



# User Manual

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11/24/2021

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# Introduction

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## **Purpose of this Manual**

Welcome to the ARCHE | ECHO app! This user manual was designed to assist users. This manual will explain/cover the major features of the app and some of their use cases. We hope this manual will help answer your questions regarding the usage of the app and its interface.

## **About Us**

ECHO and ARCHE are research programs housed at the University of Alberta. These research programs are aimed at improving child health outcomes and are part of a movement in healthcare towards more patient and family-centered care. The ARCHE | ECHO app is a reflection of these beliefs and was made in partnership with parents, nurses, clinicians and other healthcare professionals.

Here are some more in-depth videos about us:

[https://www.youtube.com/watch?v=ydQnzU4nV6Q&ab\\_channel=ECHOREsearch](https://www.youtube.com/watch?v=ydQnzU4nV6Q&ab_channel=ECHOREsearch)

<https://www.youtube.com/watch?v=QwCOEDxgLIQ>

## **Purpose of the app**

The ARCHE | ECHO app was designed to be an intuitive and informative tool capable of assisting parents caring for their sick children. The information contained in this app is provided on an “as is” basis and is offered for general information and educational purposes only; it is not offered as and does not constitute professional advice.

The app is capable of helping parents learn about potential illnesses that could be affecting their children through the “Symptom Checker” function of the app. The “Tools and Resources” section of the app contains evidence-based tools and resources that will assist in managing your children’s illnesses. Finally, the “Find a Clinic Map” assists you in finding nearby health services, including hospitals and clinics.

*The “Symptom Checker,” “Tools and Resources,” and “Find a Clinic Map” will be fully addressed below in their respective sections.*

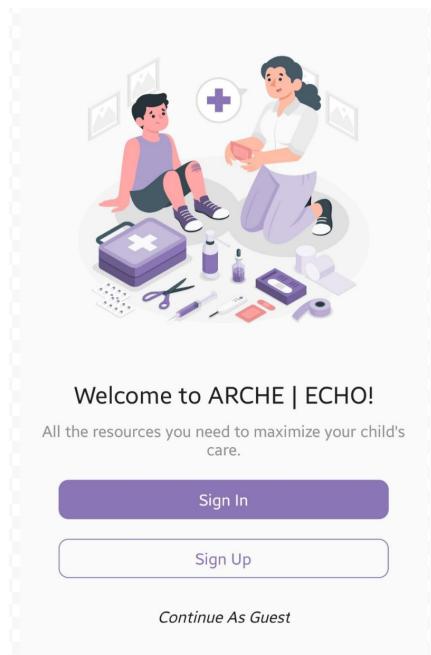
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***If you have any further questions and/or concerns, please feel free to contact the ARCHE and ECHO team at: [archecho@ualberta.ca](mailto:archecho@ualberta.ca)***

***To view this document online in its original format, use this link:***

***[https://docs.google.com/document/d/1s0gpe-ODx\\_wab1srrAqRZWhO-fgUzBuAbchO\\_XvguE0/edit?usp=sharing](https://docs.google.com/document/d/1s0gpe-ODx_wab1srrAqRZWhO-fgUzBuAbchO_XvguE0/edit?usp=sharing)***

# Signing Up and Signing In



## Initial Screen

The login and signup menus are the first set of screens that you see when you open the app. **From here you can sign up for an account, sign in if you have an account, or continue as an anonymous guest.**

## Continuing to Sign Up from Initial Screens



← Continue As Guest

Welcome!

Enter your details to get started.

First Name

Last Name

Email

Password

[Sign Up](#)

Or

[Sign Up With Google](#)

Already have an account? [Sign In.](#)

From this screen, you are able to **sign up for an account with your email address**.

Welcome!

Enter your details to get started.

First Name

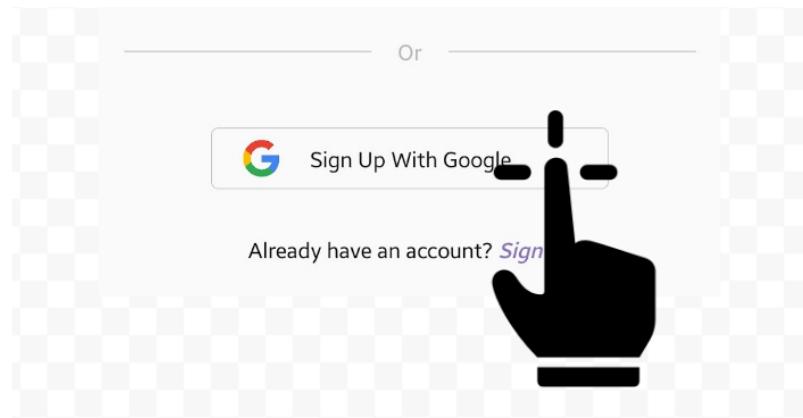
Last Name

Email

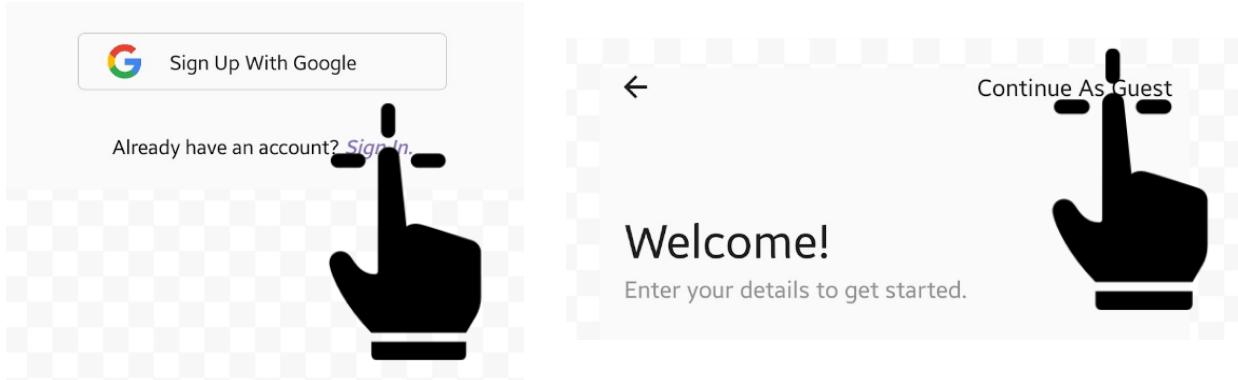
Password

Sign Up

You can also **sign up with your Google account**. Google will walk you through a short process to verify your Google account. Once finished, your Google account will be authenticated. Creating an account lets the app remember your accessibility preferences, favourite resources, and favoured clinics.



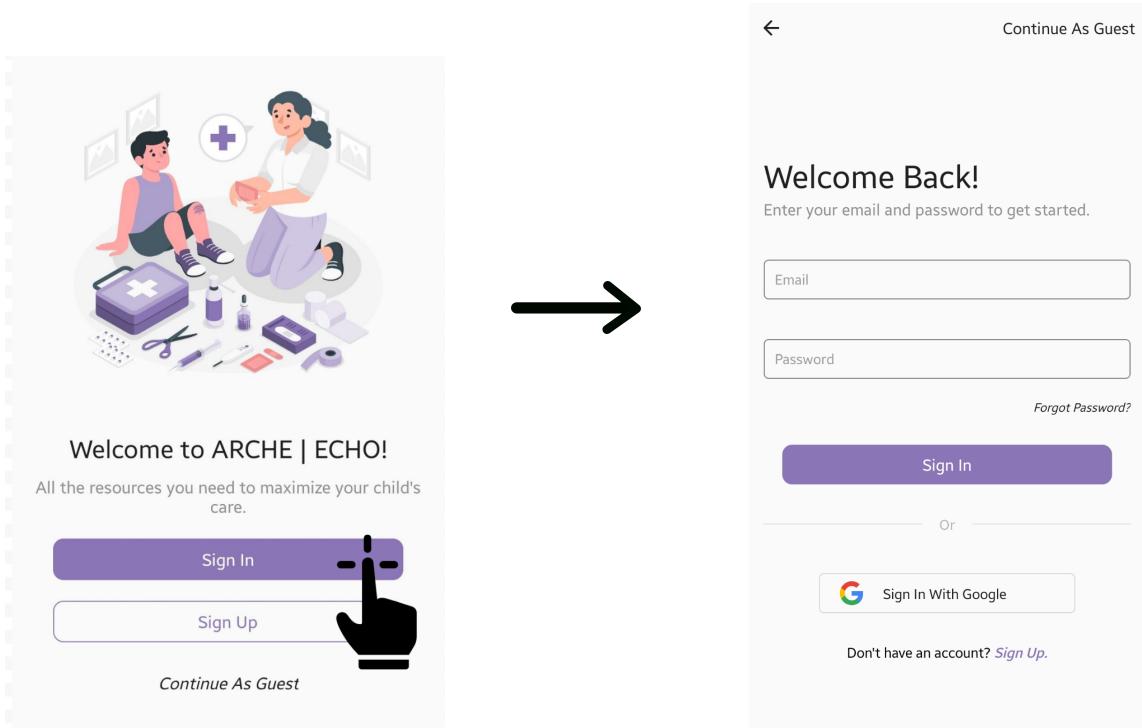
In the case that you selected the **wrong menu option**, you can also opt to continue as a guest or also go to the sign in page for email-created accounts. The back arrow can also be tapped to return to the previous screen.



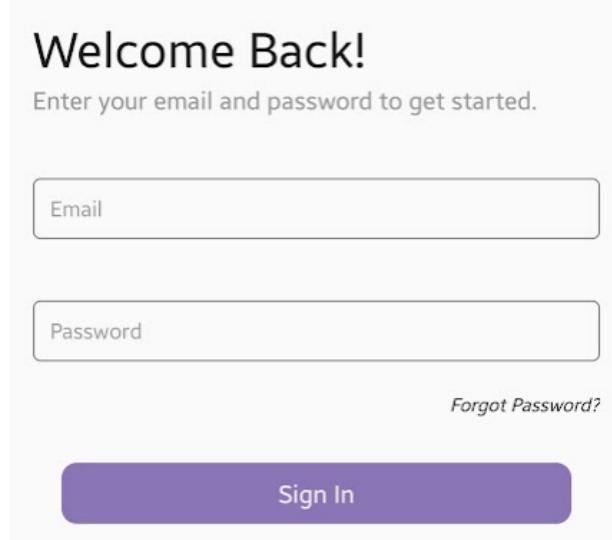
### Continuing as a Guest

When you choose to **continue as a guest** from any of the screens above, you will not have your data and preferences saved when you next log out. For example, if you had decided to add the “Asthma” resource as a favourite, that preference will be forgotten if you log out.

