

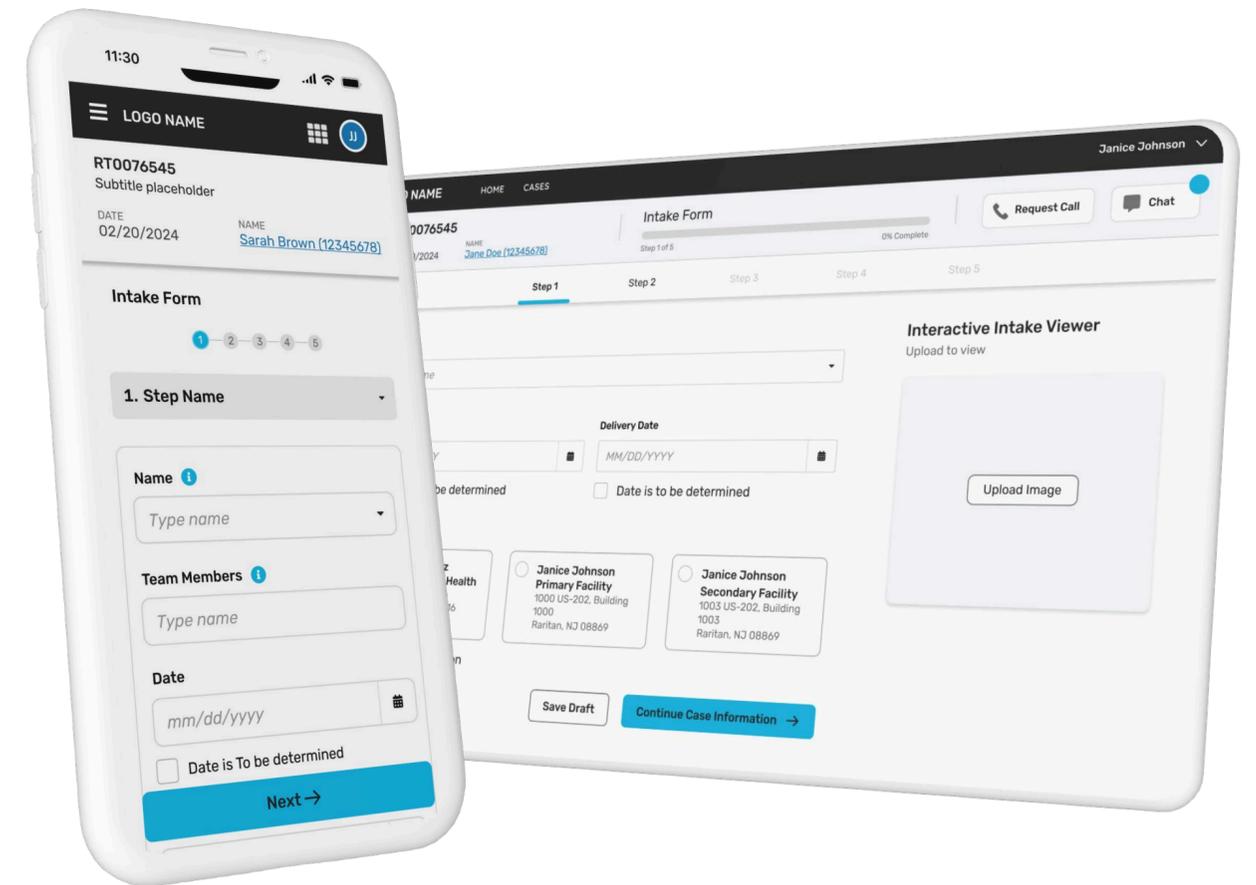


UX Case Study - 1

Designing a Facial Reconstruction Surgical Planning Platform

Senior UX Designer (Contract)

Jan 2024 - Jan 2025



My 5 Core Work Values

"I adhere to my core values to create aesthetic user-centered experiences."



Empathy



Curiosity



Adaptability



Collaborat



Communication

Team 1 PM, 4 Designers, 10 Engineers, Me (Senior UX Designer)

Timeline 6 months (Time spent Intake and Mobile designs)

My responsibilities

Lead end-to-end Design process

- Owned UX for case intake experience
- Designed intake form for case defined surgeon and delegate workflows
- Designed mobile experiences
- Collaborated with product, engineering, clinical, and regulatory teams

PROJECT OVERVIEW

Product

TRUMATCH Facial Reconstruction Platform (DePuy Synthes)

Why TRUMATCH?

Surgeons faced fragmented and inefficient workflows when creating facial reconstruction cases.

Mission & Vision:

End-to-end virtual planning system for facial reconstruction
Supports surgical planning, personalized implants, and delivery
Connects digital workflows with physical surgical outcomes

UX GOAL

Design a low-friction, streamlined, error-proof case creation flow

A UX-led approach to simplify case creation, prevent errors early, and support high-stakes clinical decisions without adding cognitive or administrative burden.

- Reduce friction during case creation
- Prevent incomplete or incorrect submissions
- Enable safe delegation without loss of control or data quality
- Simplify complex clinical inputs through visual guidance
- Ensure consistency and confidence across desktop and mobile experiences

Let's Dive Deep Into
Iterations, Designs Decisions and
Impact.....

Intake Form

Why it mattered?

The intake form is the single source of truth for the entire surgical planning process

