



User Manual

Floodlight™ MS Activities

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About



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Roche Molecular Systems, Inc.
2881 Scott Boulevard
Santa Clara, California 95050
United States of America

Made in the USA

Australian sponsor

Roche Products Pty Limited
Level 8, 30-34 Hickson Road
Sydney NSW 2000
Australia



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Floodlight™ MS Activities, Floodlight™ MS 2MWT, Floodlight™ MS Cognitive Test, Floodlight™ MS Draw a Shape Test, Floodlight™ MS Pinching Test and Floodlight™ MS U Turn Test are included on the Australian Register of Therapeutic Goods (ARTG) as software-based medical devices.

Any serious incident that has occurred in relation to the device should be reported to Roche Customer Support and to the Therapeutic Goods Administration (TGA). See the Support section for more information on how to contact Roche Customer Support.

Symbols used

The following table displays the symbols used in this User Manual.

	UDI symbol: the unique device identifier represents a series of numeric or alpha-numeric characters, which is created through internationally accepted device identification and coding standards, and which allows the unambiguous identification of specific devices on the market.
	Product manufacturer: the name and address of the application's manufacturer.
	Reference number: indicates the reference or catalogue number for this user manual.
	Global Trade Item Number (GTIN): this is a globally unique 14-digit number used to identify trade items, products or services.
	Medical Device: Floodlight™ MS Activities includes the five medical device assessments (U Turn Test, 2MWT, Pinching Test, Draw a Shape Test and Cognitive Test).
	Consult instructions for use: the device includes electronic instructions for use (eIFU).



Warnings and precautions: highlights information that is critical for the optimal performance of the system. May also indicate that the loss of data or invalid data could occur if the precautions or instructions are not observed.

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1 Overview

Welcome to the Floodlight™ MS Activities User Manual. This User Manual is applicable to both the iOS and Android platforms, and uses the Floodlight™ MS Mobile Application as an example of a supported application that includes the Floodlight™ MS Activities medical device.

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1.1 What is Floodlight™ MS Activities?

Floodlight™ MS Activities consists of five medical device assessments for patients 18 years of age and older with multiple sclerosis (MS). These assessments will help you, as a person living with multiple sclerosis (MS), collect data over time and help inform the conversation around your care.

The U Turn Test measures your gait and dynamic balance. The 2MWT measures your walking ability. The Pinching Test and the Draw a Shape Test measure your hand function. The Cognitive Test measures your cognitive function or how quickly you process information.

1.2 Intended use

Floodlight™ MS Activities consists of five medical device assessments for patients 18 years of age and older with multiple sclerosis (MS). The U Turn Test is intended to provide an objective measurement of gait and dynamic balance. The 2MWT is intended to provide an objective measurement of gait. The Pinching Test is intended to provide an objective measurement of hand function. The Draw a Shape Test is intended to provide an objective measurement of hand function. The Cognitive Test is intended as a cognitive assessment aid to determine the level of cognitive functioning. Floodlight™ MS Activities is used by patients in their home environment, and the results are reviewable by the patient and exported to a qualified healthcare professional (HCP) for review. The patient is not intended to take action on the device output without consulting a qualified HCP. Floodlight™ MS Activities allows configuring one, several or all five medical device assessments to be accessed by an application. The assessments in Floodlight™ MS Activities only provide objective measurements, and do not provide an interpretation or a clinical implication of the measurements. Floodlight™ MS Activities should only be used as an adjunctive tool, and is not intended to be used as a stand-alone diagnostic device nor to identify the presence or absence of clinical diagnoses.

1.3 Performance

Precision is how close values will be from each other if you repeat the test multiple times with the exact same input.

The precision for the various assessments included in the Floodlight™ MS Activities is as follows:

Task	Feature	Performance
2MWT	Step Intensity	The precision is expected to be 95% or higher.
U Turn Test	U-Turn Speed	The precision is expected to be 95% or higher.
Pinching Test	Tomatoes Pinched	The precision is expected to be 95% or higher.
Draw a Shape Test	Celerity	The precision is expected to be 95% or higher.
Cognitive Test	Symbols Matched	The precision is expected to be 100%.

Precision can be affected by many factors, including the accuracy and precision of the sensors available in your device.

For a list of unsupported phones, see [Unsupported phones \(on page 25\)](#), and for a list of supported operating systems (OS), see [Minimum requirements – Software \(on page 22\)](#)

1.4 Contraindications

None known.

1.5 Risks and benefits

All known and foreseeable risks have been reduced as much as possible, and no unacceptable risk has been identified. Potential benefits include tracking measurements in key domains outside the clinical setting and supporting informed consultations between healthcare professionals and their patients. Overall, the potential benefit of the device far exceeds the probable known and foreseeable risks.

1.6 Security

To ensure protected information is as secure as possible, take the following precautions:

- Select a strong and complex password that cannot be easily guessed by an intruder.
- Do not share your password
- Do not use a jailbroken device

1.7 Updates related to safety

None.

1.8 Training requirements

You do not need any specific training to use this medical device. You are simply required to know how to complete basic operations on your phone, such as downloading and starting a mobile app.

2 Download and install

The Floodlight™ MS Activities is a medical device and available as a part of several supported applications. One of the supported applications used as an example in this user manual is the Floodlight™ MS Mobile Application. In this user manual, the instructions for downloading, installing, setting up and using the Floodlight™ MS Activities medical device are based on how the device works within the Floodlight™ MS Mobile Application.

Note

If you are not using the Floodlight™ MS Mobile Application to access the medical device, **sections 2.1 to 2.4 of this chapter** do not apply to you. To download, install and set up the supported mobile app, please consult the instructions for the supported mobile app that you are using to access the medical device.

To use the Floodlight™ MS Activities medical device, you need an application such as the Floodlight™ MS Mobile Application, which is compatible with both iOS and Android phones. If you install the app, it will also install the Floodlight Software Development Kit (SDK). In this case, no additional system requirements or configurations are required.

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2.1 For iOS or Apple phones

Complete the following steps on your iOS phone:

1. Open the **App Store**.
2. Search for Floodlight™ MS.
3. Tap the icon to see the details and tap **Get**.
4. Tap **Install** to start the installation process.
5. You may be asked for your **App Store** password.

After you have entered the password, the Floodlight™ MS Mobile Application will begin to download and install.

2.2 For Android phones

Complete the following steps on your Android phone:

1. Open the **Google Play Store** on your phone.
2. Search for Floodlight™ MS.
3. Tap the icon to see the details.
4. Tap **Install** to start the installation process.
5. You will be asked to accept the download conditions by Google.

After you have accepted, the Floodlight™ MS Mobile Application will begin to download and install.

2.3 Minimum requirements – Software

The Floodlight™ MS Mobile Application requires the following:

- iOS version 15.x to 17.x
- Android version 10 to 14

2.4 Minimum requirements – Hardware

The minimum hardware requirements for the Floodlight™ MS Mobile Application are:

For iOS phones:

- **Minimum resolution required:** 1334 × 750 pixel resolution (326 ppi)

For Android phones:

- **minimum screen dimensions:** 110 mm x 56 mm (4.33 x 2.20 in)
- The following sensors are required:
 - magnetometer
 - accelerometer
 - Gyroscope
- When you use an Android phone to log in to the Floodlight™ MS Mobile Application, the app checks for the sensors listed above. If any of these sensors are missing on your Android phone, the app displays an error message and disables the activities that require the sensors. In this case, the toggle button for the activity is also disabled and you cannot manually enable the activity from the **Settings** menu.

Note

The Floodlight™ MS Mobile Application is not supported on any tablets (Android or iOS).

The app requires a minimum of **450MB** of available storage space on your phone. This ensures that if you complete an activity in offline mode, your activity data is still saved on the phone.

If your phone does not have at least **200MB** of available storage space, the app displays the following message:



Once you have the required storage available on your phone, you can continue using the app.

2.5 Unsupported phones

The Floodlight™ MS Activities is not supported on the following phones.

Brand	Model name
Alcatel	7
Alcatel	Tetra
Alcatel	ZIP LTE
Alcatel	REVL 2 Plus
Alcatel	Raven LTE
Alcatel	REVL 2
Alcatel	1X (2018)
Alcatel	PulseMix
Alcatel	Verso
Alcatel	IdealXcite
Alcatel	One Touch Idol 5
Alcatel	REVL
Alcatel	3V
Alcatel	1X Evolve

Brand	Model name
Alcatel	A30
Alcatel	Cameox 4G
Alcatel	LX 4G
Alcatel	A30 Fierce
Alcatel	A30 Plus
Alcatel	Avalon V
Alcatel	One Touch Idol 5S
Alcatel	Onyx
Alcatel	LX1
Alcatel	LX2
Alcatel	Jitterbug Smart2
Alcatel	Kora
Alcatel	A50
Alcatel	Ideal
Alcatel	Streak
Alcatel	A1

Brand	Model name
Alcatel	Axia
Alcatel	Fierce 4
Alcatel	One Touch Idol 4
Alcatel	One Touch Pixi Eclipse
Alcatel	Jitterbug Smart
Alcatel	One Touch Pixi Avion
Alcatel	One Touch Pixi Glitz
Alcatel	Allura
Alcatel	One Touch Idol 3 (5.5)
Alcatel	Dawn
Alcatel	One Touch Idol 4s
Alcatel	One Touch Flint 4G
Alcatel	One Touch Pixi 4 (5)
Alcatel	Tru
Alcatel	One Touch Pop 4S
Alcatel	One Touch Pixi Pulsar

Brand	Model name
Alcatel	One Touch Pixi 4 (6)
Alcatel	One Touch Pop 4+
Huawei	P20 Lite (2018)
Huawei	P Smart (2018)
Huawei	Mate 10 Lite
Huawei	Mate 20 Lite (2018 Sep)
Huawei	Y6 (2018)
Huawei	P10 (2017)
LG Electronics	Aristo 2 (2018)
LG Electronics	Stylo 4 (2018)
LG Electronics	K20 Plus (2016 Dec)
LG Electronics	Risio 3
LG Electronics	Tribute Dynasty
LG Electronics	Rebel 4
LG Electronics	Stylo 3 Plus
Motorola	Moto E5 Play (2018 Jul)

Brand	Model name
Motorola	Moto E4 (2017 Jun)

3 Log out and uninstall

The Floodlight™ MS Activities is a medical device and available as a part of several supported applications. One of the supported applications used as an example in this user manual is the Floodlight™ MS Mobile Application. In this user manual, the instructions for uninstalling and logging out of the medical device are based on how the device works within the app.

Note

If you are not using the app to access the Floodlight™ MS Activities medical device, **this chapter does not apply to you**. To uninstall and log out of the supported mobile app, please consult the instructions for the supported mobile app that you are using to access the medical device.

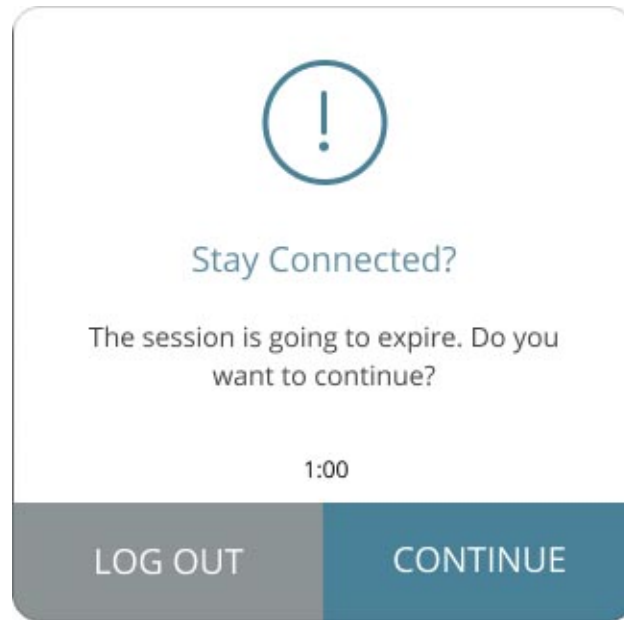
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3.1 Log out of the Floodlight™ MS Mobile Application


For security reasons, you are automatically logged out of your Floodlight™ MS Mobile Application account after **30 minutes** of inactivity.

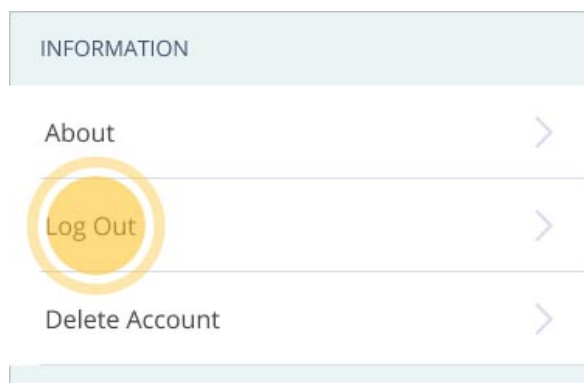
The app will display the following warning message **five minutes** before your session is about to expire. From this message screen, you can tap **CONTINUE** to continue your session, or **LOG OUT** to log out of your session.



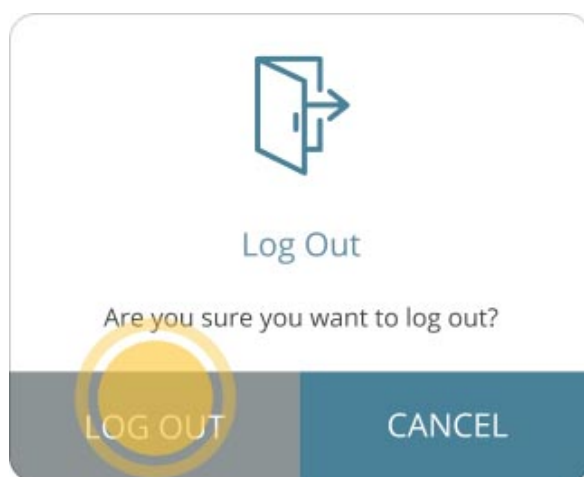
You can also log out from the **Settings** screen.

To log out:

1. Tap the **Settings** icon  on the top right corner of your screen.
2. on the **Settings** screen, scroll to the bottom and tap **Log Out**.



3. On the confirmation screen, tap **LOG OUT**.



Note: you can also tap **CANCEL** to continue using the app.


3.2 Delete your account

Uninstalling the Floodlight™ MS Mobile Application does not delete your account or your data. If you do not want to use the app anymore and wish to delete your account and all the data associated with your account, you can use the **Delete Account** option from the **Settings** screen.

Note

Your Floodlight™ MS Mobile Application account can only be deleted from within the app. Therefore, perform the following steps before you've uninstalled the app. For more information on uninstalling the app, see [Uninstall \(on page 34\)](#)

To delete your account:

1. Tap the **Settings** icon  on the top right corner of your screen.
2. On the **Settings** screen, tap **Delete Account**.
3. On the **Delete Account?** screen, type **DELETE** in the text field.
The text entry is case-sensitive.
4. Tap **DELETE ALL**.
5. Tap **OK**.

3.3 Uninstall

This section includes instructions on how to uninstall the Floodlight™ MS Mobile Application from an iOS phone or an Android phone. You can perform these steps if you do not want to use the app anymore.

Note

Uninstalling the Floodlight™ MS Mobile Application does not delete your account or your data. If you do not want to use the app anymore and wish to delete your account and all the data associated with your account, you can use the **Delete Account** option from the **Settings** screen before you uninstall the app. For more information, see [Delete your account](#) (on page 33).

3.3.1 For iOS or Apple phones

Complete the following steps on your iOS phone to uninstall the Floodlight™ MS Mobile Application:

1. Locate the Floodlight™ MS Mobile Application on your home screen.
2. Tap and hold the Floodlight™ MS Mobile Application icon to open a quick actions menu.
3. Tap **Remove app**.
4. Tap **Delete app** to delete it from your phone.

3.3.2 For Android phones

Complete the following steps on your Android phone to uninstall Floodlight™ MS Mobile Application:

1. Open the **Google Play Store**.
2. Tap the **My apps & games** menu.
3. Tap the Floodlight™ MS Mobile Application.
4. Tap **Uninstall**.

4 The 2-Min Walk activity

The 2-Min Walk activity, which is included in the 2MWT medical device, measures your walking ability. This is achieved by monitoring your walking ability while you walk for 2 minutes.

Note

If you are not using the 2MWT medical device, **this chapter** does not apply to you.

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4.1 Warnings and precautions



Do the activity as often as recommended by your provider.



The Floodlight™ MS Activities medical device is not a substitute for medical care. Do not try to interpret the data presented by the summary charts. Consult your doctor to interpret the data that you collect using the medical device or for any emergencies. Note that self-testing at home does not replace your regular visits with your doctor.



Follow the recommended instructions while performing each activity. If you do not follow the instructions, it may result in inaccurate data.



Do not attempt the activity if:

- you cannot stand and keep your balance safely.
- you are not in a safe environment where you can walk for two minutes.
- you require the use of a wheelchair for mobility.



Wear trousers with front pockets or a running belt to put your phone in because failure to do so may result in inaccurate data. The measurement will also be inaccurate if you hold your phone in your hand.



Increase the volume on your phone and turn off silent or vibrate mode. This activity uses beeps, vibrations and voice assistance to tell you when to start and stop walking.



Prior to beginning the activity, confirm that your surroundings are clear of any obstructions that could cause you to trip or injure yourself during the activity.



Do not use a phone case containing a magnet because this can interfere with the device sensors and cause errors in generating the activity results.

4.2 Get started

The 2-Min Walk activity looks at your mobility when walking quickly and can provide information about specific patterns of your gait. To perform this activity, you need a safe place where you can walk for 2 minutes. During the 2 minutes, try to cover as much ground as possible while keeping a constant pace and avoiding turns. However, do not worry if you need to slow down or rest. You can complete this activity with or without a walking aid.

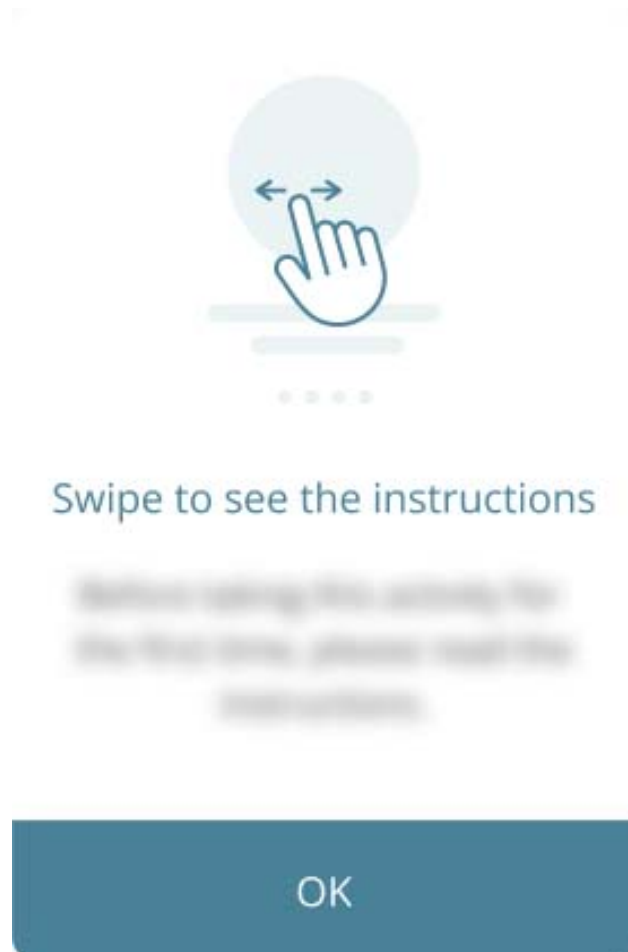
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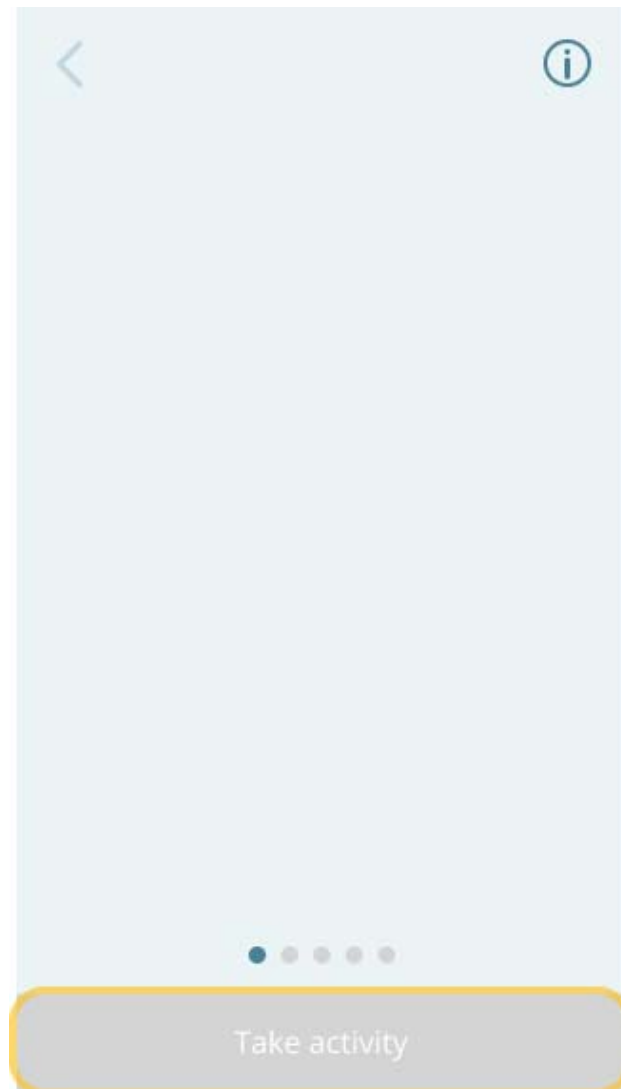
4.2.1 Review instructions

Before you start the 2-Min Walk activity, review the instructions for the activity. It is important that you follow the instructions when performing the activity. This ensures that the data collected for the activity is accurate.

For the **first five times** you perform an activity, you will see the following message:



And the **Take activity** button will remain disabled until you have swiped through all of the instruction screens.



4.2.2 Things to remember

While performing this activity, remember the following:

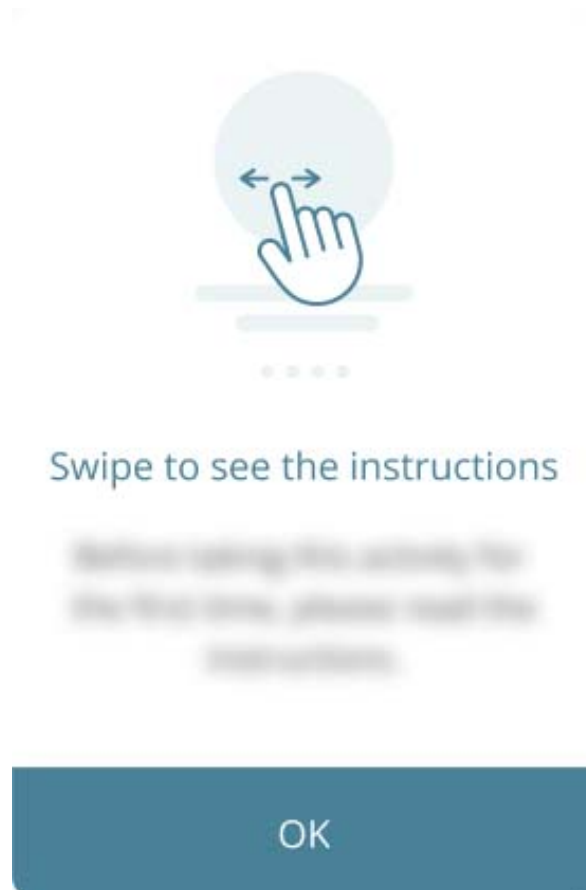
- It is best to complete this activity in an environment where you can focus, minimise interruptions and walk safely.
- Ensure that you have enough distance to walk for **2 minutes**. For this activity, walk as straight as possible and avoid turning.
- Not placing the phone in the front pocket of your trousers or a running belt will directly affect the accuracy of the data. For accurate measurements, please ensure that the phone is placed in the front pocket of your trousers or a running belt.
- Do not be concerned if you need to slow down or stop to rest.

4.2.3 Perform the 2-Min Walk activity

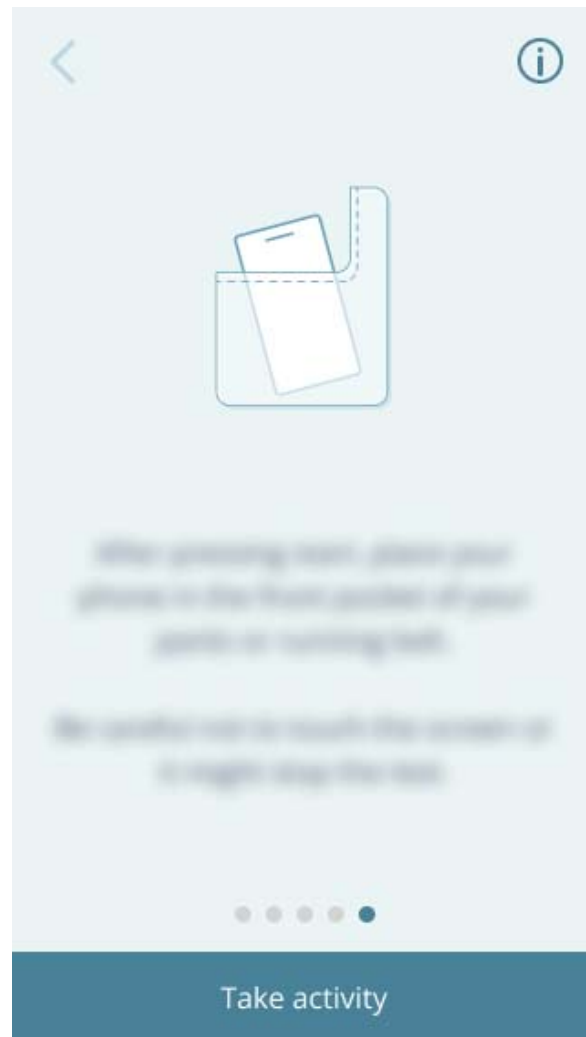
The 2-Min Walk activity looks at your mobility when walking quickly. To perform this activity, you must find a safe place where you can walk for two minutes while avoiding turns and interruptions.

To perform the 2-Min Walk activity:

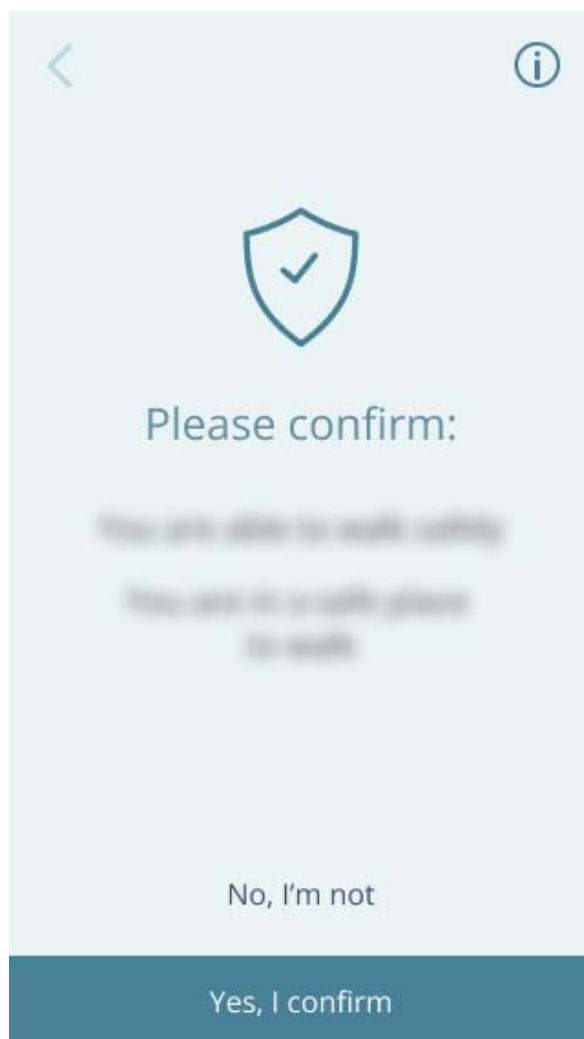
1. When performing this activity for the **first five times**, you will see the following message:



2. Tap the **OK** button.
3. Swipe left to review the instructions for taking the 2-Min Walk activity.
4. After you have reviewed all the instructions, tap the **Take activity** button.



