

Healthcare System Navigation Redesign

Introduction

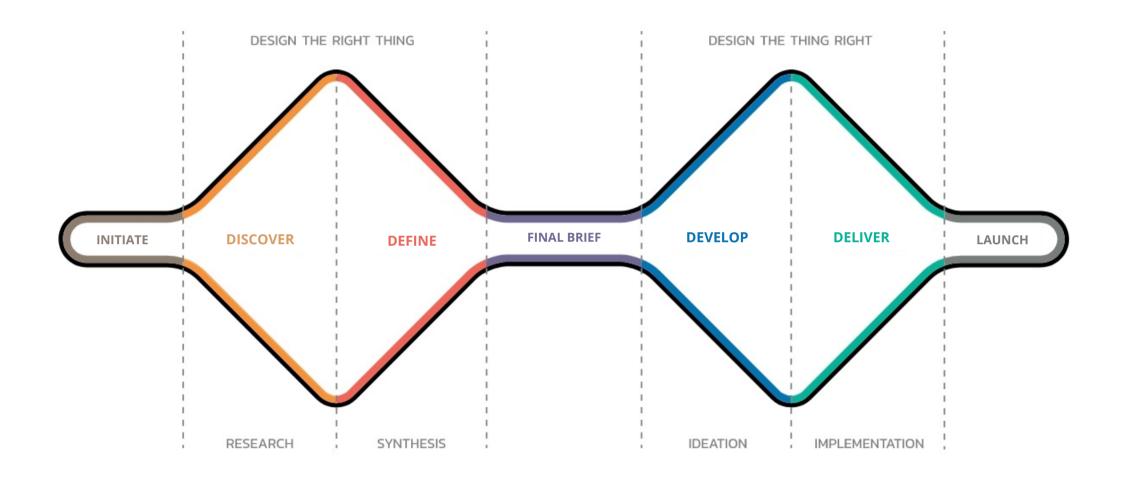
What is the project?

Working with NHS England & Improvement, we were tasked with working on their quality surveillance system. This system is used to understand how hospitals are performing around the nation, alerting commissioners to those who are under-performing so they can provide extra assistance and get the hospital back up to speed.

The system covers every NHS Trust in the nation, and caters for over 100+ NHS run services.

As the system was created based solely on functionality, it has expanded over the years but failed to cater for its users, meaning that although the right functionality is there, there has been many occasions where users cannot complete their tasks. This has been a problem for a while and requires a UX input into the root cause of these problems.

This project will demonstrate the double diamond process, as we require all of the stages to successfully deliver the right outcome.



1 Discover

Discover - Surveys & Interviews

How did we conduct our research?

Given the **timing and limitations** of the project due to the pandemic, the only feasible approach to research was surveying current users on their thoughts on the system. Users were asked a set of open ended questions where they could provide an **un-biased** review of their experiences. Survey analysis followed, with the overarching theme heavily related around **system navigation**. This theme was broken down further into three different sub themes, which are the following:

Current system is very difficult to navigate.

Submitting data can be challenging due to system navigation.

Having quick links to navigate to the most important bits would be helpful.

Discover - User Groups

Who are our target users?

Understanding the perspective from the **user feedback** helped us understand our target user groups in detail. The navigation piece would **directly affect all three main user group**s who use the system. **Providers would be the focal point**, as most comments related to them submitting data. All three groups have their main duties to carry out, as showcased below:



Providers

"As a provider, I want to successfully submit reports so that I can supply information to the relevant users."



Commissioners

"As a commissioner, I want to access submitted reports so that I can make evidenced based decisions"



Super Users

"As a super user, I want to efficiently use the system so that I can provide assistance and support to users."



Providers

"As a provider, I want to successfully submit reports so that I can supply information to the relevant users."

"Not having to hunt down a service then click over seven times to get to the dashboard."

"Seven clicks just to get to the QST or SSQD dashboards isn't user friendly. I check 115 services. Some having multiple sub-services."

"Quick links to sections rather than having to navigate through numerous pages to access the section you need."

"Easier to find where you submit – it is very confusing and not obviously available."

"I would like to see a snapshot as soon as you log in showing what is outstanding or due."



Commissioners

"As a commissioner, I want to access submitted reports so that I can make evidenced based decisions"

Not sure , but it needs to be a bit more intuitive ie click on a box that says commissioner response and review

I have not used the system in a while but when I did use it is was not very user friendly. Accessing individual trusts / services is very time consuming needs to be easier to access

The find function at the beginning could narrow down rather than simply highlight a service. There are a lot of clicks to get to where I need to enter each set of data and with sometimes 100's of services to get through this is time consuming.