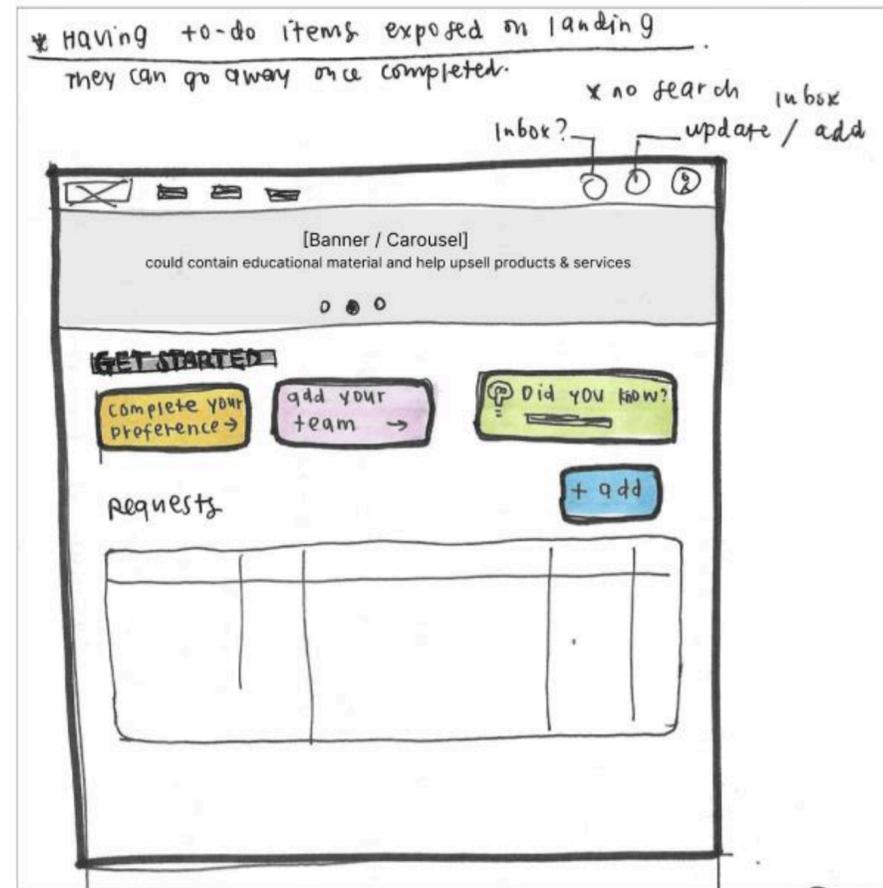
- Designed a **simple 5-step intake flow** to reduce cognitive load
- Ensured structured, complete inputs so **biomedical and surgical planning engineers** can accurately design surgeon-recommended implants
- Introduced a **delegate persona** to allow surgeons to offload intake tasks to **nurses or clinical assistants** when time-constrained

The screenshot displays the TRUMATCH Intake Form interface. At the top, it shows the user's name, Dr. Janice Johnson, and navigation options like HOME and CASES. The main header indicates the case ID CMF000001 and the current step, Intake Form (Step 1 of 5). A progress bar shows 0% completion. Below the header, there are tabs for Case Information, Image Upload, Surgical Details, Product Details, and Review & Confirm. A green notification bar states "Case CMF000001 has been created." The Case Information section includes fields for Primary Surgeon (with a dropdown menu), Surgical Team Members (with a text input and a "Show team directory" link), Surgery Date (with a date picker), Requested Delivery Date (with a date picker), and checkboxes for "Date is to be determined". The Hospital section offers three radio button options: NYU Langone Health, Primary Facility, and Secondary Facility, each with its address. There is also a checkbox for "Ship to Hospital" and a text input for "Person Receiving Shipment". At the bottom, there are "Save Draft" and "Continue Case Information" buttons. The footer includes the DePuy Synthes logo, Privacy Policy, Contact Us, and a copyright notice.

Ideation

Concept Title

Get Started! (Banner)



Concept Description

- To add preferences might not be top of mind once a Surgeon signs up.
- Leveraging progressive onboarding, the Home Page lets the Surgeon land on their workspace and includes clear entry to complete more information as they go as the "Get Started" section.
- Once items are completed, the section can disappear.
- Banner can provide educational & upselling value.

Key Moment

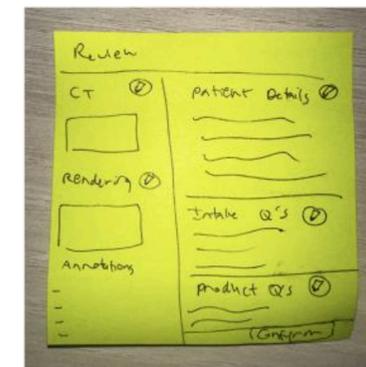
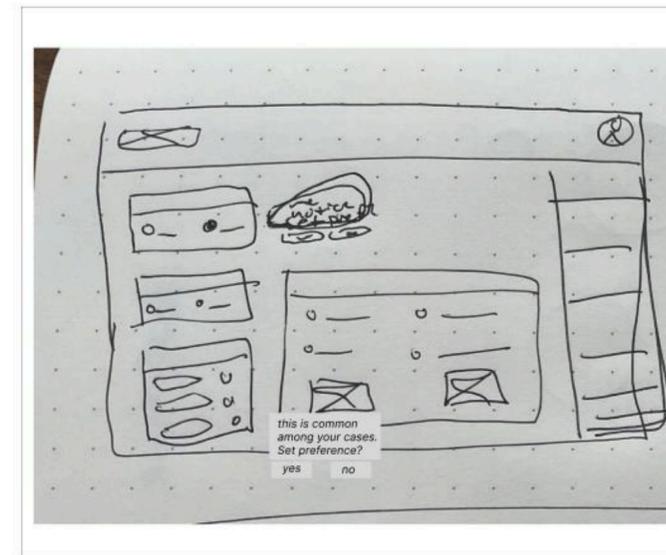
- Registration / Preference
- Patient Case Creation
- Case Page
- Dashboard
- Chat & Schedule Calls
- Other:

Surgeon Persona

- "Out of sight out of mind"
- "Early Adopter"
- "Efficiency is key"
- "If it's not broke don't fix it"
- "High Patient involvement"
- Other:

Concept Title

Smart preferences



Concept Description

While filling out intake the system notices you've chosen this on your past 5 cases and recommends you set a preference. A quick yes/no dialogue pops up

Key Moment

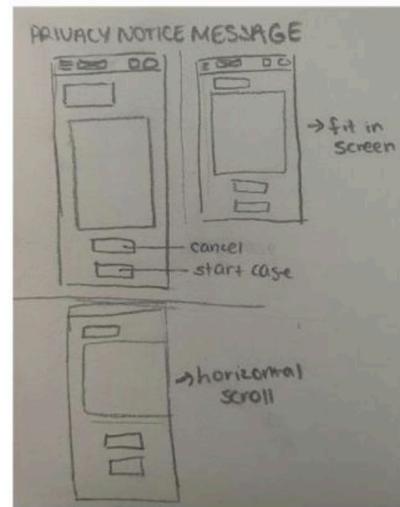
- Surgeon Registration / Preference Setting
 - How will they set their preferences when they register on SZH?
- Patient Case Creation
 - How will they upload the patient CT?
 - How will they annotate the patient's anatomical rendering?
 - How will they add patient/procedure details and choose materials for the implants?
- Case Page
 - How will they view, annotate, approve, or deny plans and designs?
 - How will they monitor the status of their order (when it is under final review, in manufacturing, being shipped, delivered)?
- Dashboard
 - How will they see all their cases, tasks, notifications, and messages?
 - How do we make sure they see the most important information first?
- Chat & Schedule Calls
 - What might scheduling a call with a clinical engineer look like?
 - How do we make sure they have access to the chat feature when they most need it?
 - How do we help them reference important information while using the chat feature?
- Other:

Surgeon Persona

- "Out of sight out of mind"
- "Early Adopter"
- "Efficiency is key"
- "If it's not broke don't fix it"
- "High Patient involvement"
- Other:

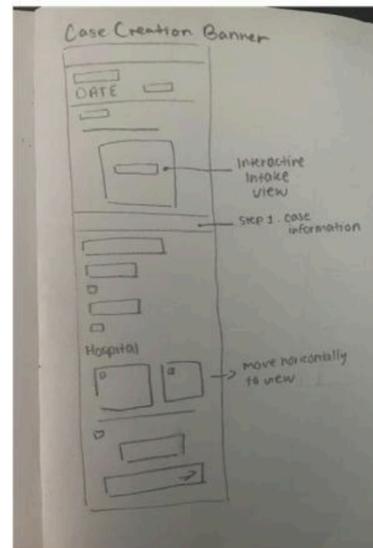
Wireframe

Privacy Notice

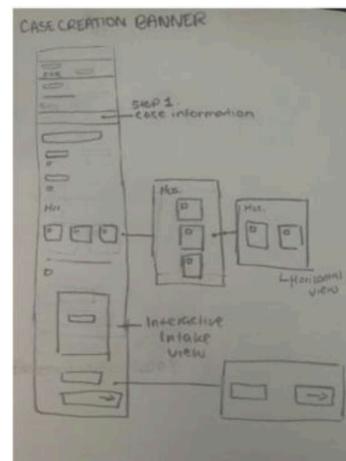


- Cancel/Start Case vertical or horizontal
- Font size smaller → privacy notice fits in screen
- Privacy notice horizontal or vertical scroll
 - horizontal scroll might be awkward
 - compatible with appian?

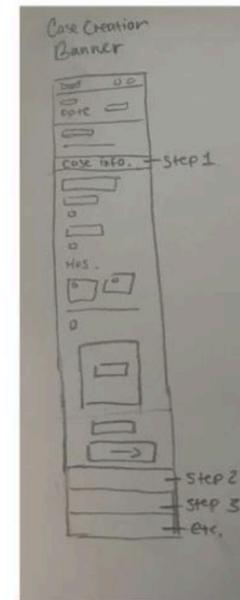
Case Creation Banner



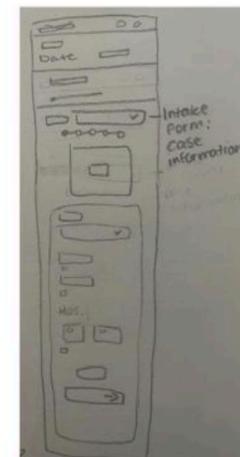
- Accordion format
- Interactive intake viewable before each step
- Hospital choices can be moved horizontally
- Save draft/continue case information is vertically placed



- Interactive intake view on bottom (before continuing case information)
- Hospital view fits exactly on page (horizontally or vertically)
- Save draft/continue case information is vertically or horizontally placed

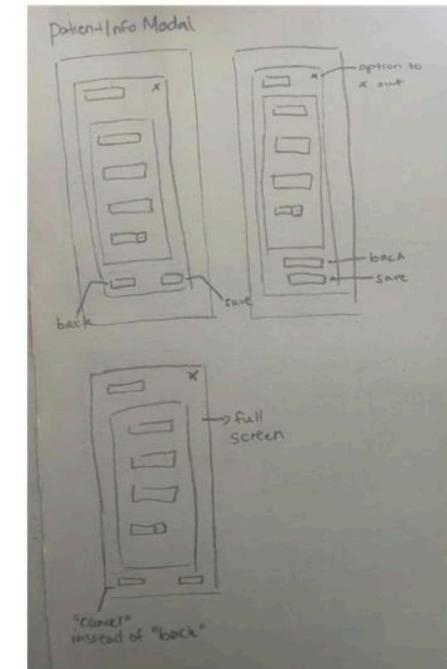


- Next steps previewed below continuing the case information



- Drop down menu
- Interactive intake viewable below choosing step

Patient Modal



- Fit info modal on screen vs creating a smaller screen
- Option to x out in top right corner
- changing verbage to "cancel" to clarify that your changes don't save unless you click "save"

Visual Style Guide



Primary colors

VELYS blue #0085E2 White #FFFFFF Black #212121 Dark blue #1A7084

Secondary colors

Shades of Gray: Light gray accent #F4F4F4, Light gray #DCDCDC, Icon idle gray #888888, Medium gray #707070, Icon active gray #4A4A4A, Page background #F7F7F7, Off white #F7F7F7

Accent colors

Data: Yellow #FFB44D, Orange #E67E22, Green #00B050, Purple #8E7CC3, Red #D9534F, Toggle and Filters background #5DC0E7

Clinical risk score

High #D9534F, Medium #E67E22, Low #00B050, VELYS Hp green #0085E2

Patient readiness

Note Started #E67E22, % Ready #F4F4F4, Ready for Surgery #00B050

Calendar (DocSpera)

Surgery #5DC0E7, Telehealth #1A7084, In person #8E7CC3, Conference #00B050, Vacation #212121

S2H Components

Typography

Typeface: Nunito
Nunito is used as display type in page headers, titles and subtitles.
<https://fonts.google.com/specimen/Nunito>

Nunito Bold
ABCDEFGHIJKLMNOPQRSTUVWXYZ
abcdefghijklmnopqrstuvwxyz 1234567890

Typeface: Rubik
Rubik is used as secondary text in body text, instructions, forms, captions and CTAs.
<https://fonts.google.com/specimen/Rubik>

Rubik Regular
ABCDEFGHIJKLMNOPQRSTUVWXYZ
abcdefghijklmnopqrstuvwxyz 1234567890

Rubik Bold
ABCDEFGHIJKLMNOPQRSTUVWXYZ
abcdefghijklmnopqrstuvwxyz 1234567890

Rubik Medium
ABCDEFGHIJKLMNOPQRSTUVWXYZ
abcdefghijklmnopqrstuvwxyz 1234567890

DESCRIPTION	TYPEFACE	WEIGHT	SCALE HEIGHT	COLOR APPLICATION
Header 1	Nunito	Bold	32px / 36px	#212121
Header 2	Rubik	Medium	24px / 28px	#212121
Header 3	Rubik	Medium	20px / 24px	#212121
Body text	Rubik	Regular	16px / 20px	#212121
Body text - bold	Rubik	Regular	16px / 20px	#212121 #707070
Navigation Links	Rubik	Medium	16px / 20px	#FFFFFF
Header Patient only text	Rubik	Medium	16px / 20px	#212121
Text/Section Text	Rubik	Medium (selected) Regular (unselected)	16px / 20px	#212121
Buttons/Links	Rubik	Medium	16px / 20px	#212121
LINK/STATE/TEXT	Rubik	Regular (ALL CAPS)	16px / 20px	#707070
LINK/STATE/TEXT - bold	Rubik	Regular (ALL CAPS)	16px / 20px	#707070
LINK/STATE/TEXT - italic	Rubik	Regular (ALL CAPS)	16px / 20px	#707070
Footnote	Rubik	Regular	10px / 14px	#707070

