

Improving the Early Childhood Education Application Process Experience



United Way
for Southeastern Michigan



Final Report

SI 487 Capstone 2020

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Executive Summary

Key Takeaways

Our team designed a login feature so that parents who have applied to early childhood education programs in Metro Detroit can quickly check their child's application status and upload documents. We also designed a map for parents to view information and gain context about the different facilities. These features will live on the United Way for Southeastern Michigan website.

1 *Research*

We conducted a heuristic evaluation, a competitive analysis, and we also conducted interviews with parents who have applied to Head Start programs. This research informed our decision to focus on bridging the communication gap during post-application interactions, along with emphasizing clear language and an easy-to-use mobile interface.

2 *Design*

We began by sketching ideas, and then we moved into wireframing. Before transitioning to high fidelity prototypes, we narrowed the scope of our designs (which were initially encompassing a map feature, desktop and mobile designs for an application status feature, and communication scripts) to focus on the mobile application status feature and a design for a "Find a Center" map page.

3 *Validation*

During the Validation phase, we sought to assess how easily users could accomplish tasks while using our designs. This involved conducting usability tests and surveys where we asked participants to rate the difficulty of tasks. Insights from this research lead to adjusting our final designs to include more icons, a revised flow for uploading documents, and additional help text to clarify requirements.

Next Steps

UWSEM aims to incorporate our designs into their redesigned website over the next year.

Additional research and recommendations include:

- Consider what happens to users' information after one school year, and how to allow them to apply again
- Clarify that users are not required to upload documents online; they can still bring them in person
 - Consider how cases will be managed if applicants do bring in documents in person - how will these appear in their account?
- Conduct additional research on what Facility-facing accounts will require

Introduction

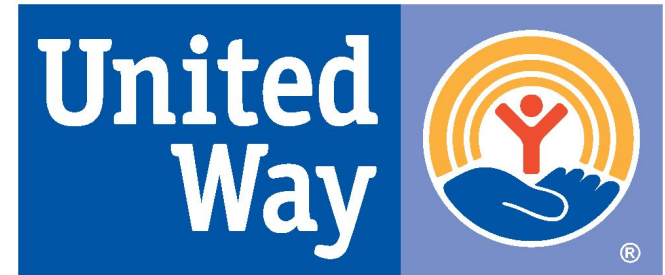
Client Mission

United Way for Southeastern Michigan (UWSEM) is a leader in community engagement; through volunteerism and advocacy efforts, the organization works to create positive outcomes for individuals and families. UWSEM's mission statement is "To mobilize the caring power of Detroit and Southeastern Michigan to improve communities and individual lives in measurable and lasting ways." Currently, the organization upholds the integrity of their mission and guiding principles by focusing on three main areas: education, economic prosperity, and health.

Project Background

United Way recently acquired DetroitHeadStart.com. Detroit Head Start provides early education to low-income families. Families can apply for early childhood education programs through an application on their website. United Way is currently working with EarlyWorks LLC, a strategy and insights consulting firm, to revamp this application and move it into the United Way website. The new application will be called Connect4Care Kids.

Our role was to help create a seamless eligibility and application tool for families who are looking to connect to early education services. Our client was looking for us to investigate and offer recommendations on the overall user experience for the application process and site design.



United Way
for Southeastern Michigan

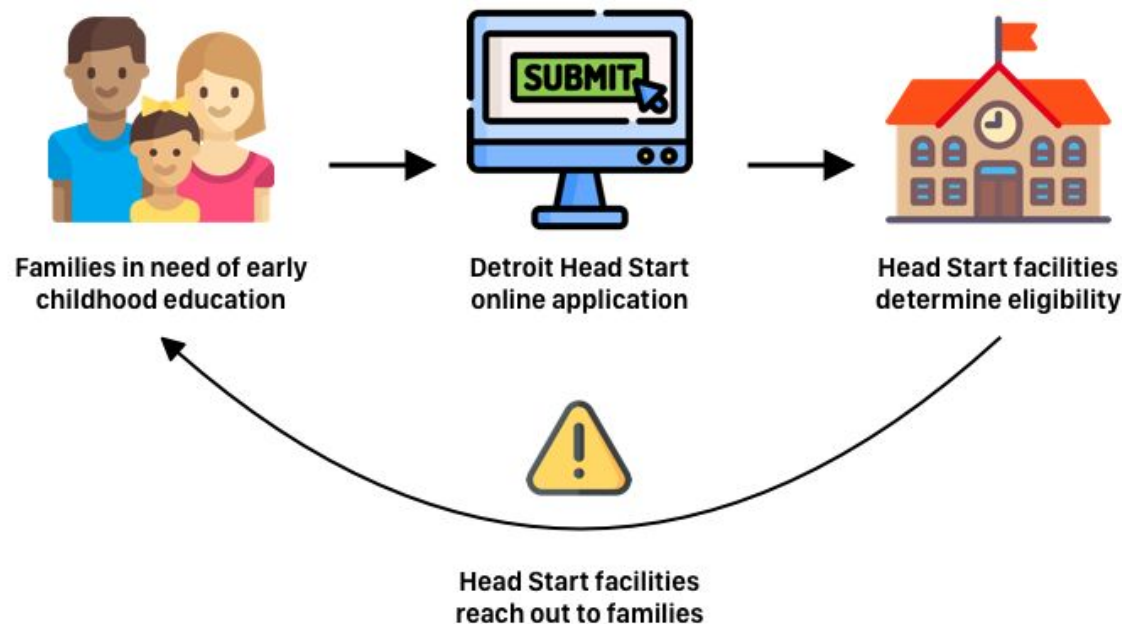


The Current Application Process

Issues in post-application communication

In the current post-application process, once a family completes the application on DetroitHeadStart.org, their application is sent out to the many different child care centers. If the family is eligible, specific centers reach back out to the family.

However, through initial stakeholder conversations, we learned that a big pain point for parents and guardians was in post-application communication, so we sought out to discover why.

