

# **Community Diagnostic Centres Patient Experience in the NHS: A National Study**

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## **Acknowledgements**

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## Executive Summary

The Community Diagnostic Centres (CDCs) Patient Experience Report for 2024 explores the experience of patients at 91 NHS CDCs across England. These centres aim to provide local, accessible diagnostic services, aligned with recommendations from the 2020 Richard's report to enhance healthcare accessibility, particularly in deprived areas. The Experience-Based Design (EBD) methodology was utilised to evaluate experiences systematically across operational CDCs using an emotional mapping approach.

### Key Findings:

- **Positive Experiences:** 90% of responders felt “happy”, “supported”, “good”, or “comfortable”.
- **Challenges Identified:** The most significant issues pertained to navigation and accessibility. Many patients struggled to locate CDCs due to poor signage, confusing maps, and incorrect postcodes.
- **Operational Insights:** Wait times varied significantly, with 30% of patients receiving an appointment within three days, while 24% waited over a month. Most patients (81%) underwent a single diagnostic test per visit.
- **Staff Perspective:** Feedback from 665 CDC staff on their view of the patient experience revealed that while communication with patients was perceived positively, there were operational concerns, such as high DNA (did not attend) rates and inadequate waiting area management that staff felt would negatively impact the patient experience. Staff echoed patient concerns regarding CDC accessibility.
- **CDC Archetype Comparison:** Experiences were generally similar across different CDC models (Standard, Spoke, and Large), although Standard CDCs had more issues with wayfinding. Staff in Standard CDCs reported more positive experiences overall but highlighted challenges related to the physical environment.

### Recommendations:

1. Improve wayfinding with better signage, accurate postcodes, and enhanced pre-visit information.
2. Offer more flexibility in appointment scheduling to increase patient satisfaction.
3. Form focus groups with patients and staff to co-design improvements.
4. Share the report's findings widely, celebrating successes while addressing key issues collaboratively.
5. Establish local initiatives to ensure each site meets the accessibility needs of diverse populations.
6. Continue regular experience-based assessments and communicate improvements transparently.
7. Capture improvement stories from CDCs to share across the NHS

**Next Steps** include involving stakeholders to improve wayfinding enhancements and repeated patient and staff surveys. This approach will help achieve the CDC vision of optimised patient and staff experience, fostering a patient-centered, accessible diagnostic service.

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## National Context

To meet the recommendations of the 2020 Richard's report, the Community Diagnostic Centre (CDC) programme seeks to deliver diagnostic centres in the heart of local communities, and where possible, remote to acute footprints. These CDCs enable improved access to diagnostic tests often in areas of high deprivation and recognised local reticence to attend traditional healthcare settings. Key to achieving this ambition is to ensure that the CDC provides an optimised experience for its patients, service users, and staff alike.

Experience Based Design (EBD) is a proven methodology to gain a baseline understanding of experience as well as its monitoring on an ongoing basis. The aim of this process is to enable appropriate, targeted interventions to constantly understand and improve the environment and way we deliver care. An integral part of the CDC programme's work has been its collaboration with NHS Elect in the rollout of EBD nationally. The far-reaching scope of the patient survey, accessing over 5000 respondents in 91 sites nationally, provides a detailed insight into the perspective of CDC patients across all regions.

The findings of the CDC patient experience survey correlate largely to the anecdotal feedback received from individual systems and regions. It is reassuring, and testimony to the commitment of all involved, that patient experience is overwhelmingly positive. The value add of CDCs to the local population is recognised in the detailed responses returned. The responses included notable positivity around the CDC location, expedited care received and quality communication and interactions.

The results did highlight areas for improvement, namely around signage and wayfinding in CDCs. Therefore, this becomes a priority for the programme to address, in conjunction with Estates colleagues' guidance and specialist input from wayfinding experts. The commitment of the CDC national team is to meaningfully respond to survey results. Participating sites have received additional funding to deliver service or estate improvements where the patient survey demonstrated a clear opportunity for improved experience. This is key to ensuring we meet our aims to address language, learning or cognitive issues for patients and their carers while receiving diagnostics in CDCs. EBD results allow us to hear how these groups of patients feel and understand what we can then do to address and meet their respective needs, ultimately encouraging and increasing attendance for all communities and cultures.

The CDC programme continues its partnership with NHS Elect in the delivery of EBD nationally. The rollout of a staff survey will commence in July 2024 and plans are already in place for the second wave of CDC patient surveys (Autumn 2024). The repeat survey cycle will enable the initial participating 91 sites to monitor progress on patient experience and to assess the impact of interventions since the initial cycle. Up to 40 additional sites which were not sufficiently developed to participate in Wave I are expected to undertake an EBD survey as part of Wave II.

Achieving optimised patient and staff experience is integral to the CDC vision. We continue to work to ensure that monitoring and improvement form part of the bedrock of CDC governance.

A review of patient experience in CDCs was undertaken by Healthwatch during the same period. Key findings of the report; '[A local diagnosis: Learning the lessons of Community Diagnostic Centres](#)' are listed below;

### Key findings

- Almost everyone (93%) we spoke to told us about good experiences at Community Diagnostic Centres (CDCs).
- Almost a third of the general public (31%) said getting the tests done quickly was their top priority when choosing where to get a diagnostic test.
- Most people weren't offered a choice of location (78%) or time (61%) around their appointments – people said they would have liked a choice when the appointment given wasn't ideal for them.
- Local Healthwatch identified accessibility issues at several sites, including:
  - passive approaches to people's communication needs
  - barriers for d/Deaf people and people experiencing hearing loss
  - issues with English language interpretation
  - barriers for people with mobility difficulties, Autism, and dementia
- Visiting the CDC was convenient for most people we spoke to – 70% arrived in less than 30 minutes, and 26% arrived in less than an hour.
- People told us about issues caused by a lack of information about how to get to the site.

### Recommendations at a glance

- We want patients and referrers to have up-to-date and detailed information about CDCs available to them.
- We want CDC sites to be as accessible as possible, through:
  - Independent reviews of the accessibility of each site
  - Proactive identification and response to communication and accessibility needs
  - Local initiatives to hear from people with different accessibility needs
  - Listing information about the accessibility of different sites online
- We want people to get clear information about travelling to a CDC through the NHS Service Finder and in referral letters.
- We want to see increased signposting to support for parking and travel costs where applicable.
- We want formal evaluations of the programme to focus on its impact on overall diagnostic activity, workforce and capital allocation, patient safety and experience, and effects on health inequalities.

The focus of the Healthwatch study was not the same as this EBD study but, many of the findings are similar with 93% of patients reporting a good experience and the recommended actions highlighting the need for improved information and wayfinding for patients.

## Experience Based Design

Experience-based Design (EBD) is a method of service improvement. It involves using experience, rather than attitudes or opinions, to gain insights from which opportunities for improvement can be identified. This is why it lends itself perfectly to putting patients and service users at the centre of design.

Professor Simon Conroy, a geriatrician at Central and North West London NHS Foundation Trust states 'Acute hospital care is all too often focused on bed-days, waiting lists and discharge decisions. Experience Based Design helps clinicians focus more on improvements that matter to patients and provide a better experience'.

The EBD approach has 4 phases:

1. Capture
2. Understand
3. Improve
4. Measure

Evidence shows that involving patients and the public in the planning, design and delivery of health and social care services can lead to more coordinated and efficient services which are more responsive to local community needs, deliver the services people will want in the future, and identify areas for service improvement and transformation (Phases 1, 2, and 3). Phase 4 utilises EBD as another dimension of measurement for improvement.

Patient-centred care is likely to be more effective as it recognises that services are better when delivered with patients rather than to patients.

The components of good design are performance, engineering and the aesthetics of experience. Traditionally, healthcare service improvement methods have concentrated on the first two; performance and engineering and have achieved demonstrable results such as shorter waiting times, changes in healthcare processes and so on. However, the third aspect, the aesthetics, has had less focus. This means that there has been a lack of attention on the usability of the service for patients or service users and staff.

At NHS Elect, we have co-developed an experience-based design technique to enable emotional mapping to be done at scale and across many services providing an opportunity to utilise this approach more easily in design and quality improvement.

Emotional mapping is an experience-based design technique used to gain insight into a journey, service or system to identify areas to improve what matters to service users. To use this approach, touch points are identified with stakeholders in the system or service journey. Touch points are defined as moments in the journey that trigger an emotional response. These should be moments that are most common to most people in the journey or service being examined. Six to eight touch points are needed across the journey to undertake a study.

## Methods

A development team of Community Diagnostic Centre (CDC) managers, NHS Elect and the NHS England CDC team worked together to establish key aspects of the service users' CDC journey (touchpoints) and to oversee the design and testing of a prototype emotional mapping tool to use in CDCs.

Identifying touchpoints is key to the EBD process. Touchpoints are defined as common moments or processes in a typical service user journey that trigger an emotional response.

The development team worked together to understand and identify touchpoints common to all.

Six touchpoints of the CDC journey were agreed, these are:

- **Referral to the CDC:** thoughts or feelings and emotions when referred
- **Arrival at the CDC:** arriving, parking, reception
- **Waiting to be seen:** the waiting room
- **Communication with the team:** communication whilst in the CDC
- **Undergoing the test:** Phlebotomy / Scan / X-ray / Echo
- **Leaving the service:** leaving when the test is complete

The development group worked to test the touch points before agreeing to the above list. A prototype data collection questionnaire was developed and distributed to the development group to test the approach and confirm the clarity and suitability of the touchpoints.

This led to a pilot study of four sites. A summary of the pilot study findings can be found in (Appendix A). This study validated the methodology allowing the project to be scaled up across operational CDCs in England.

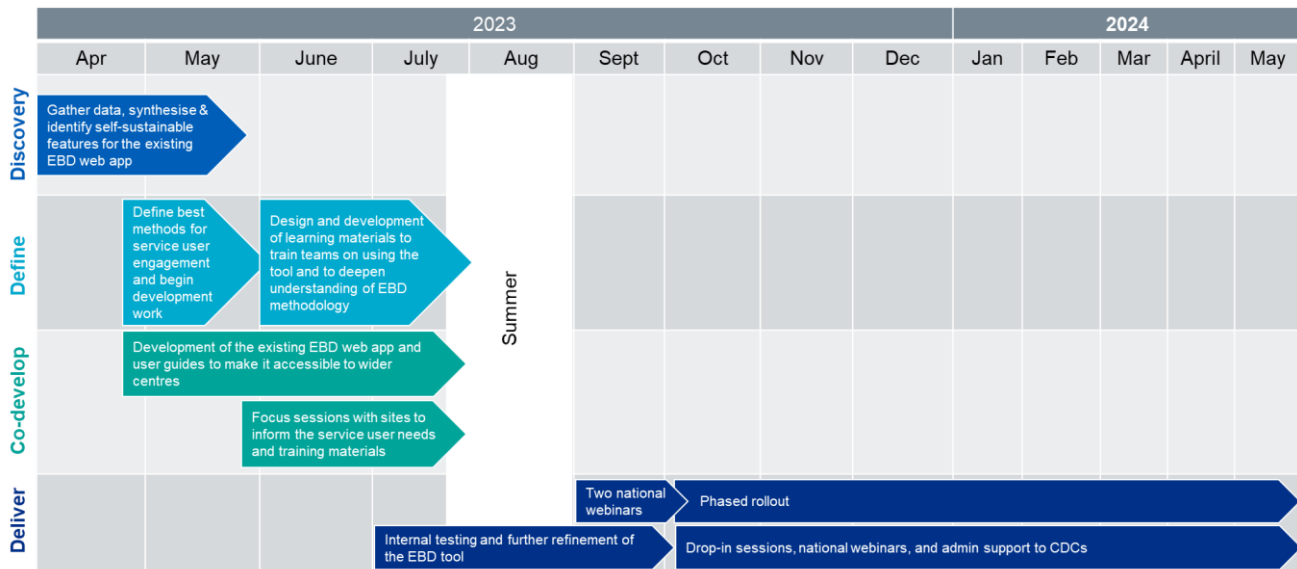
### EBD at scale

To undertake emotional mapping at a national scale, further development work was needed to make the understanding and application of EBD simple and self-service at a local level.

The plans to enable achieve this scale are illustrated in the roadmap below:



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NHS Elect achieved this by:

- Developing an online digital learning resource explaining the theory and application of EBD to staff overseeing EBD studies in local CDCs
- Creating unique links and QR codes to the questionnaire for each participating CDC, enabling easy access to the questionnaire
- Providing virtual training and support via a series of webinars and the creation of a 'help desk' team
- Technical support was provided as needed to help teams collect data, input information into the online tool and run reports locally
- Developing resources to be used locally to engage stakeholders in the study. For example, posters, emails, report templates, patient information leaflets
- Designing a monthly reporting system to monitor progress with the national spread
- Creating an emotional map collating all experience data which was reported monthly to provide ongoing input into the patient experience
- Developing a partnership approach to engagement with the national CDC team

## Results – Patients/Service Users

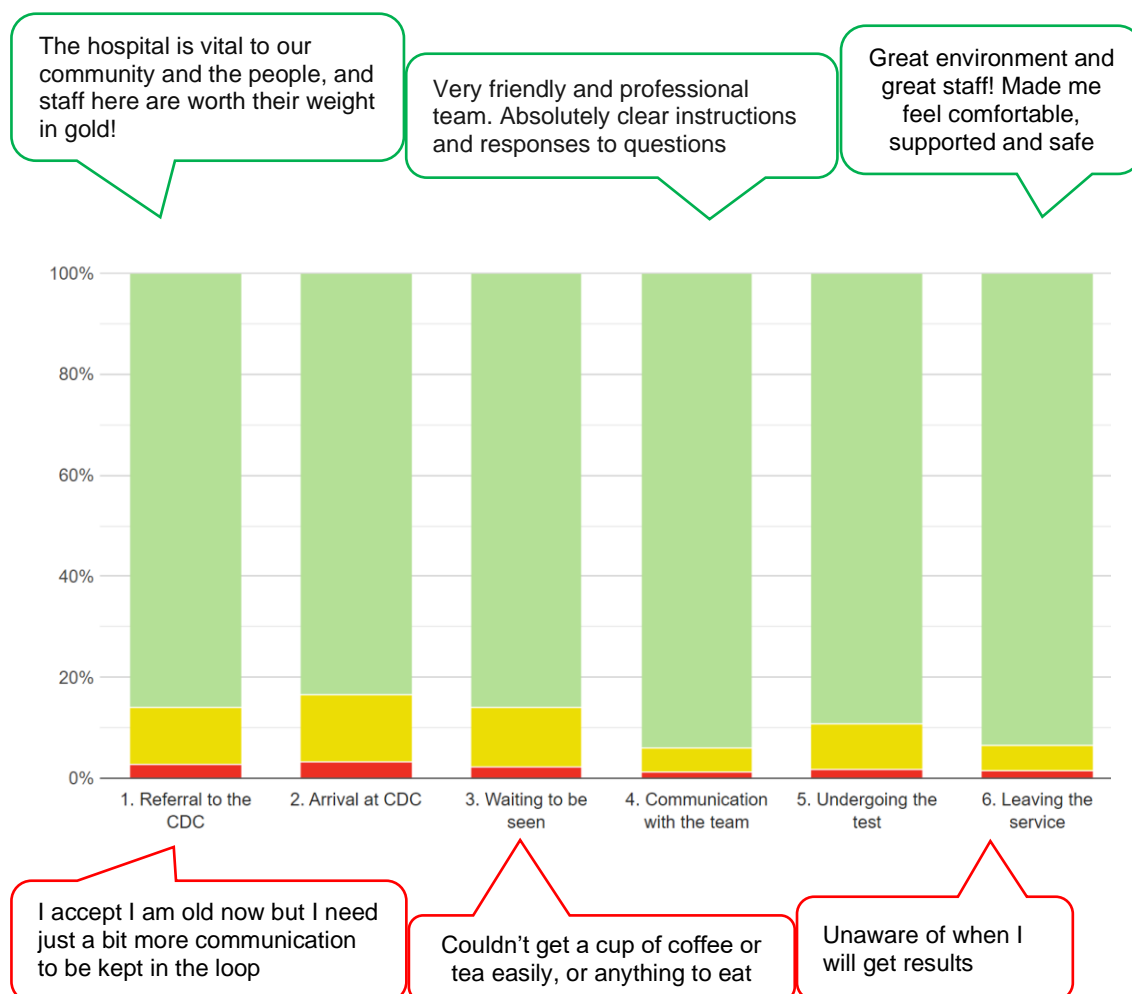


Figure 4: Emotional map showing the percentage of positive, neutral, and negative emojis selected at each of the 6 touchpoints, along with direct quotes taken from comments to annotate the chart (N= 5,502).

5,502 CDC service users across England completed the survey. 91 CDCs were involved in the study, all of whom completed an individual study of their own centre's service user experience.