### Continuing to Sign In From Initial Screens



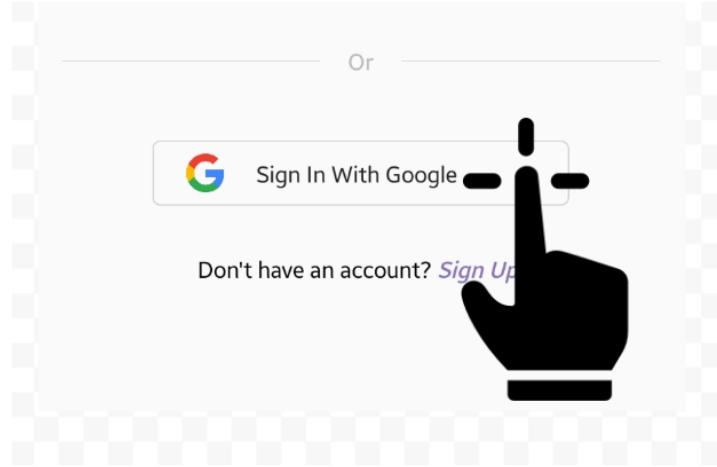
From here you are free to enter your existing information to **sign in to your account that was created with an email.**



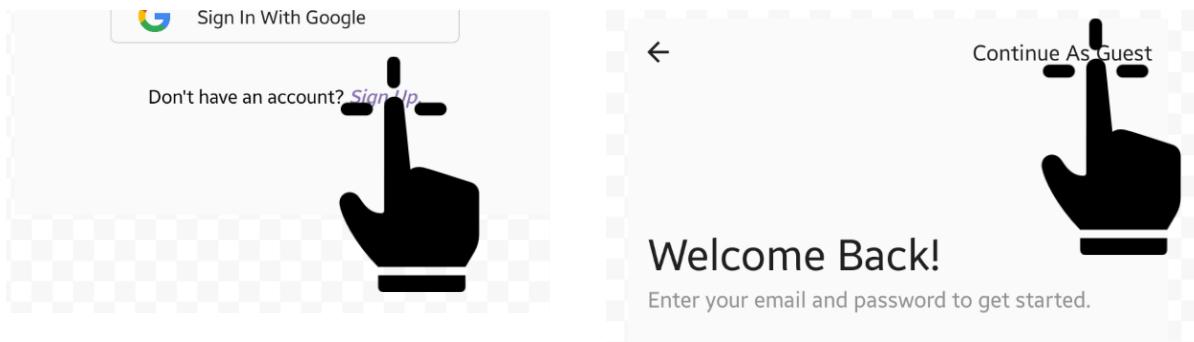
**If you forget your password, please tap on “Forget Password?” to start recovering your account.**



You also have the option to **sign in with a Google account**: if you have previously signed with this option, your existing account information will be used. Otherwise, Google will help you connect your Google account to our app for the first time.



In the case that you selected the **wrong menu option**, you can also opt to continue as a guest or also sign up for an account with your email. The back arrow can also be tapped to return to the previous screen.

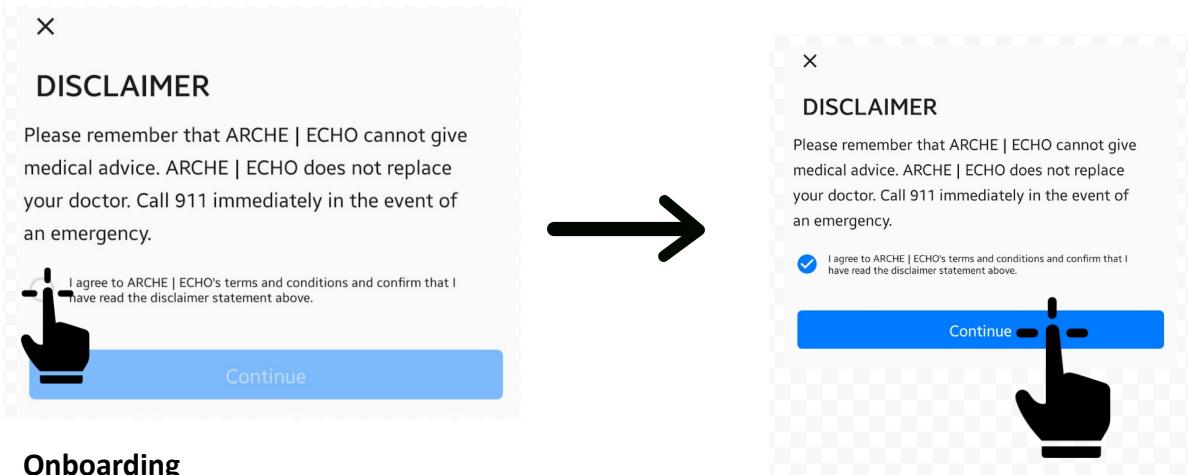


# App Introduction Screens

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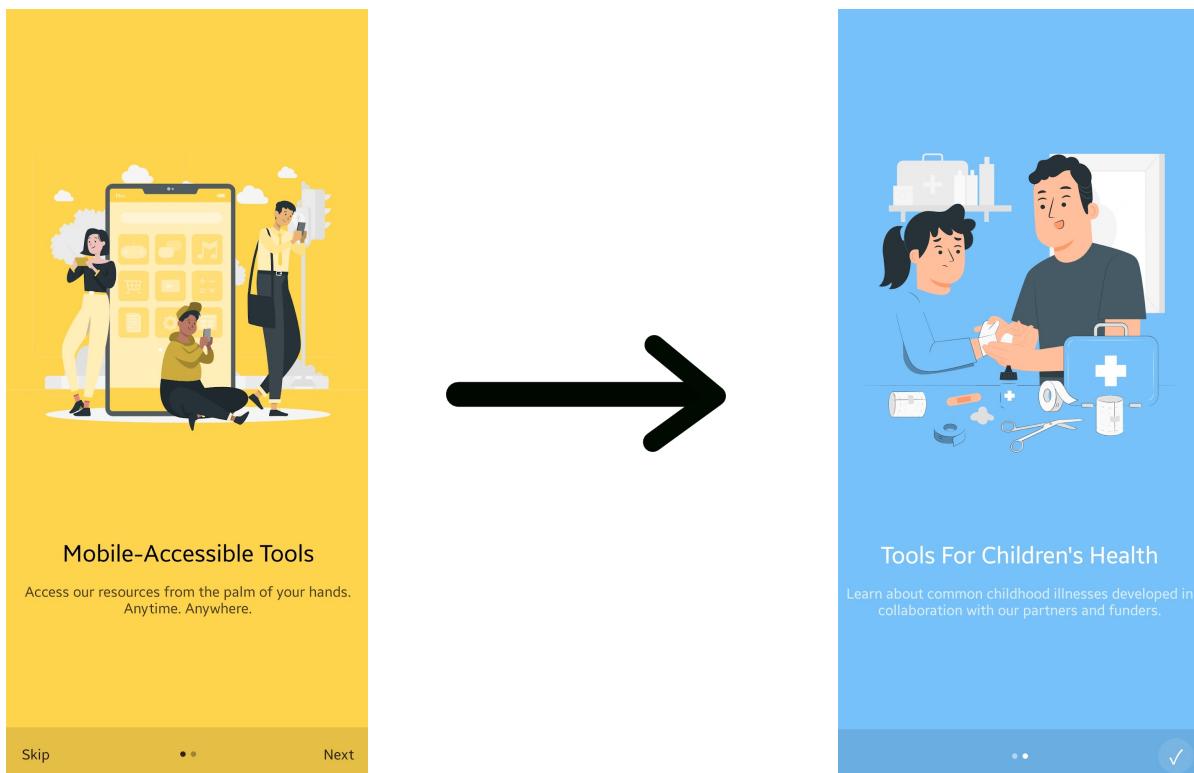
## Disclaimer

After you successfully register a new account with us, you will be asked to **read and accept our app's disclaimer**, before you can use any of the app's functionalities.



## Onboarding

After reading and accepting our disclaimer, you will be shown an **introductory screen** with our app's main purpose. You will be brought to the main menu of our app after these slides.

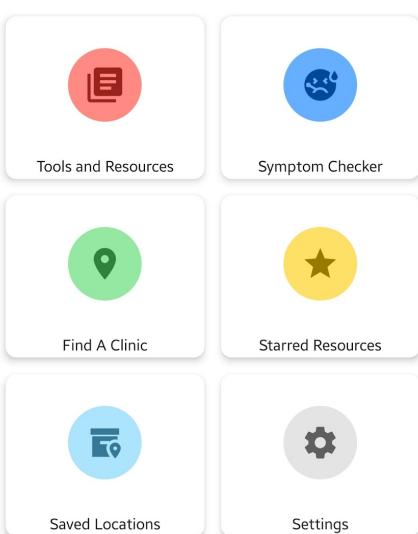


# Menus

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≡ ARCHE | ECHO Home

Good Afternoon, ARCHE ECHO



## Main Menu

This is the main menu. **The main menu will allow you to navigate to every single part of the app.**

While the main menu covers the functions of the app, additional navigational tools can be used while on the main menu. . The navigation bar and the drawer menu features can also be used to navigate around the app. A complete description of these is found below.

