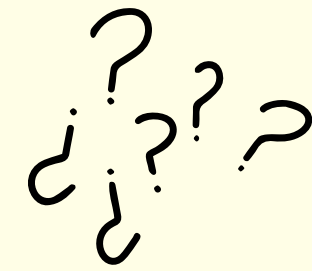


I'm Renee!

I work with people and organizations who are facing tough problems in complicated systems. My clients have come from a broad range of sectors, including healthcare, finance, retail, public transit, education, government, workforce development, and many more.

Here are a few of the ways that I do my work.



Research

I draw methods from many fields to build a holistic understanding of people, contexts, and systems.



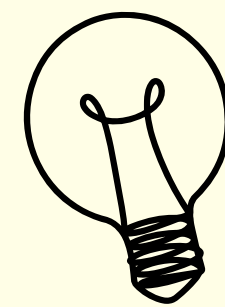
Strategy

I craft actionable strategies grounded in user experiences, business needs, and technical feasibility.



Communication

I use digital, physical, and experiential methods to share and socialize innovation.



Capacity Building

I help teams and individuals improve their practices or learn new skills.

Selected Projects

My projects have come from a broad range of industries. If you have questions about specific skills or content areas, I'm happy to share more information.

Here, I'm excited to be able share a few of the projects I've worked on in the recent past.

Predictions Display: Quantitative and qualitative analysis and synthesis, implementation

Payment Experiences: Participatory design, workshop facilitation, stakeholder communication, strategy development

DandelionRX: Ethnographic research, information design, designing for multiple user types



PREDICTIONS DISPLAY

**because we need to tell people
when the bus is coming**

Strategist and Facilitator, MBTA

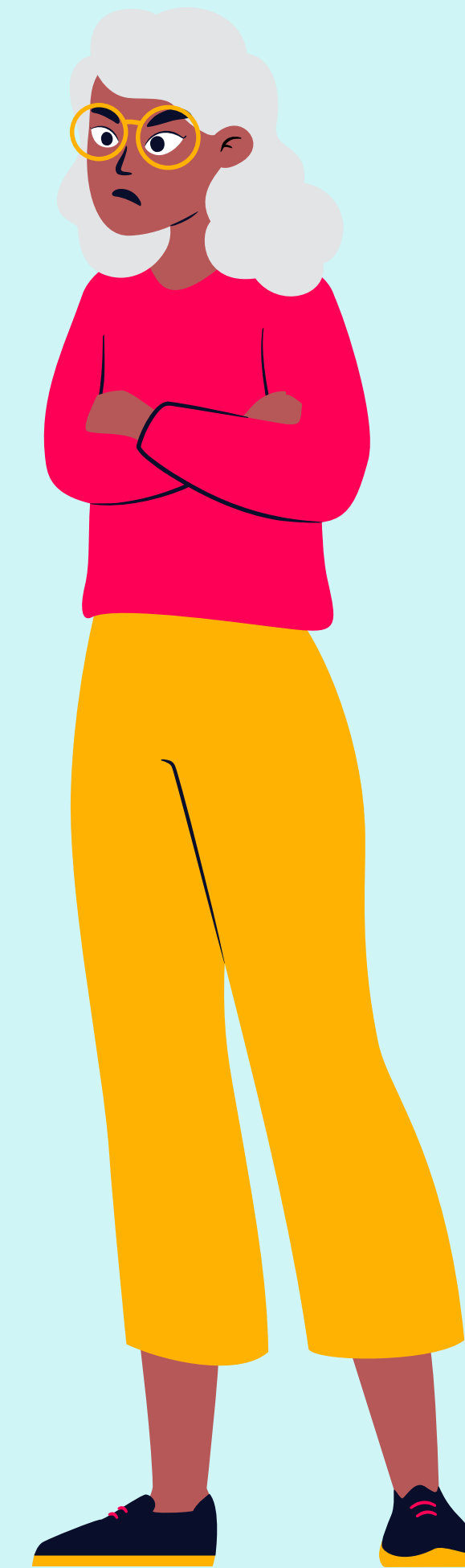


“Built on top of cow paths”

The legend goes that the city of Boston’s streets were built to follow cow paths—the informal paths that many people used to get from place to place before there were roads—rather than according to an organized plan. While the urban legend isn’t entirely true, it’s a great analogy for how many residents feel about transportation.

The Massachusetts Bay Transit Authority didn’t have a consistent language for displaying bus and train predictions. Riders and designers alike had described the system (or lack thereof) as haphazard, uncertain, and inefficient.