5. On the next screen, tap the **Yes, I confirm** button to confirm that you are in a safe place and are able to walk safely.



If the answer to either question is no, tap the **No, I'm not** button. In this case, the activity is skipped and you can do the activity at a later time.

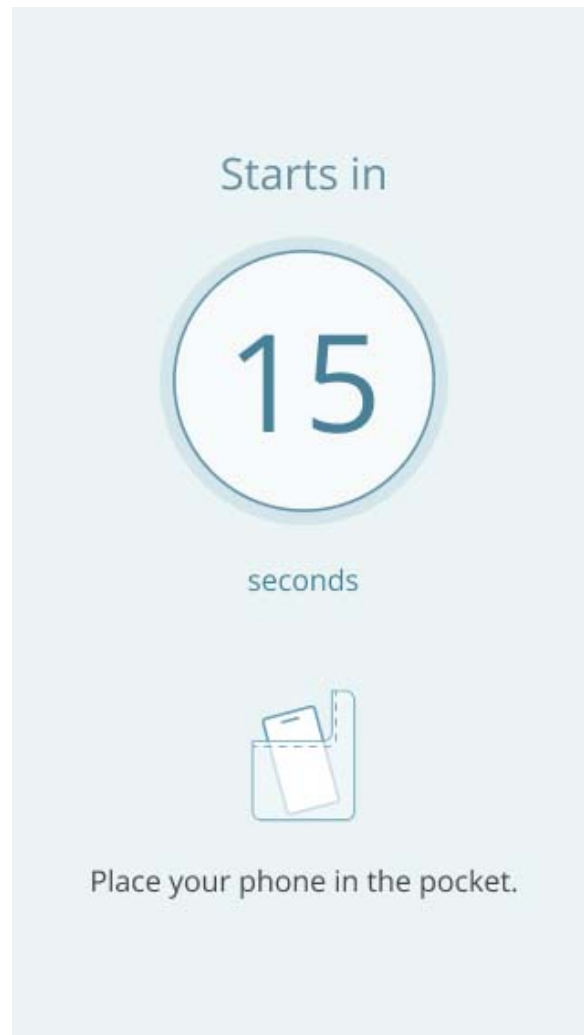
6. On the next screen, let us know if you will be using a walking aid to complete this activity. Select any one of the options on the screen and tap the **Continue** button.

A screenshot of a mobile application interface. At the top left is a back arrow icon, and at the top right is an information icon (a lowercase 'i' inside a circle). The main text in the center asks, "Will you use a walking aid to perform this activity today?". Below this text are two radio button options. The first option is "Yes, I will" with an unselected radio button. The second option is "No, I won't" with a selected radio button (a dark blue circle with a white checkmark). Below these options is a line of small, blurred text. At the bottom of the screen is a dark blue bar with the word "Continue" in white text.

7. When ready, tap the **Start** button.



8. Your phone screen will show a **15-second** countdown. During this time, place your phone in the front pocket of your pants or running belt. Be careful not to touch the screen or it might stop the activity.



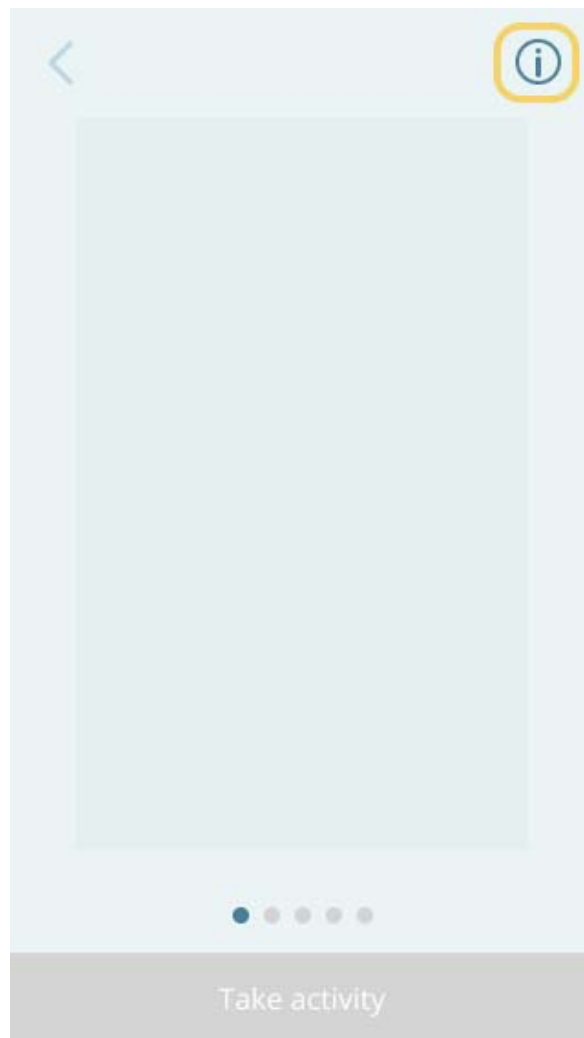
9. When the countdown is almost done, your phone will vibrate and beep. You will hear a voice prompt to start the activity. Your phone screen will now show a completion countdown for **120 seconds**.
10. Start walking. Cover as much ground as possible over two minutes. Try to keep a constant pace and avoid turning. Do not be concerned if you need to slow down or stop to rest.
11. Once the activity is complete, you can stop walking.

4.3 Read the 2-Min Walk User Manual

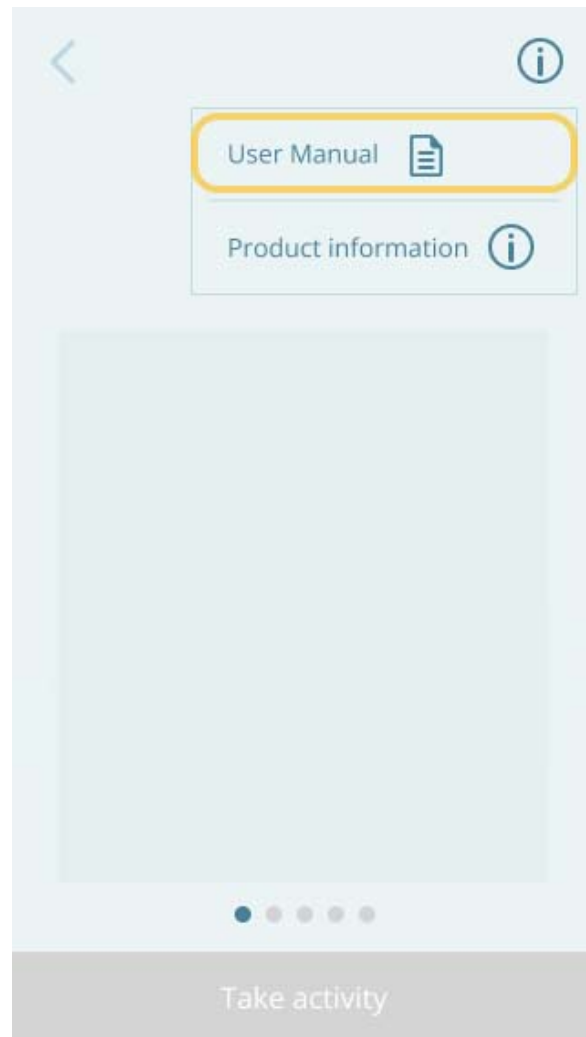
You can access this User Manual for each activity from within the activity. To access the latest version of this User Manual, use the option from within the Floodlight™ MS Activities instead of a previously downloaded .pdf.

To read the User Manual:

1. Tap the activity card for which you want to access the User Manual. For example, to access the User Manual for the 2-Min Walk activity, tap the **2-Min Walk** card from the activity carousel on your **Dashboard**.
2. On the activity screen, tap the **Information** icon on the top-right corner.



3. Tap the **User Manual** option.



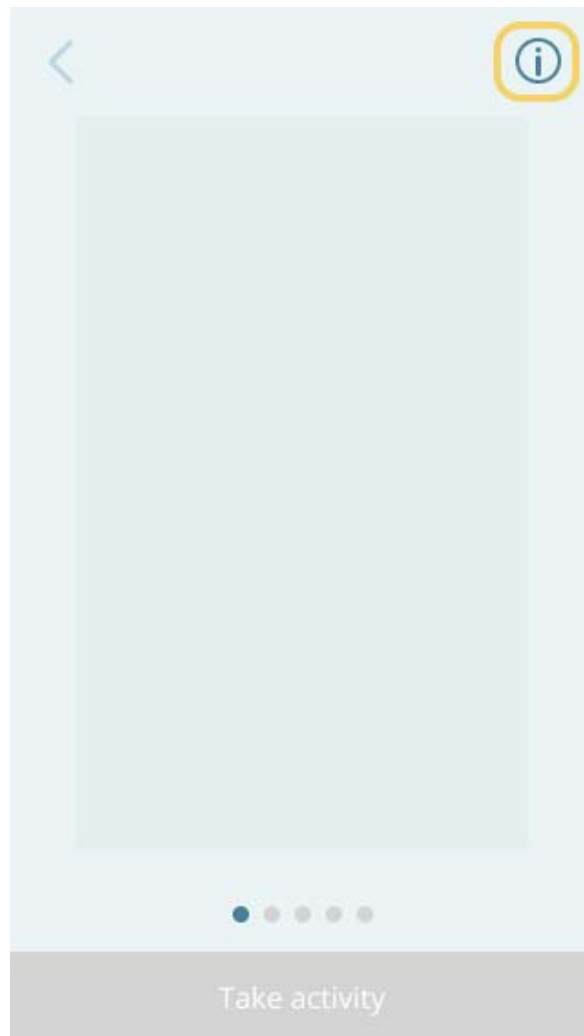
4. The User Manual for the activity is displayed.
5. Tap the **Back** button in the top-left-hand corner to get back to the activity screen.

4.4 Read the 2-Min Walk product information

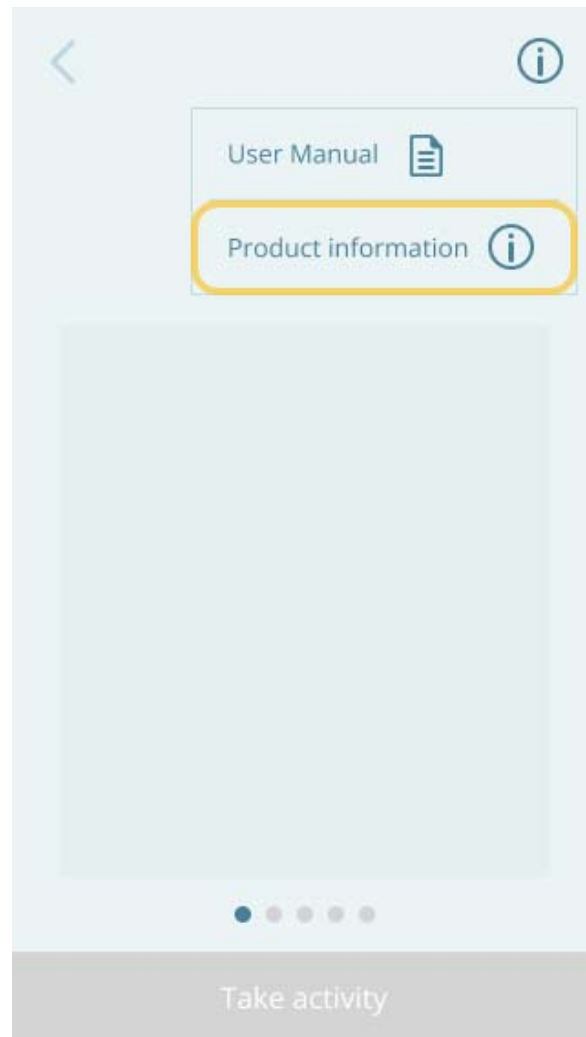
You can find out the version, copyright and other information about the medical device from the About page or the product label.

To read the product information:

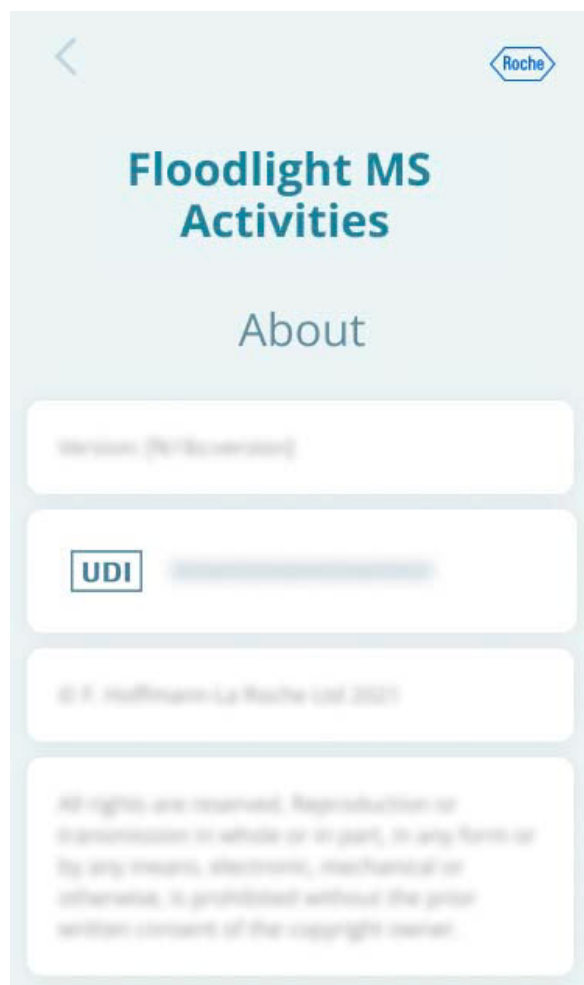
1. Tap the activity card for which you want to access the product information. For example, to access the product information for the 2-Min Walk activity, tap the **2-Min Walk** card from the activity carousel on your **Dashboard**.
2. On the activity screen, tap the **Information** icon on the top-right corner.



3. Tap the **Product Information** option.



4. The **About** page for the activity is displayed, as shown below.



5. Tap the **Back** button in the top-left-hand corner to get back to the activity screen.

5 The U-Turn activity

The U-Turn activity, which is included in the U Turn Test medical device, measures your gait and dynamic balance over time. This is achieved by:

- Asking you to walk between two points at least three steps apart and make at least five U-turns
- monitoring your gait and speed with which you do a U-Turn
- tracking how many U-turns you can do in 60 seconds

Note

If you are not using the U Turn Test medical device, **this chapter** does not apply to you.

In this section:

5.1 Warnings and precautions	52
5.2 Get started	53
5.3 Read the U-Turn User Manual	62
5.4 Read the U-Turn product information	64

5.1 Warnings and precautions



Do the activity as often as recommended by your provider.



The Floodlight™ MS Activities medical device is not a substitute for medical care. Do not try to interpret the data presented by the summary charts. Consult your doctor to interpret the data that you collect using the medical device or for any emergencies. Note that self-testing at home does not replace your regular visits with your doctor.



Follow the recommended instructions while performing each activity. If you do not follow the instructions, it may result in inaccurate data.



Do not attempt the activity if:

- you cannot stand and keep your balance safely.
- You are not in a safe environment where you can walk between two points at least three steps apart.
- you require the use of a wheelchair for mobility.



Wear trousers with front pockets or a running belt to put your phone in because failure to do so may result in inaccurate data. The measurement will also be inaccurate if you hold your phone in your hand.



Increase the volume on your phone and turn off silent or vibrate mode. This activity uses beeps, vibrations and voice assistance to tell you when to start and stop walking.



Prior to beginning the activity, confirm that your surroundings are clear of any obstructions that could cause you to trip or injure yourself during the activity.



Do not use a phone case containing a magnet because this can interfere with the device sensors and cause errors in generating the activity results.



Due to the nature of your disease, you may feel dizzy while taking this activity. If this occurs, please stop the activity and consult with your provider.

5.2 Get started

The U-Turn activity looks at your ability to turn while walking as this movement also involves your balance. To perform this activity, you need to walk between two points at least three steps apart and then make a U-Turn. You can pivot on your foot or make a tight turn. However, try to turn the same way every time. This activity lasts for 60 seconds and you can complete it with or without a walking aid.

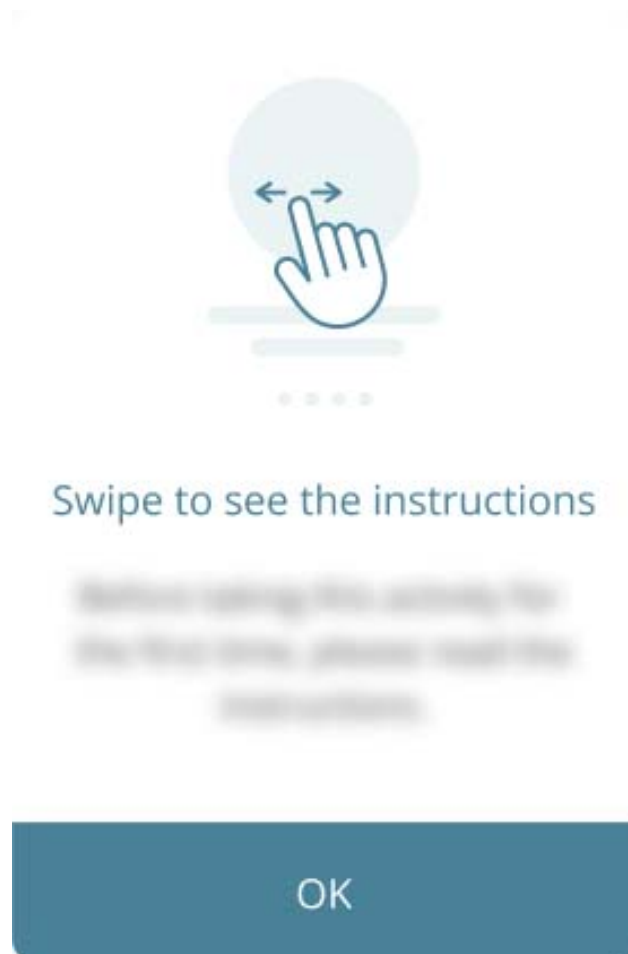
In this section:

5.2.1 Review instructions	54
5.2.2 Things to remember	55
5.2.3 Perform the U-Turn activity	56

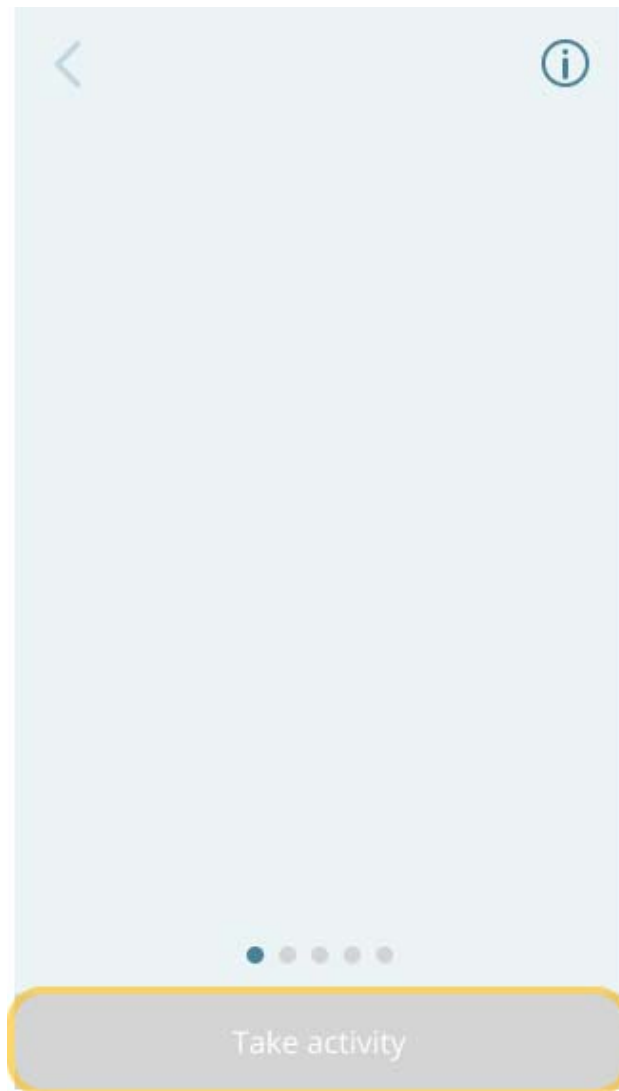
5.2.1 Review instructions

Before you start the U-Turn activity, review the instructions for the activity. It is important that you follow the instructions when performing the activity. This ensures that the data collected for the activity is accurate.

For the ***first five times*** you perform an activity, you will see the following message:



And the **Take activity** button will remain disabled until you have swiped through all of the instruction screens.



5.2.2 Things to remember

While performing this activity, remember the following:

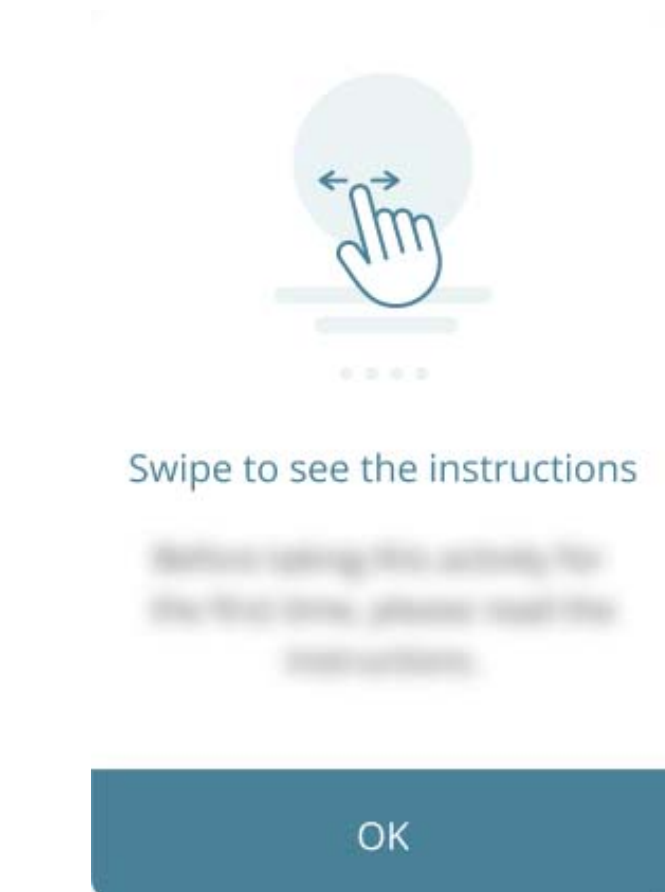
- It is best to complete this activity in an environment where you can focus, minimise interruptions and walk safely.
- Ensure that you have enough distance to walk between two points at least three steps apart and make a U-Turn.
- Not placing the phone in the front pocket of your trousers or a running belt will directly affect the accuracy of the data. For accurate measurements, please ensure that the phone is placed in the front pocket of your trousers or a running belt.
- Do not be concerned if you need to slow down or stop to rest.

5.2.3 Perform the U-Turn activity

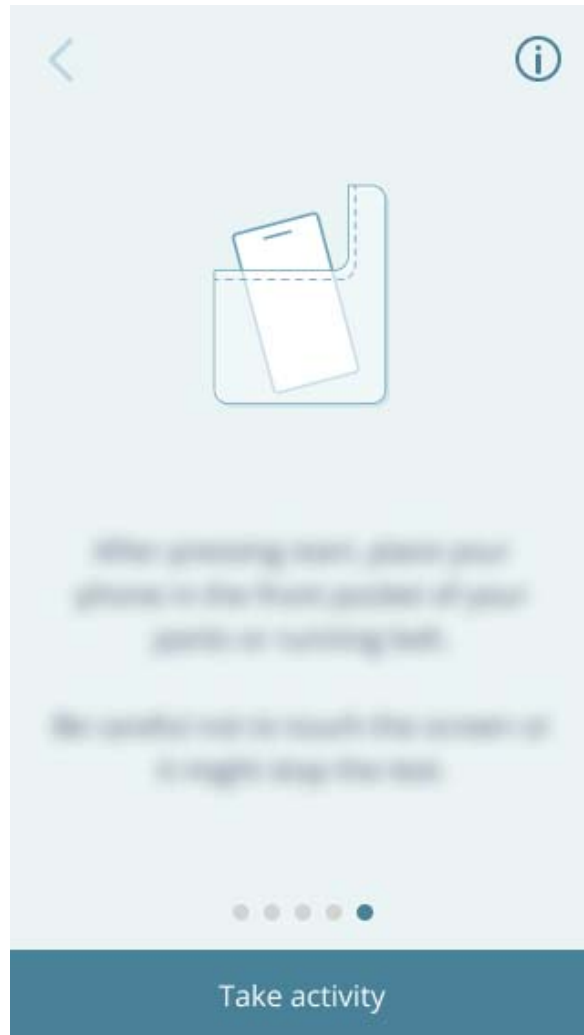
The U-Turn activity looks at your ability to turn while walking. To do this activity, you must find a safe place where you can walk between two points at least three steps apart and then make a U-Turn. You can pivot on your foot or make a tight turn. However, try to turn the same way every time.

To perform the U-Turn activity:

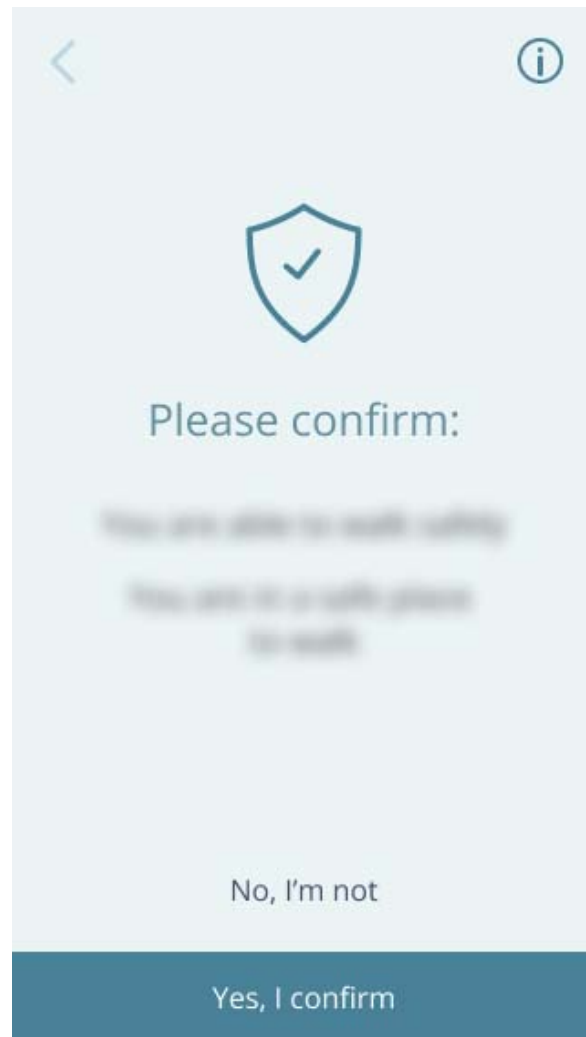
1. When performing this activity for the **first five times**, you will see the following message:



2. Tap the **OK** button.
3. Swipe left to review the instructions for performing the U-Turn activity.
4. After you have reviewed all the instructions, tap the **Take activity** button.

