

Your guide to Minder

Everything you need to know about your Minder technology

Version 5.0, December 2023



Your key information

Study ID

HOWZ ID

Installed by

dd / mm / yyyy

Your Wi-Fi
network name

Your Wi-Fi
password

Minder App

Username
(email)

Password

PIN

Additional information:

This system is not linked to urgent care or emergency services:



For medical concerns or immediate risks to your health, please contact your GP, NHS 111, or emergency services.

Welcome to Minder

We are here to support you.

Tel: 0800 138 6554

Email: minder@sabp.nhs.uk

Please contact us, the Minder Monitoring Team, if you need any help or support throughout the study.

We will also arrange weekly phone calls to check in and see how you are. These will be arranged at a time and day that is most convenient for you.

You can use this booklet as a guide to help you:

- Use the devices in your home
- Remind you of key information
- Fix common problems with devices



Contents

Section 1

Introduction to Minder

7

Section 2

Activity Sensors

17

Section 3

Healthcare Devices

29

Section 4

Tablet & Minder App

43

Section 5

Your Questions Answered

49



Introduction to Minder

This section is an introduction to the Minder study. It gives you an overview of what the study is about, why we're doing it and who's involved.

In this section you can find information on:

- ✓ Who is involved in **Minder**
- ✓ What the **Minder Study** is
- ✓ Which **devices** are being installed
- ✓ An overview of your **Tablet Computer & Apps**
- ✓ How the Minder Monitoring Team will **respond**

Who is involved in Minder?

This research study is led by the UK DRI Care Research & Technology Centre at Imperial College London. The following organisations are involved in the study:

Minder

is the name of the study and system we are developing.



UK DRI Care Research & Technology Centre at Imperial College London

is the lead research organisation behind the study. It is one of seven centres in the national UK DRI. It is partnered with University of Surrey.



Surrey and Borders Partnership NHS Foundation Trust

is NHS partner and study sponsor. They employ the Minder Monitoring Team and lead the clinical care aspects of the study.



Howz

are a technology partner. They install and maintain Minder equipment in your home and provide many of the devices in the study.



What is the Minder Study?

The study is developing a smart home system to support people living in their homes and learn more about different health conditions. This is to help us treat and manage these conditions in the future.

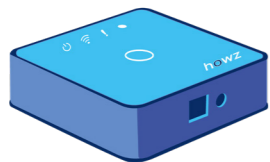


As part of this study, some sensors and electronic devices are placed in your home. By monitoring activity and taking daily measurements we can support your health and wellbeing remotely.

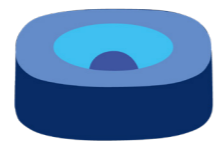
Which devices are installed in your home?

Some devices require very little interaction and will just be in the background. These are the **Activity sensors**.

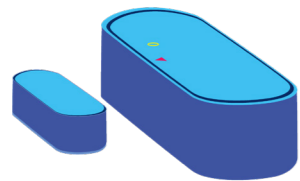
Activity Sensors



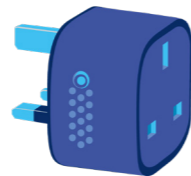
Gateway p 18



Motion Sensors p 20



Door Sensors p 22



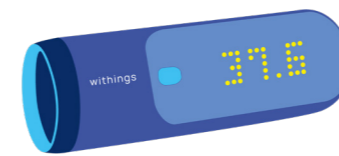
Smart Plugs p 24



Sleep Mat p 26

Other devices require you to take daily measurements. These are the **Healthcare devices**.

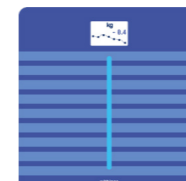
Healthcare Devices



Thermometer p 30



Blood Pressure p 34



Weighing Scales p 38

Please note:

- None of these devices can photograph or film you in your home.
- Over the course of the study, devices may be replaced or added, but this is the core set.

Tablet Computer and Apps

You are provided with a Tablet Computer as part of the Minder study. This Tablet is an essential part of making your life easier during the Minder study.

The Tablet Computer has Apps installed on it, which you will interact with on a regular basis. The two main Apps you will use are:



Minder App

The **Minder App** (page 43) has lots of useful features you can use to help you participate in the study. These include using the App to:

- see data from your sensors and devices
- answer daily questions
- watch help videos



Go to [Section 4 \(page 43\)](#) for full details of how to use your Tablet Computer and Minder App.

Please note:

You should keep your Tablet switched on and charged

How does the Minder team respond to my activity?



Remote monitoring

The Minder system automatically analyses information gathered in each home.



Review activity changes

If the system notices certain changes in your activity, the Minder Monitoring team will review your data and may contact you to check if everything is as expected.