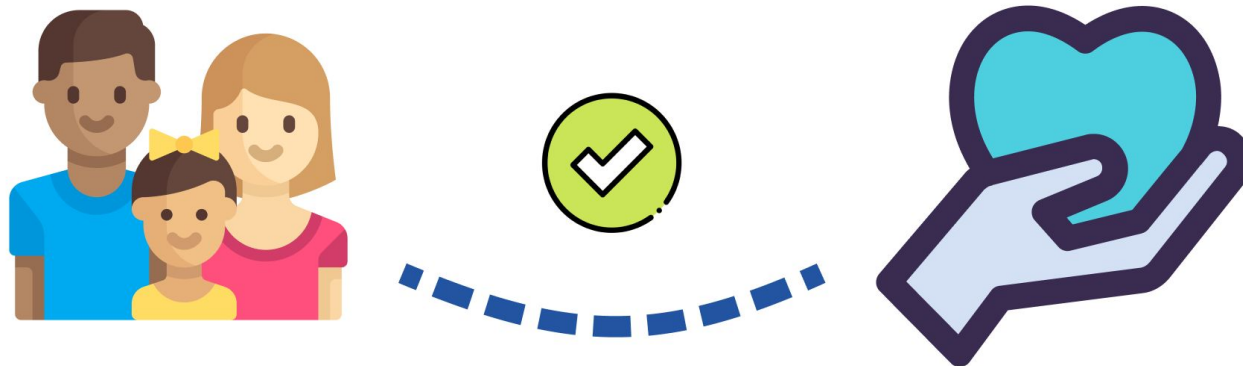


Project Goals

Create a seamless eligibility assessment process

AND

Develop a stronger connection and discover effective means of communication between Detroit Head Start facilities and Detroit families



Research Process

RESEARCH GOALS

In order to inform the design of the new common application tool, we conducted research on the current application process.

Our goals were to:

- Understand the experience guardians must go through to enroll in a Head Start program
- Understand what parents' and guardians' ideal application process looks like
- Discover opportunities for effective means of communication between United Way, Head Start, and applicants

To answer our research questions, we conducted a heuristic evaluation, a competitive analysis, and user interviews.

Heuristic Evaluation

Purpose

Completing a heuristic evaluation helped us understand part of the experience that guardians currently go through when applying to Head Start programs. It also gave us insight into how parents may currently interact with the Detroit Head Start website (specifically the application page) and what areas may be problematic for them. We sought to identify areas where the current application process falls short in usability, and based on our observations, we've provided recommendations for the new application tool.

Methodology

We utilized Nielsen's 10 Heuristics for User Interface Design as the basis of our evaluation. Additionally, because the digital application process is a form, we kept in mind best practices for forms.

We used Google Sheets to compile our observations. After each team member completed an individual evaluation (clicking through the application process, noting any issues, and ranking those issues based on severity), we compared our evaluations and developed recommendations.

Key Recommendations

Group related sections together and add a header describing the section. This allows users to quickly change a specific field by helping them remember which section it belonged to.

Use a progress bar, something to indicate how far along you are.

Use a more common format for entering dates: light text in text box indicating month/day/year or just use three text boxes with slashes that follows traditional XX/XX/20XX.

In the introduction of the application, **give applicants an estimate wait-time** that they could expect for a response. Could send a follow up email to applicant confirming their application status and saying when they can expect a response from a facility.

Make sure answer option types (checkbox/radio buttons) **and questions make sense together.**

Competitive Analysis

Purpose

The purpose of conducting a competitive analysis was to evaluate other websites' application processes. Our goal was to gather more helpful insights on how to build an effective application tool, how to facilitate the process of matching families with a facility, and what exceptional design looks like for websites with a similar goal.

Methodology

We searched for other early childhood education initiatives who are utilizing application tools as a part of their services. As we branched out for more indirect competitors, we also looked for more successful uses of application tools across different business fields.

After compiling a list of the programs/businesses we found, we developed a set of assessment criteria, including: **ease of application process, user feedback, transparency about eligibility, and number of steps to apply.**

Key Findings and Recommendations

Questions are typically grouped into categories (i.e. children's information, parent's information, address/location information)

Other sites allow for **unique applications per submission** with regards to program and location preferences

Within the application, **include interactive map showing program locations**

DHS application **error notification can be more minimalist** while remaining effective

Keep eligibility requirements listed somewhere easy to find on the site; DHS currently does this, as do most other application sites

User Interviews

Purpose

We conducted user interviews with parents/guardians who had recently applied to Detroit Head Start programs.

Through speaking with parents/guardians, our goal was to gain an understanding of guardians' experience with and impression of the application process, where they may have experienced pain points, and what they would ideally want in the application process.

Key Findings

Being on the waitlist is common

- All 4 participants were on the waitlist at some point.

Applications would like a better online application option

- When P4 went to a meeting in person, she had to redo paperwork because they couldn't find some of her information
- 3 of 4 suggested an online application process, method of submitting paperwork online
 - 2 were not aware of any sort of online application

Methodology

We developed a flyer to recruit parents who have applied to Head Start programs in the past year, and this flyer was distributed by United Way. We also developed an interview protocol. We commuted to UWSEM's Southfield office to conduct 4 interviews, and we recorded and transcribed the interviews.

We grouped together common themes from our interview notes using an online affinity mapping tool, LucidChart.

Applicants want info about safety

- P2 made several in-person visits to the program just to ensure that she trusted the facility with her child.
- In addition to facility safety, P4 also emphasized the assurance of application information being safe and secure when applying online.

Consistent post-application communication is desired

- "You should keep in contact with me and let me know that we are still on the waitlist" - P3
- "Follow-up is always good, especially if it's something that you need." - P2

Personas



Diamond, 26

*High School Teacher
East Detroit*

Needs/Goals

- Wants to enroll her two children in early childhood education programs
- Needs to ensure the facilities she chooses are safe and trustworthy

Bio/Characteristics

- Has a one-year-old and a three-year-old child
- Prefers using her iPhone to complete online tasks

Potential Pain Points

- As a teacher, it is difficult for her to take a day off work on short notice for an in-person meeting at a Head Start facility



Griselda, 57

*Receptionist
Southwest Detroit*

Needs/Goals

- Wants to enroll her grandson in an early childhood education program that is close to home
- Values convenience without compromising quality

Bio/Characteristics

- Primary caregiver of her two-year-old grandson
- Is comfortable with technology, but also just finds it easier to talk to people in person

Potential Pain Points

- Her grandson has special needs and she wants to make sure the facility is equipped to properly care for him

UX Requirements

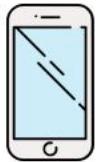
After compiling our research, we developed a set of user experience design requirements that should be met with the application we design.



