

jeffrahman.works

Robin Assist App

App Design Case Study





The Challenge

The Robin Assistant ambiently captures clinical data in the exam room, but behind the scenes virtual scribes needed a way to quickly review media, multiple sources of clinical data and process patient visits to build quality documentation for doctors.

The Idea

Create an app that gives easy, reliable access to the patient data in an order that simplifies the complexities of medical note creation.



My Role

I was responsible for leading research, concepting and creating design systems, roadmap ideation, and branding guidance for Robin Healthcare's internal scribe app - Robin Assist.

Supporting Team:

- (2) Product Manager
- (2) Product Designer
- (1) UX Copywriter
- (1) UX Researcher

Tools Used



User Research

Conducted quantitative and qualitative research with medical scribes through a series of surveys and 1:1 interviews. The work resulted in a user journey map and initial key flows to consider as we started to think through the experience design.



Brianna

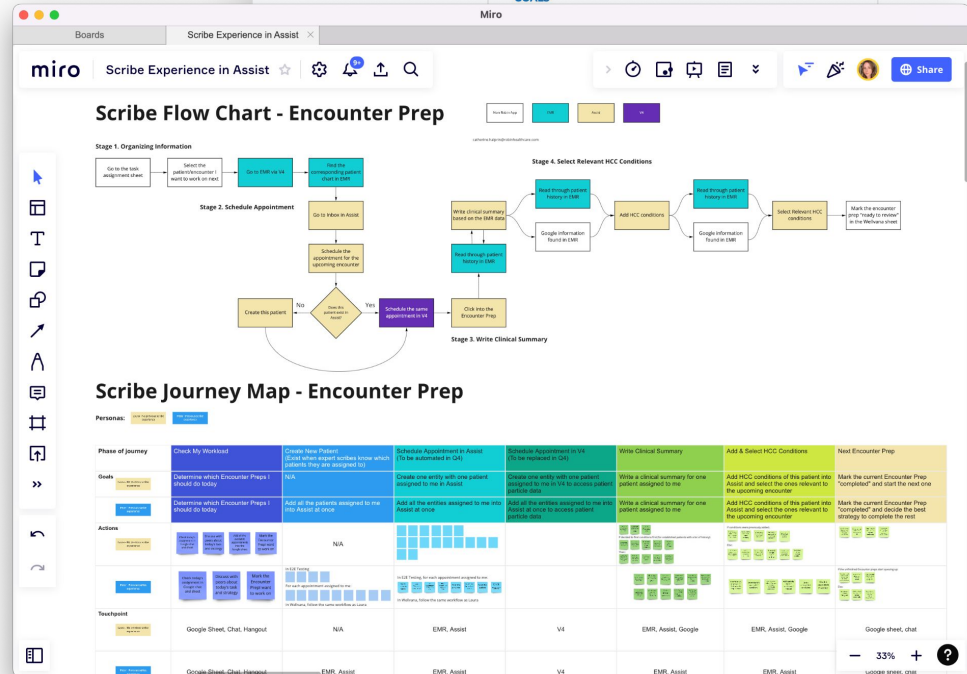
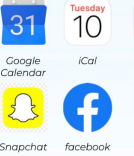
DEMOGRAPHICS

Age: 24
Gender: Female
Occupation: Scribe
Education Plans: Grad School
Location: Suburban
Edu: Bachelors

BIO

Brianna has always found she had an aptitude for science. She loved the challenge of jumping in and learning new systems. While she didn't go to school with med school in mind, something over the past few years sparked her interest in the health sciences. Scribing for Robin gives her the opportunity to gain some more knowledge on the subject and get some experience to put on her grad school application. Plus, stay-at-home and hourly flexibility makes this the perfect gap year job. When she takes a break from work she just wants to relax, enjoy great food and buy things that make her happy. When she is not working she spends time staying connected to her friends and family on Facebook and Instagram.