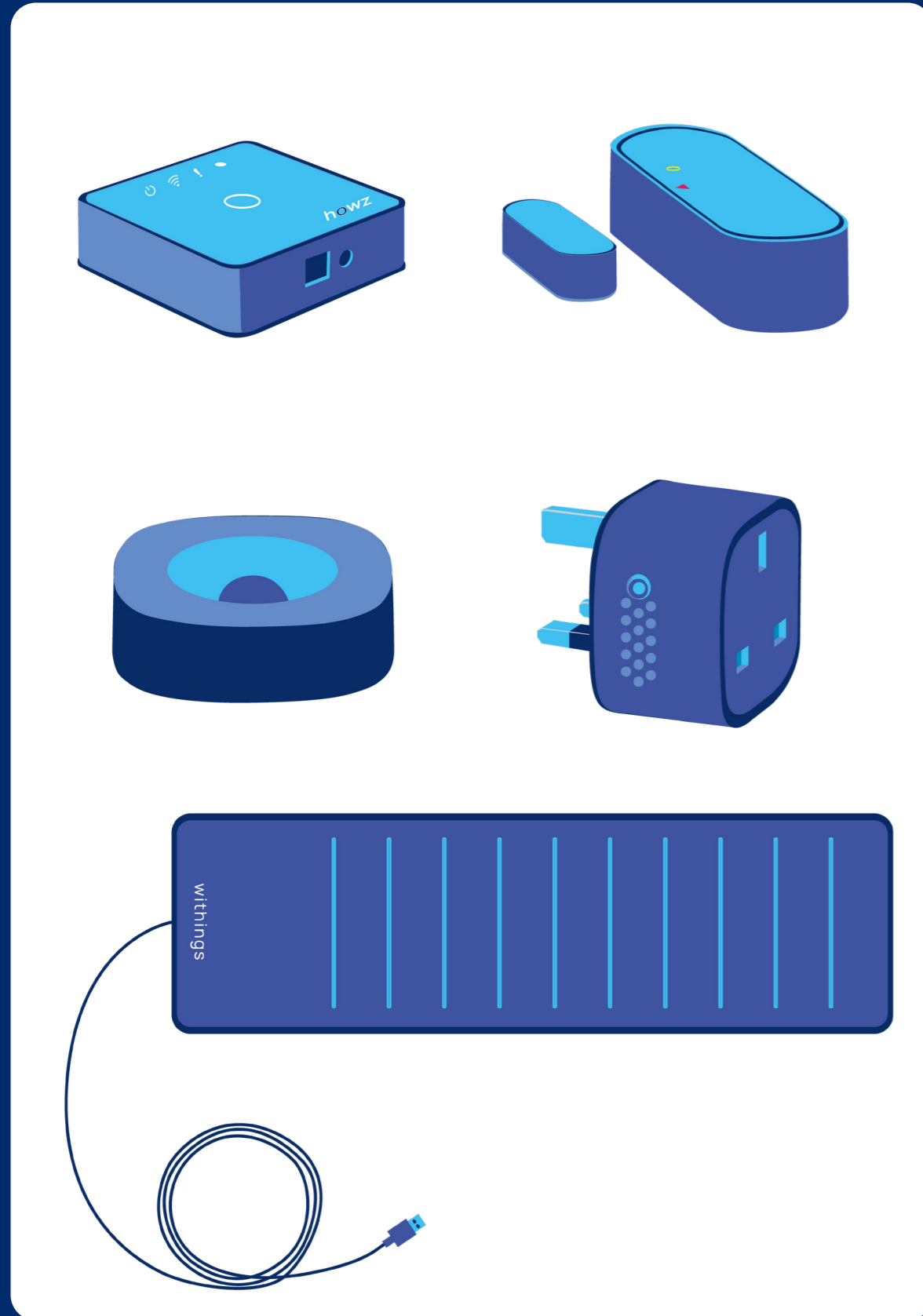


Contact, support and advice where needed

We might ask you to re-take a measurement, or suggest that you contact your GP. If we detect low or irregular activity, we may suggest closer observation or send you a diagnostic test to check for infections. We may notify family or carers to check on your wellbeing.

It is important to note that:

- There is always a delay in the sensor data reaching the system. This means that the Minder Monitoring Team cannot provide an immediate response and is therefore unable to detect and send an alert for a 'real time emergency'.
- What the system can do is collect patterns of data that provide additional information about health and may help the participant's GP to make decisions about care.



Your Activity Sensors

This section describes five different sensors which will be placed in your home. Once these sensors are installed, they are mostly in the background, and you do not need to interact with them directly.

In this section you can find information on:

- ✔ Gateway
- ✔ Motion Sensors
- ✔ Door Sensors
- ✔ Smart Plugs
- ✔ Sleep Mat

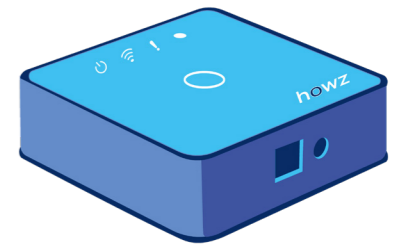
Gateway

What is the device?

- The Gateway connects other devices in your home to the Minder Platform via the internet.

Why is it part of the study?

- The Gateway device must be active for your data to be collected.
- It must be turned on at all times.



How it works

- The Gateway is plugged into your Wi-Fi router, and a power socket and sits in the background.
- Green lights on the Gateway indicate it is turned on and working.

Power supply

- The Gateway is powered by mains electricity.
- It should be plugged into a power socket at all times.

Simple tips

- If you're having trouble working your devices, these simple tips might help. If you do not feel comfortable trying these, please call the Minder monitoring team.

Issue	What to do
No light is visible on the device.	Unplug the Gateway from power, wait 30 seconds and then plug it in again.
My sensor data isn't showing in the Minder App.	Your Wi-Fi might not be connected. Try turning it on and off again.

Motion Sensors

What is the device?

- PIR (Passive Infrared) sensors are small wall-mounted devices that detect movement in the home.
- When motion is detected, it relays this information back to the Minder system.

Why is it part of the study?

- These sensors help us identify changes in daily routine that could indicate treatable health problems or gradual changes in your health



How it works

- There is a subtle red light that flashes in the centre of the sensor when it detects movement. This indicates the device is working.

Power supply & batteries

- The sensor is powered by a specialist battery - CR123A batteries.
- If the batteries need changing, please contact the Minder Monitoring team and they can send a replacement battery to you.

Simple tips

- If you're having trouble working your devices, these simple tips might help. If you do not feel comfortable trying these, please call the Minder monitoring team.

Issue	What to do
The Motion Sensor keeps falling off the wall.	Talk to the monitoring team, maybe place the sensor on a shelf or mantel piece, instead of the wall.

Door Sensors

What is the device?

- The Door Sensor sends a signal when the door is opened or closed. They can be put on front and back doors of the home as well as bathroom and fridge doors.

Why is it part of the study?

- Door Sensors can be used to identify unusual activity (such as night-time wandering) or changes in bathroom / eating habits (which could indicate an infection).
- They can also indicate gradual changes in routine.
- Lack of Door Sensors data may also indicate that someone is unwell or had a fall.



How it works

- The device works with magnets. A small green light flashes when a door opens or closes. This indicates the device is working.
- If you like, you can see the data from the Door Sensors in the HOWZ App on your tablet.

Power supply

- The sensor is powered by (2x AAA) Batteries.
- The Minder team will help you if the batteries need changing, but if you are happy and able to change them yourself, please feel free to do so.

Simple tips

- If you're having trouble working your devices, these simple tips might help. If you do not feel comfortable trying these, please call the Minder monitoring team.

Issue	What to do
The device isn't sending data.	We will call you to check that the battery is ok, and that the internet is connected.

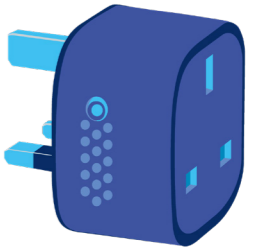
Smart Plugs

What is the device?

- The Smart Plugs are used on electrical appliances such as kettles and toasters and tell us when the device is used.
- The Smart Plug goes between the normal plug and the mains socket. You can then use the appliances as normal.

Why is it part of the study?

- The Smart Plugs help us identify changes in daily routines, including eating and drinking patterns.
- Lack of data can also indicate someone may be unwell or had a fall.



How it works

- There is a small green light on the switch that indicates that it is on. If the light is not on, push it to turn it on.
- The switch can be left on at all times.

Power supply

- The Smart Plug is plugged into the mains, so you do not need to worry about charging or replacing batteries.

