

MYSMACA

My Smart Care for DATA for GOOD

Instructions for Use

1. Introduction

MySmaCa (My Smart Care for Data for Good) is an mHealth application designed to support the shared management of chronic diseases such as COPD, CVD, and diabetes. The app facilitates active patient involvement in health management through educational resources, validated questionnaires, and personalized recommendations.

2. Intended Use

MySmaCa is designed for individuals managing chronic conditions like COPD, CVD, and diabetes. It provides personalized care plans, integrates medical devices, and offers AI-driven insights to improve patient engagement.

3. Platform Compatibility

- Android
- iOS

4. Installation & Setup

Downloading and Installing

1. Open the App Store (iOS) or Google Play Store (Android).
2. Search for 'MySmaCa'.
3. Tap 'Install' and wait for the installation to complete.

Initial Setup

1. Launch the app and tap Login.
2. A message requesting access to "partisia.com" will appear; click Continue.
3. Enter your DfG Personal platform credentials.
4. Grant permissions:
 - Google Fit/Apple Health for fitness and health tracking.
 - GPS and Location for weather, pollen levels, and air quality.

Configuration Wizard

Upon the first login, the **Configuration Wizard** guides you through a quick and easy setup to personalized careplan. This ensures the app is tailored to your health needs. Here's what to expect:

1. Personal Information:

- Input your **date of birth, weight, height**, and **gender** to establish a health baseline.

2. Active Pathologies:

- Select your active condition(s) from a list of options: **Cardiovascular Diseases (CVD)**, **Chronic Obstructive Pulmonary Disease (COPD)**, or **Diabetes**. This helps the app customize your care plan and recommendations.

3. Medications:

- Enter your current medications, including:
 - **Drug Name** (e.g., Metformin, Aspirin)
 - **Dosage** (e.g., 500 mg)
 - **Frequency** (e.g., Once daily)
 - **Assumption Times** (e.g., Morning and evening).

4. **Additional Medications:**

- Optionally, record any other medications for a comprehensive medication list.

5. **Care Plan Summary:**

- Review the **complete care plan**, which includes:
 - Scheduled medications
 - Recommended health measurements (e.g., Blood Pressure, Blood Glucose, Steps)
 - Confirm your setup or adjust before finalizing.

5. **Key Features**

- Secure SSO Authentication via Partisia blockchain.
- ECG Analysis through Cardiolyse.
- Personalized Recommendations for treatment, exercise, and lifestyle.
- Weather & Air Pollen Levels for respiratory condition management.
- Medical Device Integration for seamless data tracking.
- Shared Care Plan including medication tracking and reminders.
- Physical Activity Synchronization via Google Fit/Apple Health.

6. **Using the App**

Homepage

The **Homepage** serves as a central point for managing your daily health-related activities, providing clear guidance based on the care plan you set up during the Configuration Wizard.

Your tasks are grouped on the Homepage into distinct categories to help you prioritize and manage your daily activities effectively. Here's what each grouping means:

Now

Tasks displayed in the **Now** section are those that are due within a specific time window based on the current time.

- **Time Window:** 180 minutes before and up to 180 minutes after the current time.

Example:

If the current time is **11 AM**, a task scheduled for **after breakfast** would appear in the **Now** section from **08 AM to 2 PM**.

Late

The **Late** section highlights tasks that are overdue.

- **Time Frame:** Tasks not completed at their scheduled time for the current day will appear here.
- **Carryover Tasks:** Any unfinished tasks from the previous day will remain in the **Late** section until the user confirms whether they were completed. Once confirmed, they will be moved to the **Summary** section.

Example:

If the current time is **2.30 PM** and a measurement was scheduled for **11 AM**, it will appear in the **Late** section.

By the End of the Day

This section lists tasks that must be completed by **11:59 PM**.

These tasks are not tied to a specific time but need to be performed at some point during the day.

As needed

Tasks under the As Needed section are those marked as flexible within the scheduler.

Activities like medications or measurements that are performed based on necessity (or by symptoms) rather than a strict schedule.

Visibility: These tasks will always appear in the As Needed group on the Homepage for easy tracking.

Once all tasks are completed, they are automatically removed from the **Homepage** list and moved to the **Summary** section, helping you maintain focus on what remains to be accomplished.

How to Create a Task

- Tap the '+' button on the home screen
- Enter a task name and optional details.
- Set a due date and reminder (optional).
- Tap 'Save' to add the task.

How to Mark a Task as Complete

- Swipe right on the task in your list.
- Confirm the action to mark it as completed.

Navigation Between Tabs

The **Homepage** is divided into two tabs:

Today: Displays all tasks scheduled for the current day, grouped and ready for action. You can record completed tasks directly from this view.

Tomorrow: Provides a preview of tasks planned for the next day, helping you prepare in advance. Note that tasks in this tab are view-only and cannot be marked as done until they are moved to the Today tab.

7. Weather Module

The **Weather Module** provides patients with localized weather forecasts and air pollen levels, offering valuable information to help manage daily activities and health, especially for patients with **COPD** or other respiratory conditions.