FREQUENTLY USED APPS



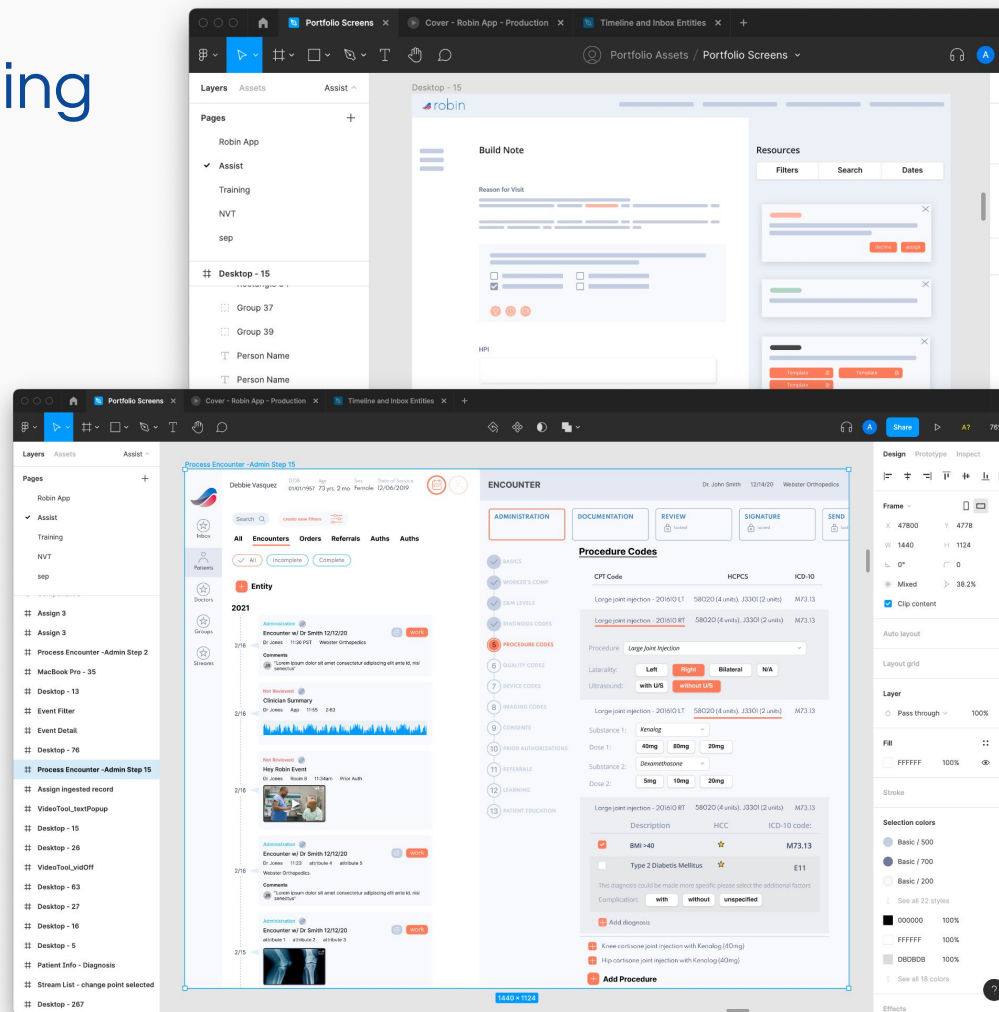
Paper Prototypes

Rapid paper prototyping was done on key flows to gain stakeholder alignment and better visualize the Robin Assist roadmap.