I think if the system is to be modified/changed significantly user involvement should be sought. The layout of how to view Trusts, selecting the Trust, double clicking to view the services, I think there could be a more user friendly layout.

The reporting function is good.

I find accessing the information and the right screens quite "clunky" - it is a lot of clicks to get to where you need to go. A lot of the terminology is difficult to understand in terms that mean something to myself and colleagues - this could be made clearer.



Super Users

"As a super user, I want to efficiently use the system so that I can provide assistance and support to users."

The directory gives no instruction whatsoever.
Users have called in with no idea what to do.

'Related links' makes no sense. The terminology used is not consistent and doesn't provide confidence

The system isn't accessible. Keyboard shortcuts don't work as intended.

You have to know where to go. In most cases, users forget where to go.

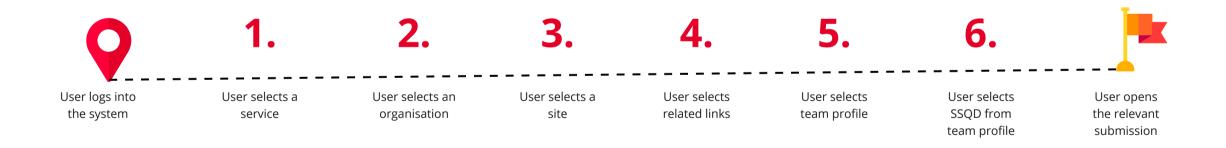
No guidance when you log in. No visual cues to help direct you.

Discover - Existing System Issues

Why does the current system not work?

After conducting an entire system evaluation based on user feedback, the general understanding was around the **amount of steps** it takes to navigate to submissions and **crossroads where users may get lost in the system**. This was dependent on **system knowledge**, as users would need to know the steps precisely in order to follow them.

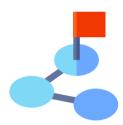
The current user journey to submit a survey (based on system knowledge):



Discover - Existing System Improvements

How can we improve the system?

On the basis of the feedback from the three target user groups, initial improvements were listed to aid a summary of the current issues. Although these themes are not certified, they offer greater insight into the underlying cause of user frustration when navigating the system. They are the following:



Clearer pathfinding

There are too many steps to get to the intended destination(s) - pathways are unclear.



Accurate and concise terminology

Signposting is unclear. Inconsistent use of terminology - do users know what they're looking at?



Intuitive UI

Are thingswhere they should be? Do users get frustrated when they use the system?

2 Define

Define - Problem Statement

Problem Statement

Users **need** a way to efficiently and accurately navigate to the relevant areas to submit quarterly reports in the system **because** they often struggle to find the right areas and require external support on how to complete this task.

Hypothesis

We will know this to be true when we see how many users are find the submission portal and are submitting reports on or before the deadline and in return the support team are receiving no further queries on how to do this.

Potential Solutions

Develop a new intuitive interface that delivers solutions to provider and commissioner problems surrounding the navigation of the system. The goal of this new interface is to provide guidance to users on how to successfully carry out their day-to-day tasks when submitting vital information on the system.

Define - User Frustrations

What are the main navigation frustrations for each target user group based from the research?



Providers

- Users struggle to find the right area in the system to submit collections.
- Users are frustrated with the amount of steps required to get to collections.
- Users need more clarity on when certain things are due. They have to search for this information, which is not obviously available.
- Users find the system difficult to use.
 It is too 'clunky' and often makes
 tasks take longer than they should
 do.



Commissioners

- Users find the system difficult to use. It is too 'clunky' and often makes tasks take longer than they should do.
- Users sometimes struggle to understand the terminology used.
- Users find the system very time consuming. They get frustrated with the amount of clicks to get to an area.
- Users find the system can be ambiguous. They are unsure what certain things are and what they do.



Super Users

- Users are frustrated with inconsistent terminology - causing users to call in for support.
- Users are frustrated that the system offers no clarity on what to do.
- Users are frustrated that the system is not intuitive. Users have called in with no idea where to go.
- Users find the system difficult to use. It is too 'clunky' and often makes tasks take longer than they should do.

