

UX Initiatives, Research & Recommendations

Readout of PI 24 HCD Work

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October 2023

Agenda

- 01** Introduction & Overview
- 02** Who are our users?
- 03** What do they do?
- 04** What is their experience? (And how can we improve it?)
- 05** Summary & Next Steps

Goals of this call

1. Provide a readout of PI 24 Portal HCD progress and findings
2. Check-in/update on ongoing HCD initiatives to assess and improve EQRS UX
3. Gather feedback on how to improve HCD artifacts
4. Start conversations and spark decision-making for UX improvements to EQRS

Our Portal HCD team



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What were our goals this PI?

In PI 24, our Human-Centered Design goals were to:

1. Conduct interviews with users to **understand their overall experience** on a deeper level
2. Conduct discovery research to identify needs and opportunities for our prioritized PI enablers:
 - a. **Navigation and Information Architecture**
 - b. **Manage Access (Role request, Managing Access, User List)**
 - c. **Facility Dashboard**
3. Revisit past research to bolster our identified insights and opportunities (unsolicited feedback; QIP Discovery Research from 2021; UX/UI Audit from Spring 2022, etc.)
4. Create artifacts to help capture an understanding of our users
5. Organize findings to inform future improvements to EQRS (for later PI / Deep Dives)

High-level questions

1. **Who** are our users?
2. **What** do they do?
3. **When** do they do it? How often?
4. **Where** are they / what “organization” are they part of?
5. **Why** do they do it? What are their goals?
6. **How** do they do it?
7. **What is their current experience? What are their pain points?**

Who are our users?

Defining our “Archetypes”

Archetypes, like personas, help us **capture who our users are**.

However, they differ from personas by leaving out personifying details such as photos, names, and personal info and focusing on the **roles users may play**, leading to a more **inclusive and system-focused understanding** of our users.

Although archetypes help us empathize with our users at a high-level, they are **not a one-size-fits-all tool** and **do not serve as a replacement to speaking directly with the user community**.

Dialysis Facility Archetypes



“Data Entry Managers”

A.K.A.

- Admin Assistants
- Receptionists / Data Entry Clerks

Goals and Responsibilities

- Fill out forms (2728, 2746) and any data that is needed from the clinic
- Identifying and fixing any data errors
- Scheduling patients, admitting patients, and discharging patients
- At independent facilities, all data is entered manually

Challenges

- Onboarding new users frequently
- Lack of ESRD and EQRS knowledge for those in roles with high turnover rates
- A lot of information to manage; frequent data errors

“Clinical/Medical Personnel”

A.K.A.

- Nurses
- Nephrologists
- Social workers

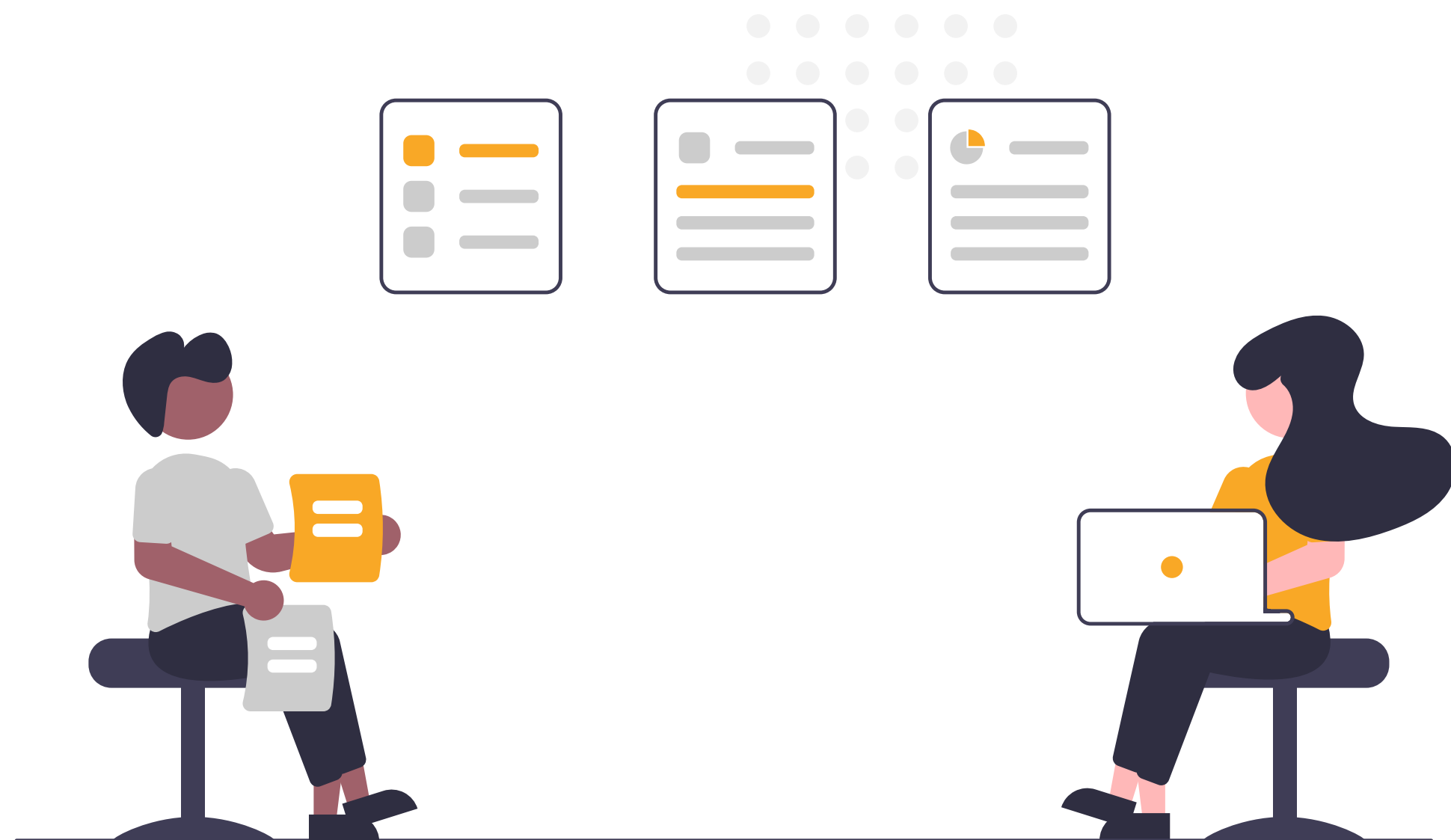
Goals and Responsibilities

- Patient logistics (transportation, counseling, education)
- Dialysis administering and patient care
- Filling out applicable forms on EQRS (Forms 2728, 2746)

Challenges

- Taking time away from patients to fill out data on EQRS
- Not having all the information I need to complete forms on EQRS

Transplant Center Archetype



“Transplant Coordinators”

A.K.A.

- Transplant Outreach Coordinator
- Clinical Manager for Transplant Programs

Goals and Responsibilities

- Coordinating with social workers and other personnel at dialysis facilities on patient information and what they need to get on the waitlist
- Managing patient records, medicare requirements, and other information

Challenges

- Difficulty getting in touch with patients and dialysis facilities
- Inconsistencies in information among coordinators and social workers at facilities; challenging to decipher info

Large Dialysis Org / EDI / Corporate Archetype



“IT / Quality Managers”

A.K.A.