The department agreed that we needed to do a better job with communication. But how do we agree on what needs to be done, and help several busy product teams take on and prioritize the work? As a strategist and facilitator, I took on the task of getting the innovation department’s leadership to agree to a set of priorities, and creating actionable next steps for individual contributors.



The voice (and view) of the rider

To get a rich understand the rider's point of view in a short window of time, I analyzed two different kinds of research.



Touchpoint library

I gathered and analyzed photos of the “current state” of every way that riders might encounter a prediction about when a vehicle might arrive, creating a detailed “touchpoint library.”

Research & rider feedback review

I used years of rider feedback and coded it for comments, complaints, and compliments about predictions. I analyzed it for sentiment and connected it to the touchpoint it was referencing.

#	Occurrence	Collaborator notes - morning	Collaborator notes - afternoon	Updates	Image(s)	Context	Text (prediction)
20	Schedules & Maps > Subway > Green Line Stations & Departures					Private	X min
21	Schedules & Maps > Commuter Rail					Private	XX:XX
Spatial Relationships: Route Ordinal							
22	Bus e-ink		**This is the wrong image, (this is for GL E-ink) *Is this XX:XX or XX:XX scheduled?			Public	Xm XX:XX
Spatial Relationships: Ordinal							
23	Schedules & Maps > Subway > Upcoming Departures (Orange Line)		Same as above, text can also show "Arriving." Also perhaps would tag "Text (data type)" with Live?			Private	X min
24	Schedules & Maps > Subway > Green Line Stations & Departures > Schedule Finder					Private	X min
25	Schedules & Maps > Bus > Schedule Finder > Upcoming Departures		For cancelled trips, IIRC this view doesn't show the trip at all (vs strikethrough)			Private	X min

Creating analytical frameworks

To build buy-in, I needed a way to “show my work” to the leadership at the MBTA: a group of passionate, knowledgeable, busy people. I used several analytical frameworks to make it digestible without glossing over the rigor of the process. I shared these frameworks with leadership at an alignment session to ensure that everyone felt confident about the direction of the work.

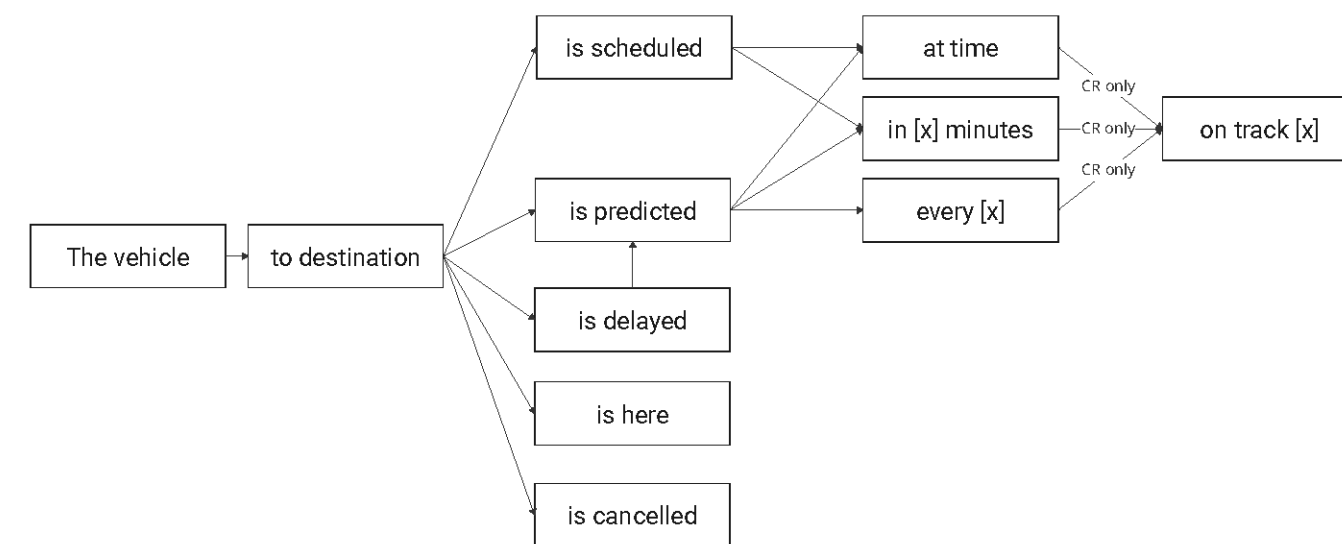
The Vocabulary of Real Time Data

Text	Time away	6m 6 min Every 7-10 minutes Now
	Time of arrival	12:10 12:10 Scheduled
	Physical proximity	ARR Due Has arrived Approaching
	Action	BRD All Aboard
Data type	Live Scheduled Live updates are currently unavailable	
Track	Track 3	
Status	Cancelled Delayed	