Typography

Typeface: Nunito

Nunito is used as display type in page headers, titles and subtitles.
<https://fonts.google.com/specimen/Nunito>

Nunito Bold

ABCDEFGHIJKLMNOPQRSTUVWXYZ
abcdefghijklmnopqrstuvwxyz 1234567890

Primary colors

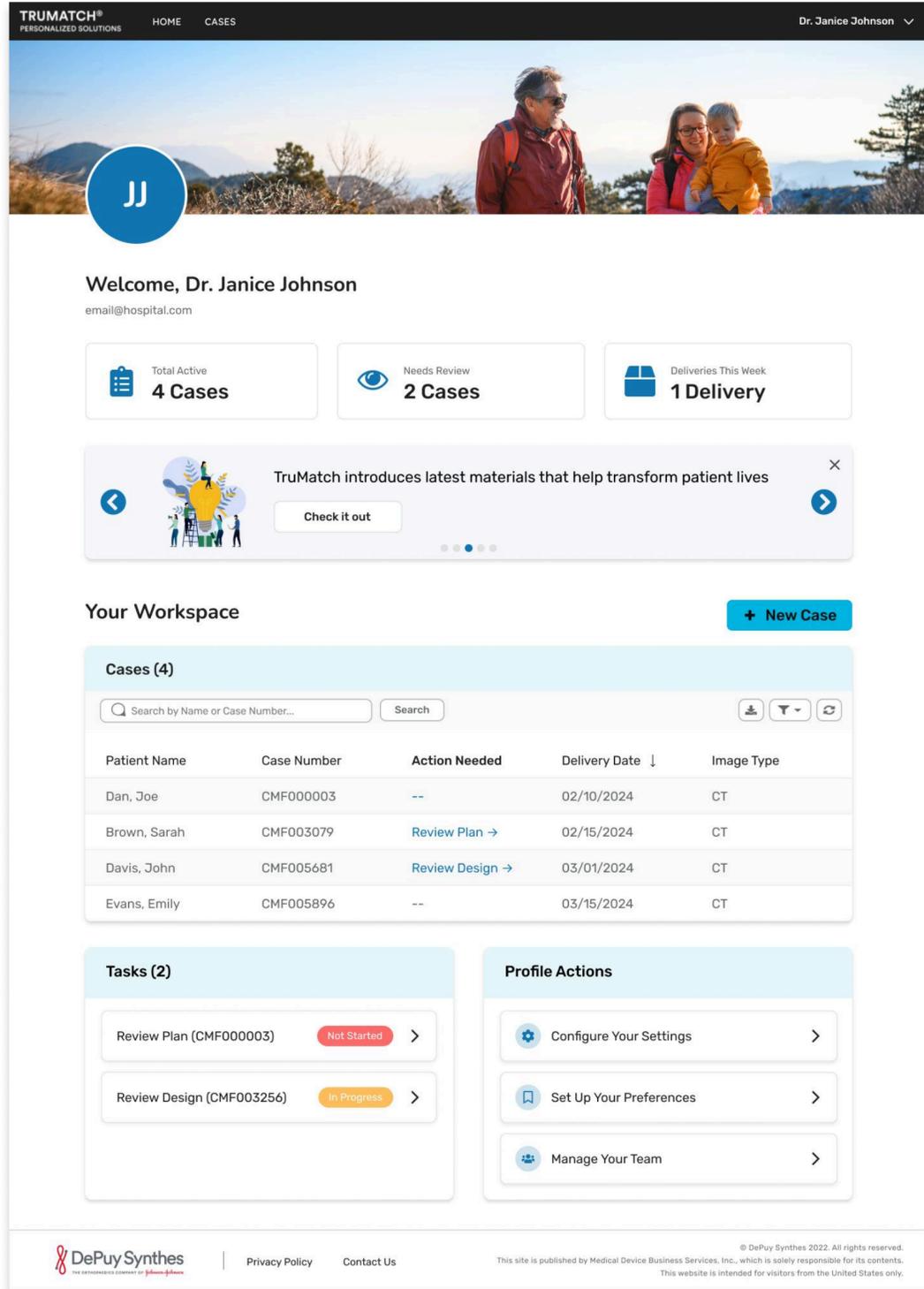
VELYS blue #0085E2 White #FFFFFF Black #212121 Dark blue #1A7084

Secondary colors

Shades of Gray

Page background

Hi-Fidelity Designs



TRUMATCH® PERSONALIZED SOLUTIONS | HOME | CASES | Dr. Janice Johnson

Welcome, Dr. Janice Johnson
email@hospital.com

- Total Active: **4 Cases**
- Needs Review: **2 Cases**
- Deliveries This Week: **1 Delivery**

TruMatch introduces latest materials that help transform patient lives. [Check it out](#)

Your Workspace

[+ New Case](#)

Cases (4)

Patient Name	Case Number	Action Needed	Delivery Date	Image Type
Dan, Joe	CMF000003	--	02/10/2024	CT
Brown, Sarah	CMF003079	Review Plan	02/15/2024	CT
Davis, John	CMF005681	Review Design	03/01/2024	CT
Evans, Emily	CMF005896	--	03/15/2024	CT