bridge communication gap between families and facilities



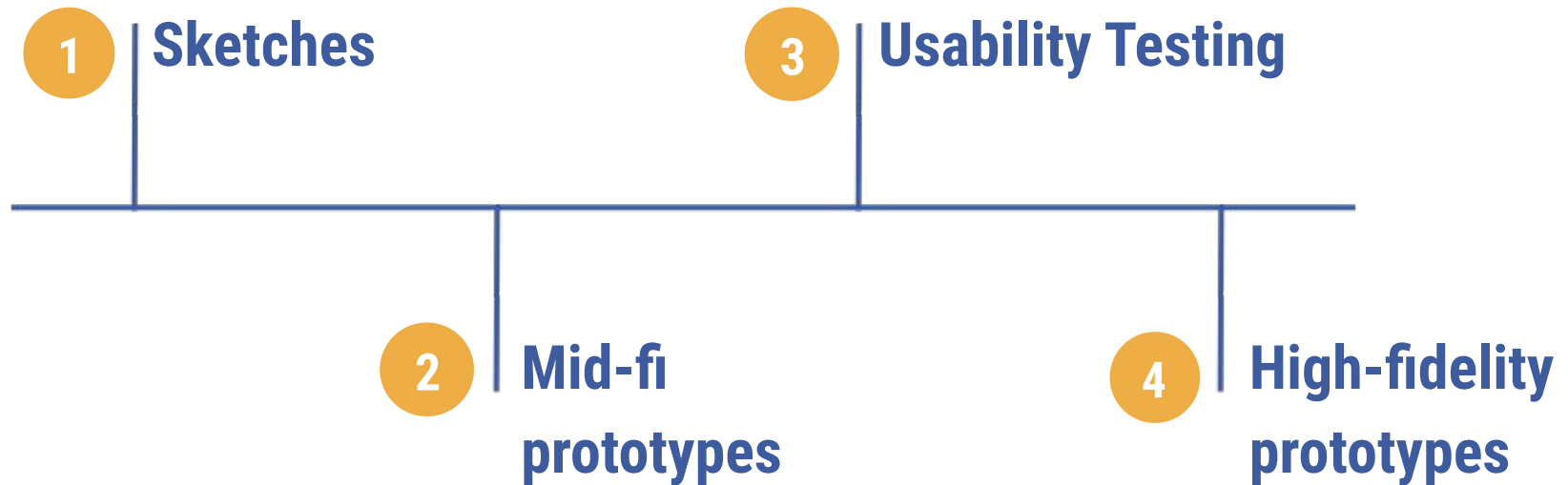
feature clear, unambiguous language to give accurate understanding of waitlist and steps for guardians



optimize design for mobile use

Design Process

Design Process Overview

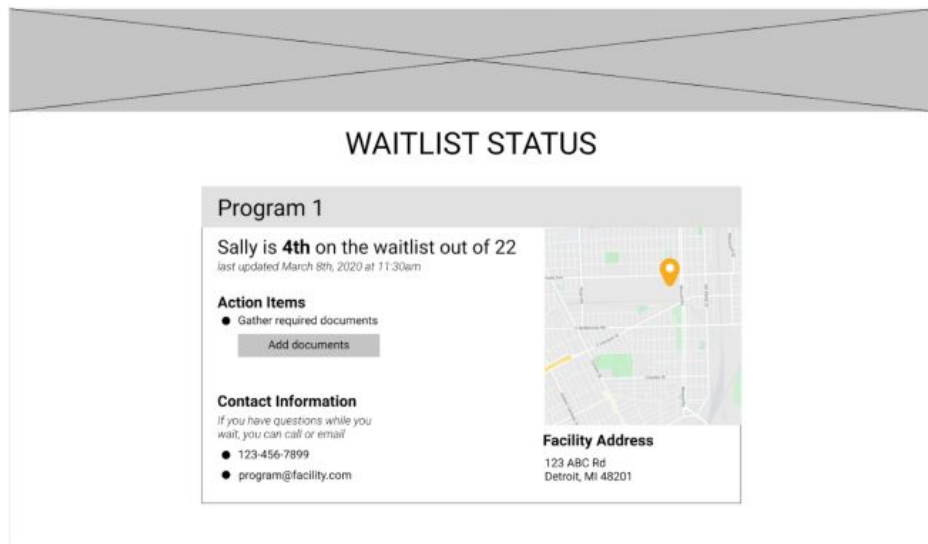
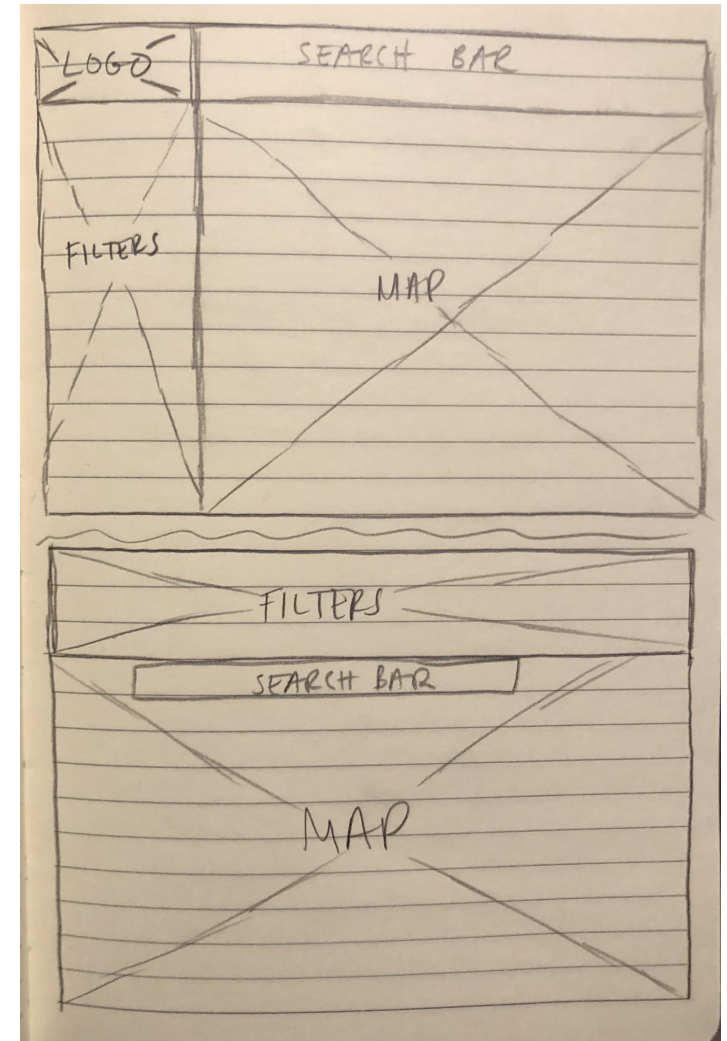


Sketches and Mid-fi Prototypes

After creating our UX requirements, we moved into the Design phase. From our communication with our client and EarlyWorks, we began to prioritize the features that would be the most useful additions.

We all began doing physical paper sketches of the different features we were thinking of implementing from our research phase: more efficient application process, Head Start facility locator, more access to information about the facilities in general, etc. We took the most useful features from each of our sketches and began to creating digital wireframes initially through Sketch.

Once we began receiving feedback on those features, we eventually transitioned to Figma as we developed and tested our flows so that we could more easily collaborate when creating interactive and detailed designs.



Narrowing Scope

Transitioning our focus to “Phase 2” features

After our user interviews, we found that many conversations showed the need for **bridging the communication gap between facilities and families**. At this point in the process, the EarlyWorks team had been working directly with different facilities on the specifics of the application content; we felt that we could best contribute to mending this communication flow by working on features to complement the application and keep users consistently updated post-application.