The six CDC touch points were used as domains for the survey, service users were asked to choose an emoji to indicate generally how they felt about the domain in question, e.g. Negative, Positive, or Neutral.

They were then asked to express how they felt and share the emotions they were feeling.

Results were collated and expressed as an emotional map\* as seen in Figure 4 (six touch points displayed on the x-axis, and percentage of positive, neutral, or negative responses along the y-axis).

*\*Emotional maps allow for easy visual comparison of positive, neutral, or negative responses toward various touchpoints.*

## How Service Users Feel

Overall, the emotions experienced by service users during their experience with the CDC were positive. Figure 5 below shows the emotional words selected by service users across all six touchpoints combined, presented in a Pareto chart. A Pareto chart is a bar graph ordered from the most common response to the least. The red line relates to the right-hand axis and depicts the cumulative total percentage of responses. For example, in Figure 5, around 90% of responders felt “happy”, “supported”, “good”, or “comfortable”.

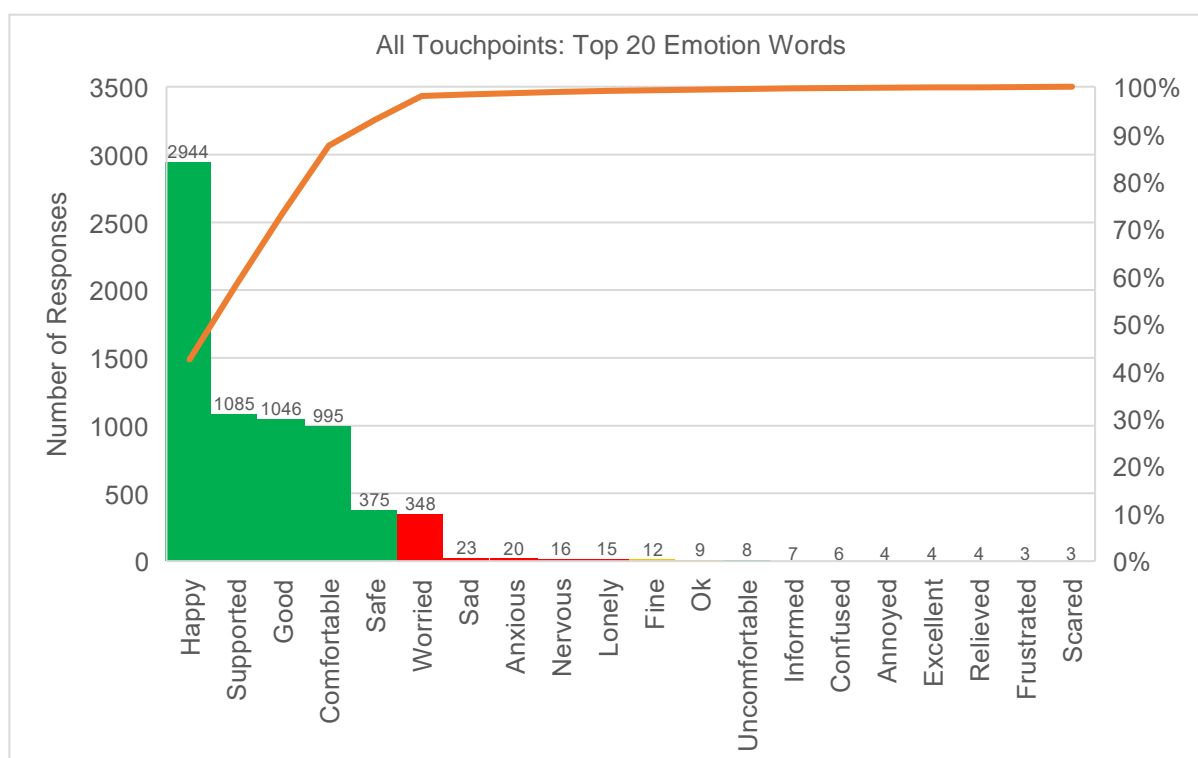


Figure 5: The top 20 emotional words selected to describe the service user’s experience at each of the six touchpoints.

## Emotions felt across the six touchpoints

The emotional words selected by service users at each of the six touchpoints can be seen in Figures 6 – 11 below. “Happy”, “supported”, “good”, “comfortable”, “safe”, and “worried”, were the top six words selected for all touchpoints.

## Community Diagnostic Centres Patient Experience in the NHS: A National Study

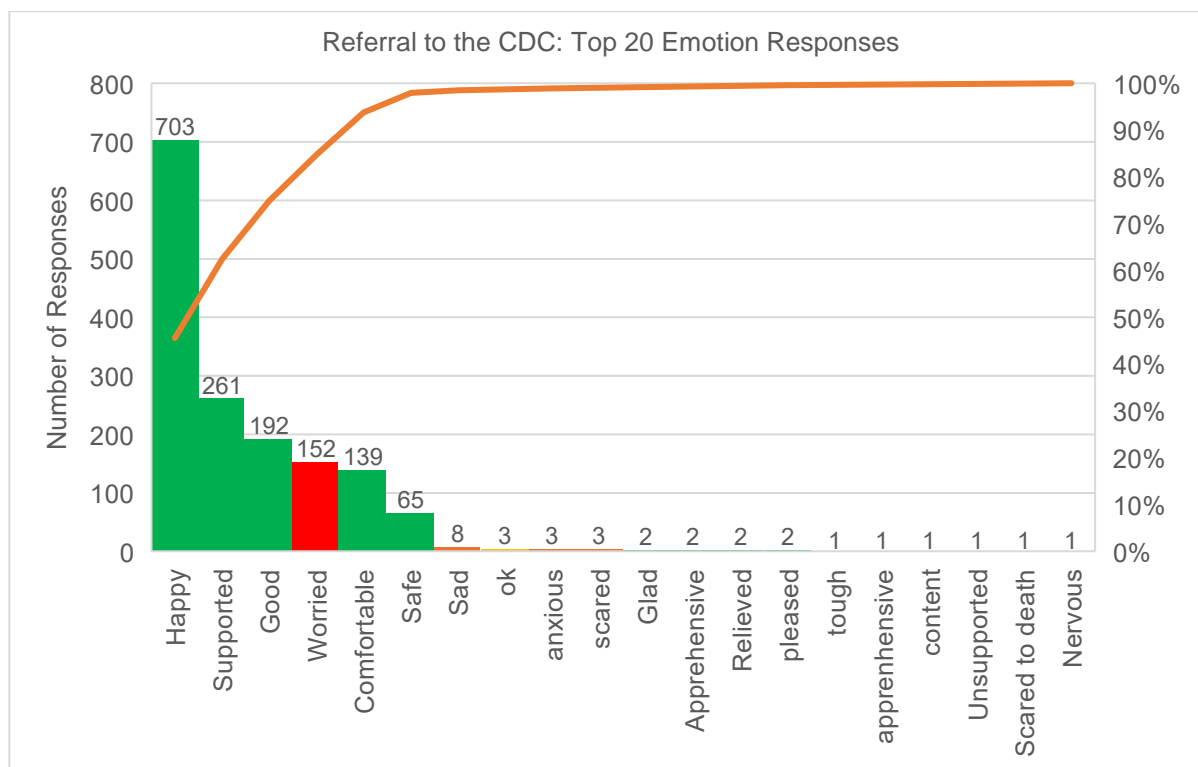


Figure 6: The top 20 emotional words selected to describe the service user's experience upon referral to the CDC.

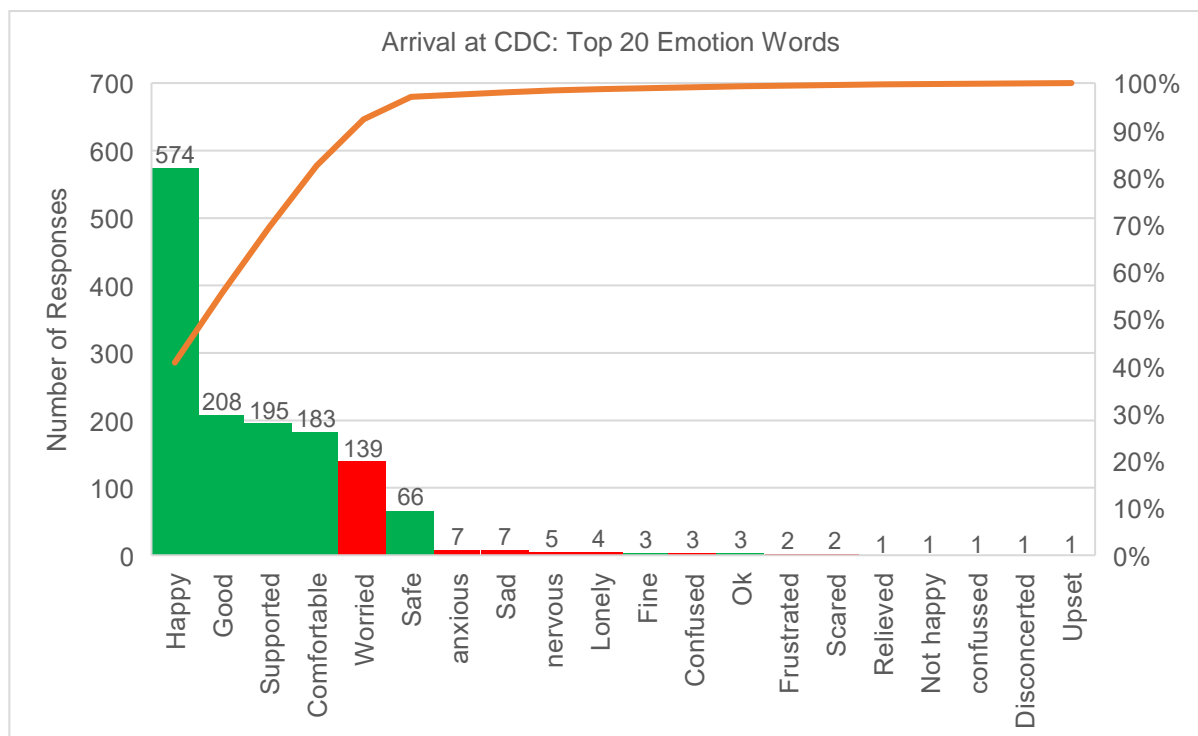


Figure 7: The top 20 emotional words selected to describe the service user's experience during arrival at the CDC.

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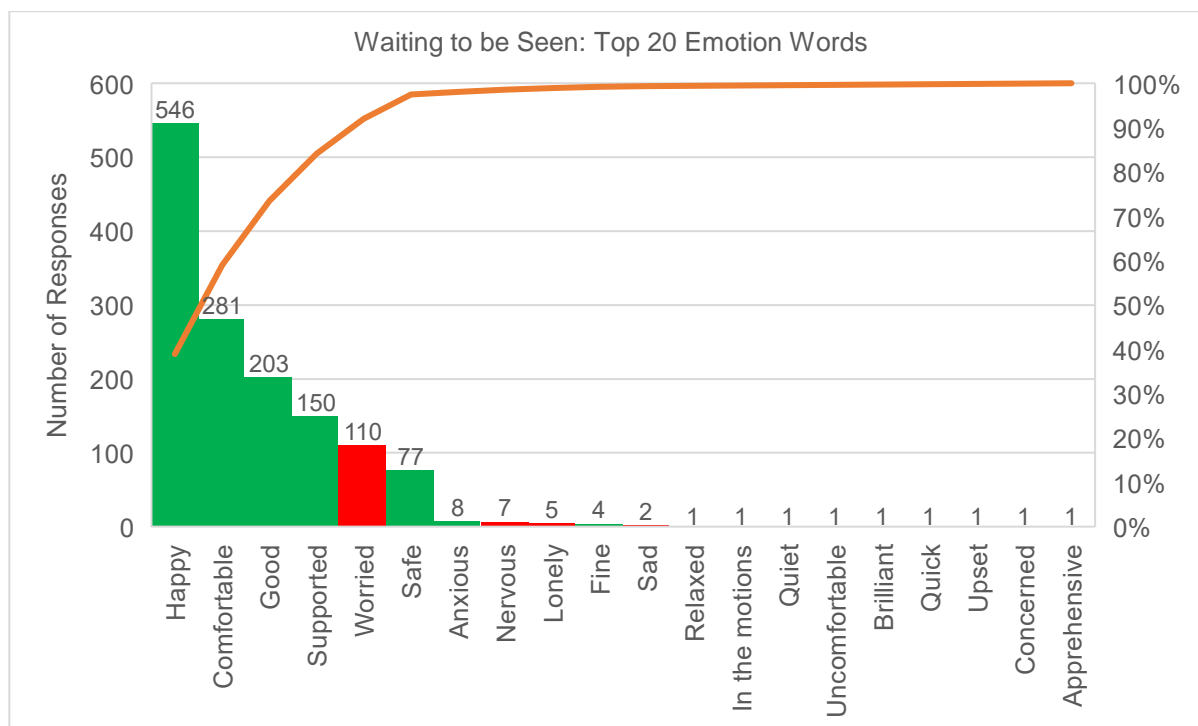


Figure 8: The top 20 emotional words selected to describe the service user's experience when waiting to be seen.

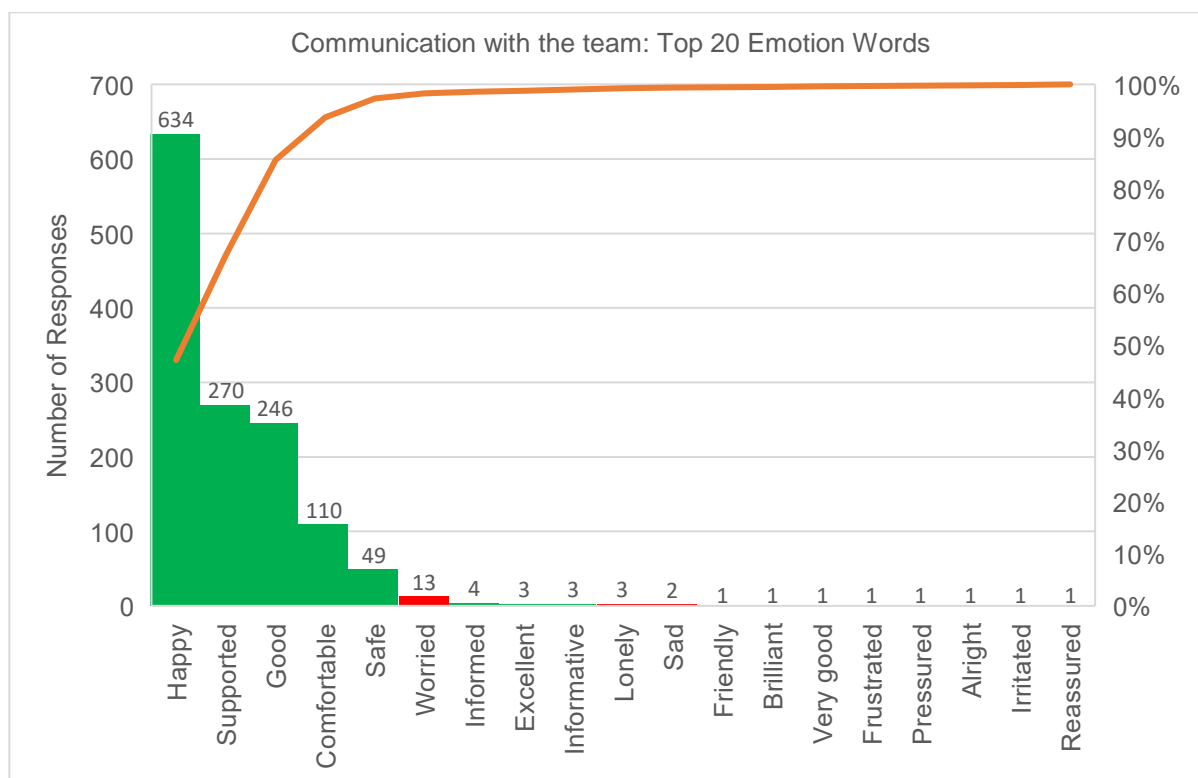


Figure 9: The top 20 emotional words selected to describe the service user's experience when communicating with the team.