Typography + Color	Type	Bold Regular Strikethrough
	Color	Black Gray

Icon	Data type	[no icon]
------	-----------	-----------

The Grammar of Real Time Data



The vehicle Vehicle number [CR]
Scheduled time of vehicle [CR]
Name or number of route

to destination Terminus of route
"via" intermediate stops

is scheduled Scheduled departure time

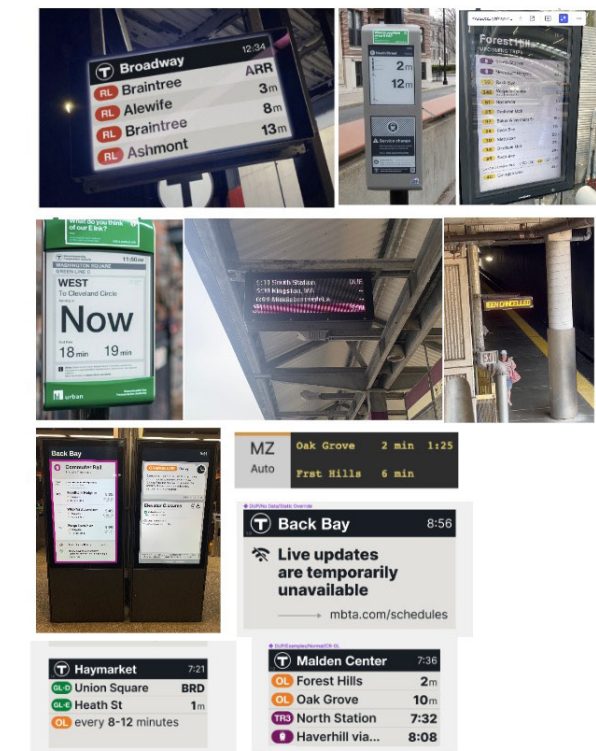
is predicted Real-time arrival prediction

is here Real-time arrival

Real Time Data Channels

"Public" screens

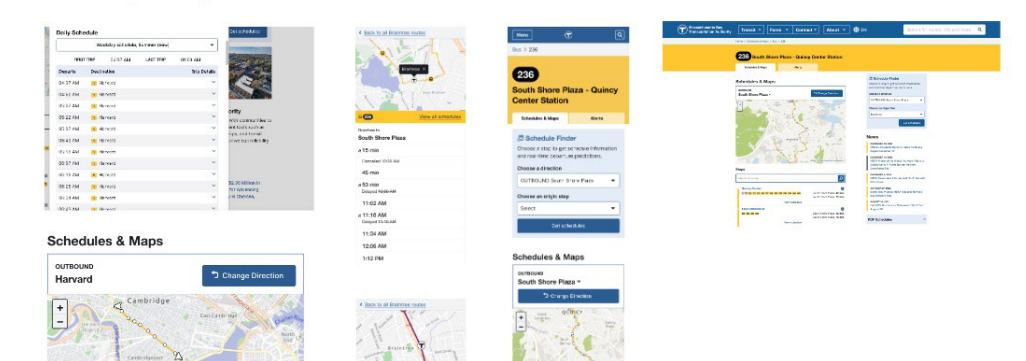
Digital interfaces that people encounter in public spaces, such as inside or outside stations or at bus stops.



"Private" screens

Digital interfaces that people pull up on private devices such as computers and phones.

Managed by CTD



Identifying opportunities

After finishing the leadership sessions, I conducted small group workshops with individual contributors—members of the project teams that would eventually have to carry out any improvements to the system—to synthesize and contextualize the patterns that were showing up in analysis. In these sessions, we developed a list of “predictions tasks” and described what resources teams would need to accomplish them.



Proposed common practices & areas for investigation

Where do we see conflicts that need to be resolved?