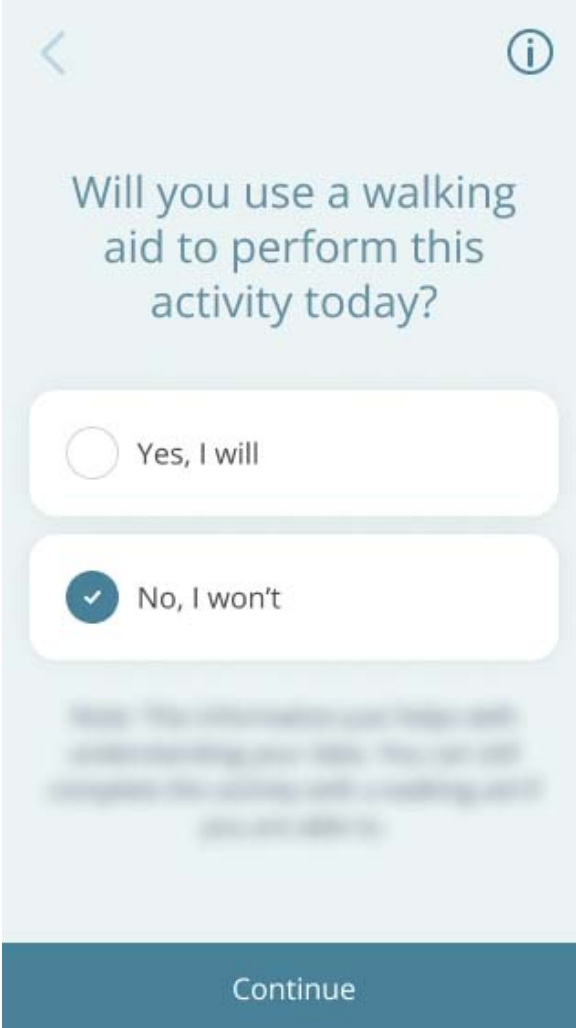


5. On the next screen, tap the **Yes, I confirm** button to confirm that you are in a safe place and are able to walk safely.



If the answer to either question is no, tap the **No, I'm not** button. In this case, the activity is skipped and you can do the activity at a later time.

6. On the next screen, let us know if you will be using a walking aid to complete this activity. Select any one of the options on the screen and tap the **Continue** button.



A mobile application screen with a light blue background. At the top left is a back arrow icon, and at the top right is an information icon (a lowercase 'i' inside a circle). The main text in the center asks, "Will you use a walking aid to perform this activity today?". Below this are two radio button options. The first option is "Yes, I will" with an unselected radio button. The second option is "No, I won't" with a selected radio button (a dark blue circle with a white checkmark). Below the options is a line of blurred text. At the bottom of the screen is a dark blue bar with the word "Continue" in white text.

< ⓘ

Will you use a walking aid to perform this activity today?

☐ Yes, I will

☒ No, I won't

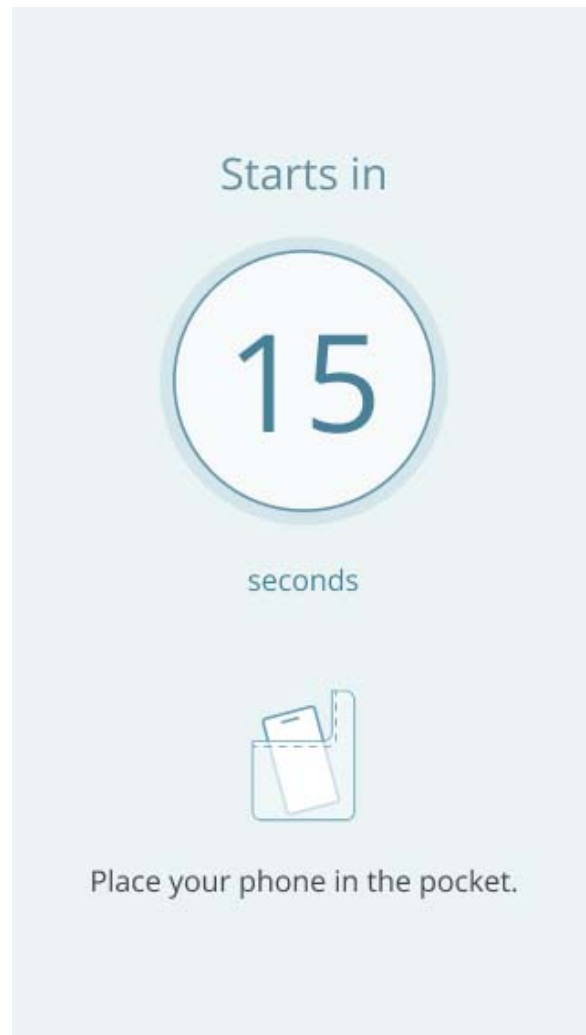
How often do you use a walking aid to perform this activity today? You can select "Yes, I will" or "No, I won't" to indicate your answer.

Continue

7. When ready, tap the **Start** button.



8. Your phone screen will show a **15-second** countdown. During this time, place your phone in the front pocket of your pants or running belt. Be careful not to touch the screen or it might stop the activity.



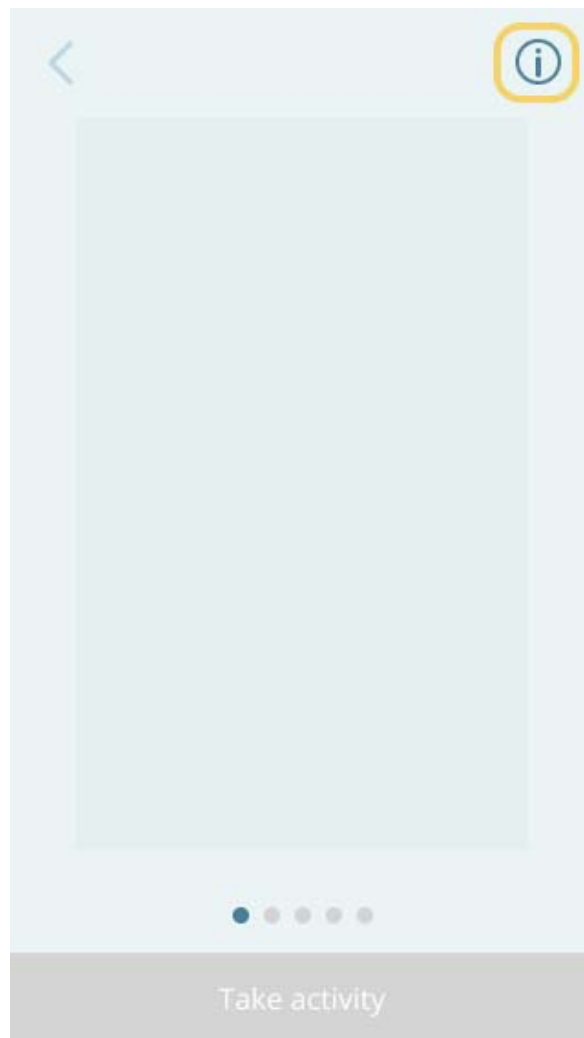
9. When the countdown is almost done, your phone will vibrate and beep. You will hear a voice prompt to start the activity. Your phone screen will now show a completion countdown of **60 seconds**.
10. Start walking. Make as many U-turns as possible in 1 minute. Try to keep a constant pace and turn the same way every time. Do not be concerned if you need to slow down or stop to rest.
11. Once the activity is complete, you can stop walking.

5.3 Read the U-Turn User Manual

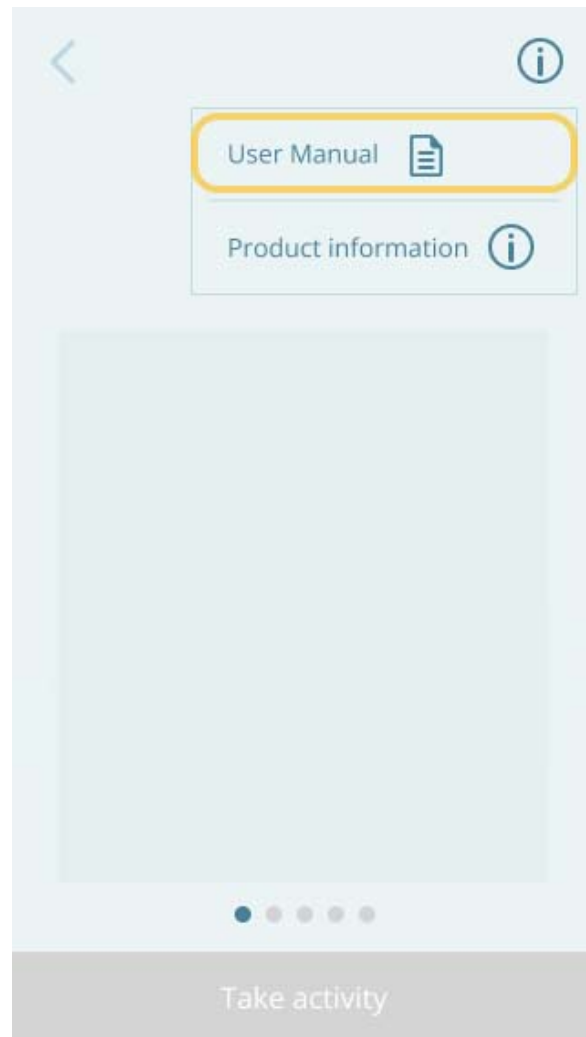
You can access this User Manual for each activity from within the activity. To access the latest version of this User Manual, use the option from within the Floodlight™ MS Activities instead of a previously downloaded .pdf.

To read the User Manual:

1. Tap the activity card for which you want to access the User Manual. For example, to access the User Manual for the U-Turn activity, tap the **U-Turn** card from the activity carousel on your **Dashboard**.
2. On the activity screen, tap the **Information** icon on the top-right corner.



3. Tap the **User Manual** option.



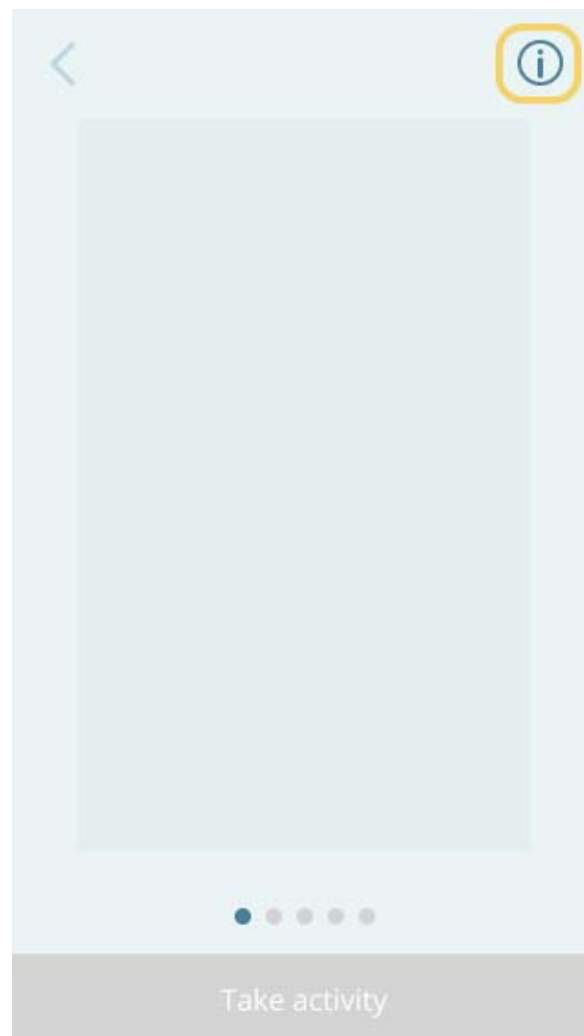
4. The User Manual for the activity is displayed.
5. Tap the **Back** button in the top-left-hand corner to get back to the activity screen.

5.4 Read the U-Turn product information

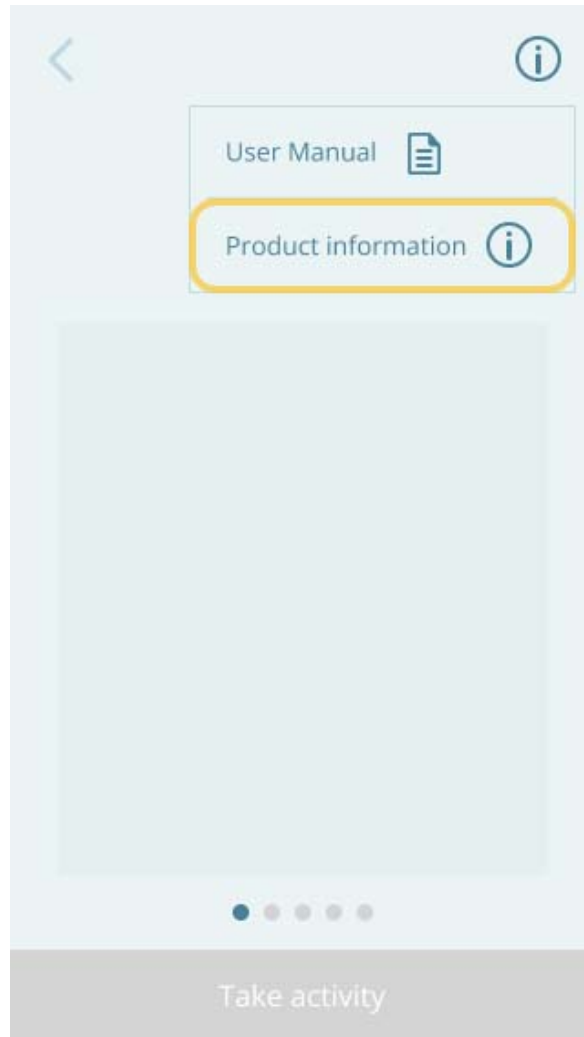
You can find out the version, copyright and other information about the medical device from the About page or the product label.

To read the product information:

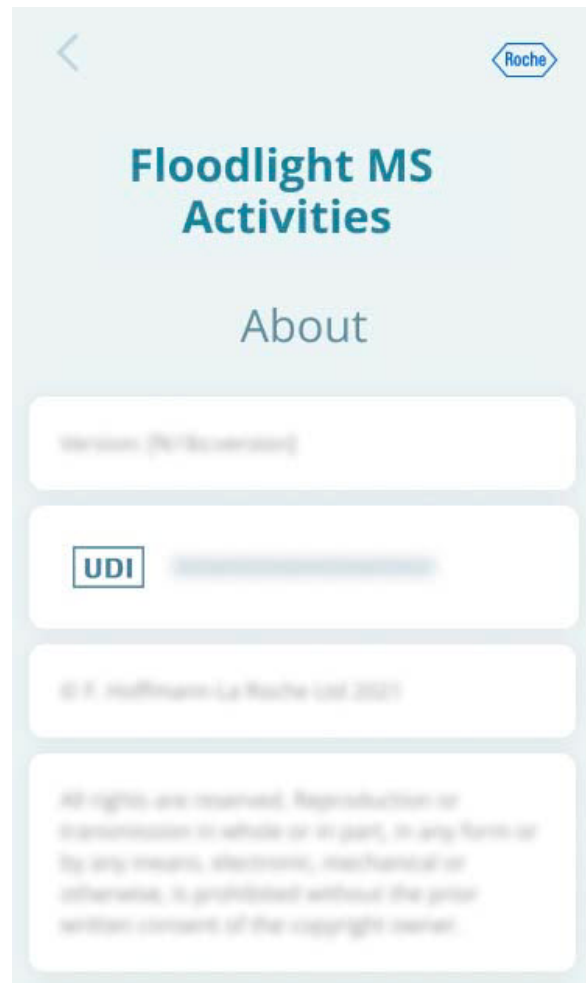
1. Tap the activity card for which you want to access the product information. For example, to access the product information for the U-Turn activity, tap the **U-Turn** card from the activity carousel on your **Dashboard**.
2. On the activity screen, tap the **Information** icon on the top-right corner.



3. Tap the **Product Information** option.



4. The **About** page for the activity is displayed, as shown below.



5. Tap the **Back** button in the top-left-hand corner to get back to the activity screen.

6 The Draw a Shape activity

The Draw a Shape activity, which is included in the Draw a Shape Test medical device, measures your hand function. This is achieved by:

- using your index finger to join the dots along a shape on your screen
- measuring how fast and accurately you join the dots along each shape

Note

If you are not using the Draw a Shape Test medical device, **this chapter** does not apply to you.

In this section:

6.1 Warnings and precautions	68
6.2 Get started	69
6.3 Read the Draw a Shape User Manual	80
6.4 Read the Draw a Shape product information	82

6.1 Warnings and precautions



Do the activity as often as recommended by your provider.



The Floodlight™ MS Activities medical device is not a substitute for medical care. Do not try to interpret the data presented by the summary charts. Consult your doctor to interpret the data that you collect using the medical device or for any emergencies. Note that self-testing at home does not replace your regular visits with your doctor.



Follow the recommended instructions while performing each activity. If you do not follow the instructions, it may result in inaccurate data.



Place your phone on a flat surface. Not placing the phone on a flat surface will change the accuracy of your data.



Only use your ***index finger*** of the ***correct hand*** to connect the dots. Do not lift your finger from the screen before you complete tracing a shape.



Use the correct hand, as indicated on the **Instructions** screen or **Draw a Shape** screen, to perform the activity.

6.2 Get started

The Draw a Shape activity looks at how well you control your hand and fingers to produce a precise and smooth movement. To perform this activity, use your index finger to trace the shape on your screen by starting at the large blue dot and following the path of the shape as fast and accurately as possible. You have 15 seconds to draw each shape you see on the screen. It is important that you do not lift your finger from the screen until you have finished drawing the shape.

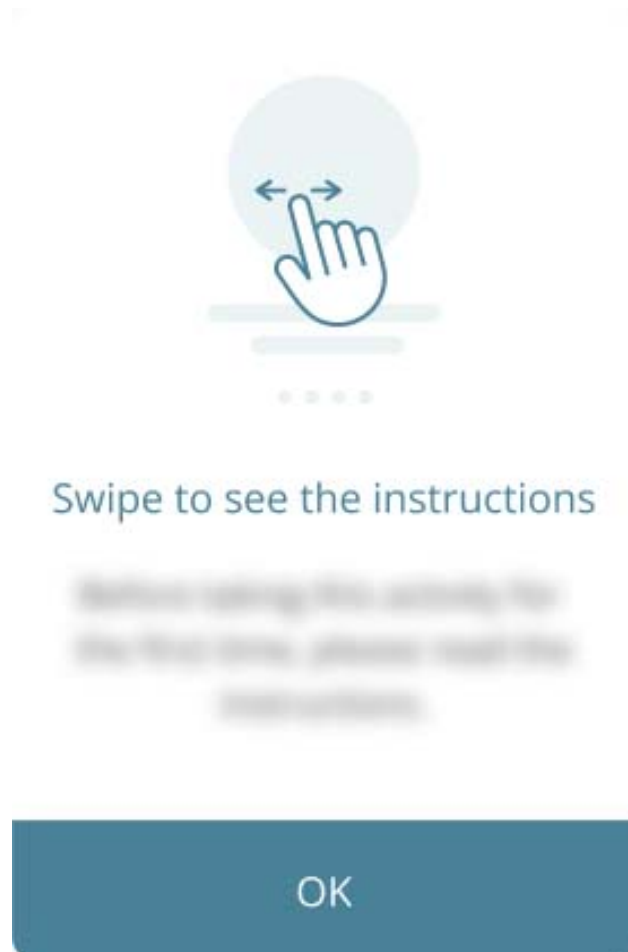
In this section:

6.2.1 Review instructions	70
6.2.2 Things to remember	71
6.2.3 Perform the Draw a Shape activity	72

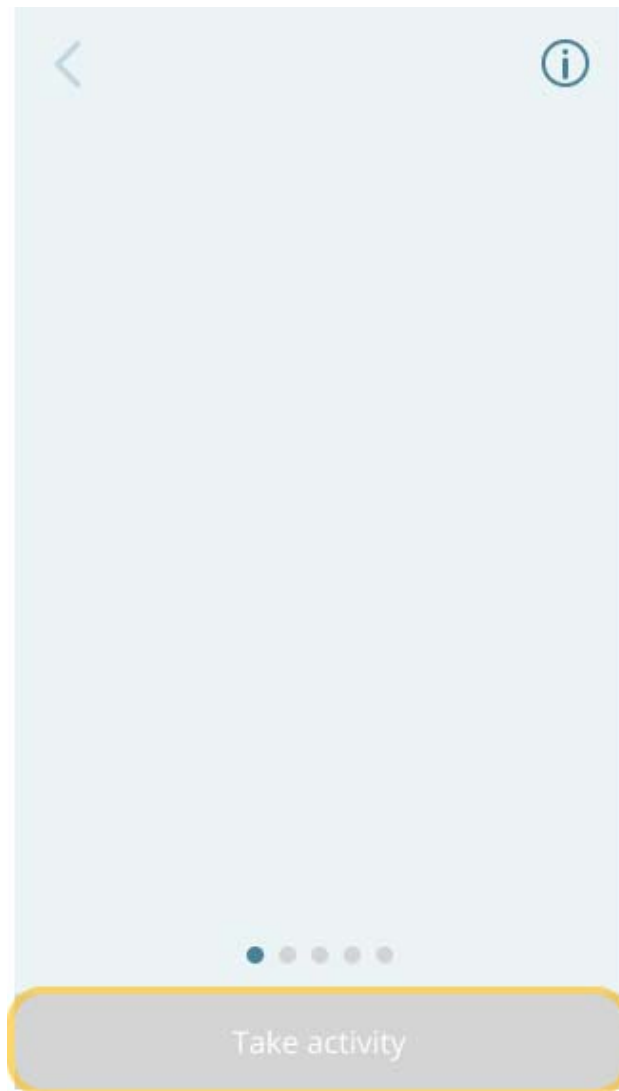
6.2.1 Review instructions

Before you start the Draw a Shape activity, review the instructions for the activity. It is important that you follow the instructions when performing the activity. This ensures that the data collected for the activity is accurate.

For the ***first five times*** you perform an activity, you will see the following message:



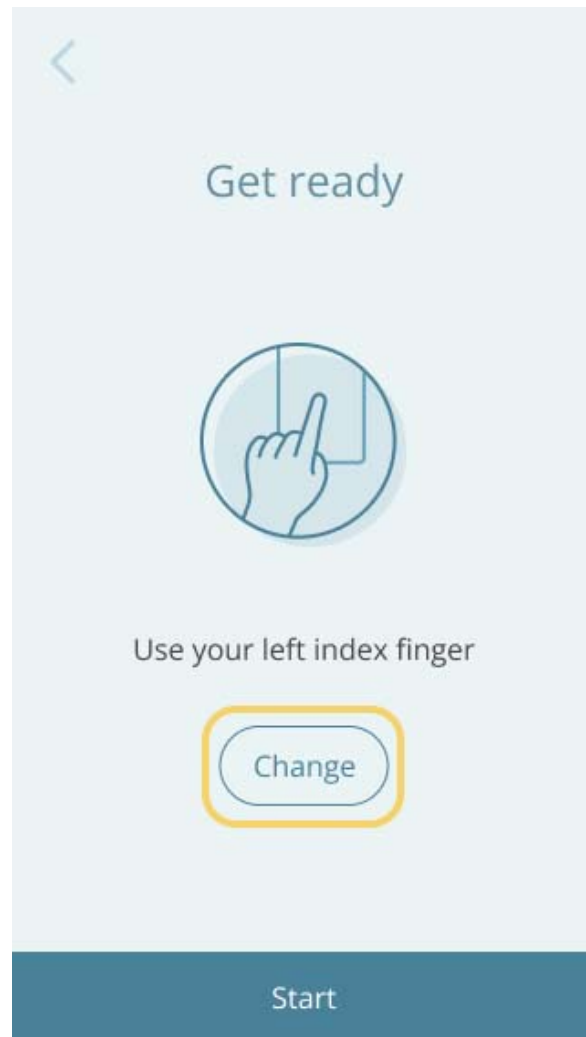
And the **Take activity** button will remain disabled until you have swiped through all of the instruction screens.



6.2.2 Things to remember

While performing this activity, remember to:

- use the correct hand to perform the activity. This is displayed on the screen when you start the activity, as shown below:

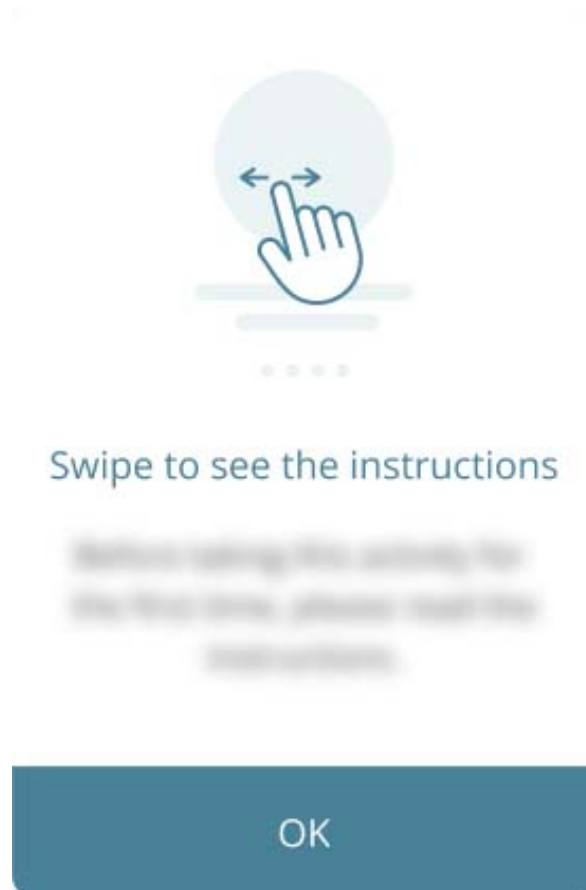


6.2.3 Perform the Draw a Shape activity

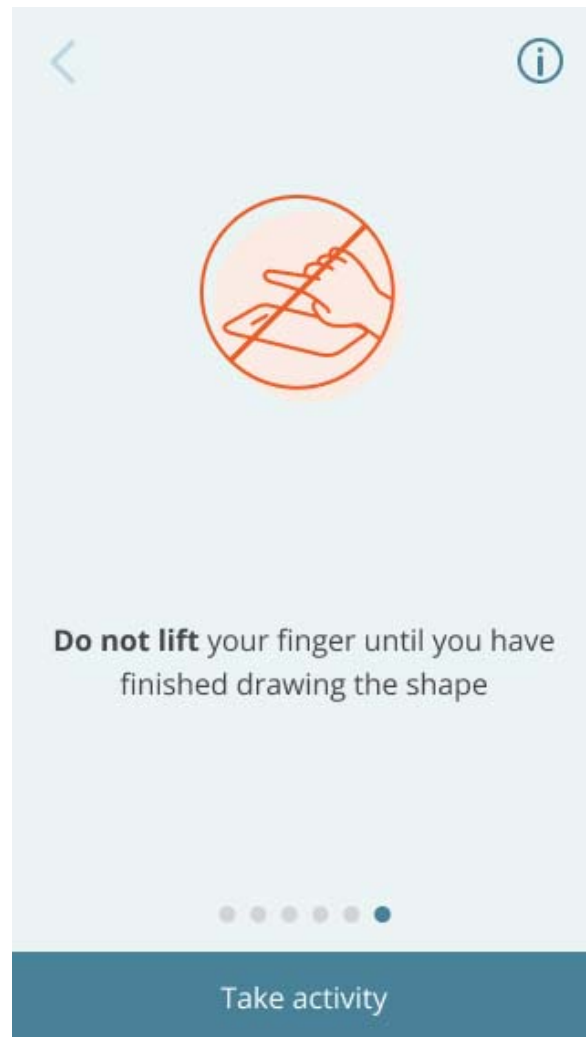
The Draw a Shape activity looks at how well you control your hand and fingers to produce a precise and smooth movement. To perform this activity, you must place your phone on a smooth surface and use your index finger to draw the shapes.