After discussions with our client, we initially settled on three Phase 2 feature ideas: a find a center map, waitlist status and login portal, and possible applicant notification/information scripts via e-mail and the UWSEM website. And after further consideration of the class timeline and project scope, we then settled on these two main Phase 2 design features:

- 1) An application **status feature with mobile compatibility** that allows parents to view their application status online and submit additional required documents;
- 2) Revamped **desktop design/recommendations for the “Find A Center” map** to inform parents of different facility locations as we felt this was an integral feature of the current website.

Mobile Application Status feature



“Find A Center” feature



High-Fidelity Usability Tests

Usability Tests Overview

After we narrowed our scope, we made interactive prototypes and conducted five usability tests with family members and friends to gather insights on our designs.

Given the public health circumstances of early 2020, we conducted our tests with the people we were quarantined with.

The usability tests were each 30 minutes long, and we asked participants to walk through:

- Completing an application and creating an account
- Uploading documents to their account
- Checking their waitlist status
- Searching for programs on the Find a Center map

Usability Test Takeaways

Takeaways Specific to the Map Feature

Use a map that highlights relevant information such as public transit

Initially, we placed our designs on top of a Google Maps image. This placed too much emphasis on streets and not enough emphasis on what users really want: the proximity of facilities to notable landmarks and means of transportation.

Make the drop pin more noticeable

Since the facility information is only shown upon being clicked, it is important that the drop pin is visible to the user. Our redesign features a larger pin as well as more color contrast with our redesigned map's background.

Add facility contact email to location information popup

Multiple users commented that a contact email would be useful information to display for facilities.

Design a more inviting filter nav bar

There was some confusion among users to discover affordances on our filter bar. This included the filter checkboxes themselves, which can be selected, and the question mark next to the filter which can display additional information about the selected program when clicked. In addition, we added the ability to collapse the panel to maximize the potential screen area for the map.

Rephrase the “redo search” button

Another source of trouble for users was determining what exactly would happen if they selected the “redo search” button. Although this type of feature is common, our language was unclear. To address this, we changed this button to read “search this area”.

Usability Test Takeaways

Takeaways Specific to the Application Status Feature

Clarity on whether applicants are on the Waitlist or not

Throughout the tests, some of our participants struggled to understand whether they were already on the waitlist or not. The Application Status page was originally titled “Waitlist Status” throughout the entire process, even when their status was that the facility had reached out to them and more actions were necessary before they could be on the waitlist. To help address this issue, we changed the name of the “Waitlist Status” page to “Application Status”.

More cues / clearer indication of the Connect4Care brand

A participant noted that the Account page seemed like it might be an account for the whole United Way website, rather than for the Connect4Care Kids application. This led to us changing our final design to more clearly label each page with the Connect4Care Kids title.

Users shouldn't have to upload/select documents in multiple places

In the mid-fidelity designs, users first had to upload their documents on the Documents page, and then they had to select those documents again from a dropdown on the Waitlist page if they wanted the documents to go to a specific provider.

Several participants mentioned that they thought they were done after uploading the documents the first time, and they were surprised and annoyed that they had to select them again: “Seems like I already entered these documents...If they (providers) wanted them they should just be able to connect to my (documents) page”. This led to us rethinking the user flow for uploading documents and sharing them with providers.

In our final designs, applicants will still upload documents on the Documents page, but will have the option to do so on the Application page as well, and there is more help text to explain that users must confirm what documents they want to be sent to a provider. This is intended to protect users' privacy.

Design Validation

Validation

Study Design

We validated our designs by conducting more structured usability tests on our designs. We conducted seven remote usability tests: three were moderated using screen share and four were unmoderated using Google Forms for feedback. Our goal was to determine the ease of accomplishing essential tasks guardians would perform with our system.

We measured several metrics, including the time it took participants to complete each task, and we asked participants to rate the difficulty of each task after they completed it.

With 1 being Very Difficult and 7 being Very Easy, all five tasks had an average rating of 5 or higher.

Insights

- Use of iconography and colors - add to help understanding



- More requirement specificity/clarification for users
- Importance of assuring online safety and security
- Consider further explaining the purpose and benefits of creating an account
- Participants found tasks to be straightforward, with easy access to needed information. They also found the map to be inviting.
- Condensed messaging function - only show most recent message

Final Designs

Design Rationale

Find A Center

One of United Way's goals in redesigning their website is to create a universal branding identity across its resources. We felt that a searchable map of Detroit with the ability to filter by programs would be a great contribution to accomplishing that goal as well as a resourceful tool for our early childhood education user group.

Our project originally began with evaluating Detroit Head Start's website. One feature we really liked was their "Find A Center" page which used a Google Maps plugin to display Head Start facilities on a searchable map. We think this should be implemented in United Way's new website and also incorporate other United Way-related resources such as after-school programs, summer programs and other early childhood care programs.

Login Portal

Because one of the biggest concerns expressed by interview participants was their frustration with the waitlist process and that they wished they were given more updates rather than having to reach out, we decided that a feature for checking waitlist position would be very beneficial for improving their waiting experience. In order to check their position on the waitlist, applicants will need a way to revisit the page with their application information. A secure way to allow applicants' information to be stored is by adding a login functionality.

Creating an Account

Before submitting the application, users are asked if they would like to create an account that will allow them to view their application's status and updates. They are given the option to create a password that will be linked to the email they entered in the application. Once submitted, users can read about necessary information and head directly to their account or application status pages.

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unitedwaysem.org

Connect4Care Kids Application

Would you like to create an account?
Your application information will be stored and you will be able to check your status for the programs you've applied to.

If yes, please create a password:

Re-enter your password:

After submitting your application, you can view your application information by clicking the Connect4Care button in the menu.

Your login information will be your email and password.

Submit Application

CONNECT4CARE KIDS

Thank You for Applying

Thank you for completing the Connect4Care application to early childhood care facilities.

