



# Caring For Caregivers

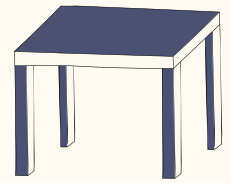
In-Person Visit, FRC Calendar, and  
the Get Well Network

Family Resource Center Toolkit



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2020

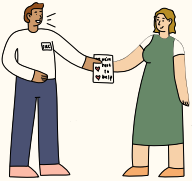


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# Executive Summary



## Design Challenge

How might we raise awareness about the services and resources offered by the Family Resource Center, particularly those related to informing and assisting caregivers?



## Background

Our project with Seattle Children's Hospital is focused on connecting caregivers of patients in the hospital with information, support services, and self-care resources. Currently, the Family Resource Center (FRC) provides resources such as a family lounge, computers, laundry, kitchen amenities, and other support services. This project will focus on building an outreach strategy for the FRC with the goal of raising caregivers' awareness about them.

## Motivation

The FRC was established to help families with basic needs, provide resources for their stay, and keep them connected with the home. Currently, FRC staff report not understanding the effectiveness of their outreach strategy and are interested in learning more about caregiver experiences to determine optimal outreach methods and times. We used the user-centered design methodology to develop this toolkit to help them with this endeavor.

## Process Overview

To make our toolkit, we first interviewed and surveyed caregivers about their experiences at the FRC and Seattle Children's Hospital, which gave us a deep understanding of caregivers' behaviors, wants, needs, and pain points. After brainstorming design solutions, we decided to use our research findings to create a toolkit for the FRC. For the toolkit, we conducted audits and user tests on the in-person visit routine, various calendar services, and the Get Well Network. Finally, we compiled our research, recommendations, and solutions into this interactive PDF document.

# Recommendation Action Sheet



## In-Person Visit Recommendations

- Conduct in-person visits with inpatient caregivers in the afternoon, between 1-3 p.m. & 4-5 p.m, the first day after admission.
- Redesign the flyer to be more scannable and include information about the calendar & reminders.
- Maintain the loose structure of the script and include a short bullet about calendar & reminders.

## FRC Calendar Recommendations

- We recommend the FRC adopt Loxi, an online calendar service that fits FRC and caregiver needs.
- Consider Google Calendar (when paired with certain extensions) and Timely as alternative or intermediate options.
- Send event reminders 24 and 3 hours before an event.
- Display RSVP counts with events to motivate caregivers to take advantage of FRC resources.

## Get Well Network Recommendations

- In the Support Services Sections, elevate the information in the FRC tab and fold it into the basic needs tab.
- Present FRC information on the Get Well Network consistently with the way its presented on other FRC materials.
- Push notifications for important events on the Get Well Network.
- Make the FRC Calendar accessible from the main navigation in the Get Well Network.



# Design Principles



When designing a system that raises awareness about the FRC, we adhered to set of principles derived from best human-centered design practices and our user research findings. We recommend that the FRC Staff follow these principles in future projects.

# Design Principles



## I Use a Multipronged Approach

1. Multipronged

A system that reaches out to caregivers through multiple mediums will be more effective than a one size fits all approach.

Consider that caregivers come from different:

- Physical and cognitive access needs
- Linguistic and cultural backgrounds
- Knowledge about hospital routines and practices
- Familiarity with technology

## 2 Use a Systems-Thinking Approach

2. Systems-Thinking

When implementing a new outreach strategy, consider how it fits into the larger FRC system. Consider how different outreach strategies can reference each other and work together.

**Example:** The hospital implements a new app that has opportunities to include FRC information. Assess ways to alter the FRC pamphlet or in-person visit script to mention the new app.

## 3 Recognize Caregiver Preferences

3. Preferences

Caregivers prefer to learn about and be reminded of FRC related resources and events predominantly through verbal communication, posters on hospital walls or in their rooms, and text or email notifications. [View Survey Results & Discussion Page 32](#)

## 4 Recognize Caregiver Pain Points

4. Pain Points

Caregivers find it difficult to track all of the incoming information at the hospital. [View Interview Results & Discussion Page 29](#)

Caregivers may not be seeking information unless it is being given to them and may not know what question to ask in the first place. [View Interview Results & Discussion Page 29](#)

First time caregivers may feel confined to their room because they do not know if they are allowed to walk around the hospital. [View Interview Results & Discussion Page 29](#)

Caregivers may feel confined to the patient room because they feel guilty leaving the patient. [View Interview Results & Discussion Page 29](#)



# Caregiver Outreach Plan

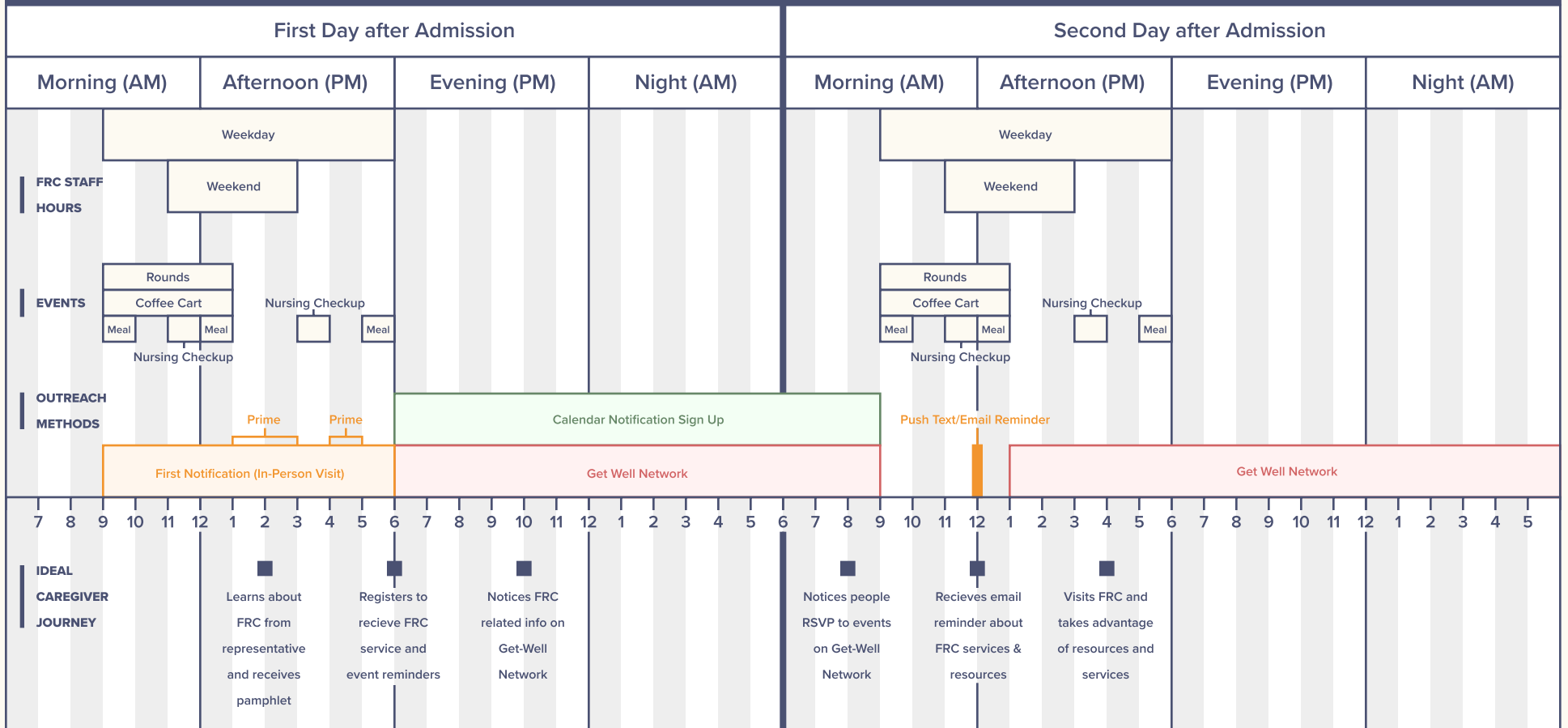


Based on our user research findings, we designed a multi-pronged plan for effectively reaching out to caregivers and motivating them to use FRC resources. We created a visual guide that shows the timing and methods of this plan.