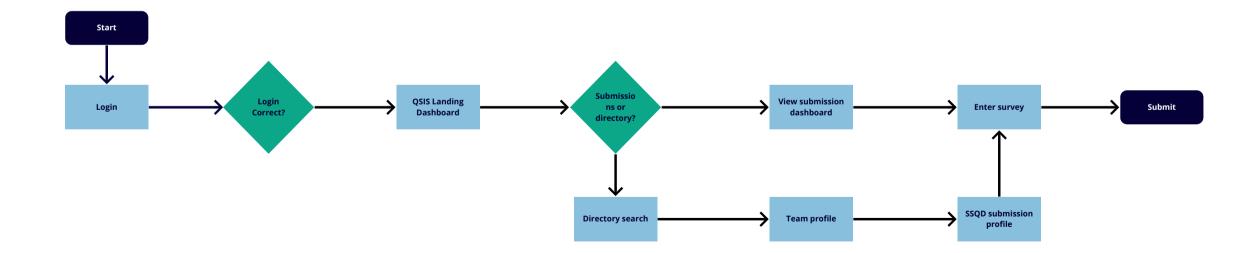
Define - User Flows



Providers

"As a provider, I want to successfully submit reports so that I can supply information to the relevant users."

SSQD Submission Flow



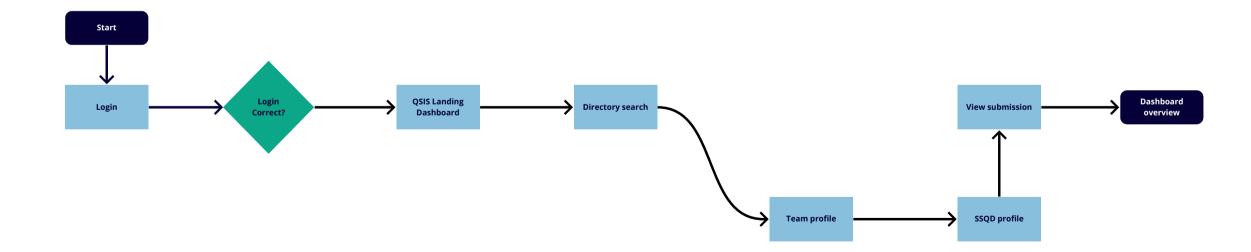
Define - User Flows



Commissioners

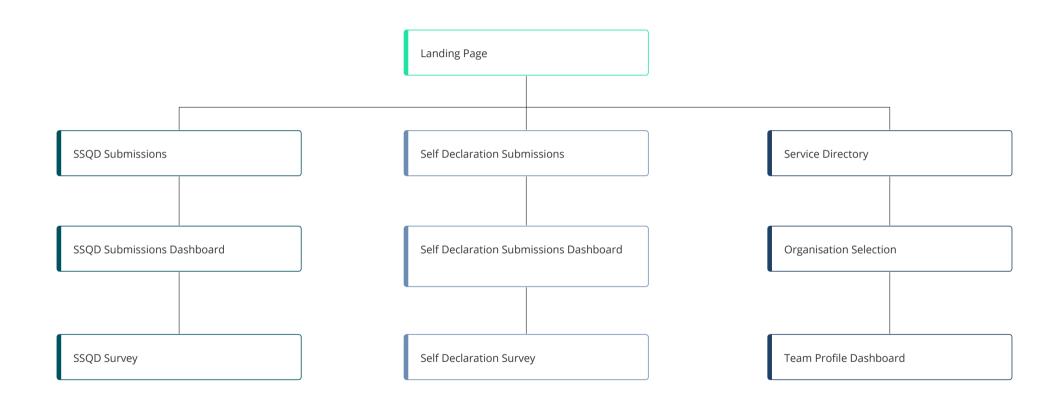
"As a commissioner, I want to access submitted reports so that I can make evidenced based decisions"