Go to My Account

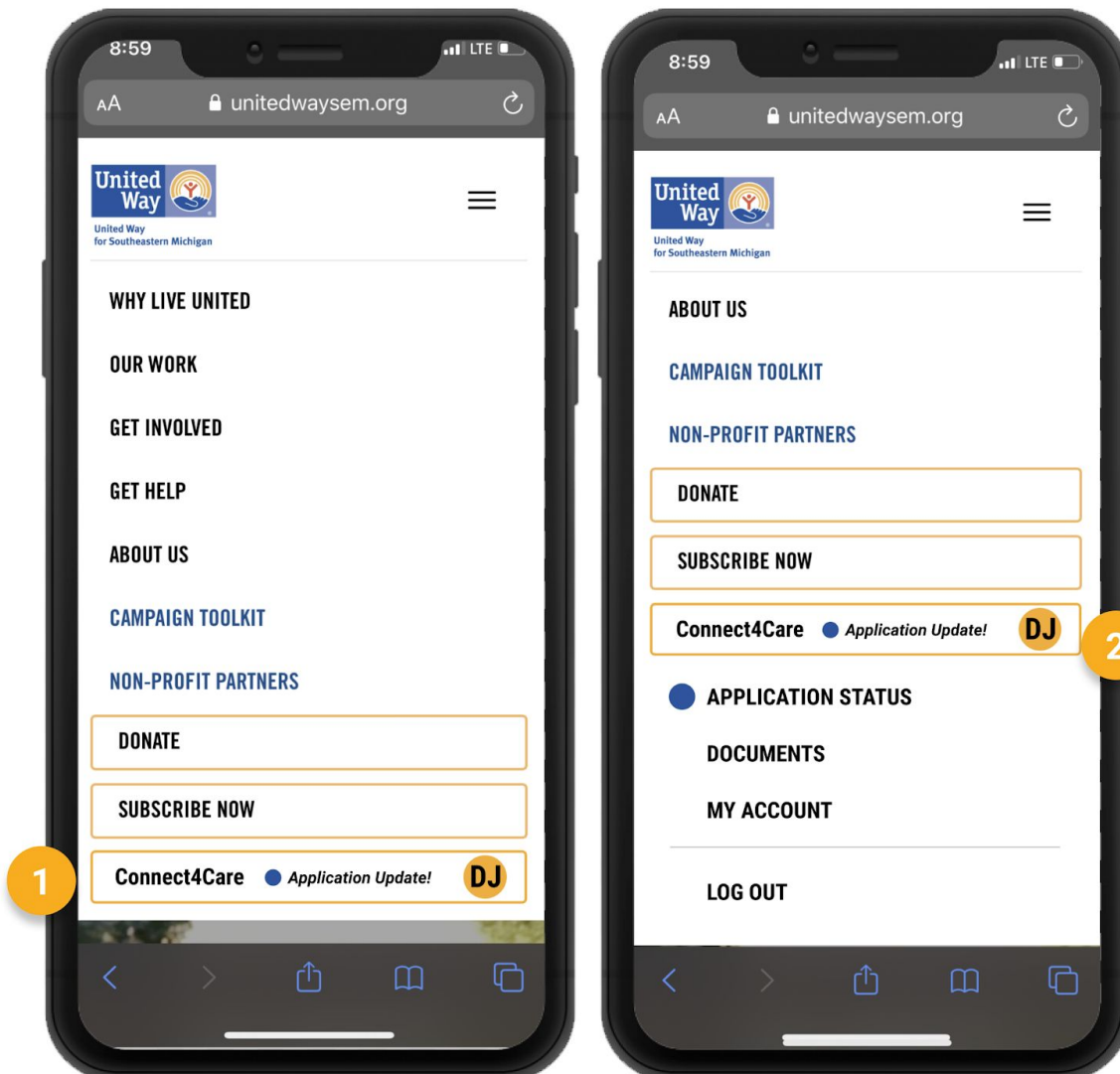
Your application will immediately be shared with providers near you. Those with openings for your child's age will follow up with you directly via the contact information that you provided on the form. You can also view these providers on your [Application Status](#) page.

Be prepared to share the necessary documentation with providers to complete your child's enrollment. These include, but are not limited to, the documents listed below:

- Your child's birth certificate
Example help text about whether you can use a copy
- Your child's immunization records
Example help text about how to get these records
- Proof of your income (if applicable)
Could be a W-2 form, pay stubs, or a statement from your employer
- Proof of your student status (if applicable)
Example help text about what proof could be
- Your driver's license or ID
Example help text about what IDs are acceptable
- Your child's medical insurance information, if available
Example help text about where to find this information

Menu

Users will be able to access their account through a button in the menu. A future design consideration will be the placement of this button; because we do not know what the menu will look like in the website redesign, we decided to place the Connect4Care menu item at the bottom for now.



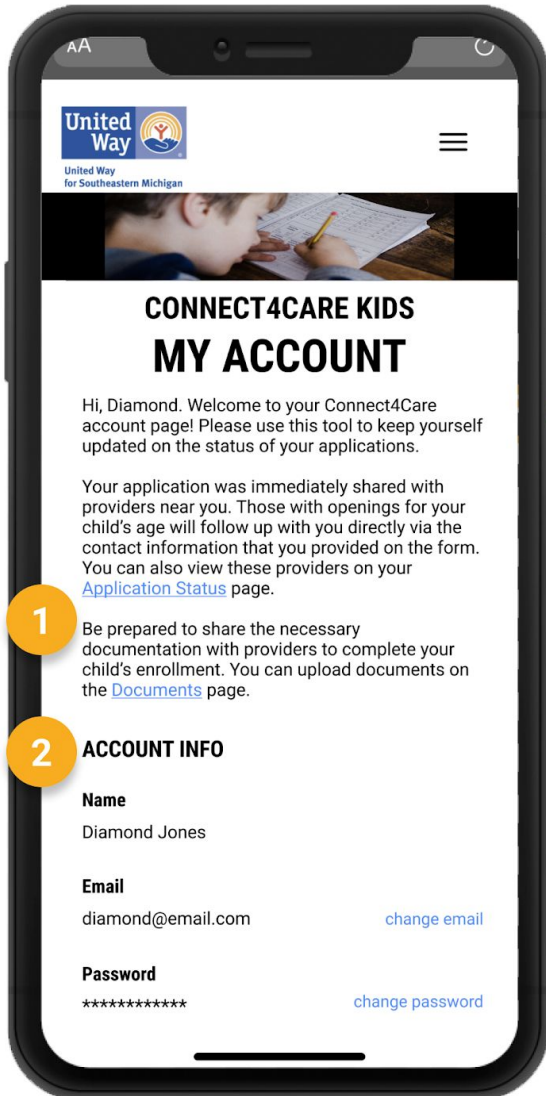
1 The “Connect4Care” account feature will be accessible as a menu item. When a user’s application status has changed, or there’s any other type of notification, a notification will appear on the “Connect4Care” button.

2 When logged in, a yellow circle with the user’s initials inside of it will appear to let the user know they are logged in. When logged out, this icon will disappear from the category bar on the menu page.