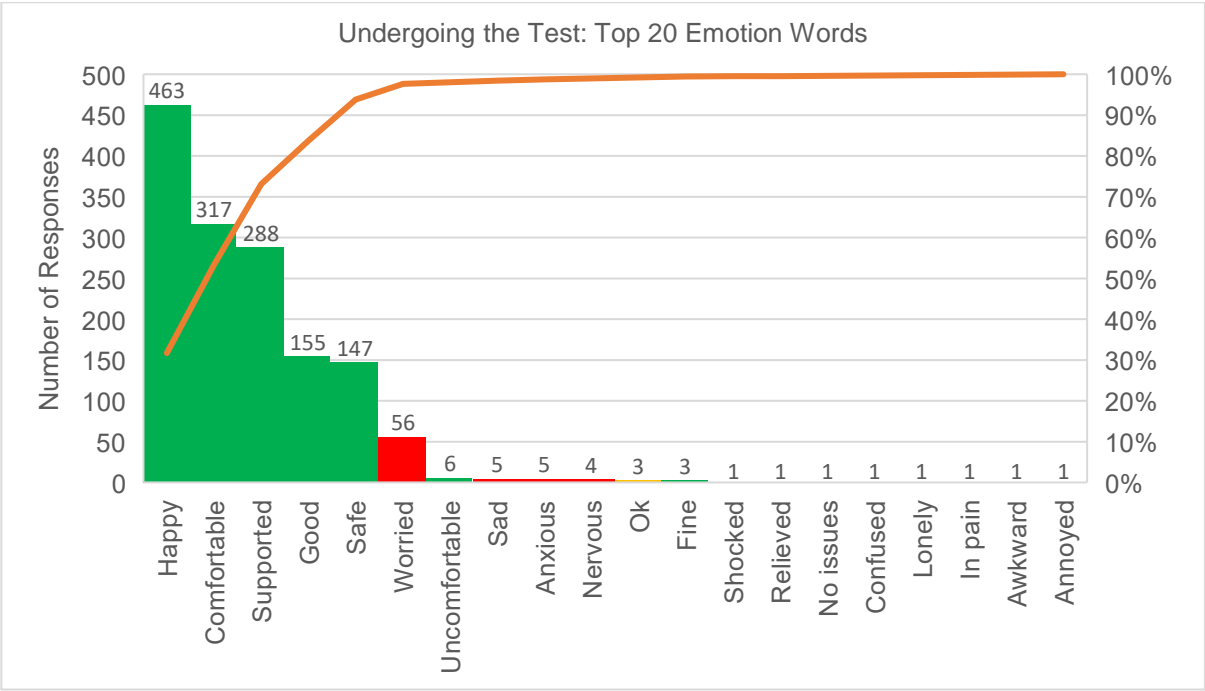


Figure 10: The top 20 emotional words selected to describe the service user’s experience when undergoing the test.

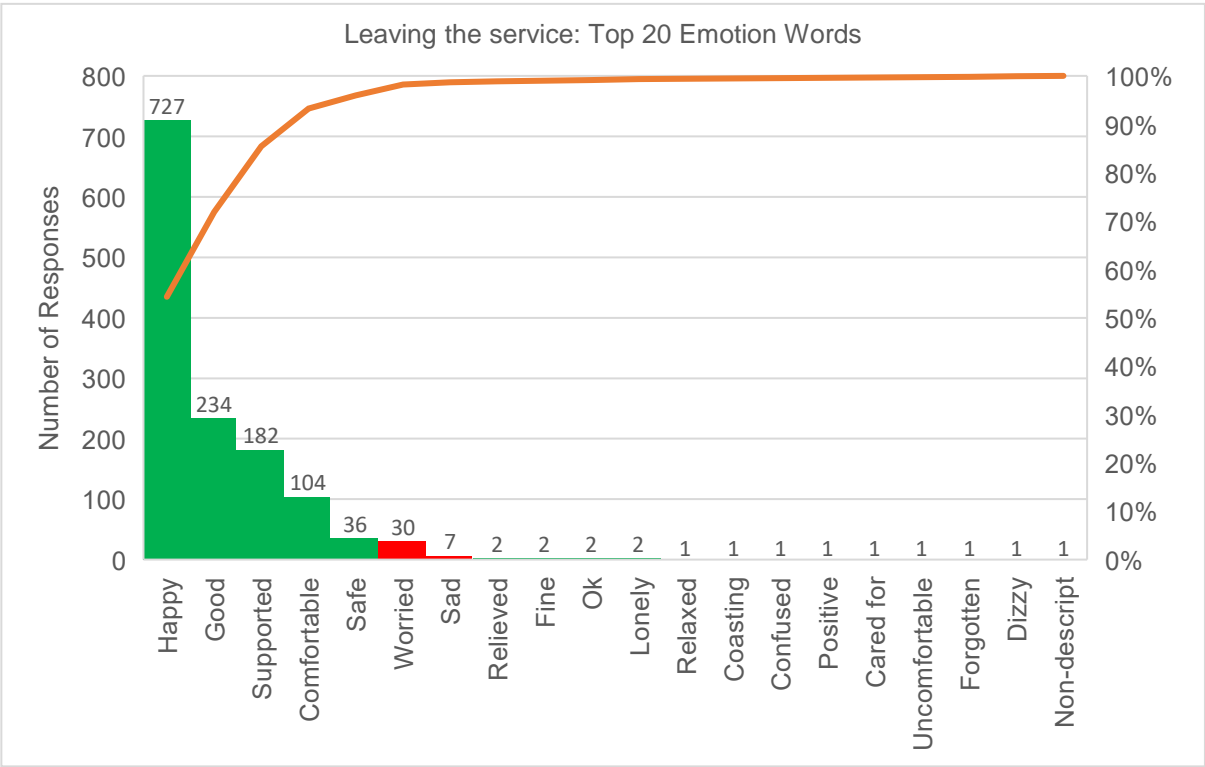


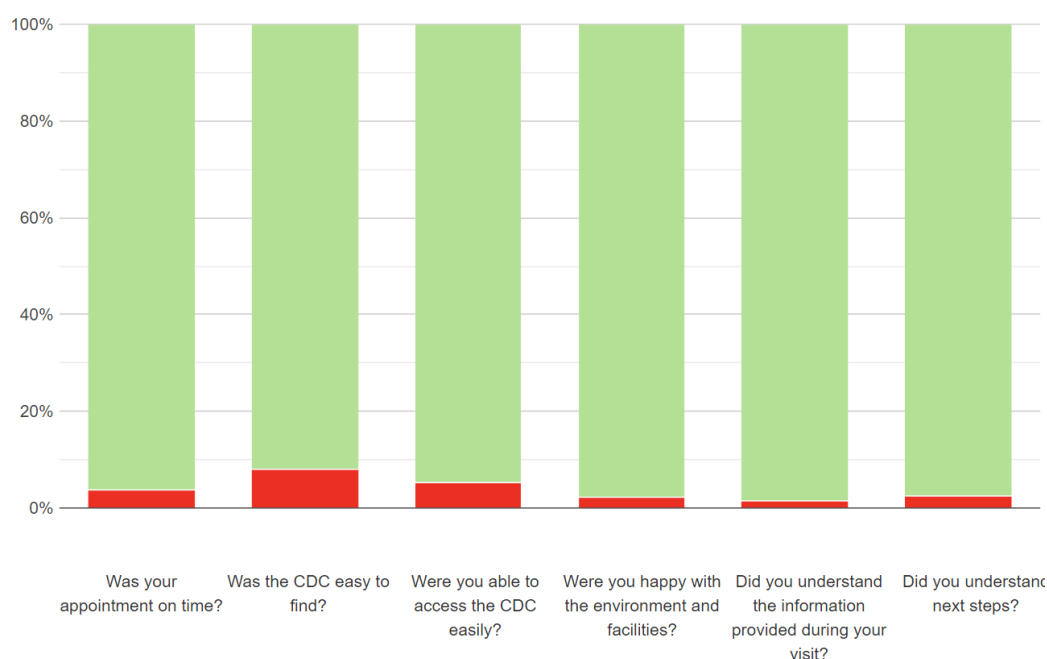
Figure 11: The top 20 emotional words selected to describe the service user’s experience when leaving the service.

## Thumbs Up/Thumbs Down

Six supplementary operational questions were added to the study. These questions were not designed to gather emotional insight but to provide data for commissioners on standards they expect to be in place in the CDC model. The questions were ‘closed’ to ease analysis. Service users were asked to select a positive or negative response using ‘thumbs up’ or ‘thumbs down’ images as responses.

Overall, responses to these operational questions were very positive, with at least 88% of service users reporting a ‘thumbs up’ (Figure 12). The most positive response was received to the question asking if service users understood the information provided in their visit, while the most negative response was given when asked if the CDC was easy to find.

Individual analyses locally of CDCs showed large variation in the number of positive and negative responses about how easy the CDC was to find, with some CDCs receiving over 40% thumbs down.



**Figure 12:** The proportion of “thumbs up” (green) and “thumbs down” (red) responses to the six supplementary questions along the X-axis.

## Wait Times

The wait time for an appointment varied across service users, with 30% receiving an appointment within 3 days, and 24% waiting a month or more (Figure 13). Service users most frequently waited between 2-3 weeks.

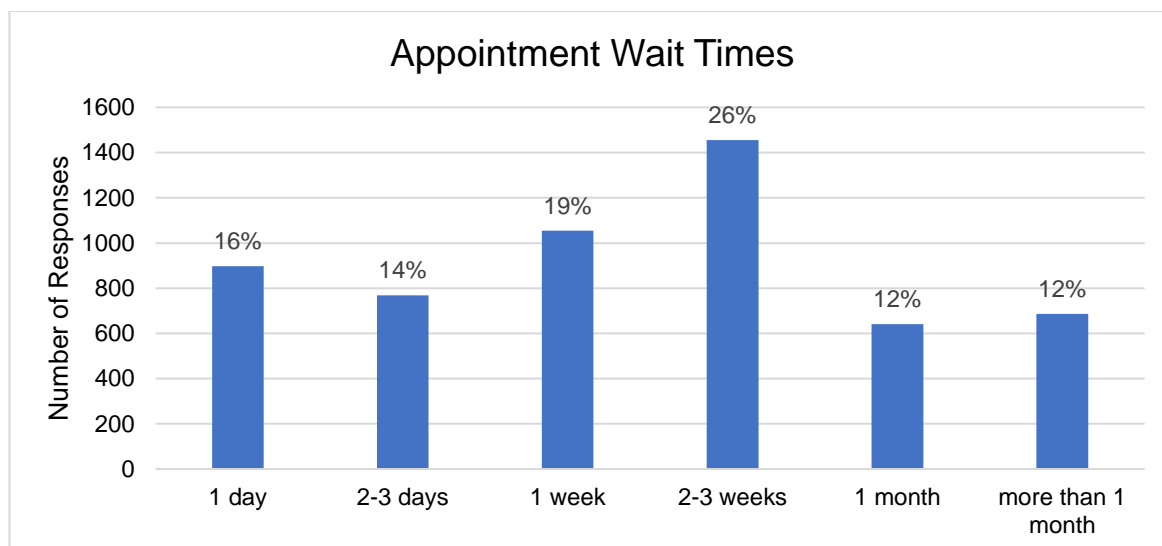


Figure 13: The length of time service users waited for their appointment at the CDC, with data labels showing the percentage of all service users waiting that length of time.

## Number of Tests

Service users were asked to state the number of tests they received during their appointment at the CDC. Most service users (81%) received one test during their visit, with very small numbers receiving more than 2 (Figure 14).

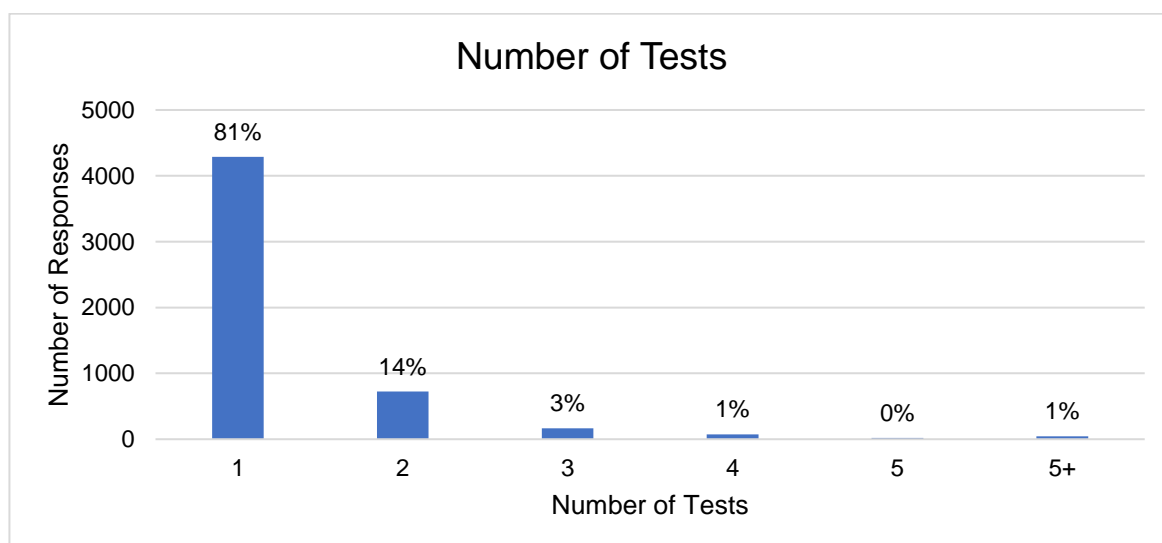


Figure 14: The number of tests service users received during their appointment at the CDC, with data labels showing the percentage of all service users receiving that number of tests.

## Communication with the team

Communication was rated the most positive touchpoint by service users (Figure 4). The top emotion words used to describe how service users felt about communication with the team were 'happy', 'supported', 'good', 'comfortable', and 'safe' (Figure 9).



Achieving such a positive response in the communication domain is remarkable. Usually, this domain is much more variable and other NHS services have identified this domain as an area for improvement. The emotional map from a large-scale study of older inpatients undertaken in 2020 illustrates this point (Figure 15). CDC staff should be commended for this achievement.

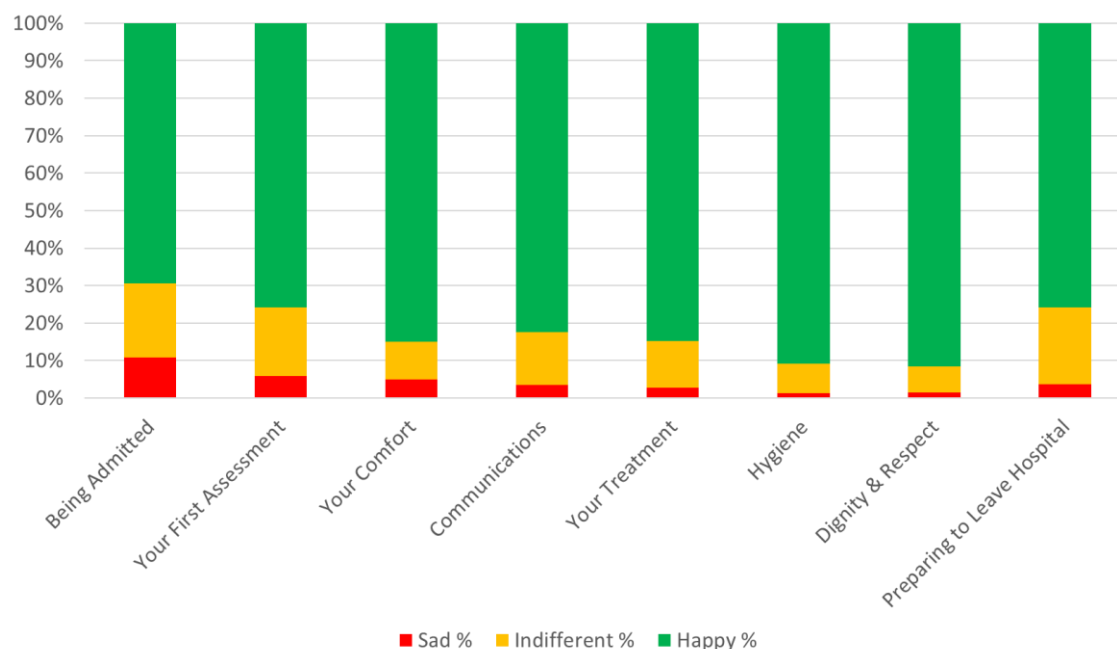


Figure 15: Emotional map generated through a large-scale study of 609 older inpatients in 2020.

Some of the comments received in the communication domain describe what made communicating with the team a positive experience for service users:

*“The clinician was very friendly and professional and put me at ease. Answered all my questions.”*

*“In and out, and a smile from everyone. A smile and greeting means a lot to people”*

*“The nurse who saw me was very careful to make sure I understood exactly what was wrong and how to treat it. I would say she was extremely professional and skilled.”*

### Arrival at the CDC

Arrival at the CDC was the touchpoint eliciting the most negative response from service users (Figure 4). Looking at the thumbs up or thumbs down chart (Figure 12), some service users reported that the CDC was not easy to find, which may have contributed to the

negative emotion felt on the arrival touchpoint. This hypothesis was further explained by the free text comments made by service users:

*“Difficulty finding unit. Not clear on the letter.”*

*“Couldn't find the building and no one to ask as very quiet on a Sunday. And very badly signposted. Requires bigger signs.”*

*“Unclear map and wrong postcode so ended up at the wrong place which was quite far from the CDC.”*

When a negative emoji is selected in response to any touchpoint, participants are invited to share their ideas to improve the experience. The ideas harvested to improve service users' experience when arriving at the CDC differed by CDC, but common themes were around improved signage, clearer instructions on the letter, and adding a map to the letter:

*“Better signage and map with the letter. Also more information about what to expect regarding my appointment.”*

*“You need better signage. Maybe a prompt sign on entry to the road so I know I'm going the right way.”*

*“Proper title of the clinic on the letter. A map would have been helpful”*

Wayfinding was an issue for patients when trying to find the CDC, but also when finding the correct location within the building. External road signs and more signage were requested by patients around the grounds and within the building to direct patients to the CDC location. Some patients also reported that the postcode provided did not take them to the correct location when using a Sat Nav. As many patients will use a Sat Nav to get to the CDC, the postcodes provided should be reviewed to ensure location accuracy.