To perform the Draw a Shape activity:

1. When performing this activity for the ***first five times***, you will see the following message:



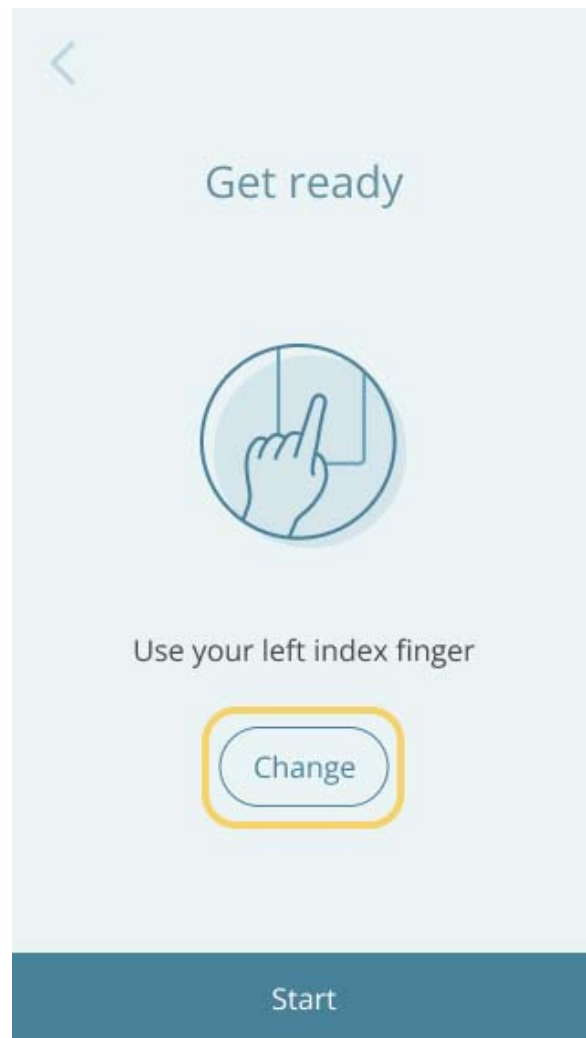
2. Tap the **OK** button.
3. Swipe left to review the instructions for performing the Draw a Shape activity.
4. After you have reviewed all the instructions, tap the **Take activity** button.



You can perform the Draw a Shape activity with either your left hand or your right hand. If both hands are enabled in your **Settings** for the app, the app recommends that a different hand be used each time you do the activity. However, before you start the activity, you can change the recommended hand if you want to.

To change hand for the Draw a Shape activity:

1. On the **Get ready** screen, tap the **Change** button.

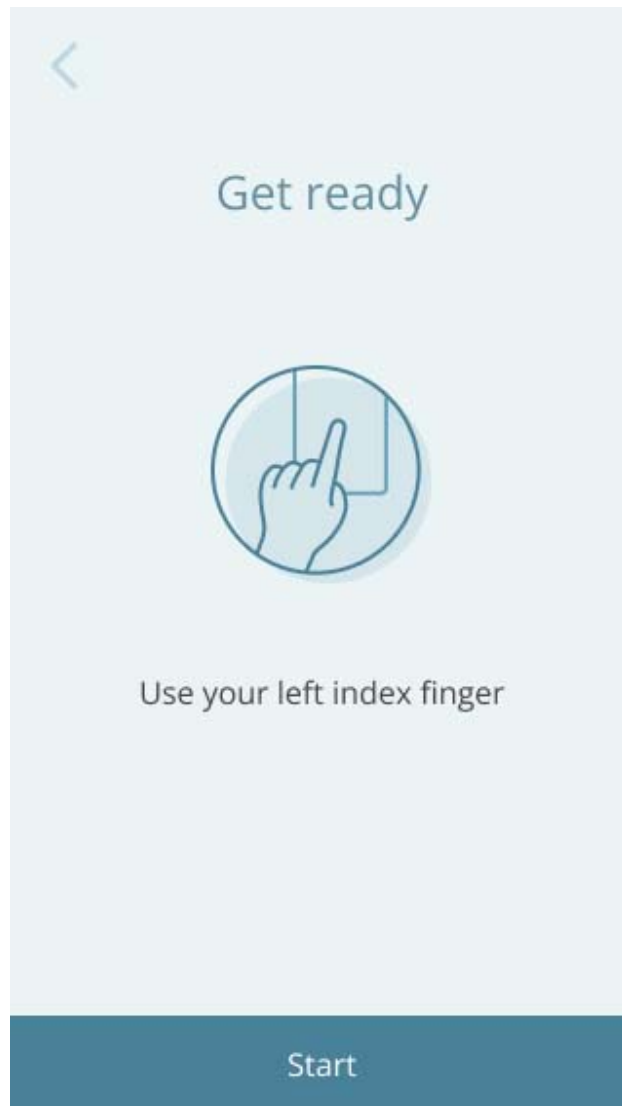


2. On the next screen, tap the **Change** button to change the hand you want to use to

perform the activity or tap the **Keep** button to continue using the recommended hand.

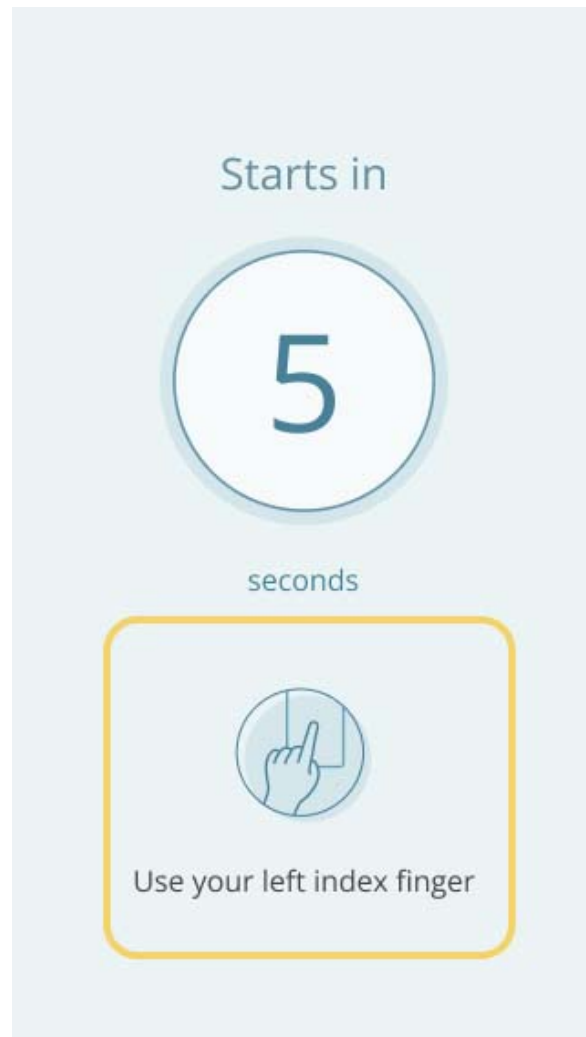


If you have disabled one of the hands in your **Settings** for the app, the **Get ready** screen does not display the **Change** button.



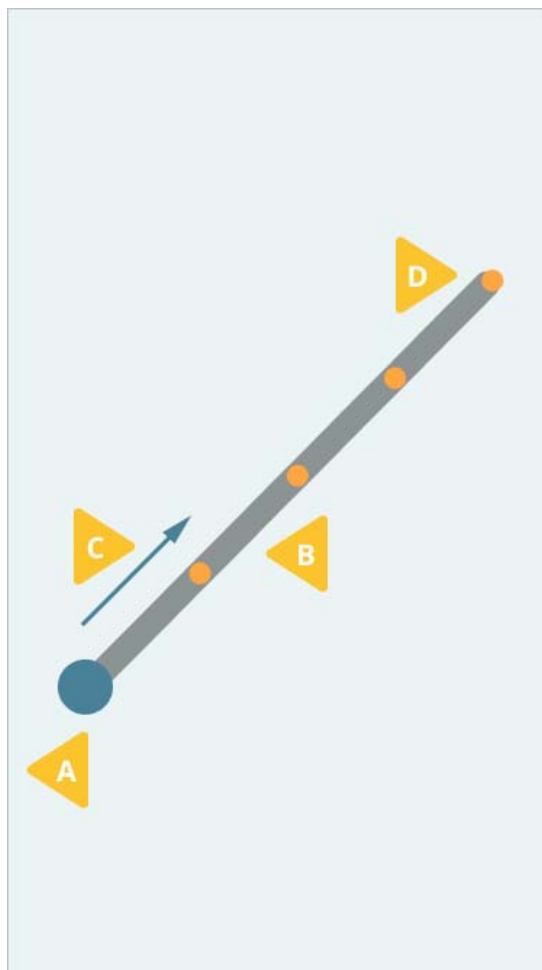
To start the Draw a Shape activity:

1. On the **Get ready** screen, tap the **Start** button.
2. Your screen will show a **5-second** countdown. During this time, place your phone on a flat surface and get ready to start the activity. This screen will also show which index finger to use to do the activity.



3. On the next screen, you will see:
- A. A *large dot* that is your starting point.
 - B. The *shape* that you will trace to connect the dots.
 - C. An *arrow* to show the direction in which you will connect the dots.

D. Several *smaller dots* that you will connect along the shape.



4. Start at the **large dot (A)**, trace along the **shape (B)** in the direction of the **arrow (C)** while connecting the **dots (D)** along the shape.

To complete this activity, connect the dots for all the shapes as quickly and as accurately as possible. This activity includes the following shapes:

- a line
- a square
- a circle
- a figure 8
- a spiral

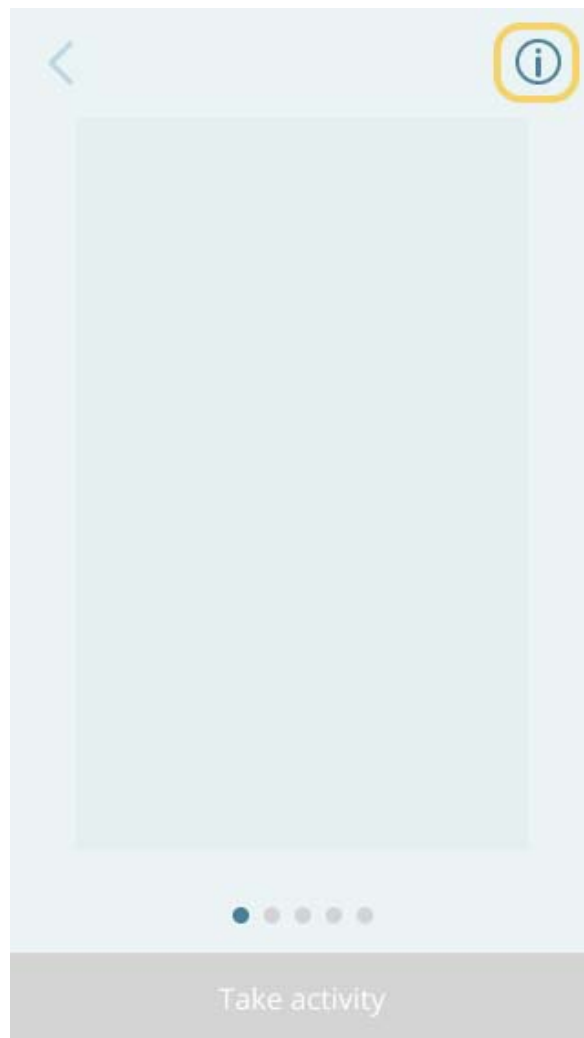
You will trace each shape two times before you see the next shape. The activity automatically stops after you have traced the last shape.

6.3 Read the Draw a Shape User Manual

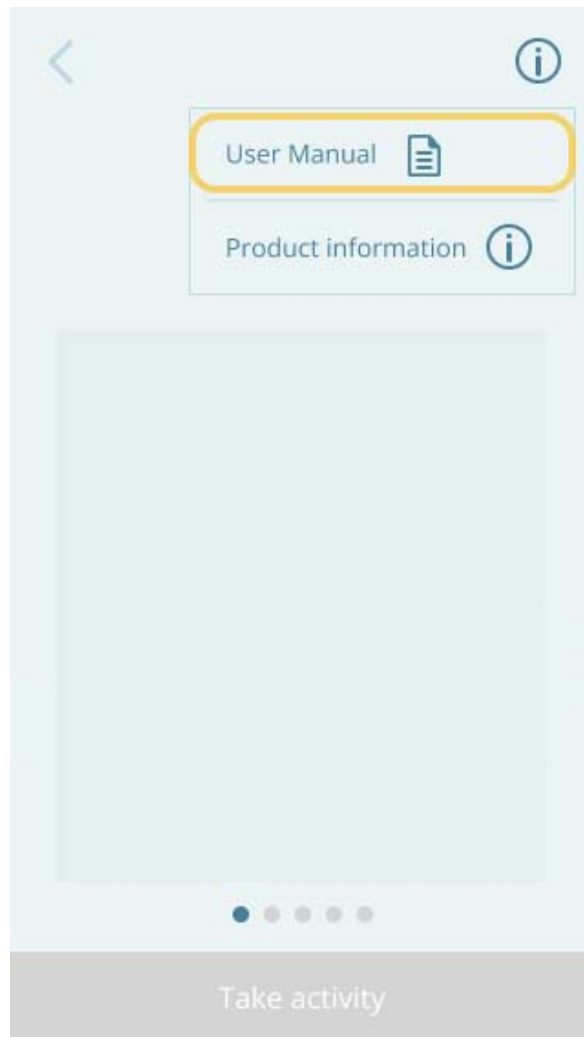
You can access this User Manual for each activity from within the activity. To access the latest version of this User Manual, use the option from within the Floodlight™ MS Activities instead of a previously downloaded .pdf.

To read the User Manual:

1. Tap the activity card for which you want to access the User Manual. For example, to access the User Manual for the Draw a Shape activity, tap the **Draw a Shape** card from the activity carousel on your **Dashboard**.
2. On the activity screen, tap the **Information** icon on the top-right corner.



3. Tap the **User Manual** option.



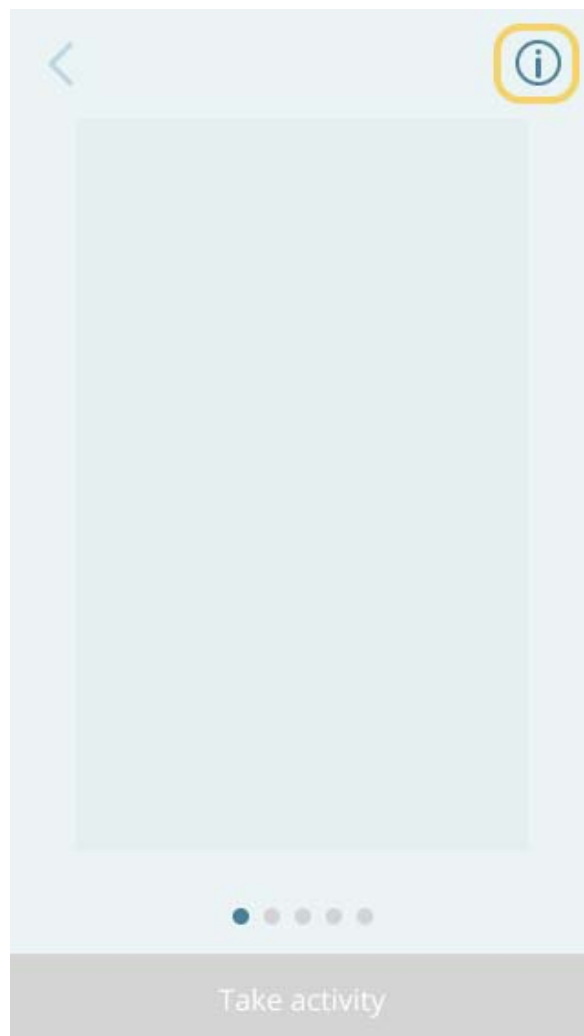
4. The User Manual for the activity is displayed.
5. Tap the **Back** button in the top-left-hand corner to get back to the activity screen.

6.4 Read the Draw a Shape product information

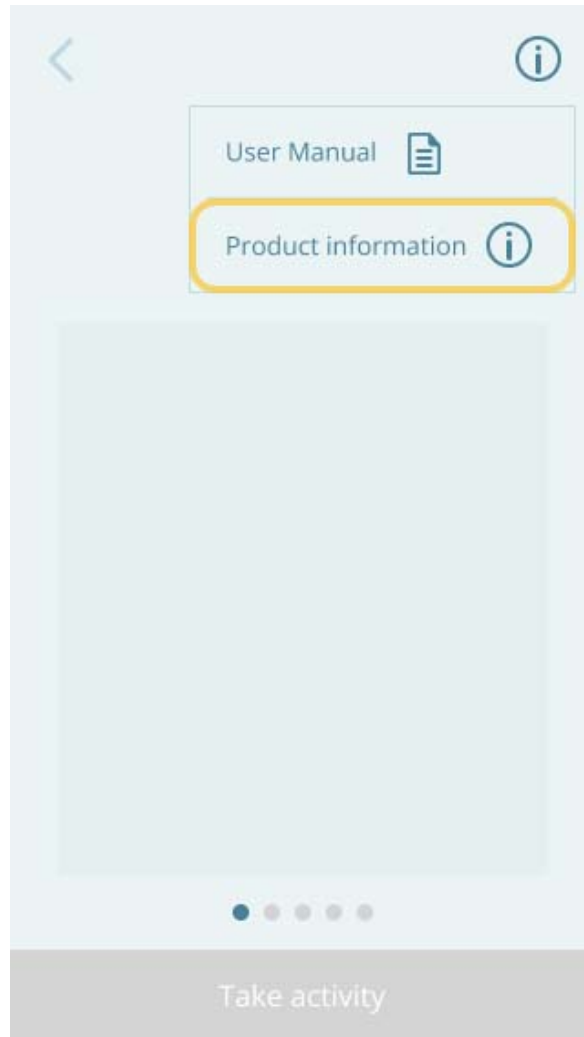
You can find out the version, copyright and other information about the medical device from the About page or the product label.

To read the product information:

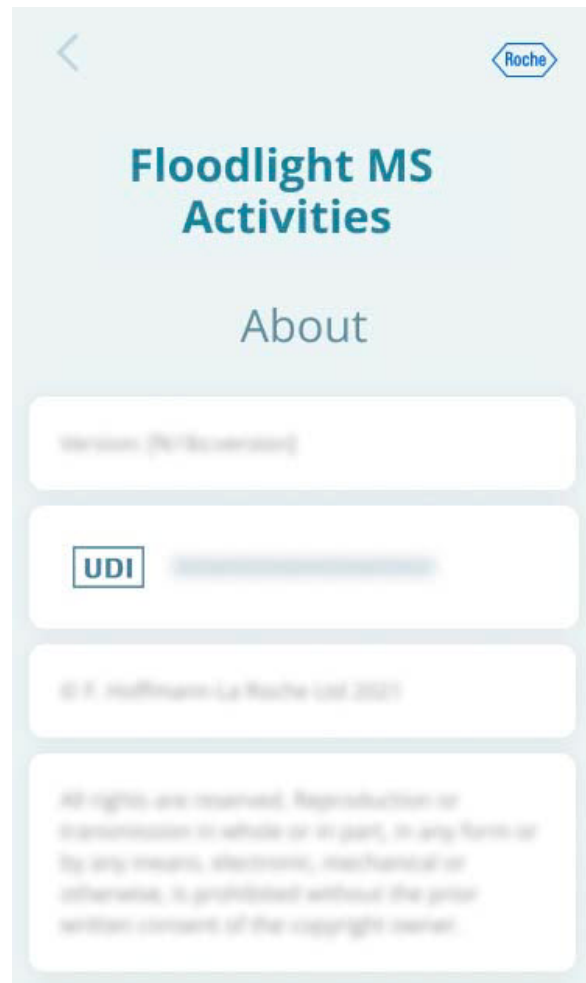
1. Tap the activity card for which you want to access the product information. For example, to access the product information for the Draw a Shape activity, tap the **Draw a Shape** card from the activity carousel on your **Dashboard**.
2. On the activity screen, tap the **Information** icon on the top-right corner.



3. Tap the **Product Information** option.



4. The **About** page for the activity is displayed, as shown below.



5. Tap the **Back** button in the top-left-hand corner to get back to the activity screen.

7 The Pinch a Tomato activity

The Pinch a Tomato activity, which is included in the Pinching Test medical device, measures your hand function. This is achieved by:

- asking you to use your thumb and index finger to pinch the image of a tomato on your screen
- measuring how many tomatoes you pinched in the given amount of time

Note

If you are not using the Pinching Test medical device, **this chapter** does not apply to you.

In this section:

7.1 Warnings and precautions	86
7.2 Get started	87
7.3 Read the Pinch a Tomato User Manual	98
7.4 Read the Pinch a Tomato product information	100

7.1 Warnings and precautions



Do the activity as often as recommended by your provider.



The Floodlight™ MS Activities medical device is not a substitute for medical care. Do not try to interpret the data presented by the summary charts. Consult your doctor to interpret the data that you collect using the medical device or for any emergencies. Note that self-testing at home does not replace your regular visits with your doctor.



Follow the recommended instructions while performing each activity. If you do not follow the instructions, it may result in inaccurate data.



Place your phone on a flat surface. Not placing the phone on a flat surface will change the accuracy of your data.



Use only your ***thumb and index finger*** of the ***correct hand*** to perform the activity. Start with your thumb and index finger wide apart to pinch the tomato.



Use the correct hand, as indicated on the **Instructions** screen or **Pinch a Tomato** screen, to perform the activity.

7.2 Get started

The Pinch a Tomato activity looks at how well you can coordinate the fine movements of your fingers in order to grasp, pinch and manipulate objects. To perform this activity, start with your thumb and index finger one inch apart and then bring them together to pinch the image of the tomato on your screen as fast as possible. You have 30 seconds to squeeze as many tomatoes as possible.

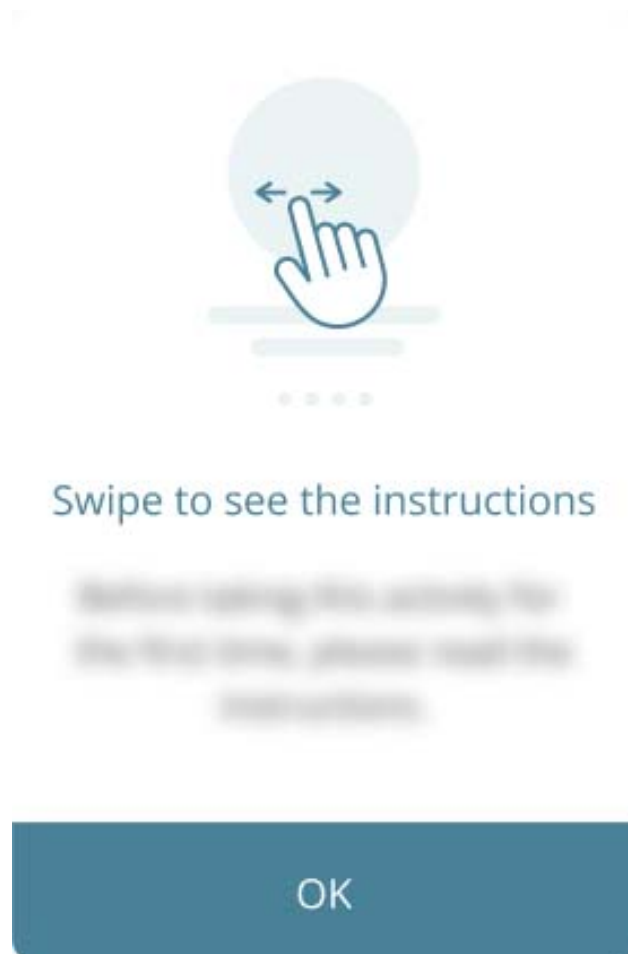
In this section:

7.2.1 Review instructions	88
7.2.2 Things to remember	89
7.2.3 Perform the Pinch a Tomato activity	90

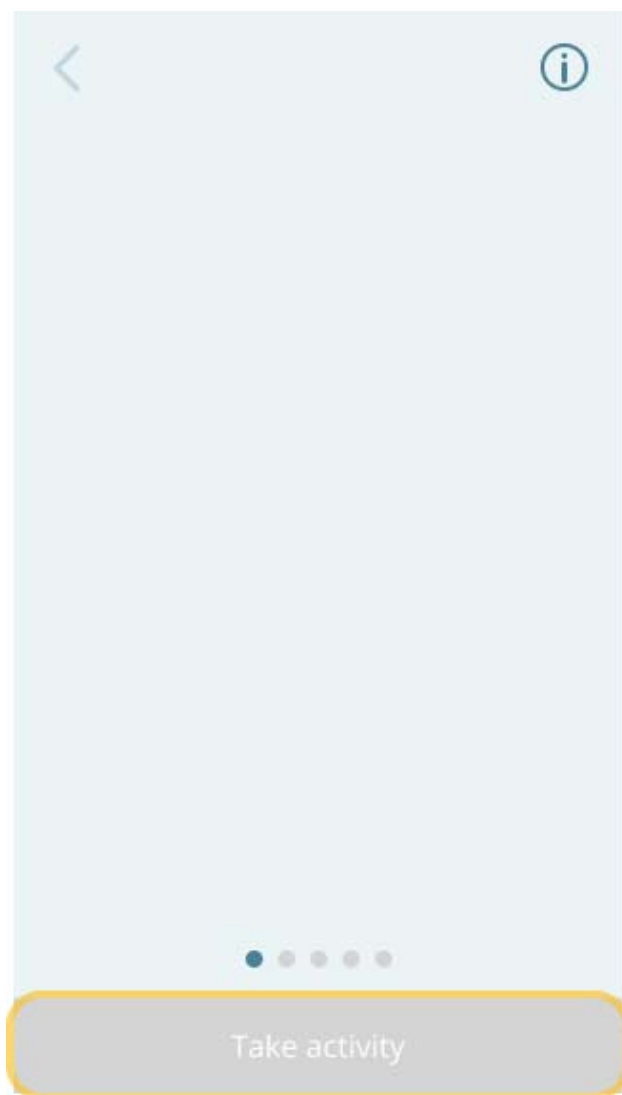
7.2.1 Review instructions

Before you start the Pinch a Tomato activity, review the instructions for the activity. It is important that you follow the instructions when performing the activity. This ensures that the data collected for the activity is accurate.