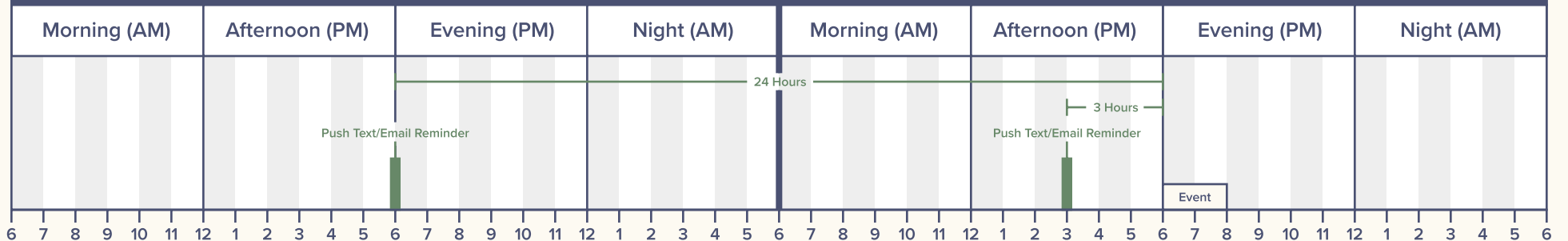
1. Multipronged

2. Systems-Thinking

## FRC Notification & Reminder Sequence

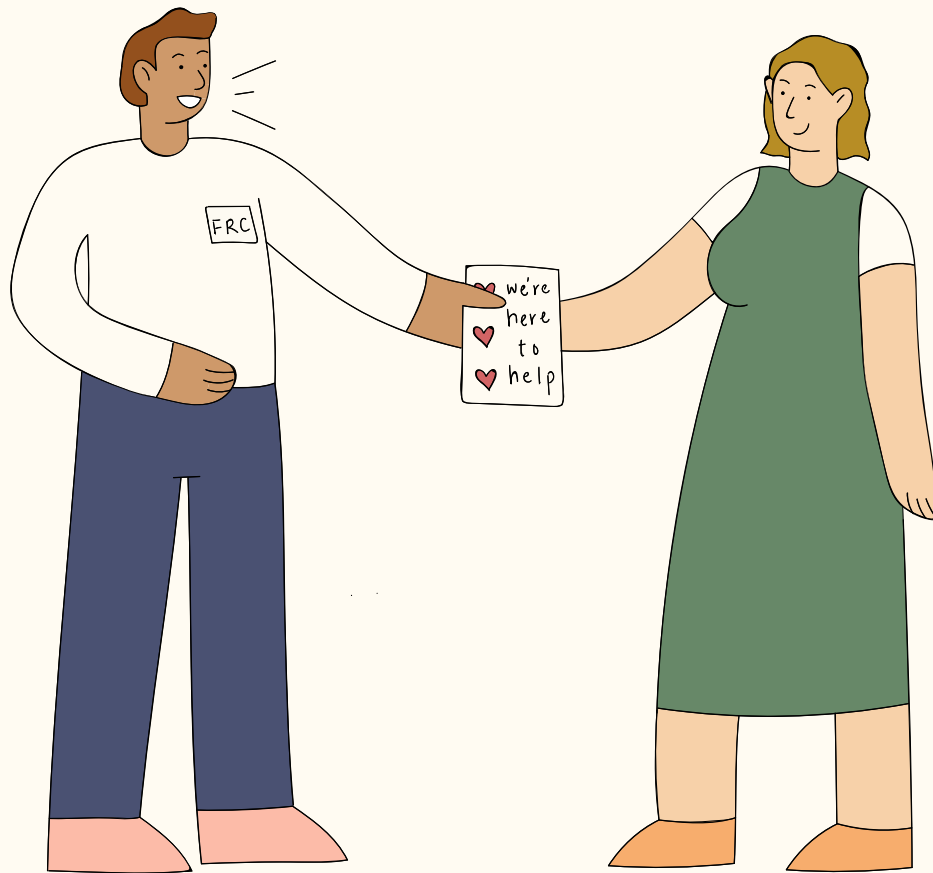


## Event Reminder Sequence



# Outreach Methods





# In-Person Visit

The following section discusses the appropriate timing for FRC representatives to visit caregivers in person and contains a collection of recommendations and redesigned materials for improving the effectiveness of this outreach method.

## Key Recommendations

1. Conduct in-person visits with inpatient caregivers in the afternoon, between 1-3 p.m. & 4-5 p.m, the first day after admission.
2. Redesign the flyer to be more scannable and include information about the calendar & reminders.
3. Maintain the loose structure of the script and include a short bullet about calendar & reminders.



# In-Person Visit: Timing

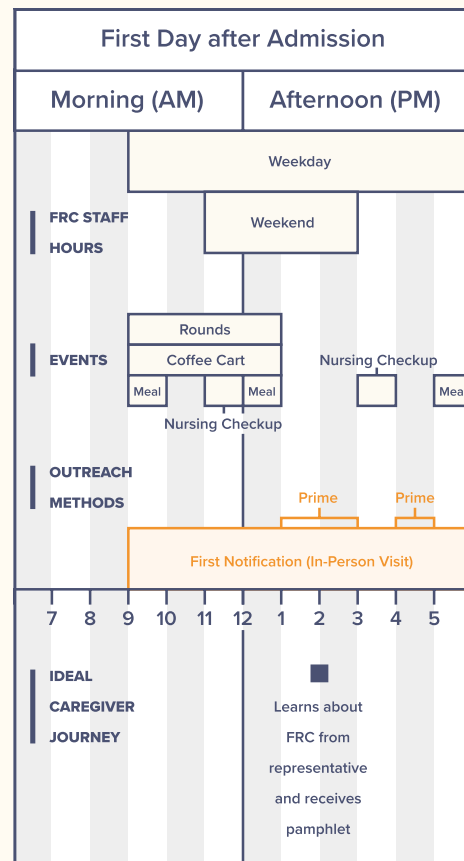
## Recommendation

Caregivers are most receptive to FRC representative visits between nursing check-ups. Given the timing of these check-ups, rounds, events, and FRC staff availability, we recommend that the FRC conduct in-person visits between 1-3 p.m. and 4-5 p.m. the first day after admission.

## Rationale

When we surveyed caregivers about what time a visit from the FRC would work best for their family (n=43), participants overwhelmingly responded that they preferred to be visited in the afternoon, between nursing check-ups. [View Survey Results & Discussion Page 32](#)

3. Preferences





# In-Person Visit: Current Flyer

## Recommendation

Redesign the two column layout of the current handout to be more scannable and make better use of hierarchy to establish clearer organization. Continue to employ colors and icons. Include a section, link, or scannable QR code that can take caregivers to the FRC calendar where they can view upcoming events and sign up for reminders.

## Rationale

In a usability evaluation, the current pamphlet received an overwhelmingly negative response. A usability test (n=21) conducted on the FRC Handout showed 71% of respondents did not like the layout and found it cluttered and confusing. Of the people who stated issues with the layout, 60% specifically mentioned the two column layout as their main issue. [View Flyer Evaluation Page 33](#)

3. Preferences

4. Pain points

Not clear enough that these are two columns

People responded positively to icons and colors

People confused by quote placement

### Family Resource Center

Level 7, River zone | 206-987-2201

<p><b>Front Desk</b> Near the Frog elevators <b>Staff available:</b> Monday-Friday 9 a.m. to 6 p.m. Saturday, Sunday 11 a.m. to 3 p.m.</p> <p>Toothbrushes, shampoo, and other toiletries</p> <p>Computers, printing, faxing, scanning</p>	<p><b>Family Room</b> Near the Forest skybridge <b>Open 24 hours a day</b></p> <p>Showers</p> <p>Computers, printing, surgery board</p> <p>Kitchen with microwave, vending machines, free coffee and tea, coffee hour</p> <p>Phone chargers in self-serve lockers</p> <p>Family lounge – TV, books, magazines</p> <p>Laundry – soap provided</p>	<div style="background-color: #f0f0f0; padding: 5px; border: 1px solid #ccc; margin-bottom: 5px;"> <p>Hospital and health information</p> </div> <p>Messages for parents and caregivers</p> <p>Car seat program</p> <p>Parent support information and groups</p> <p>Local area resources, tickets to local attractions</p>
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Dear Families,  
Let us take care of you.

# Family Resource Center



Dear families, let us take care of you.