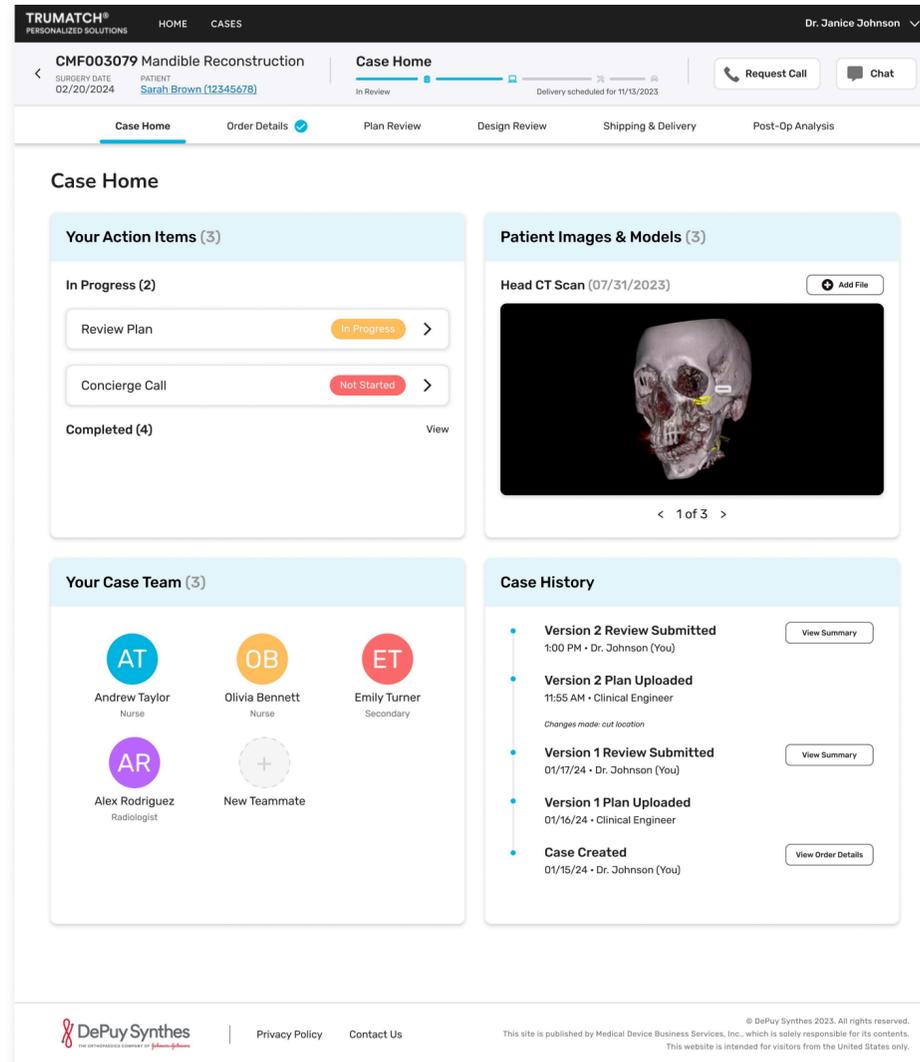
Tasks (2)

- Review Plan (CMF000003) Not Started
- Review Design (CMF003256) In Progress

Profile Actions

- Configure Your Settings
- Set Up Your Preferences
- Manage Your Team

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TRUMATCH® PERSONALIZED SOLUTIONS | HOME | CASES | Dr. Janice Johnson

CMF003079 Mandible Reconstruction | Case Home | In Review | Delivery scheduled for 11/13/2023

Request Call | Chat

Case Home | Order Details | Plan Review | Design Review | Shipping & Delivery | Post-Op Analysis

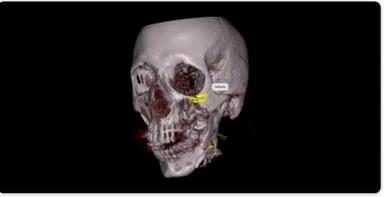
Case Home

Your Action Items (3)

- In Progress (2): Review Plan (In Progress), Concierge Call (Not Started)
- Completed (4): View

Patient Images & Models (3)

Head CT Scan (07/31/2023) [Add File](#)



1 of 3

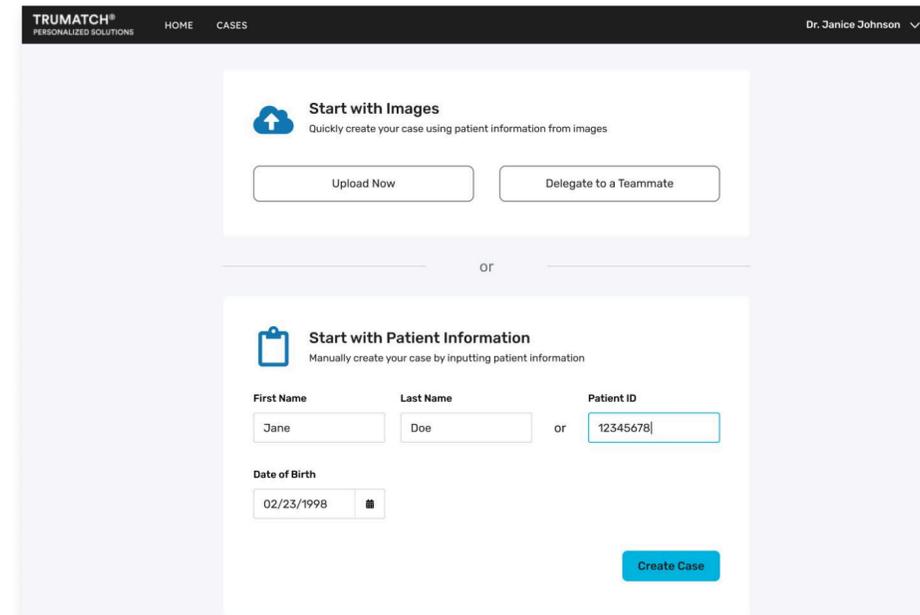
Your Case Team (3)

- AT: Andrew Taylor, Nurse
- OB: Olivia Bennett, Nurse
- ET: Emily Turner, Secondary
- AR: Alex Rodriguez, Radiologist
- New Teammate

Case History

- Version 2 Review Submitted: 1:00 PM - Dr. Johnson (You) [View Summary](#)
- Version 2 Plan Uploaded: 11:55 AM - Clinical Engineer [View Summary](#)
- Version 1 Review Submitted: 01/17/24 - Dr. Johnson (You) [View Summary](#)
- Version 1 Plan Uploaded: 01/16/24 - Clinical Engineer [View Summary](#)
- Case Created: 01/15/24 - Dr. Johnson (You) [View Order Details](#)

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TRUMATCH® PERSONALIZED SOLUTIONS | HOME | CASES | Dr. Janice Johnson

