

Appendix

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Interview Responses

GP Surgery Receptionists Interview

Interviews with two receptionists from different surgeries have taken place. They were both asked the questions that have been defined above. The interviewees have not been named, however below is their title and which surgery they work for.

Interviewee No.1 - Practice Manager from North Road Medical Practice

Interviewee No.2 - Practice Manager from Meddygfa Canna Surgery

Interviewee No.3 – Receptionist from St David’s Court Surgery

Question 1: Do you have many people on a regular basis wanting to sign up to My Health Online?

Interviewee No.1 – “Approximately only about 10% of patients are signed up on the application, we don’t seem to get many people joining up on a regular basis.”

Interviewee No.2 – “No we don’t. We have a very small percentage of patients signed up to this service at the moment.”

Interviewee No.3 – “No, very few indeed. We only have a handful of patients who use this facility.”

Question 2: Do you find your patients of the surgery get along with the system and find it useful?

Interviewee No.1 – “There was a few teething problems at first as the staff and patients were getting used to it, but it was never anything major. The patients that are registered don’t seem to have any regular problems.”

Interviewee No.2 – “Those that have registered to use it on the whole find it easy and useful. Sometimes the platform its using can crash but that seems to be the only problem we have been told about.”

Interviewee No.3 – “Those that use it seem to be happy with it as they use it regularly.”

Question 3: Has it made any positive or negative impact to your surgery i.e. less phone calls coming in etc

Interviewee No.1 – “I’m afraid I don’t know, there is none that we are aware of at this current moment, also as we don’t have that many of our patients registered on it I doubt it has made much difference yet.”

Interviewee No.2 – “That’s a bit of difficult question to answer as we can’t measure that. But because of the small numbers using it we haven’t seen a difference in volumes of calls coming in yet.”

Interviewee No.3 – “No, because of the low take up, there is no measurable impact for the surgery.”

Question 4: Do you find the application easy to use on your end by uploading the prescriptions and doctor’s appointments?

Interviewee No.1 – “It is quite easy on our end, it hasn’t made anything difficult.”

Interviewee No.2 – “Yes, it is easy from our end and all the required staff have had the training on the application.”

Interviewee No.3 – “Yes, we don’t have any problems on our end.”

Question 5: What other features would you add to the application to help benefit you?

Interviewee No.1 – “I think the ability to let patients know when they need a review or when they have the maximum number of issues for their prescription would be really useful to ensure the patient understands what they need to do next.”

Interviewee No.2 – “A more streamlined registration process would be good because at the moment the patient has to come into the GP surgery to fill out a form and bring a form ID, which I don’t think many patients want to do and it’s just another task that can easily be made electronically.”

Interviewee No.3 – “I don’t have anything to answer for this question.”

Question 6: Do you believe the application is benefiting the communication between your patients and GP practice?

Interviewee No.1 – “Yes I do believe it is gradually, as the patients do have it are finding it very useful and don’t have to worry about contacting us directly all the time.”

Interviewee No.2 – “It is purely for booking appointments and requesting repeat prescriptions at present, so our patients still need to communicate to us about other things our surgery can help with such as emergency appointments on the day.”

Interviewee No.3 – “Yes but only with the small selection of the patients as most patients prefer to manually request prescriptions.”

Question 7: Do you have an opinion on the communication between NHS facilities and patients?

Interviewee No.1 – “No I don’t really have anything to say for this question, I just believe the communication is improving in my surgery.”

Interviewee No.2 – “I don’t have opinion really, sorry”

Interviewee No.3 – “If the language medium is mutual between patients and NHS information, there should be no problems. At our surgery we have some communication problems because of the variety of languages spoken by our patients. This is of course would have a knock-on effect and may affect their ability to use electronic systems or just understanding email and letters etc.”

Question 8: Do you think this application can be used anywhere else in the NHS?

Interviewee No.1 – “I’m not sure how to answer this question either, the application seems to be working well for what it does at the moment.”

Interviewee No.2 – “Possibly could be used somewhere else, maybe for hospital appointments too so then it’s all in one place.”

Interviewee No.3 – “Presuming using MHOL, it would rely on a lot of variables such as language, IT aware, general diary keeping etc to allow it to be useful elsewhere as at the moment I don’t think it would be.”

Question 9: Do you receive any comments/feedback on the application?

Interviewee No.1 – “We don’t get any comments that I am aware of.”

Interviewee No.2 – “The only thing our patients tell us is when the internet site is not working but other than that I haven’t heard of any other feedback”

Interviewee No.3 – “Those that use it comment positively about how much more convenient they find it instead of having to call the surgery in the opening hours.”

Question 10: Would you be willing to be contacted again to help in further research of my project?

Interviewee No.1 – “No thank you”

Interviewee No.2 – “Yes”

Interviewee No.3 – “Yes”

Patient Interview

An interview with a young patient has taken place. They were asked the questions that have been defined above. The interviewees have not been named, however below is their title and age.

Interviewee No. 1 – A 22-year-old student

Interviewee No. 2 – A 65-year-old an ex Diabetes Specialist Manager

Question 1: Do you have a My Health Online account?

Interviewee No.1 – “Yes, I do”

Interviewee No.2 – “Yes I have an account”

Question 2: How often do you need to go to the doctors?

Interviewee No.1 – “I go possibly around once every 3-4 months”

Interviewee No.2 – “I go to the doctors around once a month”

Question 3: What do you mostly use the application for?

Interviewee No.1 – “Just booking appointments as I don’t have any repeat prescriptions, but I hardly ever use it as I always need on the day appointments. Occasionally I do need an appointment that can wait such as when I need to get contraception so that’s when I use ‘My Health Online’.”

Interviewee No.2 – “I use it mostly for booking appointments with a specific doctor I need to see”

Question 4: Do you find getting a doctor's appointment for when you need it difficult on My Health Online?

Interviewee No.1 – "Yes, I do as I always need an emergency appointment due to being prone to UTI's and I can only ever get one at 9am which isn't useful when I have a lecture at 9am."

Interviewee No.2 – "Booking appointments far in advance so I just book the appointments as far in advance as the system allows which seems to be around 2-3 weeks."

Question 5: Would you benefit from a more efficient online service to help booking an appointment at your GP surgery? E.g. the application offering emergency appointments etc

Interviewee No.1 – "I mostly definitely would benefit from this as then I could try to get a doctor's appointment at a more convenient time if all the emergency appointments for that day could be shown online."

Interviewee No.2 – "Yes I would, booking emergency appointments would be very useful for those occasions of acute illness, it would be much easier than phoning the surgery in the morning. Also having the ability to book an appointment with a health care assistant and phlebotomist would make the application much more efficient."

Question 6: Would you benefit from having direct communication with your doctor?

Interviewee No.1 – "For me, no this wouldn't be beneficial as I have no ongoing treatments with my doctor and the prescriptions that are given to me always work, I don't get ever get any side effects either."

Interviewee No.2 – "At the moment you can request a telephone call with them usually giving them 48-hour notice. I think if they were accessible via email or skype, it would be too much for their work load."

Question 7: Do you feel like your needs are satisfied by your GP surgery?

Interviewee No.1 – "Most of the time yes as they are good at giving me emergency appointments even if they aren't convenient for me."

Interviewee No.2 – "At my particular practice I have encountered very few issues and am more than happy with their service."

Question 8: How do you feel the communication between your GP surgery and you can be improved on this application?

Interviewee No.1 – "I believe the communication is good in general when contacting the surgery by phone, but it can definitely be improved by making the services I need online to make it more convenient."

Interviewee No.2 – “If you could perhaps send a question or query which the GP would respond to within 24 hours would be a lot more useful than a telephone call in 48 hours.

Question 9: Is there any other information from your GP surgery you would find helpful to be stored on your account?

Interviewee No.1 – “I think I would like to see the prescriptions I am given from my appointments online, so I can what medicine I have been given in the past”

Interviewee No.2 – “Personally I’m happy with the scant of information online as I think the NHS system isn’t protected enough for more intimate information to be available as confidentiality is of utmost importance.”

Question 10: Would you be willing to be contacted again to help in further research of my project?

Interviewee No.1 – “No thank you”

Interviewee No.2 – “Yes I am happy to be contacted again”

Questionnaire Analysis

Section 1: General Information

In this section, it will show the age ranges of who have an account on the application, how often they use and if they are reliant on it.

Question 1: What ages category do you fall into?

This question was asked to see what age range there is using the application, it was multiple choice question so the respondents could select which category they fit into.

1. What age category do you fall into?

24 responses

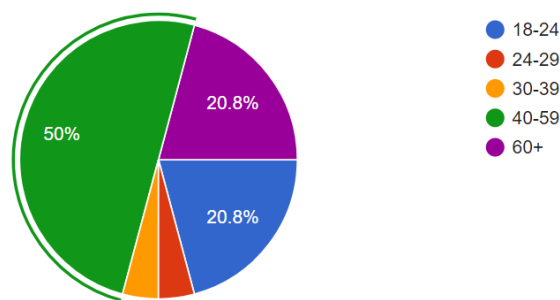


Figure 1: Age group of users

The results above show from 24 responses that 50% are in the age range of 40-59 years old. Each category has at least a few responses so throughout the questionnaire, a comparison can be made between how the younger generation find it to the older generation.

Question 2: How often do you use your account on a similar application?

This question was asked to see how much the patient uses their account, as it would indicate how useful it is for them. It was a short text answer as it only required a few words.

The responses were

Monthly (9)
Never (3)
Regularly (3)
Once or twice per month
Every few months
Rarely
Approx. 6 times a year
Once every 6-9 months
Never – still unable to access it
Often
Every few months

The results show many answers from the 24 responses, there's a mixture between monthly and on a regularly basis to rarely and never used it. The respondents are the type of patients that do need an appointment regularly and find the application useful to them.

Question 3: Are you completely reliant on it or do you need to call the surgery sometimes? If yes, why?

This question was asked to see if patients are reliant on the application or do need to call the surgery and why they do, this could give an understanding of what is missing from the application. It was a long answer text question, so respondents had enough space to write their experience.

The responses were:

"No" (4)

"Always I wasn't aware of online services at my GP" (2)

"Mostly, but I live near the surgery so occasionally drop by. I don't ever phone."

"I may call if I need an urgent appointment that cannot wait."

"When My Health Online has no appointments available, I ring the surgery"

"If I need to bring one of my children in urgently"

"Mostly use online but call surgery for results."

"call the surgery when no available appointments are shown"

"Unable to use it"

"I hate calling so prefer to use my health online."

"It sometimes won't work"

"I have only called the surgery when the system was down."

"Not completely reliant on it."

"Yes, for specific blood tests and to book nurse appt"

"I call the surgery every time"

"I do call, when it fails to give me an appointment less than a month away"

"Site not accessible or no appointments free for days I can get there as I work full time"

"Can't book urgent appointments only routine one's weeks in advance"

"Use it for repeats - only call the surgery for appointments"

"Need to call for Test results"

This question has had very varied responses, the patients would prefer to use the services online but aren't reliant on it as it doesn't always fulfil their needs, so they result in phoning the surgery. This is proving that changes need to be made so patients can become reliant on it and can benefit everyone.

Section 2: Effectiveness and efficiency of the Mock-Up or similar applications

Question 4: Have you used it for booking an appointment?

This question was asked to identify whether patient uses the application for one of the main services it offers. It was a closed question of yes and no to keep the respondent answering the question directly.

4. Have you used it for booking an appointment?

24 responses

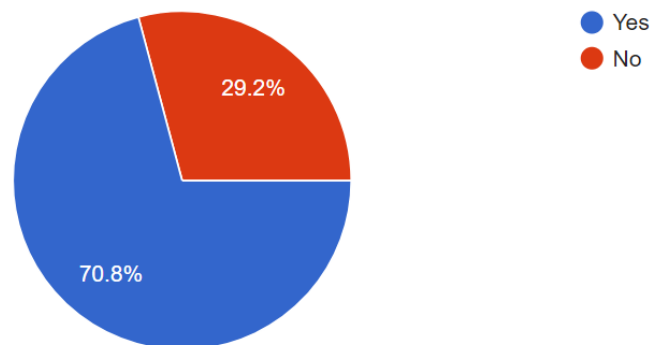


Figure 2: Have they used it for booking an appointment

From the results it shows that 71% of the 24 responses have used it for booking an appointment, but there is a 29% that haven't. This could mean that 30% haven't used it for booking an appointment because they haven't been able too. Searching through the responses individually, all the age ranges has answered no to this question which shows no pattern in these responses.

Question 5: Have you struggled to book an appointment?

This question was asked to see how common it is for patients to have problems with booking an appointment, as this one of the main services it offers. If it struggles to perform that service, the effectiveness of the application is decreased. It was a closed question as it required a yes or no answer.

5. Have you struggled to book an appointment?

24 responses

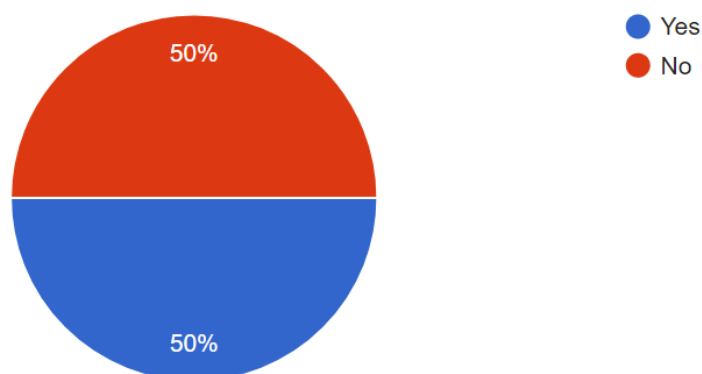


Figure 3: Have they struggled to book an appointment

The responses show 50/50 of patients struggling with this service, this shows there is an issue with the application that needs to be solved. Once again, different age ranges have struggled with booking an appointment.

Question 6: If yes to the question above, can you explain what you struggled with in particular?

This question was asked to find out from the previous question what the patient struggled with when trying to book an appointment as it is useful to know personal experiences to understand the improvements that need to be changed.

The responses were:

“Because none were available for two weeks.”

“Availability of a specific doctor”

“I was informed by the Receptionist that they only release a few appointments for online booking.”

“Lack of timely and available appointments”

“call the surgery when no available appointments are shown”

“Surgery failed to send login despite three requests”

“It crashed”

“I tried to book an appointment once, but the Dr whom I see on a regular basis wasn’t even on the form. I had no idea who the other Dr’s were. Since that time, I have never even tried to book an appointment or indeed do anything more using my “account”. This can then lead to difficulty, as appointments must be made at 8.30am. When trying to contact my surgery even at this time, the phone is engaged. By the time I am able to get through, which could be about 8.45pm, I am told that ALL appointments have been taken. I questioned this system with a Male GP who I had to see urgently on one occasion. I was spoken to badly and reprimanded. Now I am scared of GP appointments.”

“No availability shown, but was when I called”

“No free appointments for times or days I can get there”

“Appointments not available for my surgery. It’s v hard to get an appointment”

“When on line no appointment available but one is available for the same time when phoning”

A lot of the responses are about the availability of appointments, this seems to be a constant issue with the application. The procedure of releasing appointments for surgeries needs to be changed to allow this application to grow. Appointments seem to be only available in 3-4 weeks in advance, cancelled appointments should then be released on the application to allow patients to book appointments that is in the next 1-2 weeks.

Question 7: Have you used it for requesting a repeat prescription?

This question was asked to identify whether patient uses the application for one of the main services it offers. It was a closed question of yes and no as that’s what it required, and it would help keep the respondent answering the question directly.