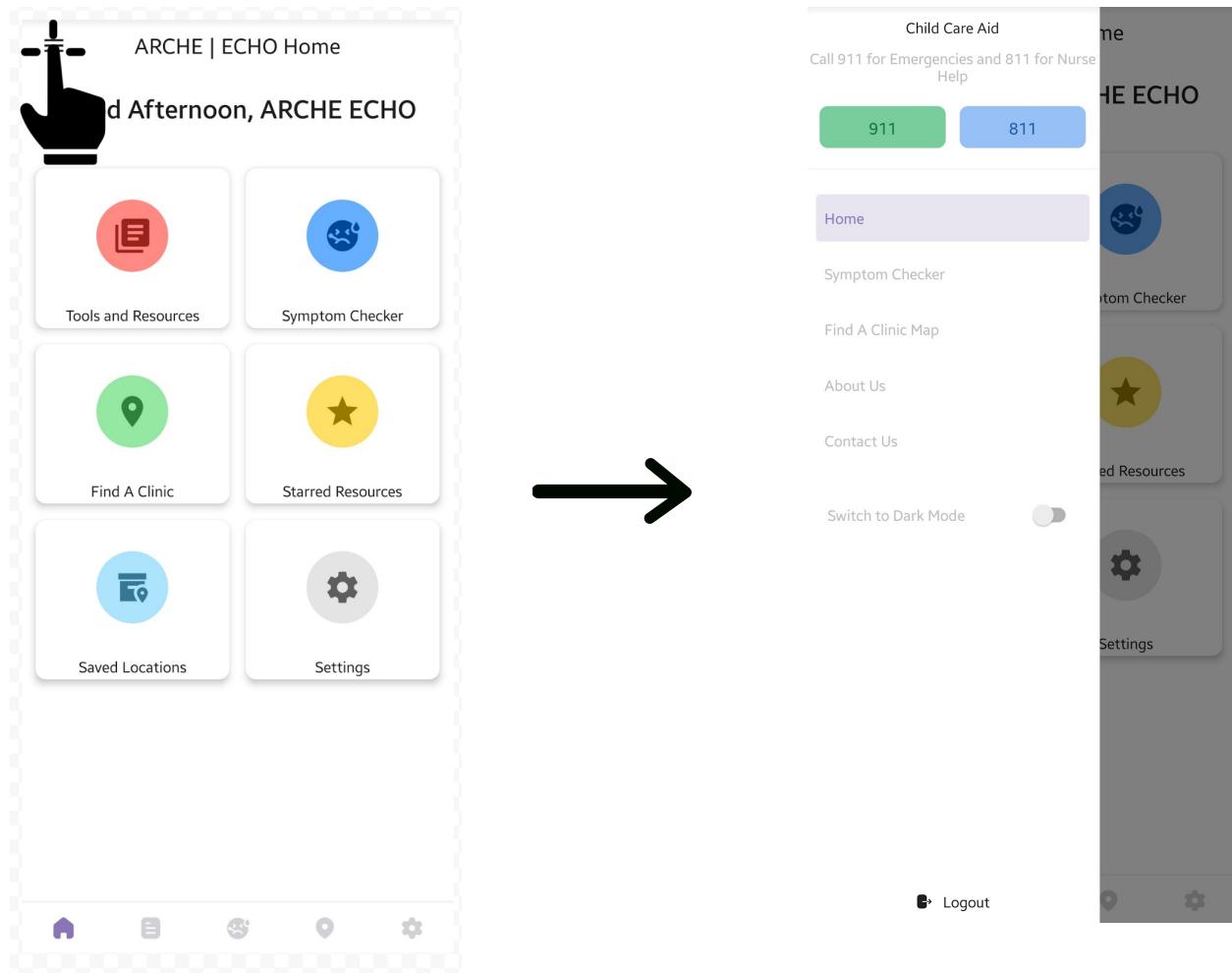


## Navigation Bar

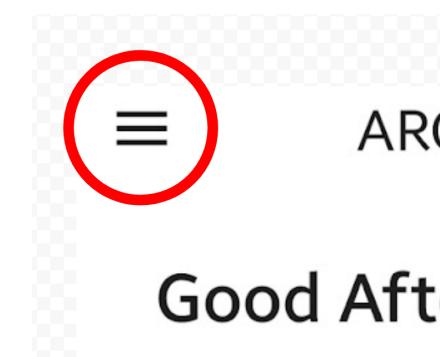


The navigation bar is a persistent menu. You can access and use it from almost every single screen on the app. **By tapping on any of the icons, you will be brought to that respective portion of the app.** The icons, from left to right, represent: (1) Main Menu, (2) Tools and Resources, (3) Symptom Checker, (4) Find a Clinic Map, (5) Settings.

## Drawer Menu

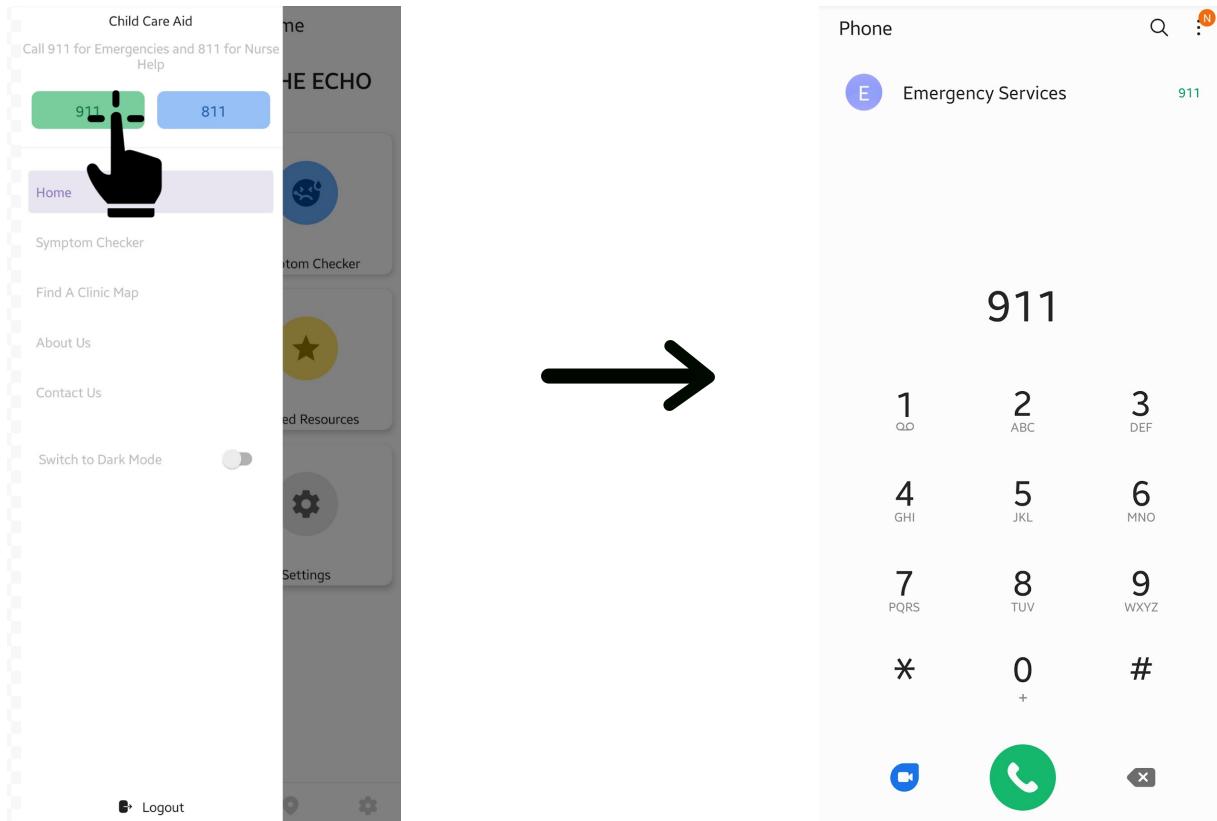


The drawer menu (or the slide out menu) also allows you to **navigate around the app**. To access this menu, tap on the “hamburger stack” in the top left corner of the screen. This icon will always represent the drawer menu in this app.



*This is the “hamburger stack” icon.*

A user can also **tap on either phone number buttons to enter 911 or 811 into their phone's dialer, ready to call by pressing the green "dial" icon.** For example, tapping 911 will do the following on a Samsung device:



Within the drawer menu, you can also **toggle on dark mode or log out of the app.** Dark mode changes the color scheme of the app to be less harsh on the eyes.



# Using Tools and Resources

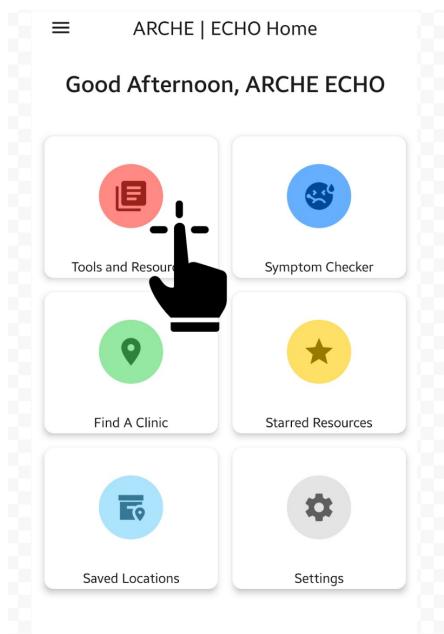
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## Introduction to Tools and Resources

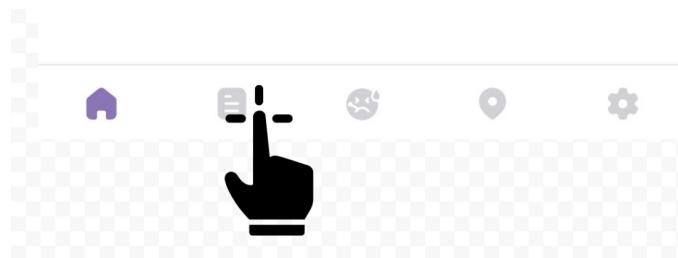
“Tools and Resources” provides users with a database of **evidence-based tools and resources for parents that want to learn more about managing a child’s illness.**

## How to Access Tools and Resources

From the main menu, you can tap on the “Tools and Resources” button found in the top-center of your screen to access “Tools and Resources.”



You can also tap on the “Tools and Resources” icon found on your navigation bar to access “Tools and Resources.”





## Tools Screen

This is the first screen that you will see upon entering the “Tools and Resources” section of the app.

It contains a **list of every tool we have available.**

On top of this list, there is a **search bar** where you can enter words, phrases, or illnesses that you personally want to look for. The app will then try to match your entry with a tool with similar text in its description.

**For the following sections, we will be using the “Bronchiolitis” tool as an example to demonstrate the “Resources” functionality.**

## Resources Screen



### Bronchiolitis

Bronchiolitis is a viral infection, commonly caused by respiratory syncytial virus (RSV). It affects the lower part of the lungs, and is common in babies and young children under 2. It is very contagious.

Video

eBook

InfoGraphic

Cough Cold and Wheeze: How to help manage your child's bronchiolitis

This video provides information on the symptoms of bronchiolitis, how to manage it at home, and when to seek emergency care.



By tapping on any of the tools on the Tools screen, the app will bring the user to that tool's "resources." At the very top of the Resources screen, there is the **tool's name and a short medical description of the tool.**

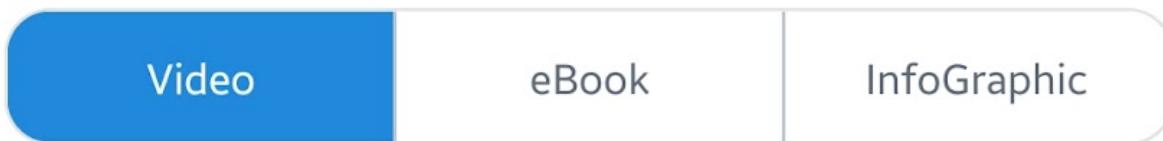


## Bronchiolitis

Bronchiolitis is a viral infection, commonly caused by respiratory syncytial virus (RSV). It affects the lower part of the lungs, and is common in babies and young children under 2. It is very contagious.

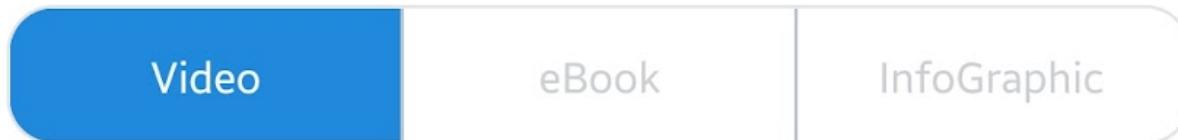
### Resources

Underneath the tool's name and description is the **Resources bar**.



