This document contains information about additional backend and frontend requirements that were not covered UI/UX engagement. It is important that we track these requirements and feature requests so if the GUI was to be built out to a full-fledged solution no logic would be lost.

# Frontend

1. Obtain High Resolution NACRN image from costumer, so it scales better. The current image’s resolution is too low.

# Backend

1. Create de-duping logic for merging records with same Social Security Number (SSN).
2. Create de-duping logic for merging records that are likely to be a duplicate by comparing multiple fields.
3. Due to lack of a backend we cannot showcase the associated “Global intake Management” status to coincide with “user type” selection that is made in the “manage users” tab when the “edit user” dialogue box is open. Currently we hard code the “Global intake Management” status to coincide with the tab selected (ex; Administrators, Power Users, Care Coordinators, End Users).
4. Alert end users monthly via their preferred contact method about what programs they qualify for via an email that is sent out monthly.

# Additional Notes:

These are the risks that crossed our mind when developing the GUI:

1. Cross-Site Scripting
2. SQL Injection
3. An admin user who decides to delete the database - this can be mitigated by taking regular backups and ensuring no admin has access to the backups as well.
4. A power user does not need approval to add a question specific to their organization and could create a question that is inappropriate or takes personal information which does not have a business justification.

The NACRN team asked for the different roles to be documented out completely. The below does that.

# Administrators –

## Access:

1. Admins are allowed complete access across the NACRN platform. In the admin view of different pages Admins have privilege to edit and control the webpage and its content. They have privileges to control users and their actions which include end users, power users, and care-coordinators.
2. Admins will be able to add, edit, and delete any user in any organization, including care-coordinators, power users, end users, and even other admins as well. This role group will be able to add and delete programs, add or remove care-coordinators and power users from particular groups.

## Home Page:

1. On the Admin’s home page, the admin will be able to view the detailed summary of complete user interaction on a weekly basis separated by organizations.
2. In the analytics section, the admin will be able to view total user activity, case referrals and the number of organizations that have programs available on the NACRN site on the daily basis.
3. The categories “total user activity”, “case referrals”, and “added organizations” are available in the “By the Week” filter (section/Drop-down) for admins.
4. The section (filter /section/Drop-down) titled “By the Organization” for admins will show daily user activity in each organization and case referrals. However, one key difference is that this summary will allow admin the opportunity to see new users in the system that have found a care-coordinator to assist them in their efforts in a section titled “new patient and care-coordinator pairings” which details the most recent additions to the system.

## All Programs:

1. The admin will have access to the “All Programs” page which shares information about each individual program that end users can apply for and possibly be eligible for.
2. No user can edit anything on this specific page; however, admin will have separate access that allows them to edit programs in the system and the information they share to possible participants / across the platform.

## Chat:

1. Admin will have access to the chat feature that all other users obtain and will not have access to edit. They may use this feature to have a conversation with other employees, such as care-coordinators or power users in order to assist them in their use of the NACRN site.

## Invite:

1. Admin will have the ability to invite a new user to the system. They can invite an individual who does not currently use or have an account with NACRN, via email or phone number and suggest that they create an account and view programs available.

## Schedule Appointment/Calendar:

1. The admin user will have access to the “Schedule Appointment” tab and is granted more privileges as to who they can schedule appointments for than other users have. The admin will be able to choose any program listed on the site from a drop-down menu that they would like to access and manage calendars across.
2. Once the admin user chooses a specific program, they are given the option to “Schedule an Appointment”.  They will then be able to create/ manage an appointment with any care-coordinator from the program in which they chose, for a user who needs one scheduled.
3. They will also have the ability to add availability to and edit or delete current appointments on the calendar filtered by program and care-coordinator. (Whenever an appointment is scheduled, or edited notifications must be triggered to corresponding people involved.)
4. This role group’s calendar view will allow them to "manage availability" and "schedule" for all coordinators in any organizations. The user is then prompted to select a specific organization and a specific care-coordinator.
5. If "schedule" is selected, the admin will be able to schedule an appointment with any care-coordinator, from any organization, for any particular user.
6. If the "manage availability" button is selected, the admin is able to denote particular times that are available for a certain care-coordinator. These will be shown as available times to schedule for end users.
7. They will be able to select this appointment as "recurring" or just as an "add availability" slot.