Start with Images

Quickly create your case using patient information from images

[Upload Now](#) | [Delegate to a Teammate](#)

or

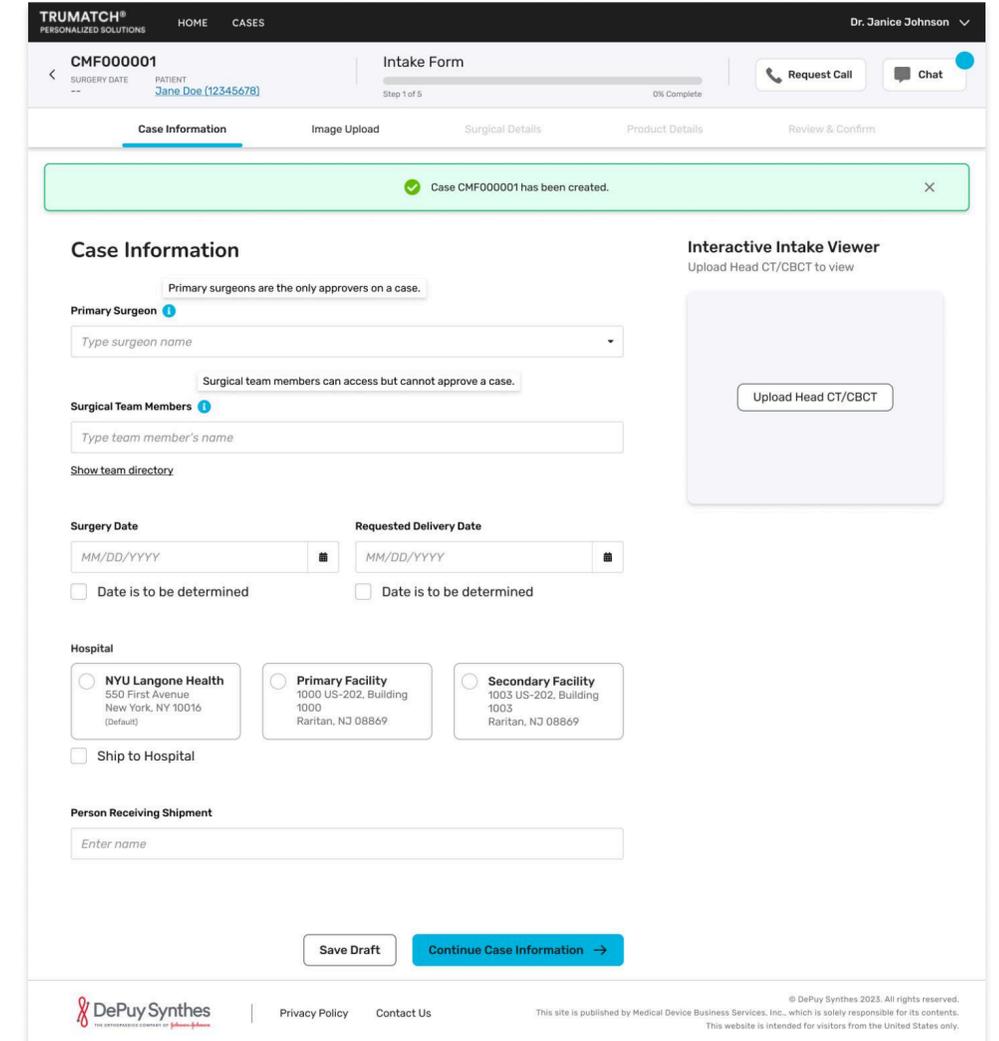
Start with Patient Information

Manually create your case by inputting patient information

First Name: Jane | Last Name: Doe | Patient ID: 12345678

Date of Birth: 02/23/1998

[Create Case](#)

TRUMATCH® PERSONALIZED SOLUTIONS | HOME | CASES | Dr. Janice Johnson

CMF000001 | Intake Form | Step 1 of 5 | 0% Complete | Request Call | Chat

Case Information | Image Upload | Surgical Details | Product Details | Review & Confirm

Case CMF000001 has been created.

Case Information

Primary surgeons are the only approvers on a case.

Primary Surgeon:

Surgical team members can access but cannot approve a case.

Surgical Team Members:

Show team directory

Surgery Date: | Requested Delivery Date:

Date is to be determined

Hospital:

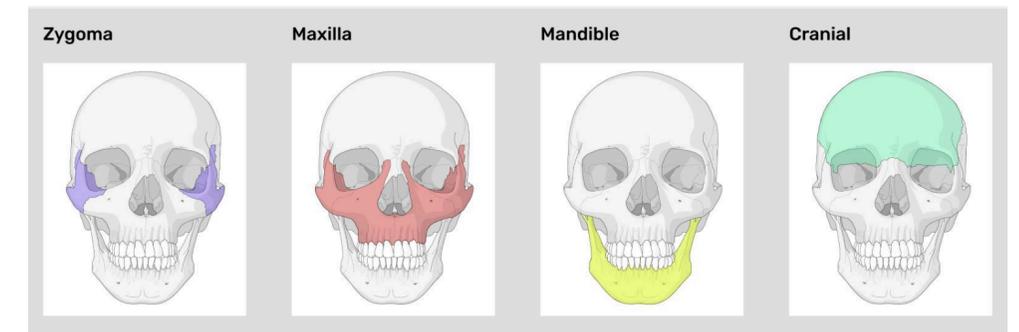
- NYU Langone Health
- Primary Facility
- Secondary Facility

Ship to Hospital

Person Receiving Shipment:

[Save Draft](#) | [Continue Case Information](#)

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TRUMATCH® PERSONALIZED SOLUTIONS | HOME | CASES | Dr. Janice Johnson

CMF000001 | Intake Form | Step 1 of 5 | 0% Complete

Request Call | Chat

Case Information | Image Upload | Surgical Details | Product Details | Review & Confirm

Case CMF000001 has been created.

Case Information

Primary surgeons are the only approvers on a case.

Primary Surgeon

Surgical team members can access but cannot approve a case.

Surgical Team Members

[Show team directory](#)

Surgery Date | Requested Delivery Date

Date is to be determined

Hospital

- NYU Langone Health
550 First Avenue
New York, NY 10016
(Default)
- Primary Facility
1000 US-202, Building 1000
Raritan, NJ 08869
- Secondary Facility
1003 US-202, Building 1003
Raritan, NJ 08869

Ship to Hospital

Person Receiving Shipment

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11:30 | LOGO NAME

RT0076545
Subtitle placeholder
DATE: 02/20/2024 | NAME: Sarah Brown (12345678)

Intake Form

1. Step Name

Name

Team Members

Date

Date is to be determined

Delivery Date

N/A

Address

- Elle Rodriguez
NYU Langone Health
550 First Avenue
New York, NY 10016
(Default)
- Janice Johnson
Primary Facility
1000 US-202, Building 1000
Raritan, NJ 08869
- Janice Johnson
Secondary Facility
1003 US-202, Building 1003
Raritan, NJ 08869

Ship to destination

Intake Viewer
Tap to expand and annotate model

INTAKE VIEWER PLACEHOLDER

DATE: 08/28/2023

Web-to-Mobile Design

Mobile was not an afterthought; it was a core use case.