- IT/Data POCs
- Clinical Informatics/Projects Directors

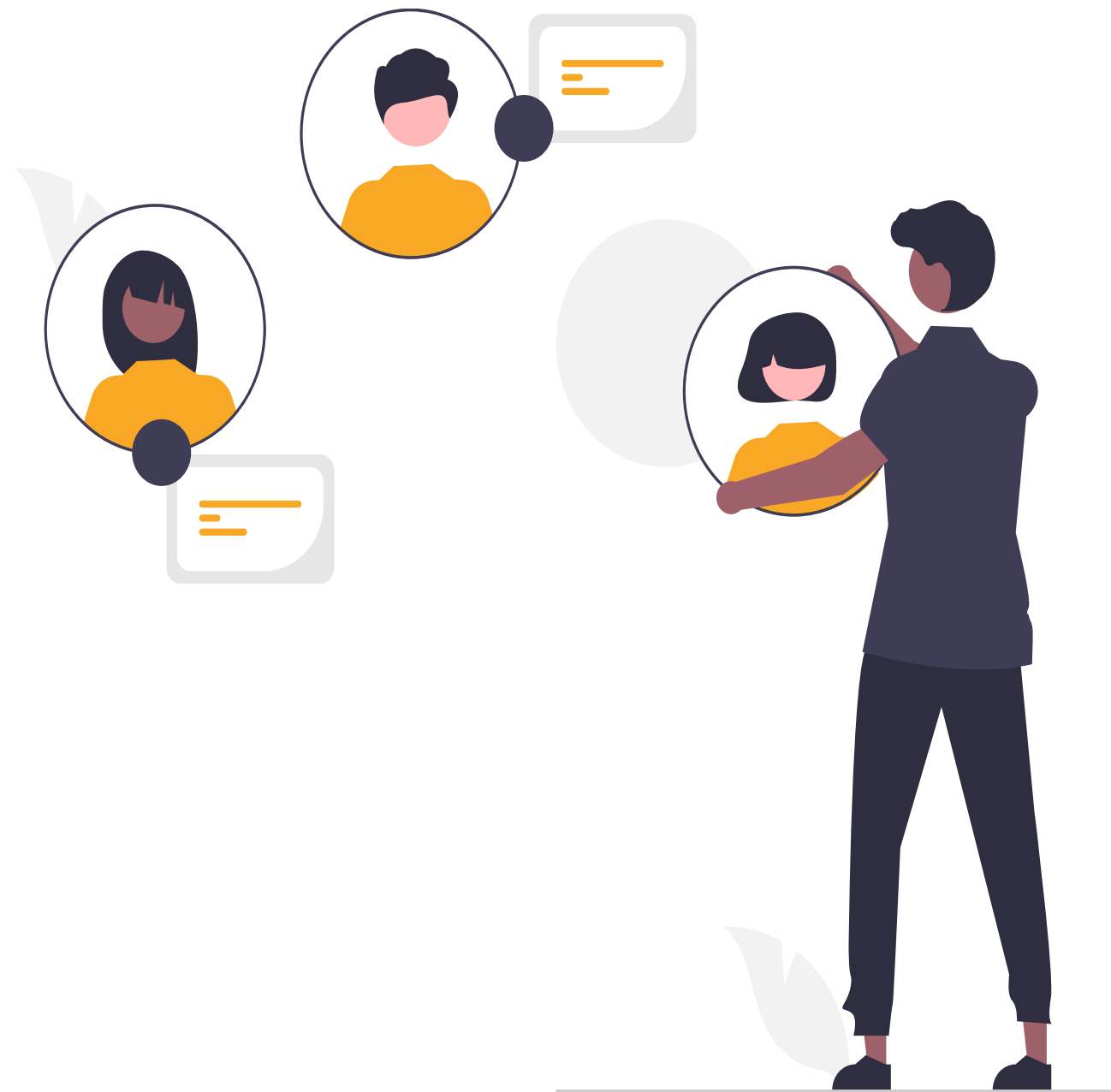
Responsibilities/Goals

- Ensuring data quality and accuracy
- Overseeing the transfer of information from their corporations' EMR systems to EQRS
- Working with CMS and other federal entities to coordinate new business objectives and data reporting compliance for their corporation

Challenges

- Dealing with hundreds to thousands of clinics' data
- Frequent errors in data accuracy
- Overseeing EQRS IT support for all of their facilities

Network Archetypes



“Clinical Quality / Data Managers”

A.K.A.

- Data Entry Clerks
- Information/Quality Managers

Goals and Responsibilities

- Collection of data
- Provides technical assistance to ESRD providers and patients
- View reports and ensure data quality for dialysis facilities and transplant centers in their network

Challenges

- Repetitive technical support to providers
- Ensuring accuracy for many providers' and patients' data is cumbersome
- Completing large volumes of tasks can be inefficient and tedious

“Social Workers”

A.K.A.

- Patient Services Directors/Coordinators

Goals and Responsibilities

- Overseeing patient grievances and cases within their networks and inputting information in PCU
- Filling out information on EQRS on behalf of facilities (2728, 2746)
- Advocate for patients' health

Challenges

- Getting all the necessary information to complete their tasks
- Completing tasks in EQRS as fast as possible to spend more time with patients

**By the
Numbers**

17k

EQRS USERS (2023)

800k

ESRD PATIENTS

8.2k

DIALYSIS FACILITIES

250+

TRANSPLANT CENTERS

600+

MANUAL SUBMITTERS

18

NETWORKS

4

ELECTRONIC DATA
INTERCHANGE
SUBMITTERS

What do they do?

How? Why?

Outlining a complex system

EQRS is a complex tool with a variety of users with different goals, responsibilities, and experiences.

We felt there was an **opportunity to create diagrams and visualizations** that paints an overall picture of our **users and their journeys**.

User Roles and Tasks Matrix

- Provides birds-eye view of all user categories, orgs, roles, and tasks

Who are the EQRS Portal Users?					What are the tasks users have to do?				
Authorized Tier	User group/"Organization"	Who are they? (some titles are generalized; not limited to list)	High level tasks in EQRS/ESRD Program	What are the user roles/ levels of access within this group?	Ad-hoc / Per event				
					Admit Patient • Done whenever a new patient is admitted to a facility	Discharge Patient •	View Patient details •	Edit/Add Personnel Information •	SSA Terminations
Tier 1 • individuals or groups that manually enter patient and facility details directly into EQRS • can also be affiliated with an organization that electronically uploads information on behalf of a facility	Dialysis Facility • 8200 facilities in US	• Nurses • Nephrologists • Data entry clerks/secretaries • Social workers • Patient-facing providers and administrators	Has purview over their affiliated facility • Provide dialysis treatment for ESRD patients • Provide data on patients, personnel, etc. to CMS • usually done through EDPM batch submission API through their affiliated LDO • Submit forms 272B, 2744 • Advocate for patients who are waitlisted for kidney transplant • 8% of 8200 (~650) facilities submit data manually in EQRS UI	Facility Editor	✓	✓	✓	✓	✓
				Facility Viewer	✗	✗	✗	✗	✗
				Facility Administrator	✓	✓	✓	✓	✓
	Transplant Center • 225 connected in EQRS • Coordinate and perform kidney transplants	• Transplant Coordinators • etc.	Has purview over their center • Coordinate organ transplants for patients • Ensures patients are eligible for a transplant (diet, etc.)	Transplant Editor					
	Corporate • Also referred to as "EDIs" (Electronic Data Interface Submitters) • 4 Corporations: • Davita • Fresenius • US Renal • DCI • Large Dialysis Organizations (LDOs) that own and manage many facilities across the nation	• Representatives of LDOs (Large Dialysis Orgs) that work at the corporate level • Business managers/analysts • Data managers/analysts	Has purview over facilities owned by the corporation • Submits data to CMS on behalf of their facilities • Participates in workgroups with CMS to provide feedback on new EQRS features and requirements • DaVita and Fresenius provide over 75% of US ESRD dialysis treatments	Corporate POC					
				Corporate Viewer					
				Facility Batch					
Tier 2 • individuals or groups that provide technical data reporting assistance • primarily monitor data reporting efforts to foster		• Data Managers • Social workers • Quality improvement supervisors • Directors	Has purview over facilities in their network • Serve as liaisons between the federal government and the providers of ESRD services • Quality oversight of the care ESRD patients receive • Collection of data to administer the national Medicare ESRD program • Provision of technical assistance to ESRD providers and patients in	Network Editor					

Ad-hoc / Per event

Monthly

Yearly

User Journey Map

- Empathy exercise by putting ourselves in their shoes
- Breaking down their process from **high-level steps/phases** to **individual actions and touchpoints**
- Documenting what they're experiencing at each point
- Identifying **opportunities** for improvement



What is their experience?