## Results – Staff Survey

665 Community Diagnostic Centre staff also completed a staff questionnaire providing a staff perspective of the patient journey. This approach aims to ask staff to share their perspective as an observer of the patient and how they believe service users ‘feel’ on their CDC journey. There were responses from 665 staff across 63 CDCs involved in the study.

Results were collated and expressed as an emotional map as seen in Figure 16 (six touch points displayed on the X-axis, and percentage of positive, neutral or negative responses along the Y-axis).

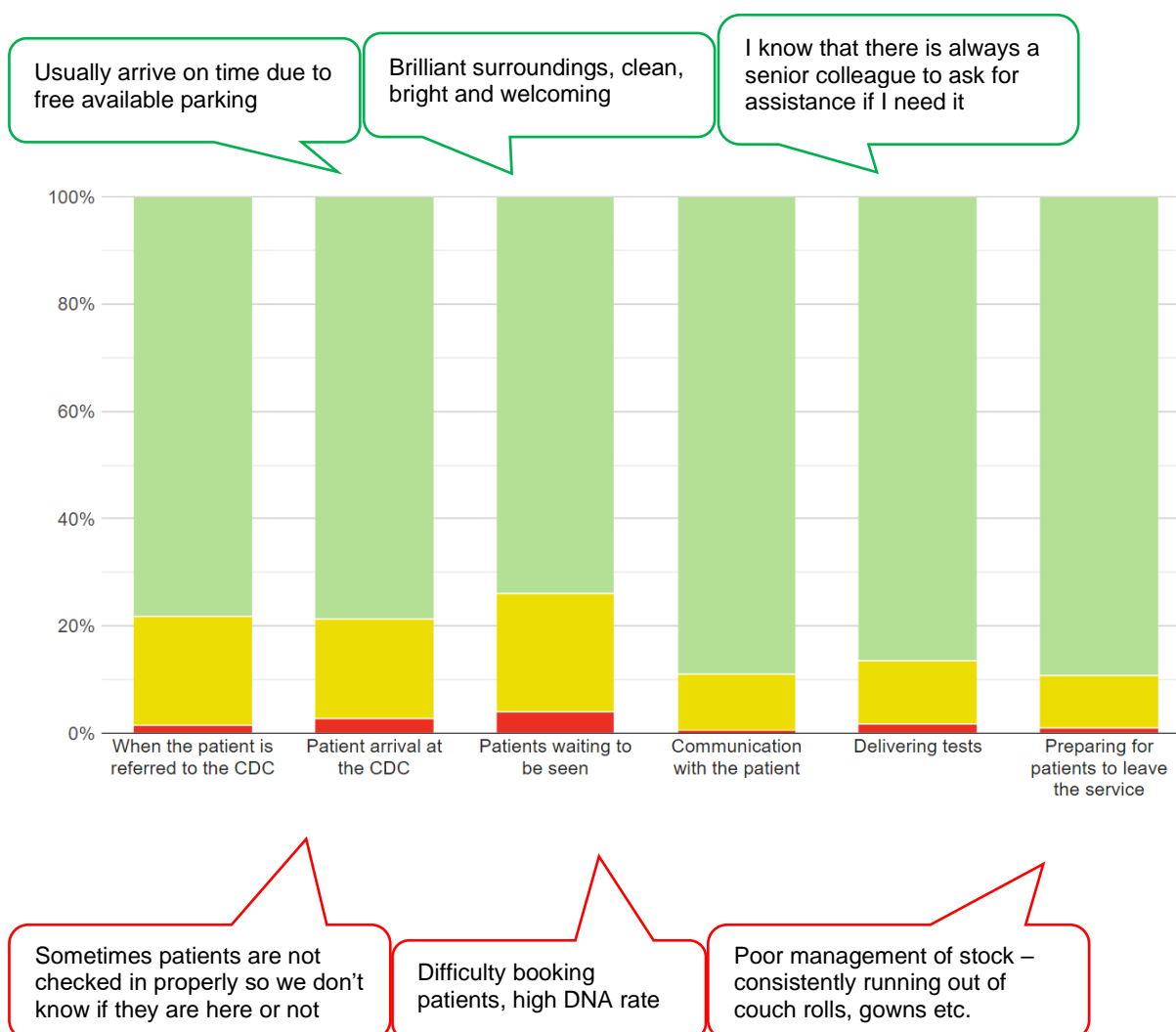


Figure 16: Emotional map showing the percentage of positive, neutral, and negative emojis felt at each of the 6 touchpoints, along with direct quotes taken from comments to annotate the chart.

## How Staff feel

Overall, the emotions experienced by staff when considering the service users' journey through the CDC were positive. Figure 17 below shows the emotion words selected by staff across all six touchpoints combined.

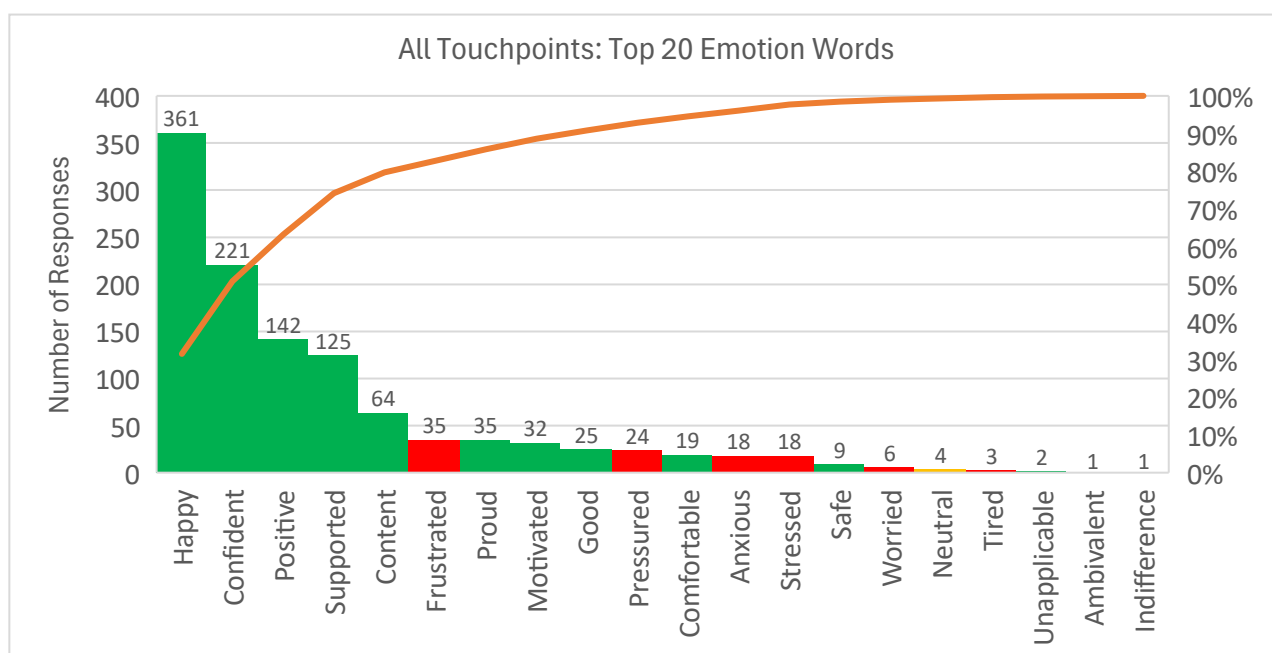


Figure 17: The top 20 emotional words selected to describe the staff's experience at each of the six touchpoints.

## Emotions felt across the touchpoints

The emotion words selected by staff at each of the six touchpoints can be seen in Figures 18 – 23 below. 'Happy' or 'confident' are the top emotions felt for each touchpoint.

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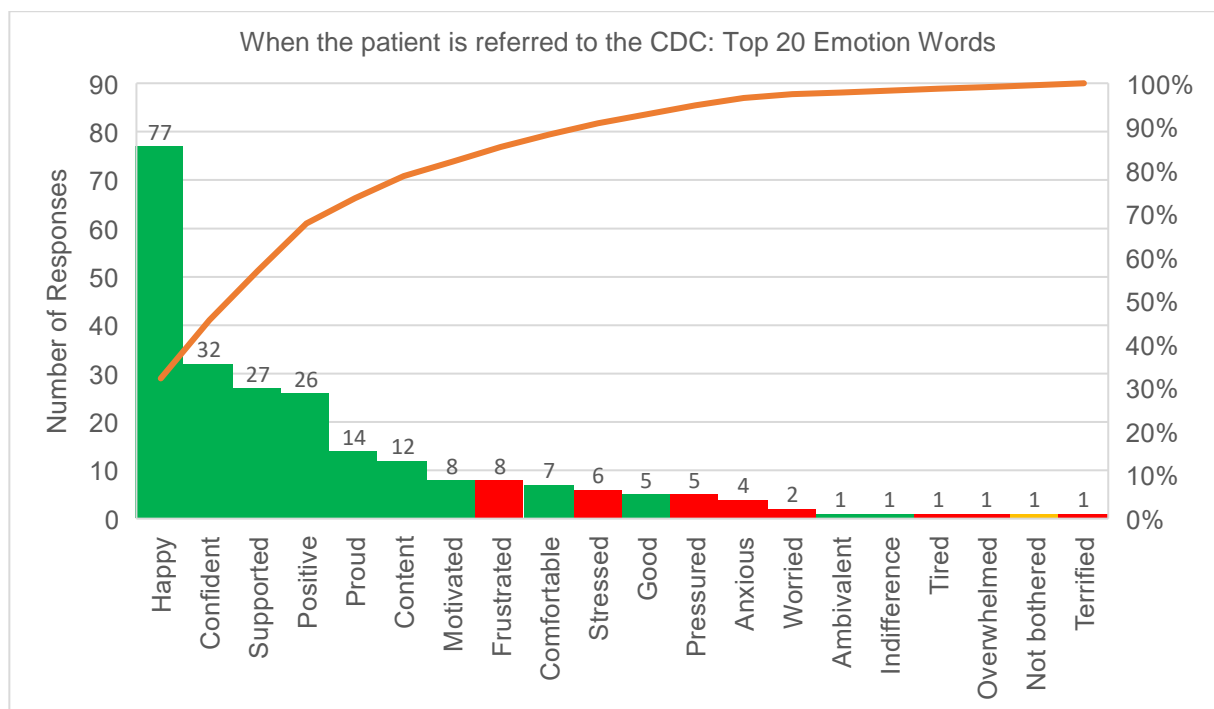


Figure 18: The top 20 emotional words selected to describe the staff's experience when patients are referred to the CDC.

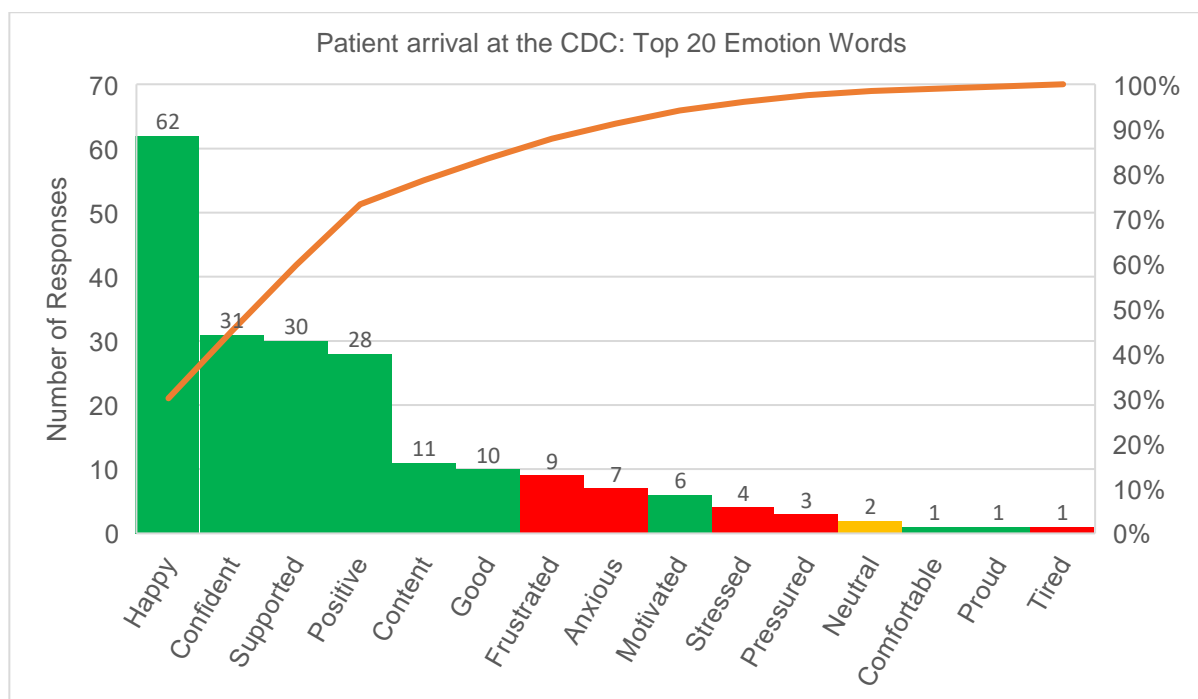


Figure 19: The top 20 emotional words selected to describe the staff's experience when patients arrive at the CDC.

## Community Diagnostic Centres Patient Experience in the NHS: A National Study

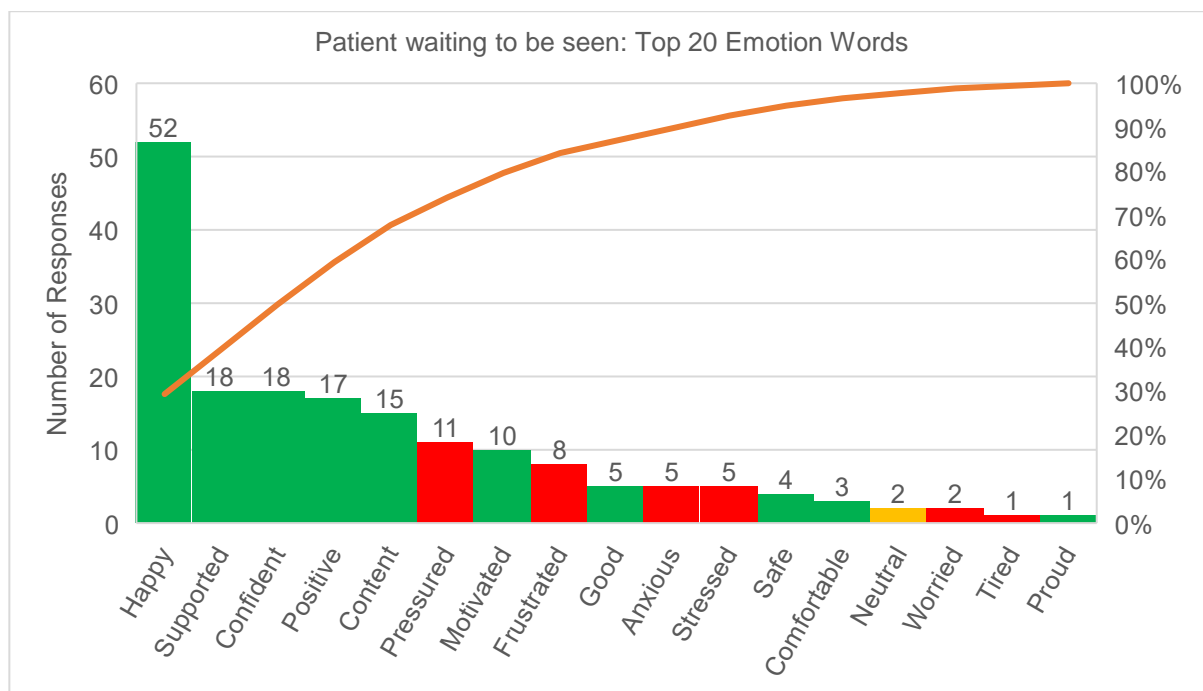


Figure 20: The top 20 emotional words selected to describe the staff's experience when patients are waiting to be seen.