7. Have you used it for requesting a repeat prescription?

24 responses

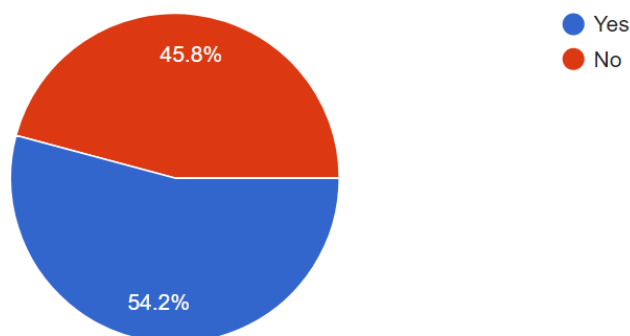


Figure 4: Have they used it to request a repeat prescription

The responses are nearly a 50/50 split, it's not as common for patients needing a repeat prescription so these results were expected. It was interesting to see how many people do use it for this service to find out further on if patients find it useful.

Question 8: Have you struggled with requesting a repeat prescription?

This question was asked to see how common it is for patients to have problems with requesting a repeat prescription, this could show if patients have problems with the application as this one of the main services it offer. If it struggles to perform that service, the effectiveness of the application is decreased. It was a closed question as it required a yes or no answer.

8. Have you struggled with requesting a repeat prescription?

23 responses

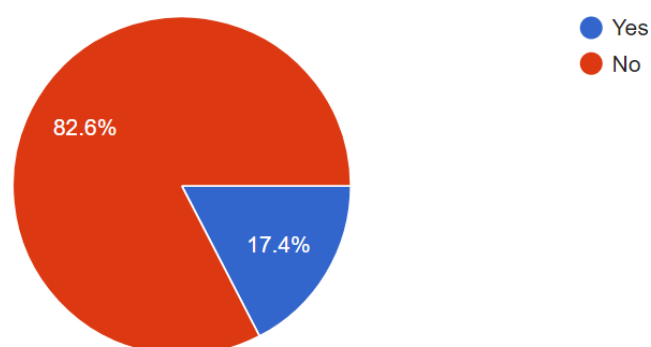


Figure 5: Have they struggled to request a repeat prescription

The responses show an 80/20 split of patients struggling with this service, some of the responses are invalid because if only 12 patients out of 24 have requested a repeat prescription so all the 23 responses can't be valid. Looking at the responses individually majority of the respondents that said yes in the question above answered no for this question. This service clearly has no major issues and seems to be working successfully.

Question 9: If yes to the question above, can you explain what you struggled with in particular?

This question was asked to find out from the previous question what the patient struggled with when trying to request a repeat prescription as it is useful to know personal experiences to understand the improvements that need to be changed.

The responses were:

“The system couldn't cope with the fact that I only need a repeat prescription every two month, whereas it was expecting a renewal once per month (I could take either one or two pills daily, and only took one - which doubled the length of time between prescriptions). The repeat option therefore fell out of the system because it thought I'd left it too long between re-orders.”

“Shared care drug”

“The correct prescriptions are not always listed for me”

“Surgery didn't get my request, allegedly”

One patient has been told their request wasn't even received by their surgery, this could make patients not trust the application and will result in doing it the old way of writing out an order slip. Once again, the application needs to be able to cope with different time lengths in repeat prescriptions as every patient has a different scenario.

Question 10: Have you changed your personal details? If yes, was it easy?

This question was asked to find out if patients have used the application for this reason and seeing if improvements need to be made in the account section.

“No” (18)

“Yes, very easy.”

“Very straightforward”

“Yes”

“Tried but failed”

“Yes, changed email address that was easy to do”

“Not easy”

The responses have shown patients have tried to perform this task and have seemed to find either very easy or failed. This task could be investigated to see if there are any unknown issues.

Question 11: Have you changed your password? If yes, was it easy?

This question was asked to find out if patients have used the application for this reason and seeing if improvements need to be made in the account section.

“No” (16)

“Yes. It was simple enough.” (2)

“Yes, and yes” (3)

“Yes, but it was not easy”

“Never felt that I wanted to change password, so don't know if this would be an easy process or not.”

“No, it wasn't easy at all”

Once again, the responses have shown patients have tried to perform this task and have seemed to have found it either very easy or failed. This task could be investigated to see if there are any unknown issues.

Question 12: Have you changed your prescription? If yes, was it easy?

This question was asked to see whether they find it easy to change a prescription, it was meant by doing it at the surgery and it being uploaded onto the application as this process needs to be easy to allow the patients to request the prescriptions when necessary.

“No” (20)

“Yes easy.”

“Never tried I can’t see how to do that”

“Change of prescription is done by surgery”

Many patients haven’t performed this task, so the responses haven’t given any recommendations on improvements that need to be made. If they found it difficult, this is a feature that could have been implemented onto the application to be able to get an appointment to assess their prescription.

Question 13: Have you cancelled your appointment? If yes, was it easy?

This question was asked to see if patients find cancelling appointments easy as it should be a simple task everyone should be able to perform on the application.

“No” (13)

“Yes, and Yes” (6)

“Yes, a simple process takes seconds.”

“Yes, and it was easy” (3)

“Yes - Cancel by telephone”

“Not available online”

Two responses show they did it by phone and didn’t even know they could do it online, this can indicate that the cancel button next to the appointment is not clear to everybody. Majority have never had to cancel the appointment and the few that had found it simple and easy.

Question 14: Are there other services that are missing from the Mock-Up that you need to call the surgery for?

This question was asked to see if there are anything they feel is missing from the application that could be implemented onto the application. This question was opened to the respondents to let them express their situation they feel needs to be online.

The responses were:

“No” (4)

“To book an appointment with the nurse for blood tests.”

“Appointments for my children. They are 2 and 4 and I was told I can't use the system on their behalf and they can't have their own accounts as they don't have email addresses or sufficient photo ID.”

“Could be helpful to access results online and advise surgery training days as this affects the 48 hours for a prognosis.”

“Ability to log in”

“Nurse/phlebotomist/HCA appointments.”

“Nurse + phlebotomist appointments.”

“yes. I can only book one appointment so it's either with a doctor or the nurse, but I often need both, but it won't let me do this.”

“Not for me”

“Don't know as I don't have faith in the application.”

“my repeat prescriptions are limited”

“Test results”

“Only used for appointments & to check medication list”

There are very varied responses from the patients on their situations. Trying to book an appointment with Phlebotomist to have a blood test has become a common recommendation. This is an easy feature that can be implemented into the appointment search. There are some features that can't be changed regarding the response on “my repeat prescriptions are limited” as patients' needs to be re-assessed for the prescription. Regarding including children on the application is a feature that would be useful to investigate to see what the regulations are involved in that situation.

Question 15: Do you get given referral appointments from the GP to the hospital?

This question was asked to find out how often it is that patients get referred to the hospital, so the next question could be asked because if most patients don't the next question isn't valid. It was a closed question as it required a yes or no answer.

15. Do you get given referral appointments from the GP to the hospital?

24 responses

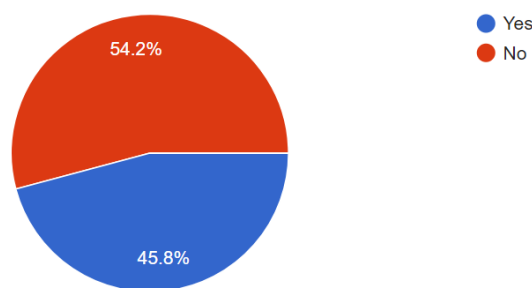


Figure 6: Do you get referral appointments to the hospital

The results show that is fair split of how many patients get referred to the hospital. It was a range of ages that answered yes to this question. As being referred to the hospital has been shown as a common action that is done in a GP surgery, the next question will be very useful in determining extra features that can be added to the application.

Question 16: If yes to the question above, would it be useful to you to have these appointments shown on the Mock-Up as well?

This question asked to get an idea of a new feature that could be added to the application. Depending on the responses from the previous question, it would determine if this question would be useful. It was a closed question as it required a yes or no answer.

16. If yes to the question above, would it be useful to you to have these appointments shown on the Mock-Up as well?

12 responses

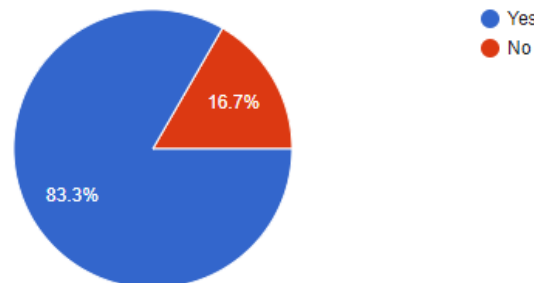


Figure 7: Would it be useful to include hospital appointments on the Mock-Up

This question had a good result of 80% of the responses answering yes to this question, which demonstrates a feature this application is missing. Patients feel this would be something that would be useful to the application. Including all appointments on one application can help ensure patients don't double book themselves and help make the application more effective.

Section 3: Satisfaction of the Mock-Up or similar applications

Question 17: Do you like the layout of the interface? If No, why?

This question was asked to find out whether the patient finds the application appealing to them. The layout needs to be simple and clear to the patient's, so they can see where they can find all the services.

The responses were:

"Yes, it's clear" (8)

"No, it's old fashioned and clunky" (2)

"Yes, it seems easy enough to use (apart from the screen to search for an appointment, there seems to be a bit too much information). My current one is much easier to use."

"It's fine."

"It's horrible to use on a smartphone"

"Yes. Easy to understand layout."

"Not user friendly"

"no. I dislike the red writing warning you of missed appointments. It's not necessary to be so much in your face."

"It's ok not very inspiring quite old fashioned"

"Don't know - As I say I tried to use the form once, but that was enough to ensure that I never use the form again"

"No, ugly and confusing (looks very outdated)"

"The lay out is ok not cluttered but looks old fashioned"

"It's ok - manageable but not particularly intuitive"

"It's satisfactory"

There have been more responses stating that they don't like the layout, it is outdated and not user friendly. Very few patients do like the layout, they said that is easy to use and satisfactory. The elements of the layout should be changed to give it a more professional and modern look, the

positions of features can be changed slightly to make it simpler to improve the many responses that don't like it.

Question 18: Looking at the mock-up, are the buttons located in accessible places for you to press? If No, why?

This question was asked as it would be useful to understand if they find the buttons accessible, if they are placed in the right position it can change opinions of the application as they would find the layout convenient for them.

The responses were:

"Yes" (13)

"Yes - on a desk top. Not tried it on a mobile."

"Not the way the page displays on a smartphone"

"All accessible."

"Don't know"

The responses have shown on the desktop the layout of the buttons seems to be satisfactory but when using it on a mobile it doesn't display in the same way. The application being convenient to be able to make appointments whenever and wherever includes being able to use the application on a mobile device.

Question 19: Do you like the colour scheme?

This question was asked to discover any issues with the interface, the colour scheme is the first thing that stands out to the patient. It could be useful to find out whether it's worth changing to make it more appealing to the eye. It was a closed question as it required a yes or no answer.

19. Do you like the colour scheme?

24 responses

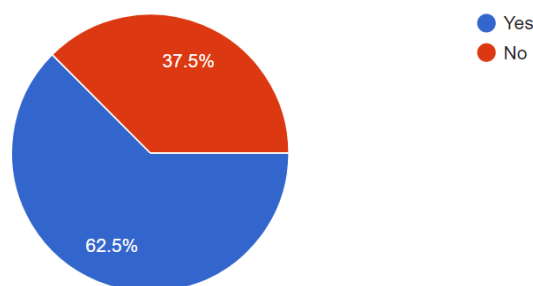


Figure 8: Do you like the colour scheme

As the responses show it is a 60/40 split. Majority have said they do like the colour but 40% is a high percentage that don't like it. This could be a change that could be considered to help entice more patients to use the application and help it look more professional. The results are mixed between the ages so it's a matter of opinion not a pattern in age.

Question 20: Is all the text clear for you to read?

This question was asked as this a vital usability principle that needs to be followed. It is important to find out if the patients can read the information provided on the interface. It was a closed question as it required a yes or no answer.

20. Is all the text clear for you to read?

24 responses

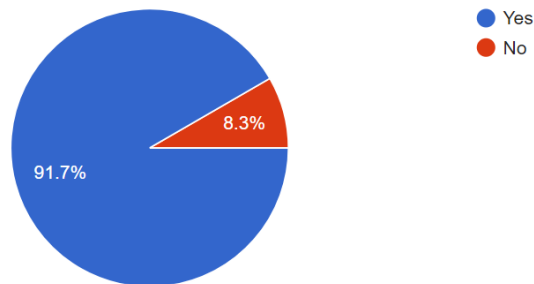


Figure 9: Is all the text clear for you to read

This response was a positive response as 92% have no trouble reading the text on the interface. A small improvement could be made to help make the 8% to be able to read the text. It seems to be the age range from 40+ which could come down to them having poor sight, these issues need to be addressed so all patients can read the required information. This issue can be addressed by changing font, text size and colour.

Question 21: How easy was it to learn how to use?

This question was asked to see what their experience was like when they first used the application, if they found learning how to use it easy. This question could help decide whether the application needs to be made simpler for all patients to be able to use it. It was a closed question using a scale of 1 to 5 to help make it easier to analyse, 1 being difficult and 5 being easy

21. How easy was it to learn how to use?

24 responses

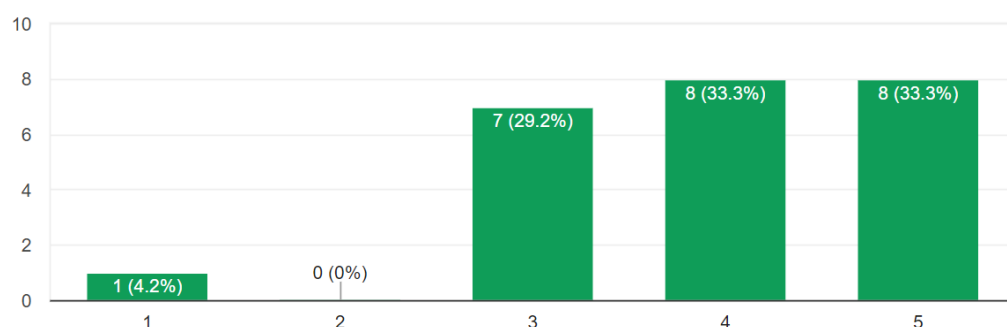


Figure 10: How easy was it to learn how to use

The responses show a good response of how patients find using the application as majority picked the number 4 and 5 which shows they do find it easy to use. There is always going to be someone

who doesn't agree with technology and doesn't find it easy. It is hard to avoid this situation with our older generation not getting along with technology as well as the younger generation.

Question 22: Do you find the Mock-Up unnecessarily complex or easy to use?

This question was asked to see how the patients find using the application performing their tasks. This question was based on the application as a whole and what the patients think of it. It was a closed question using a scale of 1 to 10 to help make it easier to analyse, 1 being unnecessarily complex and 10 being easy to use.