And how can we improve it?

How might we find the most pressing needs of EQRS users across the platform?



Discovery Research allows us to evaluate the overall user experience of EQRS.

- Gain a deeper **understanding of pain points** among all user types of EQRS
- Allows for more **flexibility in the questions we ask the user** - what are barriers in their day-to-day experiences? When was the last time they were frustrated?
- **Inform future design** and development work

What did we do?

11 semi-structured research interviews

- 45 – 60 minute sessions
- Centered on **users' differing tasks and journeys** through EQRS

Discussion Guide

Hello, my name's Jason Dong and I am a UX Researcher on the EQRS HCD team, and I'm going to walk you through today's session. I'd like to begin by thanking you for making time to speak with us. Your feedback is valuable and will help us determine pain points and areas of opportunity in the EQRS interface. Just to confirm, we'd like to keep this session to 45 min to 1 hour. Does that still work for you?

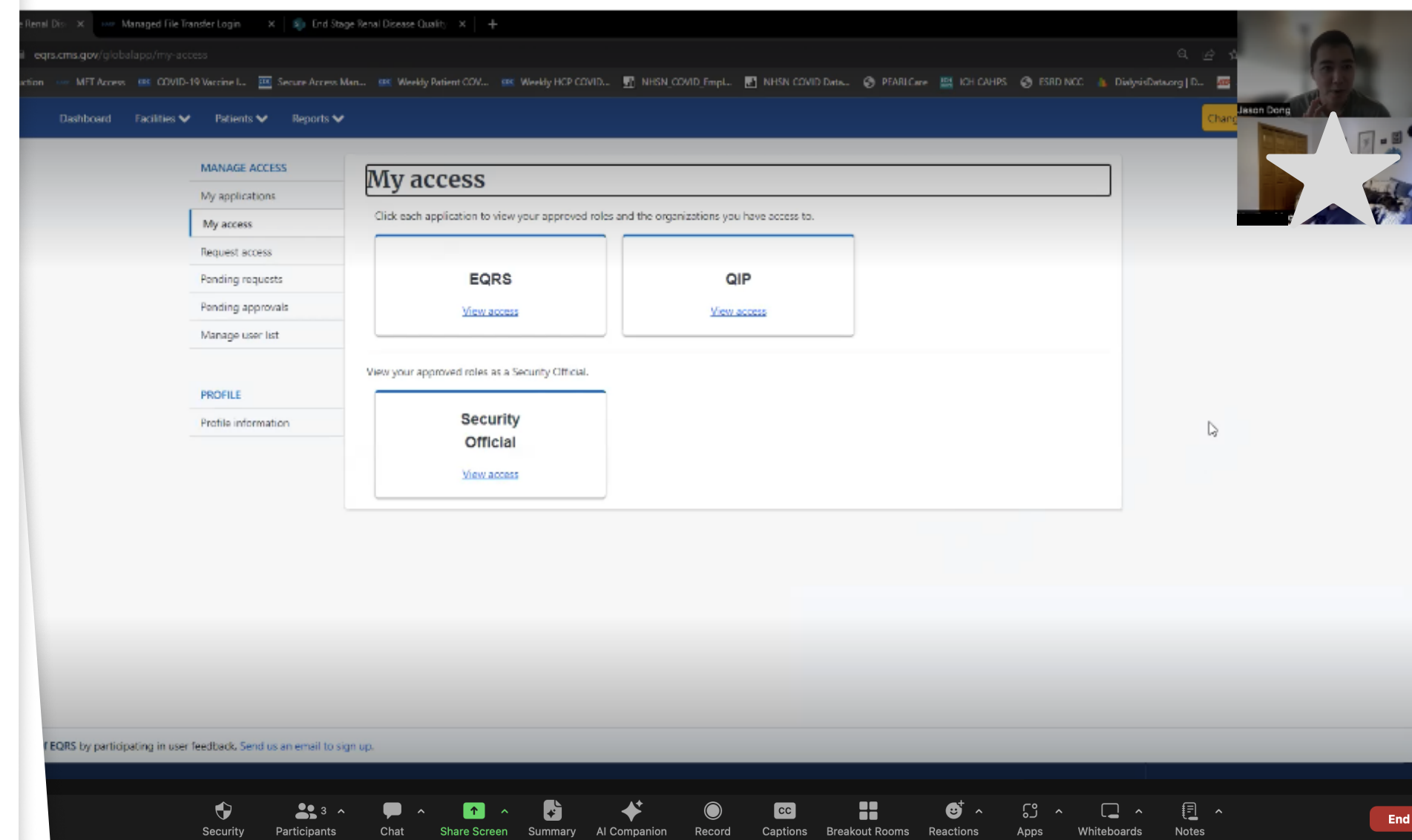
Great. If you need a break or to stop at any time, please let me know. During this session, I'll start by asking you a few questions about your work and your role on EQRS.

Later, I'll ask you to share your screen and walk us through EQRS – through the logging in process and some of the main tasks you complete. As you go about using the website, I'll ask you to think aloud as much as possible: to describe what you're looking at and what you're trying to do. This will be a big help.

With your permission, I'd like to record this call. The recording will only be used to help us figure out how to improve the site, and it won't be seen by anyone except those with a need-to-know. Do I have your permission to record this call? Any other questions before we get started?

Intro

- What is your role and organization you are a part of?
- How do you currently use EQRS? What are your main responsibilities and day-to-day tasks?
- How familiar are you with EQRS? How often do you use it?
- What EQRS roles do you have?



