

MyChild^{CMC} is a home monitoring and care coordination smartphone app that is designed to support parents in tracking their child's common symptoms. It will notify you when your child is experiencing abnormal symptoms. If used regularly, you will be able to detect a decline in your child's vitals and overall health before it gets out of control, which may help you and your provider make treatment changes to help prevent an emergency department or hospital visit.

The MyChild^{CMC} app is available on both iOS and the Android operating system. Please search "MyChildCMC" in your phone's app store and download the app.

After downloading the app, you can login with the username and password you created while setting up your account.

The first time you log into the app, you will see a Parent/Caregiver Demographic survey. This survey is to collect demographic information on you as your child's caregiver, and helps us continue to improve the app for use by parents (or older patients) in all settings. All of the questions asked in this survey are optional, so if there is any question you do not wish to answer, you can skip it. You can choose to complete the demographic survey now, or complete it later. There is also a "Profile" to complete. The profile includes important information about the patient, such as clinic, phone number, and email; and similar information for the parent/guardian. In the Profile you are also allowed to set up alerts and other functions of the app. There is an opportunity to take a picture of the patient which will always be available to their physician when they log onto the app to ensure they know exactly who's data they are reviewing.

You will then be directed to the Vitals Form. It has 12 questions and should not take more than 5 minutes to complete (including measuring your child's vital signs). You can submit the Vitals Form once every day for your child. We recommend filling it out near the end of the day, as some of the questions require you to answer based on how your child was during the entire day.

Questions 1 through 4 ask you to measure your child's temperature, heart rate, respiratory rate, and oxygen saturation (see the end of these instructions for more information on measuring vital signs). These require you to use some devices you may have around your home, like a thermometer, a stethoscope, or a pulse oximeter. For Question 4. Oxygen Saturation, there is an option to indicate whether or not your child has started or increased supplemental oxygen. Selecting Yes will open two additional questions for you to provide details on what your child's usual oxygen amount was and what you changed it to.

Question 5 asks about your child's pain level for the day on a scale of 0 to 10 with 0 indicating "No Pain" and 10 indicating the "Worst Pain Possible."

Questions 4 and 5 can be answered using the sliders by dragging the knob to the desired value. Or, you can also type in the value in the value box below the sliders using your keypad.

Question 6 asks about the number of seizures your child has had that day. The answer options for this question are framed by your child's own baseline level of seizures (i.e., usual number of seizures, fewer

than usual, more than usual, etc.). If your child does not have seizures, you can check the “Not Applicable” box

Clicking the Next button on the app brings you to the second and final page of the Vitals Form.

Question 7 asks you about your child’s Mental Status and Question 8 asks you about your child’s fluid intake status for the day.

Question 9 asks if you, as the caregiver for your child, are personally worried about your child’s health for the day. If you answer “worried” or “very worried,” additional questions will pop-up so you can provide details on what exactly is concerning you about your child’s health for the day.

Question 10 is an optional comments field for you to keep track of anything else that is not in the form or provide any additional information on how your child is doing for that day. Comments entered here can be reviewed on the graphs to be described below.

Question 11 asks you to think back on days when your child was doing well and evaluate if this day is also one of those good days for your child. This helps the app to automatically define your child’s baseline vitals, which is used to help create your child’s individualized alerts.

Finally, Question 12 gives you the option to upload a picture of your child into the app. This is an option if you’d like to keep track of your child’s physical appearance from day to day. This could include monitoring your child’s surgical, tracheostomy, or gastric-tube sites, or rashes they may have developed, etc. If an alert goes to your case manager, s/he will be able to view this picture to help in their decision-making. It is important to note that only the last 5 pictures are stored in the app; make sure any pictures you want to keep are also stored on your phone.

After you have answered all of the questions in the vitals form, you can submit your responses. Submitting the responses will bring you to the Vitals Summary or Graph Summary page. This page gives you an overall idea which measures are good or not good for your child and which can be improved.

From the Vitals Graph page, you can swipe through individual graphs for your child’s various measures (temperature, heart rate, respiratory rate, pain level, oxygen saturation, feeding status, seizures, and mental status) and view the trend over time (1 week, 1 month, or 3 months) for each of the measures (click on ‘time frame’ at top right). Each graph also includes daily data points, which you can click on to see what value was entered for that day. There are additional symbols that may appear identifying any comments you have left, or hospital admissions associated with a given data point.

Clicking the menu button at the top left-hand corner of the graph allows you to view the different pages of the app.

In the app menu, you can choose the “Profile” page to view, edit, or change your password or other settings. You can also view the last 5 pictures you have uploaded in the vitals form on the Recent

Pictures page. Clicking on “Demographic Info” will let you view the demographic survey you filled out while first logging you in.

Now you are ready to start using the MyChild^{CMC} app! Remember to use the app on a daily basis to get the greatest benefit. To help you remember to use the app, it will send you an automatic text and/or email reminder (depending on which you selected) to submit your child’s vitals into the app every day at 7:00 PM.

Also remember to periodically check for MyChild^{CMC} app updates in your phone’s app store to make sure you have the latest version.

Here are some helpful videos on how to measure temperature, heart rate, and respiratory rate (also located on the “About MyChildCMC” page:

A Guide to Pediatric Vital Signs | Healthline

<https://www.healthline.com/health/pediatric-vital-signs>

How to Read your Child’s Vital Signs | WebMD

<https://www.webmd.com/children/children-vital-signs#1>

Vital Signs | Johns Hopkins Medicine

<https://www.hopkinsmedicine.org/health/conditions-and-diseases/vital-signs-body-temperature-pulse-rate-respiration-rate-blood-pressure>

Please contact the MyChild^{CMC} Research Team if you are experiencing any technical difficulties with using the app or have any questions. **We are always happy to help!**