22. Do you find the Mock-Up unnecessarily complex or easy to use?

24 responses

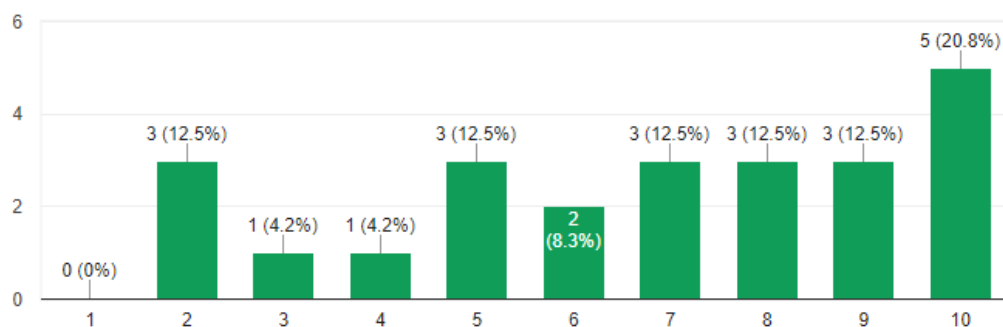


Figure 11: Do you find the Mock-Up unnecessarily complex or easy to use

There are very mixed responses from this question as shown in the figure above. Looking through the individual responses there was no pattern in the age and the results. The application's layout needs to be considered in the new requirements if there are quite a few patients finding it more unnecessarily complex than easy to use. Simple changes can be made to help make the application much easier to use.

Question 23: Is there anything you would like added to the Mock-Up?

This question was asked to see if there are any other services the GP surgeries deal with that could be implemented onto the application. This question was opened to the respondents to see what their opinion is about which other services that could be useful to them online.

The responses were:

"No" (4)

"Yes, the "practice search" doesn't really work (you have to type something in before it'll give you a drop-down menu to search for). Also, it keeps asking me to retype my registration details because I seem to log into an old version of the site first, which then redirects me to an updated site (with a new login required)."

"Ability to make appointments for dependent children. Hospital referrals and appointments."

"Results"

"Somewhere to leave a comment e.g. if we need to request a prescription early."

"Various appointment types."

"Referral history"

"It's very simple and basic and I feel sure it could be upgraded without making it too complex to use."

“Nurse or HA or other HCP appointments”

“All the Dr’s who work at the practice should have their names on the form”

“Ability to text communicate with GP surgery to book appointments”

“Test results”

“Appointments”

Responses have recommended that including hospital referral appointments, referral history and including various types of appointments. There is already a feature where it allows you to pick an appointment with a nurse but if there aren’t any available appointments they would need to call the surgery. Including a feature of being able to leave a comment is a good recommendation because it would improve the communication between the GP and patient. These improvements should be considered in the requirements for the new design.

Question 24: How useful do you find the Mock-Up?

This was another question to find out what the patient thinks about the application as a whole and if they find it beneficial to use. If they don’t find it useful, there wouldn’t be any point in the application existing. The application needs to be useful to make a positive impact to patient’s lives and help make seeing a doctor or getting a prescription more convenient. It was a closed question using a scale of 1 to 5 to help make it easier to analyse, 1 being not useful and 5 being very useful.

24. How useful do you find the Mock-Up?

24 responses

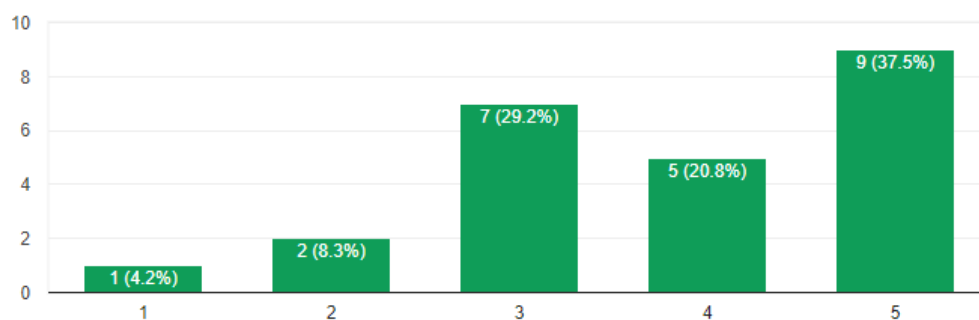


Figure 12: How useful do you find the Mock-Up

The results have shown very mixed results, the application needs to become much more useful to help patients. Once again there was no link between the age and how useful patients find the application. When the interface has been re-designed and new features are added, overall the patient may change their perspective of useful they find it. These results show there is plenty of room for improvement on the services it provides and the interface.

Question 25: Do you prefer doing the services online or do you prefer communicating on the phone?

This question was asked to see what patients prefer to do, as it’s worth seeing whether the online service need minor or major improvements to make patients prefer using the services online.

The responses were:

“Online” (12)

“If available, I’d be much happier using online services then phoning up” (2)

“I prefer online because the phone system is often engaged.”

"I would rather use the online service - if only sufficient appointments were released by the Practice"

"I prefer online but have to use the phone for anything to do with my children."

"Online. I work varying shifts and having access in the nights is incredibly helpful."

"online as I can do this at my convenience."

"Either"

"Phone" (2)

"Prefer the phone mainly because it seems that I can't see what the receptionist sees"

The responses have shown that patients would prefer to do appointments online as its much more convenient for them. It shows that more appointments need to be released from the practice for patients to be able to book them.

Question 26: Would you recommend the Mock-Up to a friend?

This question was asked to see if they think it would be beneficial for other people to use. If the majority wouldn't recommend the application, it would show the application isn't fulfilling its needs because it's not satisfying patients enough for them to not recommend it to help others. It was a closed question as it only required a yes or no answer.

26. Would you recommend the Mock-Up to a friend?

24 responses

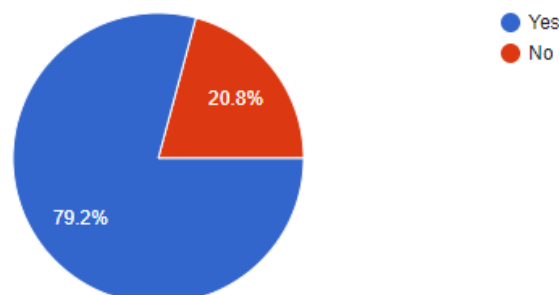


Figure 13: Would you recommend the Mock-Up to a friend

This question has had a positive outcome by most of the responses responding saying they would recommend the application. The patients that wouldn't recommend it are the patients that have had issues trying to use the application and have expressed those issues throughout the questions above.

Section 4: Calling GP surgery VS the Mock-Up/similar applications

Question 27: Have you ever struggled with the Mock-Up, so you result in calling the GP surgery?

This question was asked to see whether the patients have an issue with the application as a whole, because if patients are not succeeding with the application and call the surgery demonstrates the application isn't fulfilling the needs.

27. Have you ever struggled with the Mock-Up, so you result in calling the GP surgery?

24 responses

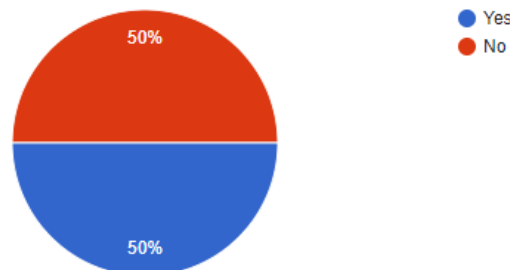


Figure 14: Have you struggled with the Mock-Up, so you result in calling the GP surgery

This outcome isn't the best for the application as it was a 50/50 split, that means that's a lot of patients that have struggled with the application trying to use one of the online services and failed. This demonstrates there is room for improvement on the application by making sure all those services provided can be fully completed by a patient. This application needs to benefit the surgery as well as the patient so if they are still calling the surgery, they will still have the same amount of calls coming in and work load to get through.

Question 28: If yes, could you please explain what you struggled with?

This question was asked to follow on from the previous question to find out what exactly patients have struggled with and their experiences on the situation.

The responses were:

"The system couldn't cope with the fact that I only need a repeat prescription every two month, whereas it was expecting a renewal once per month (I could take either one or two pills daily, and only took one - which doubled the length of time between prescriptions). The repeat option therefore fell out of the system because it thought I'd left it too long between re-orders."

"Making appointments for my children"

"Call the surgery when no available appointments are shown"

"Inability to log in"

"My browser believed the website was down. I called the surgery to check all was okay."

"I can't recall the detail now, but I was timed out I think, and I had to contact the surgery to get back online."

"Getting the right prescription"

"The whole subject of accessing the form, only to find that when I eventually "got in" my actual GP was not named anywhere within the form. I was never given an answer as to why this was the case"

"Appointments" (2)

"Couldn't get into a/c, although I used account name & password I couldn't get in"

"Initial registration is unnecessarily complex"

Every response has talked about a different experience with trying to book an appointment, this application needs to be able to handle different scenarios if it's going to offer these services online. Not every patient has the same scenario when it comes to needing an appointment and repeat prescriptions.

Question 29: Would you rather use the Mock-Up for booking appointments or phone the GP surgery?

This question was asked to see what the patient would prefer, if they prefer contacting the surgery directly that would show the application isn't fulfilling their needs. It was a closed question of including the two options from the question and an 'other' section to allow patients to include any other methods they do to use their services.

29. Would you rather use the Mock-Up for booking appointments or phone the GP surgery?

24 responses

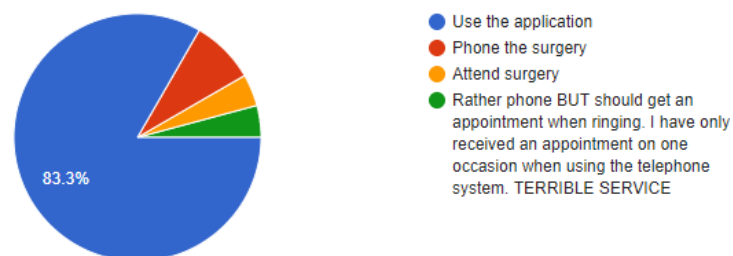


Figure 15: Would you rather use the Mock-Up for booking appointments or phone the GP surgery

The responses show a positive outcome that 83% would rather use the application instead of phone the surgery. There have been some other comments made that a patient would rather attend the surgery instead of doing either. One patient has stated that even the phone service is terrible, if the application could be improved then they could have a better experience overall by using the application instead.

Question 30: Would you rather use the Mock-Up for requesting a repeat prescription or phone the GP surgery?

This question was asked to see what the patient would prefer, if they prefer contacting the surgery directly that would show the application isn't fulfilling their needs. It was a closed question of including the two options from the question and an 'other' section to allow patients to include any other methods they do to use their services.

30. Would you rather use the Mock-Up for requesting a repeat prescription or phone the GP surgery?

24 responses

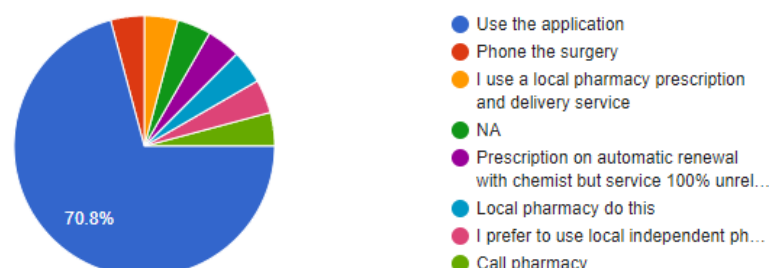


Figure 16: Would you rather use the Mock-Up for requesting a repeat prescription or phone the GP surgery

There have been many responses in the other section to this section, majority responded with stating they would rather use the application, but other respondents have stated they would rather call or use the pharmacy to use this service. Analysing the responses individually, it showed it was commonly the older generation that stated those methods in the 'other' section. They must find it easier using those methods instead of using the application. As it's only a small percentage, no major changes would need to be made but a few minor changes could be beneficial to the older generation to help them use the application more often.

Question 31: Would you rather use the Mock-Up for changing your details or phone the GP surgery?

This question was asked to see what the patient would prefer, if they prefer contacting the surgery directly that would show the application isn't fulfilling their needs. It was a closed question of including the two options from the question and an 'other' section to allow patients to include any other methods they do to use their services.

31. Would you rather use the Mock-Up for changing your details or phone the GP surgery?

24 responses

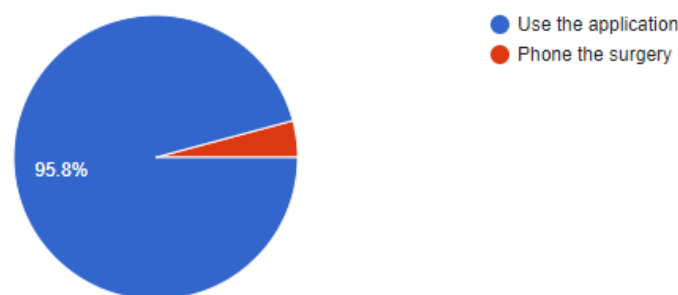


Figure 17: Would you rather use the Mock-Up for changing your details or phone the GP surgery

The responses have shown a positive outcome of 95% of the responses saying they would rather use the application instead of phoning the surgery. This service online must be useful and fulfilling the needs of the patients if they prefer to use the application.

Question 32: If you have any comments on an experience I have not asked about, please feel free to write about it here.

This question was asked to ensure the author didn't forget to ask about anything else relevant to the application. It was an open question, so the patients had the space to write any other experiences or opinions.

The responses were:

"Using the app will take the pressure off surgery staff during busy times but convincing others how easy it is to use is the biggest challenge! People don't like change sadly."

"It's a great idea to have My Health Online but I feel it could offer so much more and be more flexible. It needs updating and upgrading."

"Appointments are very difficult to obtain. Even where the Dr has written asking ME to make an appointment urgently, I am still unable to get an appropriate appointment."

These responses are the opinions of a few patients using the application, overall appointments need to become much easier to book and convincing other patients to get onboard with using the application. It is a problem if a patient is being asked to make an urgent appointment but struggles to achieve that, communication needs to be improved and by offering more appointments on the application would be more beneficial.

