAIRES

Overview
Metrics and Questionnaires functionalities are central to facilitating comprehensive patient monitoring and data-driven care management. Metrics allow you to define custom health indicators that can be tracked over time, providing standardized measurements of various patient parameters. Questionnaires, on the other hand, serve as a tool for collecting structured data from patients, enabling personalized assessments and longitudinal monitoring of their condition.
Key features
Metrics
• Create and customize "Scale" or "Numeric" metrics to track health indicators • Define measurement scales, units, and scoring systems for each metric • Set scoring and interpretation rules to categorize patient responses • Manage a library of metrics, including searching, creating new versions, and deleting
Questionnaires
• Build personalized assessments from scratch or use template-based questionnaires • Incorporate a variety of question types, including open-ended, numeric, scale, and multiple/single choice • Customize question wording, response options, and scoring criteria • Define main and sub-scores to evaluate overall patient status and specific health domains • Manage the questionnaire library, including creating new versions and deleting outdated ones



Metrics - User guide

3.1. Metrics

The screenshot displays the 'Metrics' section of the application. It features a search bar (2) and a button to 'Add new Metric' (1). Below these is a table of existing metrics. The table has columns for Name, Is global, Unit, Type, Date created, and an action column (3). The metrics listed are:

Name	Is global	Unit	Type	Date created	Action
Test percentage 01	No	percent / 100 WBC	Numeric	Mar 4, 2024, 9:33 AM	⋮
Metric 19.03.2024	No	centimeter	Numeric	Mar 19, 2024, 4:55 PM	⋮
Test 22.03.2024	No	percent	Numeric	Mar 22, 2024, 10:55 AM	⋮
volodymyr.yastrubchak+admin1@t...	No	percent Abnormal	Numeric	Mar 22, 2024, 10:57 AM	⋮
Arctica, or Arctida[1] was an ...	No	percent Abnormal	Numeric	Mar 22, 2024, 11:01 AM	⋮

At the bottom of the table, it indicates 'Rows per page: 5' and '1-5 of 366'.

- To access questionnaires and metrics, click on  on the navigation banner.
- Metrics standardize how you measure and interpret patient health data.
- Create a new metric, by clicking on “Add new Metric”.
- Provide context by specifying the unit of measurement and a terminology.
- There are **two types of metrics** you can create: “Scale” or “Numeric”.
- **Scale metrics:**
 - Defines a measurement scale with a minimum and maximum value.
 - Allows specifying the number of steps or increments on the scale (e.g. 1-10).
 - Optionally provides the ability to assign scores to specific scale points based on your interpretation.
- **Numeric metrics:**
 - Accepts numerical patient inputs
 - Optionally set limits to define normal, high, or low value ranges



- Customize a scoring system to evaluate the numeric values and assign risk levels
- For each metric, you can define a **scoring system** that assigns specific scores based on the patient's input. This allows you to categorize the responses in a meaningful way, such as identifying normal, high, or low values. Scoring system is free to interpret.

Questionnaires - User guide

3.2. Questionnaires

3.2.1. Creating questionnaires

- **Create a new questionnaire**, by clicking on “**Add new Questionnaire**”.
- Two options are available:
 - **Build from scratch**
 - Define the general information like title, description, categories, etc.
 - Add various question types and customize the wording, options, and scoring for each question.
 - **Use an existing template**



- Select an existing questionnaire template to use as a starting point.
 - Modify the general info as needed and edit the questions to fit your current requirements..
 - This allows you to efficiently create variations of proven questionnaires.
- The questionnaire builder supports several question formats (*see more details about question types in the Table in the [Care Pathway Builder](#) section*):
 - **Open-ended**: Allows free-text responses from patients.
 - **Date**: Collects a specific date (with optional time) from the patient.
 - **Numeric**: Accepts numerical inputs, often linked to a defined metric.
 - **Scale**: Presents a predefined rating scale for the patient to select a value.
 - **Multiple choice**: Lets the patient choose one or more options from a list.
 - **Single choice**: Restricts the patient to selecting only one option.
 - **Likert**: Measures the patient's opinion or attitude on a linear scale.
 - Rearrange, edit (), or remove () questions within a questionnaire.
 - Add information or guidance to question, by clicking on 
 - Apply visibility conditions to show/hide questions based on prior responses, using  button.



3.2.2. Questionnaire scoring (Optional)

The screenshot shows the 'Questionnaire builder' interface with the 'Scoring' tab selected. The top navigation bar includes 'Cancel' and 'Save' buttons. The left sidebar contains various icons for navigation. The main content area displays a list of questions (Q1-Q6_1) and a 'Main score' section. The 'Main score' section includes a 'Formula' editor with a dropdown menu for mathematical operations (+, -, *, /) and a list of selected questions (Q2, Q3, Q5, Q6_1). Below the formula editor is the 'Interpretation rules (optional)' section, which currently shows 'No interpretation rules defined'. At the bottom, there is a 'Sub-scores (optional)' section with an 'Add new Sub-score' button. Red boxes and arrows highlight the formula editor (labeled 1) and the sub-scores section (labeled 2).

The scoring system for questionnaires is a critical feature that allows you to objectively evaluate patient responses and assess their overall condition or risk level.

The questionnaire scoring involves two key components:

3.2.2.1. Questionnaire main score

- **Main score:** The main score is the primary metric that summarizes the patient's performance across all relevant questions in the questionnaire.
- To calculate the main score:
 - Select the specific questions you want to include in the formula.
 - For each selected question, choose whether to use the raw patient response value or the pre-defined score assigned to that response.
 - Combine the selected question values using mathematical operations like addition, subtraction, multiplication, etc. This formula determines how the individual question scores are weighted and aggregated.
 - The result of this formula is the final Questionnaire Main Score.
- The main score provides an at-a-glance understanding of the patient's overall status based on the completed questionnaire.



3.2.2.2. Questionnaire subscore

- **Sub-scores:** In addition to the main score, you can also define one or more sub-scores. Sub-scores are designed to **track specific areas or themes within the questionnaire**, providing a more granular analysis.
- To create a sub-score:
 - Identify the group of questions that are related to the same clinical domain or symptom category.
 - Build a separate **formula** that combines the scores of just those relevant questions.
 - This formula will yield a sub-score that focuses on that particular aspect of the patient's condition.
- You can **create multiple sub-scores to monitor different facets of the patient's health**, such as physical symptoms, mental well-being, daily functioning, etc.

3.2.2.3. Questionnaire interpretation rule

- Once the main score and any sub-scores formula are set, you can define **interpretation rules to categorize the patient's risk level**. Typically, the risk level is assigned on a scale from 1 (low risk) to 5 (critical risk).
 - To set up the interpretation:
 - Specify the score thresholds for each risk level category.
 - The questionnaire results will then be color-coded in the patient's record based on the assigned risk level.
- This standardized risk assessment allows you to quickly identify areas of concern and determine when interventions or adjustments to the care plan may be necessary.