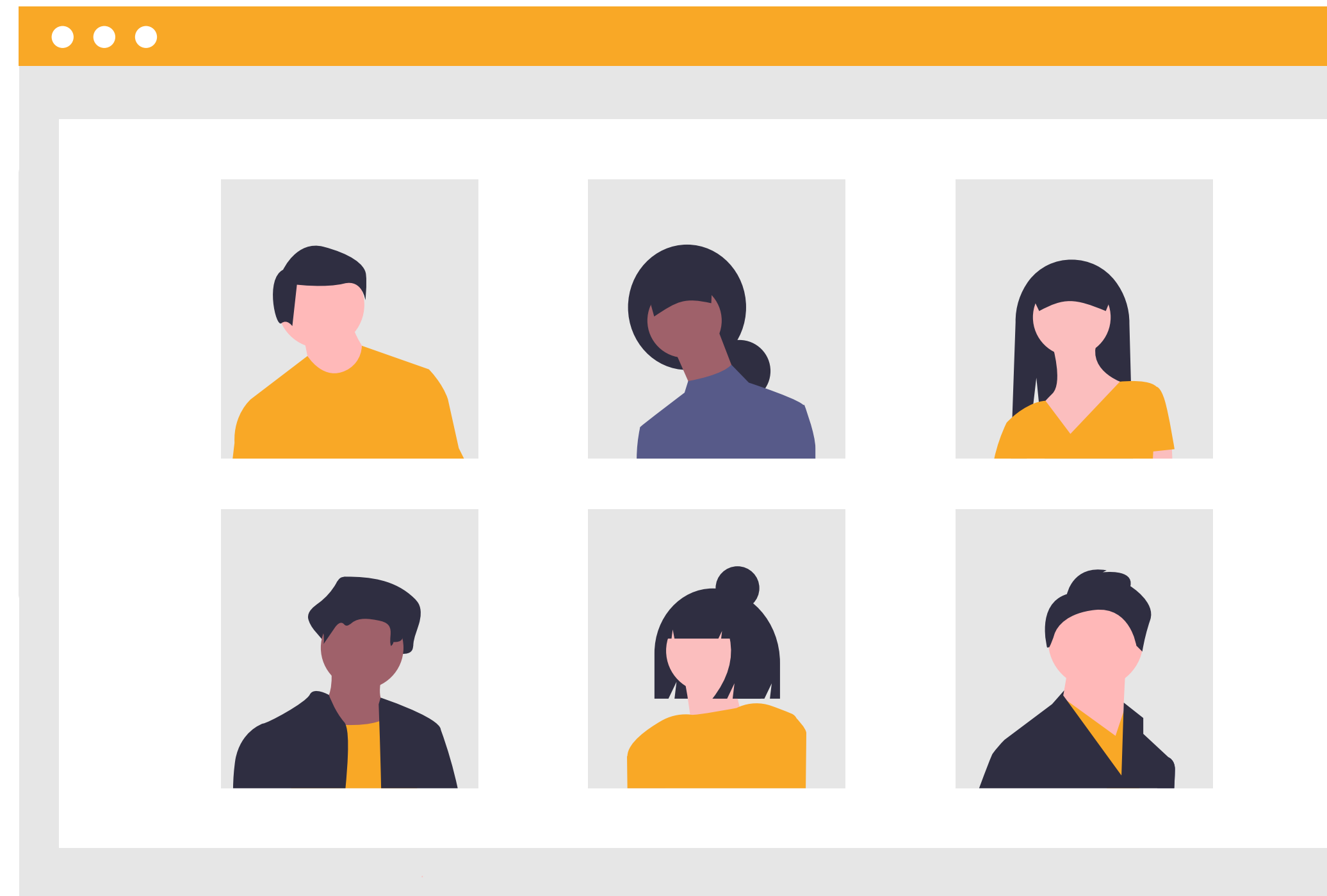
Who we talked to

11 users (Data Managers, Social Workers, Director of Clinical Projects)

- **4** LDO/Corporate users
- **5** network users
- **2** facility users

Sample Questions

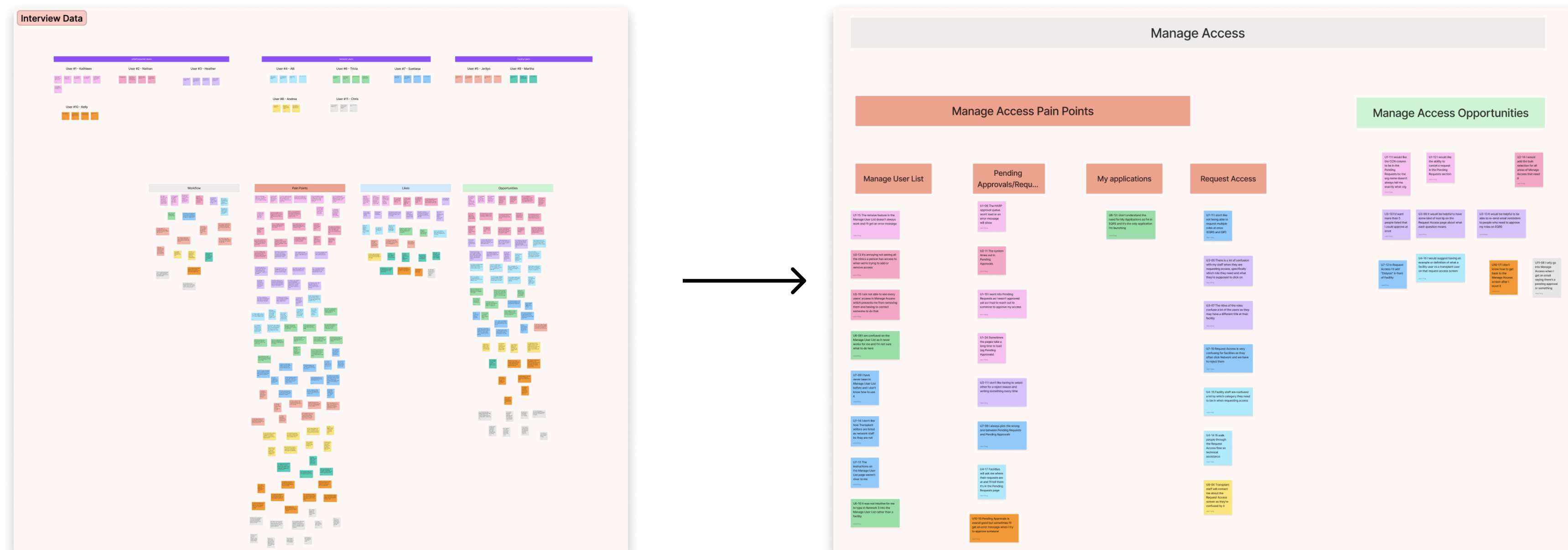
- What are the pros and cons of your **current homepage**?
- What, if any, are some barriers you encounter when trying to complete tasks in the **Manage Access section**?



Synthesis and Analysis

With all the notes and data, we extracted **major themes, pain points, and opportunities** for improvement by using affinity mapping

- Split down notes by section of EQRS (Dashboard, Manage Access, Patients...etc)
- Filtered down more and more to get actionable findings



Insights and Key Takeaways

1. Navigating the overall system
2. Onboarding and access management
3. Using the facility dashboard

INSIGHTS & KEY TAKEAWAYS

1. Navigating the overall system

EQRS-1461: Portal HCD: Exploration Enabler – Navigation/
Information Architecture

1. NAVIGATING OVERALL SYSTEM

Insight #1

When navigating and performing tasks in EQRS, users want to have **constant awareness of which organization they are in.**

- Many users would forget about the 'Change Org' dropdown
- Top right location is not best for findability
- No clear indicator of its function or purpose

Current design



Interview Quotes

"Sometimes, EQRS will open up in a facility that I wasn't in previously when I logged out, so I run into problems when I try to fill out data that is supposed to be for another facility"