Level 7, River Zone | 206-987-2201

## Front Desk

Located Near Frog Elevators | Staff Available: Monday - Friday 9 a.m. to 6 p.m & Saturday, Sunday 11 a.m. to 3 p.m

### Basic Needs



Toothbrushes,  
shampoo & toiletries



Car seat program



[seattlechildrens.org/frc/calendar](http://seattlechildrens.org/frc/calendar)

Email me reminders  
about resources &  
upcoming events

### Tech Needs



Computers, printing,  
faxing, scanning



Phone chargers

### Relaxation & Activities



Massages for parents  
& caregivers



Quiet seating area



Local area resources,  
tickets to attractions

### Info & Support



Hospital health  
Information



Parent support  
information &  
services

## Family Room

Located Near Forest Skybridge | Open 24 Hours a Day

### Basic Needs



Showers



Laundry - soap  
provided



Kitchen, microwave,  
vending machines,  
free coffee and tea

### Tech Needs



Computers,  
printing, surgery  
board

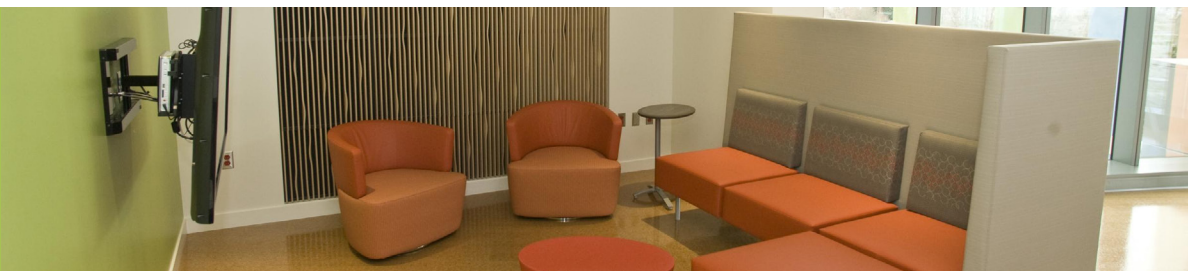


Phone chargers in  
self-serve lockers

### Relaxation

#### Family Lounge

TV, magazines,  
books and more!





# In-Person Visit: Redesigned Flyer

## Key Features

Our redesign of the pamphlet addresses all of the user feedback and incorporates a QR code & link that takes caregivers to the FRC calendar where they can view upcoming events, RSVP, and sign up for email notification reminders.

3. Preferences

Easy-to-scan horizontal separation of two groups

QR Code & link to FRC Calendar

2. Systems-Thinking

Groupings and color coded icons to reduce cognitive load and scan easily

Image of Family Lounge

**Family Resource Center**  
Dear families, let us take care of you.  
Level 7, River Zone | 206-987-2201

**Front Desk**  
Located Near Frog Elevators | Staff Available: Monday - Friday 9 a.m. to 6 p.m. & Saturday, Sunday 11 a.m. to 3 p.m.

**Basic Needs**

- Toothbrushes, shampoo & toiletries
- Car seat program
- QR code: [seattlechildrens.org/frc/calendar](http://seattlechildrens.org/frc/calendar)

**Tech Needs**

- Computers, printing, faxing, scanning
- Phone chargers

**Relaxation & Activities**

- Massages for parents & caregivers
- Quiet seating area
- Local area resources, tickets to attractions

**Info & Support**

- Hospital health information
- Parent support information & services

**Family Room**  
Located Near Forest Skybridge | Open 24 Hours a Day

**Basic Needs**

- Showers
- Laundry - soap provided
- Kitchen, microwave, vending machines, free coffee and tea

**Tech Needs**

- Computers, printing, surgery board
- Phone chargers in self-serve lockers

**Relaxation**

**Family Lounge**  
TV, magazines, books and more!



# In-Person Visit: Script

## Recommendation

Add information about how to access the FRC calendar and sign up for event reminders. Overall, the visit should be short, yet informative, as patients report feeling a lot of stress and information overload in their first couple of days at the hospital.

## Rationale

Every caregiver we interviewed explicitly mentioned keeping track of information as a pain point, and each detailed their own methods of how they try to do so, such as using the notes app on their phone, email, or whiteboards in the hospital rooms. [View Interview Results & Discussion Page 29](#)

2. Systems-Thinking

3. Preferences

## Recommended New Script Module

- Introduce yourself to the parent/caregiver
- Ask parent/caregiver if it is a good time to talk and that you are here to introduce them to services we offer while their child is in the hospital.
- Show the family where the In-Room Guide is and point to the Amenities tab outlining the support services in more detail. (Family lounge that is open 24 hours/day, free tea and coffee, computers and printers, free neck massage, etc.)
- Explain where the FRC is located and offer to show them where it is if needed.
- We understand that this is a complex place. This is a teaching hospital with a lot of different providers. Point out the Admit Packet and explain that inside is a list that describes each of their roles.
- We want to make sure that all of your concerns or questions are addressed, so please don't hesitate to ask any questions.

**> If you would like us to reach out to you at a later time through email or text, sign up on our calendar, which you can access by following the link or QR on this flyer.**

- Leave a copy of the FRC Flyer in the room.
- Was this helpful information? On a scale of 1-5



# FRC Calendars

The following section discusses a calendar system solution for managing and presenting events at the hospital that meets the needs of FRC staff and caregivers.

## Key Recommendations

1. We recommend the FRC adopt Loxi, an online calendar service that fits FRC and caregiver needs.
2. Consider Google Calendar (when paired with certain extensions) and Timely as alternative or intermediate options.
3. Send event reminders 24 hours and 3 hours before an event.
4. Display RSVP counts with events to motivate caregivers to take advantage of FRC resources.

# Recommended Calendar: Loxi

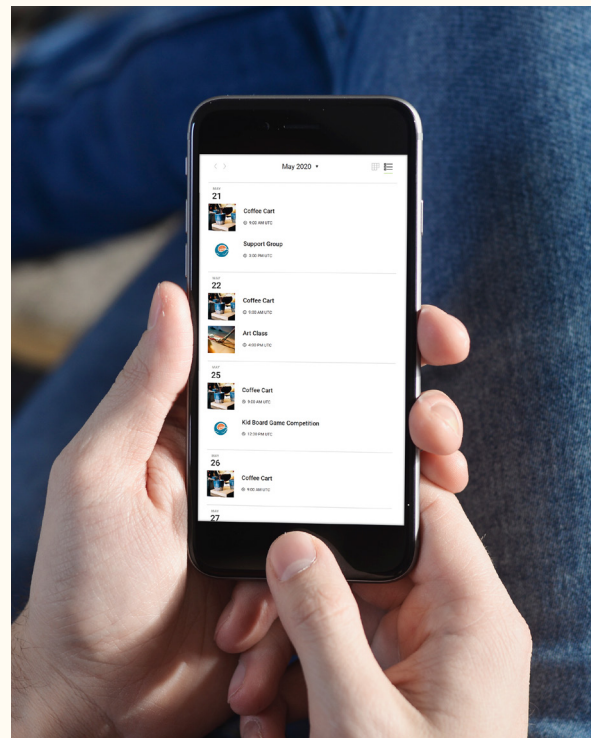
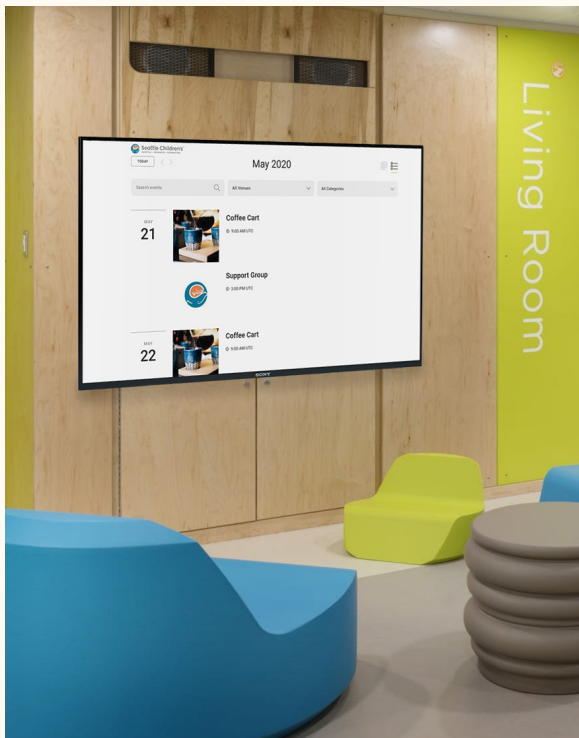
17



## Recommendation

After auditing different online calendar services, we recommend Loxi. With Loxi, the FRC will be able to quickly add events, customize the calendar's appearance, expand it to other hospital organizations with categories and pricing, and embed it into the Seattle Children's Hospital website. Loxi fits the requirements outlined by the FRC and gives caregivers the functionality they need.