## Form Management:

1. Admin will also have access to a page titled, “Form Management”, that will allow them to add, delete, edit, approve, or deny questions that will be on the intake questionnaire forms when determining eligibility for programs. When an admin accesses the page, it will allow them to choose from a dropdown menu if they would like to see “Global” questions or questions for a particular organization.
2. These users will also be shown a box that denotes questions that have been added by other power users that need admin approval to be added to the forms, “Questions Needing Approval”.
3. Once an organization is selected, those questions will be produced below and individually editable by the admin user. They will have the ability to rearrange the order of questions, edit or delete. Editing capability expands to changing the question’s answer options and format as well.
4. In creation of a new question, they will be able to choose the type of answer system they would like to use (radio buttons, multi-select, etc.).
5. For approval of questions, the Admin will be able to view the questions in the queue one at a time and accept or reject the question to the form.

## Manage Users/Organizations:

1. The most extensive capability of the admin users is that they can “Manage Users” and “Manage Organizations”. On the tab titled “Manage Users”, the admin users will be able to first select which set of users that they would like to manage, i.e. other administrators, power users, care-coordinators, and end users.
2. When the admin selects one group of users, a complete list of names as well as information like phone number, email address, and NACRN ID are displayed, other categories are included per each group’s discretion. Each user is adorned with a checkbox that can be selected one or more at a time.
3. There are three available options for editing users, admin can add a completely new user to any program in the system, remove any users of any organization from the system, or edit any user’s information as well. (Bulk user upload)
4. In addition, admin users can export end user data at any time to an Excel spreadsheet.
5. The admin users also have the ability and authority to manage and edit programs and their information that are listed on the site for end users to apply for. Similar to the admin’s “Manage Users” page, the “Manage Organizations” page lists all organizations with programs available for application on the NACRN website.
6. Each organization also lists the associated power users for the admin to view. Each item is selectable followed by two buttons, “Add Organization” and “Remove Organization”. While the admin cannot edit what that separate organization decides to add to the website but can manage by adding a new organization or deleting ones that no longer are of use for current NACRN users or that they no longer want to provide to end users. A screenshot of a cell phone

   Description automatically generated

## Personal Information:

1. Admin users have the ability to edit their own information. On clicking on their own profile, they can edit their personal information they created their account with including but not limited to their first and last name, preferred contact method and their account password.

# Power Users–

## Access:

1. Power users are allowed almost complete access similar to admin users; however, they are only able to view and edit information on the web pages for organizations that they are power users for.
2. They do not have any access or power over information, pages, or users for organizations for which they are NOT a power user for.

## Home Page:

1. Power users’ homepage slightly differs from the other users and has less information and access than admins but more than care-coordinators and end users.
2. The only section included to summarize data is a “By the Organization” section. This includes a detailed report of daily user activity, case referrals, and new patient and care-coordinator pairings for the organizations in which this particular user is a power user for.
3. Below this summary of data, the power user has access to a calendar of appointments for end users in the organizations that particular power user oversees. They can cancel any appointments for those particular organizations if need be.