AC - indicating RT data through a combination of text and icon. Align on a combination of icon and text.	AC - Align on the way that we convey timing, that text, abbreviation "arriving", "departing", what is the status of a train that is HERE.	AC - Conveying minutes - "minutes" "mins" "m"
AC - Showing a time in minutes away vs. Hkzmm - what is the pattern?	AC - When it comes to off-peak commuter rail, how do we convey that it's not a regular service? How do we convey that it's not a regular service?	PS - align on how to display cancelled trips (missing vs. strikethrough vs. cancelled text)
Align on how to display/describe delays and disruptions (vs. cancelled trips)	AC: Skipped trips vs cancelled trips???	PS: stops can be skipped (e.g., if there is a detour)
Align on how to display RT data through a combination of text and icon. Align on a combination of icon and text.		
DUPS - up to 59	shows schedules for	

What seems like an "edge case" or a separate entry in the design system?

AC - use screen sizes to guide abbreviations (countdown clocks vs. website)	AC - use screen sizes to guide abbreviations (countdown clocks vs. website)	
AC - use screen sizes to guide abbreviations (countdown clocks vs. website)	AC - use screen sizes to guide abbreviations (countdown clocks vs. website)	
AC - use screen sizes to guide abbreviations (countdown clocks vs. website)	AC - use screen sizes to guide abbreviations (countdown clocks vs. website)	
AC - use screen sizes to guide abbreviations (countdown clocks vs. website)	AC - use screen sizes to guide abbreviations (countdown clocks vs. website)	
AC - use screen sizes to guide abbreviations (countdown clocks vs. website)	AC - use screen sizes to guide abbreviations (countdown clocks vs. website)	
AC - use screen sizes to guide abbreviations (countdown clocks vs. website)	AC - use screen sizes to guide abbreviations (countdown clocks vs. website)	

What do we still have questions about?

Should we include alerts UI as a data source when considering predictions and RT data?	AC/PS - "key delays" - should we include delay information in predictions rather than just in alerts? Should delays and disruptions be included in predictions?	< How to consistently communicate about delays
how does the language that we use in operations compare to the information we show riders?	Where do we keep the data as represented in the GTFS spec? Where do we represent the data differently for riders?	
levels of information - basic to detailed, not obscuring "basic"		
differentiating between style routes and content routes. Content routes		

Putting it in action

While leadership and project teams were excited about the bird's eye view of how we were displaying predictions, I needed to ensure that these insights made it to implementation and had an impact on rider experiences.

Leadership buy-in

I returned to MBTA leadership with these tasks and, in a series of large group meetings, one-on-one sessions, and asynchronous commenting periods, sought approval and resources for project work.

Individual contributor handoff

I created a database of tasks, related research, and high-level acceptance criteria to support project work, which I handed off to the UX Principal for oversight.

Rider results

Riders were quick to notice some of the early results—while the data they were seeing wasn't new, UX designers were able to help riders understand its meaning.

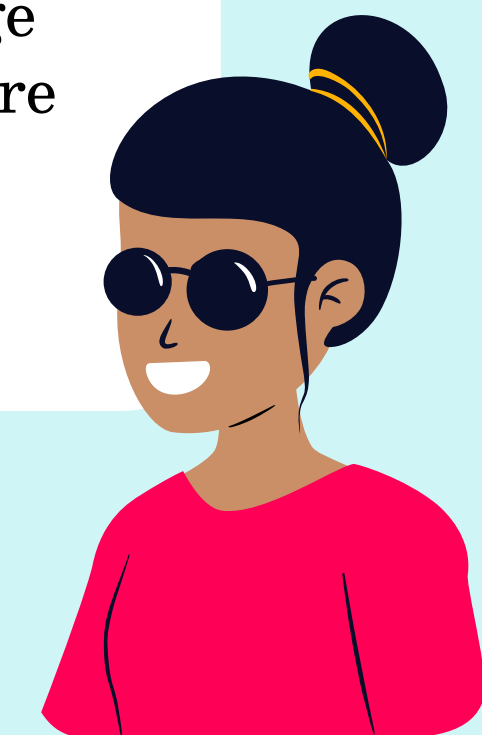
1. Make sure our **data vocabulary is defined** and readable to interested users.
2. Consider whether users would value seeing that a prediction is **real-time or scheduled on public screens**.
3. Assess the ways that a **consistent "grammar"** can support readability of signs where real estate is at a premium.
4. Create a design system that ensures users are seeing

Predictions display tasks

Aa Task	UI or UX?	Implementation team(s)	Supporting research / contact	Alerts Scope/Notes	Alerts T-Shirt Size	App Scope/
whether to use "minutes" or "min" on screens where there is enough space for multiple letters (maintaining awareness that in some cases there will only be space for 1-3 letters)	UI	Dotcom External Vendor(s) Keolis MBTA App PA/ESS	Screens Team - Mindy Villaran, Betsy Medvedovsky, MBTA.com - Anna Chung			
develop a single convention for when we display "minutes away" vs. the predicted time across public and private screens	UI	Dotcom External Vendor(s) Keolis MBTA App PA/ESS Screens	Screens Team - Mindy Villaran, Betsy Medvedovsky, MBTA.com - Anna Chung			
align on the way that we convey that a vehicle is "arriving" at a station (with						

"I love love love that you added real time updated arrival time to the page with your recent changes. This is a HUGE improvement. The change makes the page soooooo much more useful."