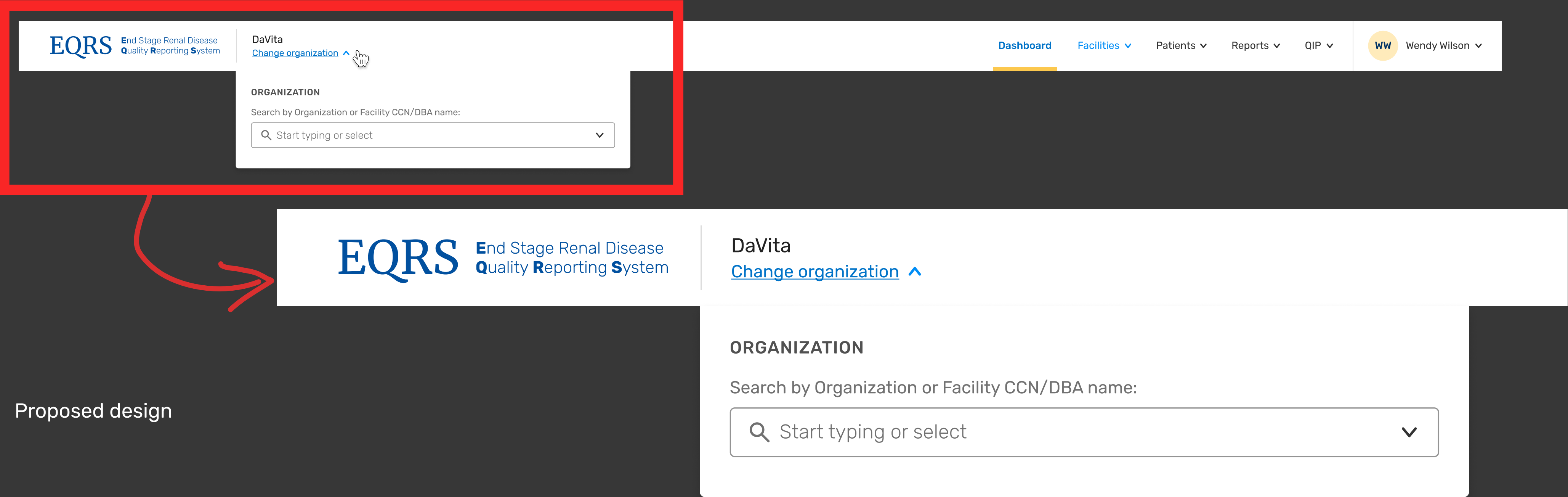
- Facility Editor

"I would have [information] at the top of the screen readily available that show you which network you are in so I don't need a separate click"

- Network Editor

Show users which organization they are in at all times.

- Show **selected organization prominently**
- Make it more noticeable by putting **key information in top left**, following Gutenberg Principle (western design principle of users absorbing information from top to bottom, left to right)

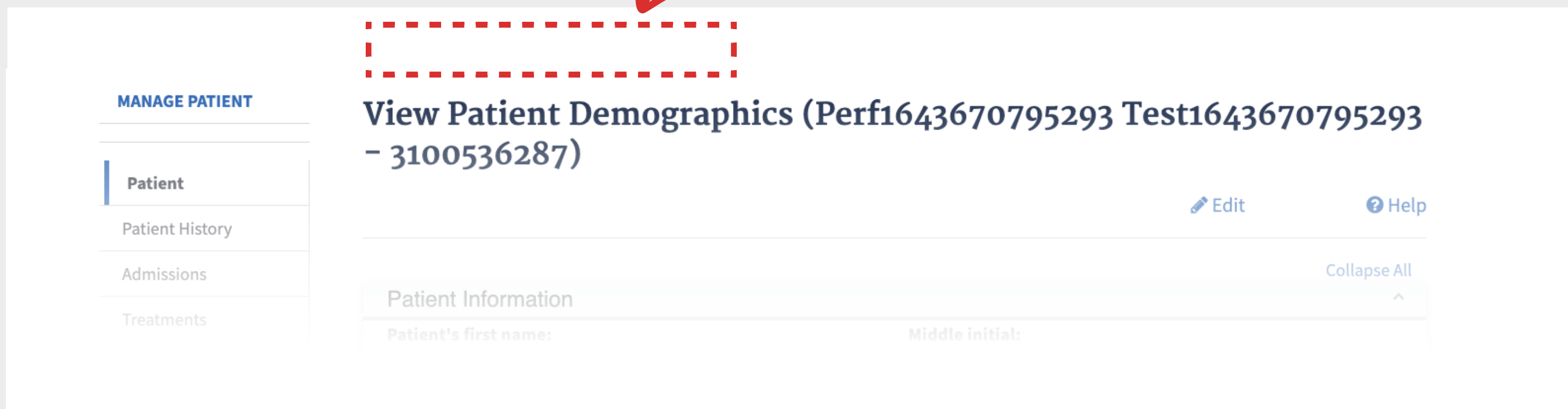


1. NAVIGATING OVERALL SYSTEM

Insight #2

Without **breadcrumbs**, users don't have a way to orient themselves in the system or a way to go back to a search results page, **making navigation confusing and limited.**

Current design



The screenshot shows a web application interface for managing patients. On the left is a sidebar with a 'MANAGE PATIENT' header and a list of options: 'Patient' (highlighted with a blue bar), 'Patient History', 'Admissions', and 'Treatments'. The main content area is titled 'View Patient Demographics (Perf1643670795293 Test1643670795293 - 3100536287)'. Above this title is a red dashed rectangular box with a red arrow pointing to it from the top left, indicating the location where a breadcrumb trail should be. To the right of the title are 'Edit' and 'Help' links. Below the title is a 'Collapse All' link. The main content area contains a section titled 'Patient Information' with fields for 'Patient's first name:' and 'Middle initial:'.

Interview Quotes

"I would like a breadcrumb trail especially in the Patients tab"

- Facility Editor

"If I go to a different facility and come back to the dashboard, I have to enter that facility again. I think breadcrumbs would be useful in that case"

- Network Editor

Have a way to navigate back to previous pages

- Breadcrumbs are a list of links **representing the current page and its “ancestors”** (parent page, grandparent page, and so on)
- Represented as a **trail of links** at the top of the page

Proposed design



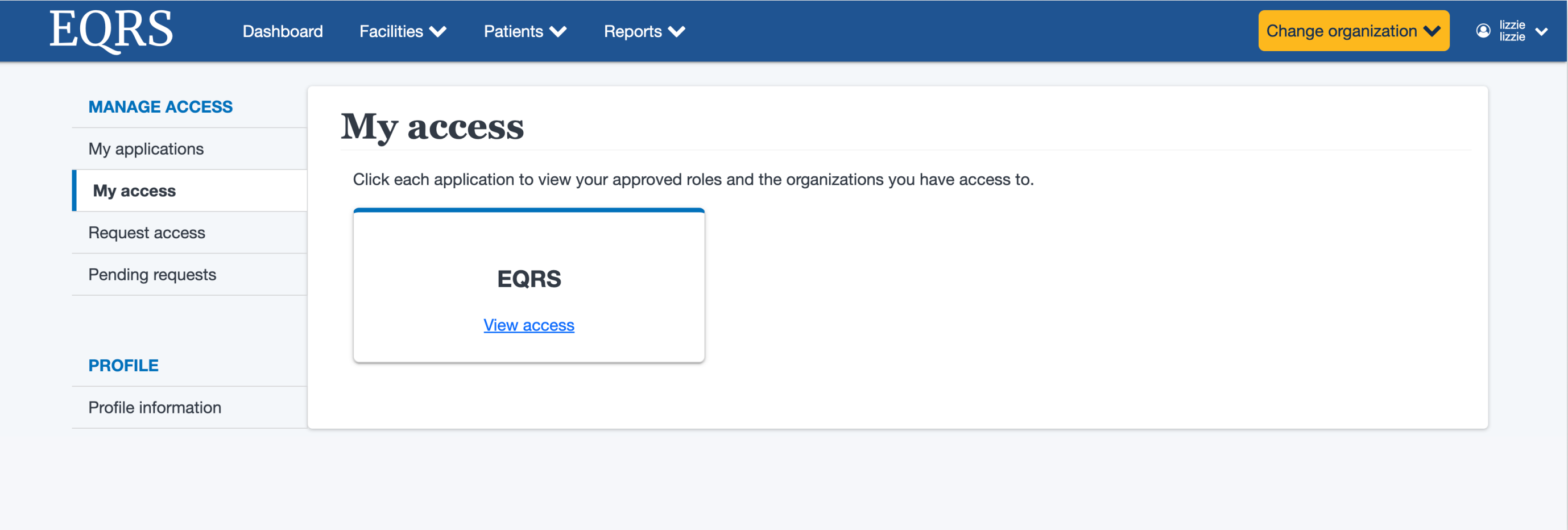
1. NAVIGATING OVERALL SYSTEM

Insight #3

Upon signing in, users want to **immediately see information and tasks pertinent to them** in an optimized homepage dashboard