For the **first five times** you perform an activity, you will see the following message:



And the **Take activity** button will remain disabled until you have swiped through all of the instruction screens.

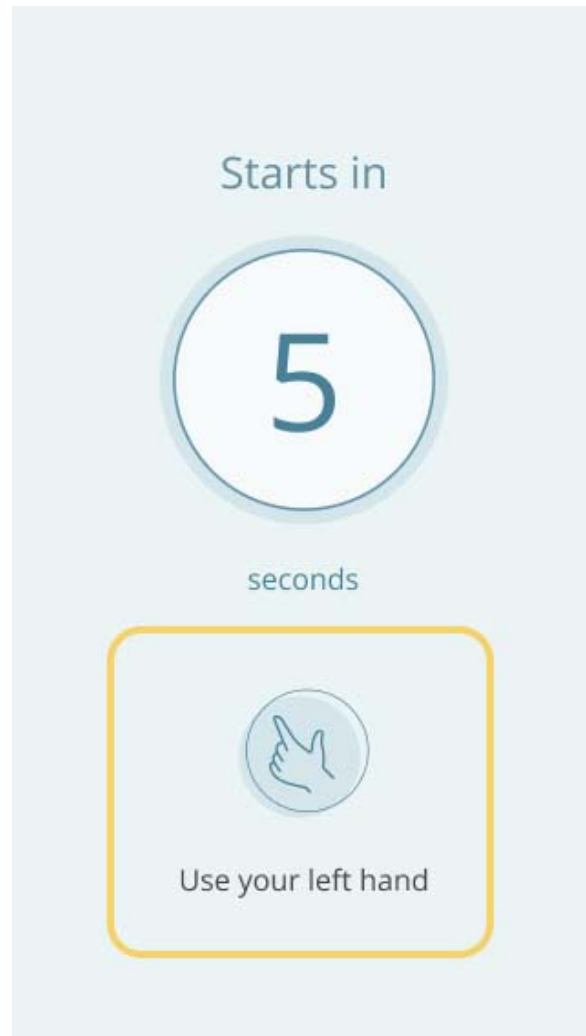


7.2.2 Things to remember

While performing this activity, remember the following instructions in order to successfully pinch a tomato:

- Only use the thumb and index finger to pinch the tomato. be careful not to touch the screen with another part of your hand.
- Start the pinch with your thumb and index finger wide apart (a little over 25 mm [1 inch] apart).
- try to keep the tomato centred between your thumb and index finger while you pinch.
- Only move your thumb and index finger towards each other.

- use the correct hand to perform the activity. This is displayed on the screen when you start the activity, as shown below:

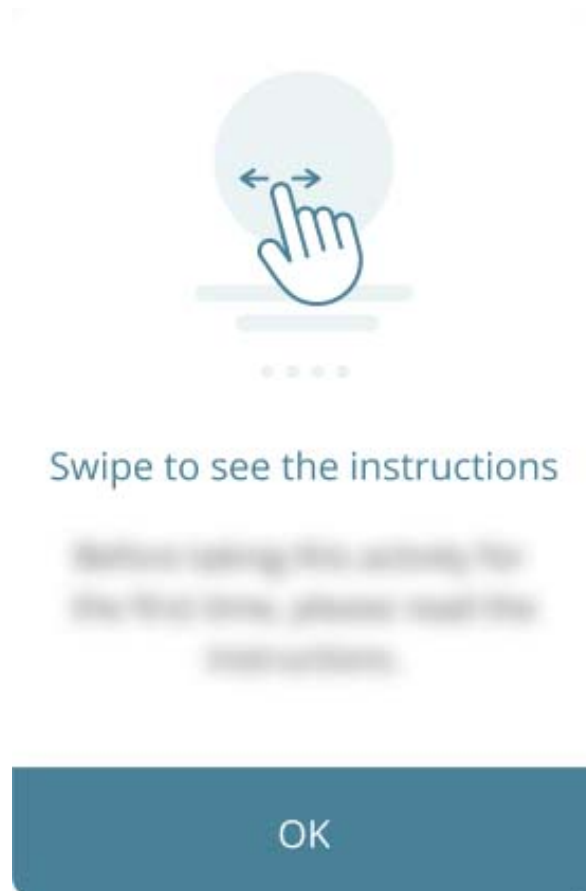


7.2.3 Perform the Pinch a Tomato activity

The Pinch a Tomato activity looks at how well you can coordinate the fine movements of your fingers in order to grasp, pinch and manipulate objects. To perform this activity, you must place your phone on a smooth surface and start with your thumb and index finger one inch apart to pinch the image of the tomato on your screen. Squeeze as many tomatoes as possible by pinching them between your thumb and index finger.

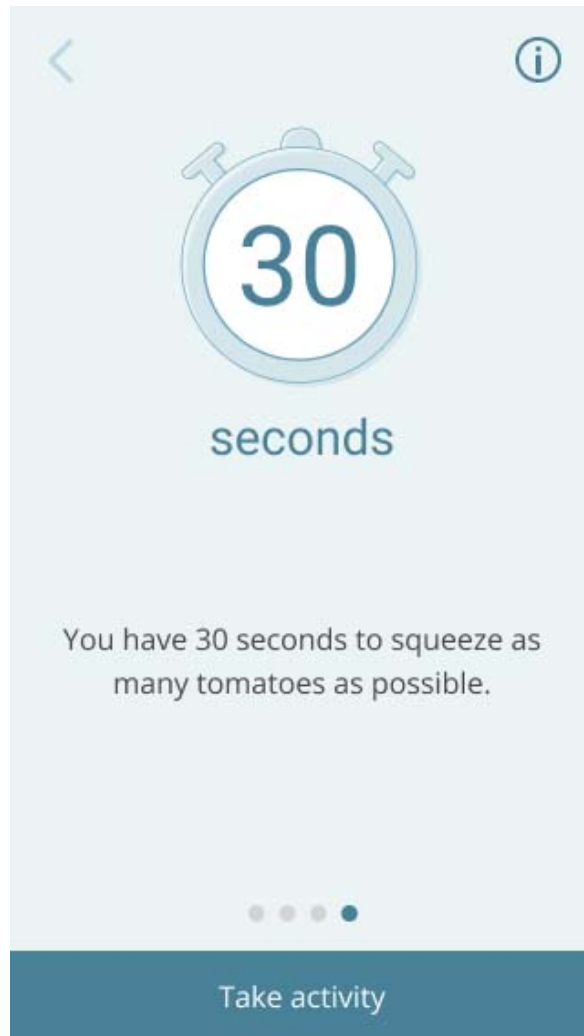
To perform the Pinch a Tomato activity:

1. When performing this activity for the **first five times**, you will see the following message:



2. Tap the **OK** button.
3. Swipe left to review the instructions for taking the Pinch a Tomato activity.

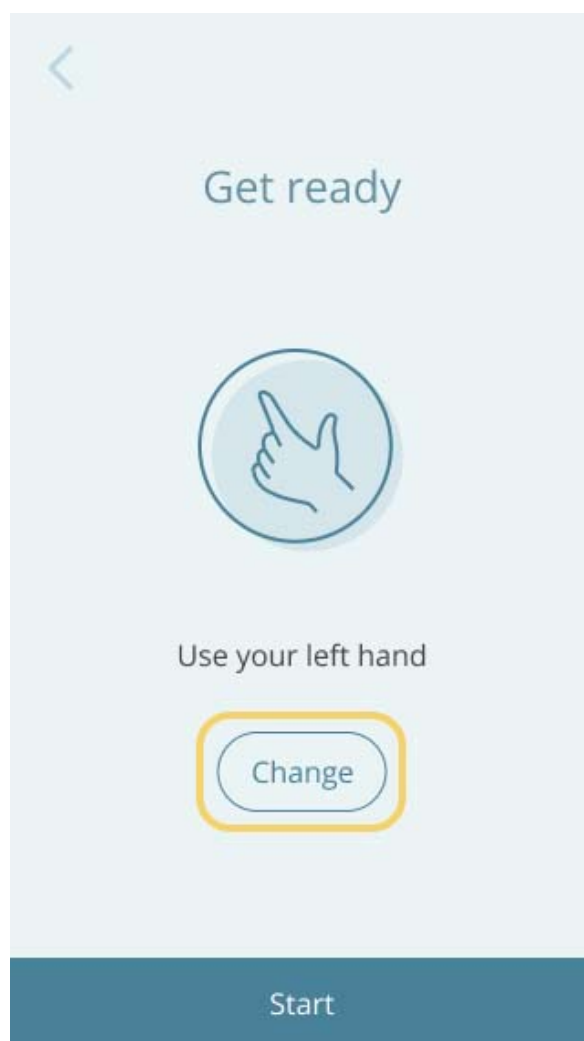
4. After you have reviewed all the instructions, tap the **Take activity** button.



You can perform the Pinch a Tomato activity with either your left hand or your right hand. If both hands are enabled in your **Settings** for the app, the app recommends that a different hand be used each time you do the activity. However, before you start the activity, you can change the recommended hand if you want to.

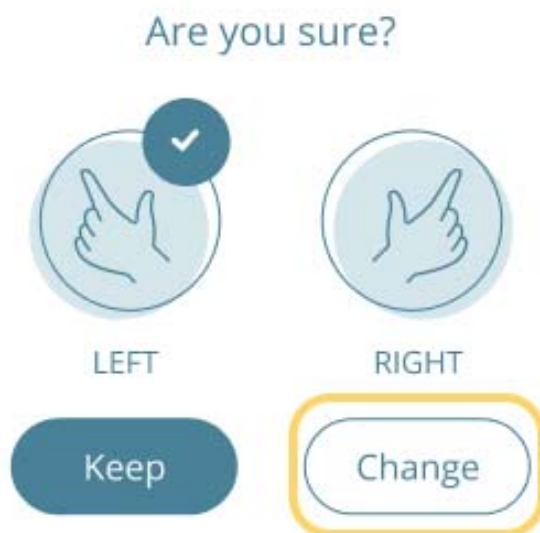
To change the hand for the Pinch a Tomato activity:

1. On the **Get ready** screen, tap the **Change** button.

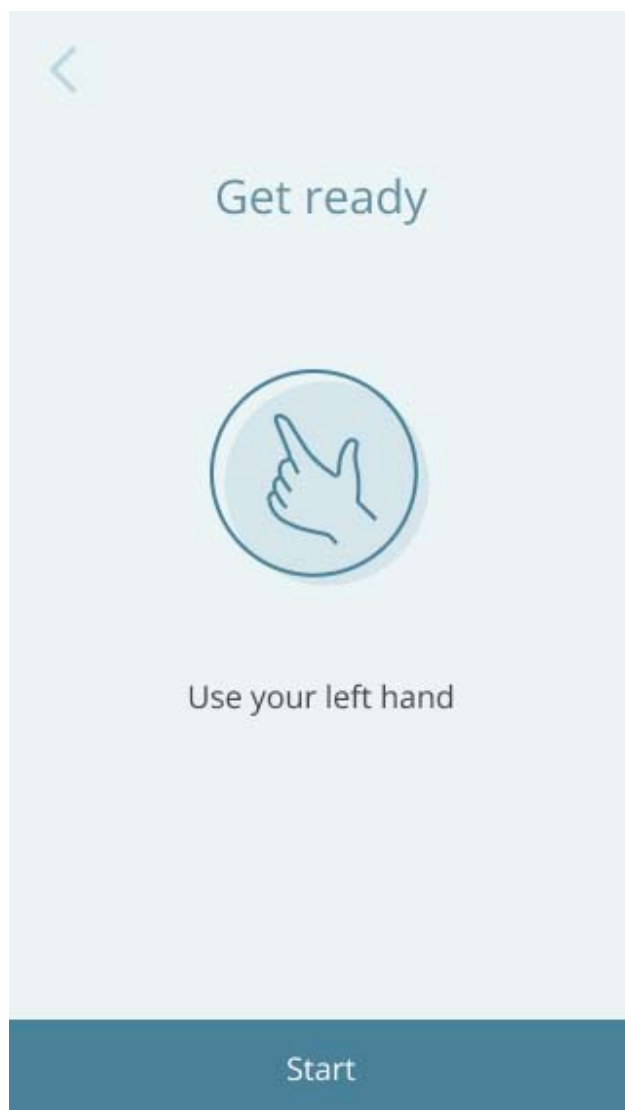


2. On the next screen, tap the **Change** button to change the hand you want to use to

perform the activity or tap the **Keep** button to continue using the recommended hand.

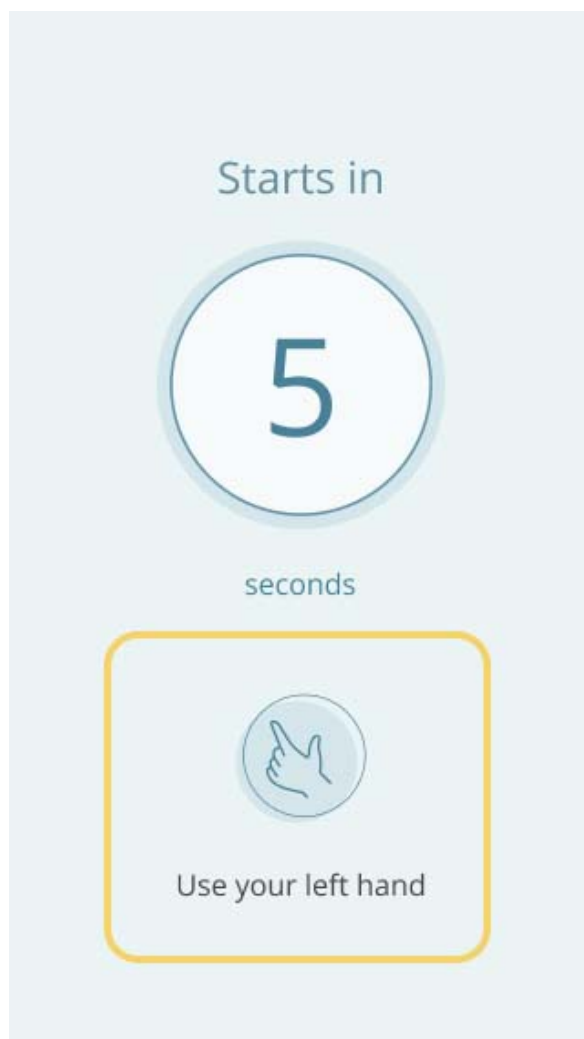


If you have disabled one of the hands in your **Settings** for the app, the **Get ready** screen does not display the **Change** button.



To start the Pinch a Tomato activity:

1. On the **Get ready** screen, tap the **Start** button.
2. Your screen will show a **5-second** countdown. During this time, place your phone on a flat surface and get ready to start the activity. This screen will also show which hand to use to perform the activity.



3. On the next screen, you will see the image of a tomato.



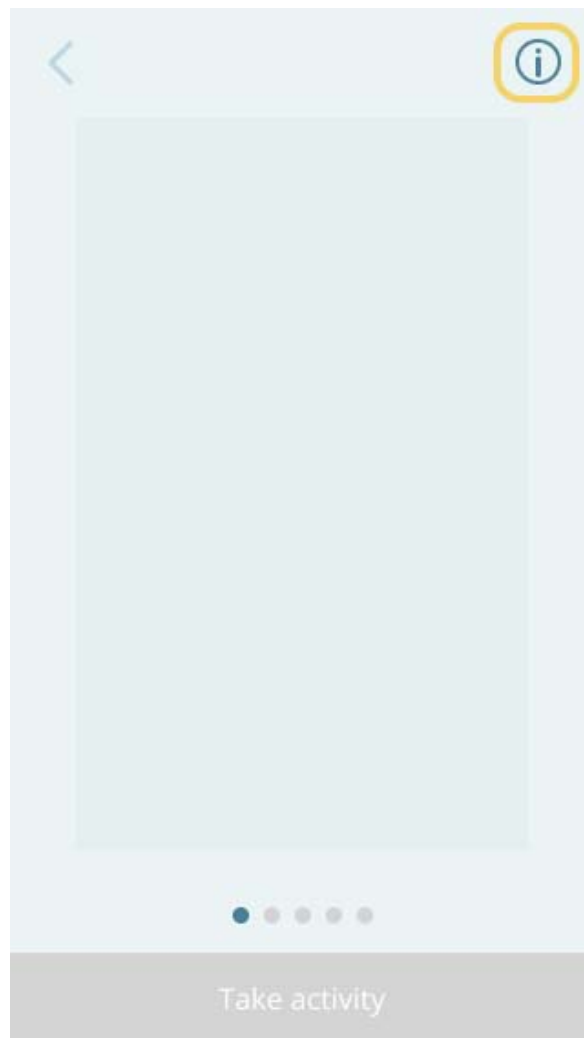
4. Once you have successfully pinched a tomato, it will disappear and a new tomato will appear in a different location.
5. Keep pinching as many tomatoes as you can until the activity ends after **30 seconds**.

7.3 Read the Pinch a Tomato User Manual

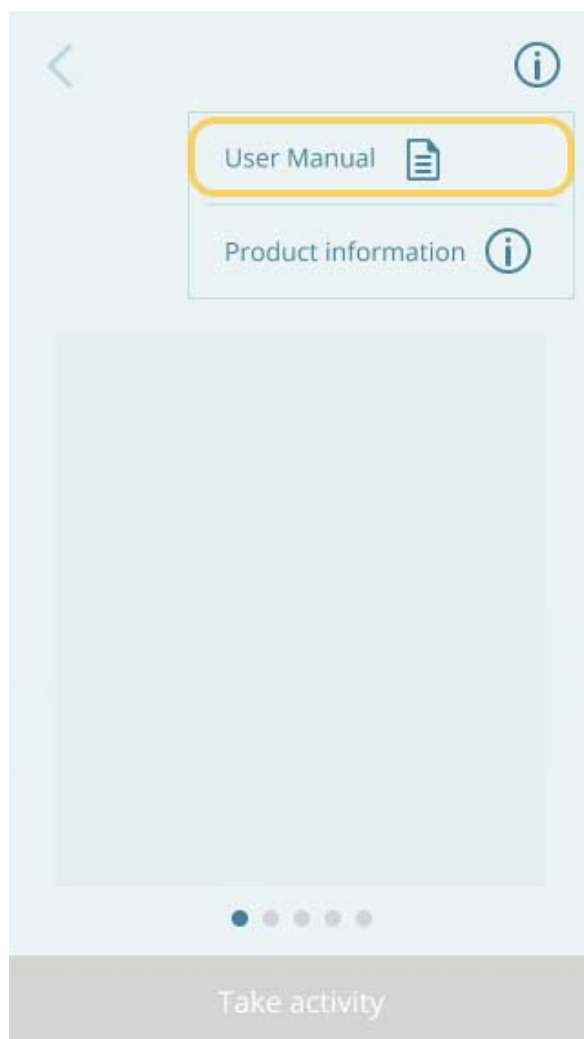
You can access this User Manual for each activity from within the activity. To access the latest version of this User Manual, use the option from within the Floodlight™ MS Activities instead of a previously downloaded .pdf.

To read the User Manual:

1. Tap the activity card for which you want to access the User Manual. For example, to access the User Manual for the Pinch a Tomato activity, tap the **Pinch a Tomato** card from the activity carousel on your **Dashboard**.
2. On the activity screen, tap the **Information** icon on the top-right corner.



3. Tap the **User Manual** option.



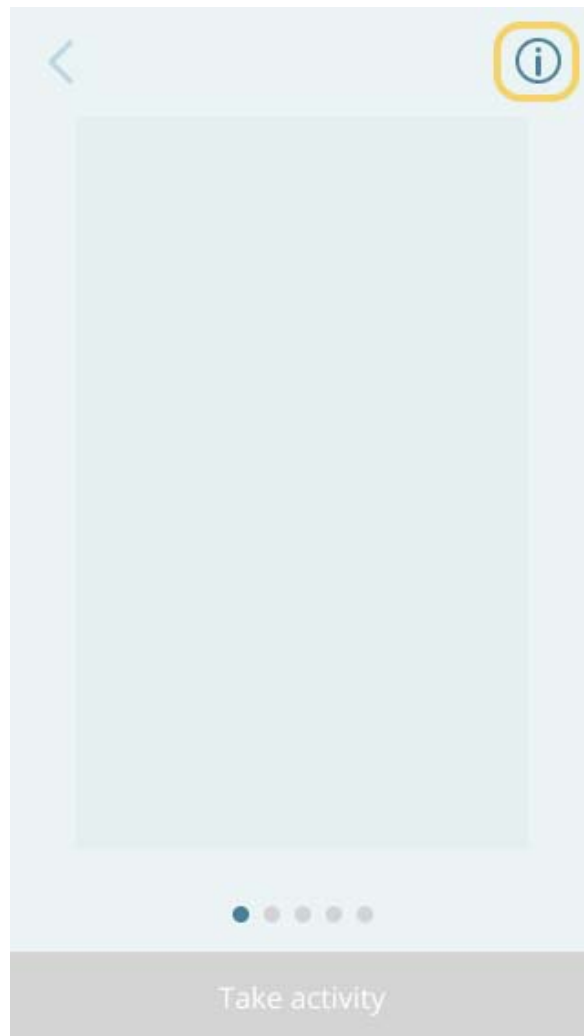
4. The User Manual for the activity is displayed.
5. Tap the **Back** button in the top-left-hand corner to get back to the activity screen.

7.4 Read the Pinch a Tomato product information

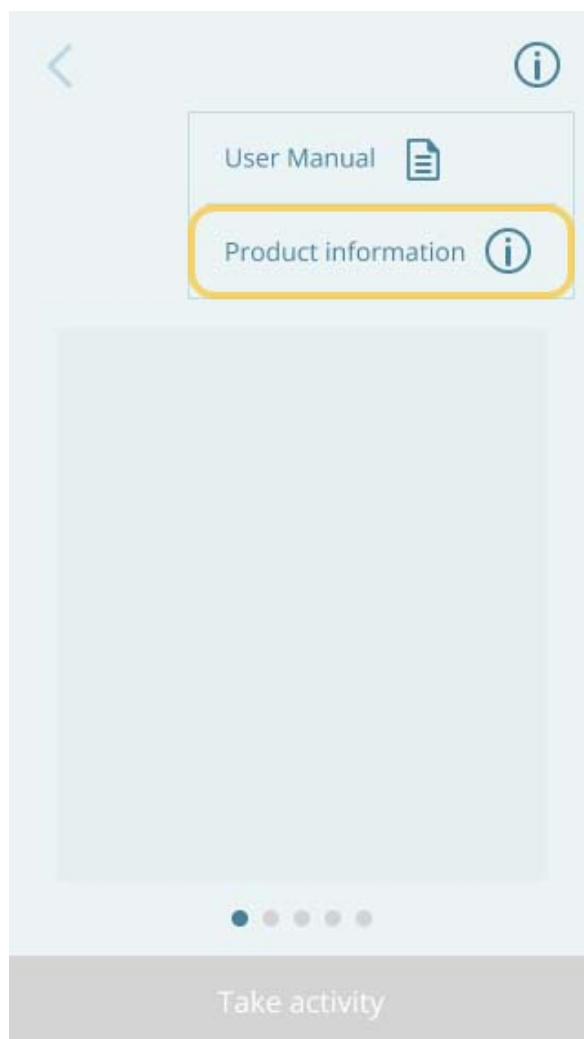
You can find out the version, copyright and other information about the medical device from the About page or the product label.

To read the product information:

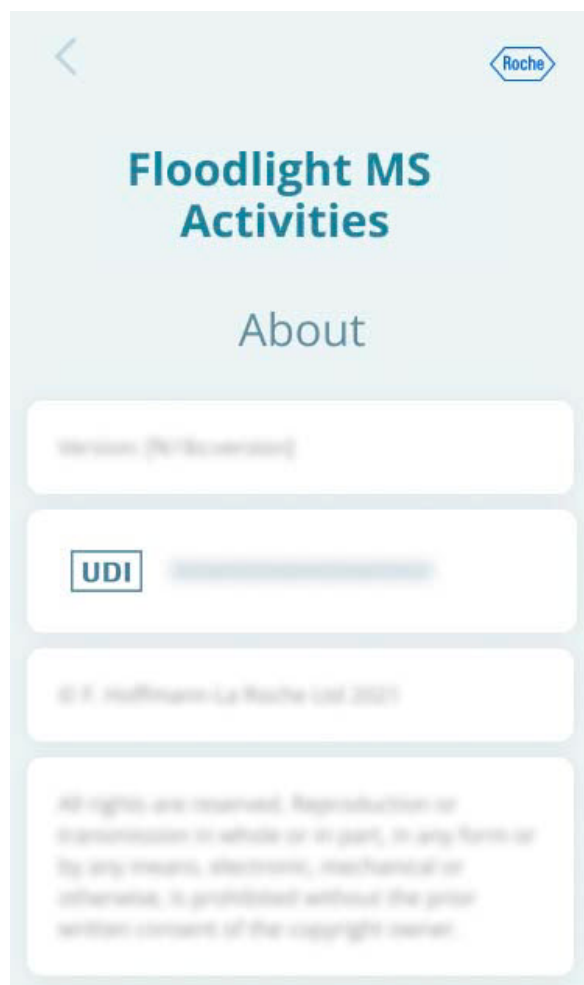
1. Tap the activity card for which you want to access the product information. For example, to access the product information for the Pinch a Tomato activity, tap the **Pinch a Tomato** card from the activity carousel on your **Dashboard**.
2. On the activity screen, tap the **Information** icon on the top-right corner.



3. Tap the **Product Information** option.



4. The **About** page for the activity is displayed, as shown below.



5. Tap the **Back** button in the top-left-hand corner to get back to the activity screen.

8 The Matching activities

The Matching activities, which are included in the Cognitive Test medical device, measure how fast your brain processes information. This is achieved by:

- asking you to correctly match symbols to a number
- asking you to match numbers
- measuring how many symbols and numbers you matched correctly in the given amount of time.

Note

If you are not using the Cognitive Test medical device, **this chapter** does not apply to you.

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8.1 Warnings and precautions	104
8.2 Get started with the Match the Symbols activity (1 of 2)	105
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8.1 Warnings and precautions



Do the activity as often as recommended by your provider.



The Floodlight™ MS Activities medical device is not a substitute for medical care. Do not try to interpret the data presented by the summary charts. Consult your doctor to interpret the data that you collect using the medical device or for any emergencies. Note that self-testing at home does not replace your regular visits with your doctor.



Follow the recommended instructions while performing each activity. If you do not follow the instructions, it may result in inaccurate data.



Place your phone on a flat surface. Not placing the phone on a flat surface will change the accuracy of your data.

8.2 Get started with the Match the Symbols activity (1 of 2)

The Match the Symbols activity is the first of the two activities included in this medical device. This activity looks at how quickly you handle information when performing a task that requires your focus. To perform this activity, use the legend displayed on your screen to find the corresponding number for a symbol and select the number using the keypad on the bottom as fast as you can. You have 90 seconds to match as many symbols as possible.