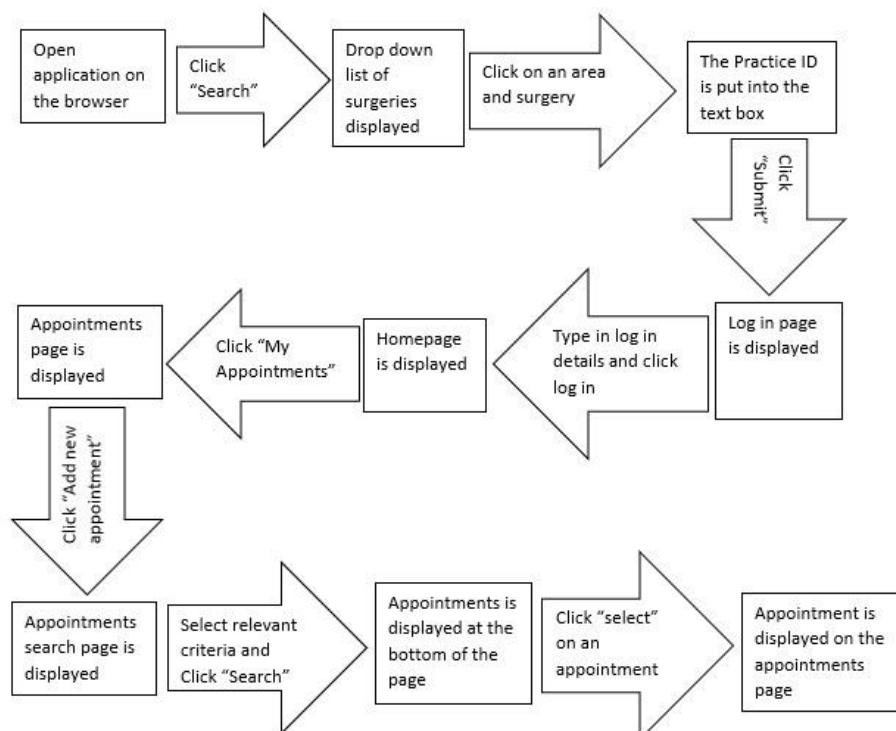
Use Cases and STN's

Use case 1 – Book an appointment

This use case will demonstrate the process of booking a film on the cinema app

1. Open application on the browser
The process starts when they open the application.
2. Click "Search"
3. Click on an area and surgery
The user selects the area and surgery they are registered at
4. Click "Submit"
5. Type in Log In details and click Log In
The user inputs their log in details and the homepage page is displayed
6. Click "My appointments"
The appointment page is displayed showing if the user has any appointments already booked
7. Click "Add new appointment"
8. Select the correct criteria for appointment
9. Click "Search"
The available appointments are shown at the bottom of the screen
10. Click "Select" next to the appointment the user wants
The appointment should now show on the appointments page

STN of Use Case 1



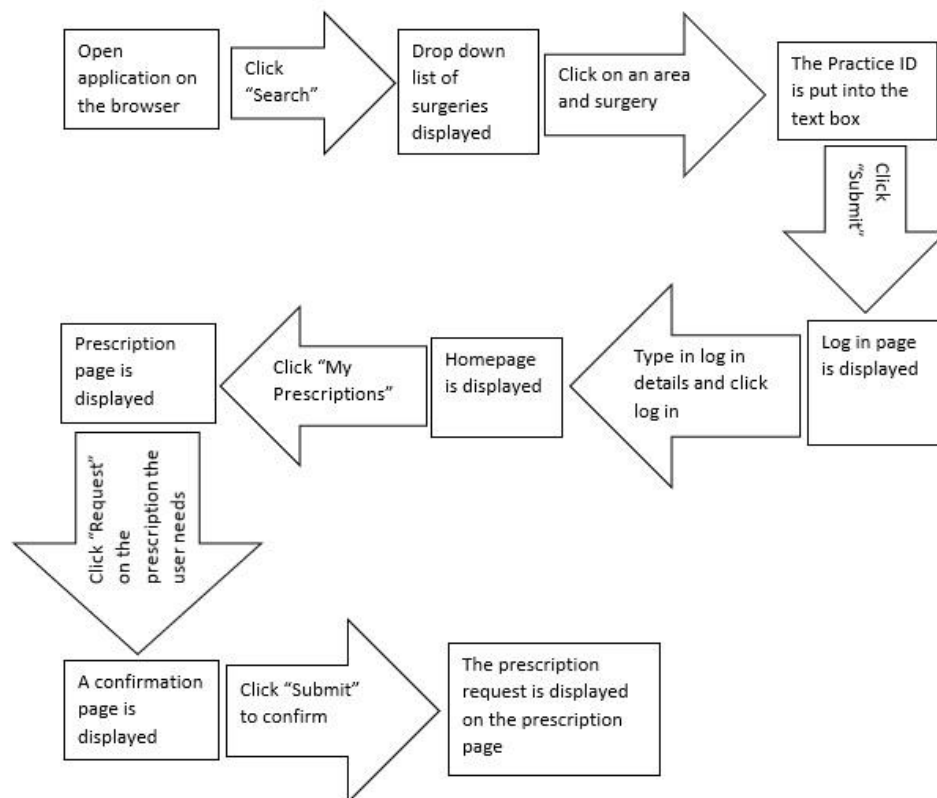
Use case 2 – Requesting a repeat prescription

This use case will demonstrate how you can search for a film on the cinema app

1. Open application
The process starts when they open the application.

2. Click "Search"
3. Click relevant drop downs
The user selects the area and surgery they are registered at
4. Click "Submit"
Log in page is displayed
5. Type in Log In details and click Log In
The user inputs their log in details and the homepage page is displayed
6. Click "My Prescriptions"
The prescriptions page is displayed showing prescription history
7. Click "Request" on the prescription the user needs
8. Click "Submit" to confirm
The prescription will now appear under Request History on the Prescriptions page

STN of Use Case 2

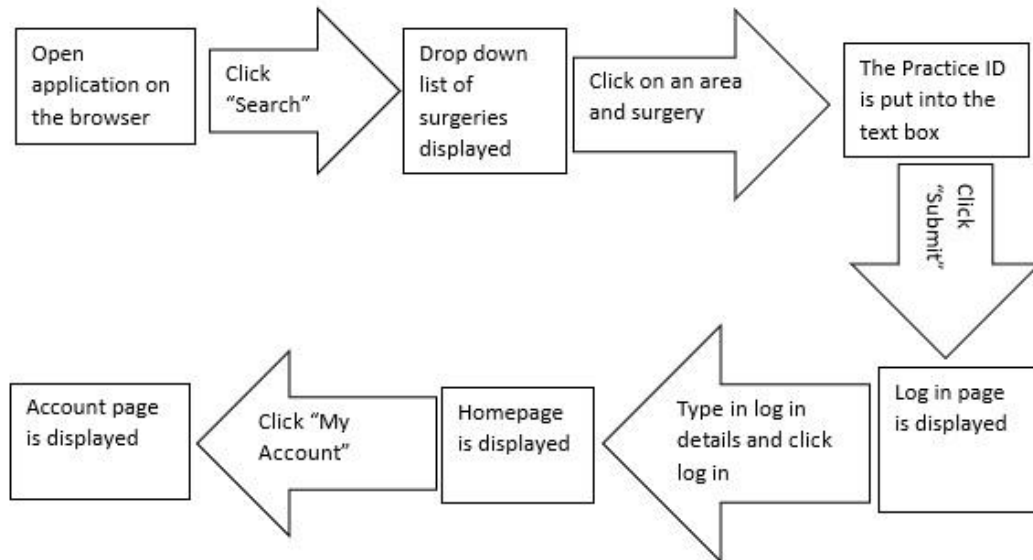


Use case 3 – Checking account details

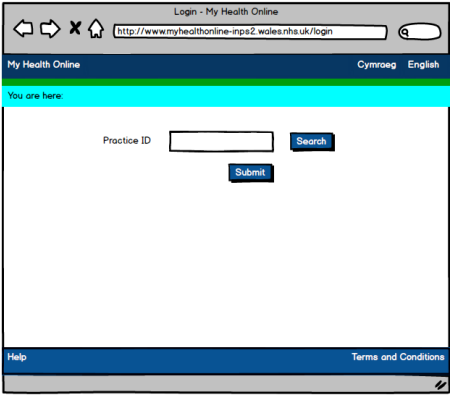
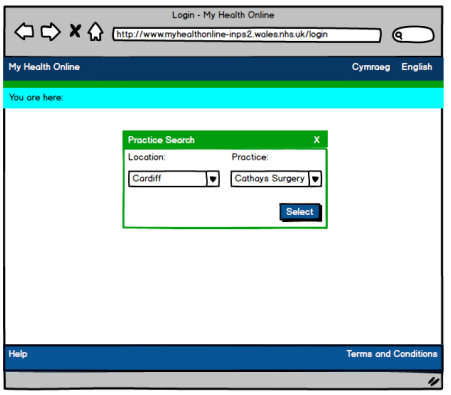
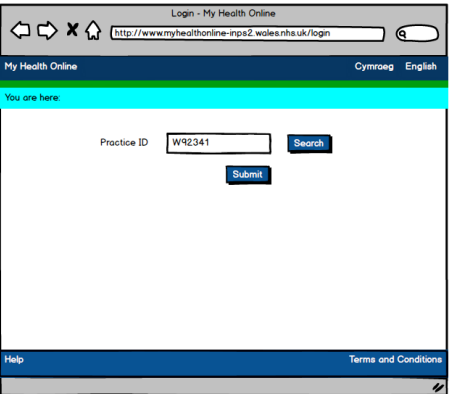
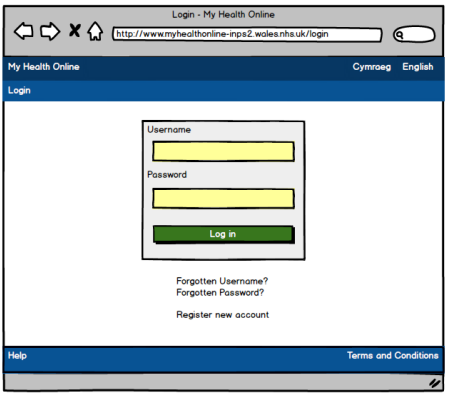
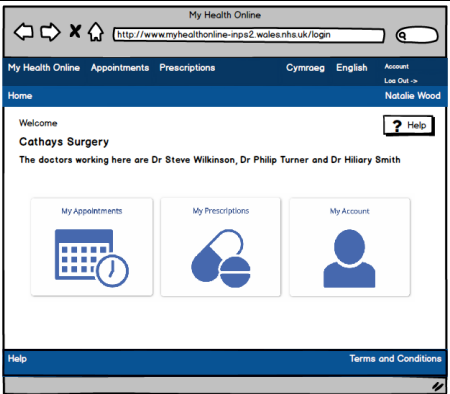
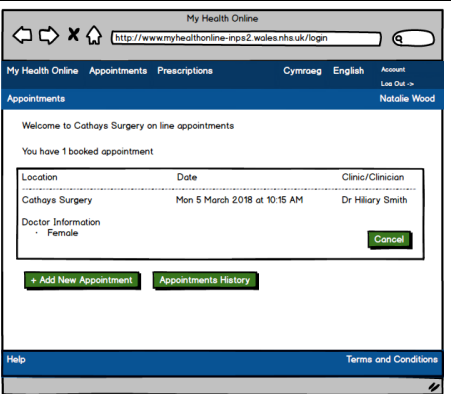
1. Open application
The process starts when they open the application.
2. Click "Search"
3. Click relevant drop downs
The user selects the area and surgery they are registered at
4. Click "Submit"
5. Type in Log In details and click Log In

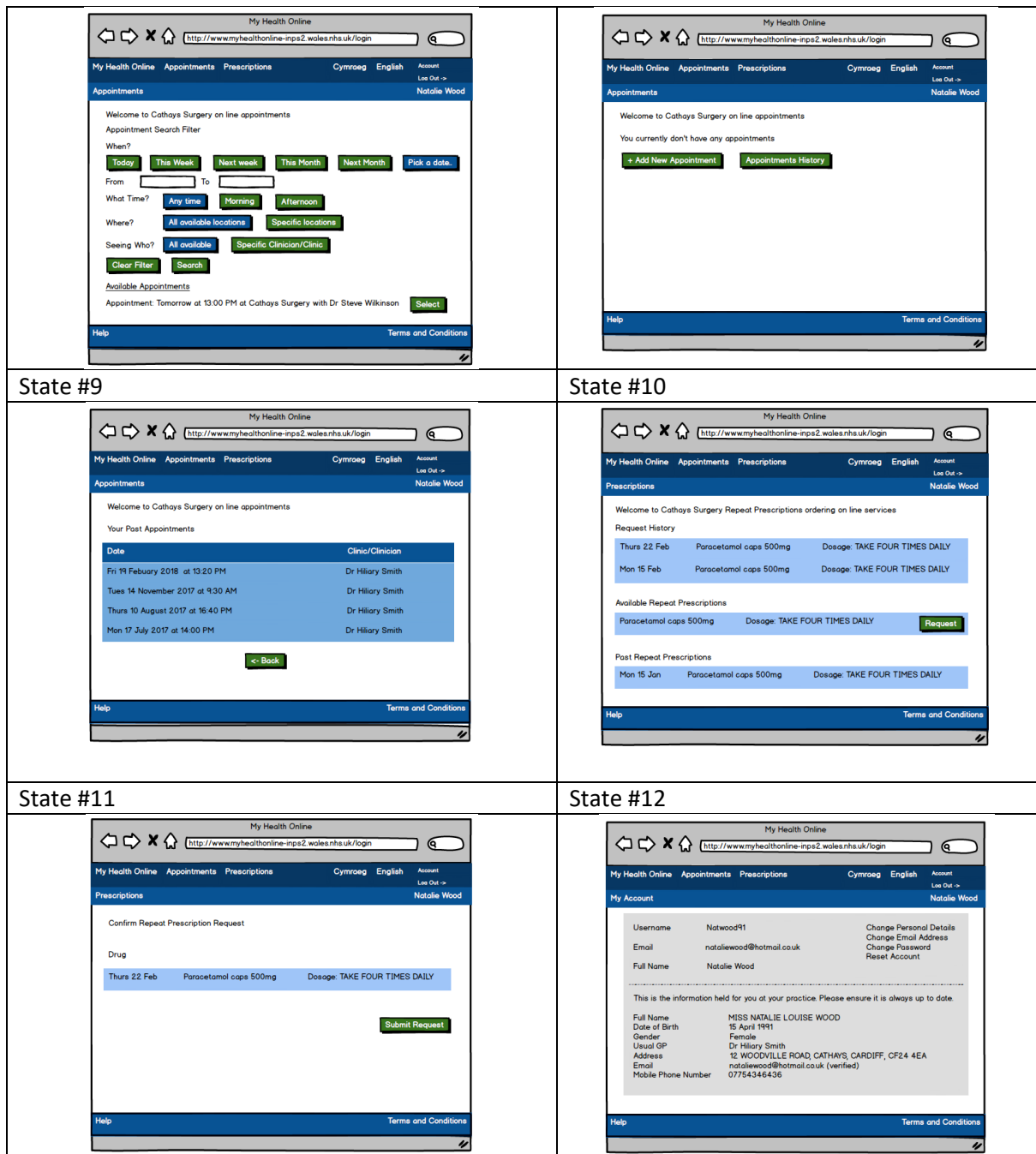
- The user inputs their log in details and the homepage page is displayed
6. Click "My Account"
Displays account information of the user

STN of Use Case 3



Heuristic Evaluation

<p>State #1</p> 	<p>State #2</p> 
<p>State #3</p> 	<p>State #4</p> 
<p>State #5</p> 	<p>State #6</p> 
<p>State #7</p>	<p>State #8</p>



Problems with the Application

After going through the prototype with the heuristic evaluation, I identified 4 problems that affect the usability of this application. Each of these problems I have given it a severity ranking and ease of fixing so it is clear where priority needs to be taken on fixing these problems.

Problem Number	Problem	Severity Ranking	Ease of fixing	Heuristic Number	States affected
1	Can't login when using the practice ID	5	2	4 & 5	State #4

2	The two-blues used in the colour scheme are too similar	4	2	7	All States
3	The account navigation button being on the other side of the page	1	1	4 & 7	State #5 to State #12
4	There is no message to recognise a search for an appointment has been carried out	3	2	1 & 5	State #7

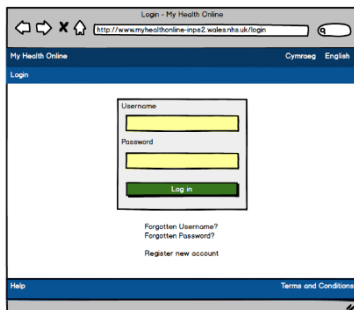
Problem 1: 'Can't login when using the practice ID'

When trying to login to the application through state #1 it doesn't allow the user to access their account when they reach that state. Whereas if it went straight to the login page, the account details are accepted, and you gain access to the account. This makes it harder for the patient to access their account as they must go find the right login page to do so.

This problem violates these heuristics:

- **Consistency and Standards:** As the log in page works differently depending on the way you go to the page means it is not consistent throughout the application.
- **Help Users Recognize, Diagnose, and Recover from Errors:** The user can't recognise and recover from this error. If their details are right, then they should be allowed access instead they have to re-find the login page to get into their account.

Evidence:



The functionality of this page is a problem for the patients using the application, it clearly needs to be fixed to make it easier to use.

Recommendation:

This problem can be easily fixed by removing the first few states as they aren't relevant. When booking an appointment, you can select which surgery you would like to go to, so if the patient just has their login details that should be sufficient.