SSQD Dashboard Review Flow



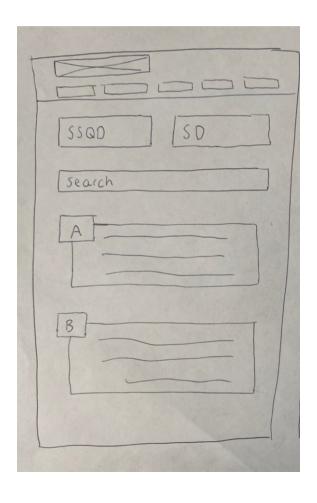
3 Develop

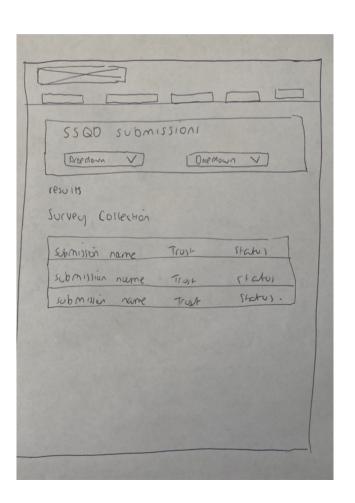
Develop - Navigation Site Map



Develop - Paper Sketches

Paper sketches were developed to map out potential ideas. The concept below demonstrates both the landing and the submission dashboard pages.

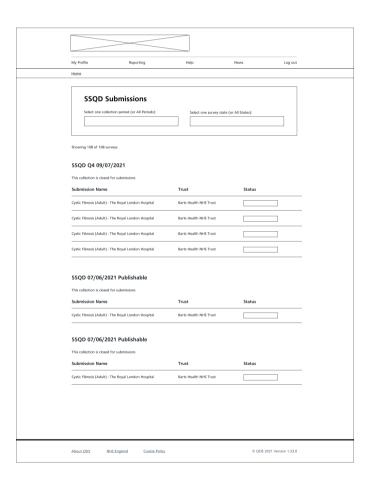




Develop - Low Fidelity Wireframes

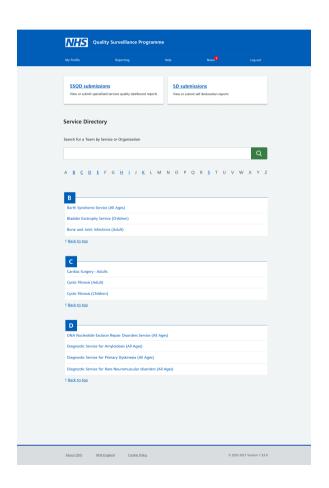
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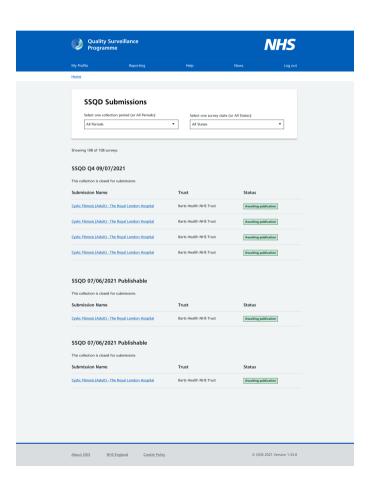




Develop - High Fidelity Prototype

Paper sketches were developed to map out potential ideas. The concept below demonstrates both the landing and the submission dashboard pages.





Develop - Usability Testing

After developing the prototypes, we wanted to test them with our target user groups to understand their perspective and see if we managed to solve the problem statement that was defined at the start. Unfortunately as noted before, we were unable to access any NHS users (providers & commissioners), but we managed to test with super users, who said the following:



Super Users

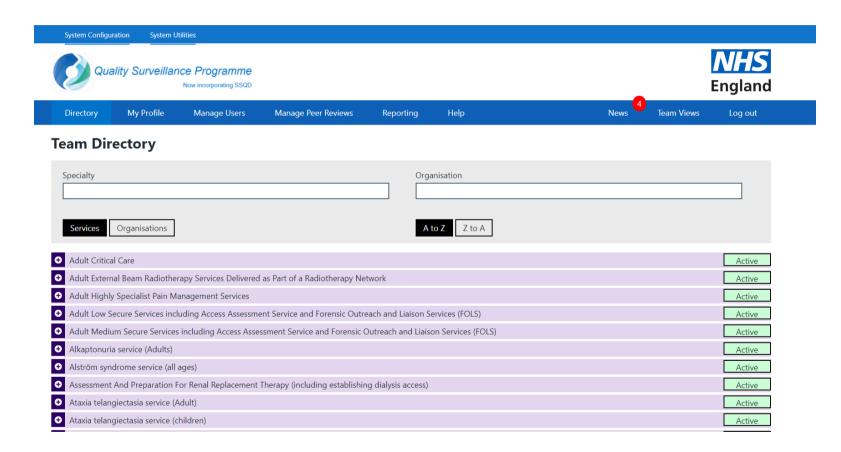
"The new system is unbelievable. I actually enjoy using it, which is something I've not said in a long time.