- Customer feedback



DEFINING AN IDEAL PAYMENT EXPERIENCE

**because it shouldn't be
hard to pay for a bus ride**

Researcher and Strategist, MBTA



What's important for us to get right in fare payment?

In November of 2023, the Fares Revenue department asked me to define an “ideal payment experience” for the MBTA.

How do you develop a cohesive vision for a critical moment in every user journey? The MBTA had already invested a great deal in fare technology innovations. Progress had been slow and siloed.

I developed and executed an in-person collaboration series to gather information about how we can develop and commit to a system-wide strategy for improving payment.



Bringing tacit knowledge to the surface

Instead of starting from scratch, I assembled a workshop series that included three expert groups:

Directors + stakeholders
share their decision-making power and institutional knowledge

Implementation teams
have feasibility & production experience

Riders
are the ultimate authority on desirability and usability



I introduced these groups in a structured peer interview workshop. Methods included card sorts and narrative interviewing; collaborators were coached on inclusive methods for blind/low vision and d/Deaf and hard of hearing participants.



Developing and refining insights

I synthesized interview data into a set of statements that surfaced a set of needs, goals, and assets.

One week later, the experts reconvened, refined my work, and generated some statements of their own based on research, experience, and institutional knowledge.

When I pay my fare, I want confirmation that the transaction was successful so that I can board the vehicle without delay.

When the T introduces new fare process or technology, I don't want them to assume I am going to find out about it.

For the third workshop, we met one last time to summarize our work, prioritize opportunities for the MBTA and imagine future states where rider goals are met.



Crafting a strategy

I took all the data from the three workshops and used it to identify four key user mindsets and principles that all fare products needed to support.

Learnings from this workshop fed into a set of directives for how to create user-centered fare experiences, and a tool to evaluate our current services for how well they meet user needs. Combined with a set of business requirements, these serve as our blueprint for improving fare payment.

Elements of User-Centered Fare Payment

These elements serve as a set of high-level instructions for developing solutions. Taken together, these elements are our “north star” – or maybe they’re closer to a “constellation.” Solutions that we develop for our riders should include all five of the elements.

Mindsets and Goals

There are four major mindsets for riders and administrative users who are interacting with fare payment.

These mindsets are often associated with certain activities. For example, when people are in the “use” mindset, they’re usually paying for transit. However, some mindsets happen in many stages of travel: a rider might be reading a poster about a new fare program while they wait for the train, which puts them in the “learn” mindset. They could just as easily be in the “learn” mindset while they’re planning a trip on the MBTA website.

Mindset	Description	User Goals
Learn	Riders encounter information about our fare payment ecosystem.	<ul style="list-style-type: none"> • Be aware of new fare technologies • Know about fare programs I’m eligible for • Understand how to interact with fare payment
Join	Riders make an initial connection with fare programs and payment methods.	<ul style="list-style-type: none"> • Decide on the best fare options for me • Get access to the programs I’m eligible for • Connect to my preferred payment method
Use	Riders pay fares to get access to transportation.	<ul style="list-style-type: none"> • Pay with confidence • Board a vehicle quickly • See that others are paying their fares
Manage	Riders maintain or adjust their relationship with fare payment.	<ul style="list-style-type: none"> • Ensure that I’m paying the right amount • Maintain a useful balance on my card • Exit programs I’m no longer a part of

interactions that understandable and free

ze the time and allocated to fare at

ers visibility into own transit use.

ut fare collection that meet individual lective needs.

e a sense of dignity onging.



Outputs and Impact

The strategy has fed into several useful tools for the Fares Technology team and its partners at the MBTA:

- Ideation frameworks
- Alignment tools
- Guiding principles

In the six months following the workshops, we've already seen impacts from both the strategy and the process:

- Included rider-centric features in new products
- Request from a partner department to scope new work on a prioritized product
- Self-reported improvements in relationships between participating departments



SUPPORTING DIAGNOSIS CONVERSATIONS

because everyone needs support when we're talking about cancer diagnoses

Design Research Lead,
Greater Good Studios



“It’s the most important visit.”