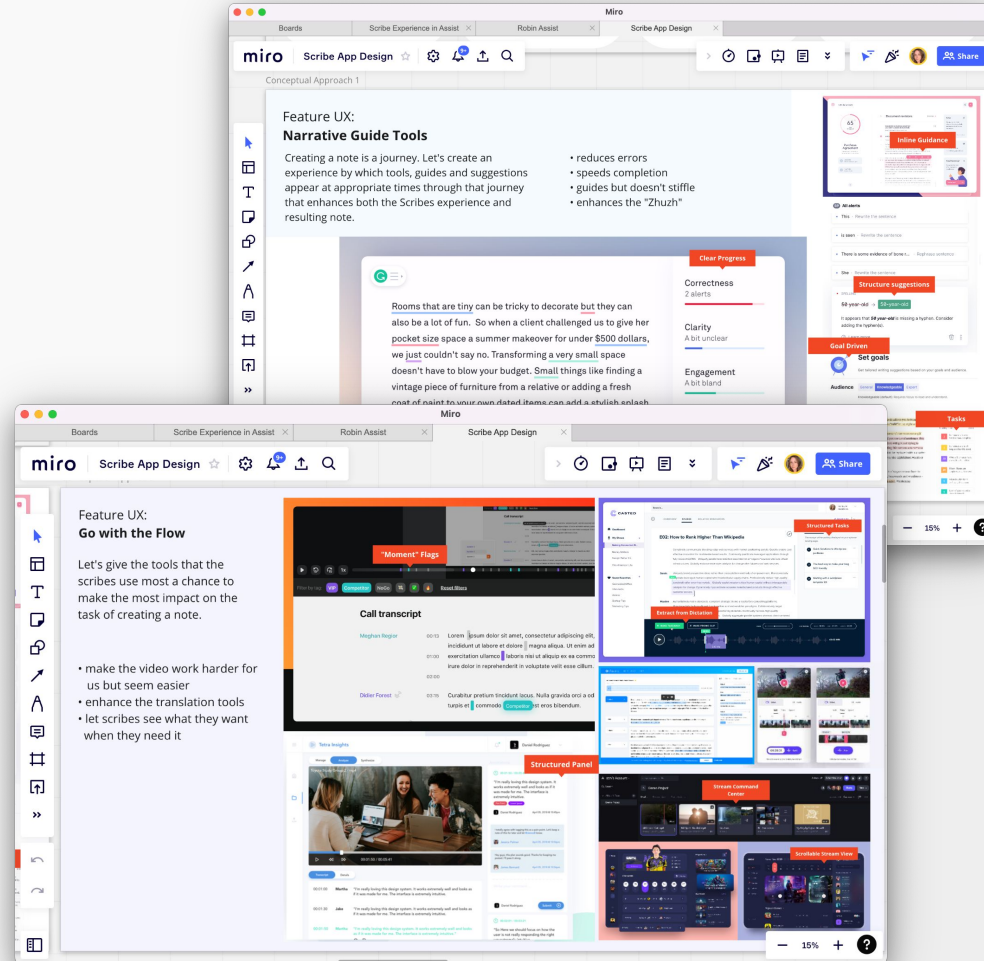
Low & High-fidelity Wireframing

Developed wireframes to articulate functionality to engineering partners to determine scope and feasibility. Initial prototype testing performed with users to validate patterns and UX decisions before bringing into the design phase.