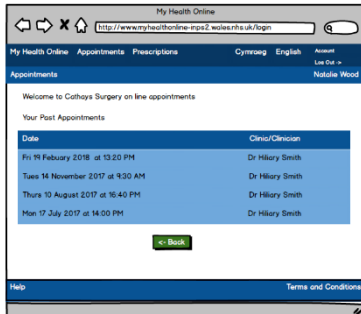
Problem 2: 'The two-blues used in the colour scheme are too similar'

The application could be harder to use for the older generation or people with poor eyesight. The lens of the eye yellows with age so the lens absorbs shortwave light which makes it harder for the person to focus on blue. This is a crucial factor to consider as a lot of the patients who need appointments at the doctors are the older generation.

This problem violates these heuristics:

- **Recognition Rather Than Recall:** It has affected this contrast as it can make it harder to read the text off the blue. There is also blue text that has been used throughout the application, so the older generation would struggle to read what it says.

Evidence:



This is just an example, as it is a problem in all the states because it is the colour scheme of the application. In this screenshot you can a lot of similar colours of blue has been used, this could affect what the user can see on the page.

Recommendation:

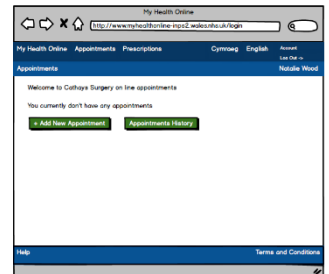
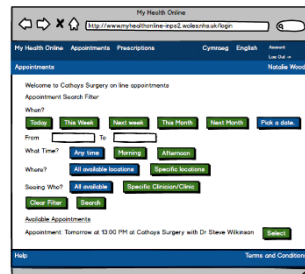
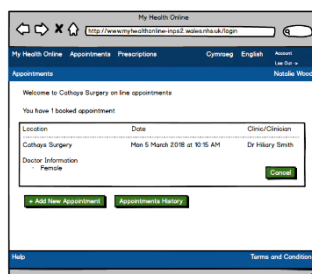
The best way to solve this issue would be to change the colour scheme, it needs to be made sure two very different colours are used that have a good contrast. This will help it stand out more and doesn't affect with anyone's eyesight. The next step would be to ensure all text is black on the white background, so all users can read it.

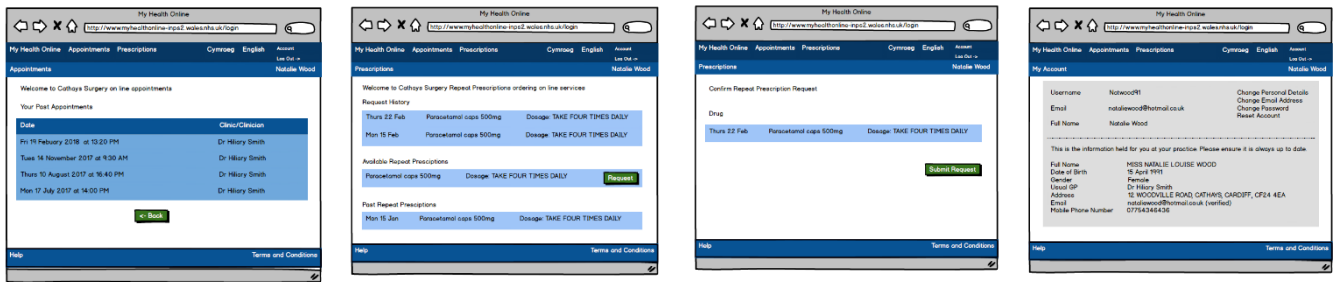
Problem 3: 'The account navigation button being on the other side of the page'

On the homepage it has the three main tasks which are 'Appointments', 'Prescriptions' and 'Account' in the boxes which are very clear. When you are on different pages there is Appointments and Prescriptions at the top of the page, but the account button is on the other side, very close next to the log-out button. This can confuse users as those are the three mains tasks that can be performed on this application, so they should be grouped together at all times to keep consistency. This problem violates these heuristics:

- **Consistency and Standards:** As the tasks have been put together on the homepage, to keep the consistency they should always be grouped together when they are displayed on other pages.
- **Recognition Rather Than Recall:** The account button isn't placed where the eyes would be looking for it as they would be looking at the other side where appointments and prescriptions is. That would be their assumption of where it should be.

Evidence:





It happens in all the states for when the user is logged in their account, you can see it is displayed the same way throughout performing all tasks.

Recommendation:

An easy way to solve this problem would be move the account button over to the other side next to appointments and prescriptions to keep the buttons consistent. It will also create more space in that corner, so the user couldn't press logout by accident as they are very close together.

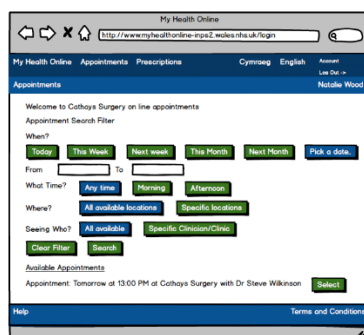
Problem 4: 'There is no message to recognise a search for an appointment has been carried out'

When carrying out a search for an appointment it doesn't show any recognition that the search has been carried out as the page already says at the bottom 'There are no appointments available' and continues to say that. The user does not know if their search has been recognised by the system as they could think it's not working.

This problem violates these heuristics:

- **Help Users Recognize, Diagnose, and Recover from Errors:** The user can't recognise the error as they haven't been informed there is one. It doesn't place the user in control of the user as wouldn't know what to do next in this situation.
- **Visibility of System Status:** There is no system feedback on the operation the user has tried to carry out, the user would be unsure if it has worked. There is no clear feedback on what to do next if there aren't any appointments available.

Evidence:



As you can see in the screenshot it demonstrates that only the only message is displayed down the bottom is 'there are no appointments available', there is no error message being displayed letting the user know what is happening, they must scroll down the page a little bit to acknowledge the message.

Recommendation:

This problem is very simple to fix as the best solution would be to add in an error message when pressing search to let the user know there are no appointments available and to widen their search to help find one. If there are appointments available, keep that the same by displaying them at the bottom of the page as the user would clearly be able to see them.

Good implementations with the Application

Good implementation number	Good implementation	Heuristics honoured
1	Good contrast with the text and background	<ul style="list-style-type: none"> Aesthetic and Minimalist Design Recognition Rather Than Recall
2	The layout is consistent throughout	<ul style="list-style-type: none"> Help and Documentation Recognition Rather Than Recall Aesthetic and Minimalist Design
3	The help assistance on the application	<ul style="list-style-type: none"> Help and Documentation
4	The text and buttons are a sensible size for their whole audience	<ul style="list-style-type: none"> Aesthetic and Minimalist Design Consistency and Standards Match between System and the Real World

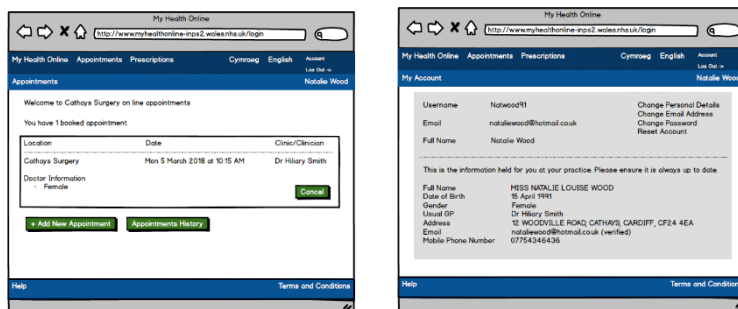
Good implementation 1: ‘Good contrast with the text and background and the text is simple to understand’

On most of the pages throughout the application it has black text on a white background which is the most effective contrast as it ensures that all text can be read by all audiences. It helps make it look professional and clear throughout the pages.

The heuristics this implementation honoured are:

- **Aesthetic and Minimalist Design:** The text stands out from its background well. It is visually clear to the user what the text says. The text is also brief and to the point, so the page isn’t overloaded with lots of text. The title is clear and bold to the user what the application is called.
- **Recognition Rather Than Recall:** There is breathing space around the text to give them enough space to be displayed on the white background which helps make it easier to read.

Evidence:



As you can see in the screenshots the text displayed to explain something is never longer than a line, its straight to the point. Users can read it easily as it spread out and contrasts well with the white

background. This ensures the people who may have problems with their sight or is colour blind has the best chance of reading it.

Good implementation 2: 'The layout is consistent throughout'

The layout is clear and simple. Only a few colours have been chosen to be used in the colour scheme as the main two colours used are blue for text boxes and green for most of the buttons, only 4-7 colours should be used, and it doesn't exceed that. The navigation is displayed in the same place in all the pages which good consistency.

The heuristics this implementation honoured are:

- **Help and Documentation:** The presentation is well designed for this application due to the navigation menu being at the top of the page consistently throughout and the pages aren't over-crowded. This helps the user easily learn how to use the application.
- **Recognition Rather Than Recall:** Sections on pages are separated by different colours to help it stand out to the user. The menu has been placed at the top of the screen as that's where most likely people will be looking.
- **Aesthetic and Minimalist Design:** Menu titles are brief but communicate well what they do. All the icons are set in visual places and which all stand out from the background.

Evidence:



Throughout the application, you can see it is a simple a layout. It is pleasing to the eye and has been designed in a way that the users can learn how to use it. The consistency helps that as well because the user will always know where certain buttons are on each page.

Good implementation 3: 'The help assistance on the application'

When a user is having an issue, the help assistance button takes you to a new link where there are sections on different types of questions that can be asked. In the sections are the frequently asked questions to help the user find a solution to their problem. It includes step by step guides that has clear and concise sentences for anyone to be able to follow.

The heuristics this implementation honoured are:

- **Help and Documentation:** The help function is visual to the user and it is labelled 'Help' on the right-hand side of the screen, so it is easily accessible. The help page is consistent with the navigation and presentation of the application. The user can easily switch between the help and the application as the help is displayed on a new tab on the internet browser.

Evidence:



This help assistance button, really helps the usability of the application as it ensures that all the users can get the help they need to quickly to learn how to solve their error. It's quick and easy plus the help section includes many questions on different topics of the application with steps on how to solve it.

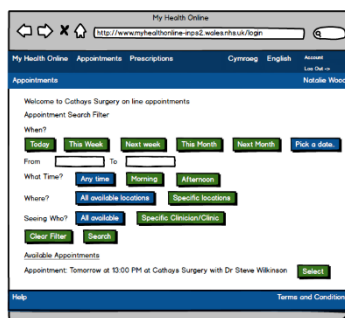
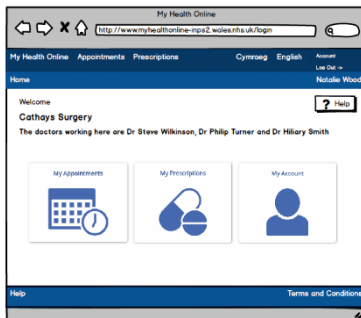
Good implementation 4: 'The text and buttons are a sensible size and are clear to their whole audience'

The text and buttons are large enough for the older generation to be able to clearly see them and read what it does. The buttons have clear words demonstrating what function that button will perform which helps prevent users from pressing the wrong button. This shows the application has taken into consideration all ages to be able to use the application.

The heuristics this implementation honoured are:

- **Aesthetic and Minimalist Design:** The text and buttons being a sensible size is important to the usability as if it is not clear and it's all too small then users will struggle to understand what a piece of text is trying to say and what function a button will perform. They stand out from the background well and visually display clearly what buttons do.
- **Consistency and Standards:** The buttons are labelled with text not any symbols, which is a lot more useful as the user can't get confused what a button will do. The text is left-justified, this is important to keeping the text easy to read.
- **Match between System and the Real World:** The buttons are concrete and familiar to users as they use words that are easily understood.

Evidence:



In the screenshots it shows that all the buttons are displayed by one or two words to help the usability of the application. The text is a reasonable size throughout the application for users to read it. The font that has been used is readable and helps make it look professional.

Summary

The problems that have been identified in this report are very simple to fix with an easy solution, some are more severe than others as it effects the usability more significantly. The major problems were not including error messages that aren't informing the user the status of the system, this could be issue as the user doesn't know if their actions they are performing are working just like the one mentioned above with searching for an appointment.

The application has been designed very well with a lot of usability features considered with the text and words used for buttons. The layout is professional and easy to use. These were identified as good implementations for usability of the application. The only problem found was the colour scheme, the two blues being used are very similar. The older generation may struggle to read the writing on the blue banners as they find it harder to focus on the colour. Some text is blue too which means the user may not be able to read it.

The usability of the application overall has been identified as very good, only a few changes need to be made to it to improve the usability even more for the audience. This will ensure they will have a good experience using the application and won't come across any problems.

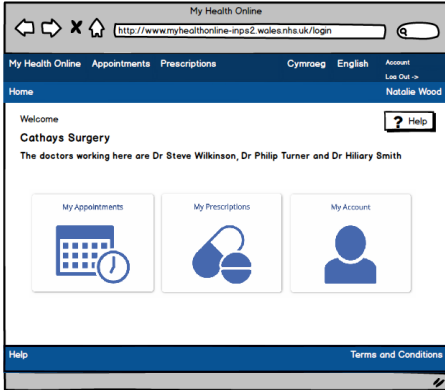
Gap Analysis

1. General application requirements

ID	1.1	
Requirement	The application must include an application form for the patient to sign up	
Justification	In the interview analysis it was a recommendation from one of the interviewees to create a more streamlined registration because at the moment the patient has to attend the surgery to sign up	
Acceptance Criteria	The system should provide an application form to fill in the relevant details that could be confirmed by the GP surgery, this will save patients having to go into their surgery to register	
Priority	Desirable	
My Health Online/Manual System Compliance	My Health Online is not compliant . It currently lets you register once you have your registration form from the surgery	The manual system is compliant . The patient can walk into the surgery and manually fill out a registration form to get an account

ID	1.2	
Requirement	The application must comply with the Data Protection Act	
Justification	The application holds very sensitive information about a patient that is confidential. It needs to be ensured the data is following those principles to make the patient trust their data is safe	
Acceptance Criteria	The system has a log in feature when the user gains access to their account to make sure there is no access to unauthorised users	
Priority	Essential	

ID	1.3	
Requirement	The application should lead straight to the log in page	
Justification	The practice ID page seems to have a problem letting the patient log in, it was identified in the heuristic evaluation and in the usability questionnaire.	
Acceptance Criteria	When searching the application, it takes you straight to the log in page that is already in place to make logging in quicker and easier	
Priority	Desirable	

ID	1.4
Requirement	The navigation menu buttons need to be grouped in one place throughout the application
Justification	In the heuristic evaluation it is shown that it can confuse users with the three main tasks of the application are not grouped together in the layout.
Acceptance Criteria	The main three navigation buttons will be placed together at the top of the page and they stay in the same position on all pages
Priority	Essential
My Health Online Compliance	<p>My health Online is not compliant. The navigation buttons are currently placed at the top on the left and right-hand side, they are grouped together.</p> 

ID	1.5
Requirement	The application displays hospital referral appointments from the NHS e-referral service
Justification	The application is separate from the NHS infrastructure, linking in the referral appointments will link the systems together and create better communication. From the questionnaire it was shown that patients would like their appointments in one place
Acceptance Criteria	On the appointments page will show GP appointments and any hospital appointments with the required details
Priority	Desirable
My Health Online/Manual System Compliance	Both My Health Online and the manual system are not compliant as it doesn't display to the patient their hospital appointments, this is something they must keep note of themselves.