- Check case status and Review tasks easily
- Improves efficiency
- Ensures intuitiveness
- Simplified, stacked layouts

The biggest problem in the previous version: STEP NAVIGATION



Multiple iterations

TRUMATCH® PERSONALIZED SOLUTIONS

CMF00310877 Mandible Distraction

SURGERY DATE TBD PATIENT

Intake Form

Step 1 of 5 20% Complete

Case Information

- Image Upload
- Surgical Details
- Product Details
- Review & Confirm

Case Information

Case Type*

- Reconstruction
- Trauma
- Orthognathic



11:30

LOGO NAME

RT0076545

Subtitle placeholder

DATE 02/20/2024 NAME Sarah Brown (12345678)

Intake Form

Step 1 of 5 20% complete

Step 1: Title of step

Step 2: Title of step

Upload Delegate Upload

- Image 1 *Required UPLOAD
- Image 2 UPLOAD
- Image 3 UPLOAD
- Image 4 UPLOAD
- Image 5 UPLOAD
- Image 6 UPLOAD

← Back Save Next →

11:30

LOGO NAME

RT0076545

Subtitle placeholder

DATE 02/20/2024 NAME Sarah Brown (12345678)

Intake Form

Step 1 of 5 20% complete

- Step 1: Title of step
- Step 2: Title of step
- Step 3: Title of step
- Step 4: Title of step
- Step 5: Title of step

Start

11:30

LOGO NAME

RT0076545

Subtitle placeholder

DATE 02/20/2024 NAME Sarah Brown (12345678)

Step 1: Title of step

Step 2: Title of step

Upload Delegate Upload

- Image 1 *Required UPLOAD
- Image 2 UPLOAD
- Image 3 UPLOAD
- Image 4 UPLOAD
- Image 5 UPLOAD
- Image 6 UPLOAD

Step 3: Title of step

Step 4: Title of step

Step 5: Title of step

← Back Save Next →

11:30

LOGO NAME

RT0076545

Subtitle placeholder

DATE 02/20/2024 NAME Sarah Brown (12345678)

Step 1 Step 2 Step 3 Step 4 Step 5

Upload Delegate Upload

- Image 1 *Required UPLOAD
- Image 2 UPLOAD
- Image 3 UPLOAD
- Image 4 UPLOAD
- Image 5 UPLOAD
- Image 6 UPLOAD

← Back Save Next →

11:30

LOGO NAME

RT0076545

Subtitle placeholder

DATE 02/20/2024 NAME Sarah Brown (12345678)

Intake Form

Step 2 of 5 20% complete

Title of Step 1

Title of Step 2

Step 2: Title of Step 2

Upload Delegate Upload

- Image 1 *Required UPLOAD
- Image 2 UPLOAD
- Image 3 UPLOAD
- Image 4 UPLOAD
- Image 5 UPLOAD
- Image 6 UPLOAD

← Back Save Next →

Surgical Details

Product Details

Review and Confirm

11:30 [Signal] [Wi-Fi] [Battery]

LOGO NAME [Grid] [JJ]

RT0076545
Subtitle placeholder

DATE: 02/20/2024 NAME: Sarah Brown (12345678)

Intake Form

< 1 2 3 4 5 >

1. Step Name

Name [i] [Type name]

Team Members [i] [Type name]

Date [mm/dd/yyyy] [Calendar] Date is To be determined

Delivery Date [mm/dd/yyyy] [Calendar] N/A

Address

Elle Rodriguez
NYU Langone Health
550 First Avenue
New York, NY 10016

Delivery Date [mm/dd/yyyy] [Calendar] N/A

Address

Elle Rodriguez
NYU Langone Health
550 First Avenue
New York, NY 10016
(Default)