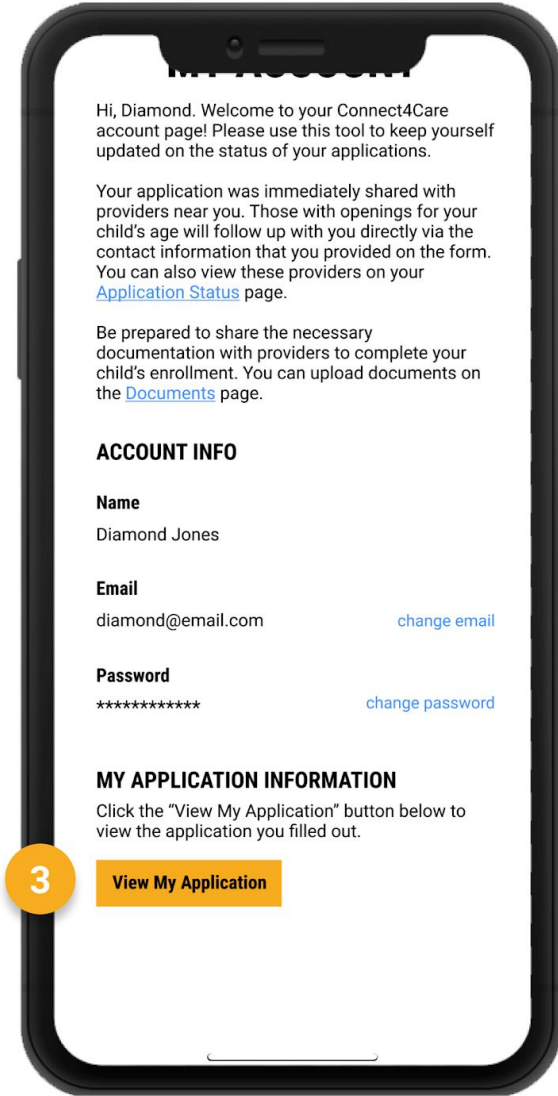
When not logged in, the button will look like this:

CONNECT4CARE LOGIN

Account

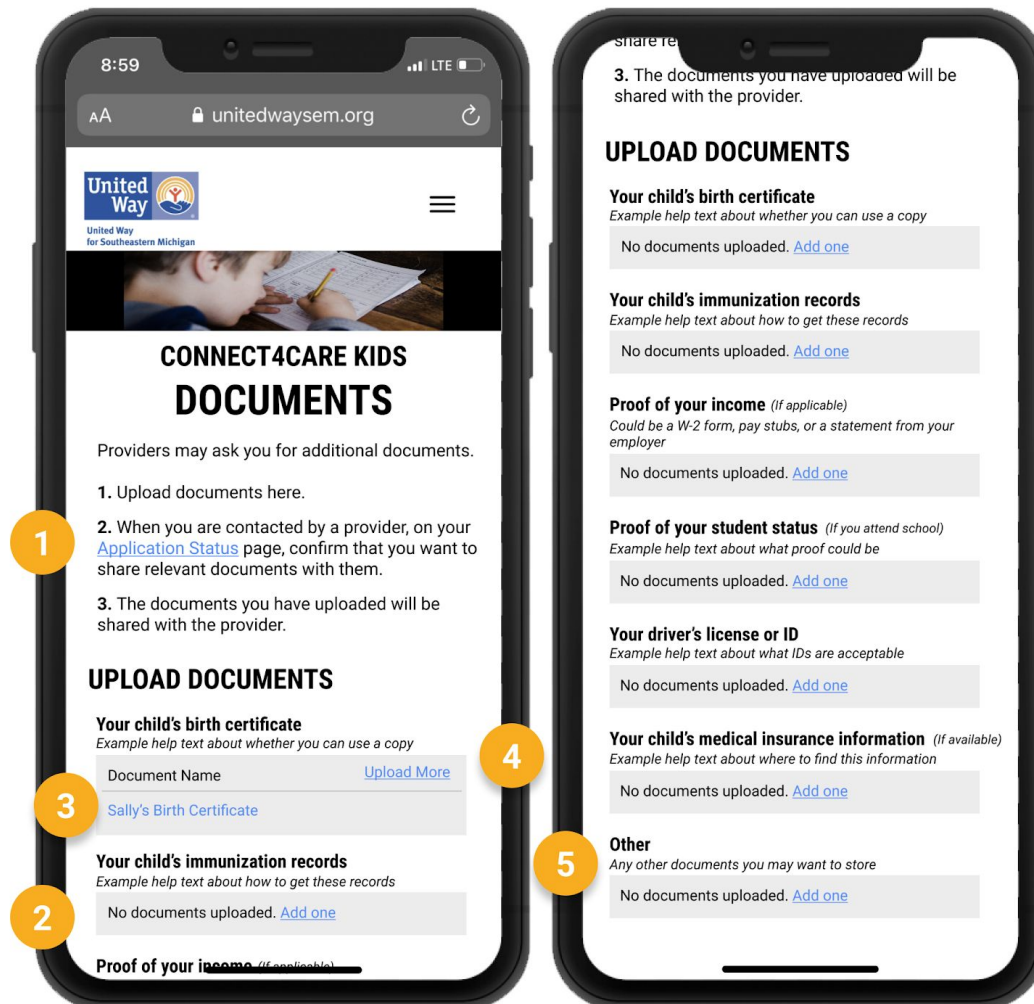


- 1 This page provides a welcome and a brief message on important information as to what the account offers. There are hyperlinks to the "Application Status" page and the "Documents" page for easier navigation.
- 2 Below this is basic account information such as: name, email, and password.
- 3 At the bottom of the screen, there is a "View My Application" button at the end of the page for users to keep record of what they put on their actual application.



Documents Page

Specific providers may need parents to submit additional documents before they can place the applicant on the waitlist or allow them to enroll. Applicants will be able to store documents on the Documents page of their account.



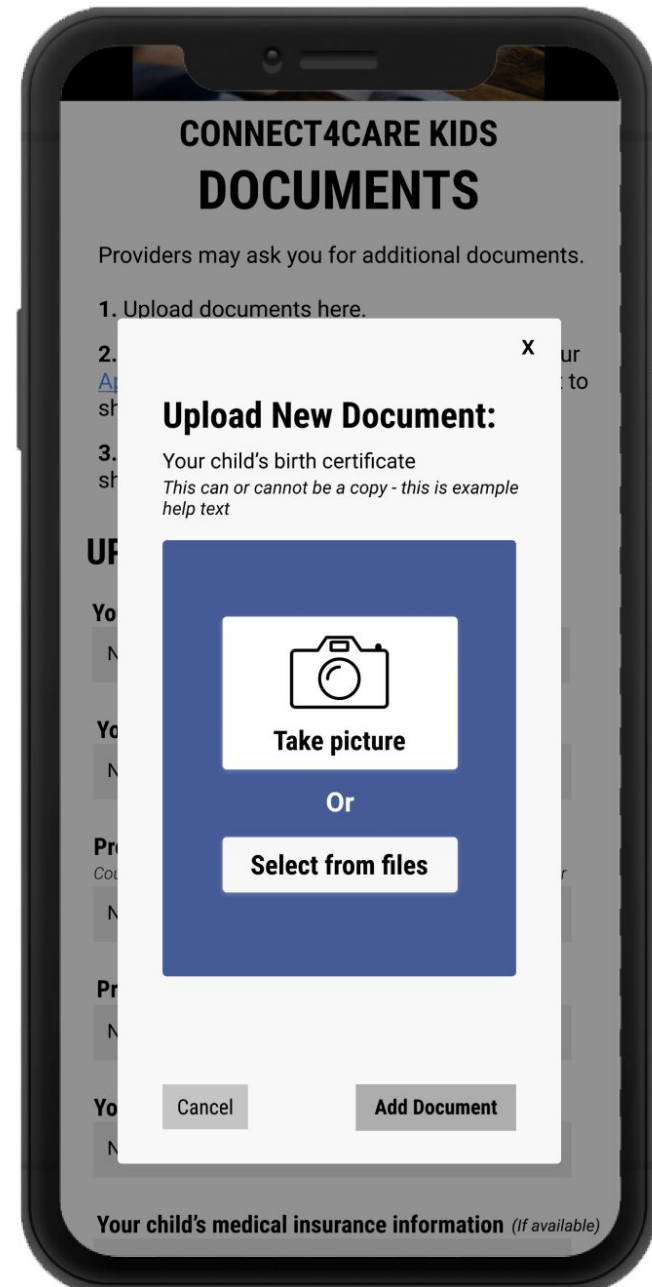
This page briefly states its purpose with a three-step overview: uploading documents, giving their consent to send a document to a provider once contacted, and confirmation that they have been sent.