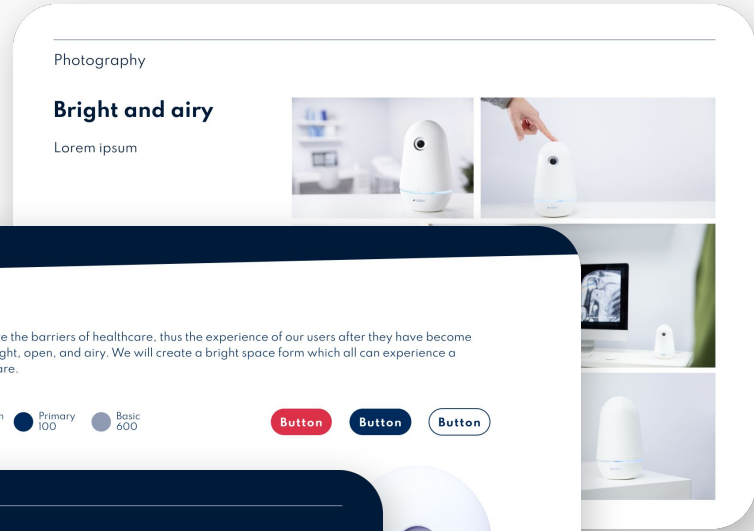
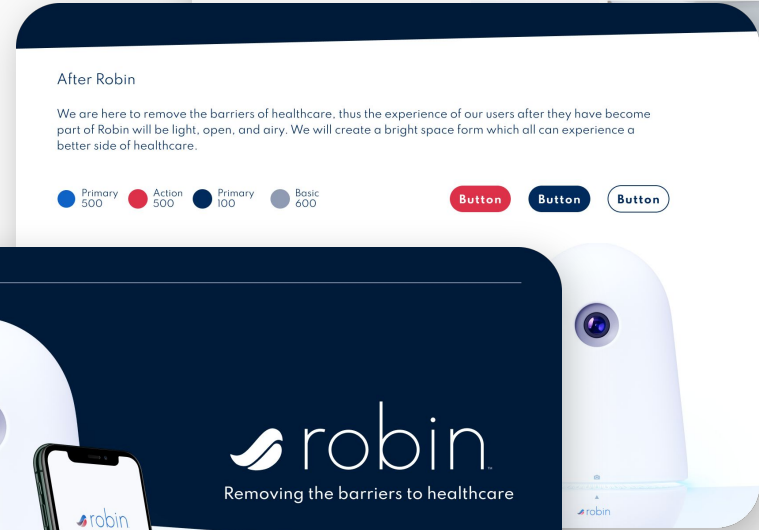
Design Discovery

Conducted a landscape audit of desktop documentation tools and media tools. This allowed us to identify best practices as it pertained to planning the Robin Assist feature set. We were inspired by easy video viewing tools as well as documentation tools with robust templates and suggestions like Grammarly.