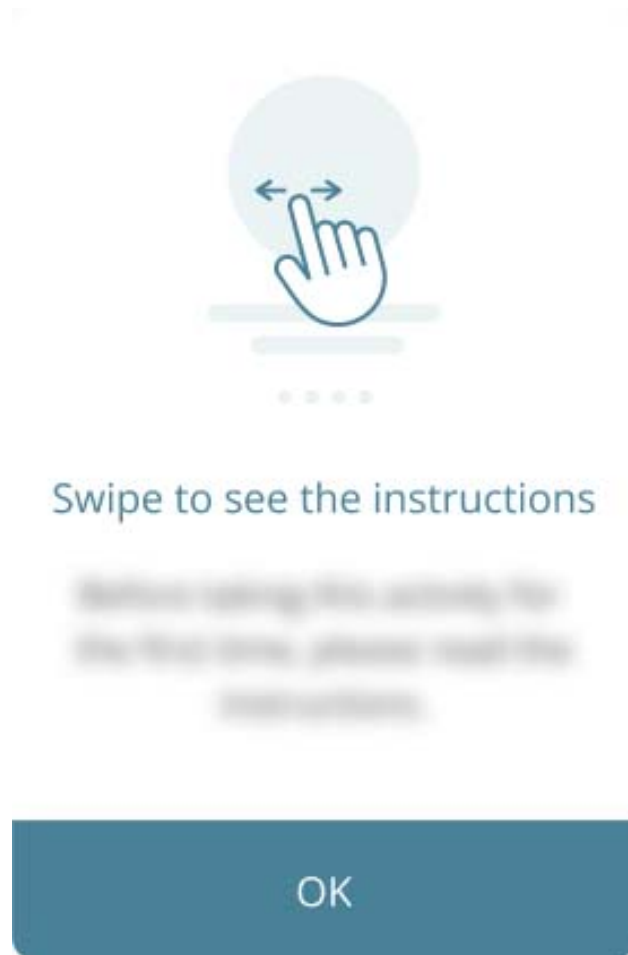
In this section:

8.2.1 Review instructions	106
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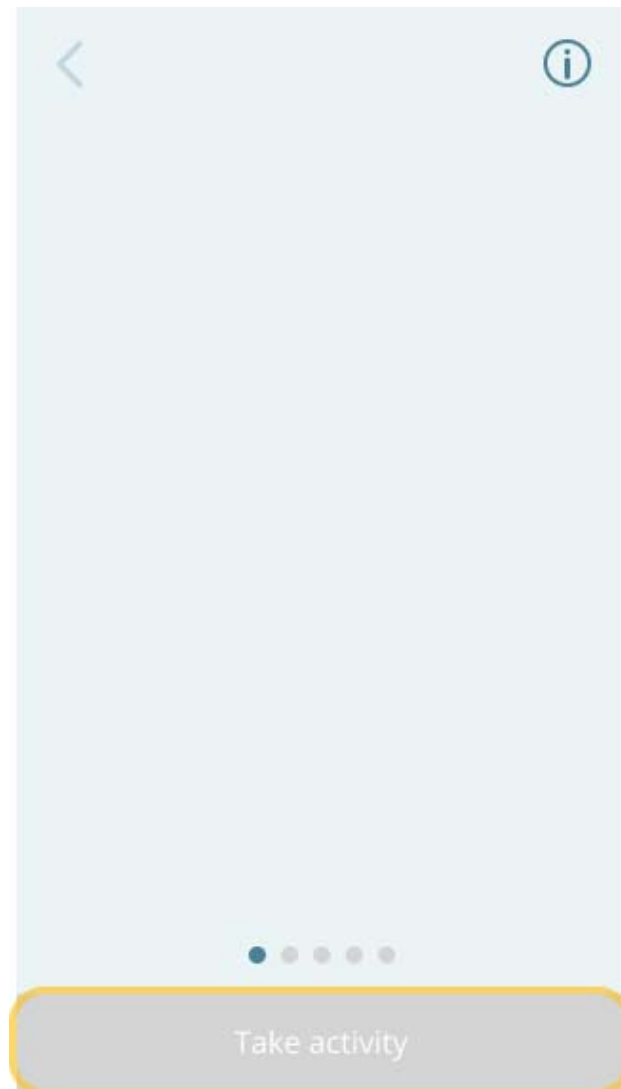
8.2.1 Review instructions

Before you start the Match the Symbols activity, review the instructions for the activity. It is important that you follow the instructions when performing the activity. This ensures that the data collected for the activity is accurate.

For the **first five times** you perform an activity, you will see the following message:



And the **Take activity** button will remain disabled until you have swiped through all of the instruction screens.

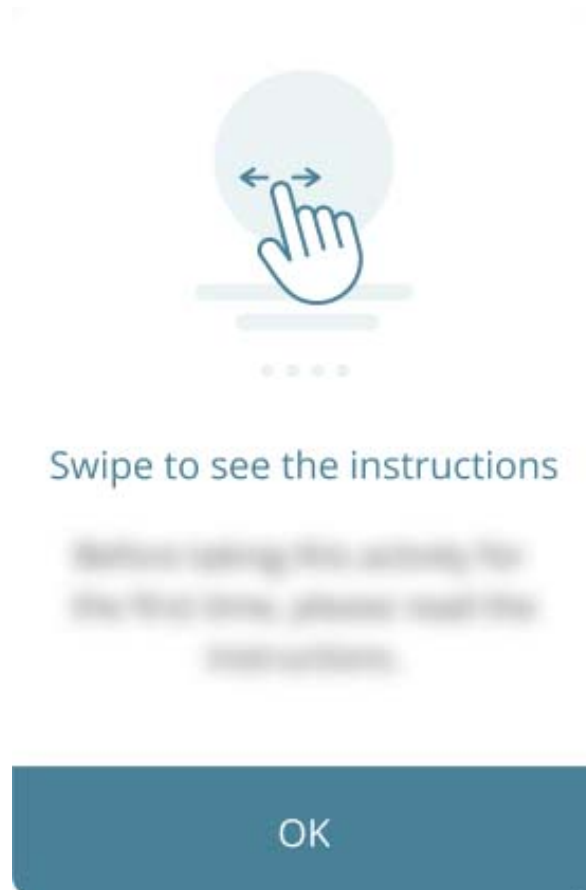


8.2.2 Perform the Match the Symbols activity

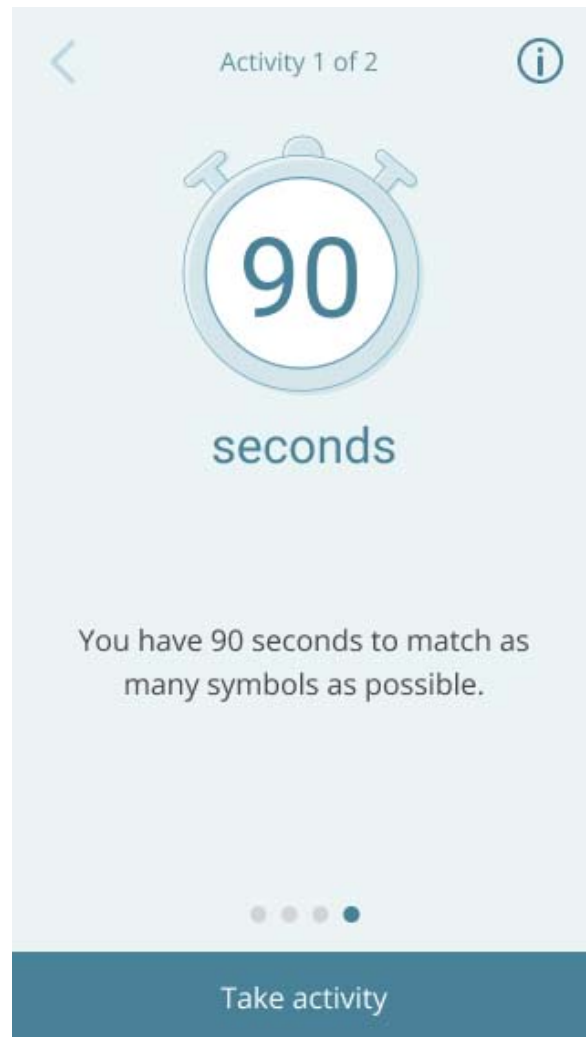
The Match the Symbols activity looks at how quickly you handle information when performing a task that requires your focus. It is best to complete this activity in an environment where you can focus and minimise interruptions.

To perform the Match the Symbols activity:

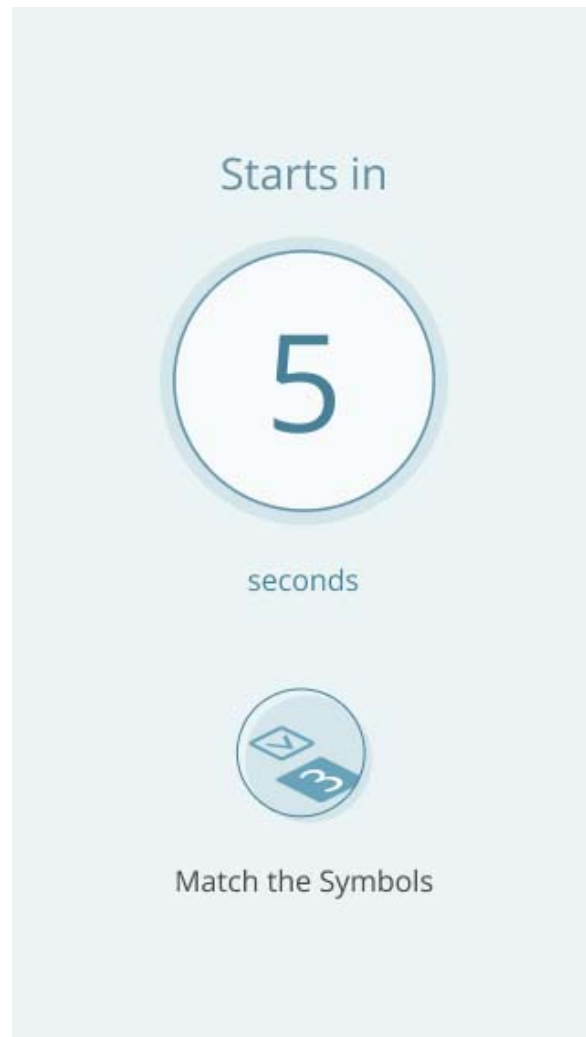
1. When performing this activity for the ***first five times***, you will see the following message:



2. Tap the **OK** button.
3. Swipe left to review the instructions for performing the Match the Symbols activity.
4. After you have reviewed all the instructions, tap the **Take activity** button.

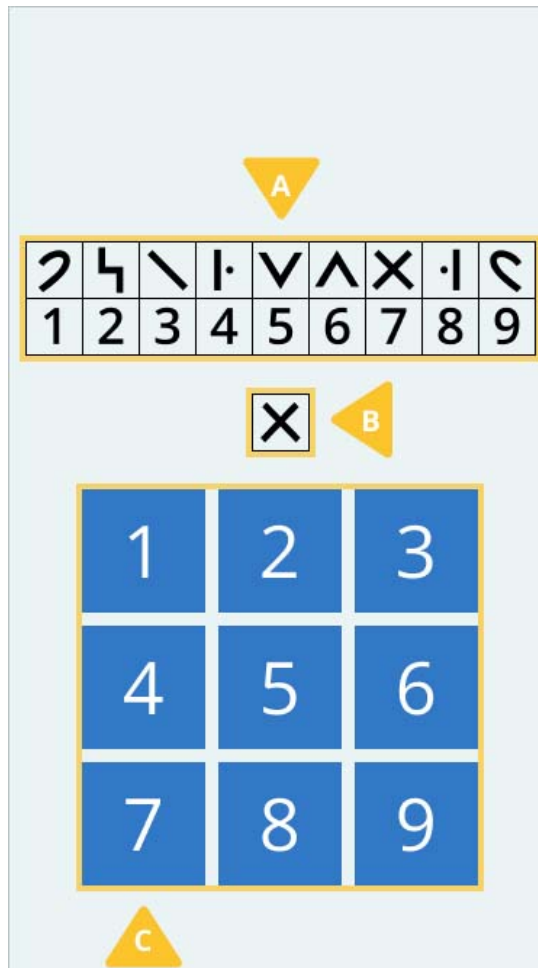


5. On the **Get ready** screen, tap the **Start** button.
6. Your screen will show a **5-second** countdown. During this time, place your phone on a flat surface and get ready to start the activity.



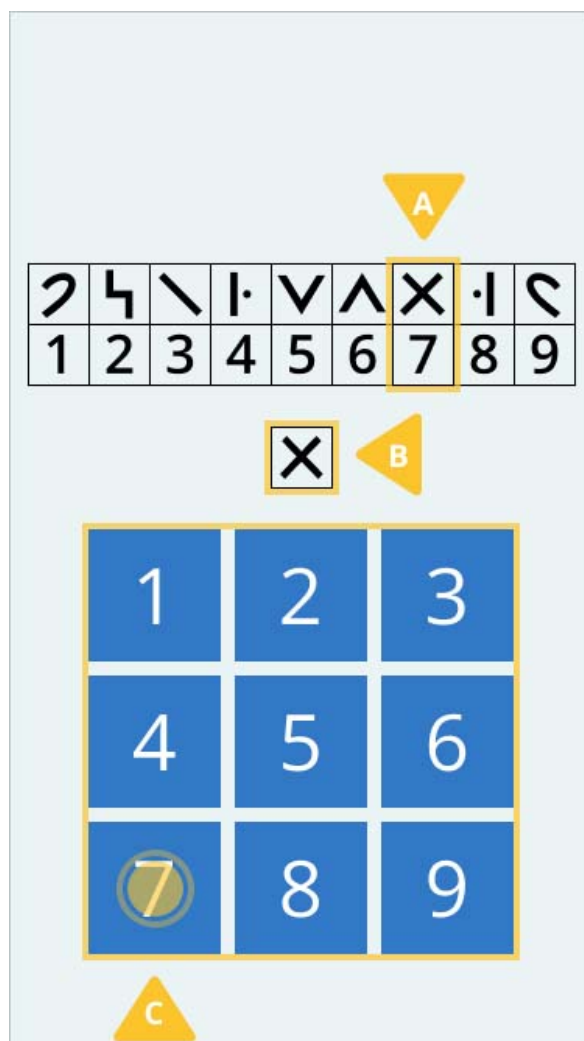
7. On the next screen, you will see:
 - A. The *symbol grid* that you will use to find the number associated with each symbol.
 - B. The *symbol* that you will have to match.

C. The *keypad* that you will use to tap the number matching the symbol.



8. Use the **symbol grid (A)** to identify the number associated with the **symbol (B)** and tap the correct number on the **keypad (C)** displayed on the screen.

For example, note that the number **7** matches the symbol **X** displayed below the symbol grid. Tap number **7** on the keypad.



To complete this activity, match as many symbols as possible to their numbers within **90 seconds**.

8.3 Get started with the Match the Numbers activity (2 of 2)

The Match the Numbers activity is the second of the two activities included in this medical device. This activity looks at your reaction time when performing a task that requires focus and speedy hand movement. To perform this activity, select the number shown on the top of the screen using the keypad displayed below it. You have 30 seconds to match as many numbers as possible.

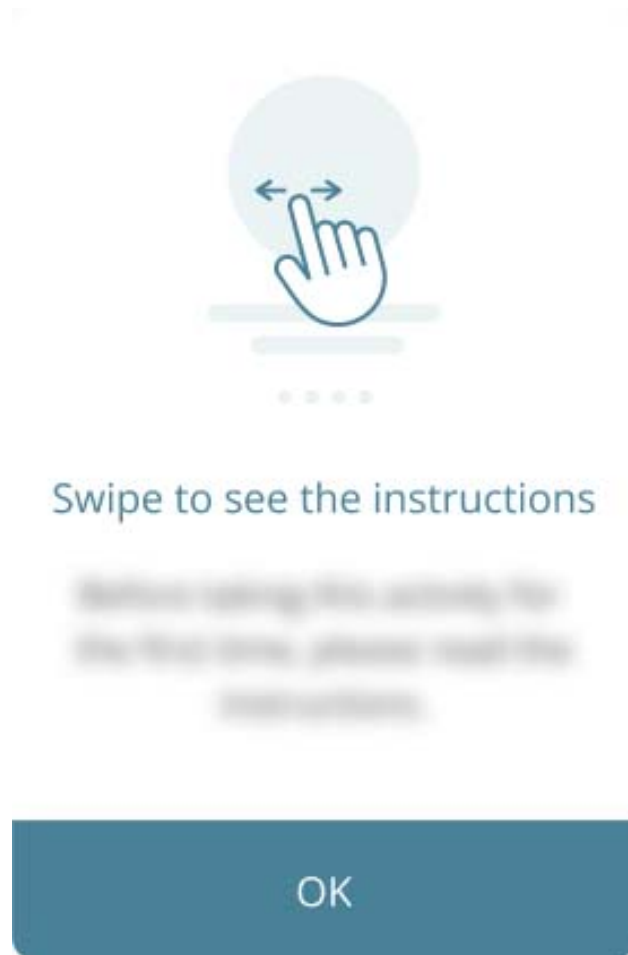
In this section:

8.3.1 Review instructions	114
8.3.2 Perform the Match the Numbers activity	115

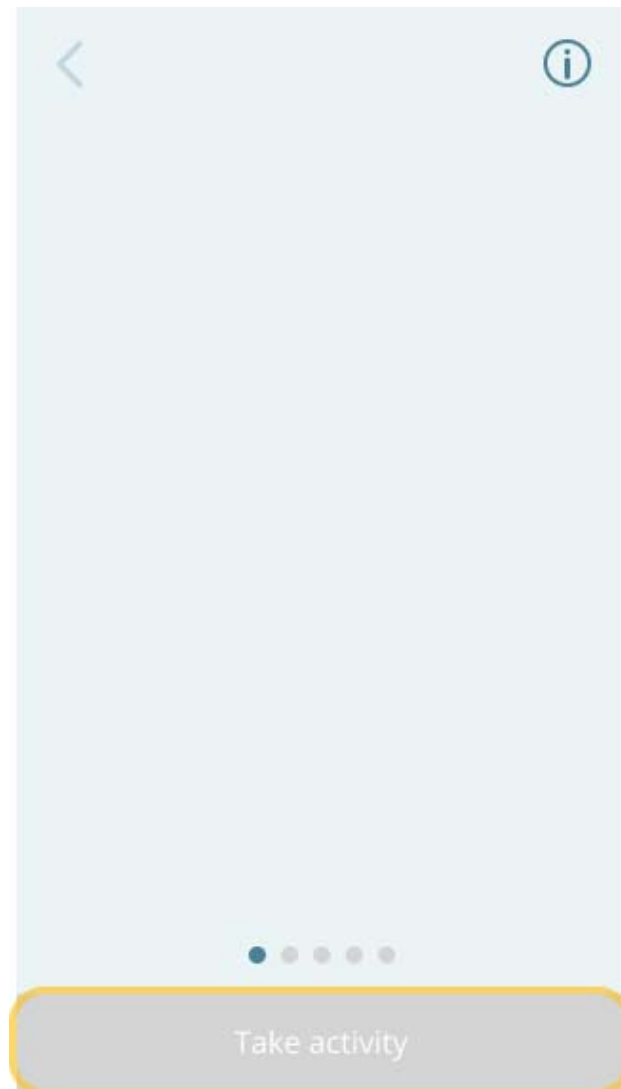
8.3.1 Review instructions

Before you start the Match the Numbers activity, review the instructions for the activity. It is important that you follow the instructions when performing the activity. This ensures that the data collected for the activity is accurate.

For the **first five times** you perform an activity, you will see the following message:



And the **Take activity** button will remain disabled until you have swiped through all of the instruction screens.

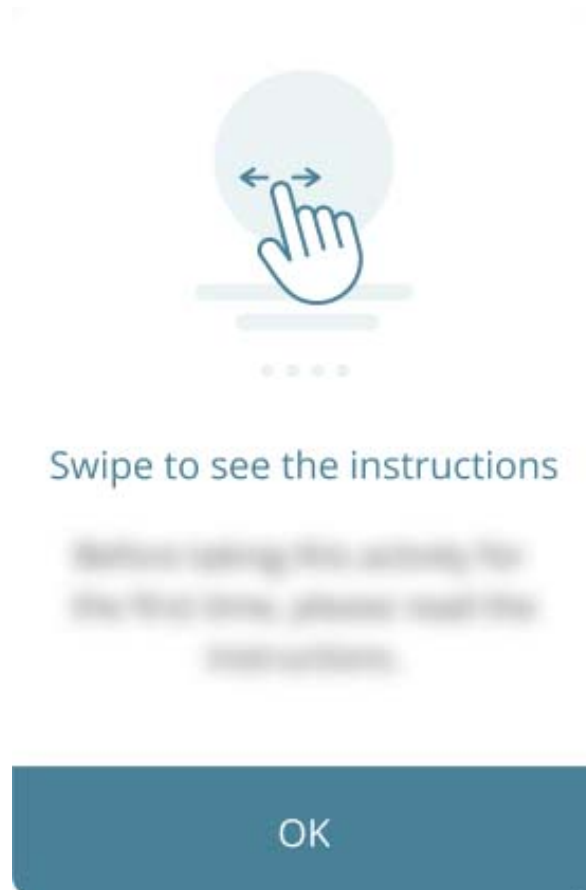


8.3.2 Perform the Match the Numbers activity

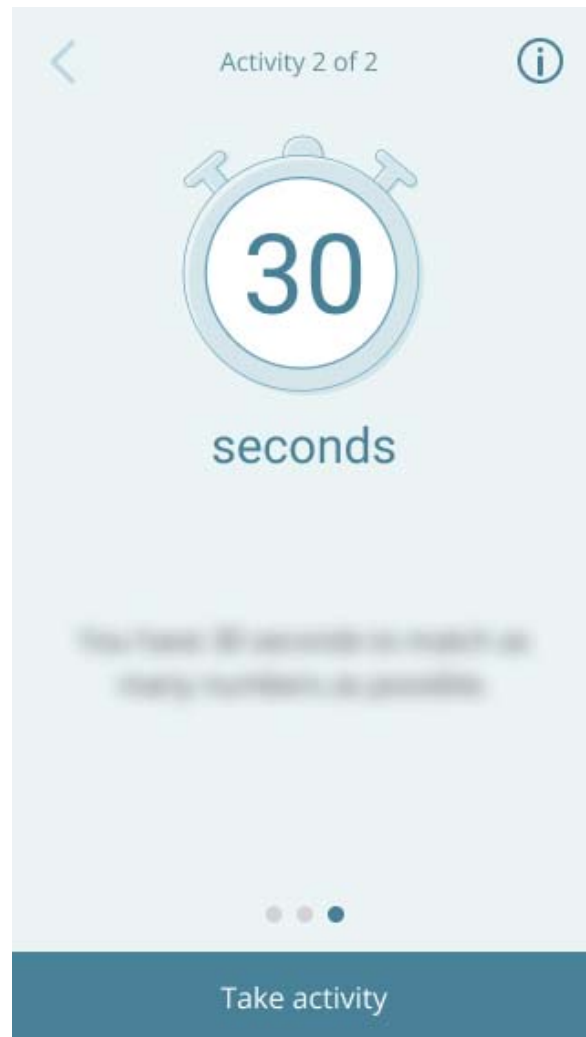
The Match the Numbers activity looks at your reaction time when performing a task which requires focus and speedy hand movement. It is best to complete this activity in an environment where you can focus and minimise interruptions.

To perform the Match the Numbers activity:

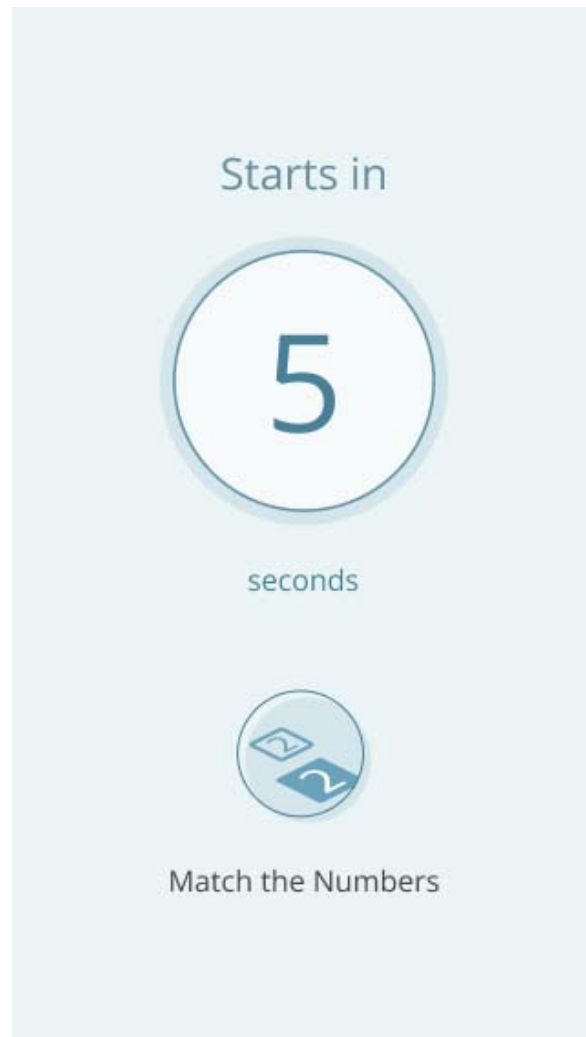
1. When performing this activity for the ***first five times***, you will see the following message:



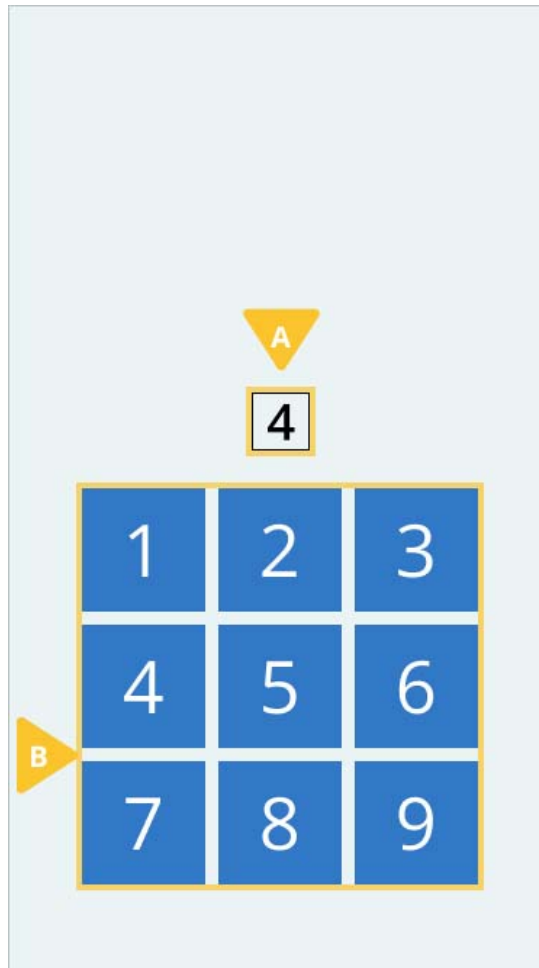
2. Tap the **OK** button.
3. Swipe left to review the instructions for performing the Match the Numbers activity.
4. After you have reviewed all the instructions, tap the **Take activity** button.



5. On the **Get ready** screen, tap the **Start** button.
6. Your screen will show a **5-second** countdown. During this time, place your phone on a flat surface and get ready to start the activity.