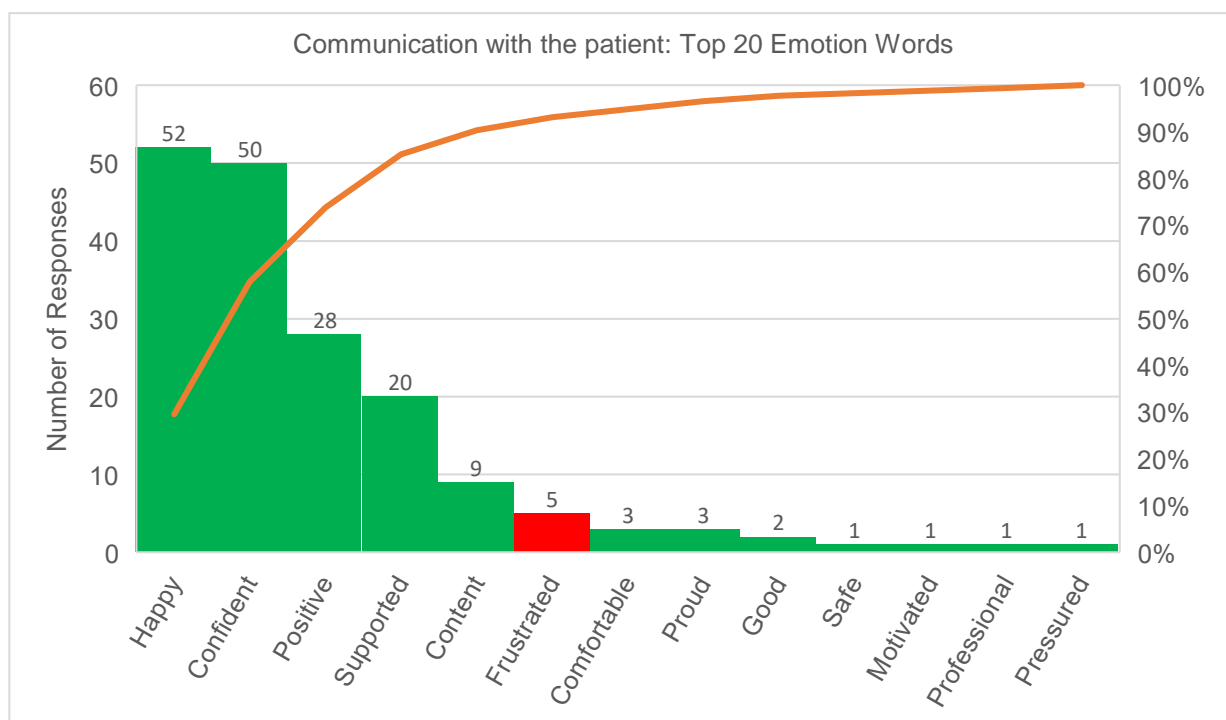


Figure 21: The top 20 emotional words selected to describe the staff's experience when communicating with patients.

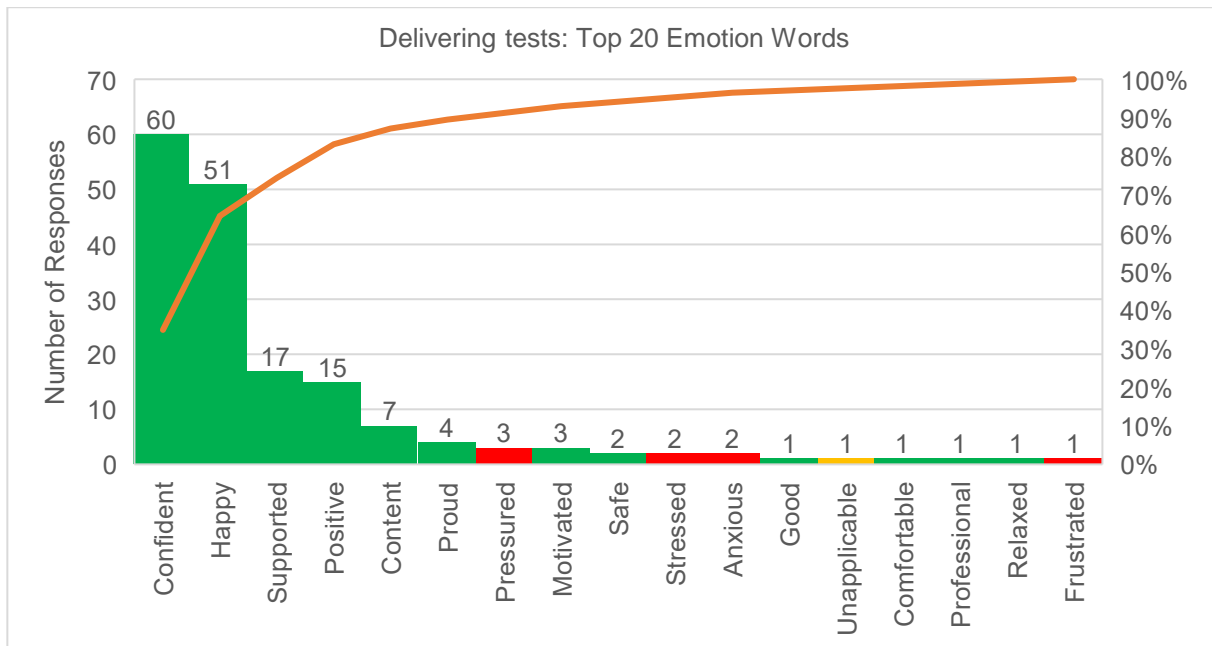


Figure 22: The top 20 emotional words selected to describe the staff's experience when delivering tests.

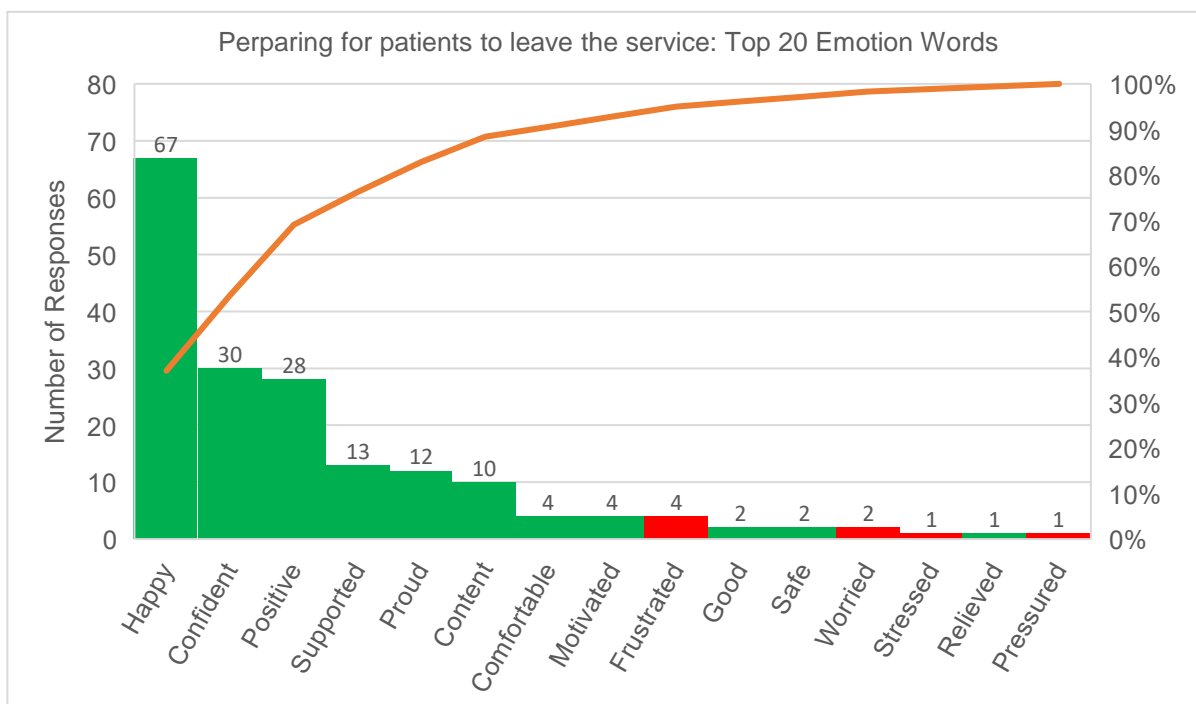
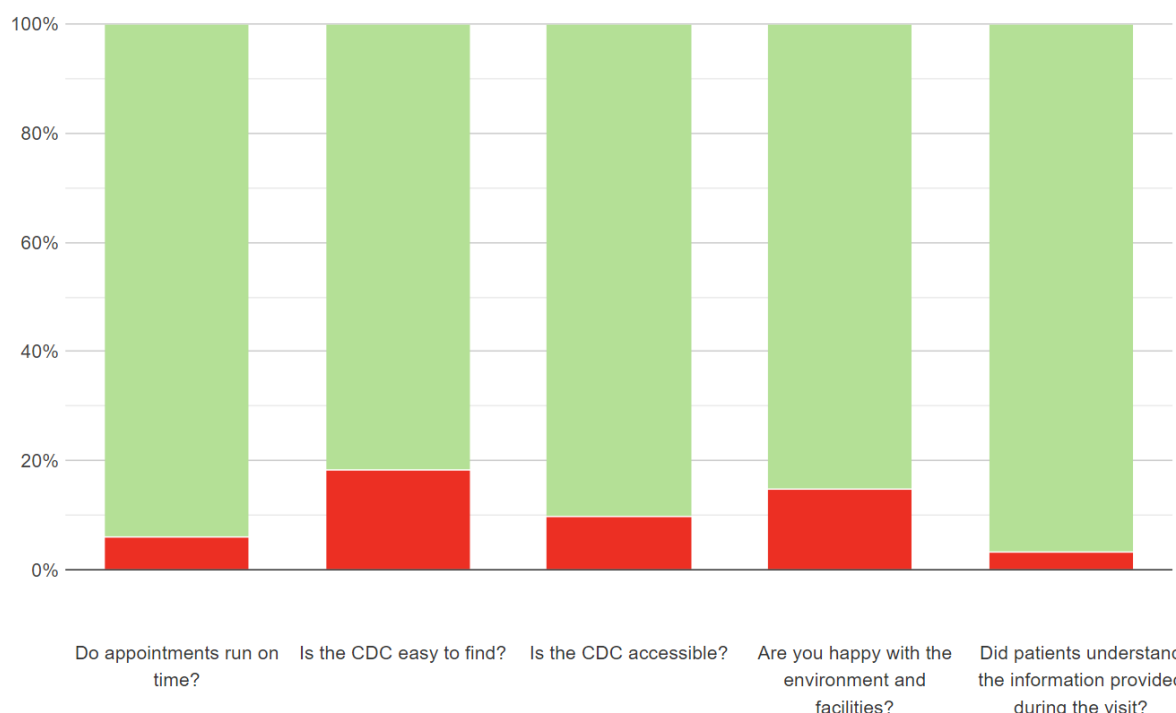


Figure 23: The top 20 emotional words selected to describe the staff's experience when preparing for patients to leave the service.

## Thumbs Up/Thumbs Down

Staff were asked five supplementary questions to further understand their perspective of the service user's journey. The staff responses were mixed, with 19% of staff feeling that

patients found the CDC difficult to find, and 17% believing that patients were unhappy with the environment and facilities (Figure 24).



**Figure 24: The proportion of “thumbs up” (green) and “thumbs down” (red) responses to the five supplementary questions along the X-axis.**

When asked what could improve how easy the CDC is to find, the comments from staff echoed those given by the service users:

*“Easy to find if you are local to the area, patients travelling from any distance need a map or postcode for Sat Nav”*

*“More signs need to be put on the road and outside the building. Lots of feedback from patients who struggle, leading to patients arriving late”*

*“They should have more signs at the main entrance or a member of staff available to specifically direct or assist patients to the departments.”*

## Communication with the patient

Communication with the patient was rated the most positive touchpoint by staff (Figure 16). The most common emotions felt by staff when communicating with service users were ‘happy’ and ‘confident’ (Figure 21).



Some of the comments received describe what made staff feel that service users would have a positive communication experience:

*“Speaking to patients is the best part of my job, reassuring them, supporting them and giving them information to help them in their appointment.”*

*“Patients are well informed of next steps, receive comprehensive letters etc. before discharge”*

### Patients waiting to be seen

‘Patients waiting to be seen’ was rated the most negative touchpoint for patients from the staff perspective (Figure 16). The emotions felt by staff at this touchpoint were still mostly positive, but a few negative emotions were expressed such as pressured and frustrated (Figure 20).

Looking at the free text responses given at this touchpoint, some of the reasons staff felt negatively were:

*“Too many crammed together. Sometimes only the standing room is available at weekends when we can't use the main waiting room.”*

*“I think that the waiting area needs to have more to keep patients occupied, as lots of patients can be nervous before an appointment.”*

*“The radiology waiting area is un-staffed, so no one is available for patients to talk to.”*

When asked what would improve the experience at this touchpoint, the ideas suggested by staff included having a ticket system so patients know how long they will be waiting – this was also suggested by service users to improve their experience. Below are some of the ideas suggested by staff:

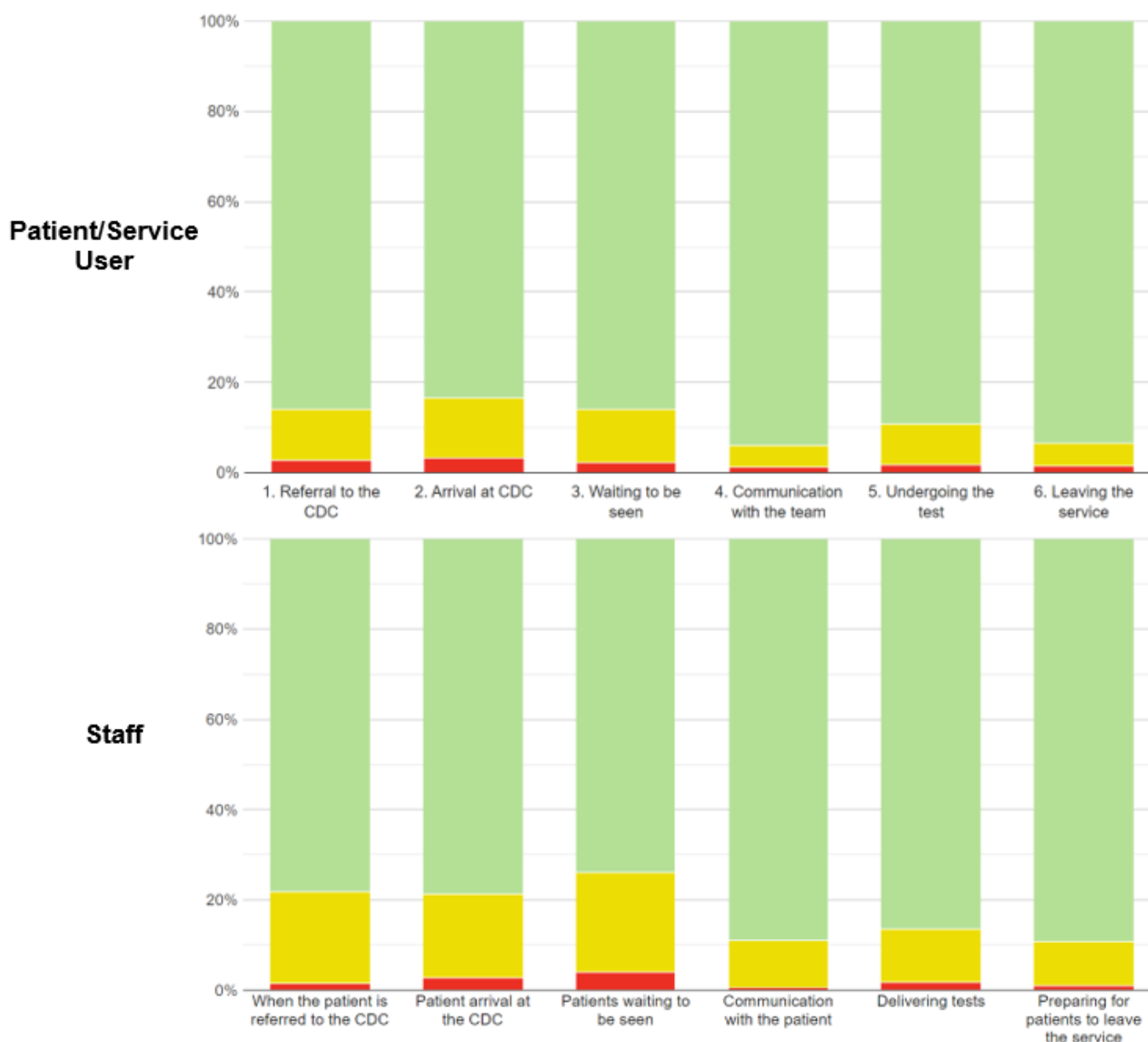
*“Provide a receptionist in the waiting room to check patients in and open the door at all times when we are open.”*