**Link:** <https://loxi.io/>



## Rationale

A calendar system that manages, presents, and reminds caregivers about hospital events and resources addresses one of caregivers' biggest pain points: tracking information at the hospital. [View Interview Results & Discussion Page 29](#). Loxi can easily be displayed on TVs throughout the hospital and accessed online, thus reducing the amount of information caregivers have to track by placing it in one externally managed location. Since Loxi is able to send reminders over email to caregivers that RSVP to events and 98% of surveyed caregivers reported wanting email reminders of FRC resources and events, the FRC can use Loxi to accurately collect caregiver email addresses and send reminders about both events and FRC resources. [View Survey Results & Discussion Page 32](#)

2. Systems-Thinking

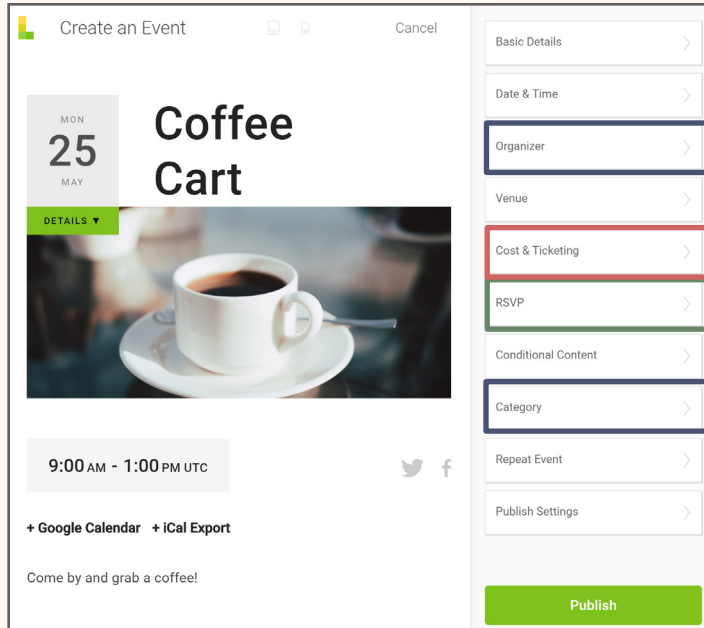
3. Preferences

4. Pain Points

# Loxi Features



## Functional and Easy



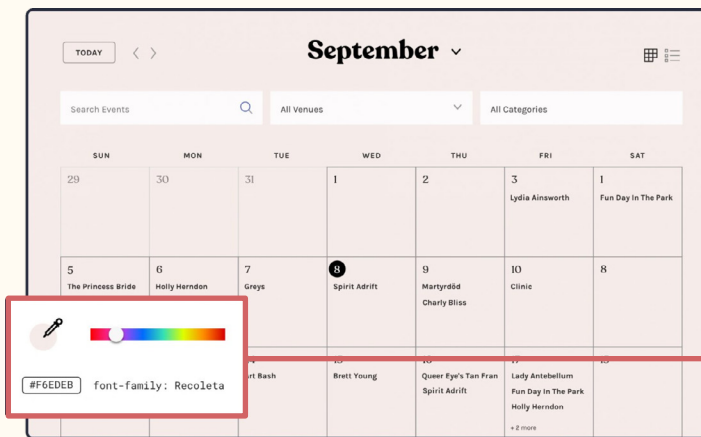
Set payment & ticketing options for events

Create categories to incorporate many organizations on one calendar

Email reminders to caregivers who RSVP.

3. Preferences

## Customizable



Customize color and font to match Seattle Children's Hospital brand.

## Pricing & Other Features

It costs \$8 a month to access all of Loxi's features which include: creating unlimited events, importing events from other platforms, searching with filters, and embedding the calendar into websites. There are no pricing tiers or add-on fees. There is also a free demo available.

Full Feature Set: <https://loxi.io/features/>

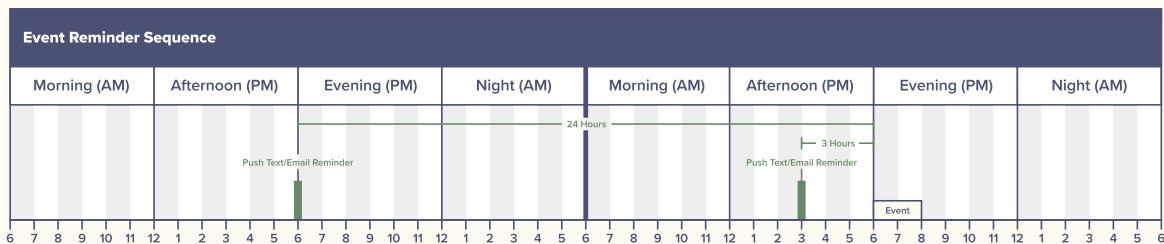
# Loxi Recommendations



## Recommendations

### 1. Event Reminders

We recommend that the FRC sends one event reminder 24 hours before an event, and another 3 hours before an event.



### Rationale

A majority of surveyed caregivers (84%) wanted 1-2 reminders of services and events. 57% reported wanting event reminders 1-3 hours before and 39% reported wanting a reminders 24 hours before. [View Survey Results & Discussion Page 32](#)

### 3. Preferences

### Considerations

With Loxi, caregivers can receive email reminders once they RSVP to an event. When RSVPing, caregivers have the option to add the event to their own personal calendars and customize the timing of reminders to their preferences.

### 2. Display RSVP Counts on Calendar

We recommend that the FRC show the RSVP count when displaying the calendar on a website or TV.

### Rationale

Caregivers reported being more inclined to take advantage of hospital resources and services if they saw other caregivers using them. [View Interview Results & Discussion Page 29](#)

### Considerations

As of 5/27/2020, Loxi does not yet have a feature that allows users to display RSVP counts. After reaching out to the Loxi team, they notified us they are working on developing this feature and plan to roll it out in the future. Having looked at other calendar systems, we have not found alternatives that display RSVP counts. [View Calendar Competitive Analysis Chart 38](#)



# Get Well Network

The following section discusses design opportunities on the Get Well Network for increasing FRC visibility and encouraging caregivers to take advantage of resources.

## Key Recommendations

1. In the Support Services Sections, elevate the information in the FRC tab and fold it into the basic needs tab.
2. Present FRC information on the Get Well Network consistently with the way its presented on other FRC materials.
3. Push notifications for important events on the Get Well Network.
4. Make the FRC Calendar accessible from the main navigation in the Get Well Network.

# Get Well Network



## Introduction

Given the Seattle Children’s Hospital’s restrictions against placing posters throughout its premises, we selected the Get Well Network, which is available in every patient room, as an alternative to caregivers’ strong preference for posters. [View Survey Results & Discussion Page 32](#)

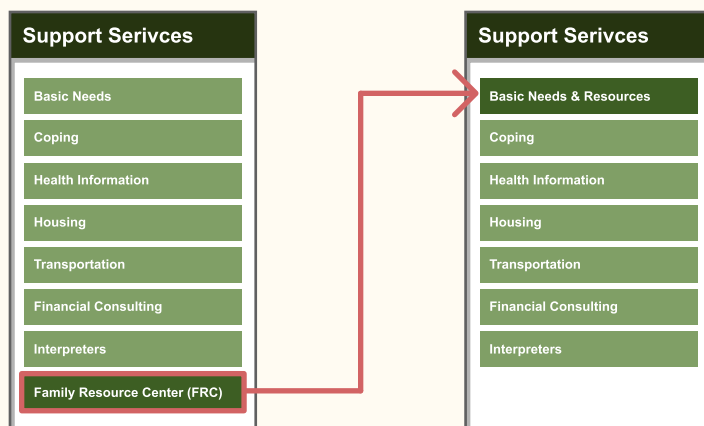
## Recommendations (Part I)

### 1. Elevate FRC in IA

Fold the information in FRC Tab into Basic Needs Tab.

#### Rationale

To reduce navigation options and make the FRC more discoverable, we suggest combining the two tabs into one. [View Heuristic Evaluation Page 40](#)

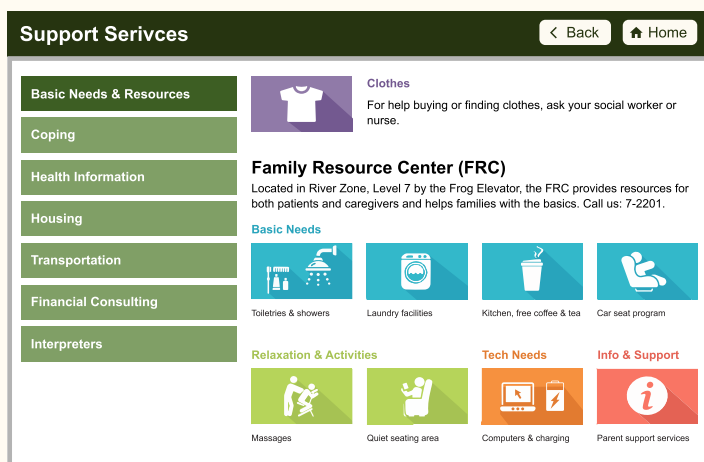


### 2. Present Information Consistently

Use icons and color to present FRC resources consistently across all materials.