## Schedule Appointment/Calendar:

1. The power user has access to the “Schedule Appointment” tab but can only schedule appointments and availability for care-coordinators in the programs that they are power users for.
2. The power user can choose any of the programs that they oversee that will be listed on the site from a drop-down menu.
3. They can then create an appointment with any care-coordinator from that program in which they chose, for a user who needs one scheduled.
4. They also have the ability to add availability to and edit or delete current appointments on the calendar for any program or care-coordinator that they have access to. (notifying users)
5. If the "manage availability" button is selected, the power user is able to create an available appointment time as “open” for a particular coordinator. They are also able to select this time as "recurring" or just as an "add availability" slot. If the user chooses that this appointment set is going to be a  "recurring" appointment, they will be prompted with a new window which allows specification on how to keep the appointment time as recurring.
6. The power user view of the calendar is very similar to that of the admin’s. This page will allow them to "manage availability" for all care-coordinators in any organizations that they are a power user for and “schedule” appointments for any organization on the NACRN site.
7. The user is then prompted to select a specific organization and a specific care-coordinator. The admin will be able to schedule an appointment for a particular user with an associated care-coordinator of a certain organization that the user is interested in. If the "manage availability" button is selected, the power user is able to denote particular times as available for appointments. These will be shown to other users as times they can schedule an appointment with that particular coordinator and program.
8. They are also able to select this time as "recurring" or just as an "add availability" slot. If the power user chooses that this appointment set is going to be a  "recurring" appointment, they will then be presented with a new window with a menu which allows specification on how to keep the appointment time as recurring.

## Form Management:

1. Power users will also have access to a page titled, “Form Management”, that will allow them to add, delete, edit, approve, or deny questions that will be on the intake questionnaire forms when determining eligibility for programs.
2. When an admin accesses the page, it will allow them to choose between the organizations they are power users for, from a dropdown menu, they do not have the option to see global tier questions for other organizations.
3. Once an organization is selected, those questions will be produced below and individually editable by the power user. They will have the ability to rearrange the order of questions, edit or delete. Editing capability expands to changing the question’s answer options and format as well.
4. In creation of a new question, they will be able to choose the type of answer system they would like to use (radio buttons, multi-select, etc.).
5. Finally, any new questions that a power user creates need to be submitted for admin approval.

# Care-Coordinators –

## Access:

1. Care-coordinators are granted more access than end users but less than the admin and power users. They are able to see information regarding patients in their program that they are a care-coordinator for.
2. They have the ability to edit their own personal apportionment availability, edit appointments they have scheduled with them, create an appointment for a patient with them and chat with prospective patients online before scheduling a meeting.

## Home Page:

1. Care-coordinator’s homepage does not show any details regarding information in the system but does allow them to see their schedule for the current week.
2. On this page, they will have the accessibility to cancel any appointments that they have in any week. The current week is automatically presented and the care-coordinators have the ability to expand a calendar and choose a different week that they would like to view.

## Calendar:

1. The care-coordinator view of the calendar will allow them to "manage my availability" and "schedule" appointments for all coordinators in any organizations. The user is prompted to input a specific organization’s program and an associated care-coordinator.
2. If "schedule" is selected, the user is asked for the patient's name and the information for the appointment being scheduled. They will then be able to choose an open time slot from those already created as "open" in "manage my availability" by either themselves, the power users for that organization, or admin.
3. If "manage my availability" is selected, the "select organization" drop down will request a reply. The user is then shown a calendar for the current month and are able to select a certain date from the month. Once a date is selected, they are able to select a start and end time from two drop down menus with time in 15 minute intervals.
4. They are then able to denote that this time is "recurring" or just is an "add availability" slot. If the user chooses "recurring" they will be prompted with a new window (shown in one screenshot) of a menu which allows specification on how to keep the appointment time as recurring. The one addition to this screenshot would be to add "bi-weekly" in the list of "weekly, monthly, yearly".

## Care-Coordinator Database:

1. Care-coordinators will also have access to the care-coordinator database. They will have a page which allows them to search for a specific coordinator by narrowing the search by organization. They will be presented with a list of matching organizations with their associated care-coordinators.
2. Separately, but on the same page, the care-coordinators can view a summary of a patient’s basic information.
3. They can create and delete notes and important alerts that may affect other coordinators involved. In addition, they can search through and edit these messages for that particular patient.
4. Coordinators will also have the ability to include their name in a list of associated care-coordinators to an organization and then delete if need be.