- 1 Below that are sections for every document that needs to be uploaded featuring a brief description about the document, and an upload function.
- 2 If any documents have not been uploaded, users will be prompted to do so through an "Add one" hyperlink.
- 3 Once the document has been named and uploaded, the document's name will appear in hyperlinked text. If clicked, this should lead to a pop-up with a preview of that document.
- 4 Next to the header, is an "Upload More" hyperlink since some categories may require multiple documents.
- 5 Users also have the option to upload to an "Other" Documents category for any additional items a specific provider may need.

Uploading Documents

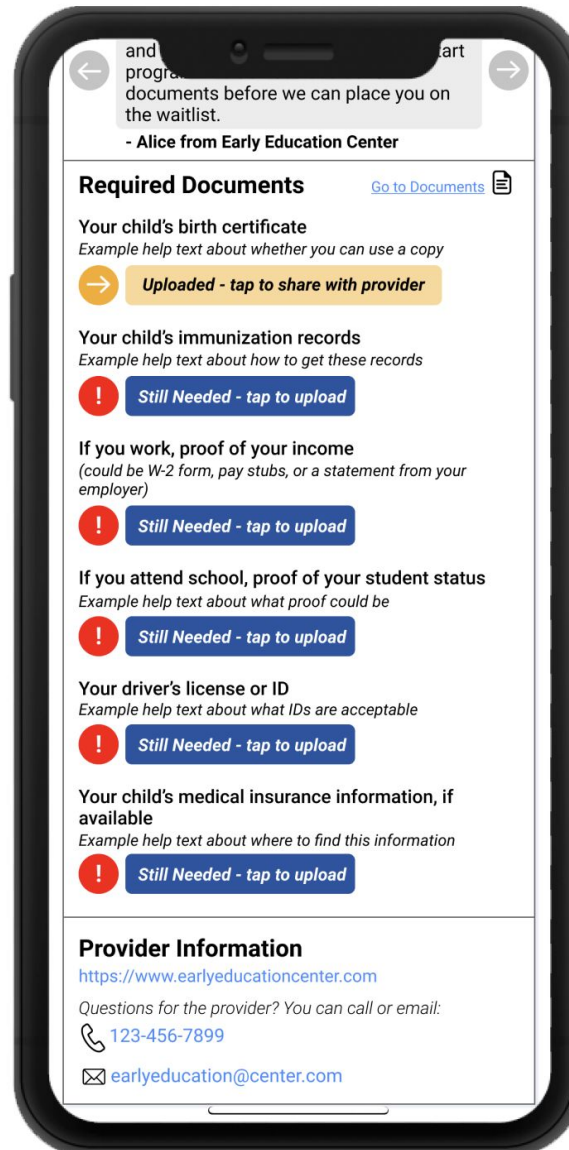
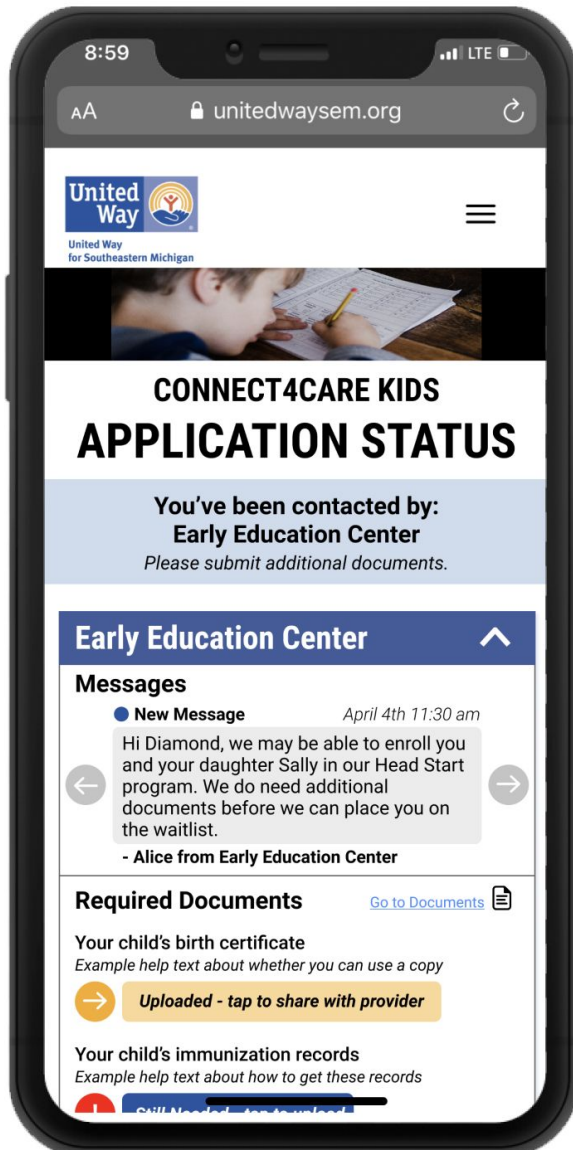
Applicants will be able to upload documents either by taking a picture or selecting from their images and files. On the Documents page, all potential documents are listed under an “Upload Documents” section. After uploading, parents can write in a name for the document and click to add it to their account.