"Adding the quick links to submissions on the landing page will be a game changer. I can imagine we won't get many calls at all about not being able to find submissions."

"The system is a breath of fresh air. It finally feels like a complete system."

4 Deliver

Develop - Current System Before Changes



Landing Page

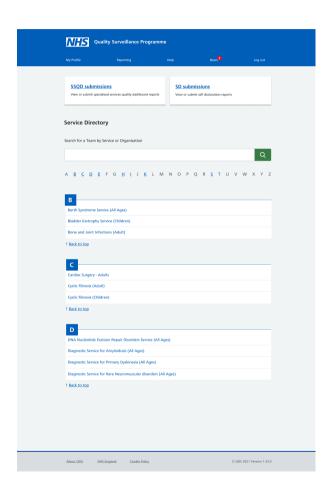
To demonstrate the changes made, here is the current system before the changes made. It is clear to see the issues on first glance.

The landing page has too much content to digest, with users experiencing cognitive overload. They would be asking themselves "what am I meant to be looking at?"

There are two search functions which can be confusing. The interactions for each service are hidden. Users have to click into each service 3 times to find the relevant interaction for submissions - that's if they know they need to go there.

The list of services continues from A to Z. The current system has two filters. 'A to Z' and 'Z to A'. What if a user wants to find a service beginning with the letter 'M'? That deems the functionality as useless.

It is clear to see why users have frustrations.



Landing Page

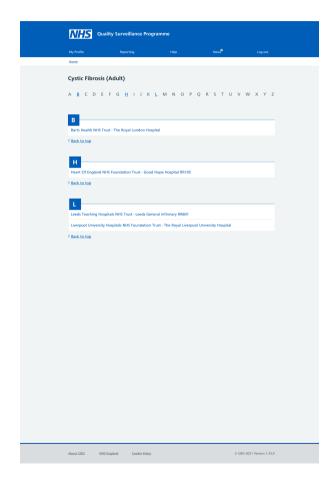
The landing page has been fully redesigned using the NHS style guide. In comparison to the original system, the design has been updated but keeps the same functionality.

The landing page has two notable new features - that being the submission short cuts at the top, and the overhauled service directory.

The submission buttons allow users to be directed straight into an area showing all the submissions with their name on it. This provides a clear pathway to their main objective, whilst making use a 'quick links' to save the user the hassle of trying to find these within the system.

The service directory remains the same in terms of functionality, however it has been stripped back and refined. Instead of the previous lists of services, they have been broken into an alphabetical categorisation, paired with an A-Z navigation where users can simply interact with the relevant letter and be transported to those services.

There is also a new search bar where users can search the system for anything by using key words. This is beneficial mainly for commissioners and super users, but providers may find this useful if they need to search for multiple pieces of information.

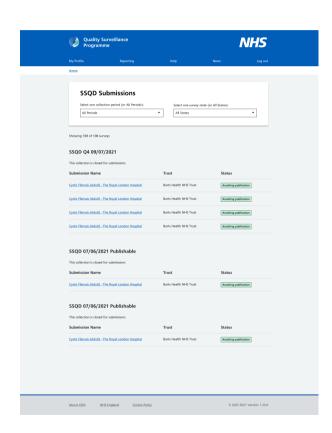


Directory Search

This page is a follow on from using the service directory on the landing page. It's purpose is to provide a refined view of selecting a Trust and Site

The page showcases to the user which Service they are currently looking under - in this example, Cystic Fibrosis. This helps inform the users on what they're looking at, to avoid confusion.

The A-Z navigation is only highlighted with the services that are visible. This links back to the clear pathfinding attribute, as users can no longer get lost when searching through Services.



SSQD Submissions

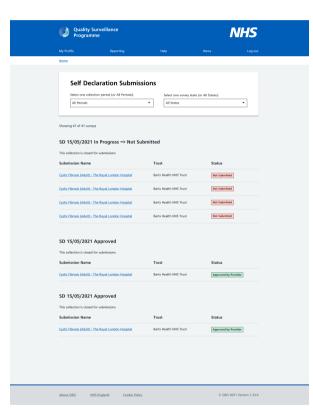
The submissions page is a new feature on the system. It addresses the main issue for providers on knowing where to go in the system to find and enter survey submissions.