#### Rationale

Using consistent presentation gives the FRC a more recognizable identity.



#### Considerations

While this tile-based layout is more attention-grabbing and consistent with other FRC materials, the Get Well Network code base may not be able to accommodate this style. In this case, we recommend using headers and sub-headers to split up all of this information in list-form. Alternatively, the FRC can upload a static image of this layout in this section; however this could make content difficult to edit and create an accessibility barrier for caregivers using a screen readers.

1. Multipronged

2. Systems-Thinking

3. Preferences

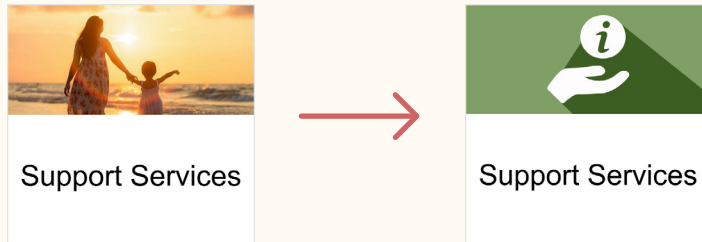
# Get Well Network



## Recommendations (Part II)

### 3. Change Imagery

Find a more representative image for support services. Consider designing a new icon.

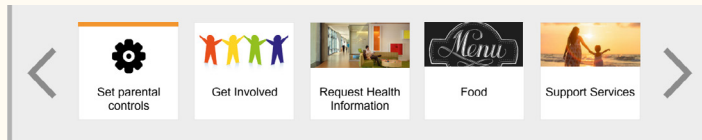


#### Rationale

The current image does not accurately represent the contents of the section; the beach aesthetic is not related to the content.

[View Heuristic Evaluation Page 41](#)

#### Main Navigation

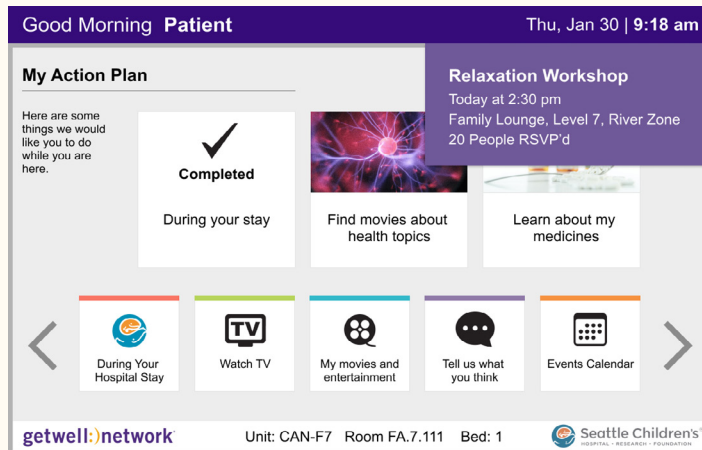


### 4. Event Notifications

Implement notifications for upcoming events (unit-specific or general) on the Get Well Network.

Push an event reminder 3 hours before an event.

Say how many caregivers have RSVP'd to the event.



#### Rationale

98% of surveyed care-givers reported wanting reminders of FRC resources and events. [View Survey Results & Discussion Page 32](#). Caregivers are more inclined to use resources if they see other caregivers are doing the same. [View Interview Results & Discussion Page 29](#)

#### Considerations

Send notifications for important or popular events only and add settings allowing caregivers to turn off notifications. Do not push notifications to caregivers watching movies or relaxation videos.

# Get Well Network



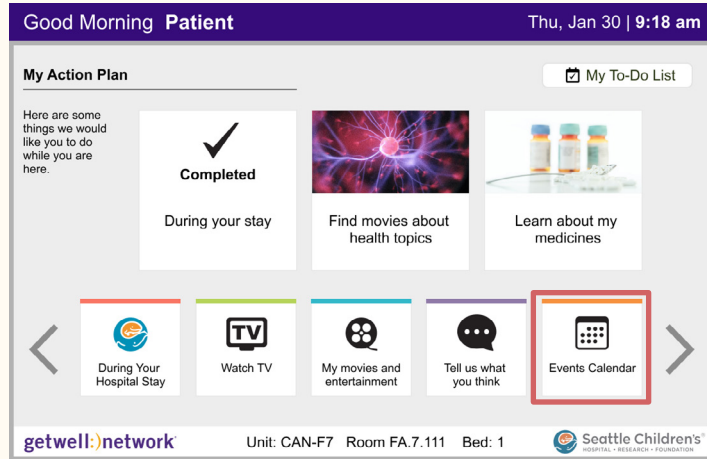
## Recommendations (Part III)

### 5. Link to FRC Calendar

Make the FRC Events calendar accessible from the Get Well Network by adding a tile in the main navigation.

#### Rationale

A new tile will add an extra entry point into the calendar and make FRC related information more discoverable.



2. Systems-Thinking



# Research





# Research Overview

## Defining Caregivers

We defined primary caregivers as parents, guardians, family, or friends who come into the hospital with the patient and support them throughout their stay. We are focusing on these people in particular because the FRC caters to caregivers and hopes to provide information and resources to make their stays better. We did not focus on secondary caregivers that might be providing support to the patient remotely.

## Our Process

To recommend design solutions and a plan for raising awareness about the FRC at Seattle Children's Hospital, our team used a variety of user research and testing methods to understand caregivers' experiences and pain points. We began our process by interviewing four caregivers to explore how they use the FRC and keep track of information at the hospital. After analyzing these interviews, we created a survey to test and validate our findings across a larger sample of people. Specifically, we asked what times are most convenient for FRC representatives to talk to caregivers in person, if and how caregivers want to be reminded of FRC events and services, and finally, how caregivers organize and track information.

Based on the results from the interviews and surveys, we decided that the best solution is to reach out to caregivers through multiple outreach methods: the in-person visit, a calendar system, the Get Well Network, and text or email reminders.

To understand how to most effectively execute these outreach methods, we used a variety of research approaches. First, we studied the Welcome Program script and conducted a usability test on the flyer that is given to caregivers by FRC representatives during in-person visits. Next, we studied the Get Well Network to evaluate the discoverability of FRC information and to understand the platform's constraints. Finally, we talked to FRC staff and used our survey findings to compile a list of requirements for a calendar system that the FRC could use to manage, track, and present events at the hospital. The following sections report our methods, analysis, discussions, and results for each of these different research methods.



# Interviews

The following section reports our research questions, methods, analysis, discussions, and results from our interviews.

## Key Findings

1. **Primary pain points:** being unaware of FRC resources due to poor advertising, feelings of isolation and guilt that prevent leaving the patient rooms, and keeping track of a lot of information.
2. **Common information tracking methods:** memory, handwritten notes, handouts/pamphlets, and mobile apps.
3. **Interesting behaviors:** new caregivers find hospital routines unpredictable and complex. They do not seek out information unless it is being given. They are more inclined to take advantage of hospital resources if they see other caregivers doing the same.

# Interviews



## Research Questions

1. What information do caregivers need to know when admitted to the hospital?
2. How does this information differ based on the unit that the caregiver is admitted to?
3. How do caregivers process information when in the hospital?
4. When is the best time to present caregivers with important information?
5. How do caregivers interact with the printed materials given or available to them?
6. How do caregivers view the FRC and are they aware of the resources provided?
7. How do caregivers keep track of information during their child's stay in the hospital?
8. Is there any information that caregivers find to be missing or lacking?
9. What is the most frustrating part about being a caregiver in the hospital?



## Methods

### Type

We followed a semi-structured interview format. In addition to 12 scripted questions, we asked follow-up questions in cases where we wanted participants to further explain their reasoning. We conducted the interviews over Google Hangouts; each lasted between 20 and 45 minutes. Once the interview began, we read participants an introduction and consent script. We then recorded audio of the interview with the participant's consent and transcribed them by hand for later analysis.