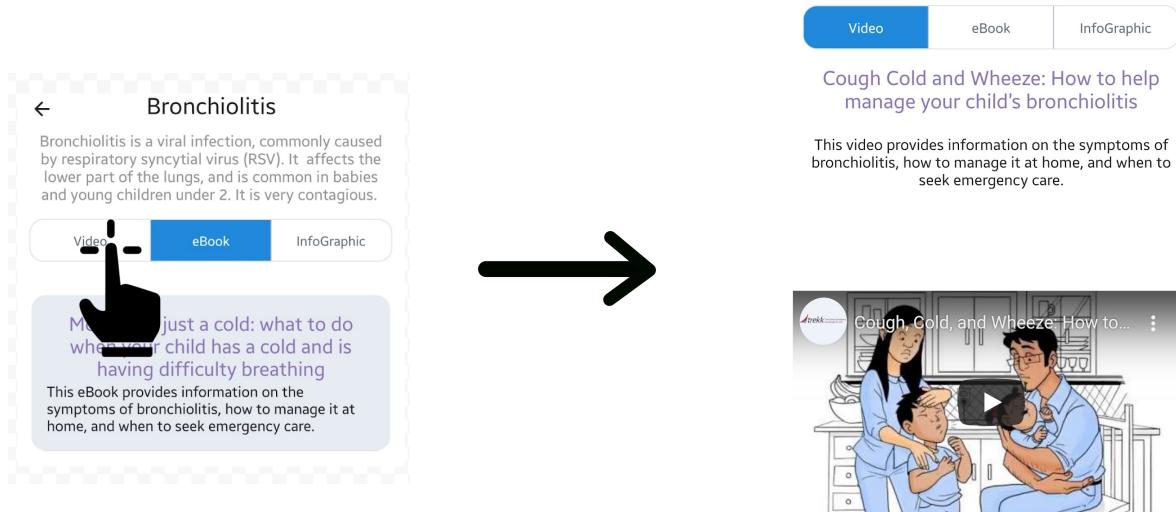
**Every tool has up to 3 types of resources available for use.** These three types are YouTube videos, eBooks in the form of a PDF, or infographics that will be opened in the browser. However, not every tool will have all 3 types of resources, some will have only an infographic, some will have a video and an eBook, etc.

**If a resource were to be unavailable, its text on the resource bar would be greyed out.** The Asthma tool only has a video, here is how its resource bar looks like:

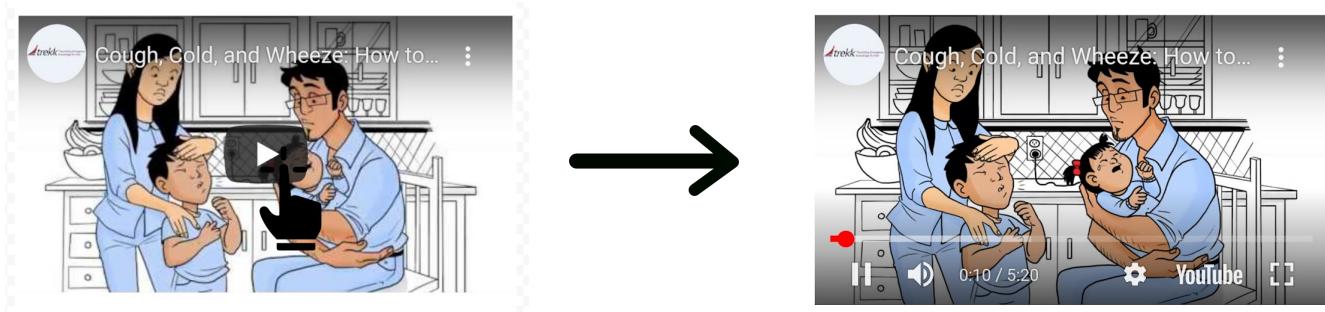


## Resources - Video

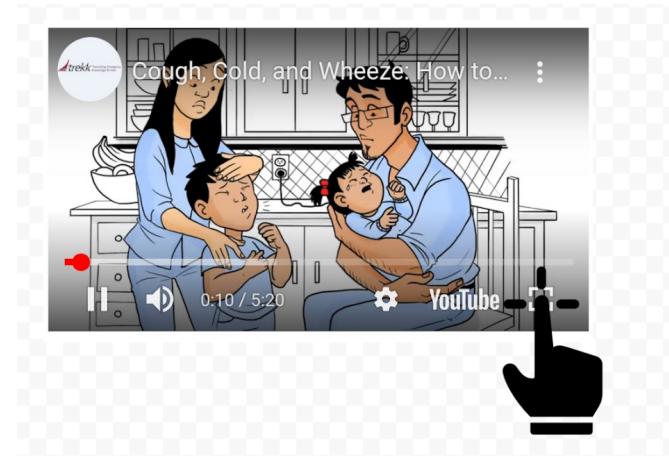
Tapping on the “Video” section of the resources bar updates the screen and displays the Youtube video in a minimized window.



Tap on the play button if you want to watch the YouTube video.

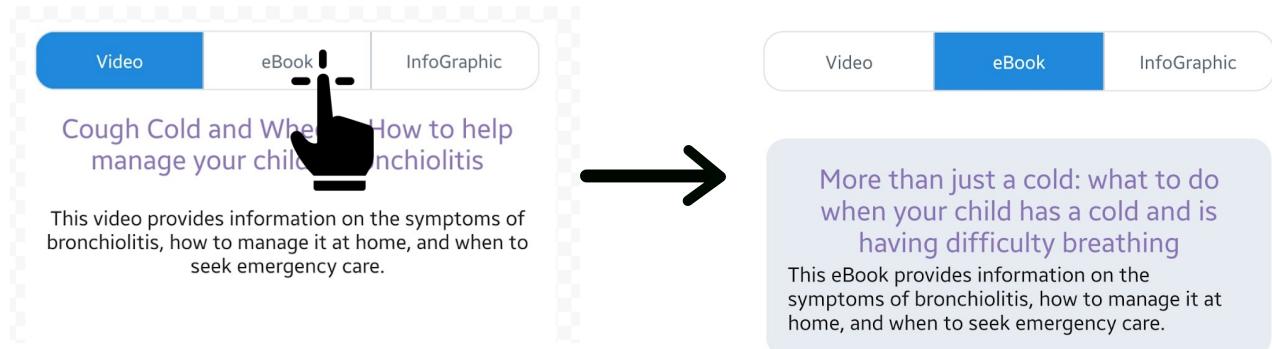


Tap on the fullscreen icon if you would want the YouTube player to go into fullscreen mode. Tap again on the same button to exit out of fullscreen mode.

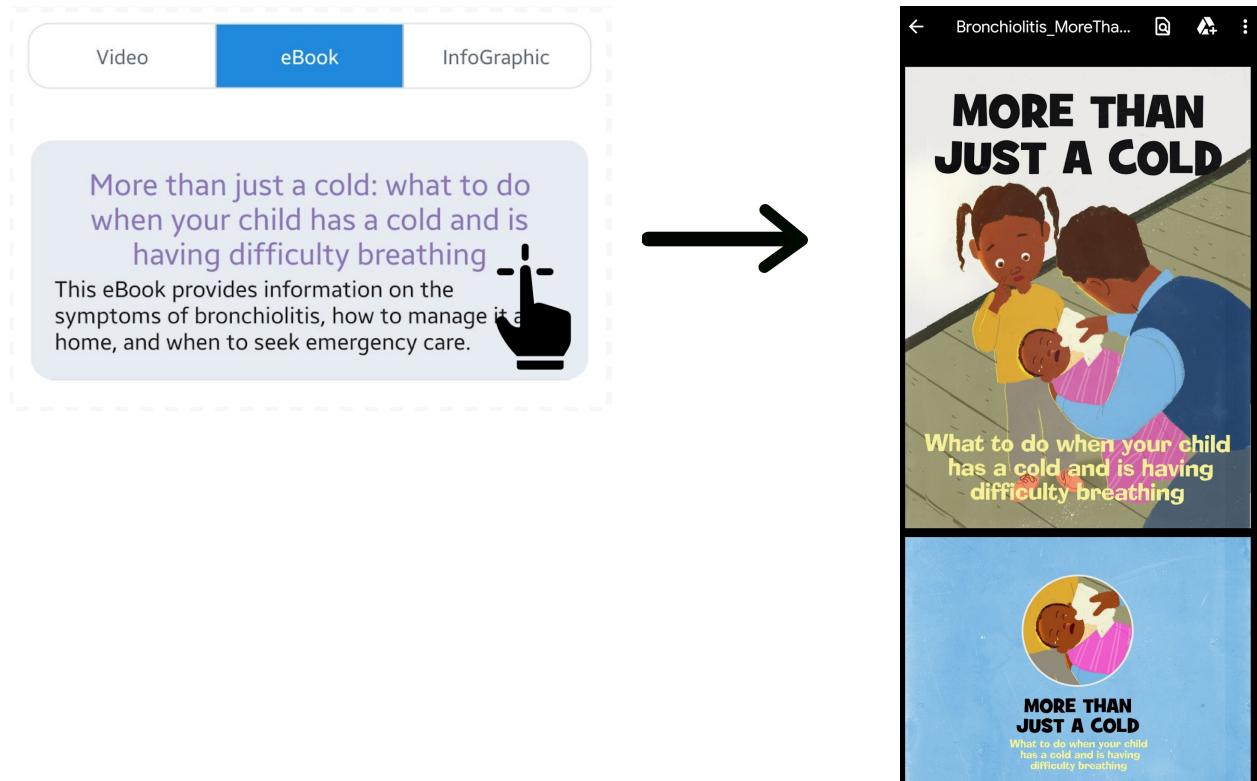


## Resources - eBook

Tapping on the “eBook” section of the resources bar updates the screen and displays an eBook button. This light purple button will display the title of the eBook and also will display a short description of the eBook’s contents.



Click on the light purple button to open the eBook in a PDF viewer. Click the back button in the PDF viewer to return to the app.