Originally, users would have to use the directory to find the right service, organisation and site before clicking on 'related links' to find the submission dashboard. Now, with this new design, users can simply navigate to the submissions dashboard and find them all there.

The dashboard gives users the control, allowing them to filter by 'collection period' and 'survey state'. This is intended to benefit users who have lots of surveys and need to prioritise them based on deadline date and state.

The dashboard provides a quick link to the submission, the trust it's part of and the status of the submission - which informs the users where surveys are and how soon they need to action them.

The dashboard finally provides a deadline date for each submission - whilst notifying users when collection periods are closed.



Self Declaration Submissions

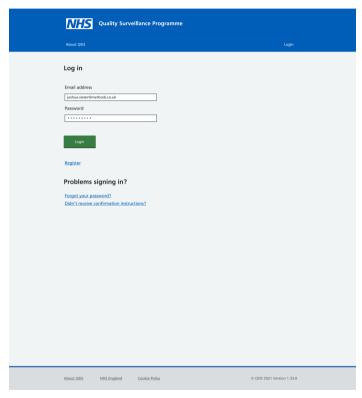
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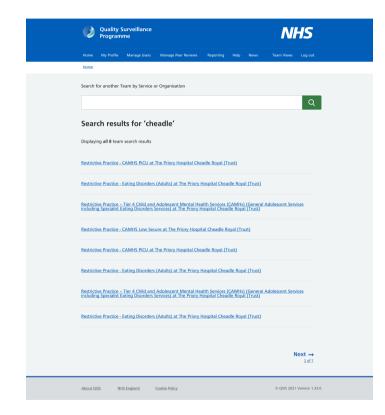
The dashboard finally provides a deadline date for each submission - whilst notifying users when collection periods are closed.



<u>Login</u>

The login page has been redesigned using the NHS & GOV.UK style guide.

No notable changes have been made, aside from using a new button component to make the page accessible.



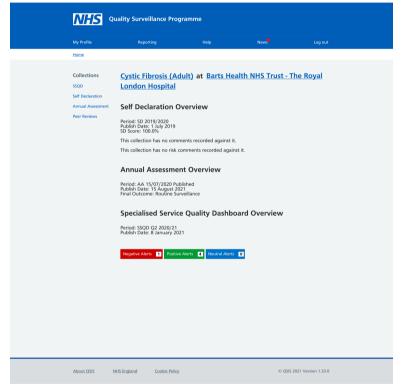
Search Results

The search results page is another new feature added to the system. It's purpose is to provide an easy way for users to search for key words on the system.

Currently, the system does not allow this. Users have to drill down into various areas to find what they are looking for. With this new search functionality, they can find the relevant pages by simply typing in what they want on the homepage.

The results page returns up to 10 results per page. It sorts the terms based on the most relevant, in the hope that the majority of users would see what they are looking for at the top of the list.

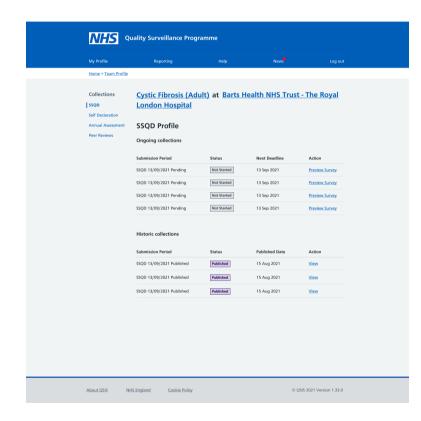
The page uses pagination at the bottom, so users know what page they're on, and how many other pages they can cycle through.



Collections Overview

The collections overview page has been refined following the NHS style guide recommendations.

Like the login page, nothing notable has changed.



SSQD Profile

The SSQD profile page has been refined following the NHS style guide recommendations.

Like the login page, nothing notable has changed.

Develop - Conclusion

Did we solve the problem?

Reviewing the project and what has been created, I think we solved the problem. Users were struggling to navigate the system - with issues such as not knowing where to submit reports, being frustrated with the amount of clicks and feeling lost when using the system. The system now helps guide users to the relevant areas, with the use of quick links and a refined search & navigate function.

What could be done differently?

If I was to do this project again, the number one factor would be access to users. Given the limitation caused by the pandemic, we had little to no access to users. I would want to take on the project when there is a green light for user access, as I believe further research and testing sessions would be extremely beneficial to understand if the proposed changes were accurate, and to understand users frustrations and emotions on a human level - not behind a survey.