Simple tips

- If you're having trouble working your devices, these simple tips might help. If you do not feel comfortable trying these, please call the Minder monitoring team.

Issue	What to do
My device isn't working when the Smart Plug is plugged in.	Make sure the socket switch is on. Press the side button on the Smart Plug. When it is switched on, the button will light up green.

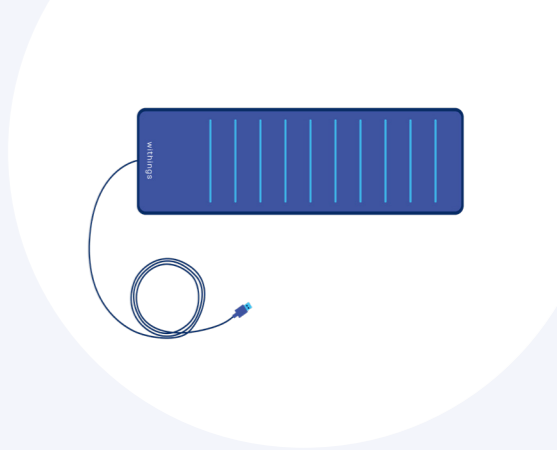
Sleep Mat

What is the device?

- The Sleep Mat goes under your mattress to monitor sleep quality.
- It can be used with both single and double occupancy beds.

Why is it part of the study?

- The information gathered from the Sleep Mat provides a detailed analysis of your sleep quality.
- The effect sleep has on dementia symptoms is a specific area of research for the centre.



How it works

- The Sleep Mat will lie under your mattress.
- No further interaction is required other than to go to bed as normal.

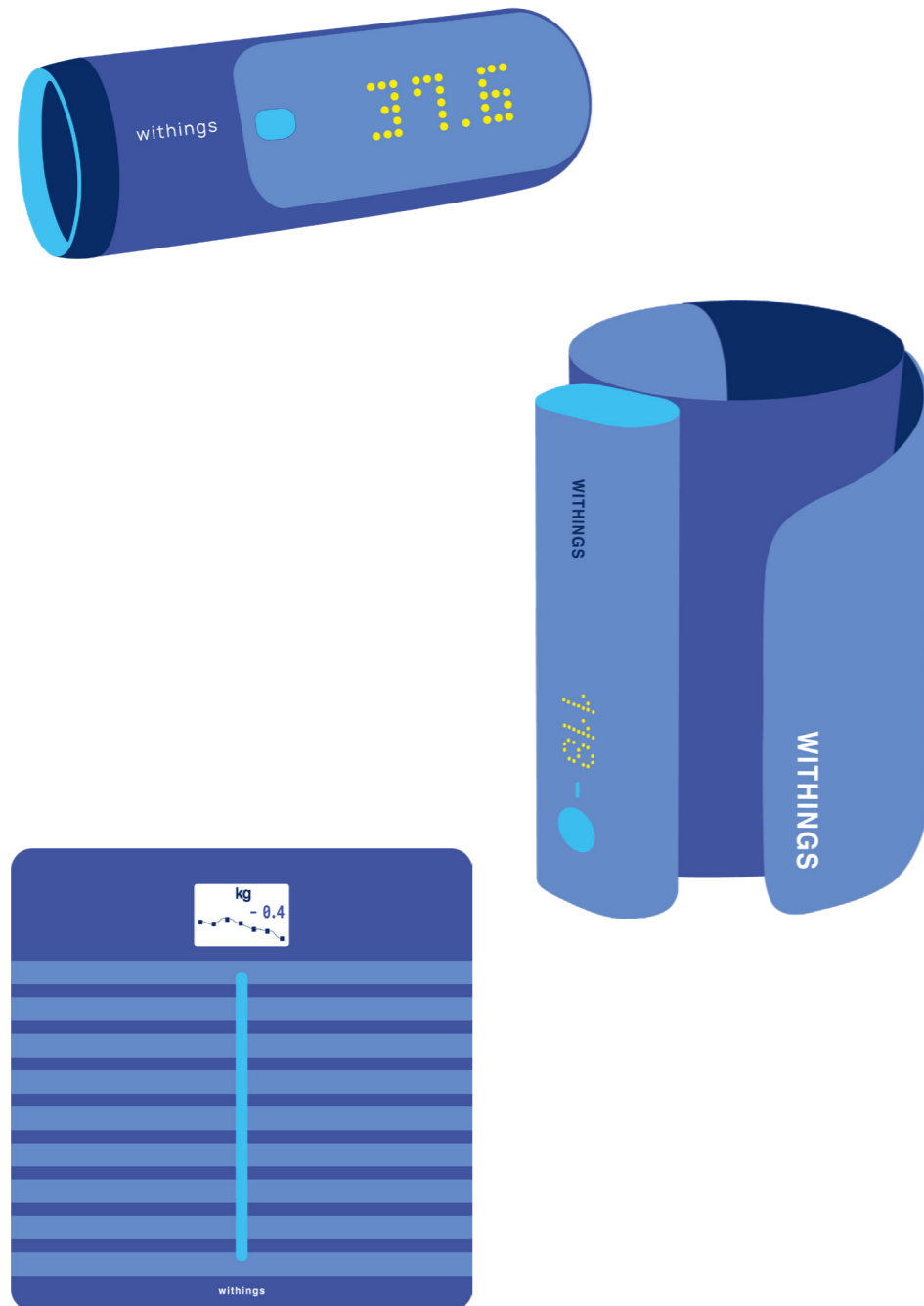
Power supply

- The Sleep Mat will be plugged directly into the mains power supply, so you don't need to worry about charging or changing batteries.

Simple tips

- If you're having trouble working your devices, these simple tips might help. If you do not feel comfortable trying these, please call the Minder monitoring team.

Issue	What to do
The device has stopped sending data.	Check the device is plugged securely into the mains and see if that helps.



Your Healthcare Devices

This section describes three healthcare devices which you will use regularly as part of your daily routine.

In this section you can find information on:

- ✓ Using your **Thermometer**
- ✓ Using your **Blood Pressure Monitor**
- ✓ Using your **Weighing Scales**

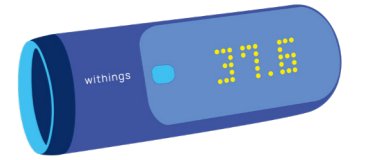
Thermometer

What is the device?

- The Thermometer reads your body temperature wirelessly.
- The device is connected to our system so the data uploads directly.

Why is it part of the study?

- The Thermometer helps us look after your health, including detecting infections early.
- Understanding your general health can also help us make sense of other data from the house.



Power supply

- The Thermometer is powered by (2x AAA) Batteries.
- The Minder team will help you if the batteries need changing, but if you are happy and able to change them yourself, please feel free to do so.