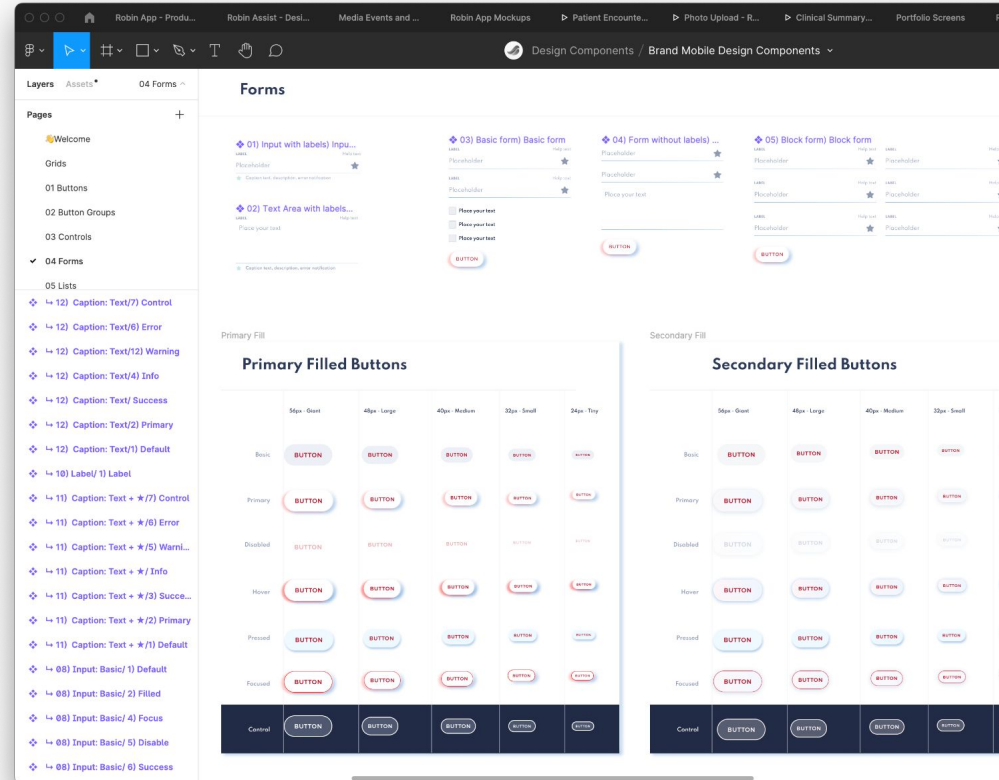
Defining an Approach

The app needed to reflect the new brand and color palette, and feel like a companion to the Robin App. High level design systems were developed along with key UI patterns.



Building a Design System

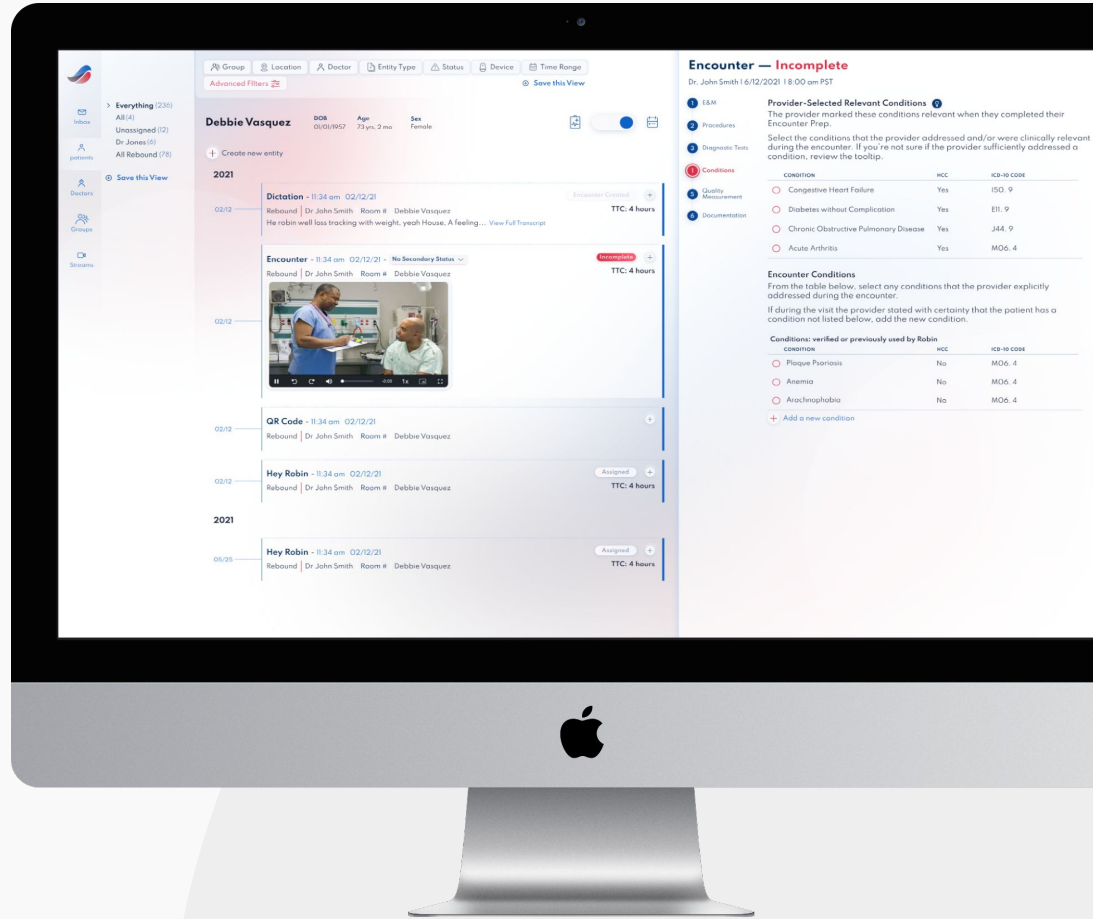
Once the aesthetic was selected, a design system was built to support the app's main elements such as forms, buttons, and menu styles.