- Currently, the majority of users don't have a need to land on the My Access page. Most users click directly on Dashboard after logging in

Current design



Interview Quotes

“If I was a nursing manager I’d want my dashboard to be my landing page as the current one there’s nothing important there for me”

-Facility Editor/SO

“I think the Dashboard should be made the landing page for facilities”

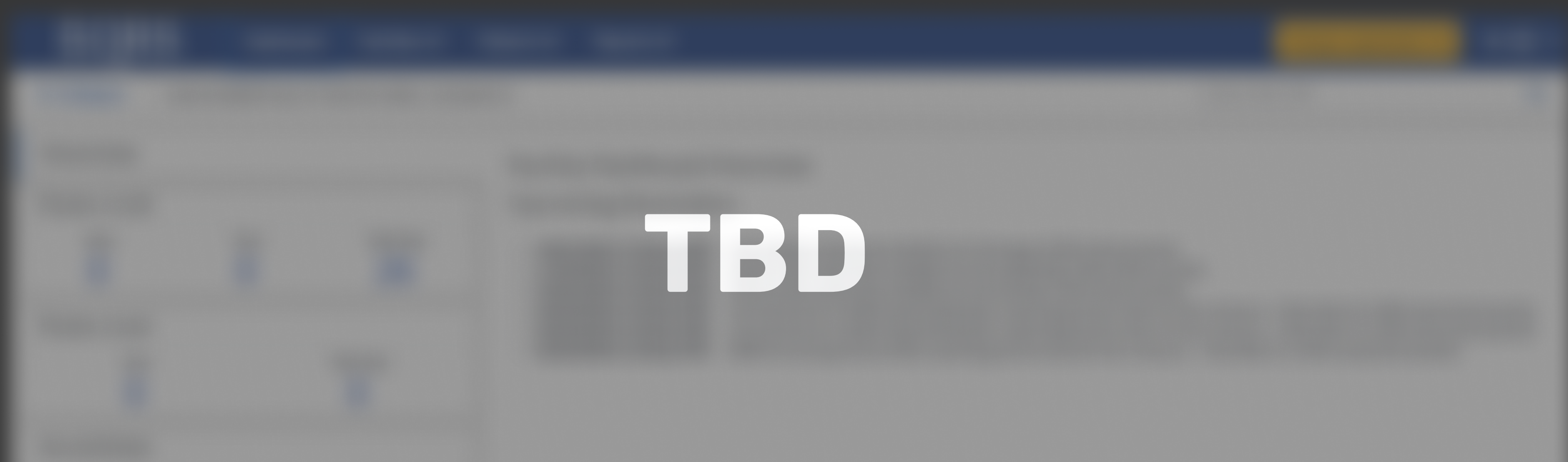
- Network Editor/SO

RECOMMENDATION

Make the “dashboard” the homepage and the first page users see once logged in to EQRS

- Users want to **see information and tasks that are most important to them** on a homepage
- Standard UX practice is to have users **land on a homepage upon signing in** with most up-to-date content

Proposed design



TBD

INSIGHTS & KEY TAKEAWAYS

2. Onboarding and managing access

EQRS-1460: Portal HCD: Exploration Enabler – Manage Access and My Profile Redesign

Insight #1

Onboarding, or **requesting access**, is confusing, with **unclear language and no guidance**

Interview Quotes

“There is a lot of confusion with my staff when they are requesting access, specifically which role they need and what they're supposed to click on”

- Facility Editor & SO

“I would suggest having an example or definition of what a facility user vs a transplant user on that request access screen”

- Network Editor

Current design

MANAGE ACCESS

My applications

My access

Request access

Pending requests

1
Organization Category

2
Organization role

3
Review and submit

Select the organization category for which you are requesting a role to.

☒ Facility

☐ Corporation

☐ Network

☐ Transplant

For CMS use only.

☐ CMS

☐ CMS Support

Please select the application you are requesting role to.

☐ EQRS

☐ QIP

Organization:

CMS Support (EQRS)

Role

Select a Role

MSP

System Administrator

Security Official

Add

RECOMMENDATION

Optimize flow of a role request to be more clear and novice-friendly.

- Add descriptions of roles
- Add instructions
- Allow requesting of multiple roles
- Show pending request page after submission

Proposed design

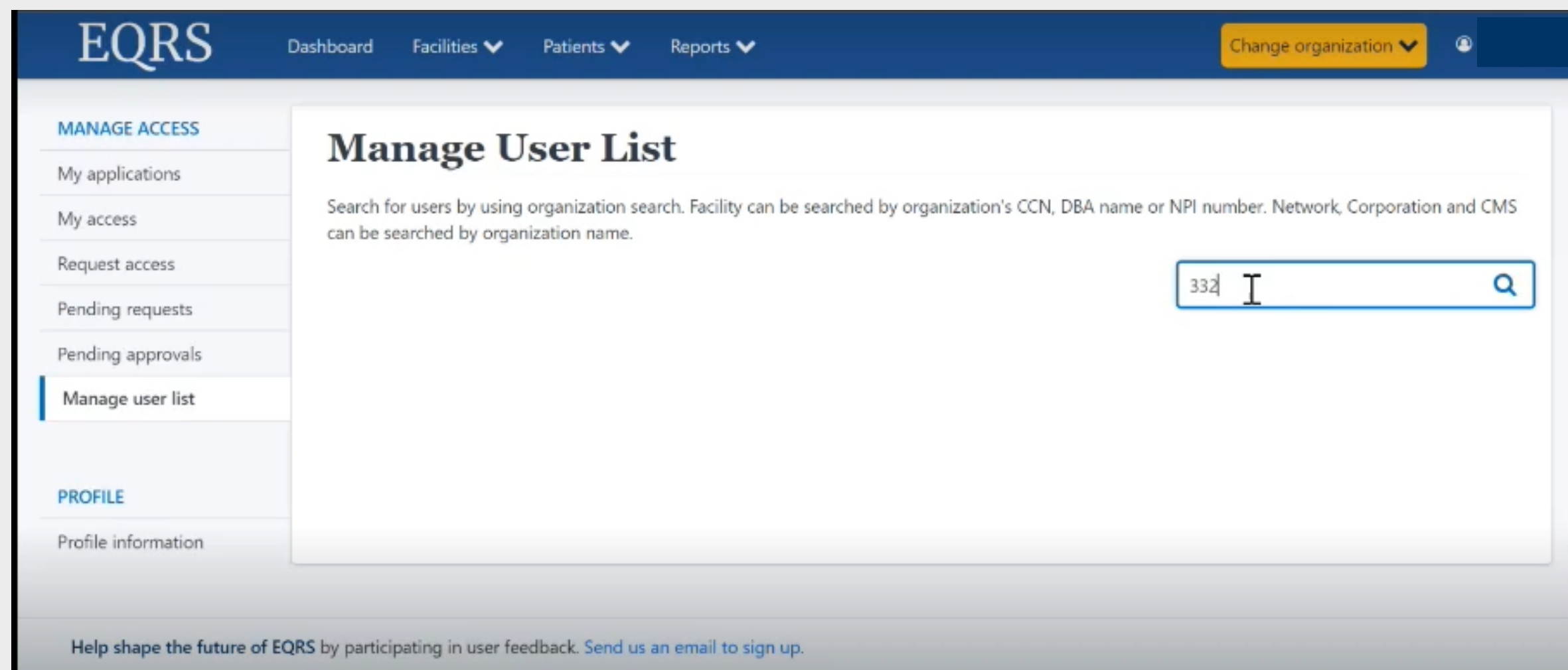


2. ONBOARDING & MANAGING ACCESS

Insight #2

As a Security Official of organizations, managing other's access is frustrating, as they just **want to see all the clinics a person has access to** without having to search each individual clinic.