*“There could be a way to give the patient a number to know who is next”*

*“Increase appointment times from 5 mins to 10 mins. Have an extra member of staff e.g. 3 lists 4 staff, 5 lists 6 staff.”*

*“Provide the patients with a distraction: TV, reading material, etc.”*

## Patient/Service User and Staff Comparison



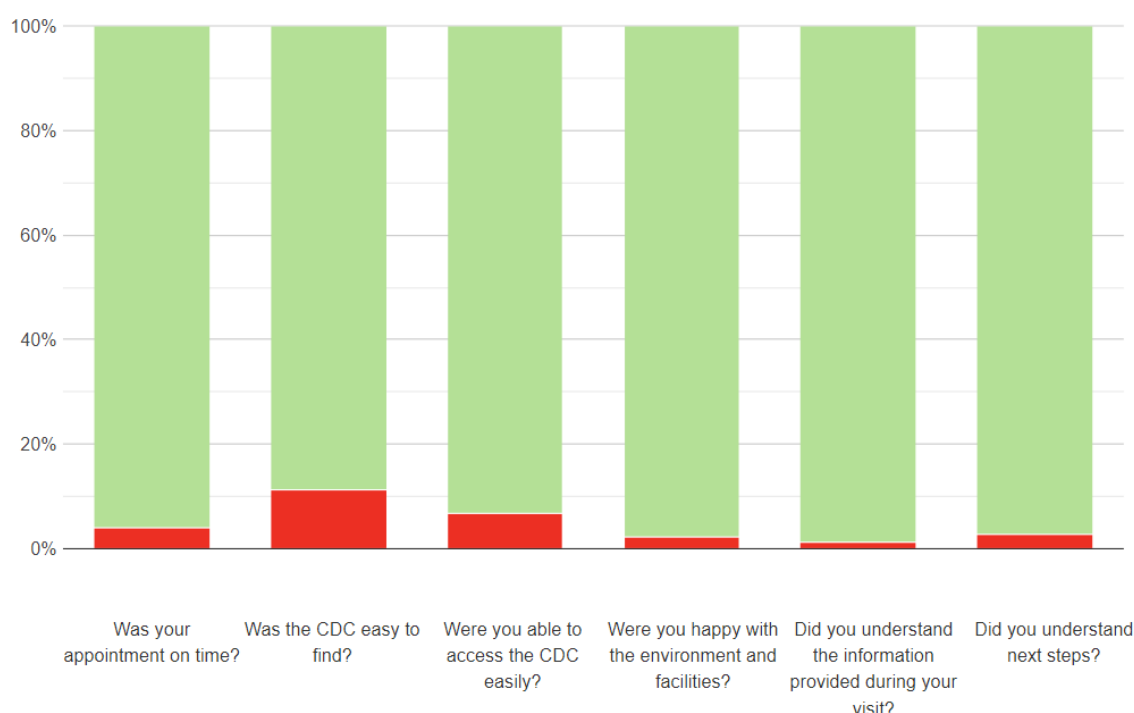
When comparing the emotional maps generated by both service users and staff, we see a very positive picture in each, and strong similarities across the two groups (Figure 25). Both groups found communication and leaving the service to evoke the most positive emotion. Staff differed from service users on the touchpoint they found the most negative as staff chose patients waiting to be seen, while service users chose arrival at the CDC.

Figure 25: Comparison of the emotional maps generated by the patient/service users (top) and staff (bottom).

## Results by CDC Archetype

The results were split into the three CDC archetypes: Standard, Spoke, and Large CDC to investigate differences in experience between the different models. Of the 91 CDCs, 17 were Large, 44 were Spoke, and 30 were Standard.

When comparing the emotional maps generated by patients across the three different archetypes, very little difference in experience was reported (Appendix B). A difference was found when comparing the thumbs up/thumbs down responses, as patients at Standard CDCs gave more thumbs down responses when asked if the CDC was easy to find (Figure 26), when compared to Spoke or Large CDCs (Appendix B).



**Figure 26: Thumbs up/thumbs down responses for patients at Standard CDCs (N=1973 responses).**

Results from staff showed more variation across archetype when compared to patients. Staff working at Standard CDCs reported the most positive experiences across the patient pathway (Figure 27). However, they also reported the most thumbs down responses when asked if the CDC was easy to find, if it was accessible, and if they were happy with the environment and facilities (Figure 28). Staff working in Large CDCs reported the most negative experience across the patient journey. Charts for Large and Spoke CDCs can be found in Appendix B.

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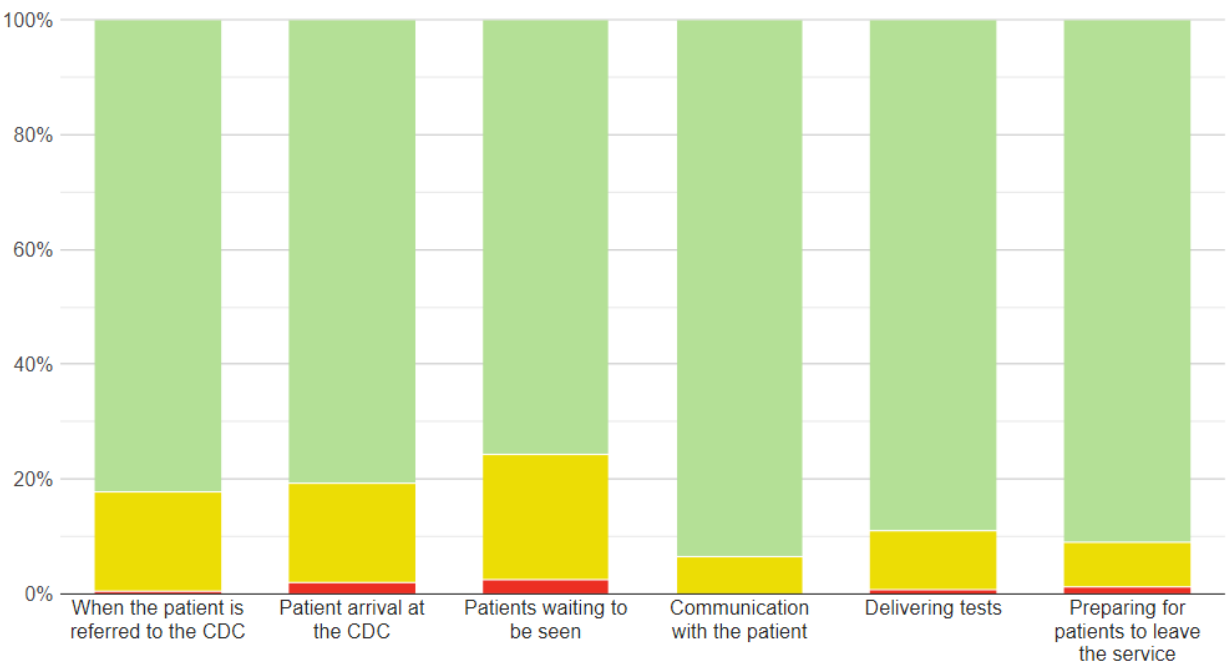


Figure 27: Emotional map generated by staff at Standard CDCs (N=304 responses).

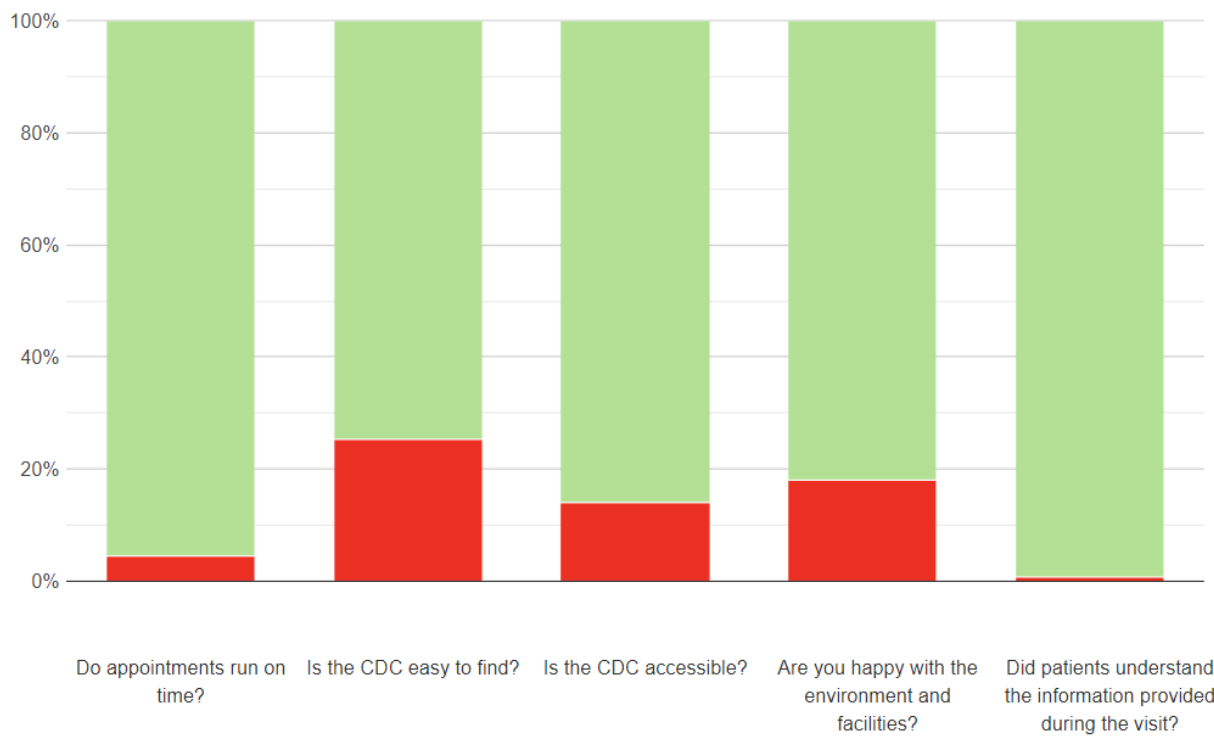


Figure 28: Thumbs up/thumbs down responses for staff at Standard CDCs (N=304 responses).

## Conclusion

There are many conclusions to be drawn from this study. It is the largest emotional mapping EBD study undertaken in England. This was only made possible through positive partnerships working with the CDC national team and CDC teams embracing EBD methodology.

Throughout this programme of work, teams at NHS Elect and NHS England have worked together to co-design and develop an approach to support this study at scale. This has required constant design, development and testing.

The original ambition to undertake the study across all operational CDCs was achieved with a 100% response rate. This is an outstanding result, and the work needed to achieve this should not be underestimated. Many innovations were utilised to enable the study, these include the creation of a self-service approach, the development of easy access to digital resources, the use of QR codes etc.

The results are positive, particularly around communication. Patients report feeling 'happy', 'supported', 'good', 'comfortable', and 'safe'. Arrival at the CDC was the touchpoint eliciting the most negative emotion from service users (Figure 4). Looking at the thumbs up/down chart (Figure 12), some service users reported that the CDC was not easy to find, which may have contributed to the negative emotion felt around arrival.

The supplementary 'thumbs up', 'thumbs down' questions revealed patients did not find the CDC easy to locate and reported 'wait times' which varied across service users, with 30% receiving an appointment within 3 days, and 24% waiting a month or more (Figure 13). Service users most frequently waited between 2-3 weeks. The majority of patients reported they attended the CDC for one test. The number of patients attending one appointment was disproportionate but not reported as good or bad by patients or staff. In terms of improving operational efficiencies, this could be an area for action.

Staff were included in the survey to capture their perspective on how patients felt on their journey through the CDC. This sample size was smaller, but the emotional map was also positive. Staff reported feeling 'happy' and 'confident'. Interestingly, they also identified an issue with patients finding the CDC.

When comparing results across the three CDC archetypes, patient experience showed little difference, while staff reported a more positive experience in Standard CDCs (Figure 27). Patients reported that Standard CDCs were harder to find (Figure 26), so efforts to improve wayfinding should be focused here.

A patient survey undertaken by Healthwatch in the same period recommended that patient information and wayfinding should be improved.

## Recommendations

- Share the results widely across the NHS and celebrate the positive results
- Share the report with Healthwatch and collaborate on improvements
- Form a focus group of service users and staff to create an improvement plan
- Action improvements
- Repeat the study after improvements embedded
- Advise CDCs to also undertake the above process locally utilising their individual results
- Set up a 'task and finish' group to improve 'wayfinding' in CDCs
- Review processes for appointment scheduling
- Capture improvement stories from CDCs to share across the NHS

## Next steps

To ensure a comprehensive approach to enhancing CDC services, the next steps involve organising a focus group comprising both service users and staff. This group will be instrumental in reviewing the collected results and co-designing an improvement plan that addresses key areas, including signage, the overall environment, the arrival process, the number of tests conducted, and the clarity of information provided post-investigation for service users.

Additionally, it will be essential to collaborate with various teams to understand communication processes, enabling the identification and dissemination of best practices effectively. This collaborative effort will not only enrich our understanding of user experiences but also foster a culture of continuous improvement across our services.

For more information on the use of EBD and the emotional mapping tool please contact the NHS Elect team at [networksinfo@nhselect.org.uk](mailto:networksinfo@nhselect.org.uk)

## References

1. Richards M (2020) Diagnostics: recovery and renewal — report of the Independent Review of Diagnostic Services for NHS England (NHS England).
2. Donetto S, Tsianakas V, Robert G. (2014) Using Experience-based Co-design (EBCD) to improve the quality of healthcare: mapping where we are now and establishing future directions. London: King's College London, 5-7.

# Appendix A

## The Pilot Study (4 sites)

In 2022/23, NHS Elect and the CDC team at NHS England worked together to develop an approach to gain service user insights into the new CDC model as it spread across the country. Using an 'experience-based design' (EBD) emotional mapping approach, a pilot study of the service user experience in four CDCs was started. The aim of the pilot study was to learn more about the service users' experience to test the approach and inform the design of the CDC model and the national spread programme, ensuring the new model is truly patient-centered and provides a good experience for patients.

212 patient experience questionnaires were completed in the pilot. Data collection took place between December 2022 to January 2023. Patients used a variety of options to express their feelings at each stage of the journey:

- an emoji to indicate if they felt happy, sad or neutral
- a word to describe their feelings at each stage from a predefined list
- a free text option for the patient to include comments or feedback

Some supplementary operational closed questions were added, and patients selected a thumbs up and thumbs down (Good or Poor) to indicate if they felt happy or unhappy in response to these questions

An emotional map has been created from these responses using the touch points created for the journey (see Figure 1). To construct the map, a RAG (Red, Amber, Green) rating has been used to analyse emoji responses indicated in the box at each touchpoint of the journey. The bar of the chart is filled with colour according to emoji responses. E.g. red in the box will indicate the number of patients unhappy at this stage, green happy and yellow neutral. The map is annotated with some of the comments received in the free text option to illustrate why patients report feeling this way.

'Emotions' expressed by patients are plotted in Figure 2. Responses to the thumbs up and thumbs down are illustrated in Figure 3.