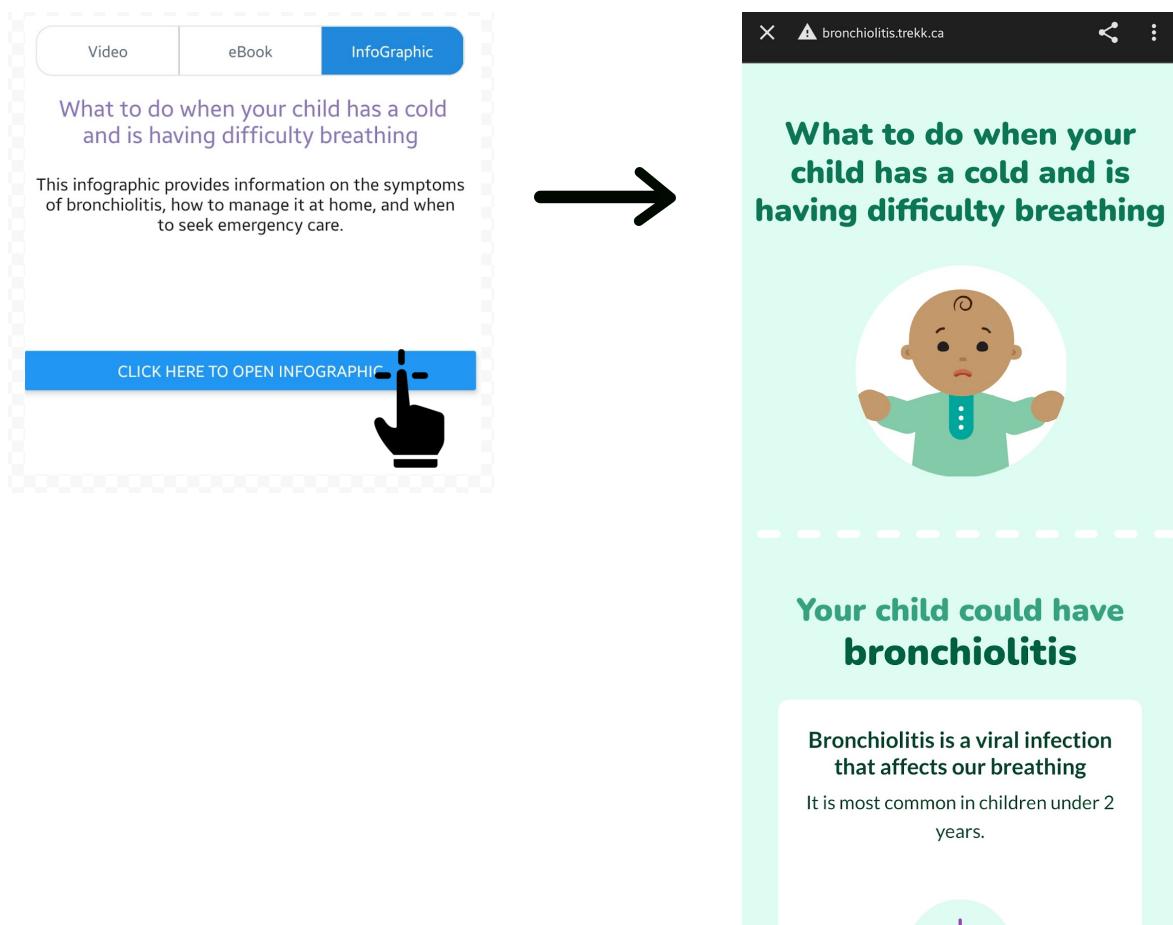


### Resources - Infographic

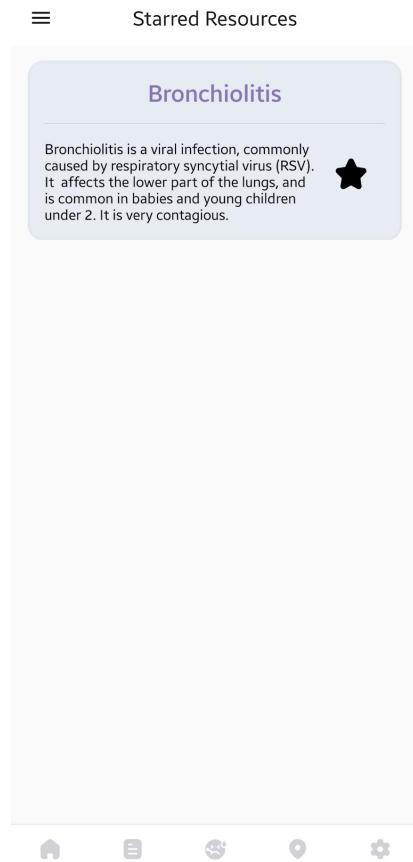
Tapping on the “Infographic” section of the resources bar updates the screen to display the title of the infographic and a short description of the eBook’s contents.



Click on the long blue button labelled “CLICK HERE TO OPEN INFOGRAPHIC” to open the infographic in your browser. Close the browser window to return to the app.



## Starred Resources

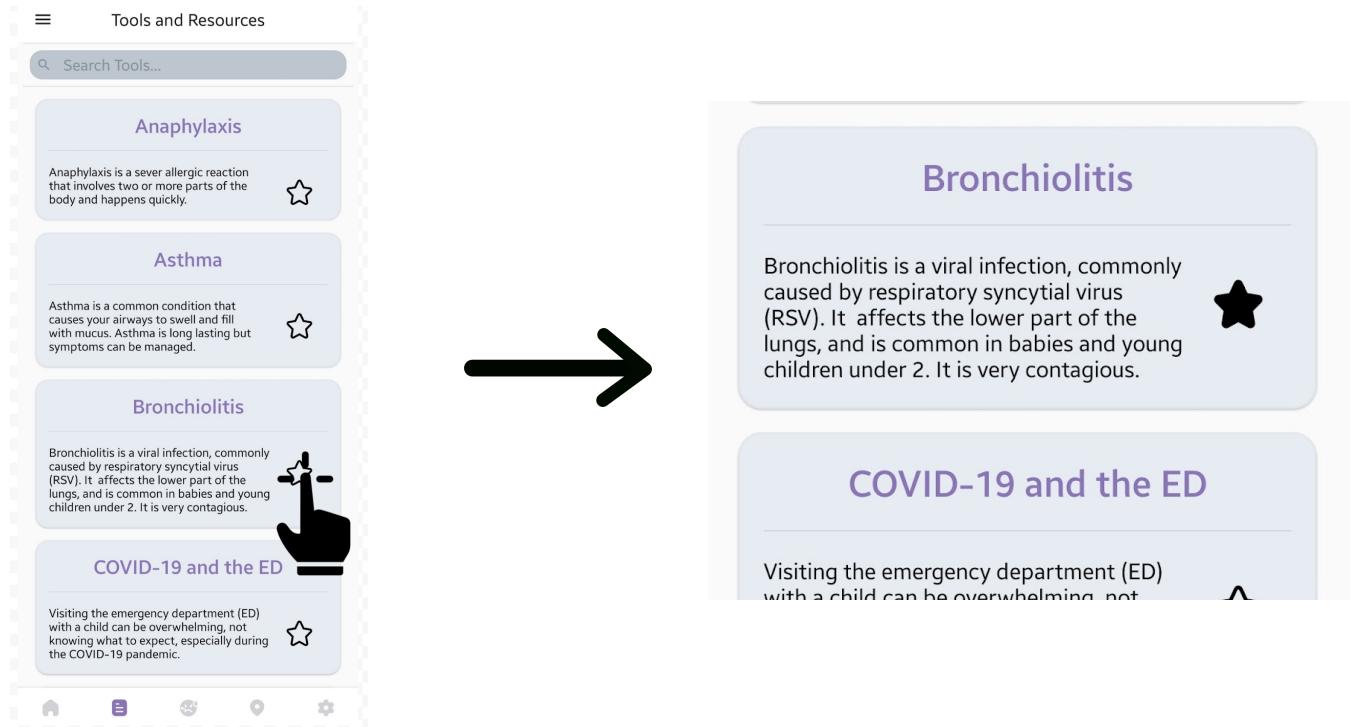


**Starred resources allows users to save their favourite tools and resources.** Guest accounts are allowed to use this functionality but they'll lose their saves if they ever log out of the app or if they ever sign in to an account.

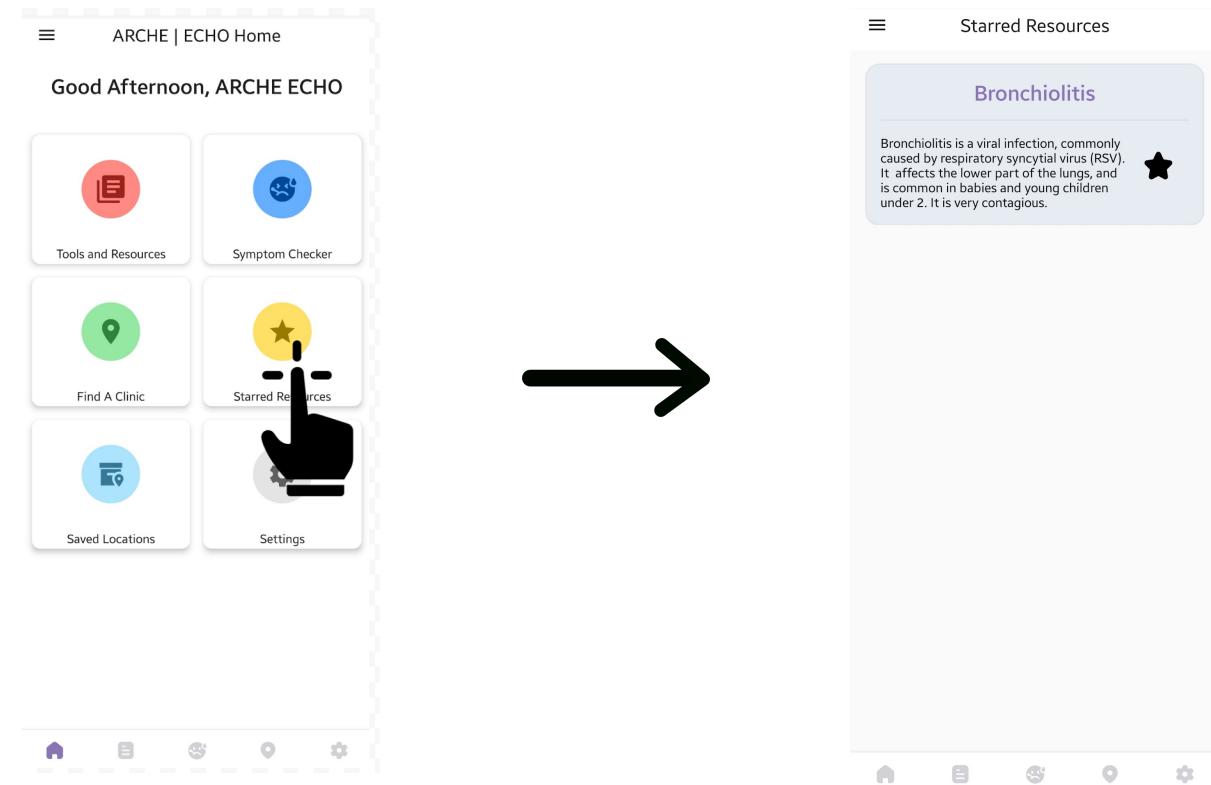
All your “starred resources” are saved in the “Starred Resources” portion of the app. For example, in the picture shown on the left, we’ve gone ahead and “starred” Bronchiolitis.

## Starred Resources - Tutorial and Example

To “save/favourite” a tool and its resources, navigate to “Tools and Resources.” On the left side of each tool in the list, simply tap on the star icon. If it becomes a black colored star, you have successfully “saved” a tool and its resources!