Simple tips

- If you're having trouble working your devices, these simple tips might help. If you do not feel comfortable trying these, please call the Minder monitoring team.

Issue	What to do
The reading appears too low or says "retry".	Make sure you have removed the green cover, and try holding the device closer to the head (about 1 finger width away) when you take the reading.

Thermometer

Step-by-step guide:

1

Preparing to take the reading

The user and Thermometer must remain in the same room temperature for 10 mins before taking a reading. The reading must be taken on dry skin. Sweaty skin will impact results.



2

Getting your devices ready

Remove the protective green cap before taking a reading. Press the button on the device to turn on. The moving light indicates it's ready to take a reading.



3

Taking the reading

Scan across the forehead in a straight line, starting from the centre of the forehead towards the temple. The Thermometer should be about 1 finger width away from your skin.



4

Submitting the reading

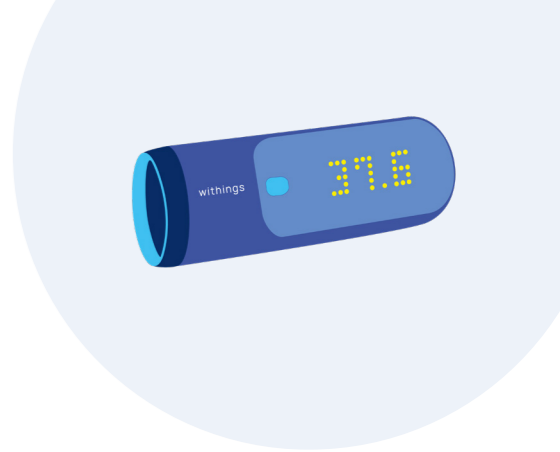
The Thermometer vibrates twice to indicate the reading is taken, and displays the temperature on the device.

You must assign the reading from your Thermometer by swiping up on the 3 vertical dots on the device.

Your username (e.g. MINDER5) will show on the screen, when you see this, click the button on the device.

The name will flash, and a green light will show. This assigns the reading to the right person.

The task is now complete.



Blood Pressure Monitor

What is the device?

- The Blood Pressure Monitor measures blood pressure, heart rate and detects unusual heart rhythms.

Why is it part of the study?

- Changes in blood pressure or heart rate can indicate poor health.
- Understanding your general health can also help us make sense of other data from the house.



IMPORTANT: If the screen shows any unexpected negative messages (e.g. HYPERTENSION) and you are concerned, please call the Minder Monitoring Team on 0800 138 6554.



Power supply & charging

- This device is rechargeable.
- It should only need to be recharged every 6 months

Simple tips

- If you're having trouble working your devices, these simple tips might help. If you do not feel comfortable trying these, please call the Minder monitoring team.

Issue	What to do
I am not getting a blood pressure reading.	Readjust the cuff so you can fit two fingers between the cuff and your arm.
The device takes 3 readings.	<p>If you press the button for too long the device will enter a mode to take 3 readings. The device display will show BPx3 or 1/3.</p> <p>To exit this mode, hold the button for 2 seconds until the x3 disappears from the display and it shows only BP.</p> <p>Then push the button once more to take the reading.</p>

Blood Pressure Monitor



Step-by-step guide:

1

Prepare for the reading

Please make sure you are seated. Take the reading with your feet flat on the floor without crossing your legs. Your forearm should be supported on a chair arm or table in front of you.



2

Fasten cuff on your arm

Fasten the blue cuff around your arm with the grey pipe at the lower edge. Leave space for 2 fingers between the cuff and the arm.



3

Press button to start

Place your forearm on a flat surface. Press the button on the device. Once you see "BP" appear, press the button again. The device will now start inflating and the deflating. Try to stay relaxed while this happens.



4

View reading

Once the reading has been taken, your measurements will appear on the device. Press the button again. Your username will now appear. Press the button again and you will see a tick shown on the device.



5

Upload reading to app

After the tick has been shown, you will then see a loading circle. This means the reading is being uploaded to the app via Wi-Fi. You can now take the device off your arm.



6

View data on Healthmate app

The device works over Wi-Fi, so your readings should go straight through. But should you want to view them again, you can check them in the Healthmate app. Your task is now complete.



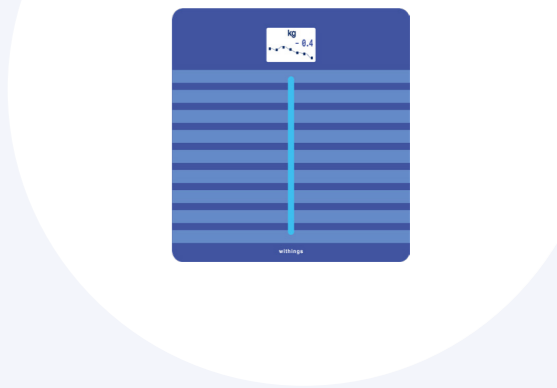
Weighing Scales

What is the device?

- The Scales measure your weight and how hydrated you are.

Why is it part of the study?

- Weight loss can be an indicator of poor health.
- Understanding your general health can also help us make sense of other data from the house.



Power supply

- Rechargeable battery
- Average battery life: up to 12 months

Simple tips

- If you're having trouble working your devices, these simple tips might help. If you do not feel comfortable trying these, please call the Minder monitoring team.

Issue	What to do
The scales aren't taking a reading when I stand on them.	Please contact the monitoring team to see if this is an issue with the device.
Data is not being received by Minder.	The Scales could be too far away from the Wi-Fi router. We will contact you to help solve the problem.

Weighing Scales



Step-by-step guide:

1

Stand on the Scales

Stand on the scales with bare feet and wait a few seconds for the measurement to stabilise. It will then flash and show the name of the account at the top left.



2

View your weight and data

The scales will then show the weight trend, heart rate and your BMI. A screen may appear showing your “vascular age” but you can ignore this.



3

Your data is sent

Your measurements will be sent via Wi-Fi to the Healthmate App. You can then view and keep track of your health data in the app.



Please do not use the Scales if you have a **pacemaker**.



Please do not use the Scales without support and supervision if you have:

- a history of **falls**
- a history of **dizziness**
- difficulties with **balance**



If you have socks on, the scale will only display your weight and not your hydration levels.



Your Tablet & Minder App

This section describes how to use your Minder App through the Tablet device which we have provided you with.