Current design



Interview Quotes

"It's annoying not seeing all the clinics a person has access to when we're trying to add or remove access"

-Facility Editor/ Corporate SO

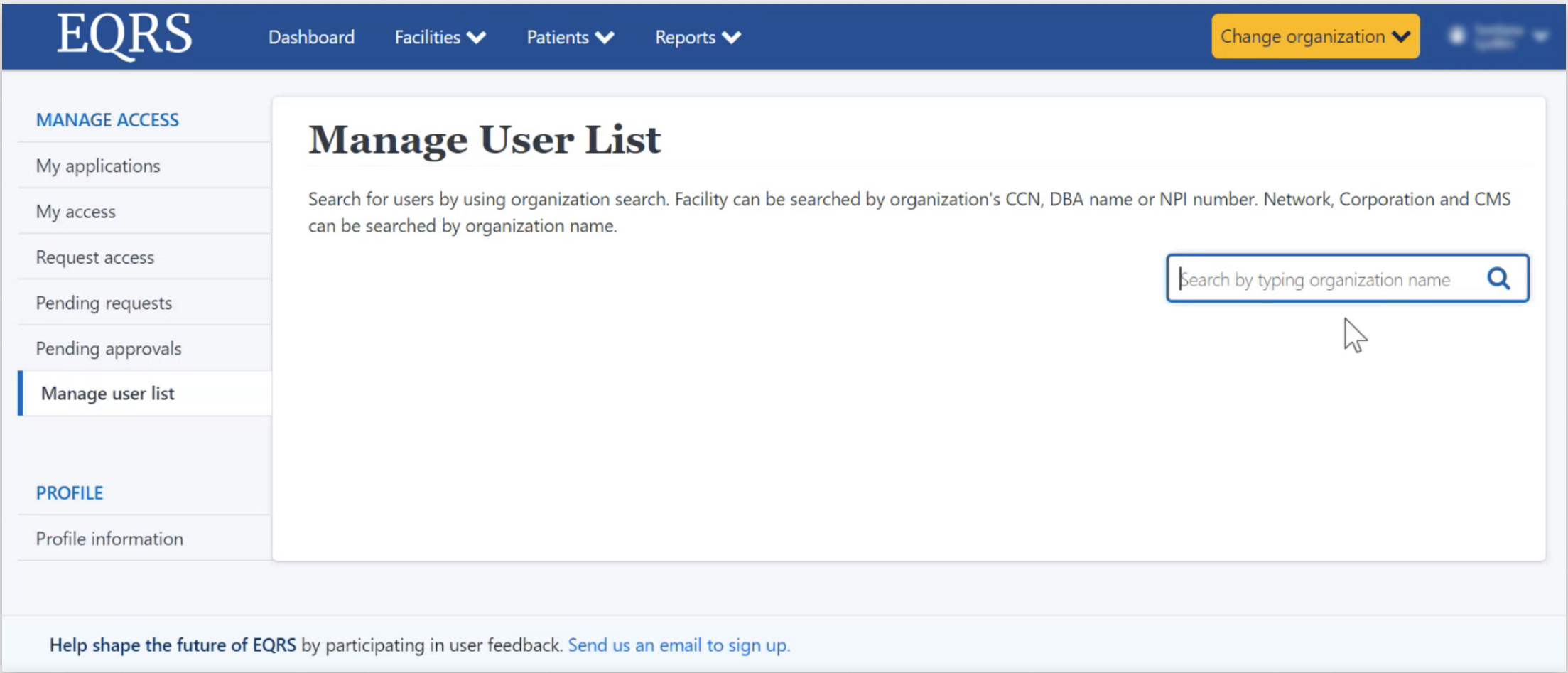
"The remove feature in the Manage User List doesn't always work and I'll get an error message"

- Facility Editor/ Corporate SO

Insight #3

When managing the list of users, **it lacks direction and guidance**, with no information readily available/visible.

Current design



Interview Quotes

“I am confused on the Manage User List as it never works for me and I'm not sure what to do here”

-Network Editor / Admin

“The instructions on the Manage User List page weren't clear to me”

- Network Editor

Show all users and their roles that SOs have purview over upon entering page

- Include a **list of all users**, all clinics they are a part of, and their accompanying roles in one view
- Allow **filtering** by facility/organization, name, username, and role type

Proposed design



INSIGHTS & KEY TAKEAWAYS

3. Using the facility dashboard

EQRS-1462: Portal HCD: Exploration Enabler – User landing page by Organizational Role

3. USING THE FACILITY DASHBOARD

Insight #1

Users want **more accurate information on the dashboard**, so they can better complete their tasks.

Interview Quotes

“On the Dashboard, the [number of] Depression Screenings [that are overdue] are inaccurate as I know I have none left but it'll say I have 81 to do”

- Facility Editor

Current design

Overview

Form 2728

New	Due	Past due
0	2	3

Form 2746

Due	Past due
0	0

Accretions

Unresolved
0

System Discharges

2023	2022
1	0

Clinical Depression Screenings

Required Screenings	Upcoming Screenings
81	0

Add additional services to your facility

Please confirm if additional services are offered at your facility by navigating to the Services section.

Facility Dashboard Overview

Upcoming Reminders

- 11/01/2023 2:59 am EDT - Clinical Data submission deadline for the August 2023 clinical period.
- 12/01/2023 2:59 am EST - Clinical Data submission deadline for the September 2023 clinical period.
- 01/03/2024 2:59 am EST - Clinical Data submission deadline for the October 2023 clinical period.
- 03/01/2024 2:59 am EDT - Clinical Depression Screening reporting period closes for the January 1 - December 31, 2023 assessment period.

“If we're looking for clinical data, we never use this clinical data (dashboard) because the value isn't always accurate to what's really missing for a patient”

- Facility Editor / SO

2. USING THE FACILITY DASHBOARD

Insight #2

Dashboard can be better optimized to **drive data accuracy and task completion.**

Current design

EQRS

DashboardFacilities▼Patients▼Reports▼

Change organization▼

lizzie lizzie▼

 Collapse

462539 WEBER VALLEY DIALYSIS (DVA) (1023284171)

Enter CCN or NPI



Overview

Form 2728

New	Due	Past due
0	0	26

Form 2746

Due	Past due
0	0

Accretions

Unresolved
0

Form 2744 - Annual Facility Survey

The status of your facility's 2022 Form 2744 is **Draft**:

Your facility has generated the survey; however, it has not been submitted. The facility should review the Remarks/Comments section of the survey for any errors or warnings and submit to the Network for review.

You can view your facility's 2022 Form 2744 in EQRS.