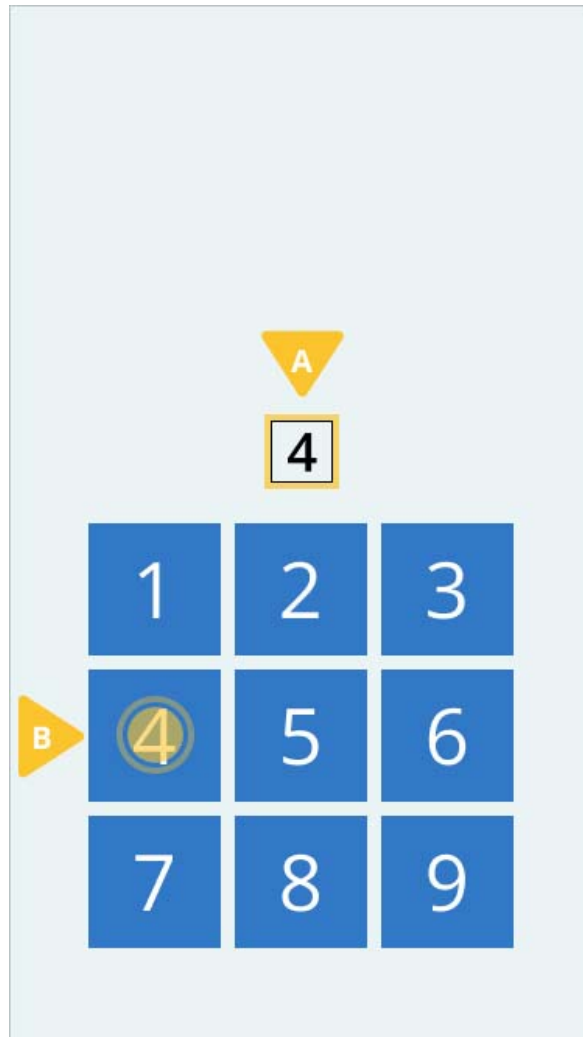


7. On the next screen, you will see:
- A. The *number* that you will have to match.
 - B. The *keypad* that you will use to tap the number.



8. When a **number (A)** is displayed on the screen, tap the same number on the **keypad (B)** displayed on the screen.

For example, note that the number **4** is displayed on the screen. Tap number **4** on the keypad.



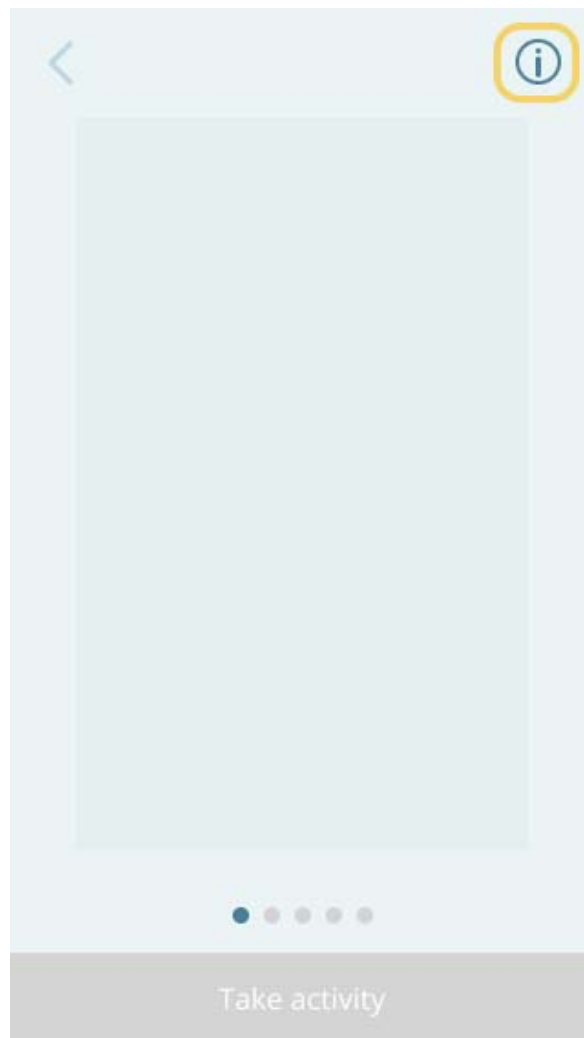
To complete this activity, match as many numbers as possible within **30 seconds**.

8.4 Read the Match the Symbols User Manual

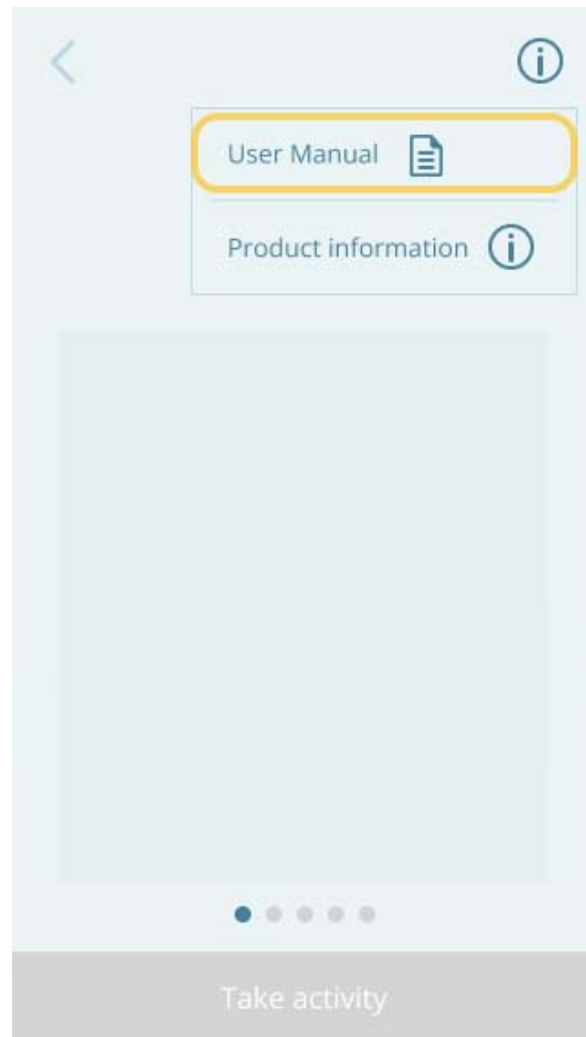
You can access this User Manual for each activity from within the activity. To access the latest version of this User Manual, use the option from within the Floodlight™ MS Activities instead of a previously downloaded .pdf.

To read the User Manual:

1. Tap the activity card for which you want to access the User Manual. For example, to access the User Manual for the Match the Symbols activity, tap the **Match the Symbols** card from the activity carousel on your **Dashboard**.
2. On the activity screen, tap the **Information** icon on the top-right corner.



3. Tap the **User Manual** option.



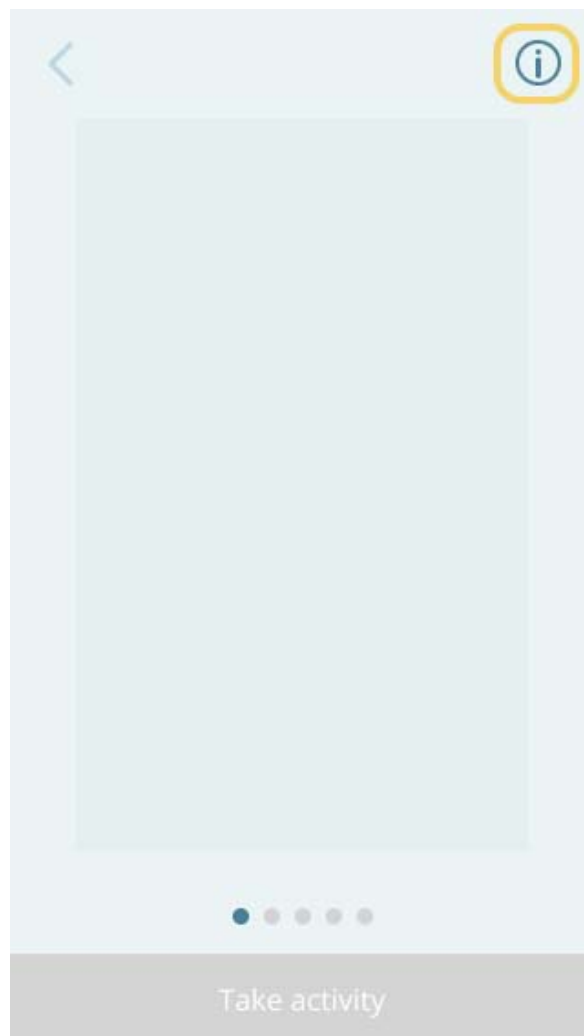
4. The User Manual for the activity is displayed.
5. Tap the **Back** button in the top-left-hand corner to get back to the activity screen.

8.5 Read the Match the Symbols product information

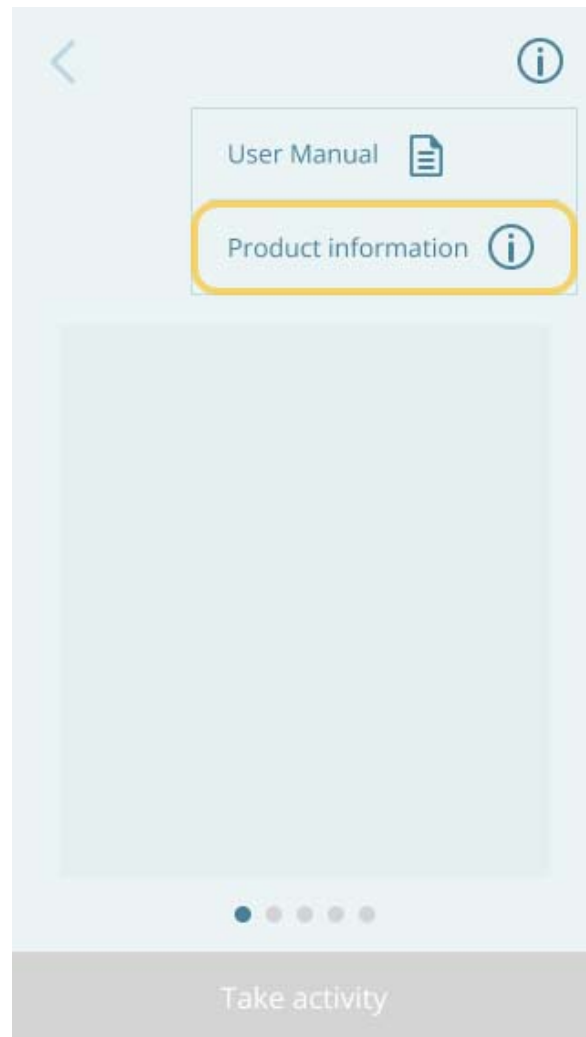
You can find out the version, copyright and other information about the medical device from the About page or the product label.

To read the product information:

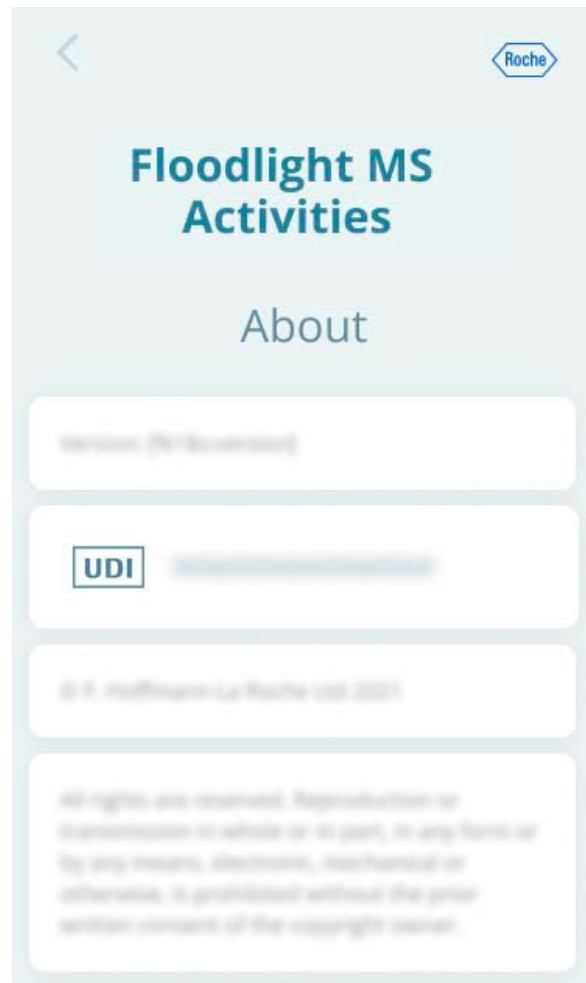
1. Tap the activity card for which you want to access the product information. For example, to access the product information for the Match the Symbols activity, tap the **Match the Symbols** card from the activity carousel on your **Dashboard**.
2. On the activity screen, tap the **Information** icon on the top-right corner.



3. Tap the **Product Information** option.



4. The **About** page for the activity is displayed, as shown below.



5. Tap the **Back** button in the top-left-hand corner to get back to the activity screen.

9 FAQs


In this section:

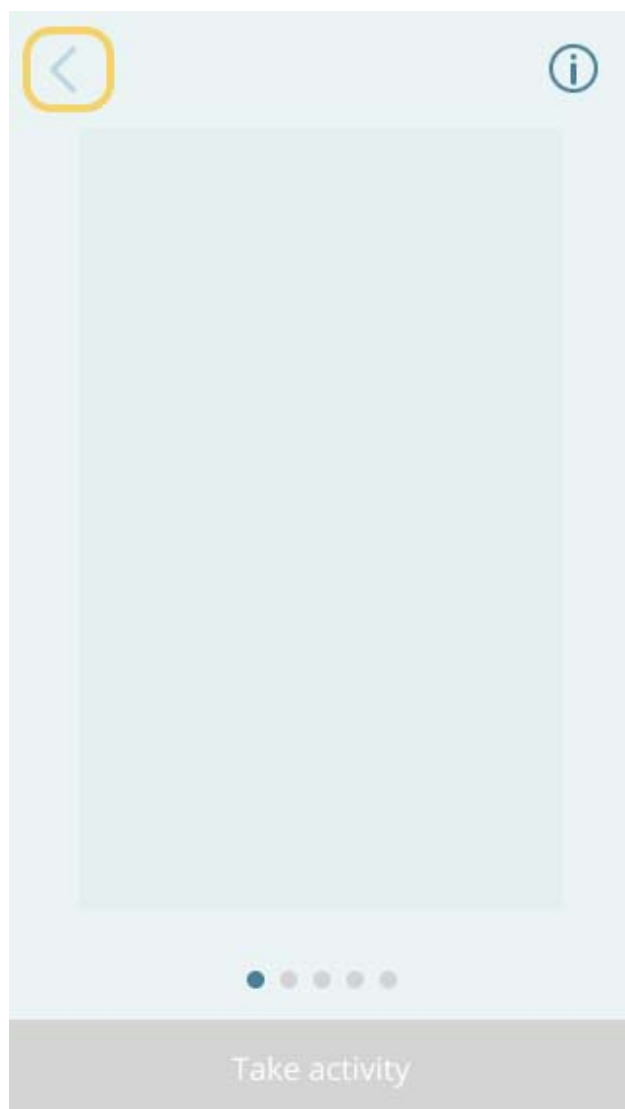
9.1 Why is the Take activity button disabled?	127
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9.1 Why is the Take activity button disabled?

You must follow the instructions when performing any activity. Therefore, the ***first five times*** that you perform an activity, the **Take activity** button will be disabled until you swipe left to review all of the instructions for the activity. Once you have swiped through all the instruction screens, the **Take activity** button is enabled.

9.2 How do I cancel an activity?

You can cancel an activity only before you've started it. To cancel the activity, tap the **Back** button  on the top-left-hand corner of the screen, as shown below:



9.3 Can I cancel an activity after I have started?

No, you **cannot** cancel an activity after you tap **Start**.

9.4 What if I receive a call while performing the activity?

If you receive a call while performing the activity, the activity is automatically stopped and no data is submitted. You can restart the activity at a later time.

9.5 What if I get interrupted or distracted by someone while performing this activity?

It is best to complete this activity in a location or environment where you can focus, for better accuracy. However, it is not a problem if you get interrupted or distracted as you perform this activity. You will have more opportunities to complete this activity in the future. The data collected over an extended period of time is more relevant than a single data point.

9.6 Can I redo the activity?

You can only redo the activity if:

- you received a phone call during the activity.
- you cancelled the activity earlier during the day.

9.7 Why am I not able to squish a tomato every time I pinch?

Please be patient. It may take some time for you to get comfortable with the activity. You may still be unable to pinch some tomatoes but this is to be expected.

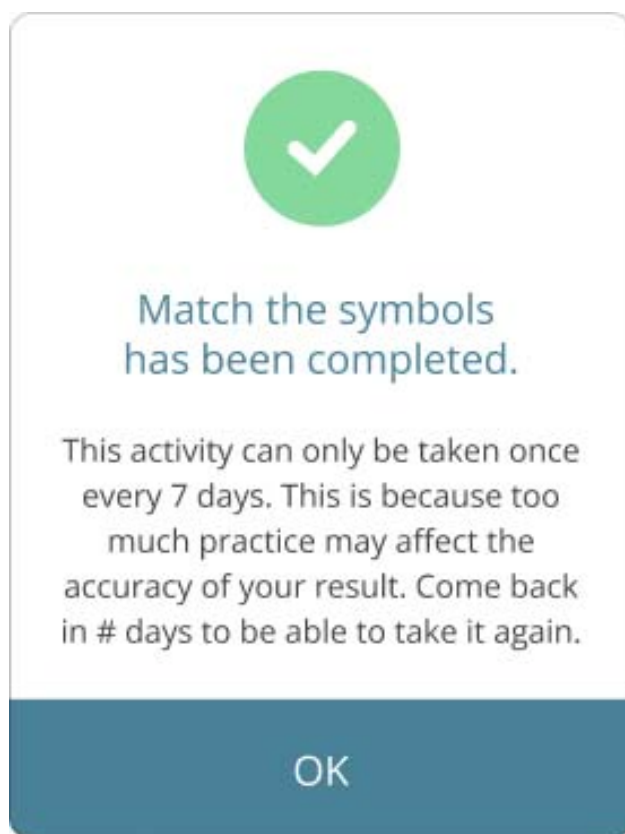
Bear the following instructions in mind in order to successfully pinch a tomato:

- use the correct hand to perform the activity.
- Only use the thumb and index finger to pinch the tomato. be careful not to touch the screen with another part of your hand.
- Start the pinch with your thumb and index finger wide apart (a little over 25 mm [1 inch] apart).
- try to keep the tomato centred between your thumb and index finger while you pinch.
- Only move your thumb and index finger towards each other.
- Place your phone on a flat surface. Not placing the phone on a flat surface will affect the accuracy of your data.

9.8 Why am I seeing a screen about this activity being skipped?

Your ability to memorise the symbol grid may affect the accuracy of the data collected by this activity. This activity may be skipped if you have already completed it in the last seven days.

If that situation occurs, you will see the following message:



9.9 Do I need to use a specific hand or finger when completing this activity?

No, this activity does not require you to use a specific hand or finger. It is recommended to consistently place the phone on a flat surface, such as a table, to optimise the accuracy of the data collected.

10 Additional information

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10.1 Internet connection

You can complete your activity in offline mode. However, you will need an internet connection (Wi-Fi or mobile) to transfer your activity data to the server.

Note

If you have installed a third-party security app on your phone, it can block your internet connection and prevent you from using all the features of the Floodlight™ MS Mobile Application.

10.2 Adverse events

An adverse event is defined as any untoward medical occurrence, unintended disease or injury, or untoward clinical signs (including abnormal test results) related to this Floodlight™ MS activity. While there are no known adverse events related to the activity, potential adverse events include depression and/or suicidal behaviour triggered by a misinterpretation of the test results, and physical injury if the activity is performed in an unsafe environment. To mitigate this risk, note the warning not to try to interpret the data presented by the summary charts (**Warnings and Precautions** section). For the [2-Min Walk](#) and [U-Turn activities](#) confirm that your surroundings are clear of obstructions that may cause you to trip or injure yourself during the activity. If you experience or think you may have experienced an adverse event, please report this information (see the **Support** section for the contact details).

10.3 Warranty

Please refer to the **No warranties** section in the Floodlight™ MS Mobile Application Terms and Conditions.

11 Support

If you face any problem using the Floodlight™ MS Mobile Application, you can contact us at any time.

- **By email:**

- **Australia** — floodlightms_support.au@roche.com
- **Austria** — floodlight_support.at@roche.com
- **Germany** — grenzach.support_floodlight@roche.com
- **Italy** — italy.floodlightms@roche.com
- **Portugal** — floodlightms_support.pt@roche.com
- **Spain** — FloodlightMS_support.es@roche.com
- **Switzerland** — floodlightms_support.ch@roche.com
- **United Kingdom** — uk.floodlightms_support@roche.com
- **USA** — FloodlightMS_support.us@gene.com

- **By phone:**

- **Australia** — 1800 570 627
- **Austria** — 0800 012 327
- **Germany** — 0800 4268426
- **Italy** — 800 098 389
- **Portugal** — 800 910 428
- **Spain** — 900 922 301
- **Switzerland** — 0800 35 66 35
- **United Kingdom** — 0800 066 5557
- **USA** — 1-888-ILLUMN8 (1-888-455-8668)

12 Appendix A

In this section:

12.1 Open-source software	142
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12.1 Open-source software

12.1.1 Open-source licence notifications and licences (For iOS)

The following table lists the open-source software used as part of the Floodlight™ MS Activities for the iOS devices.

- Library=commons-collections-3.2.2.jar
 - Version=3.2.2
 - License=Apache 2.0
 - Link=<https://www.apache.org/licenses/LICENSE-2.0>
- Library=javase-3.3.0.jar
 - Version=3.3.0
 - License=Apache 2.0
 - Link=<https://www.apache.org/licenses/LICENSE-2.0>
- Library=simpleclient_dropwizard-0.0.19.jar
 - Version=0.0.19
 - License=Apache 2.0
 - Link=<https://www.apache.org/licenses/LICENSE-2.0>
- Library=commons-dbutils-1.7.jar
 - Version=1.7
 - License=Apache 2.0
 - Link=<https://www.apache.org/licenses/LICENSE-2.0>
- Library=commons-lang3-3.7.jar
 - Version=3.7
 - License=Apache 2.0
 - Link=<https://www.apache.org/licenses/LICENSE-2.0>
- Library=woodstox-core-5.2.1.jar
 - Version=5.2.1
 - License=Apache 2.0
 - Link=<https://www.apache.org/licenses/LICENSE-2.0>

- Library=commons-csv-1.7.jar
 - Version=1.7
 - License=Apache 2.0
 - Link=<https://www.apache.org/licenses/LICENSE-2.0>
- Library=commons-collections4-4.4.jar
 - Version=4.4
 - License=Apache 2.0
 - Link=<https://www.apache.org/licenses/LICENSE-2.0>
- Library=vertx-config-3.8.4.jar
 - Version=3.8.4
 - License=Apache 2.0
 - Link=<https://www.apache.org/licenses/LICENSE-2.0>
- Library=cache2k-base-bom-1.2.4.Final.pom
 - Version=1.2.4.Final
 - License=Apache 2.0
 - Link=<https://www.apache.org/licenses/LICENSE-2.0>
- Library=httpcore-4.4.13.jar
 - Version=4.4.13
 - License=Apache 2.0
 - Link=<https://www.apache.org/licenses/LICENSE-2.0>
- Library=commons-csv-1.8.jar
 - Version=1.8
 - License=Apache 2.0
 - Link=<https://www.apache.org/licenses/LICENSE-2.0>
- Library=vertx-pg-client-3.8.4.jar
 - Version=3.8.4
 - License=Apache 2.0
 - Link=<https://www.apache.org/licenses/LICENSE-2.0>
- Library=freemarker-2.3.30.jar
 - Version=2.3.30
 - License=Apache 2.0
 - Link=<https://www.apache.org/licenses/LICENSE-2.0>

- Library=modelmapper-2.3.7.jar
 - Version=2.3.7
 - License=Apache 2.0
 - Link=<https://www.apache.org/licenses/LICENSE-2.0>
- Library=commons-lang-2.6.jar
 - Version=2.6
 - License=Apache 2.0
 - Link=<https://www.apache.org/licenses/LICENSE-2.0>
- Library=simpleclient-0.9.0.jar
 - Version=0.9.0
 - License=Apache 2.0
 - Link=<https://www.apache.org/licenses/LICENSE-2.0>
- Library=log4j-api-2.13.3.jar
 - Version=2.13.3
 - License=Apache 2.0
 - Link=<https://www.apache.org/licenses/LICENSE-2.0>
- Library=commons-io-2.7.jar
 - Version=2.7
 - License=Apache 2.0
 - Link=<https://www.apache.org/licenses/LICENSE-2.0>
- Library=simpleclient_hotspot-0.9.0.jar
 - Version=0.9.0
 - License=Apache 2.0
 - Link=<https://www.apache.org/licenses/LICENSE-2.0>
- Library=simpleclient_dropwizard-0.9.0.jar
 - Version=0.9.0
 - License=Apache 2.0
 - Link=<https://www.apache.org/licenses/LICENSE-2.0>
- Library=simpleclient_hotspot-0.0.19.jar
 - Version=0.0.19
 - License=Apache 2.0
 - Link=<https://www.apache.org/licenses/LICENSE-2.0>

- Library=simpleclient_vertx-0.0.19.jar
 - Version=0.0.19
 - License=Apache 2.0
 - Link=<https://www.apache.org/licenses/LICENSE-2.0>
- Library=TrueTime-5.0.3
 - Version=5.0.3
 - License=Apache 2.0
 - Link=<https://www.apache.org/licenses/LICENSE-2.0>
- Library=commons-lang3-3.11.jar
 - Version=3.11
 - License=Apache 2.0
 - Link=<https://www.apache.org/licenses/LICENSE-2.0>
- Library=springfox-boot-starter-3.0.0.jar
 - Version=3.0.0
 - License=Apache 2.0
 - Link=<https://www.apache.org/licenses/LICENSE-2.0>
- Library=kafka-clients-2.6.0.jar
 - Version=2.6.0
 - License=Apache 2.0
 - Link=<https://www.apache.org/licenses/LICENSE-2.0>
- Library=kafka_2.13-2.6.0.jar
 - Version=2.6.0
 - License=Apache 2.0
 - Link=<https://www.apache.org/licenses/LICENSE-2.0>
- Library=kafka-streams-test-utils-2.6.0.jar
 - Version=2.6.0
 - License=Apache 2.0
 - Link=<https://www.apache.org/licenses/LICENSE-2.0>
- Library=commons-io-2.8.0.jar
 - Version=2.8.0
 - License=Apache 2.0
 - Link=<https://www.apache.org/licenses/LICENSE-2.0>

- Library=micrometer-core-1.5.5.jar
 - Version=1.5.5
 - License=Apache 2.0
 - Link=<https://www.apache.org/licenses/LICENSE-2.0>
- Library=micrometer-registry-prometheus-1.5.5.jar
 - Version=1.5.5
 - License=Apache 2.0
 - Link=<https://www.apache.org/licenses/LICENSE-2.0>
- Library=vertx-config-3.9.2.jar
 - Version=3.9.2
 - License=Apache 2.0
 - Link=<https://www.apache.org/licenses/LICENSE-2.0>
- Library=httpclient-4.5.13.jar
 - Version=4.5.13
 - License=Apache 2.0
 - Link=<https://www.apache.org/licenses/LICENSE-2.0>
- Library=core-3.4.1.jar
 - Version=3.4.1
 - License=Apache 2.0
 - Link=<https://www.apache.org/licenses/LICENSE-2.0>
- Library=guava-30.0-jre.jar
 - Version=30.0-jre
 - License=Apache 2.0
 - Link=<https://www.apache.org/licenses/LICENSE-2.0>
- Library=joda-time-2.10.8.jar
 - Version=2.10.8
 - License=Apache 2.0
 - Link=<https://www.apache.org/licenses/LICENSE-2.0>
- Library=vertx-config-3.9.4.jar
 - Version=3.9.4
 - License=Apache 2.0
 - Link=<https://www.apache.org/licenses/LICENSE-2.0>