### Participants & Recruitment

We interviewed a total of 4 caregivers. Given that inpatient stay can be stressful, we interviewed caregivers who have gone through this experience in the past. We interviewed an even distribution of hospital stay durations:

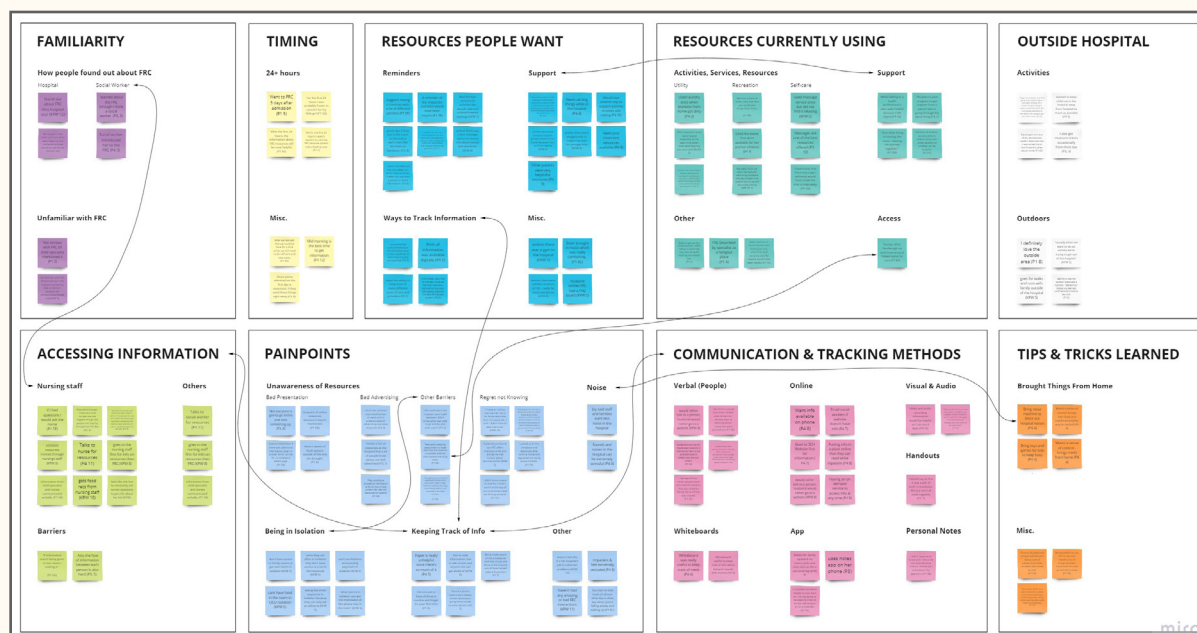
1. Long Visit: Families who spend one to several months at the hospital
2. Mid-Range Visit: Families who spend one to several weeks at the hospital
3. Short Visit: Families who spend one to several days at the hospital

We recruited participants from the Seattle Children's Hospital Advisory Board. All four caregivers were white, female and between the ages of 30-40.



## Analysis

We used affinity diagramming to analyze our interviews. We parsed the interviews into salient quotes, statements, and phrases, and wrote them on post-it notes. We grouped the post-it notes based on common found themes and identified names for the groupings. Afterwards, we categorized related groupings and labeled the categories. In the end, our affinity diagram revealed 9 topics that we used to scope our research questions for the survey and our design challenge. These topics included FRC familiarity, timing, resources that people want, resources people currently use, activities outside the hospital, information access, pain points, communication methods, and tips and tricks learned throughout their stay.



## Results & Discussion (Part I)

### Accessing Information

Participants brought up four different ways that they tend to access information during their stay. Every participant stated that they primarily go to nurses for information and if one does not know the answer they tend to ask the next nurse that comes by for rounds. Then, caregivers talk to social workers if they cannot get their questions answered by the nurses. In addition, caregivers also remember receiving a lot of information during their hospital tour. Lastly, caregivers reported finding other caregivers helpful for learning about the flow of the hospital and available resources.

### Resources and Activities Caregivers Currently Use

Currently, caregivers are using basic FRC resources such as laundry services, toiletries, showers, stress management activities that provide connection between caregivers, and the outdoor areas. Caregivers report enjoying leaving the hospital and walking outside on the trails or at nearby parks.



## Results & Discussion (Part II)



### Barriers to Resource Access

Caregivers reported the following barriers for accessing resources at the hospital: confinement to patient rooms, balancing parenting multiple kids, and ineffective presentation of information. Caregivers said that they feel confined to their child's hospital room and that they forget to take care of themselves. Caregivers also feel isolated while in the hospital and would like more community support to get them out of their child's room. They mentioned that they barely look at the stack of handouts they receive upon arrival because it is an overwhelming amount of information. One caregiver brought up that they only looked at the handouts after they left the hospital and reported regretting not knowing about the described resources. Another participant described challenges in understanding hospital routines because it was their first time. As newcomers, they did not know what they were allowed to do and only took advantage of resources once they saw other caregivers doing so. They also reported not seeking out information unless it was being given to them. Another participant expressed a similar sentiment saying that they did not know what questions to ask to get the information they needed.



### Communication and Tracking Methods

Caregivers have a myriad of ways in which they collect and track information. They tend to keep information online in Google Drives or emails so that it is available whenever they need it. During their stay they like to use the whiteboards in patient rooms to keep track information about their child. Other ways include apps on their phones, writing in notebooks, recording voice notes, and talking to hospital staff. Finally caregivers reported information tracking to be one of the most difficult tasks.

### Timing

Some caregivers reported wanting to learn about resources 24 hours after being admitted to Seattle Children's Hospital, once they had time to process the duration of their hospital stay and settle in. On the other hand, one participant reported wanting all the information at the very beginning. We explored the disparities in timing preferences in our surveys. [View Surveys Page 31](#)

### Caregiver Wants

Participants mentioned that they wanted an easier way to track, organize, and sift through information while at the hospital. While they tended to use notes, apps, and online resources to track information, they found it cluttered, confusing, and overwhelming due to the amount of information given throughout their stay. Additionally, caregivers reported wanting reminders of activities. Lastly, caregivers asked for support groups with other parents in the hospital. They mentioned that being a caregiver can be isolating and wanted a sense of community.





# Surveys

The following section reports our research questions, methods, analysis, discussions, and results from our surveys.

## Key Findings

1. The majority of people want to be initially notified quickly of the FRC's services, with most people saying within the first 24 hours.
2. For all notifications and reminders, people prefer in-person visits, posters in each patient room and throughout the hospital, and text/email notifications.
3. People want to receive reminders of both events and services.
4. In general, people prefer to be visited and notified of resources in the afternoon after rounds and between nursing checkups.

# Surveys



## Research Questions

1. What time of day are people most receptive to having an in-person visit from the FRC?
2. Do caregivers want reminders about the FRC's events and services and if so, in what medium?
3. How do caregivers organize and keep track of information throughout their hospital stay?

## Methods

### Type

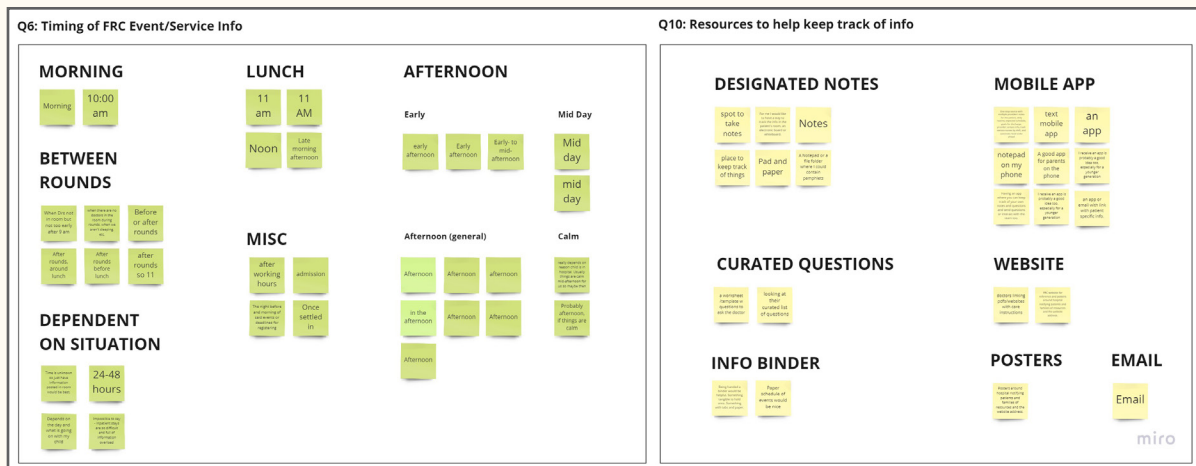
We constructed our survey using Qualtrics. It consisted of a maximum of 15 questions; some questions had exclusion criteria so not every person got every question. The survey featured a range of multiple choice, ranking, and free response questions.

### Participants & Recruitment

We received a total of 44 responses, 43 of which were valid (one had to be removed from analysis due to incomplete and unintelligible answers). We recruited participants from the Seattle Children's Hospital Advisory Board. We did not record any demographic information about our participants.

## Analysis

13 of the 15 questions were either multiple choice or ranking questions, so we analyzed them using Qualtrics' built in data analysis software, which auto generated bar charts that allowed us to compare answers. We analyzed the remaining two free response questions using affinity diagramming.