Janice Johnson
Primary Facility
1000 US-202, Building 1000
Raritan, NJ 08869

Janice Johnson
Secondary Facility
1003 US-202, Building 1003
Raritan, NJ 08869

Ship to destination

Intake Viewer
Tap to expand and annotate model

INTAKE VIEWER PLACEHOLDER

DATE: 08/28/2023

Save

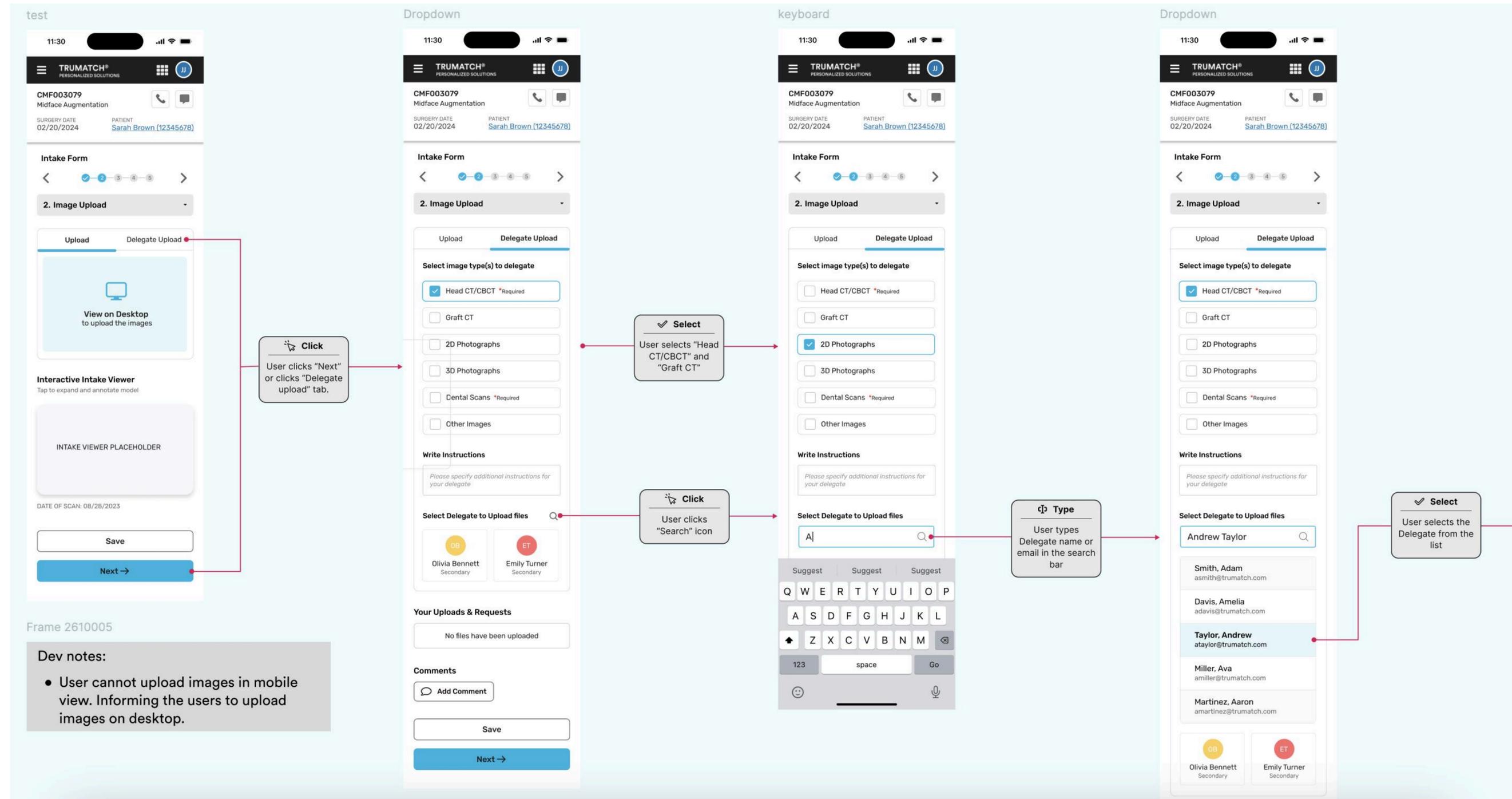
Next →

How did I solve it?

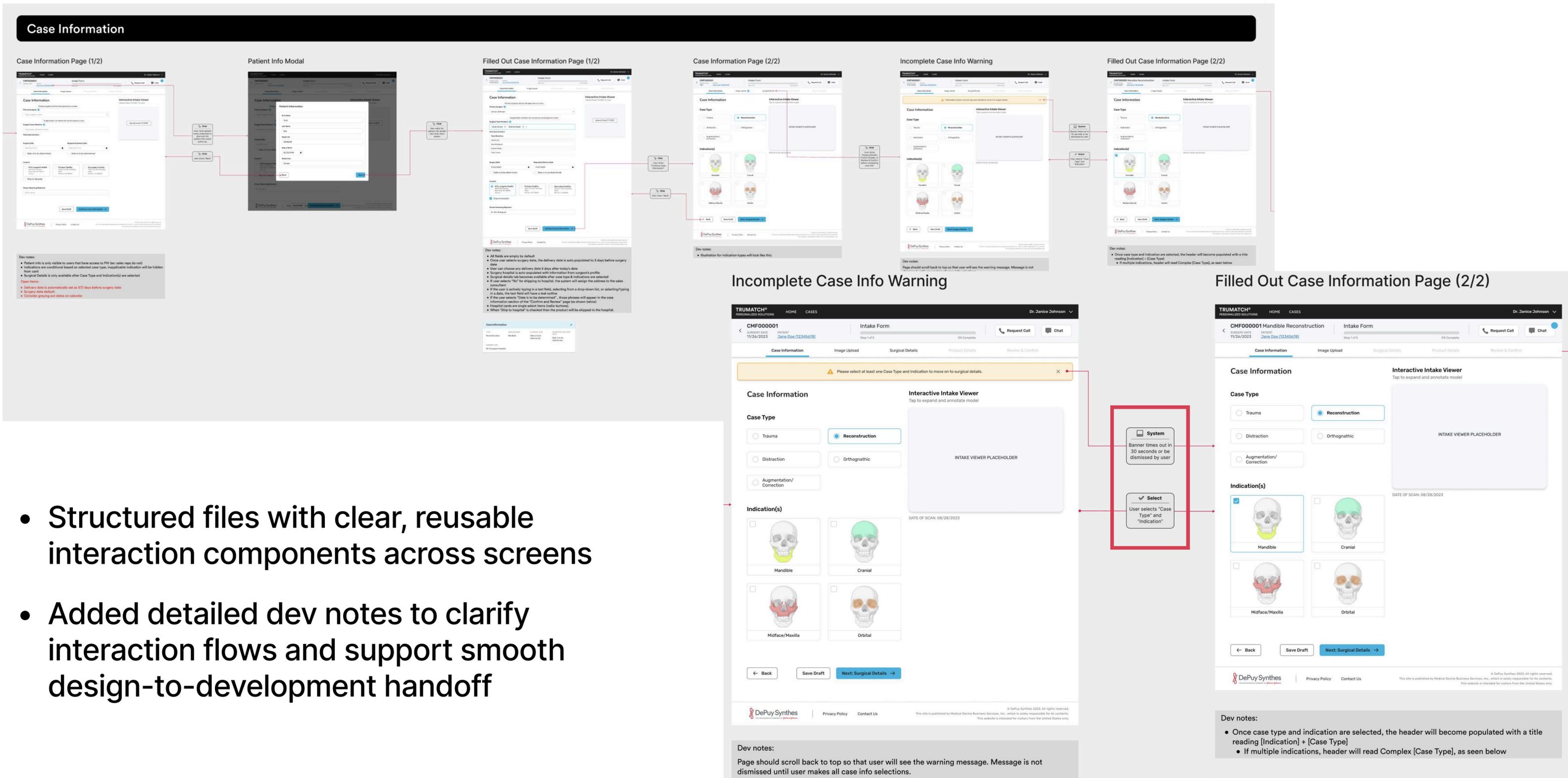
- Leverage Existing Appian Components
- Accessible top arrows for easy left/right navigation
- Step dropdown to jump directly to any step (e.g., Step 1–Step 5) with a single click.
- Design with developers in mind for an intuitive experience.

Delegate - Image Upload

Mobile experience is intentionally limited to image upload, with delegate-only access enabled for efficient task assignment



File Structure



- Structured files with clear, reusable interaction components across screens
- Added detailed dev notes to clarify interaction flows and support smooth design-to-development handoff

THE IMPACT

25%

Improved development efficiency ensuring design accuracy: clear interactions and dev notes in Figma

30%

Converted web designs to mobile, slashing mobile-specific issues by 30% and boosting design consistency

40%

Dynamic design system for multiple branches, enabling one-click style updates & cutting design time by 40%

Challenges

- Aligning multiple stakeholders across designers and product managers with differing priorities
- Translating complex surgeon workflows and pain points into intuitive, scalable UX
- Designing within strict clinical, regulatory, and data constraints

Key Learnings

- Deep collaboration with surgeons is critical to uncover real workflow pain points
- Strong UX in healthcare requires clarity, validation, and error prevention over visual complexity
- A well-structured design system enables consistency across teams and speeds up delivery
- Designing for regulated systems strengthened my ability to balance usability, safety, and scalability