If they’ve been contacted by a provider, applicants can also upload documents on the Application Status page,



Application Status Page - Sharing Documents

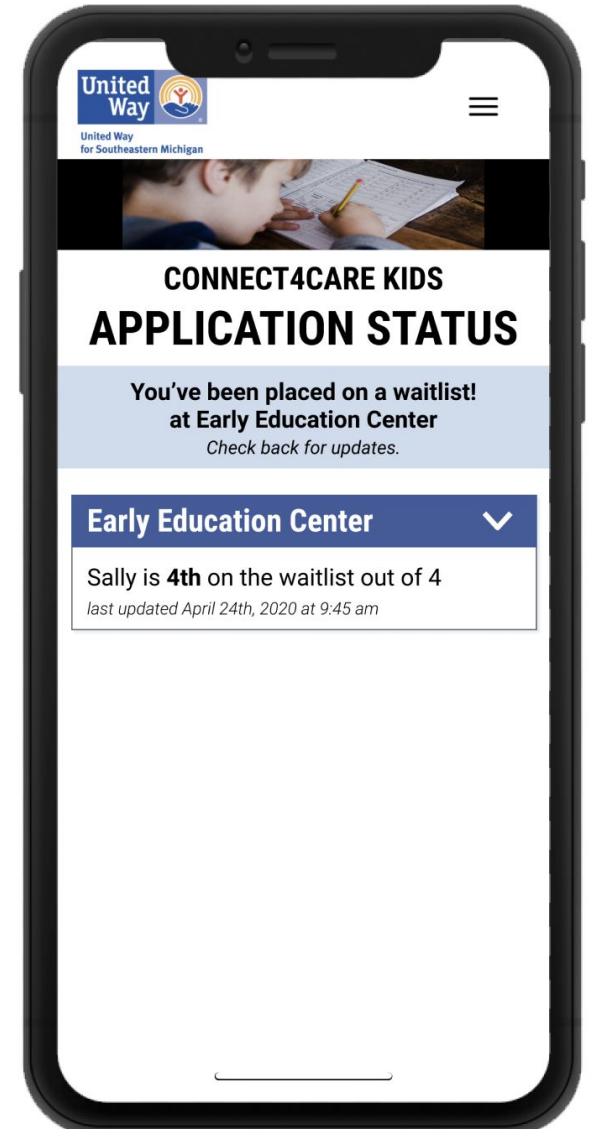
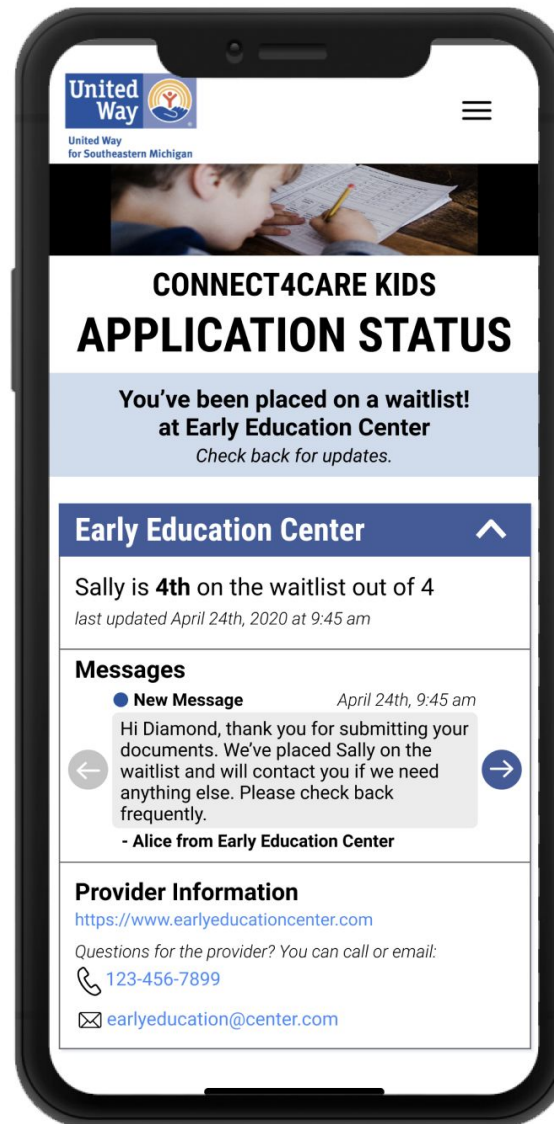
The Application Status page is where applicants will be able to see when a provider reaches out to them. Any messages from the provider will be shared here, along with a list of additional needed documents. There will also be contact information for that specific provider. To share documents through this application status page, applicants can either consent to upload and share directly from this page or simply tap to send from documents that they've already uploaded on their Documents page.



Application Status Page - On Waitlist

Once an applicant has sent in all of their necessary documents, they may be placed on a waitlist. If so, their status will update on this page. For their status to update, someone from the facility will need to update the waitlist from their end.

If an applicant is contacted by multiple providers, those will all appear here. Users can collapse the provider cards in order to access multiple cards more easily.



Map

Finally, our Find A Center page allows users to explore United Way resources on a searchable map. Users can read additional information about the types of programs available and filter by program. Additionally, we felt that a useful map would include only relevant information like public transit, major highways, and notable landmarks.

The image shows a screenshot of the United Way Find A Center map interface. The map displays various resources and landmarks in Detroit, Michigan. Annotations highlight key features:

- use current location**: A button labeled "use my location" is positioned next to the search bar.
- search bar**: A text input field with the placeholder "Enter keyword, ZIP code or facility name".
- filters for different United Way-related resources**: A "FILTER BY PROGRAM" sidebar with checkboxes for:
 - Early Head Start
 - Head Start (checked)
 - Detroit SOAR
 - Summer Programs
 - Great Start Readiness Program
 - After-school programs
- facility business information**: A popup for "Early Education Center" at 1234 Conner, Detroit 48213, including contact info and hours.
- additional program information with link to official webpage or United Way webpage**: A tooltip for the Head Start program explaining eligibility and providing a link.
- map features only public transit, major highways and intersections, and notable landmarks**: A legend for "DDOT ROUTES" showing ConnectTen (pink), Neighborhood Route (blue), and Key Route (green).

Recommendations for Next Steps

Once the new application and the redesigned website have been implemented, we recommend placing our designs within the context of the new design and testing them with parents.

Listed below are some considerations and suggestions for further research that will be helpful in making this tool a reality.

- Consider adding another submenu item under the Connect4Care dropdown (in addition to Application Status, Documents, and My Account) for applicants to be able to apply again the next year. Something to consider is how information will be stored / archived / deleted after the school year is over, and if applicants are applying for another year, would they still be able to see previous years' information?
- Consider including on the Documents page, and throughout the website, that applicants are not REQUIRED to upload their documents online; they can still bring them in in person if they would prefer. Also, if applicants create an account but then bring in documents in person, how will this be displayed on their account? Maybe they would need to have the facility check it off on their side of the account?
- Providers will need some sort of accounts allowing them to contact specific applicants. This will likely require additional research to determine the best way for providers to manage applicants.
- Consider adding a "reminder" button somewhere on the provider card on the Application Status page. This could be a way for applicants to send a nudge to the provider without needing to call the provider.