ID	1.6
Requirement	The application should include a feature to access waiting test results
Justification	This is another service that is offered over the phone that could easily be made digitalised and in the questionnaire, it was mentioned as another feature they would like added to the application as it saves them ringing the doctors at a certain time when it isn't convenient for them
Acceptance Criteria	The interface needs to have a feature that the patient can see a document
Priority	Desirable

My Health Online/Manual System Compliance	My Health Online is not compliant . It currently doesn't show any test results	The manual system is compliant . The patients call up the surgery at certain time to find out their results
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ID	1.7
Requirement	The application should include a feature to access previous prescriptions
Justification	To improve the communication this would be a useful feature to add, as patients can see what their surgeries store about them.
Acceptance Criteria	Patients can't remember every medicine they have been given, on the appointments history they can access what medicine they were given at that appointment
Priority	Desirable
My Health Online/Manual System Compliance	Neither My Health Online or manual system allow you access to previous prescriptions, if you have to request your medical records through a different NHS system

ID	1.8
Requirement	The application should include a feature that allows you to change the language of the text
Justification	In one of the interviews, a receptionist stated that there is a language barrier that doesn't help communication with patients that speak very little English/welsh, this will ensure all patients can use the application confidently.
Acceptance Criteria	To improve communication with patients that don't speak very good English or welsh, this feature would be useful to them. A button will be included on the log in page to change it
Priority	Essential
My Health Online/Manual System Compliance	My Health Online is semi compliant as it contains two languages such as welsh and English but neither does the application or manual system help communicate in different languages

ID	1.9
Requirement	The user can only log in with the correct log in credentials to gain access to their account
Justification	This is important for a security reason as this account holds highly confidential information of the individual, only that individual should have access
Acceptance Criteria	Correct log in credentials will direct the user to the homepage and if they are not correct they will be directed to an alert message asking them to try again
Priority	Essential
My Health Online/Manual System Compliance	My Health Online is compliant . If the user types in the wrong details it doesn't allow the user access into the application

ID	1.10
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Requirement	The application should include a help feature throughout the different tasks
Justification	As there is a huge age range of people using the application that having assistance on using the application is important. Some tasks don't come across as easy to everyone.
Acceptance Criteria	The application will have a help feature at the bottom of the page to help user at any stage they are at in the application
Priority	Essential
My Health Online/Manual System Compliance	My Health Online is compliant . There is a help button the application the user can press to be taken to a separate page to help answer the question or solve their issue

ID	1.11
Requirement	A log out button should be included on every page when logged into the user's account
Justification	The user needs to be able to exit the application at any point. This helps with navigation as it gives the user the flexibility to be able to leave the application at any point.
Acceptance Criteria	The application will have a log out button in the top right-hand corner consistently throughout the application
Priority	Essential
My Health Online/Manual System Compliance	My Health Online is compliant . There is a log out button displayed consistently throughout the application

ID	1.12
Requirement	Patient's medical details from their account and available appointments at the practice will be uploaded to the system GP connect
Justification	The medical details of the patient and available appointments being uploaded onto the system will allow it to be more accessible to the right clinician.
Acceptance Criteria	There will be no evidence displayed on the application itself but will be informed where their data is being shared.
Priority	Desirable
My Health Online/Manual System Compliance	My Health Online is not compliant . The application is not linked to any other systems in the NHS.

ID	1.13
Requirement	The application will be implemented using the programming language Java
Justification	While exploring this site https://developer.nhs.uk/ it was noticed that majority of the applications being developed are being written in Java. This will help it easily connect to other NHS systems if they are in the same language
Acceptance Criteria	The language will not be shown on the interface but it will determine how the features will be presented and function due to the limitations it has.
Priority	Essential

2. Booking appointment requirements

ID	2.1	
Requirement	The application should separate the Nurses, HCA and Phlebotomists from the drop-down list of doctors	
Justification	The application does include the available appointments for all health care professionals but in the questionnaire, there was a couple responses about including available appointments with Phlebotomists and Nurses which is a service offered on the application. This is indicated as a usability problem.	
Acceptance Criteria	The search for appointments needs to separate the health care professionals to help each profession stand out to the user	
Priority	Essential	
My Health Online/Manual System Compliance	<p>My Health Online is not compliant. The list of all health care professionals is in the same place</p> 	<p>The manual system is compliant. As the receptionist can tell you the appointments required with the correct health care professional</p>

ID	2.2	
Requirement	The application should include a process to book an emergency appointment	
Justification	Calling the surgery is always a struggle in the morning and the patient feels they have to take the first appointment offered to them, this could give the patient different appointments, so they can pick the one most convenient for them	
Acceptance Criteria	Emergency appointments should be made available online to reduce the number of calls to the surgery, there can be a form to fill out to ensure it is an emergency which can lead them to the available appointments	
Priority	Desirable	
My Health Online/Manual System Compliance	<p>My Health Online is not compliant. The application only allows a patient to book an appointment a couple of weeks in advanced</p>	<p>The manual system is compliant. It allows the patient to call the surgery at 8am to get an appointment on that day</p>

ID	2.3
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Requirement	The application needs to alert the user a search for an appointment has been carried out	
Justification	Alerting the patient on the status of the system is important, it isn't clear the search works as there is no indication it has been carried out	
Acceptance Criteria	An alert message will appear to the user stating that the search didn't find any appointments that match their criteria, otherwise all available appointments will be displayed at the bottom of the page	
Priority	Essential	
My Health Online/Manual System Compliance	My Health Online is not compliant . There is no alert message indicating to the patient the search has been carried out	The manual system is compliant as they have more appointments on their system, the receptionist goes through the available appointments with the patient

ID	2.4	
Requirement	The application needs to release more available appointments in the next 4 weeks	
Justification	Throughout the questionnaire it is spoken about frequently how there is never any appointments to book. For the application to be used more there must be more available appointments released to be displayed	
Acceptance Criteria	The surgery will release more of their appointments online to allow it to be more frequently used, if no appointments are available on the system which results the patient calling the surgery	
Priority	Essential	
My Health Online/Manual System Compliance	My Health Online is not compliant . Only a few appointments come up over the course of a few weeks	The manual system is compliant . The surgery releases more appointments for further in advance

ID	2.5	
Requirement	The application should allow the user to cancel either a GP or hospital appointment	
Justification	This is another feature that would complement the feature of booking an appointment, it would make the application more effective	
Acceptance Criteria	The application needs to have a cancel button next to each appointment to make it simple to cancel appointments individually	
Priority	Essential	
My Health Online/Manual System Compliance	My Health Online is compliant as it has a feature to allow you to cancel appointments	Manual System is compliant as you can phone up the GP surgery to cancel an appointment

3. Requesting repeat prescription requirements

ID	3.1	
Requirement	The interface should include a feature to allow you to leave a comment on the prescription that will be responded to within 24 hours	
Justification	A feature allowing patients to communicate with their doctor about their prescription could help save them from booking an appointment with a doctor	
Acceptance Criteria	On the prescription page, in the section of 'request history', there needs to be a button to leads to a text box where the patient can leave a comment	
Priority	Desirable	
My Health Online/Manual System Compliance	My Health Online is not compliant . There is no feature to allow to contact your doctor regarding your prescription	The manual system is not compliant . To be able to speak about prescription the patient requires to book an appointment with their doctor to discuss the issue

ID	3.2	
Requirement	The application needs to be able handle different lengths of repeat prescriptions	
Justification	In the questionnaire, a respondent stated about their prescription not working due to it can handle the length of the repeat prescription of being every two months instead of one month. Not all prescriptions are the same and it should be able to handle different scenarios.	
Acceptance Criteria	Not all patients need a new prescription once a month, depends on their daily dosage to when they run out. On the prescription page, the prescription will include the length of how long the prescription will last	
Priority	Essential	
My Health Online/Manual System Compliance	My Health Online is not compliant . It allows a standard a repeat prescription of length of a month	The manual system is compliant as the patient can order the prescription when they do need it as the order slip they have doesn't go out of date

ID	3.3	
Requirement	The application needs to alert the patient when they need to book an appointment for a review on their prescription	
Justification	Patients may not be aware of the last time they can request their prescription, notifying them of their next review is improving the communication between the patient and their doctor. The patient will feel more satisfied by communication as they can know in advance when they need to book an appointment for	

Acceptance Criteria	When the patient is requesting their last set of that prescription, they will receive a message to book an appointment for a review to be able to carry on with the prescription	
Priority	Desirable	
My Health Online/Manual System Compliance	My Health Online is not compliant . The patient does not know when they are ordering their last set of a prescription	The manual system is compliant . The receptionist at the surgery lets them know this information when dealing with their last prescription

ID	3.4
Requirement	A confirmation page is displayed to confirm the prescription the user is requesting
Justification	The user needs to be informed that their request has gone through otherwise the user can be easily confused.
Acceptance Criteria	The application needs to display a clear confirmation page that states the request has been received.
Priority	Essential
My Health Online Compliance	My Health Online is compliant as it displays the user with confirmation of the prescription

4. Non-functional requirements

ID	4.1
Requirement	The interface needs to have an appropriate colour scheme
Justification	In the heuristic evaluation, a problem was identified with the colour scheme. The older generation struggle to focus their eyes on the colour blue, which might affect the ability to read the text
Acceptance Criteria	The application needs to be appropriate for all patients and will be used throughout the whole application to keep consistency
Priority	Essential

ID	4.2
Requirement	The interface must be user-friendly and easy to navigate
Justification	The interface needs to be user-friendly to help make patients use it more often, the application needs to be effective and improve the communication for all patients
Acceptance Criteria	The application must use text that is easily understood and only include relevant data to not crowd the page
Priority	Essential

ID	4.3
Requirement	The applications data must be encrypted always
Justification	In the interview analysis, one of the interviewee's mentioned that they don't believe the application is fully protected, if it can be ensured it is encrypted always then the application can hold more personal data

Acceptance Criteria	The application is secure and only gives access to authorised users to their data only
Priority	Essential
My Health Online/Manual System Compliance	Both are compliant to keeping their data encrypted online and, on the hardware, used at the surgeries

ID	4.4
Requirement	The application should run error free
Justification	An application should always run error free to ensure its efficiency and make sure its reliable to use
Acceptance Criteria	The application should run error free for patients and those who work on the back-end of the application, no matter what browser or device they are using it on
Priority	Desirable

ID	4.5
Requirement	The interface needs to be consistent throughout
Justification	The layout needs to stay be consistent to make sure it's easy to use. In the questionnaire there was a mixture of how easy it is to use so the layout needs to be clear and used throughout the application to make patients find it easy to learn how to use. It will help it abide by the Nielson's heuristic of 'Consistency and Standards'.
Acceptance Criteria	The interface should have the same layout throughout all the pages of the application and all the required buttons are placed in the same position
Priority	Desirable

ID	4.6
Requirement	The text and icons need to be large to allow all users to read them
Justification	In the questionnaire, there was a few respondents that selected 'No' in the question 'Is all the text clear for you to read?', if this application could ensure that all the responses would be 'Yes' it would influence patients to use it more often.
Acceptance Criteria	A reasonable size and font for the text will be used throughout the interface. Icons will be a decent size for the users to be able to read the text on the button.
Priority	Essential

Cognitive Analysis

Task Number	1
Task Name	The user logging into the application
Pre-condition	The user must open the application
Step Number:	Step Description:
1	Type in Username and Password
2	Press 'Log In'

Analysis of task:

Will the user realistically be trying to do this action?
Yes
- To be able to use the application the user will need to be able to gain access to their account

Is the control for action visible?
Yes
- The text boxes and button are clear to the user

Is there a strong link between the control and the action?
Yes
- The boxes and icons are clearly labelled.

Is the feedback appropriate?
Yes
- The feedback is clear for failed logins

Severity of problems encountered:	Reason:
5	Password entered is displayed in free text which is a security risk.

Evidence:

The screenshot shows the login interface for GIG Cymru NHS Wales. At the top, there are logos for 'Fy - Iechyd Ar-Lein My Health Online' and 'GIG CYMRU NHS WALES'. A warning message states: 'Access to this system is permitted to authorised users ONLY. Unauthorised attempts are considered a criminal offence and could be prosecuted.' Below this, a link says 'Need to apply for an account? Click here'. The login form has two input fields: 'Username' (containing 'Amy/ao') and 'Password' (containing 'University'). A green 'Log In' button is below the password field. At the bottom of the form, there are links for 'Forgotten Username?', 'Forgotten Password?', and 'Register new account'. A 'Language' dropdown menu is at the bottom right, showing the UK flag. The footer contains 'Help Contact Website Support' and 'Terms and Conditions Privacy Policy FAQ'.

Two callout boxes with arrows pointing to the form fields provide the following evidence:

- Step 1 – Typing in the user's details**: Points to the Username and Password input fields.
- Step 2 – Press "Log In"**: Points to the green 'Log In' button.

Access to this system is permitted to authorised users ONLY. Unauthorised attempts are considered a criminal offence and could be prosecuted.

Need to apply for an account? [Click here](#)

You have typed in the wrong username
and password.

Please try again.

OK

Forgotten Username?
Forgotten Password?
Register new account

Language 
Terms and Conditions
Privacy Policy
FAQ

Help
Contact Website Support

The feedback to incorrect
log in details

Task Number	2
Task Name	The user applying for a new account
Pre-condition	The user must open the application
Step Number:	Step Description:
1	On the log in page press 'Click Here' where it says apply for new account
2	Type in the correct details
3	Press 'Apply'
4	Click 'Ok' on the confirmation page

Analysis of task:

Will the user realistically be trying to do this action?
Only the once
- This action will only need to be carried out once to apply for an account

Is the control for action visible?
Yes
- However, there are two registration options, the one above the username and the one at the bottom. The user can get confused between applying and registering.

Is there a strong link between the control and the action?
Yes
- The instruction is clear, however the format, of placing a hyperlink on the words click here does not work well with search engines that will struggle to understand what the hyper link is for. It might be better to say "click to register" which would be clear to search engines.

Is the feedback appropriate?
Yes
- However, the final confirmation could be worded better. The notification of the time to process could be less formal. Perhaps a more direct statement would be better.

Severity of problems encountered:	Reason:
2	Address only allows a single line of text. Today's Date should be system created and not something a user has to type.

Evidence:

Step 1 – Press “Click Here”

Step 2– Type in correct details

Step 3– Press “Apply”

Step 4– Click “Ok”

Task Number	3
Task Name	The user registering their new account
Pre-condition	The user must open the application
Step Number:	Step Description:
1	On the log in page press 'Register' at the top of the page or 'Register new account' at the bottom of the page
2	Type in the correct details
3	Press 'Register'
4	Press 'Log In' on the confirmation page

Analysis of task:

Will the user realistically be trying to do this action?
Only the once
- This action will only need to be carried out once to register their details for an account

Is the control for action visible?
Yes
- It is clear at the bottom but can be confused with applying for a new account. To make them stand out different, perhaps use a specific url could be a better approach

Is there a strong link between the control and the action?
No
- Due to the confusion with applying for an account

Is the feedback appropriate?
Yes
- Once the user has selected submit, they are directed to a confirmation page informing them their details have been sent to their GP Surgery.

Severity of problems encountered:	Reason:
5	Password is not secure
2	Date of Birth could include a calendar to help find the date so it is in the correct format.
3	Should the registration fail, it might be good to return back to the original form with data entered to reduce the need to retype it.

Evidence:

Fy - Iechyd Ar-Lein
My Health Online

Access to this system is permitted to authorised users ONLY. Unauthorised attempts are considered a criminal offence and could be prosecuted.