How It Works

1. GPS-Based Localization:

- The app uses your device's GPS position to determine your current location.
- Based on this location, it retrieves weather and air quality data specific to your area.

2. Weather Forecast:

- Provides real-time weather updates, including temperature, humidity, and precipitation, helping you plan your day.

3. Air Pollen Levels:

- Displays pollen levels in your area, helping COPD patients and others with respiratory sensitivity make informed decisions about outdoor activities.

8. Summary

The **Summary** section provides a comprehensive overview of your recorded activities, helping you monitor your progress over time. It is a powerful tool for reviewing both scheduled and manually added activities, ensuring that your health journey is always under control.

Activity History

Specific Activity View

Select a particular activity (e.g., **Blood Pressure**) to see its complete history, grouped by date. This allows you to track patterns and trends over time for that specific activity.

General Activity History

Navigate to the broader activity history (e.g., **Measurements** → **Measurement History**) to view the full history of all related activities, such as blood pressure, steps, sleep, and more. These records are also grouped by date for easy reference.

Manually Adding Activities

The **Summary** section allows you to record non-scheduled activities, offering flexibility for logging additional health metrics outside your predefined care plan. Here's how:

1. Access Manual Input:

Tap the **plus icon** in the top-right corner of the screen.

2. Select Activity:

Choose the activity you wish to record from the provided list of managed activities. For example, if steps are not part of your care plan, you can manually select and log them.

3. Input Details:

- Enter the relevant values for the selected activity (e.g., number of steps, blood pressure reading, sleep duration).
 - Set the **date and time** for when the activity occurred.
4. **Save the Entry:**

Complete the recording process, and the system will add the activity to your history, grouped with other records by date.

This functionality ensures that no important activity goes unrecorded, giving you a complete and accurate view of your health data over time. Whether you're logging scheduled or spontaneous activities, the **Summary** section keeps everything organized and easily accessible.

9. Device Connection

The **Device Connection** section allows patients to seamlessly pair compatible Bluetooth devices with the app for automatic data retrieval and integration into their care plan. This functionality enhances health tracking by enabling real-time data synchronization.

How to Connect a Device

1. **Access the Device Connection Section:**

- Navigate to the **Device Connection** section from the app's main menu.

2. **Select the Device Type:**

- Choose the type of device you wish to connect (e.g., Blood Pressure Monitor) from the provided list of compatible devices.

3. **Start the Connection Wizard:**

- Follow the step-by-step instructions in the connection wizard:
 - Turn on Bluetooth on your mobile device.
 - Power on the Beurer BM 96 Cardio or other selected device.
 - Ensure the device is in pairing mode as per the manufacturer's instructions.
 - Confirm the device selection when it appears in the app.

4. **Complete the Pairing Process:**

- Once the app establishes a connection, the pairing process will finalize, and the device will appear in your **Device List**.

Supported Devices

Beurer BM 96 Cardio - Blood pressure monitor with ECG function

Beurer BM96 Cardio Device Connection – Blood Pressure measurement

1. Open **MySmaCa** and go to the **Home** section of the app.
2. Attach the cuff and adopt the correct posture
3. Press the **START/STOP** button to turn on the **Beurer BM 96 Cardio**.
4. Select the desired user by pressing the memory buttons M1 (for user **1**) or M2 (for user **2**).
5. After you have made your selection, press the **START/STOP** button two more times until BP is shown in the display.
6. After approx. 3 seconds, the measurement starts automatically.
7. Once the measurement has finished, a popup will open in the **Home** asking if you want to import the detected measurements
8. Access the **Summary** section to view the imported data

Beurer BM96 Cardio Device Connection – ECG measurement

1. Open **MySmaCa** and go to the **Home** section of the app.
2. Insert the ECG stick cable into the connection for the ECG stick on the main unit.
3. Press the **START/STOP** button to turn on the **Beurer BM 96 Cardio**.
4. Select the desired user by pressing the memory buttons M1 (for user **1**) or M2 (for user **2**).
5. After you have made your selection, press the **START/STOP** button to switch to the ECG Mode and the measurement time is shown in the display.
6. Place your right index finger on the upper electrode on the device and hold the device vertically in your hand.
7. The Measurement starts automatically after approx. 10 seconds, if there is sufficient contact to the electrodes on the stick and the signal is stable.
8. A countdown on the right side of the display indicates the progress of the measurement. During the measurement, the current heart rate is displayed in real time. At the same time, the heart symbol.
9. A summary of the ECG measurement and the average heart rate appear on the display after the countdown has elapsed.
10. To switch off the device, hold the **START/STOP** button for 3 seconds. Alternatively, the device will switch off automatically after 1 minute.
11. Once the measurement has finished, you must select the ECG tile in the Home and chose the detected measurement you want to import.
12. Once imported, the measurement will be sent to Cardiolyse AI for advanced analysis
13. Access the Summary section to view the imported ECG data with Cardiolyse's assessment evaluation (example. Normal, AFib, etc)
14. Select a measurement in the list to access detailed information from Cardiolyse AI analysis, including realistic assessments of Heart Disorders (e.g., cardiovascular risk).