# End Users –

## Access:

1. End users have the most limited access to the site out of the five user actors.
2. End users are able to create an account for themselves, review and apply for programs that they are eligible for, answer intake questions to determine eligibility for programs, chat with a care-coordinator for the organizations or set up an appointment to do so in person, and manage their own appointments and programs.
3. Essentially, the user only has access to information pertinent to their NACRN affiliation.

## Home Page:

1. End users homepage does not show any details regarding information in the system but does allow them to see their schedule for the current week.
2. On this page, they will have the accessibility to view information for and cancel any appointments that they have in any given week. The current week is automatically presented and at the end of the page, users have the ability to expand a calendar and choose a different week that they would like to view their current schedule for.

## Programs:

1. While end users have much less editing and widespread capability on the NACRN website, the pages presented to them are minimal.
2. Following the homepage, end users are first able to access the “Programs” page that every group of users has access to. They are able to see a full list of all available organizations on the NACRN site and more specifically, the programs in which they are eligible for. However, they have no editing ability in adding or removing any programs or organizations, they have a read-view only.
3. End users do; however, have the ability to select and decide if they would like to share their information or application with third parties.
4. If selected, other organizations are able to review their personal information for review.

## Chat:

1. The next page that end users have access to is the “Chat” page in which they can virtually talk with a power user or care-coordinator that can either guide them, provide information in how their organization may assist them personally, or schedule and lead appointments.
2. No users have the ability to edit the chat feature on the NACRN webpage.

## Scheduling/Calendar:

1. End users only have access to their personal information, account, and program information.
2. For scheduling, they are asked to input which program they are interested in scheduling an appointment for to learn more about and which of the program’s care-coordinators they would like to meet with.
3. Finally, they are asked to choose a time slot from those preset by the care-coordinators, power users, or admin.
4. They are also presented with a list of all appointments they are currently scheduled for, to which they can choose to edit, delete, or keep scheduled.
5. The end user’s calendar view will allow them to "schedule" an appointment for themselves only. The user is then prompted to select a specific organization and a specific care-coordinator that is associated with that program.
6. When "schedule" is selected, the end user is asked to input some information for the appointment being scheduled.
7. They will then be able to choose an open time slot from those already created as "open" in "manage availability" by the care-coordinator or power users and admin.

## Invite:

1. The end users also have access to invite a new user to the NACRN webpage. As other users can, end users can input a friend’s email address or phone number and send them an invite to create a NACRN account and find their own programs to apply for.

## Personal Information:

1. Finally, end users have the ability to edit their own information. In clicking on their own profile, they can edit any information they created their account with including first and last name, preferred contact method and their account password.

# Global Intake Question Managers –

## Questions:

1. Global intake question managers are ONLY able to access and review questions being asked on intake of a new patient to determine which programs they are eligible for.
2. They are able to add, edit, delete and approve or deny questions that should be asked on intake in relation to specific programs.

## Form Management:

1. Global intake question managers will also have access to a page titled, “Form Management”, that will allow them to add, delete, edit, approve, or deny questions that will be on the intake questionnaire forms when determining eligibility for programs.
2. When a global intake manager accesses the page, they will be prompted to choose from a dropdown menu if they would like to see “Global” questions or questions for a particular organization. These users will be shown a box that denotes questions that have been added by other users that need admin or global intake manager approval to be added to the forms, “Questions Needing Approval”.
3. Once an organization is selected, those questions will be produced below and immediately editable individually by the user. They will have the ability to rearrange the order of questions, and edit or delete one or more. Editing capability expands to changing the answer options and format as well as create the question.
4. In creation of a new question, they will be able to choose which format they will use for answers to questions which can include radio buttons, multi-select, etc.
5. A global intake question manager is the only other role which may approve and deny any and all questions, alongside admin users.

# Potential Requirements:

1. Consider adding a “service type” drop down menu with discrete options (i.e., short descriptions of service types) so that you can have a searchable database of services available. Also, it would be good if case managers could search for a particular service type (e.g., clothing, food, etc.) and obtain a list of providers located in the region/local area to be able to refer a customer to a specific provider. Address and website would also be useful program details fields.