In this section you can find information on:

- ✓ Using your **Tablet Computer**
- ✓ Using your **Minder App**

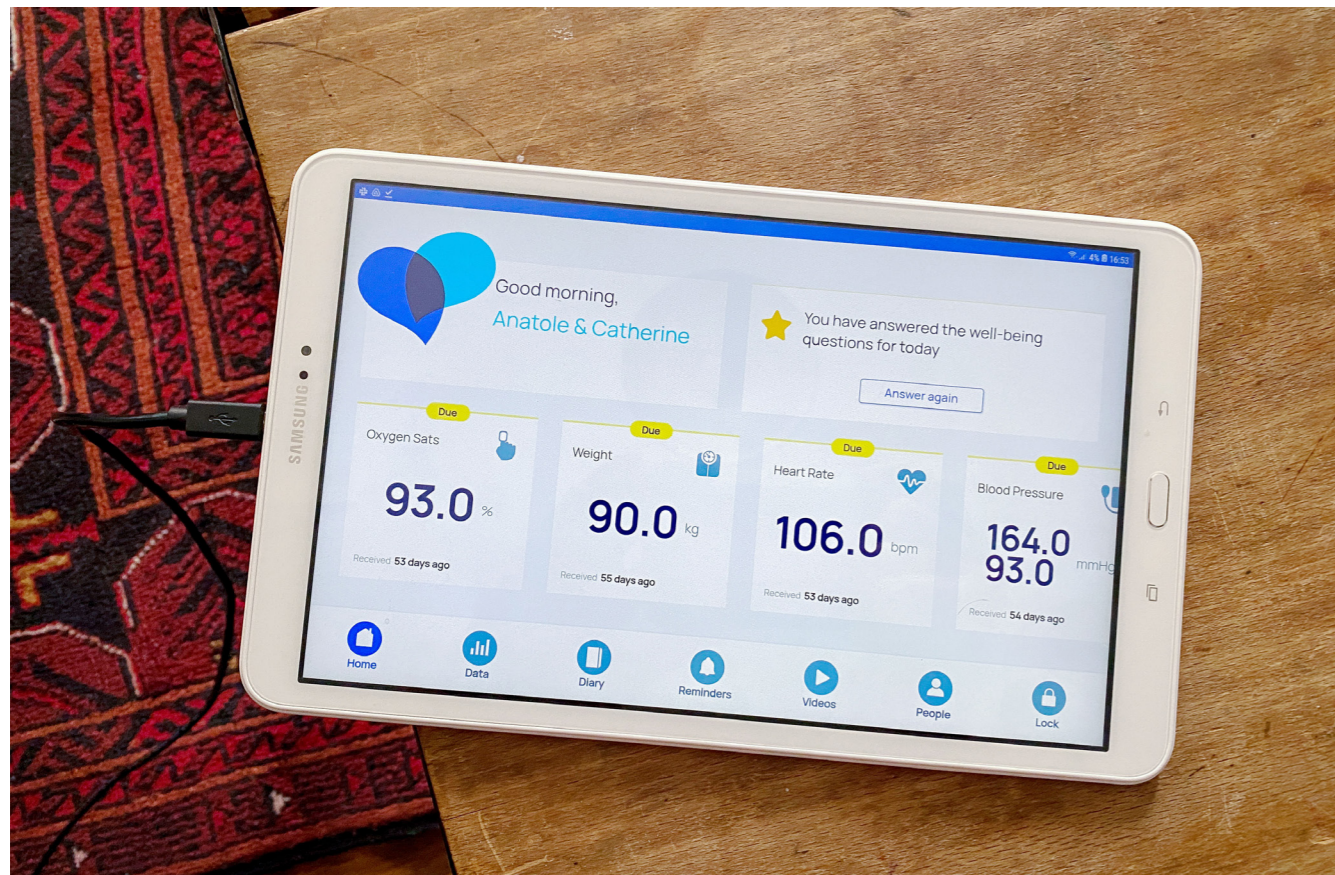
Your Tablet & Minder App

What is the device?

- The Tablet Computer enables you to view your daily activity and health device readings via the Minder App, and answer daily wellbeing questions.

Why is it part of the study?

- The Minder App allows you to see your data, answer daily well-being questions, provides help videos and other features you might find useful.



Power supply & charging

- This Tablet is rechargeable and needs to be charged regularly.
- Charging: Insert the USB cable provided into the charging port of the device and leave to charge for at least 3 hours.

Simple tips

- If you're having trouble working your devices, these simple tips might help. If you do not feel comfortable trying these, please call the Minder monitoring team.

Issue

What to do

I can't view new data on the App.

Your Wi-Fi might not be connected. Try turning it on and off again.

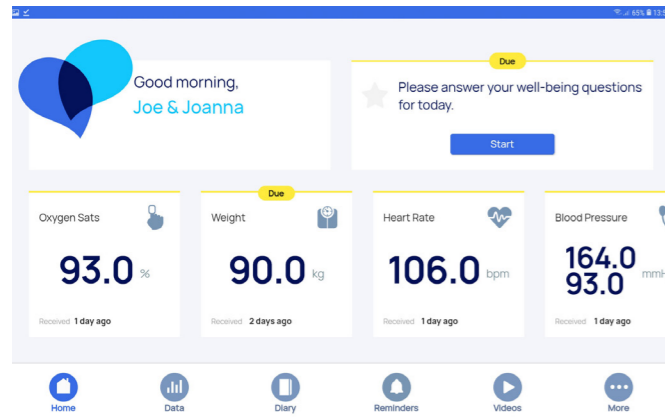
The tablet says it needs to update.

This will happen from time to time and is expected. Accept the update and it will automatically run through the process.

Overview of Minder App



Page-by-page guide:



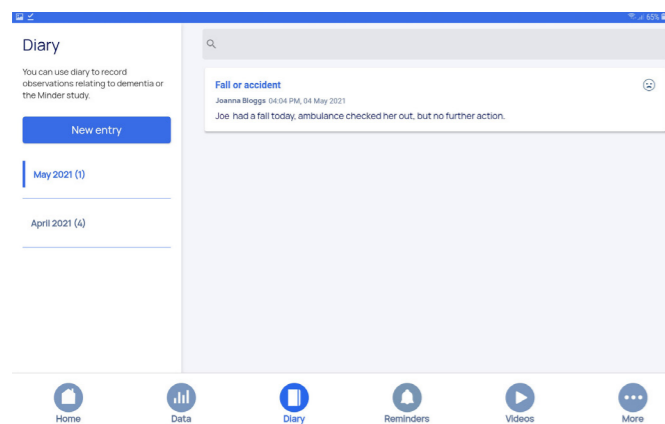
Home Page

An overview of your health data collected from your devices. You can also see which activities are due to be completed each day.