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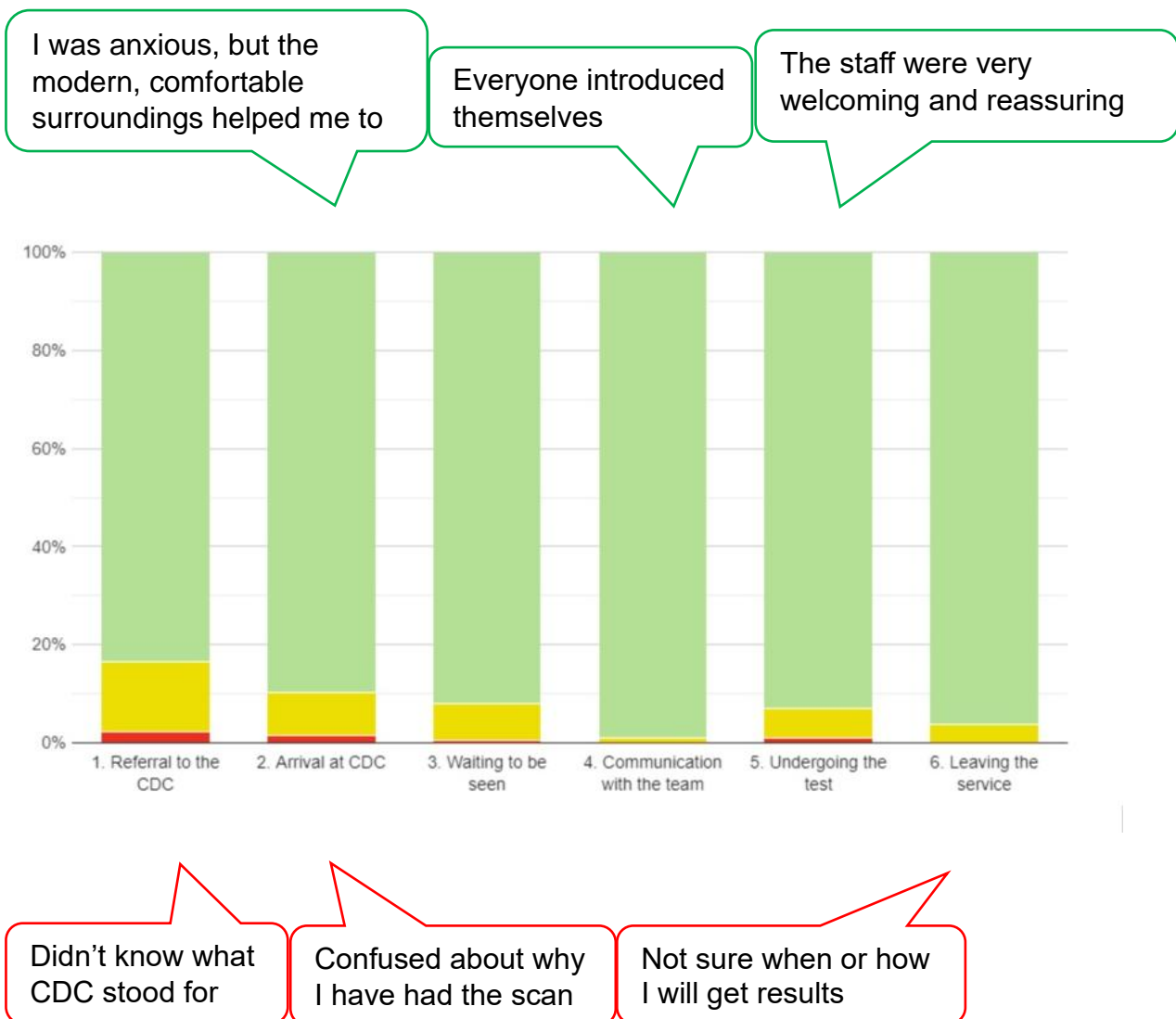


Figure 1: Emotional map generated from the pilot study data, showing the percentage of positive, neutral, and negative emojis selected at each of the 6 touchpoints, along with direct quotes taken from comments to annotate the chart.



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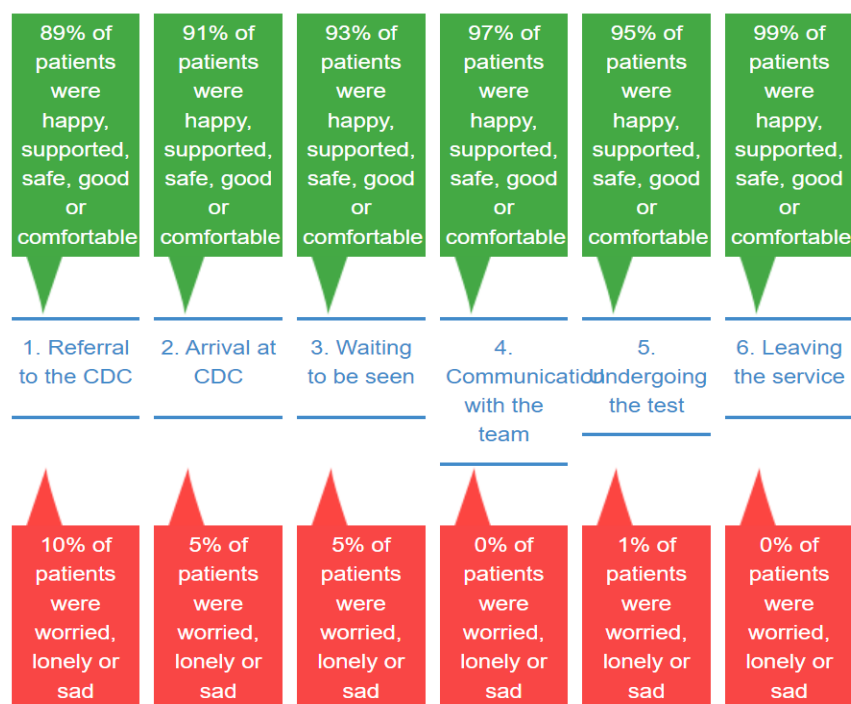


Figure 2: Chart of 'emotions' generated from the pilot study data.

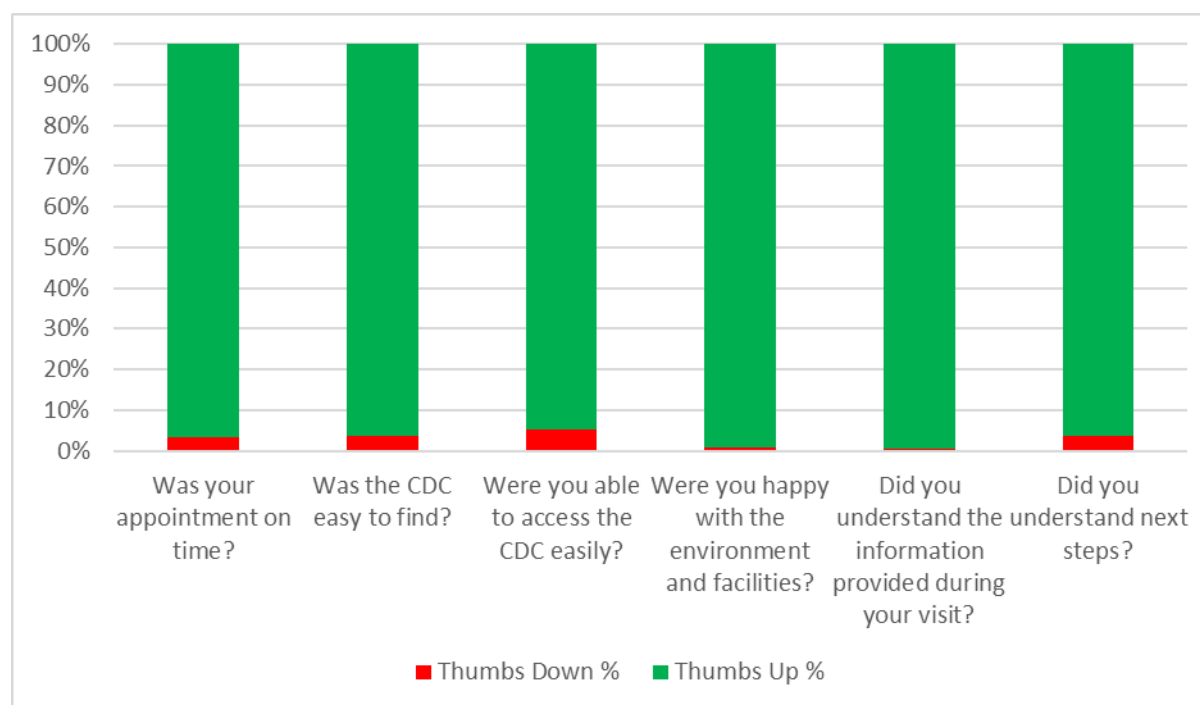


Figure 3: The proportion of 'thumbs up' (green) and 'thumbs down' (red) responses to the six supplementary questions along the X-axis, collected during the pilot study.

This pilot study enabled the development team to design the right tools for this specific cohort of service users going through CDCs and to gain an understanding of the application of tools for this population. Early insights from the pilot were welcomed by the sites and the NHS England team who utilised the analysis to inform further development of the CDC model. At this time, the NHS England team commissioned a wider study to roll out the EBD programme to all operational Community Diagnostic Centres - up to 100 CDCs.

# Appendix B

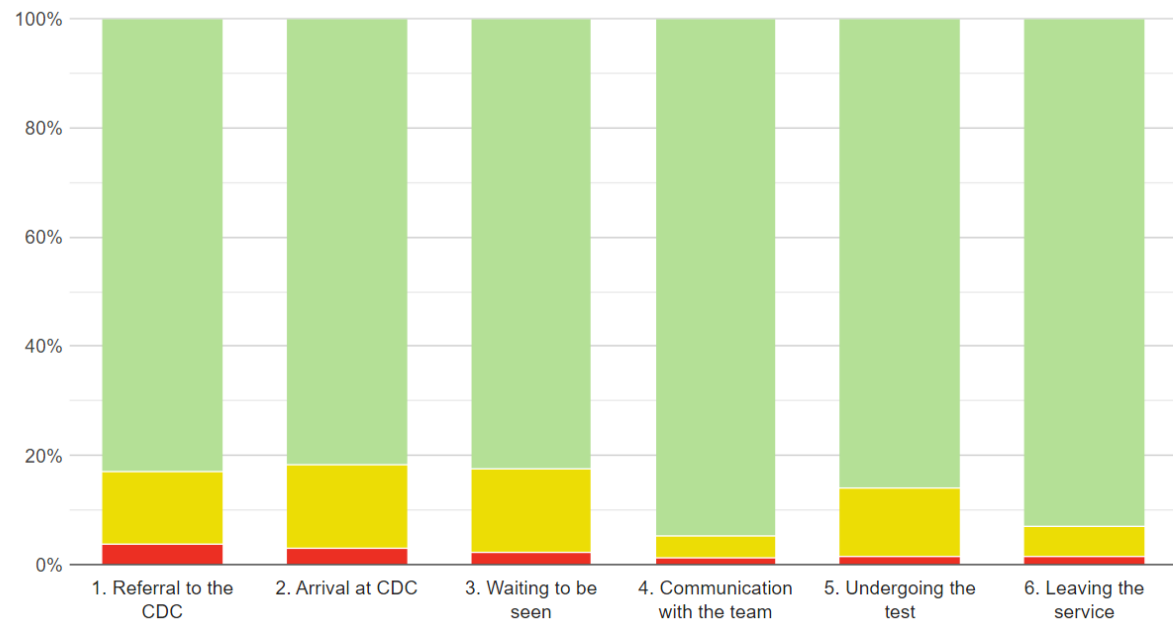


Figure 29: Emotional map generated by patients at Large CDCs (N=1143 responses).

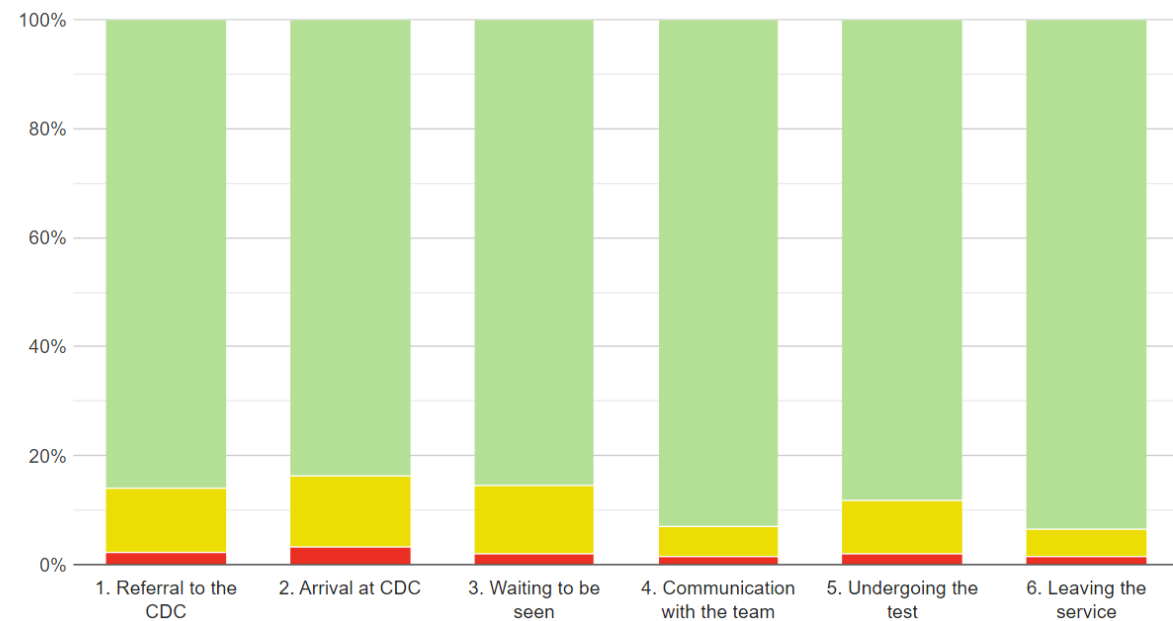


Figure 30: Emotional map generated by patients at Spoke CDCs (N=2386 responses).

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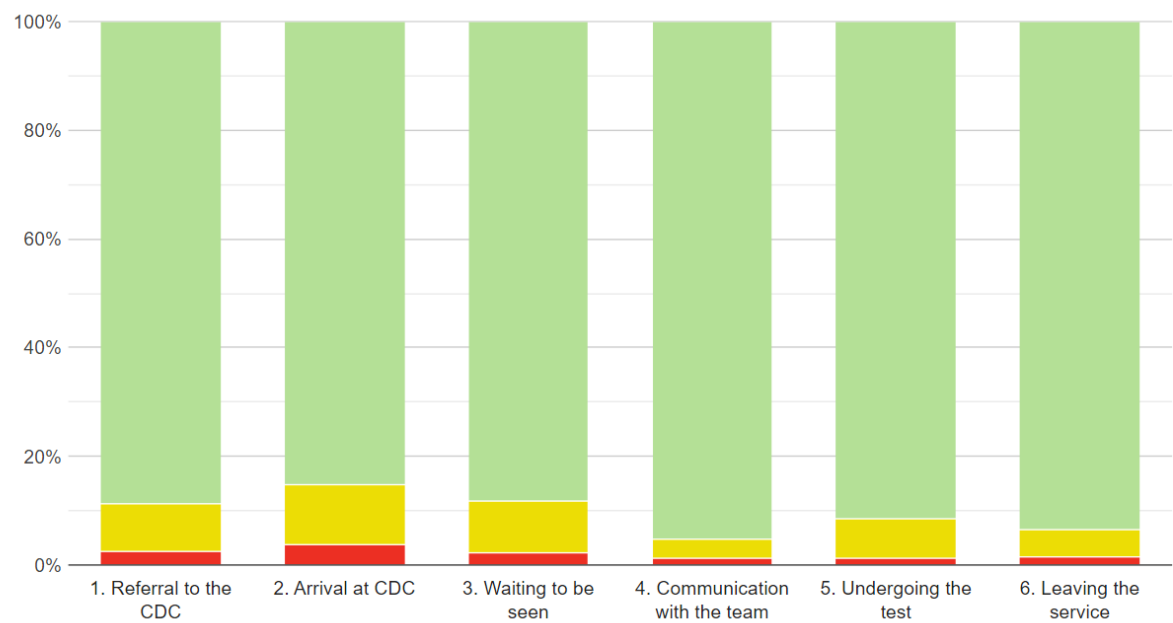


Figure 31: Emotional map generated by Standard CDCs (N=1973 responses).

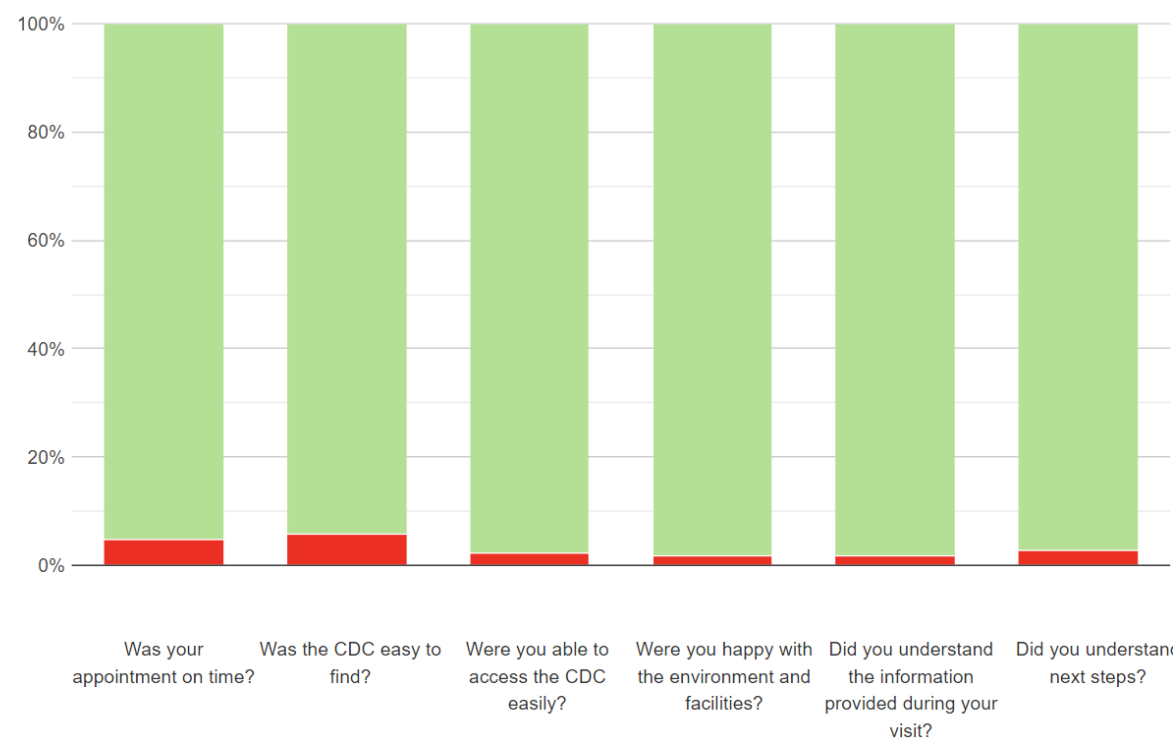


Figure 32: Thumbs up/thumbs down responses for patients at Large CDCs (N=1143 responses).