Interview Quotes

“It would be nice to have some visual reminders or deadlines on the dashboard”

- Network Editor

“It would be nice to show patients admitted or something like that on the dashboard rather than having to run a report so facilities can see what they need to do”

- Network Editor/Admin

“I want to be able to access patient data from graphs and charts on the dashboard”

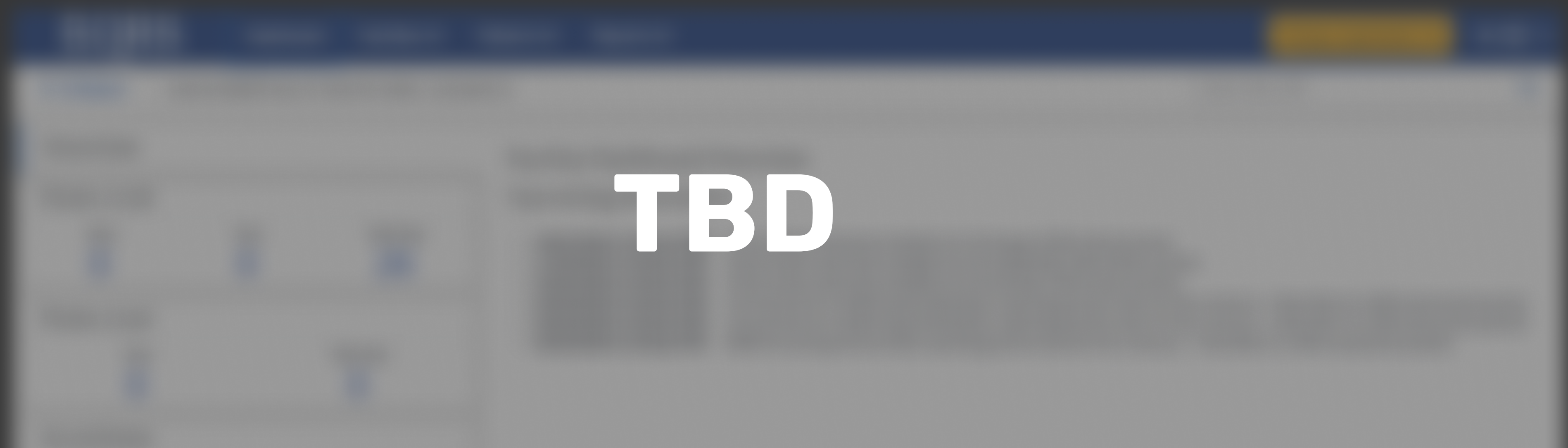
- Corporate SO, Facility Editor

RECOMMENDATION

With the dashboard as the homepage, we can better display information that is useful to the users

- Include more **accurate data and widgets or information to help users** ensure data accuracy and complete tasks more easily
 - e.g. outstanding tasks, deadlines, infographics, etc.

Proposed design



TBD

Summary & Next Steps

Navigating the overall system

- Show users what organization they are in at all times
- Have breadcrumbs in all areas of EQRS to support wayfinding
- Make the Dashboard the homepage and the first page users see after logging in

Onboarding and managing their access

- Optimize flow of requesting a role to be more clear and novice friendly
- Show all users and their roles that SOs have purview over upon entering Manage User List page

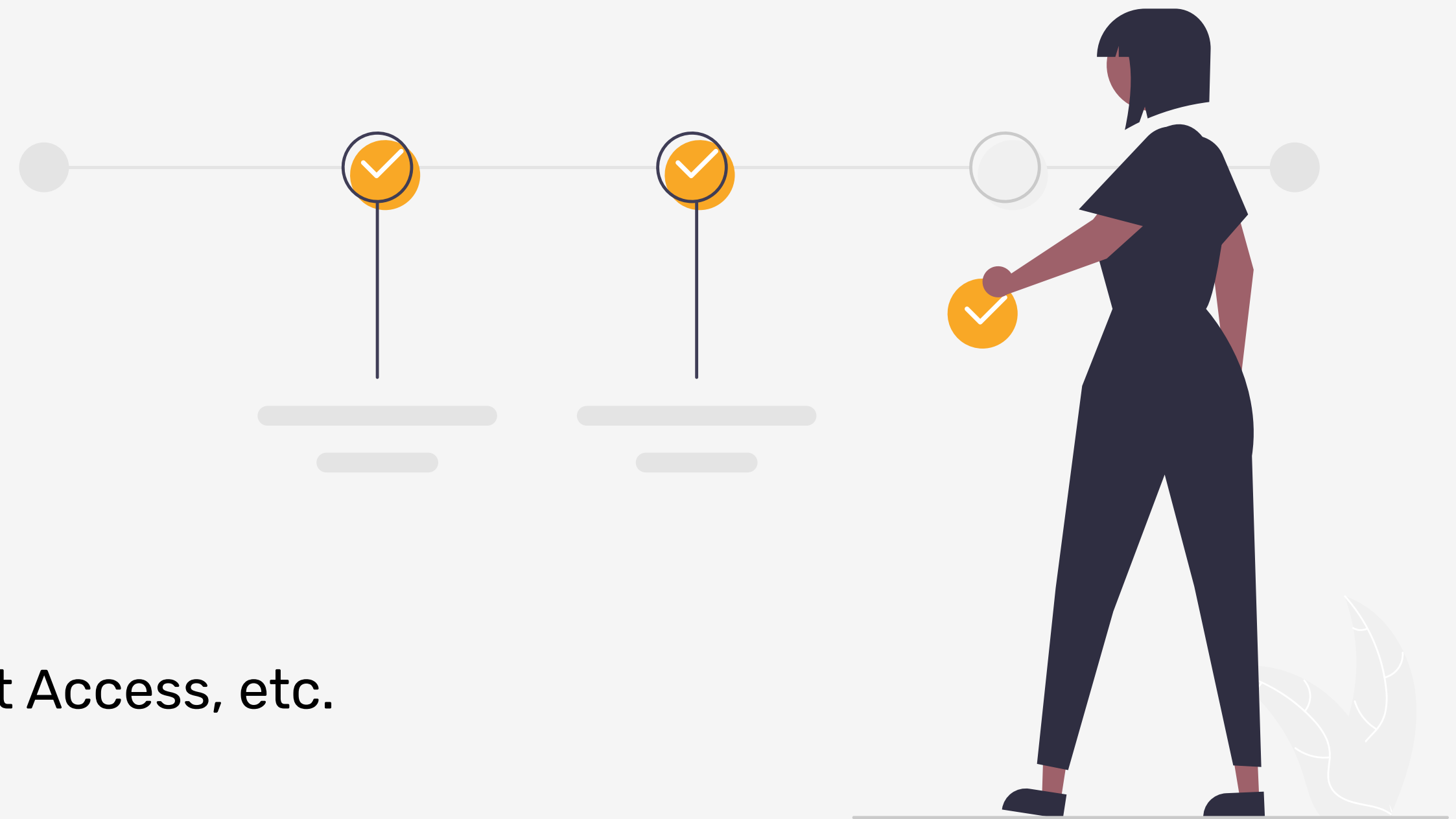
Using the facility dashboard

- With the dashboard as the homepage, include more accurate data, more widgets or infographics, and clearly displayed deadlines

Next steps

In PI 25:

- Iterating on designs for:
 - Dashboard/homepage
 - Manage Access pages: User List, Request Access, etc.
- Usability testing and validation
- Working with program and POs on finalizing product requirements and design specifications
- Presenting additional findings on other areas of EQRS in future syncs/updates



Thank you for listening!