Need to apply for an account? [Click here](#)

Username

Password

Log In

Forgotten Username?
 Forgotten Password?
[Register new account](#)

Language 

Help
 Contact Website Support

Terms and Conditions
 Privacy Policy
 FAQ

Step 1 - Press "Register"

Fy - Iechyd Ar-Lein
My Health Online

Please use the registration details from your letter to fill out this form

Registration Details

Practice ID
 Account ID
 Linkage Key

Account Details

Username
 Password
 Confirm Password

Personal Details

First Name
 Last Name
 Email
 Confirm Email
 Date of Birth

☐ I agree to the Terms & Conditions and Privacy Policy

Cancel **Reset** **Register**

Help
 Contact Website Support

Terms and Conditions
 Privacy Policy
 FAQ

Step 2 - Type in the correct details

Step 3 - Press "Register"

Fy - Iechyd Ar-Lein
My Health Online

Your My Health Online account has now been created, press log in to access your account.

Log In

Help
 Contact Website Support

Terms and Conditions
 Privacy Policy
 FAQ

Step 4 - Press "Log In"

Task Number	4
Task Name	The user to be able to change the language of the application
Pre-condition	The user must open the application
Step Number:	Step Description:
1	On the log in page, press 'Language'
2	Select a language on the drop-down list
3	Press 'Submit'

Analysis of task:

Will the user realistically be trying to do this action?

Not very often

- The action will only be there for anyone who doesn't speak fluent English

Is the control for action visible?

Yes

- It did take me a few moments to find. Moving it to the top of right hand corner would be more useful.

Is there a strong link between the control and the action?

Yes

- The control says language with a flag to indicate it is relevant to changing the language

Is the feedback appropriate?

Yes

- It would change to the language selected.

Severity of problems encountered:

0

Reason:

No problems encountered

Evidence:

Access to this system is permitted to authorised users ONLY. Unauthorised attempts are considered a criminal offence and could be prosecuted.

Need to apply for an account? [Click here](#)

Username

Password

Log In

Forgotten Username?
Forgotten Password?
Register new account

Language

Help
Contact Website Support

Terms and Conditions
Privacy Policy
FAQ

Step 1 – Press
“Language”

Please choose a language

English

Submit

Help
Contact Website Support

Terms and Conditions
Privacy Policy
FAQ

Step 2 – Select
Language

Step 3 – Press
“Submit”

Task Number	5
Task Name	The user accessing their test results
Pre-condition	The user must log into in the application
Step Number:	Step Description:
1	Type in Username and Password
2	Press 'Log In'
3	Press 'Click Here' where it says if you are waiting for test results

Analysis of task:

Will the user realistically be trying to do this action?
Depending on the user
- This action will happen depending on the user, as some patients will never need to retrieve test results whereas other patients may be always having tests

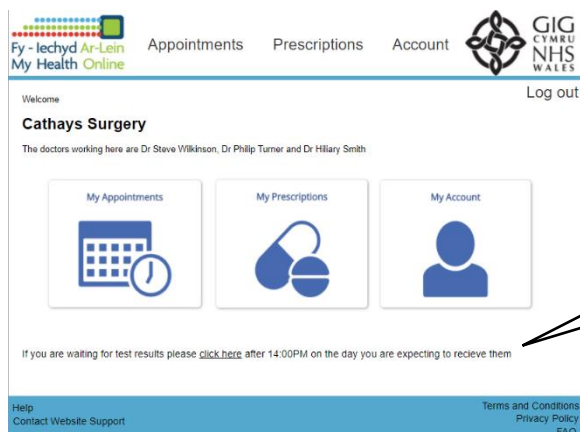
Is the control for action visible?
Yes
- Placed at the bottom of the screen in a large text size

Is there a strong link between the control and the action?
Yes
- It explains to click here if waiting for test results

Is the feedback appropriate?
No
- The sentence needs to change something a lot simpler i.e. "You have test results – click here to see them." Or maybe "You have no recent test results, these are normally updated by 14:00 on the day they are due."

Severity of problems encountered:	Reason:
0	No problems encountered

Evidence:



Can see step 1 and 2 above

Step 3 – Press
"Click Here"

Task Number	6
Task Name	The user accessing their account details
Pre-condition	The user must log into in the application
Step Number:	Step Description:
1	Type in Username and Password
2	Press 'Log In'
3	Press 'Account' button on homepage

Analysis of task:

Will the user realistically be trying to do this action?
Not very often - The action will only be carried out when the user needs to change their details or check they are correct

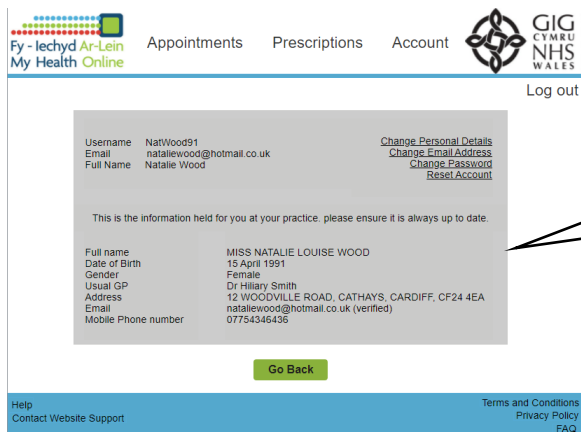
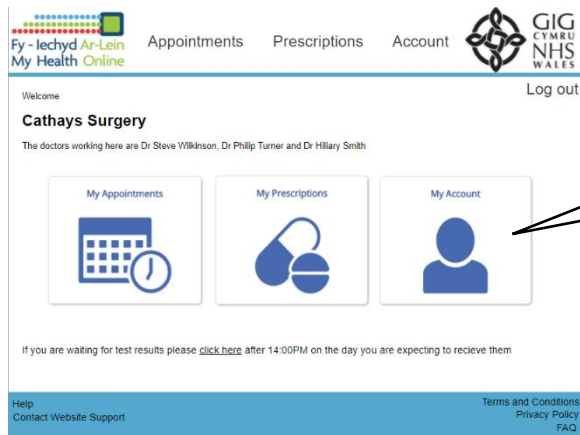
Is the control for action visible?
Yes - Very good as it uses a large button.

Is there a strong link between the control and the action?
Yes very - It has a picture of a person below the word Account

Is the feedback appropriate?
Yes - It directs you to the page with the account details

Severity of problems encountered:	Reason:
3	It needed a lot of concentration to read. Not sure black on grey has appropriate contrast for visually impaired users.
1	Needing more white space around the elements to make it more spread out

Evidence:



Task Number	7
Task Name	The user viewing their appointments
Pre-condition	The user must log into in the application
Step Number:	Step Description:
1	Type in Username and Password
2	Press ‘Log In’
3	Press ‘Appointments’ on the homepage

Analysis of task:

Will the user realistically be trying to do this action?
Yes
- The user will want to view their doctor’s appointment, so they don’t forget to attend

Is the control for action visible?
Yes
- both from the large button and the top menu (maybe consider if both are really needed).

Is there a strong link between the control and the action?
Yes

- the icon in the middle of the page has a picture of calendar along with the word Appointments

Is the feedback appropriate?

Yes

- It directs you to the page containing all the user's current appointments

Severity of problems encountered:

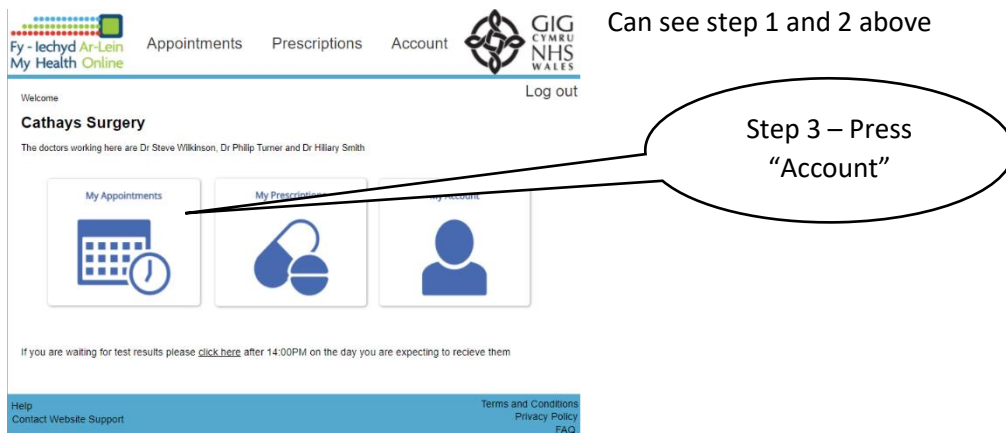
0

Reason:

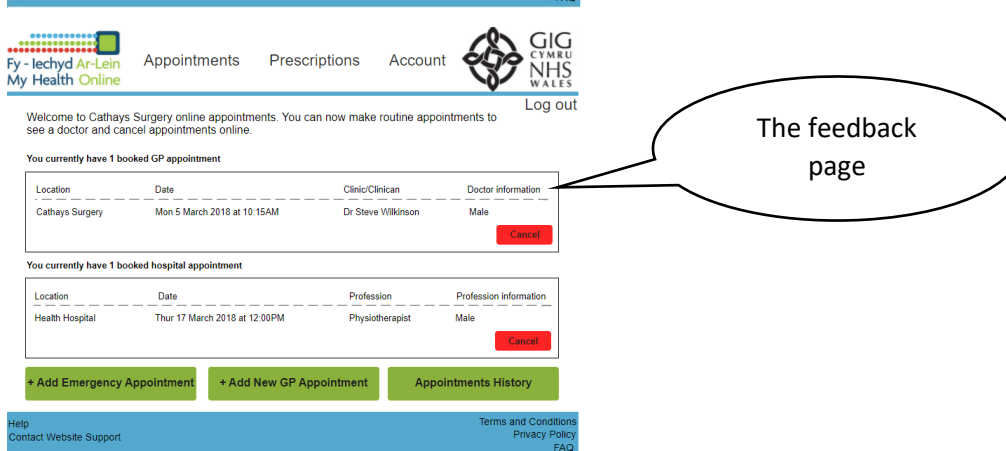
No problems encountered

Evidence:

Can see step 1 and 2 above



Step 3 – Press “Account”



The feedback page

Task Number	8
Task Name	The user booking GP appointments
Pre-condition	The user must log into in the application
Step Number:	Step Description:
1	Type in Username and Password
2	Press ‘Log In’
3	Press ‘Appointments’
4	Press ‘Add New GP Appointment’

5	Type in search criteria
6	Press 'Search'
7	Press 'Select' on the appointment

Analysis of task:

Will the user realistically be trying to do this action?
Yes
- This action will be carried out frequently as it is one of the main services this application is used for

Is the control for action visible?
Yes
- The button is clear to the user as its plain text

Is there a strong link between the control and the action?
Yes
- The buttons could have been worded shorter by putting "Book GP Appointment" and "Book Emergency Appointment"

Is the feedback appropriate?
Yes
- It is a very busy form, could divide the form up into different steps instead of being on one page

Severity of problems encountered:	Reason:
3	It is a very busy and complex form

Evidence:

Can see step 1 and 2 above

The evidence consists of two screenshots of the Cathays Surgery My Health Online interface. The left screenshot shows the 'My Appointments' button highlighted with a callout bubble labeled 'Step 3 - Press "Appointments"'. The right screenshot shows the 'Add New GP Appointment' button highlighted with a callout bubble labeled 'Step 4 - Press "Add New GP Appointment"'. Both screenshots show the NHS Wales logo and navigation links for Appointments, Prescriptions, and Account.



Task Number	9
Task Name	The user booking an emergency appointment
Pre-condition	The user must log into in the application
Step Number:	Step Description:
1	Type in Username and Password
2	Press 'Log In'
3	Press 'Appointments'
4	Press 'Add Emergency Appointment'
5	Type in the box the problem
6	Press 'Submit'
7	Press 'Select'

Analysis of task:

Will the user realistically be trying to do this action?
Yes
- Booking an emergency appointment is a service that is widely used at the GP surgery

Is the control for action visible?
Yes
- The button is in plain text

Is there a strong link between the control and the action?
Yes,
- This is much easier to use than the previous one. Maybe change problem to symptoms.

Is the feedback appropriate?
Yes
- It lists all appointments in that day

Severity of problems encountered:	Reason:
3	Consider the contrast again grey and black, might be hard to read for some users
1	The text stating the appointment is quite long – could take out appointment or change into two lines

Evidence:

Can see step 1 and 2 above

Step 3 – Press “Appointments”

Step 4 – Press “Add Emergency Appointment”

Step 5 – Type in the problem

Step 6 – Press “Submit”

Step 7 – Press “Select”

Task Number	10
Task Name	The user cancelling a GP appointment
Pre-condition	The user must log into in the application
Step Number:	Step Description:
1	Type in Username and Password
2	Press ‘Log In’

3	Press 'Appointments'
4	Press 'Cancel' on the GP appointment
5	Press 'Confirm'

Analysis of task:

Will the user realistically be trying to do this action?
On the occasion
- The user may need to change their appointment or may not require it anymore

Is the control for action visible?
Yes
- It is red to make it stand out

Is there a strong link between the control and the action?
Yes, very strong.
- It is placed right next to the appointment

Is the feedback appropriate?
Yes
- All very good, but maybe add a feature to be able to reschedule appointment before cancelling to ensure there is an appointment booked

Severity of problems encountered:	Reason:
0	No problems encountered

Evidence:

Can see step 1 and 2 above

The screenshot shows the 'My Health Online' interface for Cathays Surgery. A speech bubble labeled 'Step 3 – Press "Appointments"' points to the 'My Appointments' button in the left-hand menu. Another speech bubble labeled 'Step 4 – Press "Cancel"' points to the red 'Cancel' button next to a listed GP appointment. The appointment details show: Location: Cathays Surgery, Date: Mon 5 March 2018 at 10:15AM, Clinic/Clinician: Dr Steve Wilkinson, Doctor Information: Male. Below this, there is a section for hospital appointments and buttons to 'Add Emergency Appointment', 'Add New GP Appointment', and 'Appointments History'.

Please confirm you would like to **cancel** this appointment:

Location	Date	Clinic/Clinician	Doctor information
Cathays Surgery	Mon 5 March 2018 at 10:15AM	Dr Steve Wilkinson	Male

[Confirm](#)

Step 5 – Press “Confirm”

Task Number	11
Task Name	The user cancelling a hospital appointment
Pre-condition	The user must log into in the application
Step Number:	Step Description:
1	Type in Username and Password
2	Press ‘Log In’
3	Press ‘Appointments’
4	Press ‘Cancel’ on the hospital appointment
5	Press ‘Confirm’

Analysis of task:

Will the user realistically be trying to do this action?
On the occasion
- The user may need to cancel the appointment due to other commitments

Is the control for action visible?
Yes
- It is red to make it stand out

Is there a strong link between the control and the action?
Yes, very strong.
- It is placed right next to the appointment

Is the feedback appropriate?
Yes
- It cancels the appointment, wouldn’t be possible to reschedule the appointment on this application as it needs to be done through the hospital

Severity of problems encountered:	Reason:
0	No problems encountered

Evidence:

Can see step 1 and 2 above

Step 3 – Press
“Appointments”

Step 4 – Press “Cancel”

Welcome
Cathays Surgery
The doctors working here are Dr Steve Wilkinson, Dr Hilary Smith and Dr Hilary Smith

My Appointments My Prescriptions My Account

If you are waiting for test results please [click here](#) after 14:00PM on the day you are expecting to receive them

Help
Contact Website Support

Terms and Conditions
Privacy Policy
FAQ

Welcome to Cathays Surgery online appointments. You can now make routine appointments, see a doctor and cancel appointments online.