10. Integration with Google Fit and Apple Health

When the patient first logs into the app, the system will request consent to access health-compatible data types. An Android or iOS operating system form will then appear, allowing the patient to toggle on/off specific data types they wish to share. Once the patient sets their preferences in the OS, this configuration enables the app to retrieve and sync the selected data types automatically.

If needed, the patient can manually adjust these integrations at any time by navigating to Profile → Settings → Google Fit/Apple Health toggle to modify the permissions.

Manual permission grant:

To manage and toggle permissions for reading specific health data types, please refer to the detailed procedures provided by the respective health platform (Apple Health or Health Connect). Those steps will guide you in granting or revoking access to health data for the app, ensuring that your preferences are accurately reflected.

Data synchronization:

All health-compatible data types available through Google Fit or Apple Health platforms will be automatically synced with the app, ensuring seamless integration of your health information.

Managing Permissions

To adjust permissions, visit the respective platform's phone settings (e.g., in Google Fit or Apple Health on your phone).

11. Educational Contents and Validated Questionnaires

The app includes a **Questionnaires** feature that helps patients engage with validated health assessments related to their condition and overall well-being. These questionnaires can be scheduled just like medications and measurements, offering timely and relevant insights into key health topics.

Types of Questionnaires

Initially focused on **Diabetes**, the app will gradually expand to include assessments for **COPD** and **Cardiovascular Diseases (CVD)**. The available questionnaire topics include:

- **Nutrition:** Assess dietary habits and nutritional understanding.
- **Physical Activity:** Evaluate exercise routines and physical fitness levels.
- **Self-Control:** Gauge your ability to manage aspects of your condition independently.
- **What is Diabetes?:** Enhance your knowledge about diabetes and its management.
- **Hypoglycemia:** Understand causes, symptoms, and management of low blood sugar episodes.
- **Diabetic Foot:** Learn about foot care and early identification of complications.
- **Treatment:** Review your familiarity with prescribed treatments and medications.
- **Other Questionnaires:** Cover additional topics relevant to your condition.

How It Works

1. **Scheduling Questionnaires:**
 - Questionnaires are scheduled similarly to medications and measurements.
 - Notifications will remind you when it's time to complete a questionnaire.
2. **Completing a Questionnaire:**
 - Open the scheduled questionnaire from your task list on the Homepage.
 - Respond to the questions one at a time, selecting from the provided options.
3. **Scoring and Feedback:**
 - After completing the questionnaire, you'll receive a score summary, such as: *"You replied to 8 questions out of 10."*

- This feedback helps you track your engagement and identify areas where further attention or improvement may be needed.

The app includes a dedicated **Educational Section** designed to provide patients with a variety of resources to enhance their understanding of their condition and overall health management. This section is always accessible, offering valuable information at your fingertips.

Types of Educational Content

The educational resources are curated to cover a wide range of topics and are available in multiple formats to suit your preferences:

- **Web Articles:** Comprehensive, easy-to-read articles from trusted sources.
- **PDF Documents:** Downloadable guides and informational handouts.
- **YouTube Videos:** Engaging video content to explain complex topics visually and interactively.

How It Works

1. Browsing Content:

- Open the **Educational Section** from the app's main menu.
- Explore resources organized by categories such as:
 - Nutrition
 - Physical Activity
 - Diabetes Management
 - Medication Tips
 - Chronic Disease Awareness

2. Accessing Resources:

- Select a resource to learn more.

The app will guide you to specific content, such as a webpage, document viewer, or video player.

12. Analytics and Statistics

The **Analytics and Reports** section allows you to track your progress and gain insights into the health measurements you've recorded over time. This feature helps you visualize trends, identify patterns, and stay informed about your overall health.

Features of the Analytics and Reports Section

1. Comprehensive Tracking:

- View detailed progress for all measurements you've logged, such as:
 - Blood Pressure
 - Blood Glucose
 - Steps
 - Sleep Duration
 - Other health metrics included in your care plan.

2. Data Visualization:

- Data is displayed through easy-to-understand graphs or charts providing a clear view of your progress over time.

3. Time Range Filtering:

- Select specific time periods to focus on, such as:
 - Last 7 days
 - Last 30 days
 - Custom date ranges

This flexibility allows you to analyze short-term progress or long-term trends.

13. Data Sharing and Consent Management with DfG Platform

1. Go to 'Profile → Settings → Data Sharing'.
2. Click on 'Manage consents' to:
 - View consents via an iFrame.
 - Verify the date and time of each consent (requested/granted/withdrawn).
 - Withdraw consent using the 'withdraw consent' option and verify that the user is logged out of MySmaCa.
3. Reaccess the DfG Personal platform, grant consent, and verify successful login in the app.

14. Data Verification on DfG Personal

1. Log in to the DfG Personal platform (<https://my-health-wallet.platform.demo1.partisia.com/services>).
2. Navigate to the 'My Data' section.
3. Verify that the displayed data matches the records in MySmaCa (e.g., steps, weight, blood pressure).

15. Contact Information

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