To find or view your newly “starred” Bronchiolitis, return to the main menu and click on the “Starred Resources” button.



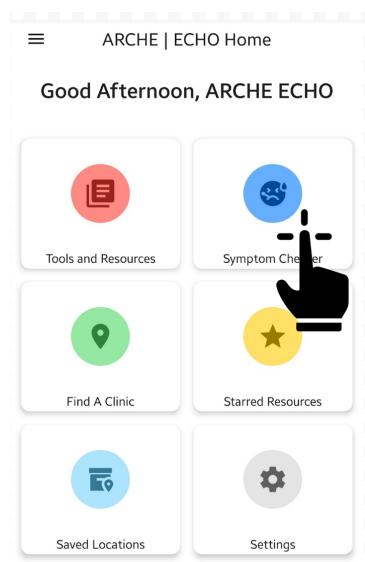
# Using Symptom Checker

## **Introduction to the Symptom Checker**

The “Symptom Checker” was a functionality designed to tackle the unknown. In circumstances where users do not know what exact illness is affecting their child, the “Symptom Checker” can be used to associate symptoms that your child is experiencing with a list of most probable illnesses/causes.

## **How to Access the Symptom Checker**

From the main menu, you can tap on the “Symptom Checker” button found in the center of your screen to access the “Symptom Checker.”



At any time, you can also tap on the “Symptom Checker” icon found on your navigation bar to access the Symptom Checker.



The image shows a mobile application interface for a symptom checker. At the top left is a menu icon (three horizontal lines). The top right displays the title "Symptom Checker". Below the title is a subtitle "Select a body part to get started." In the center is a simple line drawing of a human figure from the waist up, facing forward. To the right of the figure's head is a small red alarm icon. Below the figure is a rectangular button with rounded corners containing the word "Select" and a downward-pointing arrow. At the bottom of the screen, there are two lines of text: "1 or more poop accidents a week" and "agitated, crying, fussy, or irritable". The bottom of the screen also features a navigation bar with icons for a home screen, a search function, a user profile, and a location.

## Symptom Checker

This is the first screen that you are shown after arriving on the Symptom Checker.

The Symptom Checker takes a checklist of symptoms and returns a list of applicable tools and resources that may assist you in better understanding what is affecting your child and also, how to care for your sick child.

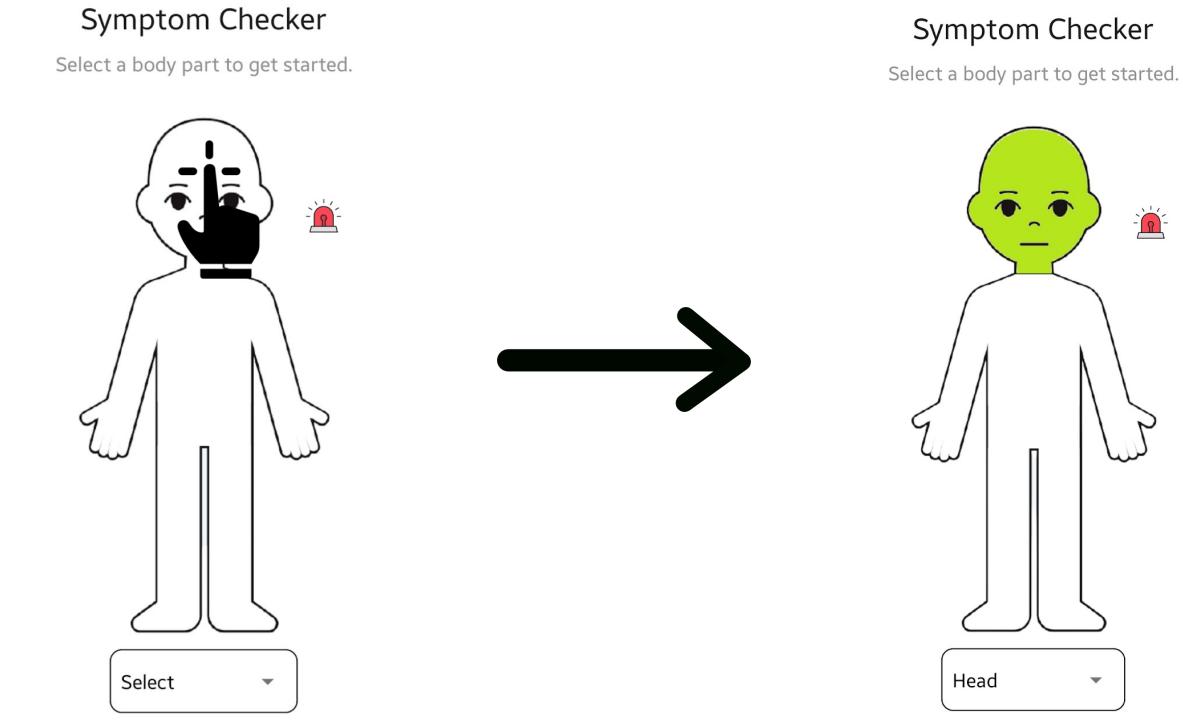
To best understand how the Symptom Checker works, we will be demonstrating an example use case while also at the same time explaining the components of the “Symptom Checker” that we use at each stage of the tutorial.

## **Tutorial - Finding Symptoms Related to Your Child's Condition**

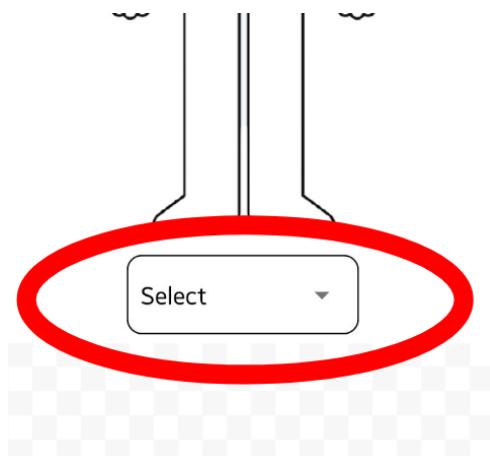
Firstly, there is an **interactive avatar** from which you can select a single body part. You can tap the head, chest, stomach, pelvis, legs or arms on the avatar.

The image shows a mobile application interface titled "Symptom Checker". At the top, there is a large title "Symptom Checker" and below it, a subtitle "Select a body part to get started.". The main feature is a central figure of a human body, facing forward, enclosed within a large red oval. The figure is simple, showing a head with two eyes, a nose, and a mouth, a torso, and two arms and legs. In the bottom right corner of the oval, there is a small icon of a red alarm bell with a yellow light on it. At the very bottom of the screen, there is a white button with the word "Select" in black text and a small downward arrow.

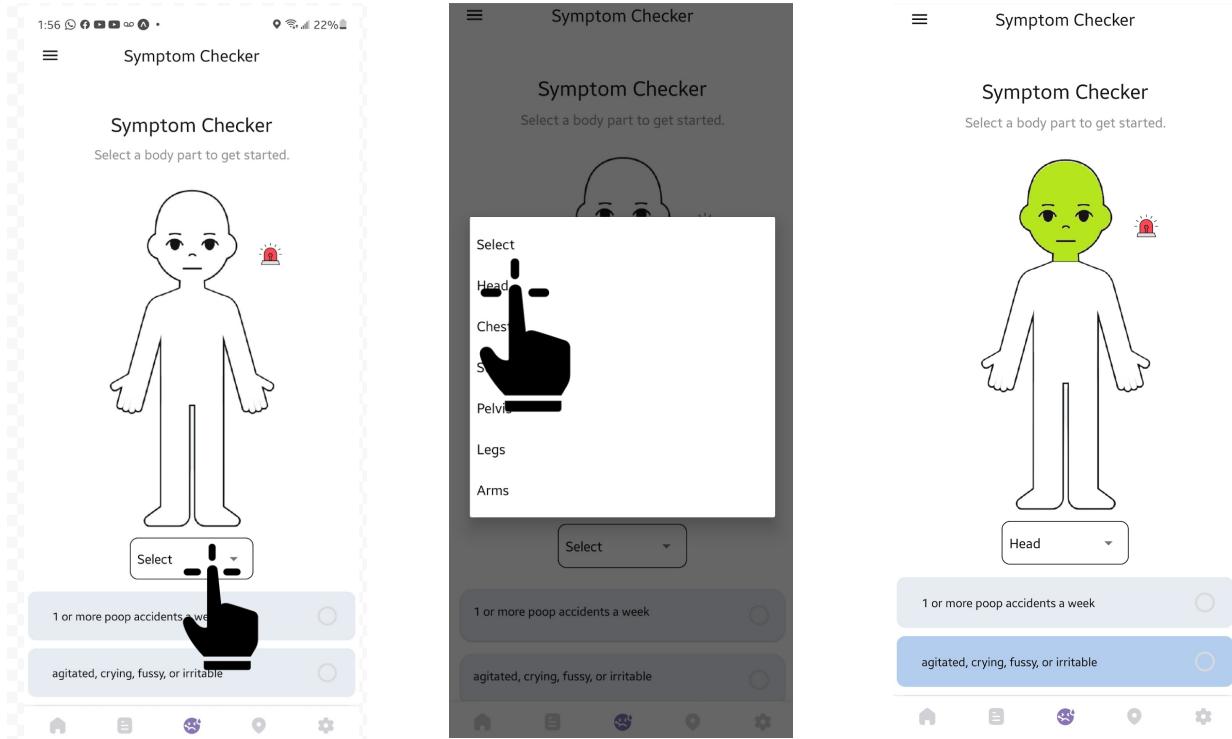
Tapping on a body part will make that body part green, update the selection in the drop down menu, and will also highlight symptoms associated with that body part in the symptom list. We will show tapping the head in the immediate graphic.



There is also a **drop down menu** where you can select a body part from. You're allowed to select either the head, chest, stomach, pelvis, legs or arms like the interactive avatar.

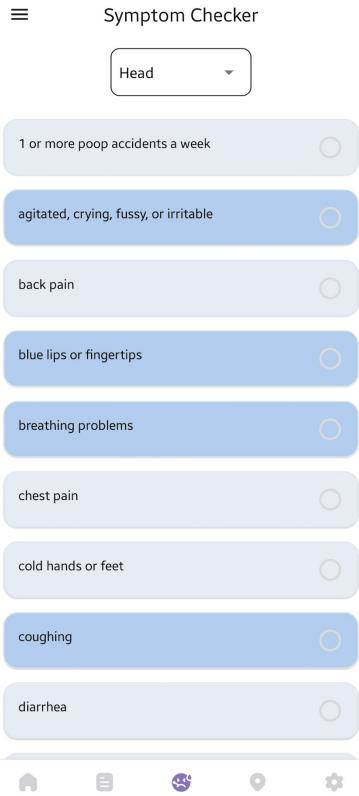


Like the interactive avatar, selecting a body part from the drop down menu will update the interactive avatar (make the body part green) and will also highlight symptoms associated with that body part in the symptom list. We will show selecting the head in the immediate graphic.