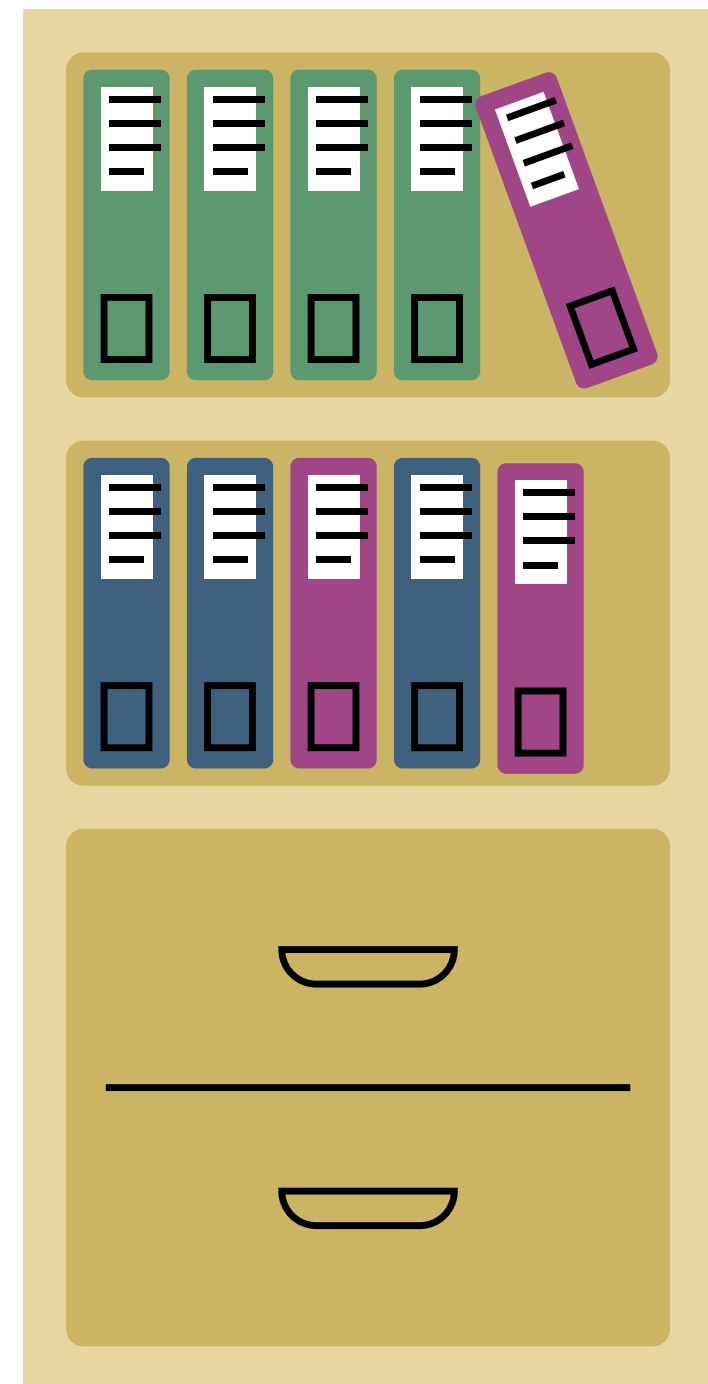
Every year, almost 90,000 people in the US are diagnosed with gynecologic cancers like ovarian and endometrial cancer. The diagnosis itself is often traumatic—and very few parts of the experience are crafted with the patient, their caregivers, or even their healthcare providers in mind.

Our client, DandelionRX, wanted to help people with cancer make sense of their diagnosis, treatment plans, and support options. I worked with a team of researchers and graphic designers at Greater Good Studio to create a toolkit that would help patients, caregivers, and providers during diagnosis conversations and beyond.



Understanding diagnosis

We had some basic questions that we needed to answer before we even started. What does it mean to get a diagnosis of endometrial or ovarian cancer? What does care look like? And what are some of the big challenges in patient-provider communication?



We assembled a **team of advisors:** providers and patient advocates who could guide and support our work during research and development.

We conducted **secondary research** to learn more about the disease and diagnosis, the vocabulary that people use to talk about cancer and treatment, and current practices in healthcare.