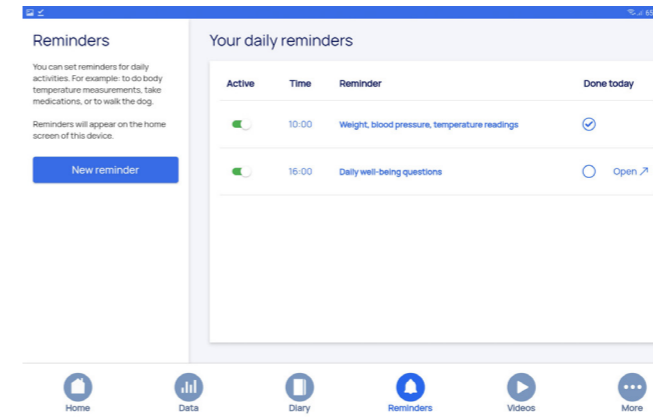
Data Page

Tap the menu icon to view different measurements, such as Hydration or Temperature. You can view data over 1 week, 1 month, or 3 months.



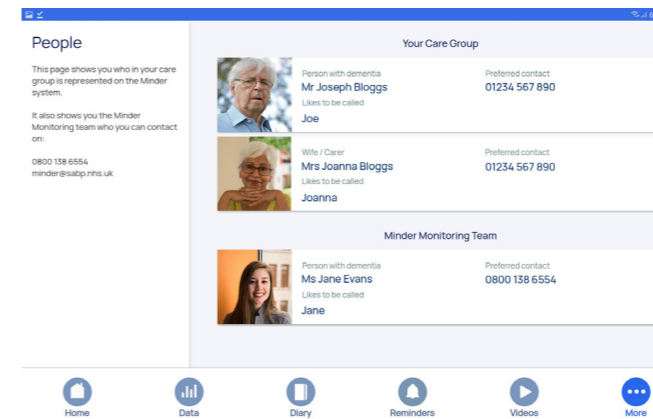
Diary Page

Make diary entries about significant events that happen in your home. You can store these privately or share them with the Minder team.



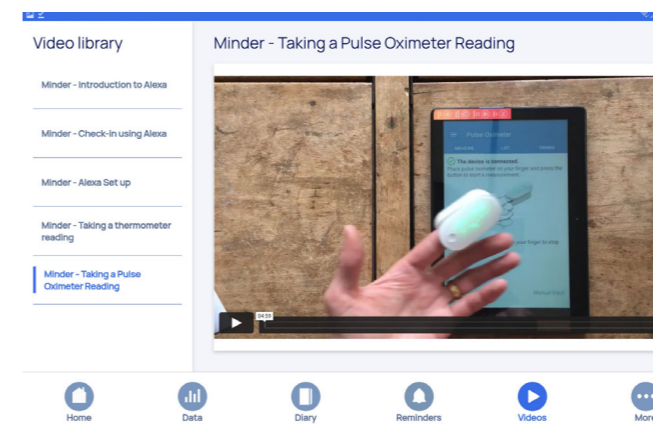
Reminders Page

Set reminders for when you need to carry out your daily tasks and complete your daily questions.



People Page

View the people in your Minder network, including your Care Group and Minder Monitoring Team.



Videos Page

Watch videos on how to use Healthcare Devices and Apps. We will keep these videos up to date so you can access the latest guidance.

Your Questions Answered

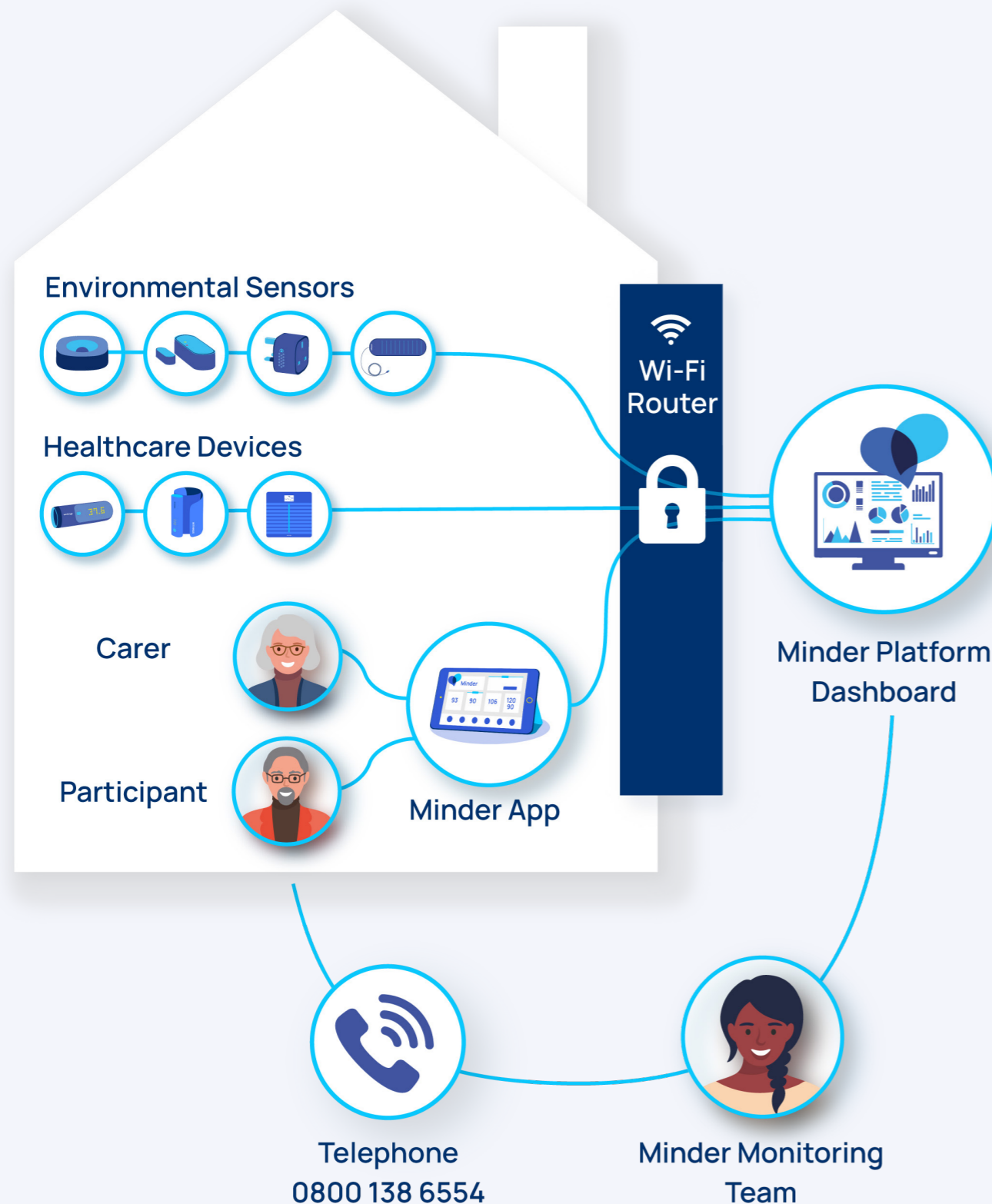
This section is where you can find more information and contact details, should you still have any unanswered questions about the study.