- Library=micrometer-registry-prometheus-1.6.1.jar
 - Version=1.6.1
 - License=Apache 2.0
 - Link=<https://www.apache.org/licenses/LICENSE-2.0>
- Library=modelmapper-2.3.9.jar
 - Version=2.3.9
 - License=Apache 2.0
 - Link=<https://www.apache.org/licenses/LICENSE-2.0>
- Library=spring-cloud-stream-3.0.10.RELEASE.jar
 - Version=3.0.10.RELEASE
 - License=Apache 2.0
 - Link=<https://www.apache.org/licenses/LICENSE-2.0>
- Library=spring-cloud-starter-sleuth-3.0.0.jar
 - Version=3.0.0
 - License=Apache 2.0
 - Link=<https://www.apache.org/licenses/LICENSE-2.0>
- Library=spring-cloud-sleuth-zipkin-3.0.0.jar
 - Version=3.0.0
 - License=Apache 2.0
 - Link=<https://www.apache.org/licenses/LICENSE-2.0>
- Library=simpleclient_vertx-0.9.0.jar
 - Version=0.9.0
 - License=Apache 2.0
 - Link=<https://www.apache.org/licenses/LICENSE-2.0>
- Library=springdoc-openapi-webflux-ui-1.5.0.jar
 - Version=1.5.0
 - License=Apache 2.0
 - Link=<https://www.apache.org/licenses/LICENSE-2.0>
- Library=dynamodb-enhanced-2.15.59.jar
 - Version=2.15.59
 - License=Apache 2.0
 - Link=<https://www.apache.org/licenses/LICENSE-2.0>

- Library=sts-2.15.59.jar
 - Version=2.15.59
 - License=Apache 2.0
 - Link=<https://www.apache.org/licenses/LICENSE-2.0>
- Library=jackson-annotations-2.12.1.jar
 - Version=2.12.1
 - License=Apache 2.0
 - Link=<https://www.apache.org/licenses/LICENSE-2.0>
- Library=jackson-core-2.12.1.jar
 - Version=2.12.1
 - License=Apache 2.0
 - Link=<https://www.apache.org/licenses/LICENSE-2.0>
- Library=vertx-pg-client-3.9.4.jar
 - Version=3.9.4
 - License=Apache 2.0
 - Link=<https://www.apache.org/licenses/LICENSE-2.0>
- Library=commons-lang3-3.12.0.jar
 - Version=3.12.0
 - License=Apache 2.0
 - Link=<https://www.apache.org/licenses/LICENSE-2.0>
- Library=aws-java-sdk-s3-1.11.967.jar
 - Version=1.11.967
 - License=Apache 2.0
 - Link=<https://www.apache.org/licenses/LICENSE-2.0>
- Library=aws-java-sdk-sts-1.11.967.jar
 - Version=1.11.967
 - License=Apache 2.0
 - Link=<https://www.apache.org/licenses/LICENSE-2.0>
- Library=jackson-annotations-2.12.3.jar
 - Version=2.12.3
 - License=Apache 2.0
 - Link=<https://www.apache.org/licenses/LICENSE-2.0>

- Library=jackson-core-2.12.3.jar
 - Version=2.12.3
 - License=Apache 2.0
 - Link=<https://www.apache.org/licenses/LICENSE-2.0>
- Library=s3-2.16.44.jar
 - Version=2.16.44
 - License=Apache 2.0
 - Link=<https://www.apache.org/licenses/LICENSE-2.0>
- Library=url-connection-client-2.16.44.jar
 - Version=2.16.44
 - License=Apache 2.0
 - Link=<https://www.apache.org/licenses/LICENSE-2.0>
- Library=apache-client-2.16.44.jar
 - Version=2.16.44
 - License=Apache 2.0
 - Link=<https://www.apache.org/licenses/LICENSE-2.0>
- Library=netty-nio-client-2.16.44.jar
 - Version=2.16.44
 - License=Apache 2.0
 - Link=<https://www.apache.org/licenses/LICENSE-2.0>
- Library=jackson-datatype-jsr310-2.12.3.jar
 - Version=2.12.3
 - License=Apache 2.0
 - Link=<https://www.apache.org/licenses/LICENSE-2.0>
- Library=AWSCognitoIdentityProviderASF-2.24.0
 - Version=2.24.0
 - License=Apache 2.0
 - Link=<https://www.apache.org/licenses/LICENSE-2.0>
- Library=AWSCognitoIdentityProvider-2.24.0
 - Version=2.24.0
 - License=Apache 2.0
 - Link=<https://www.apache.org/licenses/LICENSE-2.0>

- Library=AWSAuthCore-2.24.0
 - Version=2.24.0
 - License=Apache 2.0
 - Link=<https://www.apache.org/licenses/LICENSE-2.0>
- Library=AWSMobileClient-2.24.0
 - Version=2.24.0
 - License=Apache 2.0
 - Link=<https://www.apache.org/licenses/LICENSE-2.0>
- Library=AWSCore-2.24.0
 - Version=2.24.0
 - License=Apache 2.0
 - Link=<https://www.apache.org/licenses/LICENSE-2.0>
- Library=spring-webflux-5.3.9.jar
 - Version=5.3.9
 - License=Apache 2.0
 - Link=<https://www.apache.org/licenses/LICENSE-2.0>
- Library=reactor-core-3.4.9.jar
 - Version=3.4.9
 - License=Apache 2.0
 - Link=<https://www.apache.org/licenses/LICENSE-2.0>
- Library=spring-kafka-2.7.6.jar
 - Version=2.7.6
 - License=Apache 2.0
 - Link=<https://www.apache.org/licenses/LICENSE-2.0>
- Library=spring-boot-starter-2.5.4.jar
 - Version=2.5.4
 - License=Apache 2.0
 - Link=<https://www.apache.org/licenses/LICENSE-2.0>
- Library=spring-boot-starter-actuator-2.5.4.jar
 - Version=2.5.4
 - License=Apache 2.0
 - Link=<https://www.apache.org/licenses/LICENSE-2.0>

- Library=spring-boot-starter-web-2.5.4.jar
 - Version=2.5.4
 - License=Apache 2.0
 - Link=<https://www.apache.org/licenses/LICENSE-2.0>
- Library=spring-boot-starter-test-2.5.4.jar
 - Version=2.5.4
 - License=Apache 2.0
 - Link=<https://www.apache.org/licenses/LICENSE-2.0>
- Library=reactor-kafka-1.2.6.RELEASE.jar
 - Version=1.2.6.RELEASE
 - License=Apache 2.0
 - Link=<https://www.apache.org/licenses/LICENSE-2.0>
- Library=netty-codec-4.1.68.Final.jar
 - Version=4.1.68.Final
 - License=Apache 2.0
 - Link=<https://www.apache.org/licenses/LICENSE-2.0>
- Library=json-schema-validator-1.0.59.jar
 - Version=1.0.59
 - License=Apache 2.0
 - Link=<https://www.apache.org/licenses/LICENSE-2.0>
- Library=guava-31.1-jre.jar
 - Version=31.1-jre
 - License=Apache 2.0
 - Link=<https://www.apache.org/licenses/LICENSE-2.0>
- Library=sts-2.17.148.jar
 - Version=2.17.148
 - License=Apache 2.0
 - Link=<https://www.apache.org/licenses/LICENSE-2.0>
- Library=kms-2.17.148.jar
 - Version=2.17.148
 - License=Apache 2.0
 - Link=<https://www.apache.org/licenses/LICENSE-2.0>

- Library=s3-2.17.148.jar
 - Version=2.17.148
 - License=Apache 2.0
 - Link=<https://www.apache.org/licenses/LICENSE-2.0>
- Library=r2dbc-postgresql-0.8.12.RELEASE.jar
 - Version=0.8.12.RELEASE
 - License=Apache 2.0
 - Link=<https://www.apache.org/licenses/LICENSE-2.0>
- Library=spring-boot-starter-webflux-2.6.6.jar
 - Version=2.6.6
 - License=Apache 2.0
 - Link=<https://www.apache.org/licenses/LICENSE-2.0>
- Library=spring-boot-starter-actuator-2.6.6.jar
 - Version=2.6.6
 - License=Apache 2.0
 - Link=<https://www.apache.org/licenses/LICENSE-2.0>
- Library=spring-boot-starter-validation-2.6.6.jar
 - Version=2.6.6
 - License=Apache 2.0
 - Link=<https://www.apache.org/licenses/LICENSE-2.0>
- Library=spring-boot-starter-web-2.6.6.jar
 - Version=2.6.6
 - License=Apache 2.0
 - Link=<https://www.apache.org/licenses/LICENSE-2.0>
- Library=spring-boot-starter-data-r2dbc-2.6.6.jar
 - Version=2.6.6
 - License=Apache 2.0
 - Link=<https://www.apache.org/licenses/LICENSE-2.0>
- Library=google-java-format-1.15.0.jar
 - Version=1.15.0
 - License=Apache 2.0
 - Link=<https://www.apache.org/licenses/LICENSE-2.0>

- Library=sts-2.16.44.jar
 - Version=2.16.44
 - License=Apache 2.0
 - Link=<https://www.apache.org/licenses/LICENSE-2.0>
- Library=jackson-datatype-jsr310-2.13.3.jar
 - Version=2.13.3
 - License=Apache 2.0
 - Link=<https://www.apache.org/licenses/LICENSE-2.0>
- Library=lottie-ios-3.4.0
 - Version=3.4.0
 - License=Apache 2.0
 - Link=<https://www.apache.org/licenses/LICENSE-2.0>
- Library=Split-2.15.0
 - Version=2.15.0
 - License=Apache 2.0
 - Link=<https://www.apache.org/licenses/LICENSE-2.0>
- Library=r2dbc-postgresql-0.9.2.RELEASE.jar
 - Version=0.9.2.RELEASE
 - License=Apache 2.0
 - Link=<https://www.apache.org/licenses/LICENSE-2.0>
- Library=micrometer-registry-prometheus-1.9.6.jar
 - Version=1.9.6
 - License=Apache 2.0
 - Link=<https://www.apache.org/licenses/LICENSE-2.0>
- Library=spring-kafka-2.8.11.jar
 - Version=2.8.11
 - License=Apache 2.0
 - Link=<https://www.apache.org/licenses/LICENSE-2.0>
- Library=httpclient-4.5.14.jar
 - Version=4.5.14
 - License=Apache 2.0
 - Link=<https://www.apache.org/licenses/LICENSE-2.0>

- Library=spring-boot-starter-webflux-2.7.7.jar
 - Version=2.7.7
 - License=Apache 2.0
 - Link=<https://www.apache.org/licenses/LICENSE-2.0>
- Library=spring-boot-starter-web-2.7.7.jar
 - Version=2.7.7
 - License=Apache 2.0
 - Link=<https://www.apache.org/licenses/LICENSE-2.0>
- Library=spring-boot-starter-validation-2.7.7.jar
 - Version=2.7.7
 - License=Apache 2.0
 - Link=<https://www.apache.org/licenses/LICENSE-2.0>
- Library=spring-boot-starter-actuator-2.7.7.jar
 - Version=2.7.7
 - License=Apache 2.0
 - Link=<https://www.apache.org/licenses/LICENSE-2.0>
- Library=spring-boot-starter-data-r2dbc-2.7.7.jar
 - Version=2.7.7
 - License=Apache 2.0
 - Link=<https://www.apache.org/licenses/LICENSE-2.0>
- Library=jackson-databind-2.12.7.1.jar
 - Version=2.12.7.1
 - License=Apache 2.0
 - Link=<https://www.apache.org/licenses/LICENSE-2.0>
- Library=kafka-clients-3.4.0.jar
 - Version=3.4.0
 - License=Apache 2.0
 - Link=<https://www.apache.org/licenses/LICENSE-2.0>
- Library=Split-2.19.1
 - Version=2.19.1
 - License=Apache 2.0
 - Link=<https://www.apache.org/licenses/LICENSE-2.0>

- Library=log4j-api-2.20.0.jar
 - Version=2.20.0
 - License=Apache 2.0
 - Link=<https://www.apache.org/licenses/LICENSE-2.0>
- Library=log4j-core-2.20.0.jar
 - Version=2.20.0
 - License=Apache 2.0
 - Link=<https://www.apache.org/licenses/LICENSE-2.0>
- Library=log4j-to-slf4j-2.20.0.jar
 - Version=2.20.0
 - License=Apache 2.0
 - Link=<https://www.apache.org/licenses/LICENSE-2.0>
- Library=graphql-spring-boot-starter-1.0.0-M3.jar
 - Version=1.0.0-M3
 - License=Apache 2.0
 - Link=<https://www.apache.org/licenses/LICENSE-2.0>
- Library=AWSCore-2.30.4
 - Version=2.30.4
 - License=Apache 2.0
 - Link=<https://www.apache.org/licenses/LICENSE-2.0>
- Library=AWSCognitoIdentityProviderASF-2.30.4
 - Version=2.30.4
 - License=Apache 2.0
 - Link=<https://www.apache.org/licenses/LICENSE-2.0>
- Library=AWSCognitoIdentityProvider-2.30.4
 - Version=2.30.4
 - License=Apache 2.0
 - Link=<https://www.apache.org/licenses/LICENSE-2.0>
- Library=AWSAuthCore-2.30.4
 - Version=2.30.4
 - License=Apache 2.0
 - Link=<https://www.apache.org/licenses/LICENSE-2.0>

- Library=AWSMobileClient-2.30.4
 - Version=2.30.4
 - License=Apache 2.0
 - Link=<https://www.apache.org/licenses/LICENSE-2.0>
- Library=commons-math3-3.6.1.jar
 - Version=3.6.1
 - License=Apache 2.0, BSD 3
 - Link=<https://www.apache.org/licenses/LICENSE-2.0>
 - <https://opensource.org/licenses/BSD-3-Clause>
- Library=vertx-web-client-3.8.4.jar
 - Version=3.8.4
 - License=Apache 2.0, Eclipse 1.0
 - Link=<https://www.apache.org/licenses/LICENSE-2.0>
 - <https://www.eclipse.org/legal/epl-v10.html>
- Library=vertx-web-client-3.9.4.jar
 - Version=3.9.4
 - License=Apache 2.0, Eclipse 1.0
 - Link=<https://www.apache.org/licenses/LICENSE-2.0>
 - <https://www.eclipse.org/legal/epl-v10.html>
- Library=vertx-kafka-client-3.9.4.jar
 - Version=3.9.4
 - License=Apache 2.0, Eclipse 1.0
 - Link=<https://www.apache.org/licenses/LICENSE-2.0>
 - <https://www.eclipse.org/legal/epl-v10.html>
- Library=vertx-web-3.8.4.jar
 - Version=3.8.4
 - License=Apache 2.0, Eclipse 2.0
 - Link=<https://www.apache.org/licenses/LICENSE-2.0>
 - <https://www.eclipse.org/legal/epl-2.0/>
- Library=vertx-core-3.9.4.jar
 - Version=3.9.4
 - License=Apache 2.0, Eclipse 2.0

- Link=<https://www.apache.org/licenses/LICENSE-2.0>
 - <https://www.eclipse.org/legal/epl-2.0/>
- Library=vertx-web-3.9.4.jar
 - Version=3.9.4
 - License=Apache 2.0, Eclipse 2.0
 - Link=<https://www.apache.org/licenses/LICENSE-2.0>
 - <https://www.eclipse.org/legal/epl-2.0/>
- Library=postgresql-42.2.13.jar
 - Version=42.2.13
 - License=BSD 2
 - Link=<https://opensource.org/licenses/BSD-2-Clause>
- Library=postgresql-42.2.16.jar
 - Version=42.2.16
 - License=BSD 2
 - Link=<https://opensource.org/licenses/BSD-2-Clause>
- Library=postgresql-42.3.8.jar
 - Version=42.3.8
 - License=BSD 2
 - Link=<https://opensource.org/licenses/BSD-2-Clause>
- Library=oval-1.90.jar
 - Version=1.9
 - License=Eclipse 1.0
 - Link=<https://opensource.org/licenses/EPL-1.0>
- Library=logback-classic-1.2.3.jar
 - Version=1.2.3
 - License=Eclipse 1.0, LGPL 2.1
 - Link=<https://opensource.org/licenses/EPL-1.0>
 - <https://www.gnu.org/licenses/old-licenses/lgpl-2.1.en.html>
- Library=junit-jupiter-engine-5.4.2.jar
 - Version=5.4.2
 - License=Eclipse 2.0
 - Link=<https://opensource.org/licenses/EPL-2.0>

- Library=junit-jupiter-api-5.4.2.jar
 - Version=5.4.2
 - License=Eclipse 2.0
 - Link=<https://opensource.org/licenses/EPL-2.0>
- Library=json-20220320.jar
 - Version=20220320
 - License=JSON
 - Link=<http://json.org/license.html>
- Library=argparse4j-0.7.0.jar
 - Version=0.7.0
 - License=MIT
 - Link=<https://opensource.org/licenses/MIT>
- Library=graphql-java-13.0.jar
 - Version=13
 - License=MIT
 - Link=<https://opensource.org/licenses/MIT>
- Library=json-20190722.jar
 - Version=20190722
 - License=MIT
 - Link=<https://opensource.org/licenses/MIT>
- Library=ReachabilitySwift-5.0.0
 - Version=5.0.0
 - License=MIT
 - Link=<https://opensource.org/licenses/MIT>
- Library=java-jwt-3.11.0.jar
 - Version=3.11.0
 - License=MIT
 - Link=<https://opensource.org/licenses/MIT>
- Library=lombok-1.18.16.jar
 - Version=1.18.16
 - License=MIT
 - Link=<https://opensource.org/licenses/MIT>

- Library=Amplitude-7.2.2
 - Version=7.2.2
 - License=MIT
 - Link=<https://opensource.org/licenses/MIT>
- Library=lombok-1.18.20.jar
 - Version=1.18.20
 - License=MIT
 - Link=<https://opensource.org/licenses/MIT>
- Library=lombok-1.18.22.jar
 - Version=1.18.22
 - License=MIT
 - Link=<https://opensource.org/licenses/MIT>
- Library=graphql-java-extended-scalars-17.0.jar
 - Version=17
 - License=MIT
 - Link=<https://opensource.org/licenses/MIT>
- Library=java-jwt-3.18.3.jar
 - Version=3.18.3
 - License=MIT
 - Link=<https://opensource.org/licenses/MIT>
- Library=Sourcery-1.6.0
 - Version=1.6.0
 - License=MIT
 - Link=<https://opensource.org/licenses/MIT>
- Library=Peasy-1.2.0
 - Version=1.2.0
 - License=MIT
 - Link=<https://opensource.org/licenses/MIT>
- Library=SwiftyMocky-4.1.0
 - Version=4.1.0
 - License=MIT
 - Link=<https://opensource.org/licenses/MIT>

- Library=slf4j-api-1.7.36.jar
 - Version=1.7.36
 - License=MIT
 - Link=<https://opensource.org/licenses/MIT>
- Library=Swinject-2.8.1
 - Version=2.8.1
 - License=MIT
 - Link=<https://opensource.org/licenses/MIT>
- Library=lombok-1.18.24.jar
 - Version=1.18.24
 - License=MIT
 - Link=<https://opensource.org/licenses/MIT>
- Library=SwiftGen-6.6.2
 - Version=6.6.2
 - License=MIT
 - Link=<https://opensource.org/licenses/MIT>
- Library=ZIPFoundation-0.9.16
 - Version=0.9.16
 - License=MIT
 - Link=<https://opensource.org/licenses/MIT>
- Library=Swinject-2.8.3
 - Version=2.8.3
 - License=MIT
 - Link=<https://opensource.org/licenses/MIT>
- Library=SwiftLint-0.51.0
 - Version=0.51.0
 - License=MIT
 - Link=<https://opensource.org/licenses/MIT>
- Library=SwiftFormat/CLI-0.51.3
 - Version=0.51.3
 - License=MIT
 - Link=<https://opensource.org/licenses/MIT>

- Library=AnalyticsConnector-1.0.1
 - Version=1.0.1
 - License=MIT
 - Link=<https://opensource.org/licenses/MIT>
- Library=Amplitude-8.15.2
 - Version=8.15.2
 - License=MIT
 - Link=<https://opensource.org/licenses/MIT>
- Library=bom-2.17.148.pom
 - Version=2.17.148
 - License=Apache 2.0
 - Link=<https://www.apache.org/licenses/LICENSE-2.0>
- Library=bom-2.16.44.pom
 - Version=2.16.44
 - License=Apache 2.0
 - Link=<https://www.apache.org/licenses/LICENSE-2.0>
- Library=java-sdk-1.6.1.jar
 - Version=1.6.1
 - License=Amplitude Contract
 - Link=<https://amplitude.com/>
- Library=lottie-ios-3.5.0
 - Version=3.5.0
 - License=Apache 2.0
 - Link=<https://www.apache.org/licenses/LICENSE-2.0>
- Library=Charts-3.6.1
 - Version=3.6.1
 - License=Apache 2.0
 - Link=<https://www.apache.org/licenses/LICENSE-2.0>
- Library=Charts/Core-3.6.1
 - Version=3.6.1
 - License=Apache 2.0
 - Link=<https://www.apache.org/licenses/LICENSE-2.0>

- Library=SnapshotTesting-1.11.0
 - Version=1.11.0
 - License=MIT
 - Link=<https://opensource.org/licenses/MIT>
- Library=Charts/Core-3.6.2
 - Version=3.6.2
 - License=Apache 2.0
 - Link=<https://www.apache.org/licenses/LICENSE-2.0>
- Library=Charts-3.6.2
 - Version=3.6.2
 - License=Apache 2.0
 - Link=<https://www.apache.org/licenses/LICENSE-2.0>

12.1.2 Open-source licence notifications and licences (For Android)

The following table lists the open-source software used as part of the Floodlight™ MS Activities for the Android devices.

- Library=aws-android-sdk-cognitoidentityprovider-asf-2.64.0.aar
 - Version=2.64.0
 - License=Amazon Software
 - Link=<https://aws.amazon.com/asl/>
- Library=aws-android-sdk-cognitoidentityprovider-2.64.0.aar
 - Version=2.64.0
 - License=Amazon Software
 - Link=<https://aws.amazon.com/asl/>
- Library=aws-android-sdk-mobile-client-2.64.0.aar
 - Version=2.64.0
 - License=Amazon Software
 - Link=<https://aws.amazon.com/asl/>
- Library=aws-android-sdk-auth-core-2.64.0.aar
 - Version=2.64.0
 - License=Amazon Software
 - Link=<https://aws.amazon.com/asl/>

- Library=javax.inject-1.jar
 - Version=1
 - License=Apache 2.0
 - Link=<https://www.apache.org/licenses/LICENSE-2.0>
- Library=annotations-13.0.jar
 - Version=13
 - License=Apache 2.0
 - Link=<https://www.apache.org/licenses/LICENSE-2.0>
- Library=commons-collections-3.2.2.jar
 - Version=3.2.2
 - License=Apache 2.0
 - Link=<https://www.apache.org/licenses/LICENSE-2.0>
- Library=javase-3.3.0.jar
 - Version=3.3.0
 - License=Apache 2.0
 - Link=<https://www.apache.org/licenses/LICENSE-2.0>
- Library=simpleclient_dropwizard-0.0.19.jar
 - Version=0.0.19
 - License=Apache 2.0
 - Link=<https://www.apache.org/licenses/LICENSE-2.0>
- Library=commons-dbutils-1.7.jar
 - Version=1.7
 - License=Apache 2.0
 - Link=<https://www.apache.org/licenses/LICENSE-2.0>
- Library=commons-lang3-3.7.jar
 - Version=3.7
 - License=Apache 2.0
 - Link=<https://www.apache.org/licenses/LICENSE-2.0>
- Library=lifecycle-livedata-2.0.0.aar
 - Version=2.0.0
 - License=Apache 2.0
 - Link=<https://www.apache.org/licenses/LICENSE-2.0>

- Library=documentfile-1.0.0.aar
 - Version=1.0.0
 - License=Apache 2.0
 - Link=<https://www.apache.org/licenses/LICENSE-2.0>
- Library=print-1.0.0.aar
 - Version=1.0.0
 - License=Apache 2.0
 - Link=<https://www.apache.org/licenses/LICENSE-2.0>
- Library=loader-1.0.0.aar
 - Version=1.0.0
 - License=Apache 2.0
 - Link=<https://www.apache.org/licenses/LICENSE-2.0>
- Library=interpolator-1.0.0.aar
 - Version=1.0.0
 - License=Apache 2.0
 - Link=<https://www.apache.org/licenses/LICENSE-2.0>
- Library=legacy-support-core-utils-1.0.0.aar
 - Version=1.0.0
 - License=Apache 2.0
 - Link=<https://www.apache.org/licenses/LICENSE-2.0>
- Library=cardview-1.0.0.aar
 - Version=1.0.0
 - License=Apache 2.0
 - Link=<https://www.apache.org/licenses/LICENSE-2.0>
- Library=cursoradapter-1.0.0.aar
 - Version=1.0.0
 - License=Apache 2.0
 - Link=<https://www.apache.org/licenses/LICENSE-2.0>
- Library=viewpager-1.0.0.aar
 - Version=1.0.0
 - License=Apache 2.0
 - Link=<https://www.apache.org/licenses/LICENSE-2.0>

- Library=localbroadcastmanager-1.0.0.aar
 - Version=1.0.0
 - License=Apache 2.0
 - Link=<https://www.apache.org/licenses/LICENSE-2.0>
- Library=swiperefreshlayout-1.0.0.aar
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- Library=asynclayoutinflater-1.0.0.aar
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- Library=listenablefuture-9999.0-empty-to-avoid-conflict-with-guava.jar
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- Library=listenablefuture-1.0.jar
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- Library=listenablefuture-9999.0-empty-to-avoid-conflict-with-guava.pom
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- Library=spring-cloud-sleuth-zipkin-3.0.0.jar
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- Library=httpClient-4.5.14.jar
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- Library=spring-boot-starter-webflux-2.7.7.jar
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- Library=spring-boot-starter-web-2.7.7.jar
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- Library=spring-boot-starter-validation-2.7.7.jar
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- Library=spring-boot-starter-actuator-2.7.7.jar
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- Library=spring-boot-starter-data-r2dbc-2.7.7.jar
 - Version=2.7.7
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- Library=jackson-databind-2.12.7.1.jar
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- Library=security-crypto-1.1.0-alpha04.aar
 - Version=1.1.0-alpha04
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- Library=viewbinding-7.4.1.aar
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- Library=kafka-clients-3.4.0.jar
 - Version=3.4.0
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- Library=work-runtime-ktx-2.8.0.aar
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- Library=log4j-to-slf4j-2.20.0.jar
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- Library=graphql-spring-boot-starter-1.0.0-M3.jar
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- Library=postgresql-42.2.16.jar
 - Version=42.2.16
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- Library=postgresql-42.3.8.jar
 - Version=42.3.8
 - License=BSD 2
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- Library=oval-1.90.jar
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- Library=logback-classic-1.2.3.jar
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- Library=desugar_jdk_libs-1.1.5.jar
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- Library=json-20220320.jar
 - Version=20220320
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- Library=graphql-java-13.0.jar
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- Library=aws-android-sdk-mobile-client-2.64.0.pom
 - Version=2.64.0
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- Library=aws-android-sdk-cognitoidentityprovider-2.64.0.pom
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