Robin Assist

The medical scribes needed a way to see the patient's timeline of health events, and media captured in the room while also answering critical questions for clinical and administrative purposes.

Creating this new way to navigate both the media feed and the questions improved efficiency while still providing a clear path for completing the work.





- > Unassigned
- Inbox
 - All
 - Dr Roberts
 - Dr Jones
 - All Rebound
- Streams
- Log Out

Group Location Doctor Entity Type Status Device Time Range
Advanced Filters Save this View

Unassigned (236)

+ Create new entity

- Appointment** - 11:34 am 02/12/21 - No Secondary Status
Rebound | Dr John Smith | Room # | Debbie Vasquez
Awaiting Rooming
TTC: 4 hours
- Hey Robin** - 11:34 am 02/12/21
Rebound | Dr John Smith | Room # | Debbie Vasquez
Unassigned
TTC: 4 hours
- QR Code** - 11:34 am 02/12/21
Rebound | Dr John Smith | Room # | Debbie Vasquez
Unassigned
- Encounter** - 11:34 am 02/12/21 - No Secondary Status
Rebound | Dr John Smith | Room # | Debbie Vasquez
Incomplete
TTC: 4 hours
- Encounter** - 11:34 am 02/12/21 - No Secondary Status
Rebound | Dr John Smith | Room # | Debbie Vasquez
Incomplete
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Awaiting Rooming
TTC: 4 hours
- Encounter** - 11:34 am 02/12/21 - No Secondary Status
Rebound | Dr John Smith | Room # | Debbie Vasquez
Completed
TTC: 4 hours
- Dictation** - 11:34 am 02/12/21
Rebound | Dr John Smith | Room # | Debbie Vasquez
He robin well loss tracking with weight, yeah House. A feeling... View Full Transcript
Unassigned
TTC: 4 hours
- Appointment** - 11:34 am 02/12/21 - No Secondary Status
Rebound | Dr John Smith | Room # | Debbie Vasquez
Awaiting Rooming
TTC: 4 hours



- Everything (236)
 - Inbox
 - All (4)
 - Unassigned (12)
 - Dr Jones (6)
 - All Rebound (78)
- Save this View
- Appointments
- Log Out

Group Location Doctor Entity Type Status Device Time Range

Advanced Filters

Save this View

Debbie Vasquez

DOB: 01/01/1957 Age: 73 yrs, 2 mo Sex: Female

Create new entity

2021

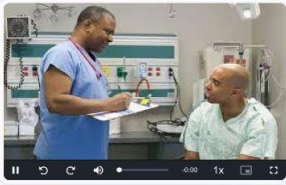
02/12 Dictation - 11:34 am 02/12/21 Encounter Created TTC: 4 hours

Rebound | Dr John Smith Room # Debbie Vasquez

He robin well loss tracking with weight, yeah House. A feeling... View Full Transcript

02/12 Encounter - 11:34 am 02/12/21 - No Secondary Status Incomplete TTC: 4 hours

Rebound | Dr John Smith Room # Debbie Vasquez



02/12 QR Code - 11:34 am 02/12/21

Rebound | Dr John Smith Room # Debbie Vasquez

02/12 Hey Robin - 11:34 am 02/12/21 Assigned TTC: 4 hours

Rebound | Dr John Smith Room # Debbie Vasquez

05/25 Hey Robin - 11:34 am 02/12/21 Assigned TTC: 4 hours

Rebound | Dr John Smith Room # Debbie Vasquez

Process Encounter - Incomplete

Dr. John Smith | 6/12/2021 | 8:00 am PST

1 E&M

2 Procedures

3 Diagnostic Tests

4 FFS Conditions

5 VBC Conditions

6 Quality Measurement

7 Documentation

8 Post & Submit Note

Mark Complete

Note Completion

Documentation



Subjective

REASON FOR VISIT: F/U for left hip pain HISTORY OF PRESENT ILLNESS Onset: 2017

Today, the patient reports left hip pain. She describes it as occurring with activity and rates it as mild-to-severe. Her symptoms are exacerbated by walking and jumping. He has previously treated her symptoms with NSAIDs.