In this section you can find information on:

- ✔ Your **questions answered**
- ✔ Where to find further **information**
- ✔ Further **contact details**



Your questions answered



How are my devices connected to your system?

The devices in your home are connected to the Minder Platform through your Wi-Fi network. Most devices connect directly to the through your Wi-Fi router but some devices, such as some of the Blood Pressure Monitors, may connect via the tablet computer (using bluetooth).

Will the Minder Monitoring Team contact me?

The Minder Monitoring Team can see your data through Minder Dashboard and may contact you if they notice certain changes in your activity, to offer further support.

How can I contact the Minder Monitoring Team?

Should you wish for further support, you can contact the Minder Monitoring Team directly by calling them on **0800 138 6554**.

Need further details on how we use your information?

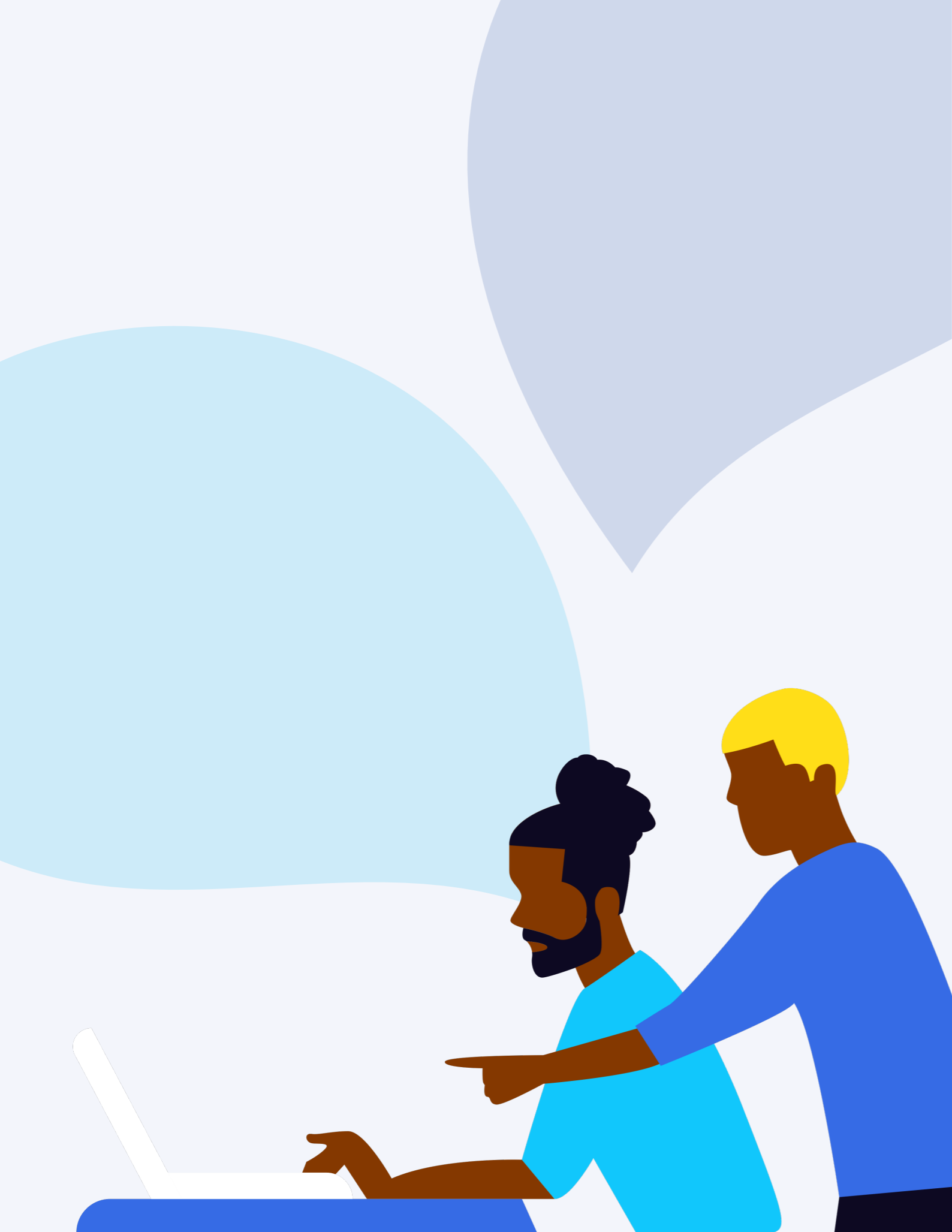
You might have further questions around how the study is being run, how your data is being shared, and what protocols we have in place to protect you.