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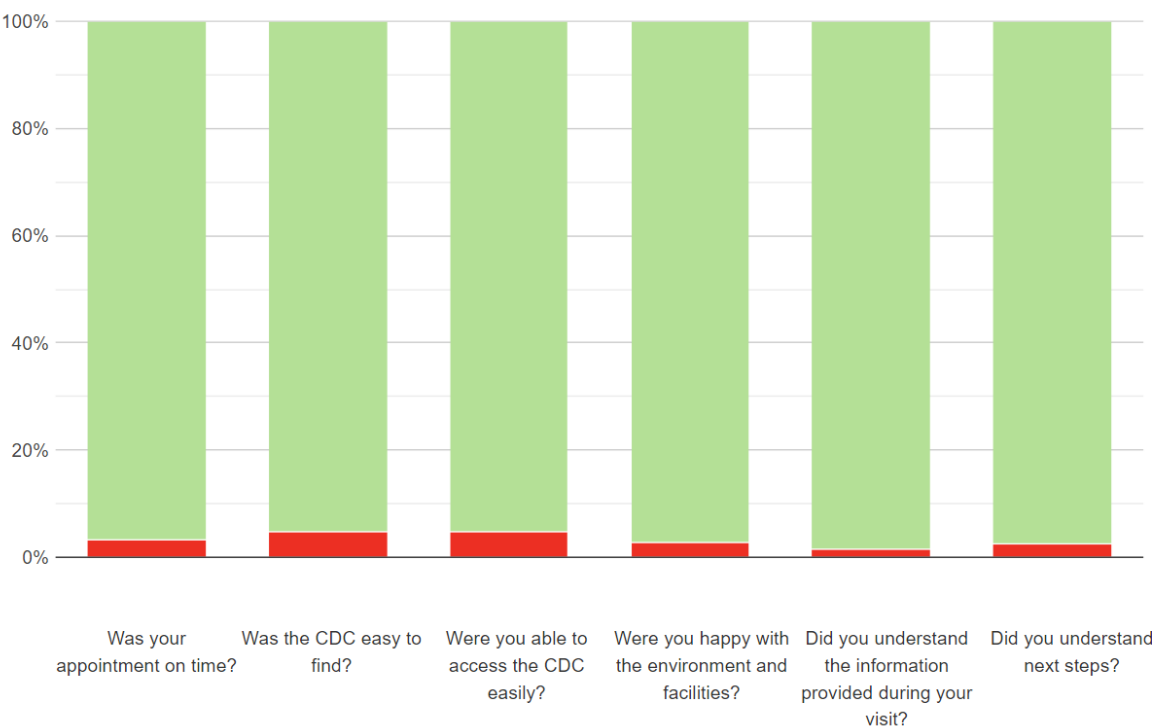


Figure 33: Thumbs up/thumbs down responses for patients at Spoke CDCs (N=2386 responses).

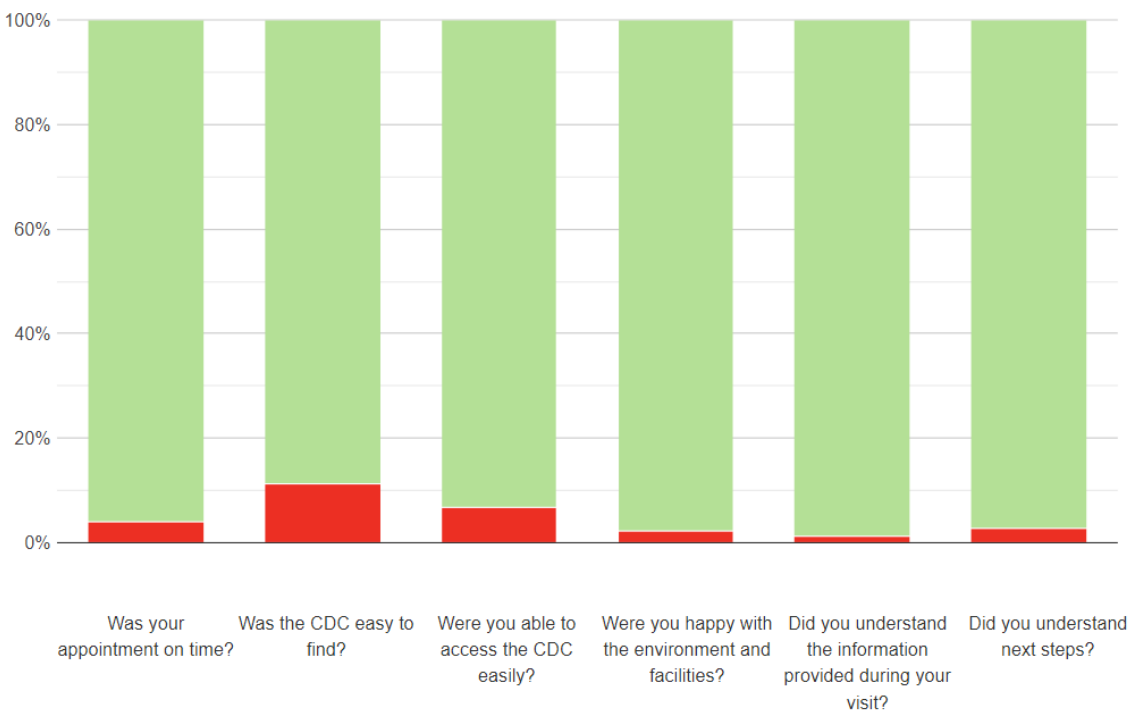


Figure 34: Thumbs up/thumbs down responses for patients at Standard CDCs (N=1973 responses).

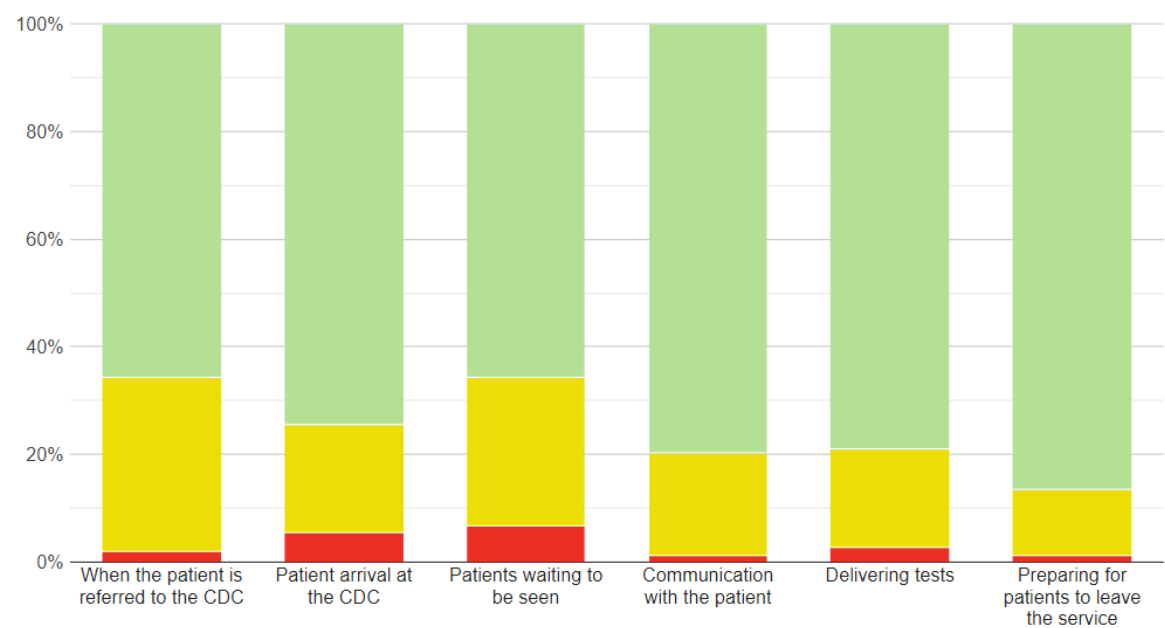


Figure 35: Emotional map for staff working in Large CDCs (N=148 responses).

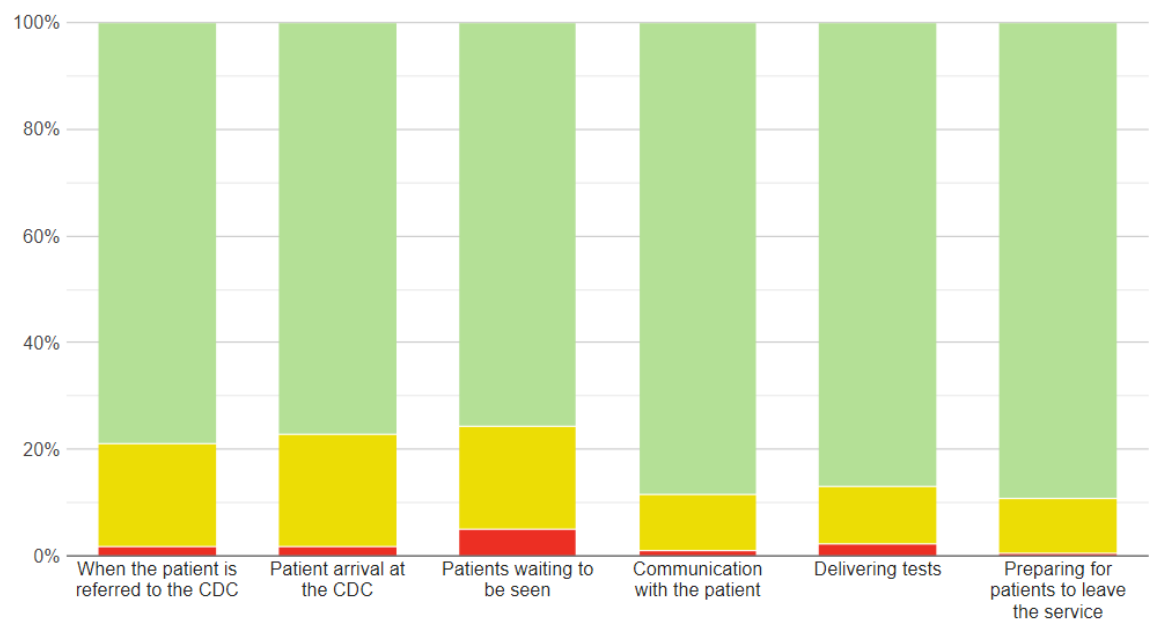


Figure 36: Emotional map for staff working in Spoke CDCs (N=215 responses).

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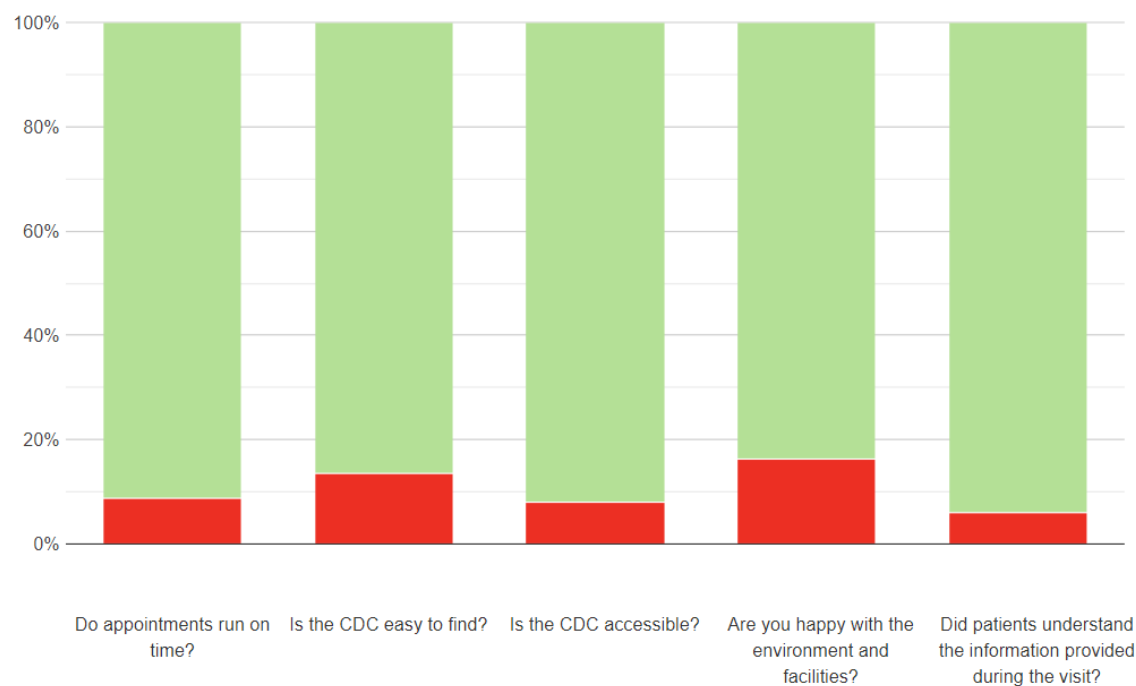


Figure 37: Thumbs up/thumbs down responses by staff working in Large CDCs (N=148 responses).

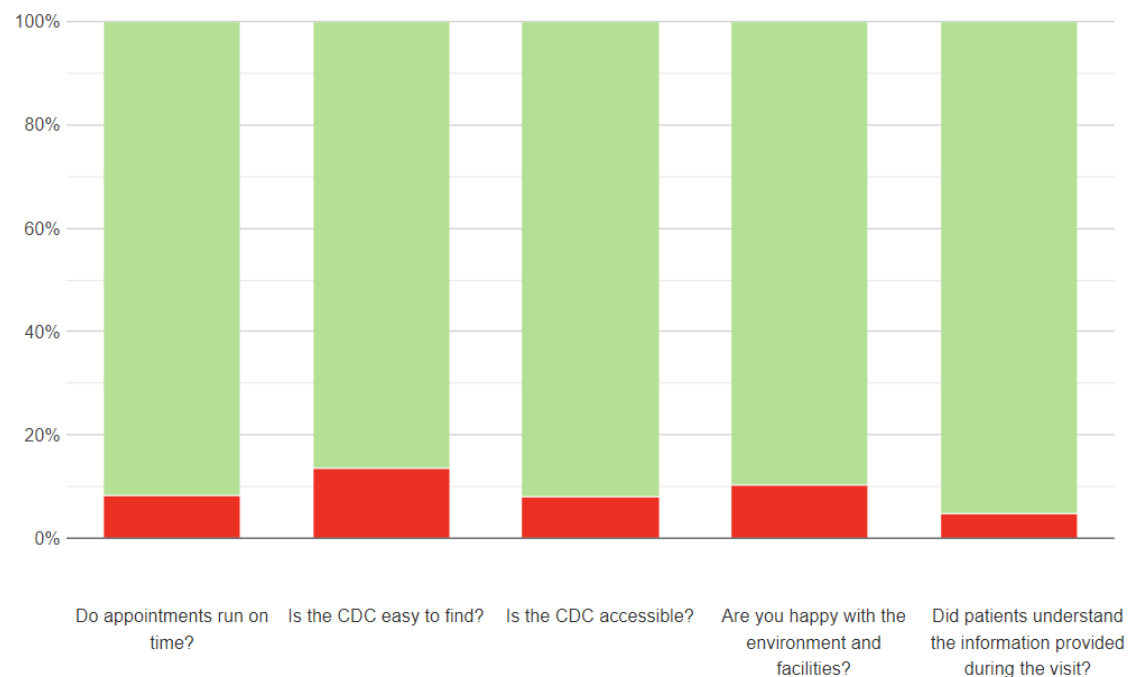


Figure 38: Thumbs up/thumbs down responses by staff working in Spoke CDCs (N=215 responses).