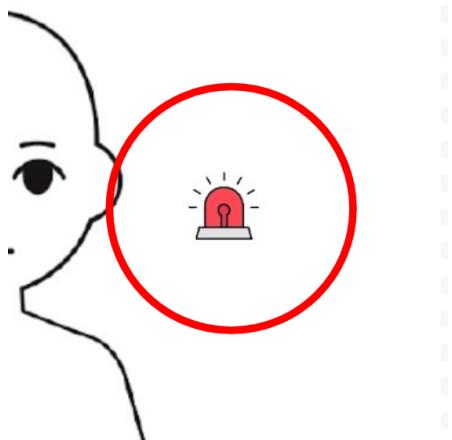


**Once you select a body part with either method, symptoms in the checklist that can possibly be associated with that body part become highlighted.** Note that only one body part can be selected at a time. For example, selecting the head in the drop down menu is simultaneously also registered as a head tap on the interactive avatar and vice versa.

Since we've tapped the head previously, this will highlight symptoms associated with the head. Note that there are more symptoms than the app screenshot below shows--you must scroll down the list to see the rest.



Finally, you also have the option to **tap the “red light emergency” icon** and this will highlight symptoms on the checklist that may require immediate medical attention. Please seek further medical assistance if your child has any of the emergency symptoms.

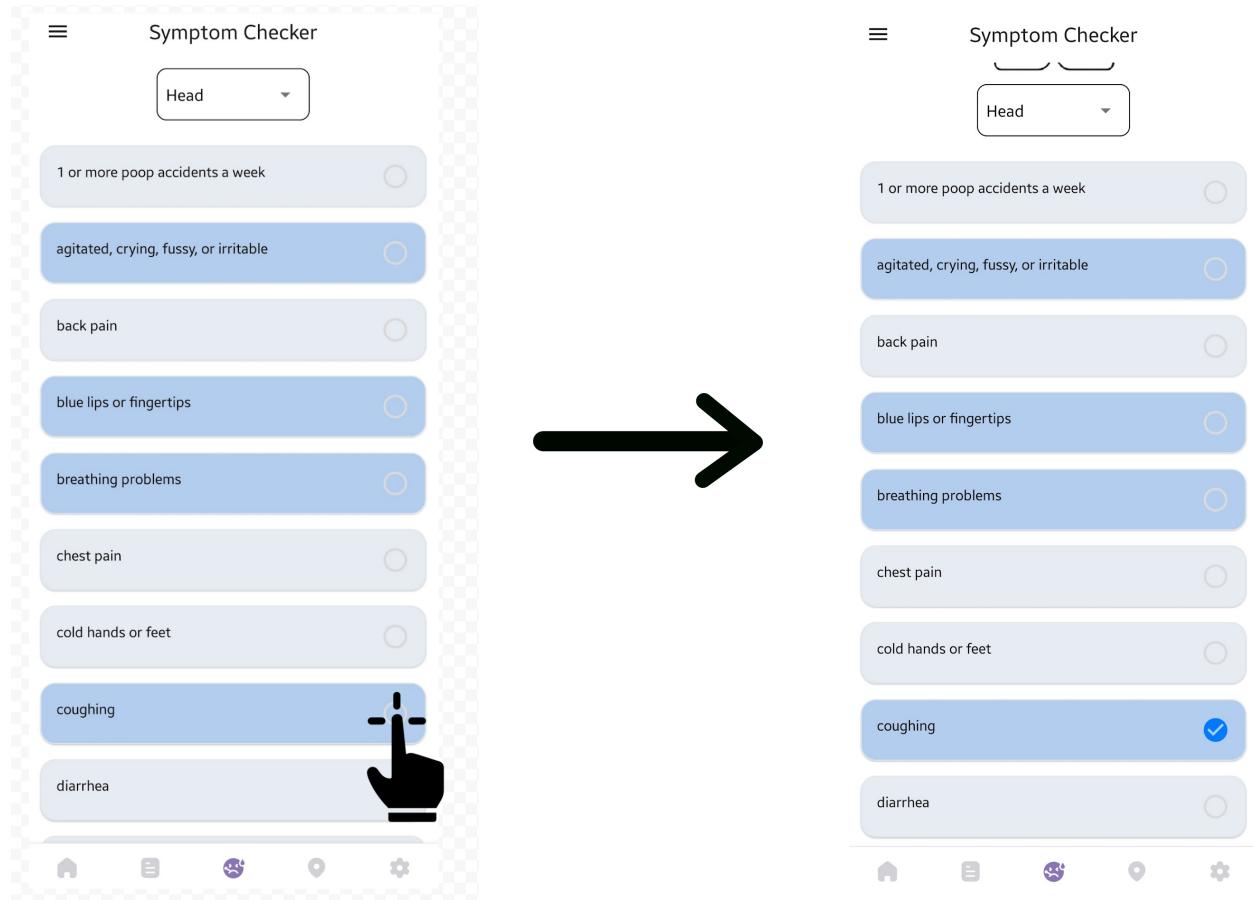


### **Tutorial - Selecting Symptoms from the Checklist**

After selecting the head in the previous section, our symptom checklist is now highlighting symptoms associated with the head.

**Tapping on the empty circles on the right side will check off that symptom.**

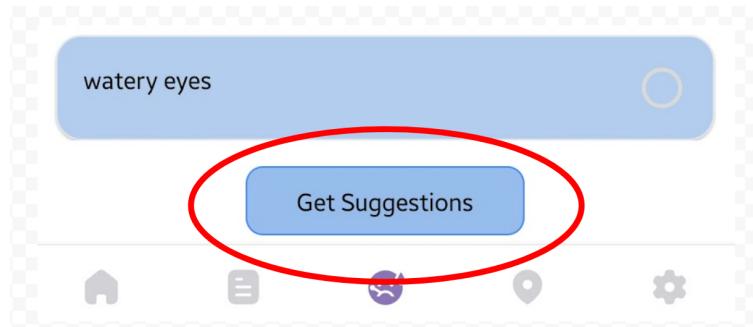
We will select “coughing” in our example.



Alternatively, if you already know exactly what specific symptom is affecting your child, you are also allowed to select the symptoms from the scrolling checklist without using the interactive avatar or the drop down menu.

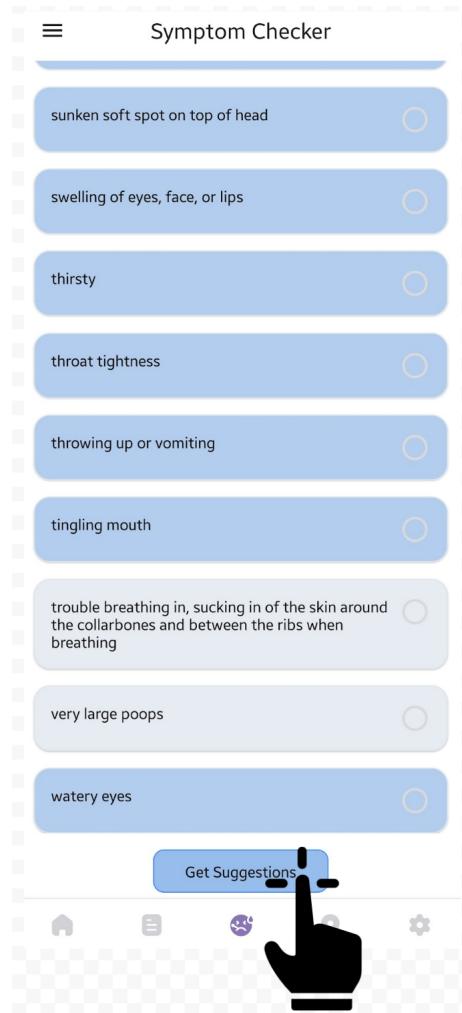
### **Tutorial - Symptom Checker Results**

With the “coughing” symptom selected, we are now able to scroll down to the bottom of the list and successfully use the “Get Suggestions” button.



**Tapping the “Get Suggestions” button will search the Tools and Resources catalogue and then display possible illnesses along with the tools and resources for it.**

We will then “Get Suggestions” for the coughing symptom.



**Shown below is the “Related Causes” screen, it shows the possible causes of your child’s symptoms and also shows a list of tools within our app that you can use. Tapping on any of the items in the list will bring you to that tool’s “resources” screen.**



## Related Causes

Find possible causes below

### Anaphylaxis

Anaphylaxis is a severe allergic reaction that involves two or more parts of the body and happens quickly.

### Asthma

Asthma is a common condition that causes your airways to swell and fill with mucus. Asthma is long lasting but symptoms can be managed.

### Bronchiolitis

Bronchiolitis is a viral infection, commonly caused by respiratory syncytial virus (RSV). It affects the lower part of the lungs, and is common in babies and young children under 2. It is very contagious.

### Croup

Croup is a common respiratory illness caused by a viral infection in the airways. Accompanied by a barking cough and respiratory distress, this illness is most common in children from birth to 6 years of age, peaking at 2 years of age.

*Please refer to the “Using Tools and Resources” section of the user manual for terminology and usage information.*

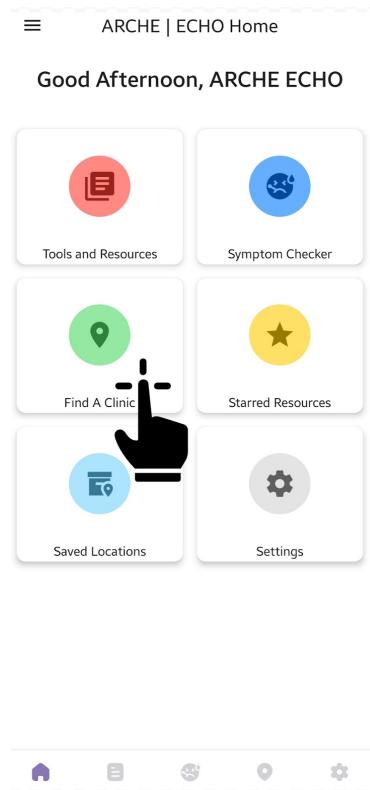
# Using Find-a-Clinic Map

## Introduction to the Find-a-Clinic Map

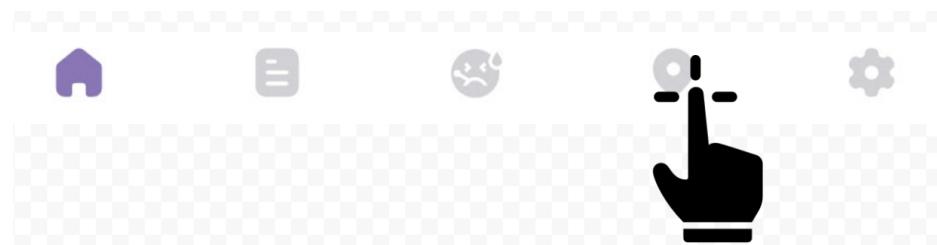
The Find-a-Clinic map was a functionality designed to help users find the medical clinics that are closest to their phone's location. Unlike Google Maps, we filter out unrelated nearby businesses from the start in order to get users the information of medical clinics.