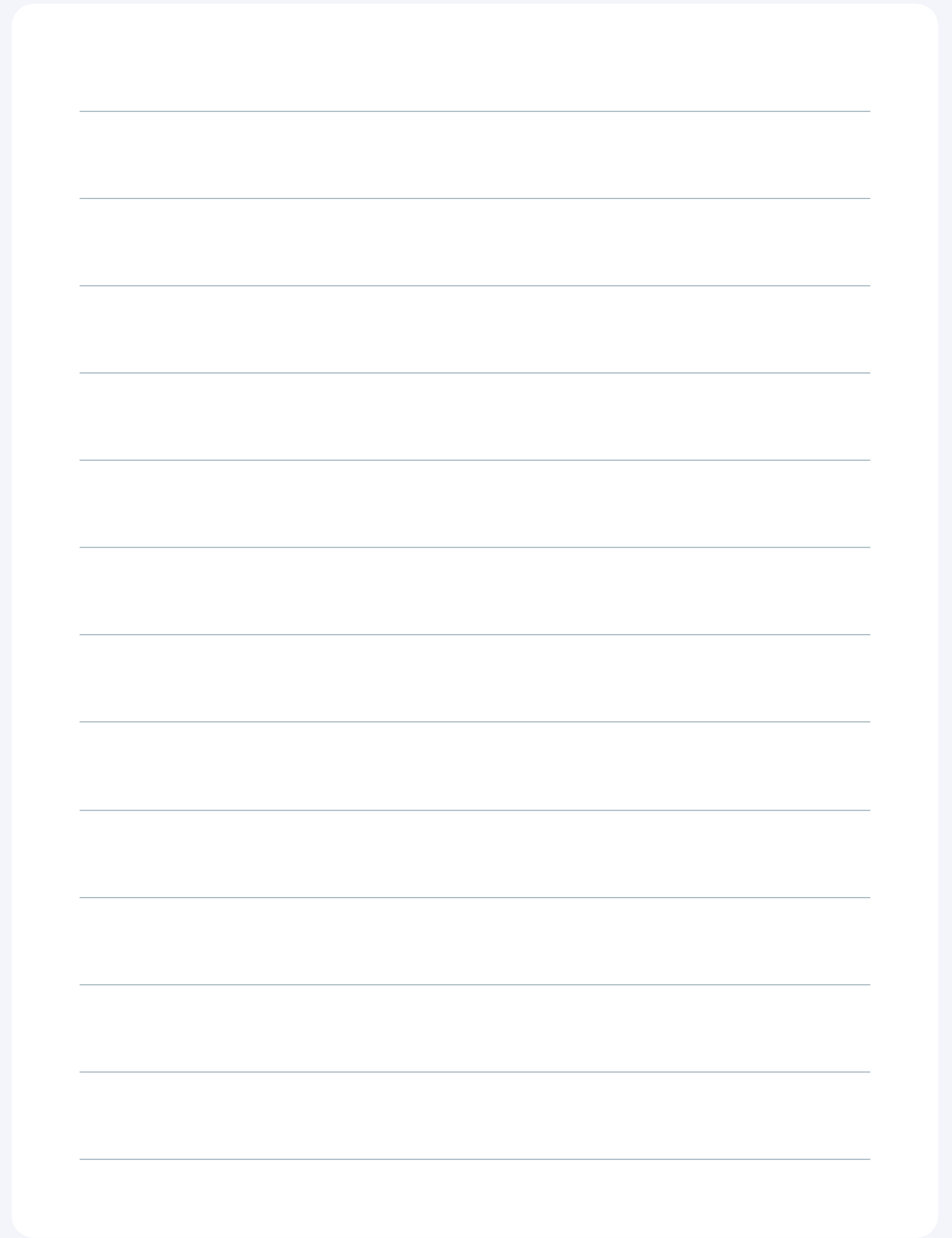
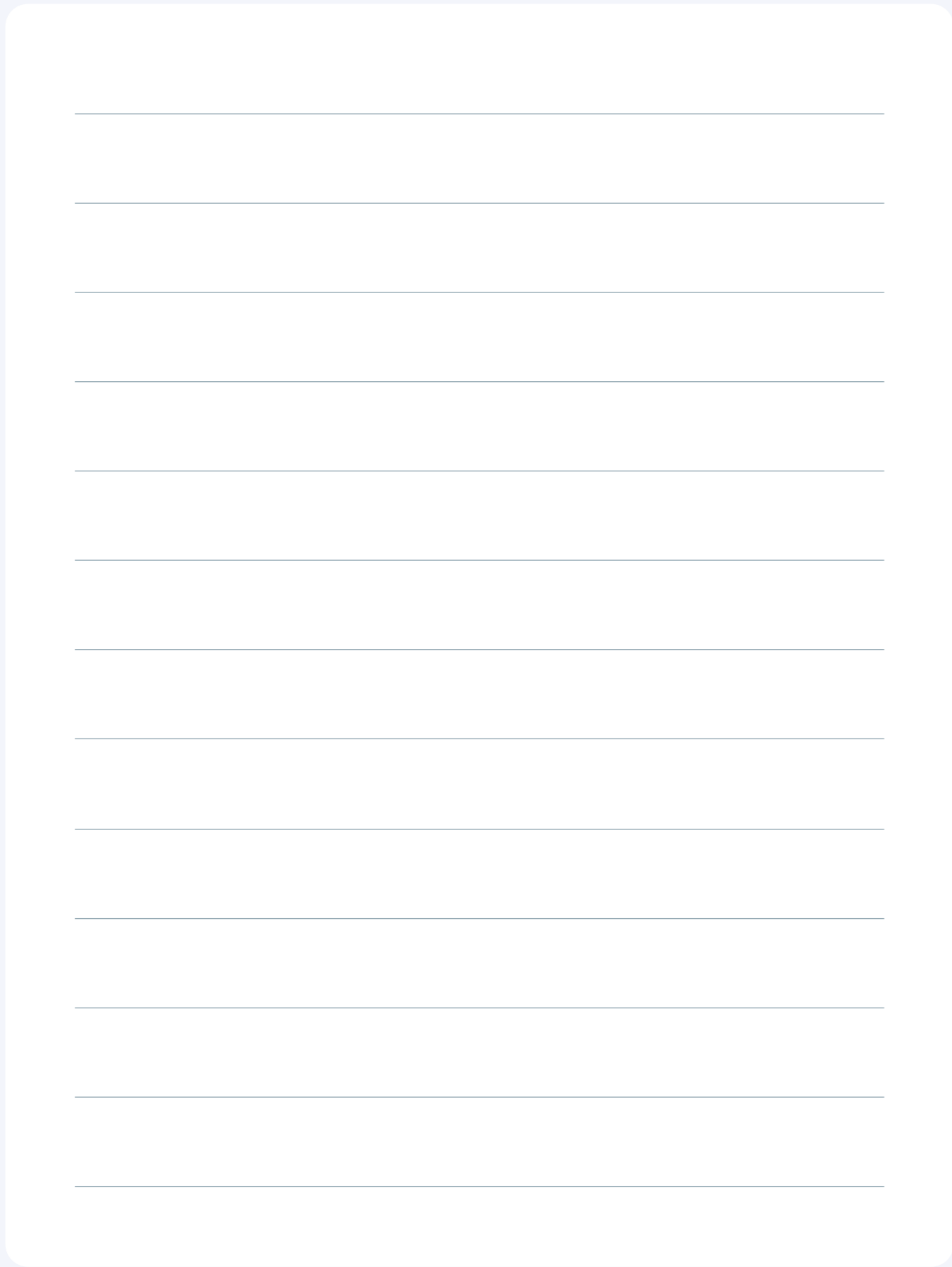
All of this information can be found in the **PIS** (participant information sheet) which was given to you at the beginning of the study.

In the PIS you can find further information about:

- how we protect your **privacy**
- how we share and use your **information**
- how you can **withdraw** from the study
- how you can make a **complaint**

If you have lost or can no longer find your PIS, please contact the Minder Monitoring Team on 0800 138 6554.







If you have any further questions or need help accessing this document please contact the minder monitoring team on:

Minder Monitoring Team

Tel: 0800 138 6554

Email: minder@sabp.nhs.uk

For the latest guidance on how to use your sensors and devices, watch our Minder help videos in the Minder App.



You can also watch these online by scanning the QR code or using the link below:

<https://mindermeetingplace.com/help/>