# Surveys



## Results & Discussion

### Initial Notification - Timing & Mediums

The first portion of our survey focused on the timing of initial notifications of FRC services. We found that most people want to be notified quickly after admission, with a majority (41%) saying they wanted to be notified within the first 24 hours. 28% said they wanted to be notified the day after admission.

Next, participants were asked what mediums they would like this notification to be in, and the three most popular answers were in-person visits, posters in each patient room and throughout the hospital, and text/email notifications. This means that the first in-person meeting should happen quickly after admission, ideally within the first day, and in the form of an in-person visit, a poster, or a text/email notification (potentially all three).

### Reminders - Timing & Mediums

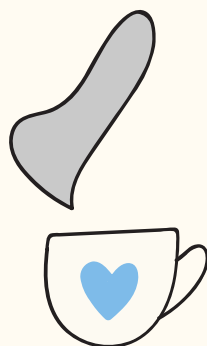
The next portion of our survey focused on reminders of FRC events and services. When asked what reminders caregivers want to receive, people overwhelmingly responded that they preferred notifications for both events and services (98%). In general, people want reminders of events close to when the event takes place. 57% want event reminders 1-3 hours before the event and 39% want reminders 24 hours before. A majority of people (84%) want 1-2 reminders of services. When asked what mediums they would want events and service notifications to be in, people again chose text/email reminders, posters, and in-person visits, matching up with the preferred mediums for initial notifications. Overall, people want a few, well timed reminders about events and services.

### Information Tracking

When asked about strategies for keeping track of information at the hospital, participants said they prefer to do so through handwritten notes, paper handouts/brochures, whiteboards, and email. When asked what resources could help track information, the most popular responses were a mobile app and a binder for notes. These responses mostly align with what caregivers already use.

### General Timing

Finally, when asked about general timing for both the initial notification and reminders, people overwhelmingly said the afternoon after rounds, between nursing checkups and lunchtime. This outcome is especially interesting because participants were responding to a free-response question. The responses logically make sense as rounds are at 11 a.m. and lunch is at noon, so caregivers' biggest gap of free time is the early afternoon. Overall, this means that notifications should be conducted in the early afternoon when families are not preoccupied and are more receptive to new information.





# FRC Flyer Evaluation

The following section reports our methods, analysis, and results for evaluating the effectiveness of the FRC flyer.

## Key Findings

1. A majority of people responded negatively to the two-column layout of the current flyer, with the main complaint being that it is difficult to scan.
2. A majority of people responded positively to the use of color and icons.
3. A majority of people are able to accurately identify what the FRC does after looking at the flyer.

# FRC Flyer Evaluation



## Research Questions

1. How effective is the FRC flyer at communicating the services and resources the FRC provides?
2. What impression do people have of the flyer?

## Methods

### Type

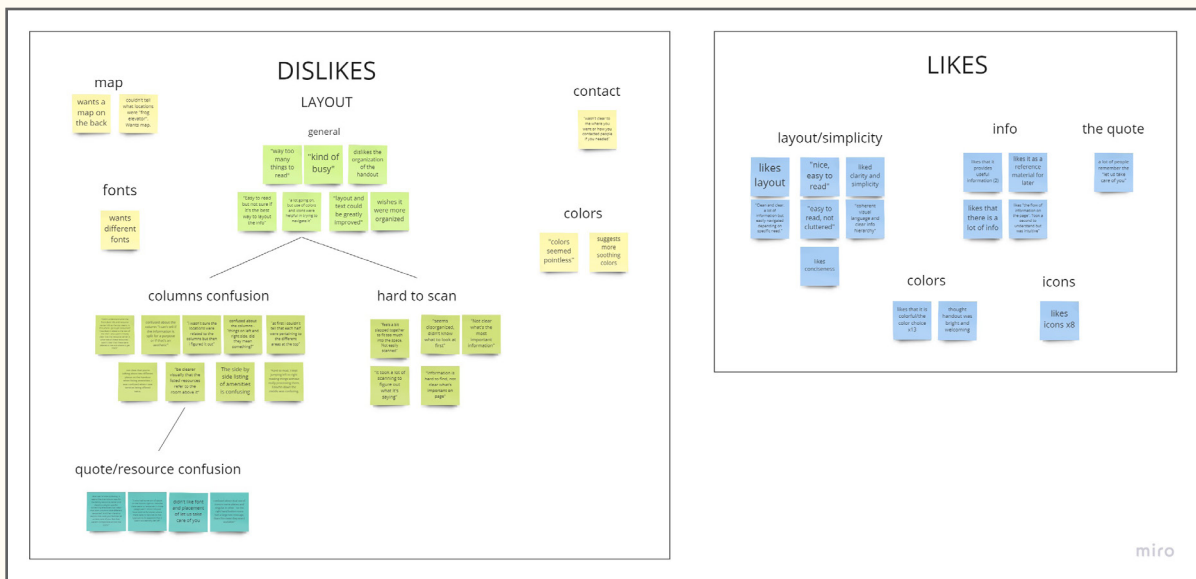
We conducted an impression usability test on the FRC Flyer using Jotform. We gave participants 30 seconds to look at the flyer and then asked a series of free response questions about their understanding of the content and impressions of the FRC.

### Participants & Recruitment

To get feedback from people who were unfamiliar with the FRC, we sent the test to family and friends of all ages, and posted it in a UW Facebook group. The goal was to emulate someone who had never heard of the FRC viewing the flyer for the first time. We screened participants for their familiarity with the FRC, and tested only those who were unfamiliar with it. We collected no demographic information about the participants. We tested 22 participants.

## Analysis

We analyzed the responses using affinity diagramming.



# FRC Flyer Evaluation



## Results & Discussion

Our affinity analysis indicated that a majority (71%) of respondents did not like the layout of the handout and found it cluttered and confusing. Of the people who stated issues with the layout, 60% specifically mentioned the two column layout as their main issue, stating things like:

*"I can't tell if the information is split for a purpose or if that's an aesthetic."*

*"Things on the left and right side, did they mean something?"*

*"Not clear that you're talking about two different places on the handout when listing amenities. I was confused when I saw the services being offered twice"*

In addition to confusion about the columns, four people also reported specific confusion about the dear families quote and how it blocked part of the right column. One participant said:

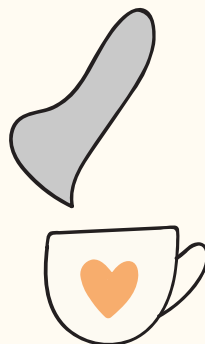
*"On the right hand bottom icons, it had a large text message. Does that mean they aren't available?"*

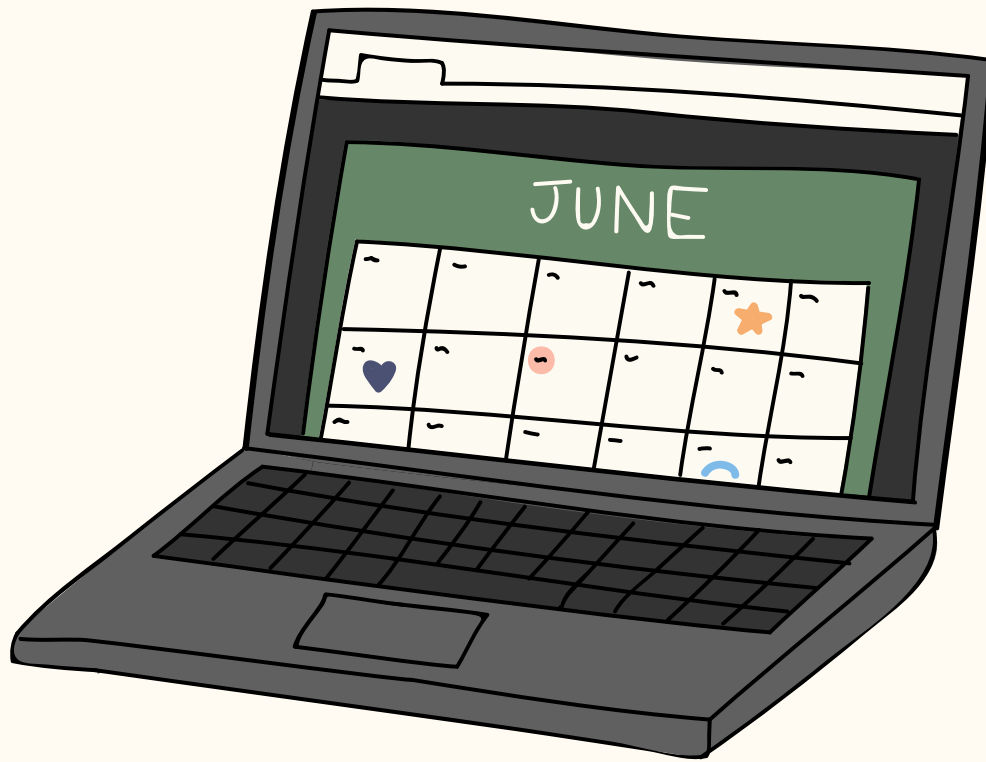
Furthermore, 23% of participants specifically stated that they found the handout hard to scan and did not know what to look at first.