Researching a sensitive, multi-user system

We used multiple methods to conduct deep, trauma-informed ethnographic research with different user types.

We recruited doctors and their staff to get a more holistic view of the practice. We connected with patients and their caregivers to get multiple perspectives on the same conversations.

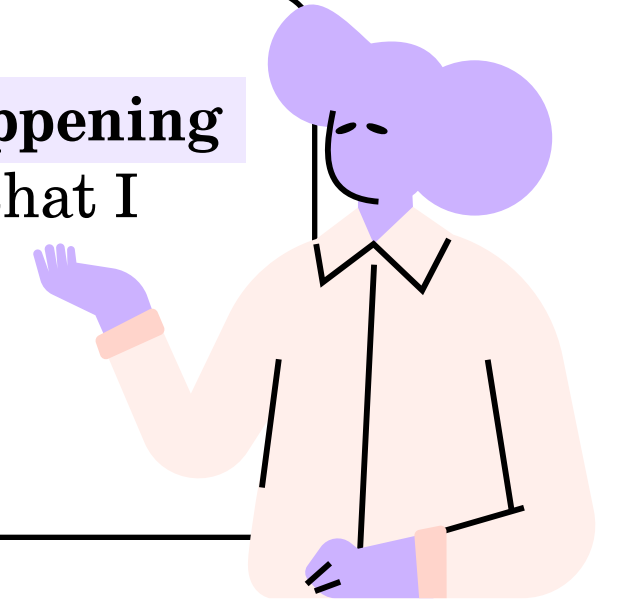
Two strategies proved to be particularly useful in our interviews with patients, caregivers, and providers:

Projectives supported first-person storytelling. They gave interviewees a starting point to describe their experiences.



My mind went into shock. **What is happening right now?** This is like the last thing that I could ever have imagined happening.

- Patient

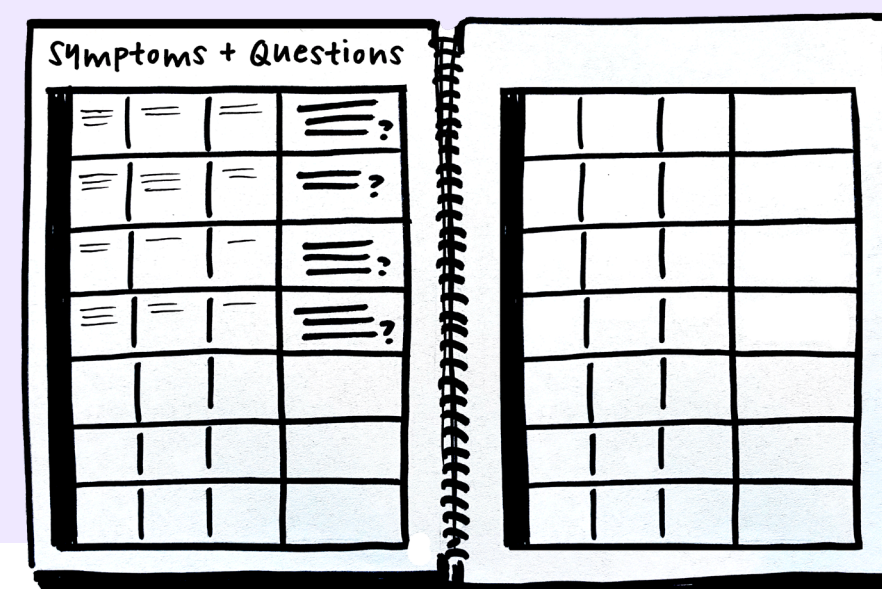


When I look at that patient and I ask how they're doing and they say, "I'm fine," but they're frowning. **If they're not comfortable with you, they won't say much."**

- Provider



Artifact shares helped us understand how users communicate and comprehend new information.



We used **notebooks to write it all down.** If either of us thought of a question after the visit, we wrote it down so the next time we went to the doctor we didn't forget to ask it.