## How to Access the Find-a-Clinic Map

From the main menu, you can tap on the “Find a Clinic” button found in the center of your screen to access the “Find-a-Clinic Map.”



You can also tap on the “Find-a-Clinic Map” icon found on your navigation bar to access the “Find-a-Clinic Map.”



## Find-a-Clinic Map



This is the first screen that you are shown after arriving on the Find-a-Clinic Map.

It uses Google Maps as a foundation, so it also has Google's giant database of registered businesses and locations. Combining that powerful database and the location data of your phone, the app is able to find the closest medical clinics to your location.

By filtering out unnecessary businesses that aren't useful in the context of your child's health, our Find-a-Clinic map is much faster and more intuitive than Google Maps.

Make sure you have given the app permission to use your location in order to use this function of the app.

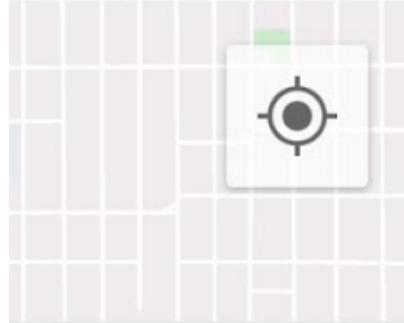
## Map Component

The component of the screen in the center is our implementation of Google Maps and as such, it has many of the same functionalities. You are able to zoom in and out, move the map in any direction, see markers for businesses or public locations, and also see names of neighborhoods, cities, etc.



*This is the map component.*

In the event that you've lost your current location, you can click on the "centering" icon on the top right to recenter your map on your location.



### Slide-Up Drawer

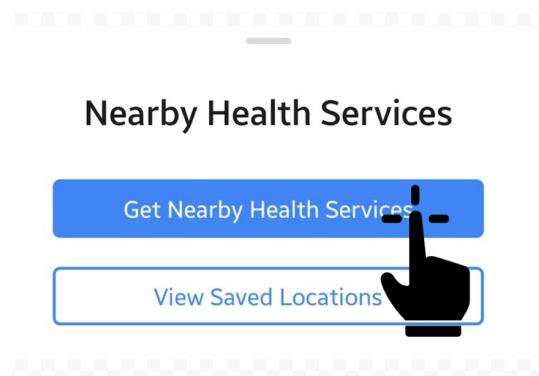
#### Nearby Health Services

Get Nearby Health Services

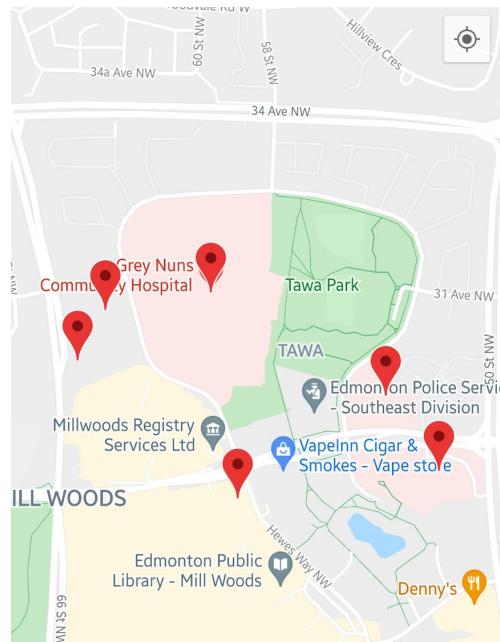
View Saved Locations

*This is the slide-up drawer.*

By tapping on the "Get Nearby Health Services" button, the app is able to read your current location and fetch the closest medical clinics to you.



It will then create red markers on the map associated with the medical clinics as shown below. You can pan around the map to find them...



Or you can also slide up on the drawer to pull up a comprehensive list of the clinics closest to your location.

≡ Find A Clinic Map

**Nearby Health Services**

[Get Nearby Health Services](#)

[View Saved Locations](#)

EveryDay Medical Clinic at 48 st

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2 mins away by car - 1.2 km

Centre D'Accueil St. Laurent Enr

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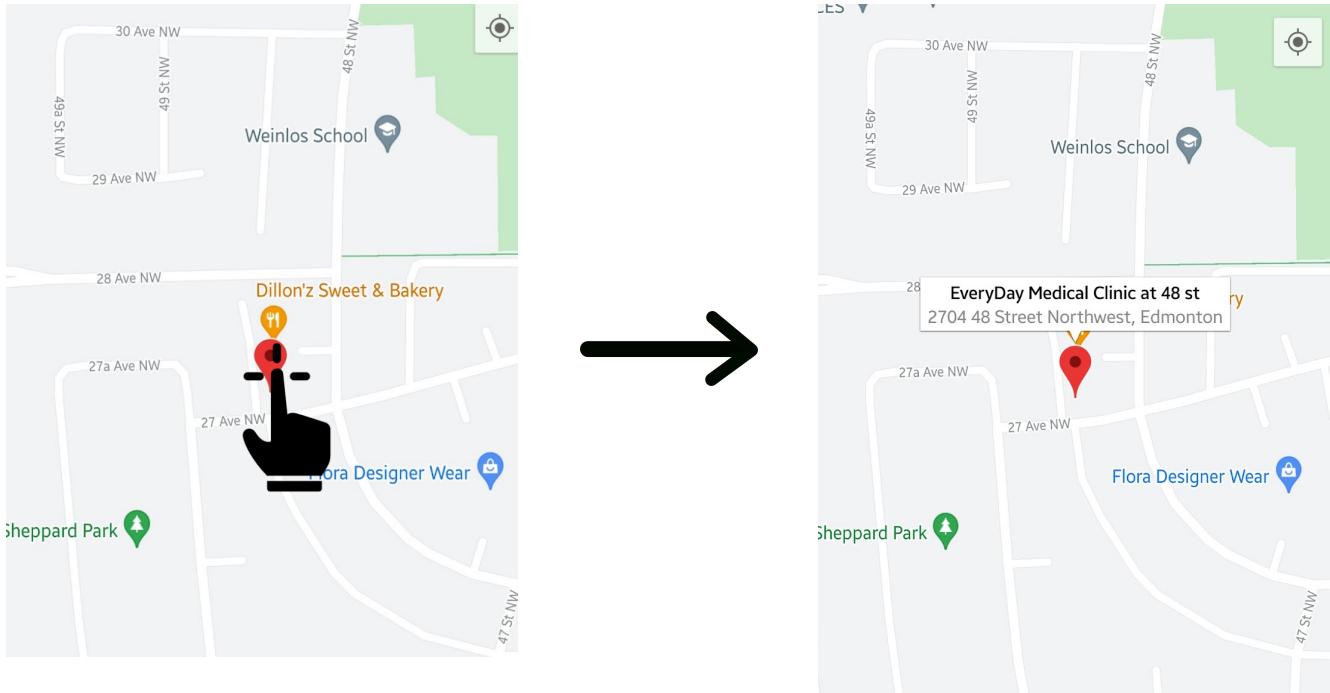
2 mins away by car - 0.9 km

PDG (Millwoods Good Samaritan)

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2 mins away by car - 1.0 km

Tapping on a clinic in the list focuses your map on that marker (works like the centering icon).  
Tapping on a marker gives you the clinic name.

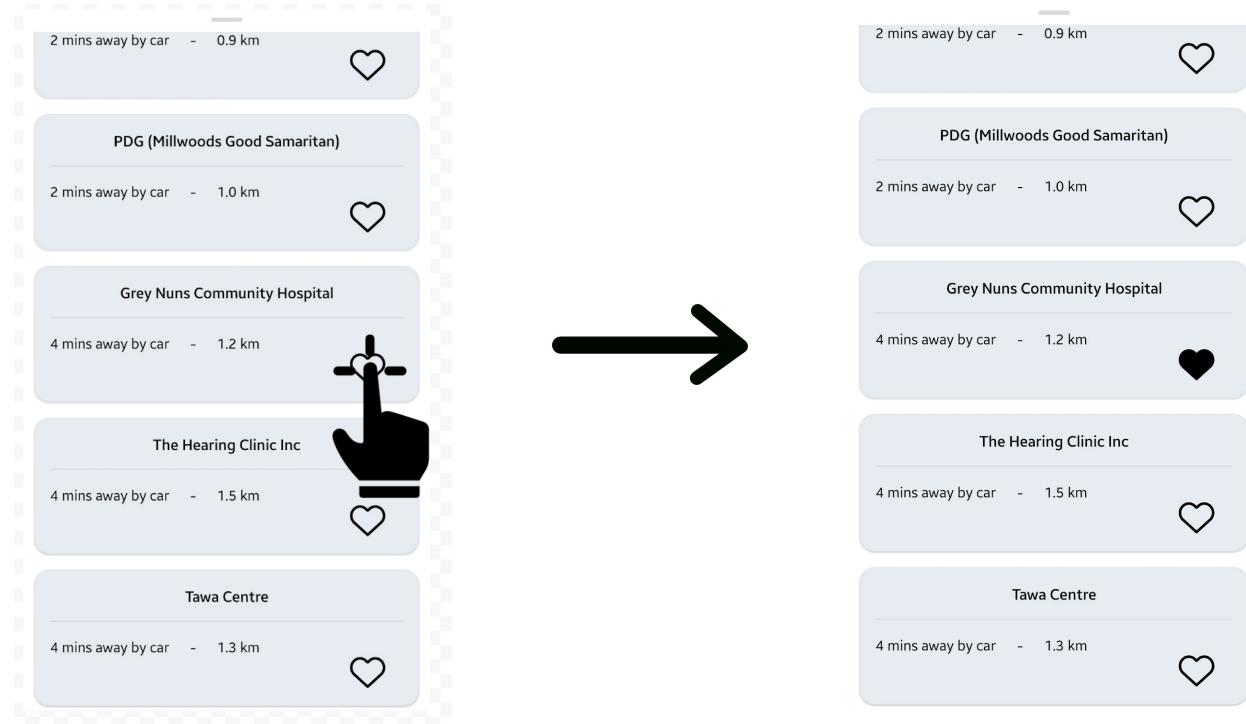


## Saved Locations

**Saved Locations** allows users to save their choice of clinics from the Find-a-Clinic Map. Guest accounts are allowed to use this functionality but they'll lose their saves if they ever log out of the app or if they ever sign in to an account.

## Saved Locations - Tutorial

To save a location, navigate to the “Find-a-Clinic Map.” On the left side of each location in the list, simply tap on the heart icon. If it becomes a black colored heart, you have successfully “saved” a location!



They can be accessed while on the Find-a-Clinic Map (and then tapping the “View Saved Locations” button) or they can be accessed from tapping on the Saved Locations icon in the main menu.

**END OF USER MANUAL**