Despite the large amount of negative feedback, there was some positive praise about the use of colors and icons. 61% of people mentioned liking the use of color and 38% mentioned enjoying the use of icons. Overall, 90% of participants were able to accurately guess what the FRC does based on the flyer. 65% of participants said they would definitely visit the FRC after looking at the flyer, and 35% said that they would maybe visit.

## Recommendations

[View In-Person Visit 12](#)





# Calendar Competitive Analysis

The following section reports our methods, analysis, and results for comparing different online calendar services.

## Key Findings

1. Loxi, is an online calendar service that best fits FRC and caregiver needs.
2. Google Calendar (when paired with certain extensions) and Timely can be good intermediate or alternative options.

# Calendar Competitive Analysis



## Introduction

We conducted an audit of calendar options that fit FRC and caregiver requirements and preferences. Moreover, we looked at research that the FRC had previously done on other hospital site calendars.

## Methods

To conduct the audit, we searched Google for calendar applications that could be integrated into the Seattle Children's Hospital website with the option to expand to multiple groups in the hospital. Using the interview and survey results and requirements from our sponsors, we created a list of calendar requirements and evaluated multiple services. We looked for the following key functionalities:

- An easy interface for teams at Seattle Children's Hospital to enter events, including last-minute events or changes
- Ability to display today's/upcoming events on public screens in the hospital, smartphones (perhaps in the Scout app), and on the website in an easy-to-read format
- Customizable to be Seattle Children's Hospital branded
- Opt-in for text/email reminders or alerts, either by specific event or possibly by category or keyword
- Optional registration and payment functions (this would potentially expand its usefulness across other areas of the organization)
- Budget constraints

## Results

Ultimately we recommend Loxi because it best fits all of the outlined requirements. View the table on the next page to see how it compares with other calendars.

## Recommendations

[View FRC Calendar 17](#)

Requirements	Loxi	Timely	Google Calendar
<b>Easy Interface Allowing for Last Minute Changes</b>	Filter and Search allows multiple types of events to be on one calendar  Add events through Google Calendar, Outlook or directly through Loxi	Categories and Tags available for each event	Can be integrated into personal calendars
<b>Embeddable to Both Website and App</b>	Embeddable onto a website. For mobile integration, contact Loxi support team	Embeddable onto a website with possible integration into the Scout app (support team can help with this)	Embeddable onto website and mobile
<b>Display Today's Events</b>	Multiple displays including monthly and list form	Multiple views with the option to have a tile version of all the events for one day  Can promote events on social media	Multiple displays including day, week, and month
<b>Can be Branded to Seattle Children's Hospital</b>	Customizable to any brand	Customizable to any brand	Not customizable
<b>Opt-in Text/Email Reminders</b>	Once RSVP'd for an event	Send out automatic newsletters about events through emails	Can create public Google Group people can sign up for to get notifications about all events
<b>Registration Functionalities</b>	RSVP options for individual events with emails for reminders	RSVP options for individual events with emails for reminders  Can add and share events through every social media and calendar/email	RSVP only available for people who have opted into the Google Groups
<b>Payment Functionalities</b>	Add a purchasing option with tickets	Add a purchasing option with tickets	No native payment functionalities. Possible extensions: EventBrite
<b>Number of Attendees</b>	Ability to see how many people have RSVP'd from admin side  Will be visible to public in future	Ability to see how many people have RSVP'd from admin side	Ability to see how many people have RSVP'd from admin side
<b>Barrier of Entry</b>	Access website or app	Access website or app	Access website or app
<b>Pricing</b>	\$8/month	\$14 - \$83 depending on package	Free



# Get Well Network Evaluation

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The following section reports our methods, analysis, and results for evaluating design opportunities on the Get Well Network for raising awareness about the FRC.

## Key Findings

1. Currently, the discoverability of FRC information on the Get Well Network is low.
2. There are some minor inconsistencies in the way the FRC presents information on the Get Well Network that could lead to reduced engagement and recognition of the FRC.

# Get Well Network Evaluation



## Methods

To conduct our evaluation, we used a method called a heuristic evaluation. In this method, we look at how well a system adheres to a set of usability principles. We used the following principles for our evaluation:

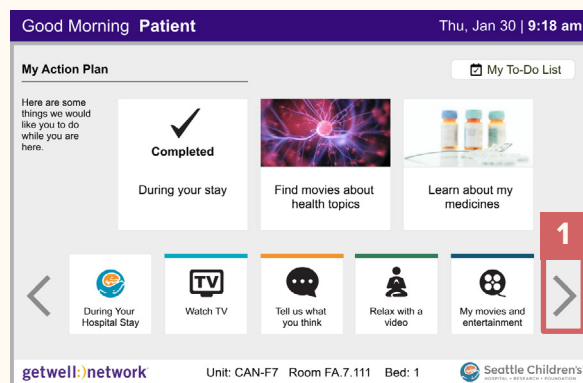
**Discoverability:** How easy is it to find information about the FRC on the Get Well Network?

**Consistency:** Does the FRC use similar language and visual patterns across materials?

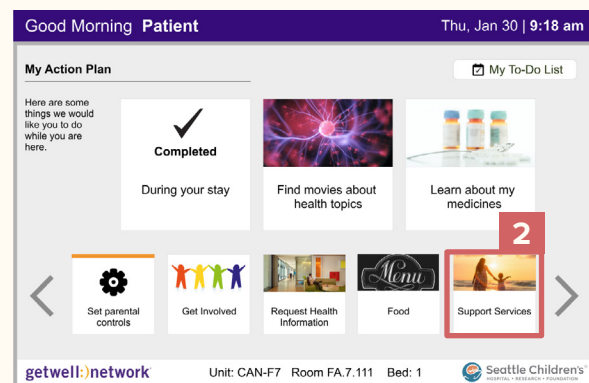
## Analysis & Results (Part I)

To evaluate discoverability, we looked at the steps caregivers would have to go through to find FRC information.

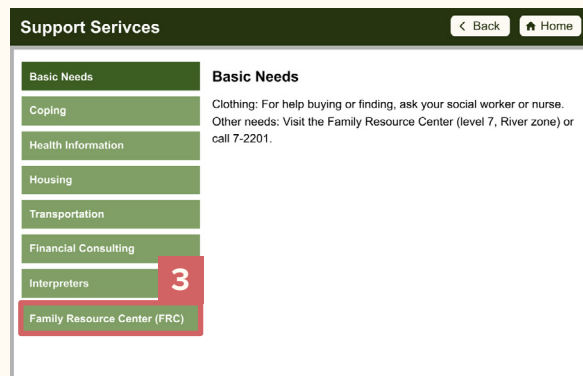
### 1. Home Screen - Navigation (1/3)



### 2. Home Screen - Navigation (2/3)



### 3. Support Services Screen - Basic Needs



### 4. Support Services Screen - FRC



Currently, FRC information is three clicks deep and in two different navigation menus. Moreover, in both navigation menus, the FRC link appears last. Given the deep placement of this content in the system's architecture, caregivers are unlikely to come across FRC information whether they are directly looking for it or casually browsing the Get Well Network.

# Get Well Network Evaluation



## Analysis & Results (Part II)

We also looked at the imagery that the system pairs with FRC information. Currently, information about the FRC sits in a section called “Support Services.” The image that is paired with the label “Support Services” features a parental figure and a child playing on the beach. While this photo is potentially relaxing to look at, it does not match the tone and content in the Support Services section which is more informational and practical. A caregiver that is scanning the navigation may not expect to find such information by clicking on this tile because of the dissonance between the imagery and label.



Support Services

Finally, we compared how the FRC presents information on the Get Well Network, flyer, and website and looked for inconsistencies that could impede caregivers learning and recognizing the FRC.

### FRC Get Well Network Screen

### FRC Flyer

With a few minor exceptions, we found that the FRC uses the same tone and language to present their resources and services. The only major inconsistency is that the FRC does not use any colors and icons to display their resources on the Get Well Network or website. The lack of these visual signifiers on the Get Well Network and website is ultimately a minor issue; however, their inclusion would increase engagement and reinforce the FRC’s identity making it more memorable and recognizable.

## Recommendations

[View Get Well Network 20](#)

# Acknowledgments





## A special thanks to

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