You currently have 1 booked GP appointment

Location	Date	Clinic/Clinician	Doctor information
Cathays Surgery	Mon 5 March 2018 at 10:15AM	Dr Steve Wilkinson	Male

Cancel

You currently have 1 booked hospital appointment

Location	Date	Profession	Profession information
Health Hospital	Thur 17 March 2018 at 12:00PM	Physiotherapist	Male

Cancel

+ Add Emergency Appointment + Add New GP Appointment Appointments History

Help
Contact Website Support

Terms and Conditions
Privacy Policy
FAQ

Step 5 – Press “Confirm”

Please confirm you would like to **cancel** this appointment:

Location	Date	Clinic/Clinician	Doctor information
Cathays Surgery	Mon 5 March 2018 at 10:15AM	Dr Steve Wilkinson	Male

Confirm

Help
Contact Website Support

Terms and Conditions
Privacy Policy
FAQ

Task Number	12
Task Name	The user viewing their appointment history and prescriptions
Pre-condition	The user must log into in the application
Step Number:	Step Description:
1	Type in Username and Password
2	Press ‘Log In’
3	Press ‘Appointments’
4	Press ‘Appointment History’

Analysis of task:

Will the user realistically be trying to do this action?

Sometimes

- The action can be carried out to see their previous appointments but also a copy of their prescription, so they can see the medicine they were given on that occasion

Is the control for action visible?

Yes

- It is displayed in plain text

Is there a strong link between the control and the action?

Yes

- The button is clearly labelled "Appointment History"

Is the feedback appropriate?

OK

- The clinic / clinician is not aligned with the results and the results seem to show clinician and not clinic. Prescription header alignment issue too. Might suggest the PDF attachment link is turned into a button to stay consistent with the theme.

Severity of problems encountered:

0

Reason:

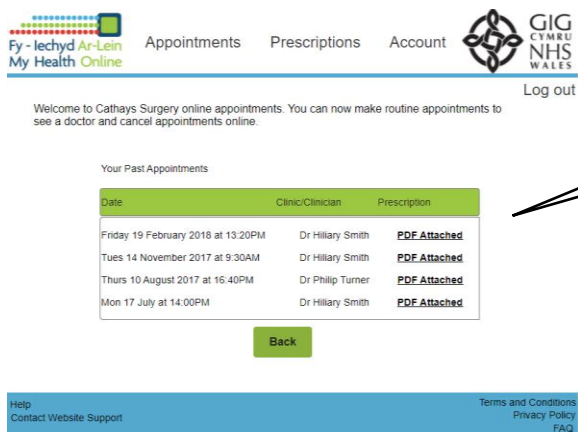
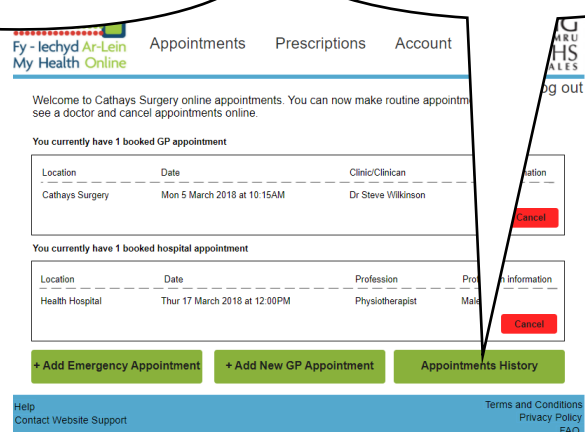
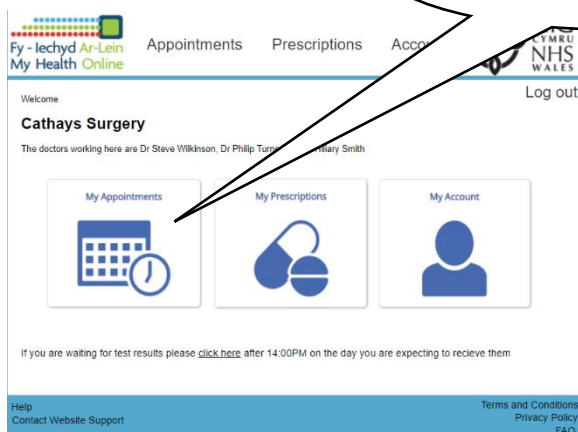
No problems encountered

Evidence:

Can see step 1 and 2 above

Step 3 – Press
"Appointments"

Step 4 – Press
"Appointments History"



The feedback page

Task Number	13
Task Name	The user requesting a repeat prescription
Pre-condition	The user must log into in the application
Step Number:	Step Description:
1	Type in Username and Password
2	Press 'Log In'
3	Press 'Prescriptions'
4	Press 'Request'
5	Press 'Submit Request' on the confirmation page

Analysis of task:

Will the user realistically be trying to do this action?
Yes - This will action will be carried out as it is on the main services the application offers

Is the control for action visible?
Yes - The request button is located next to the prescription

Is there a strong link between the control and the action?
Yes - It is clearly labelled "Request"

Is the feedback appropriate?
Good - Not sure about some of the language. "There are no unavailable repeats to display"

Severity of problems encountered:	Reason:
1	Would be good to get offered to book an appt now when seeing the "Please note: This is the last request you can make for this prescription, please make an appointment to see your GP for a review." Could include a check box for to tick to arrange a new appt once the confirmation has gone through.

Evidence:

Can see step 1 and 2 above

Step 3 – Press “Prescriptions”

Step 4 – Press “Request”

Step 5 – Press “Submit Request”

Task Number	14
Task Name	The user leaving a comment on a prescription
Pre-condition	The user must log into in the application
Step Number:	Step Description:
1	Type in Username and Password
2	Press ‘Log In’
3	Press ‘Prescriptions’
4	Press the date of the prescription
5	Write the comment in the patient’s box
6	Press ‘Submit’

Analysis of task:

Will the user realistically be trying to do this action?
On the occasion
- The user may get side-effects from prescriptions that may need to be quickly discussed with a doctor

Is the control for action visible?
No
- There is no indication that you need to click on the prescription to give feedback.

Is there a strong link between the control and the action?

No

- It isn't clear to the user what clicking on the date of the prescription does

Is the feedback appropriate?

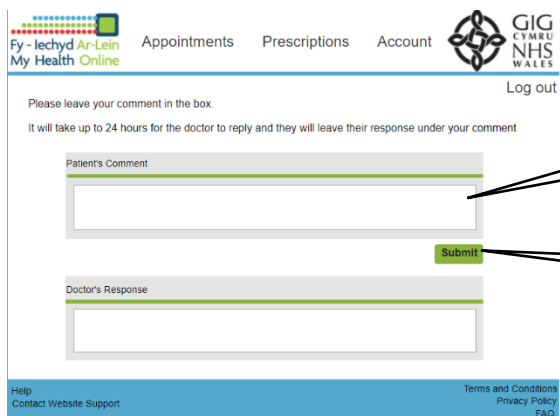
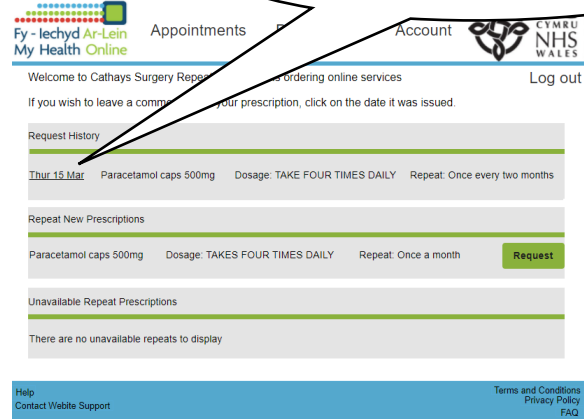
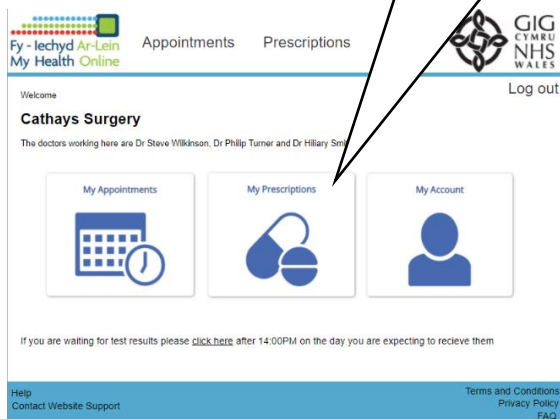
No

- There is no feedback that the comments have been received.

Severity of problems encountered:	Reason:
5	No clickable button
4	No feedback
1	The Doctor's comments could be removed during the input stage
3	How is doctor's feedback alerted to the user? What if the doctor needs to see the patient urgently?

Evidence:

Can see step 1 and 2 above



Step 5 – Type in the comment

Step 6 – Press “Submit”

User Testing – Think Aloud


The three users who participated in the testing:

User 1 – 65 years old retiree

User 2 – 43 years old IT manager

User 3 – 21 years old dentist student

Test 1 – Apply for a new account

Preconditions: The user needs to have the application open				
User	Step	Think Aloud	Problem Areas	Good Usability
1	1	The user couldn't locate the click here to apply for an account	<p>The user didn't find it clear on the log in page where to apply. They got confused between applying and registering an account</p> 	
	2	The user found it simple to fill out their details in the text boxes	No problems found	The form was simple and quick to fill out
	3	The user easily pressed 'Apply'	No problems found	The button was clear and large enough for the user

Preconditions: The user needs to have the application open				
User	Step	Think Aloud	Problem Areas	Good Usability
2	1	User is easily found click here to apply for an account	No problems found	
	2	User filled out the form easily, but didn't know the format to put	There was only one box and didn't indicate the format	A simple and clear form to fill out

		the details in as it wasn't clear		
	3	The user easily pressed 'Apply'	No problems found	

Preconditions: The user needs to have the application open				
User	Step	Think Aloud	Problem Areas	Good Usability
3	1	The user easily located the click here button to apply for an account	No problems found	
	2	The user typed in their details	No problems found	
	3	The user quickly located the 'Apply' button	No problems found	The buttons were large and clear on the page

Test 2 – Logging into their account

Preconditions: The user needs to have the application open				
User	Step	Think Aloud	Problem Areas	Good Usability
1	1	The user found it easy to enter the username and password	No problems found	Easy to type in the right information. The text boxes are clear.
	2	The user knew to select 'Log In' to access their account	No problems found	The button is large and clear enough for the user

Preconditions: The user needs to have the application open				
User	Step	Think Aloud	Problem Areas	Good Usability
2	1	The user can easily type in their details	No problems found	Large icons used which is useful for people which who may be visually impaired
	2	The 'Log In' button was clear to the user	No problems found	

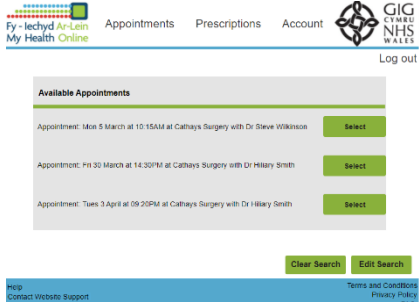
Preconditions: The user needs to have the application open				
User	Step	Think Aloud	Problem Areas	Good Usability

3	1	The user typed in their details, didn't like their password was on display	Password being on display is a security risk	The layout is familiar to other log in pages on different websites
	2	The user clicked 'Log In' button really quickly	No problems found	

Test 3 – Book a GP appointment

Preconditions: The user needs to be logged into their account				
User	Step	Think Aloud	Problem Areas	Good Usability
1	1	The user easily selected 'Appointments'	No problems found	The icons used are clear what their function is
	2	The user easily selected 'Add New GP Appointment'	No problems found	
	3	The user worked through the search criteria quickly	No problems found	The search filters are easy to understand to the user
	4	The user found it simple to select an appointment	No problems found	

Preconditions: The user needs to be logged into their account				
User	Step	Think Aloud	Problem Areas	Good Usability
2	1	The user located the 'Appointments' button easily	No problems found	The icons are large on the homepage
	2	Easily located the button 'Add New GP Appointment'	Didn't know if they wanted an emergency appointment or not	
	3	The user thought the search page was busy so found it a lot to fill out	No problems found	

	4	The user found it simple to choose an appointment and selected the appropriate 'Select' to the required appointment	Found it difficult to separate the appointments by date and time so it took a while to process them all 	
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Preconditions: The user needs to be logged into their account				
User	Step	Think Aloud	Problem Areas	Good Usability
3	1	The user clicked 'Appointments'	No problems found	
	2	The user clicked 'Add New GP appointment'	No problems found	
	3	Typed in search criteria	No problems found	
	4	The user clicked the 'Search' button	No problems found	
	5	The user selected an appointment	No problems found	The layout is simple, and the appointments have been spread out to make them clearer

Test 4 – Book an emergency appointment

Preconditions: The user needs to be logged into their account				
User	Step	Think Aloud	Problem Areas	Good Usability
1	1	The user easily selected 'Appointments'	No problems found	
	2	The user easily selected 'Add Emergency Appointment'	No problems found	
	3	The user typed in their problem	No problems found	The user found the text box large enough to discuss their problem

	4	The user easily selected an appointment	No problems found	
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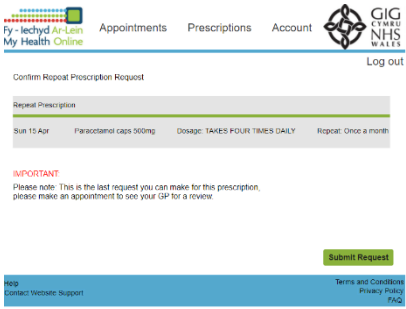
Preconditions: The user needs to be logged into their account				
User	Step	Think Aloud	Problem Areas	Good Usability
2	1	The user easily found 'Appointments'	No problems found	It's very clear as the icons have good illustrations with the words
	2	The user typed in their problem	No problems found	
	3	The user selected 'Submit'	No problems found	
	4	The user selected their appointment by clicking 'Select' next to an appointment	The same problem as before, they struggled to separate the date and time which took them a while to process	

Preconditions: The user needs to be logged into their account				
User	Step	Think Aloud	Problem Areas	Good Usability
3	1	The user selected 'Appointments'	No problems found	
	2	The user selected 'Add Emergency Appointment'	No problems found	The buttons were clear on the difference of appointments they are
	3	The user found it easy to type in their problem	No problems found	
	4	The user easily located an appointment and selected the appropriate one for them	No problems found	

Test 5 – Request a prescription

Preconditions: The user needs to be logged into their account				
User	Step	Think Aloud	Problem Areas	Good Usability
1	1	The user selected 'Prescriptions'	No problems found	

	2	The user selected request on the prescription	No problems found	The user thought the request button stood out on the page
	3	The user selected 'Submit Request' on the confirmation page	No problems found	

Preconditions: The user needs to be logged into their account				
User	Step	Think Aloud	Problem Areas	Good Usability
2	1	The user found 'Prescriptions' button clear	No problems found	
	2	The user found it clear where to request a repeats prescription	No problems found	The repeat prescription page is very clear to the user
	3	The user found the confirmation page clear and selected 'Submit Request' but would have liked to be able to book appointment straight away as being told they need a review	Not being able to go straight to booking an appointment 	

Preconditions: The user needs to be logged into their account				
User	Step	Think Aloud	Problem Areas	Good Usability
3	1	The user easily clicked 'Prescription'	No problems found	
	2	The user located the request button	No problems found	
	3	The easily understood the confirmation page and selected 'Submit Request'	No problems found	The text is simple to understand