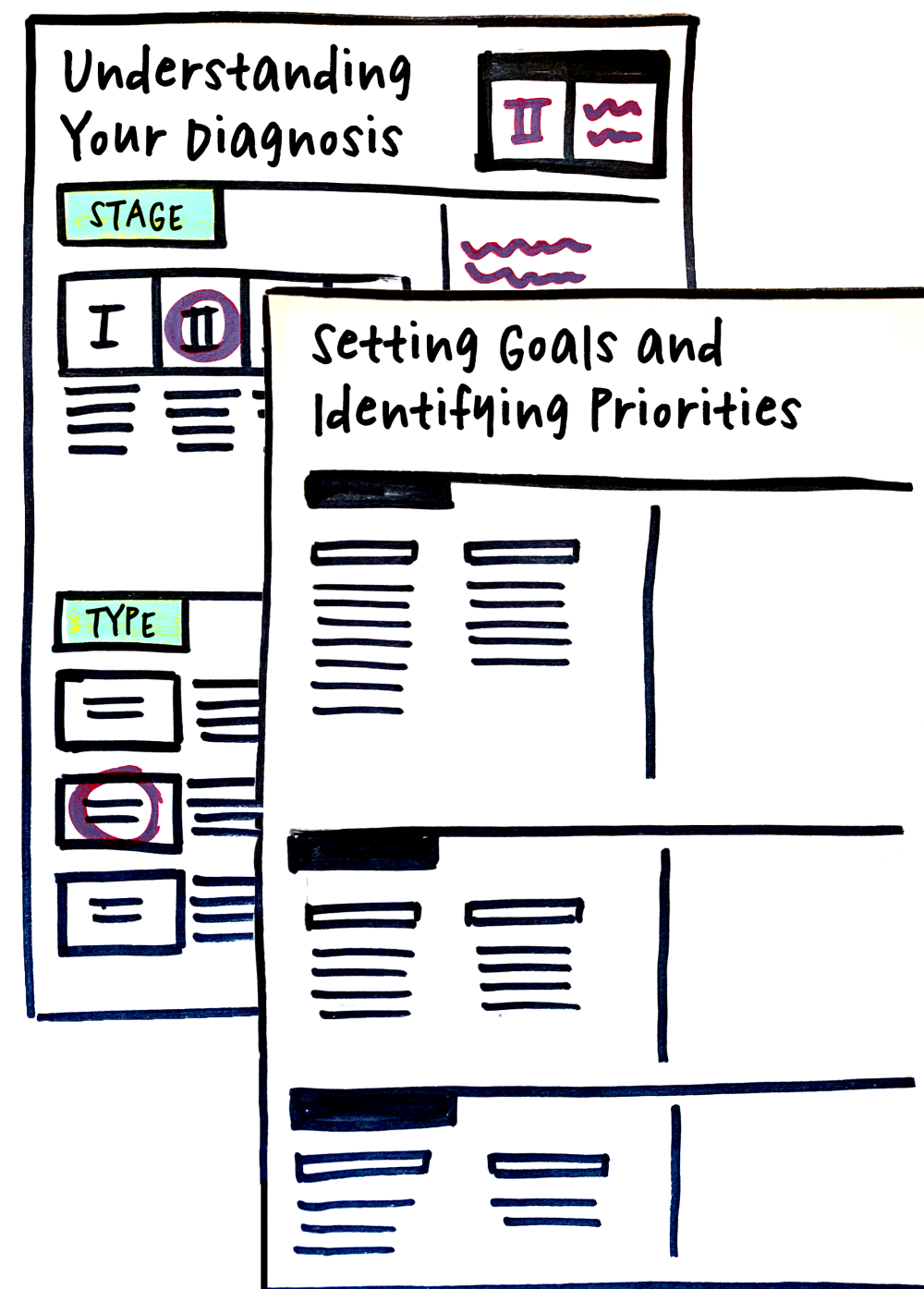
- Caregiver



Levers and tools for effective communication

We coded over a thousand data points from secondary and primary research into three key levers for effective communication.

- **Trust:** Build a relationship between patients, caregivers, and the care team.
- **Learning:** Prioritize what's important for everyone to know at the end of the visit.
- **Empowerment:** Give people the tools they need to take the next steps.



Next, based on the tools that all of our users found most helpful, we prototyped and tested a set of tools:

- worksheets and journals centered on understanding diagnosis, capturing notes and tracking treatments
- two accredited Continuing Education modules for healthcare providers



Reviews from patients and providers

When we published our materials, patients and providers reported back: with this toolkit, they felt more prepared to have these difficult conversations.



If I had received something like this I would have felt more in control. I would have felt like a participant in my own health.

- Patient

I wish I had been given something simple like this at first, and then could have dove into the details later.

- Patient

I learned a lot from this... especially about how to simplify information without being patronizing.

- Provider



Thank you!

Please let me know if you have questions about any of the work you see here, or about other specific projects I've done in the past.

You can see more of my work at reneelynn.com, and I'm always available by email at renee@nightheron.studio.