The available records and medical history forms obtained in preparation for the visit were reviewed. A detailed review of systems is available in the patient record and relevant findings incorporated into the history of present illness and was otherwise noncontributory.

Objective

Constitutional: NAD and appears stated age
 Eyes: EOMI and no conjunctival erythema
 Hent: NCAT and atraumatic external nose and ears
 Respiratory: Non-labored breathing and no audible wheezing Cardiovascular: Extremities appear well-perfused and no visible varicosities Neurological: Alert and oriented
 Psych: Appropriate affect and cooperative
 Skin: No visible rashes and no visible masses

The patient took approximately 9 seconds to transition from sitting to standing.

RIGHT HIP EXAM: No tenderness to palpation medially

Assessment

Right hip osteoarthritis

Plan

The patient has long-standing hip OA awaiting a THA. The plan is to stay indoors as much as reasonably possible for the hip as well as in regards to the coronavirus. She's going to treat her pain primarily with Tylenol, using Norco as needed. She will also continue her weight loss efforts in terms of reducing her intake of simple carbohydrates and sugar, trying to eat more of a plant-based diet. She will continue working on some daily activity, as this is good for virus protection as well as for her general health. If her condition worsens, she will call us, otherwise, we'll touch base in about 6 weeks. Hopefully by then, we'll be rescheduling surgeries, and we'll get her back on the surgery schedule.

Replace the bracketed phrases with information about the encounter.

7 brackets to complete

Note Templates

Consistency Tools (4)

Patient Name Check

Pronoun Check

Laterality Check

Body Site Check

Snippets (9)

Procedure code justification: Injection

Copy/Paste - HPI review

Copy/Paste - Patient acknowledgement

Guidance - Imaging studies

Guidance- Discussion of surgical risks

Guidance- HCC Documentation

Copy/Paste - BMI

Copy/Paste - Influenza immunization

Another Snippet type here

Testing and Iteration

With a population of over 500 medical scribes, we were able to do weekly design interviews and surveys to ensure we were building tools that with maximize quality and efficiency.

We also provided design Q&A with scribes during production reviews to address critical bugs as well as learn from users, rapidly improving the experience with each release.

Issue 3 - Divided Section

Description

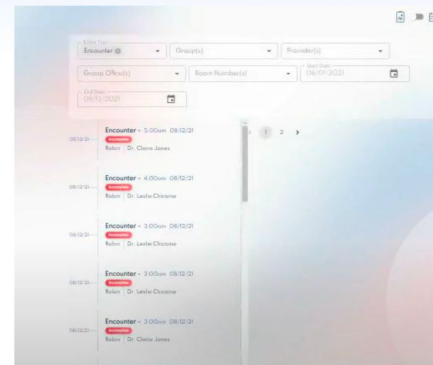
The pagination component takes half of the middle section in the UI.

Impact

- Not enough horizontal space for the appointment list
- Waste space in the UI layout

Criticality

Should be fixed soon



robin 13

Description

22% of the participants had difficulty finding the CPT code location for reporting.

Impact

- Increased note completion time
- Increased scribe confusion

Criticality

There will be one final screen

Process Encounter - Incomplete

Dr. John Smith | 08/02/21 | 2:34pm

EMR Were any in-office procedures performed today?
 Yes No

Procedures

Procedures for this encounter

PROCEDURE DESCRIPTION	CPT	HCPCS
1. Injection of trigger finger, left	20550	

+ add another procedure

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Results

Decreased 20+ minutes of time spent doing documentation for medical scribes

Improved COGs by \$2 a note

45%+ improved app satisfaction by Robin virtual medical scribes





Keep exploring.

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