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Post-occupation evaluation study report

**Catkin Centre and Sunflower House,
Alder Hey Children's Hospital**

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Contents

1. Introduction	3
1.1. Post occupancy evaluation	
1.2. Project background	
1.3. Project information	
1.4. Objectives of the post-occupancy evaluation	
2. Scope of the study	4
2.1. Study focus	
2.2. Exclusions	
2.3. Methodology	
3. Findings of this POE	5
3.1. Shared findings	
3.2. Sunflower House	13
3.3. Catkin Centre	23

1. Introduction

1.1. Post occupancy evaluation

Post-occupancy evaluation (POE) is a process of evaluating the performance of buildings after they have been built and occupied for some time, analysing how occupants assess the built environment and obtaining feedback on a building's performance in use. The feedback gathered from a POE can be utilised by design teams to inform new processes, systems, and designs on future projects, resulting in better, more efficient building design, whilst reducing the occurrence of repeating mistakes.

1.2. Project Background

The new Catkin Centre and Sunflower House provides a holistic approach to children's mental health services at Alder Hey Children's Hospital. Designed by Cullinan Studio and constructed by Galliford Try, the building amalgamates both inpatient and outpatient care onto one site within the main hospital grounds, bringing together a range of specialist children's mental health services that were previously scattered across the hospital site and the city.

Sunflower House is a tier four mental health inpatient unit which provides twelve beds for children aged 5-13 with the most challenging mental health conditions including anxiety, depression, eating disorders, psychosis, and self-harm. It replaces the Dewi Jones facility, which is eight miles away from Alder Hey and only had nine bedrooms.

The Catkin Centre offers outpatient services for Autism Spectrum Disorder (ASD), Attention Deficit Hyperactivity Disorder (ADHD), Community Adolescent Mental Health Services (CAMHS), eating disorders and crisis care.

Former patients were consulted on the designs and they had input into the design of the bedrooms, dining space, choice of colours and even the name 'Sunflower House' for the inpatient unit.

1.3. Project Information

Name of facility	Catkin Centre & Sunflower House
Location	Alder Hey Children's Hospital, Liverpool
Number of storeys	3
Project value	£20 million
Users of the facility	Alder Hey Children's Hospital NHS Foundation Trust
Room types	<p>Sunflower House - Inpatient bedrooms, social spaces, therapy rooms, calming and de-stimulation rooms, classrooms, ADL kitchen, family rooms, meeting rooms, staff facilities</p> <p>Catkin Centre - Counselling rooms, family therapy rooms, phlebotomy, height & weight, MDT, staff rest</p>
Completion date	May 2023

1.4. Objectives of the Post-Occupancy Evaluation

- To highlight issues and best practice associated with the design and layout of the centre
- To examine to what extent the centre is being used as the brief and design proposals intended
- To gather feedback from end users to establish whether the centre meets the needs of those who work at and/or visit the centre
- To assess the suitability and performance of the furniture within the centre

2. Scope of the study

2.1. Study focus

This POE study focuses on the design and layout of the building, the quality and performance of the furniture and equipment, the internal environment of the building and how the building operates on a day-to-day basis following occupation.

2.2. Exclusions

The study did not evaluate areas such as the project management performance (e.g. budget, programme, communication etc.) or the mechanical and electrical (M&E) design. The report is not intended to provide a detailed assessment of the M&E systems and how well they operate, however where user feedback has referred to M&E matters, such as over-heating, lack of cooling, problems with water systems, these are included for completeness.

The original design brief for the project was not available to the review team, therefore this POE has not reviewed how closely the building fulfils the original design brief. Where user feedback has referred to room sizes, functionality and adjacencies this has been included in the report, however it cannot be concluded if this feedback was in line with or a departure from the original design brief, or if the brief did not fully reflect the user's needs.

2.3. Methodology

The POE consisted of three elements; patient/carer and staff surveys, interviews with operational and clinical team members, and an observational study carried out during a site visit.

Patient/carer and staff surveys were developed for the POE (see appendix 1 and 2), which were available via an electronic link in advance of the MJ Medical visit, and in hard copy which patients/ visitors were asked to complete on the day of the visit.

These surveys asked a series of questions relating to the respondent's opinions on:

- The accessibility of the centre
- The wayfinding strategy

- The design of waiting areas
- The clinic rooms and staff areas
- The furniture
- Which elements of the building participants liked or disliked

Feedback via the surveys was gathered from 19 patients/carers and 17 members of staff. It is important to note that quantitative feedback in this report is based on relatively small sample sizes. At the time of the visit Sunflower House did not have many patients in residence, however the survey was sent to a group of former patients and families in order to obtain some patient/carer feedback. The qualitative feedback given, however, was very rich in detail. The results of the staff and visitor surveys can be found in appendices 3 and 4.

Staff members were invited on the day of the visit to take part in an informal face-to-face interview to discuss their views on the building in more depth. Feedback was gathered from a range of staff members including service managers, assistant practitioners, support workers, secretaries/receptionists, psychologists and health care assistants.

Alongside asking patients and staff to complete the surveys and speaking to staff, the team spent time observing the day-to-day activity at both Sunflower House and Catkin Centre to develop an understanding of how the building is being used and to review the following:

- Are areas/rooms being used as intended?
- How often do areas/rooms get used?
- Does the wayfinding strategy work?
- Is the furniture/equipment still in good condition?
- Has any furniture/equipment been replaced?
- Travel distances for patients and staff.
- Visibility throughout the building.

This report sets out the findings from the surveys, interviews, and the review team's observations, highlighting where good examples of healthcare design can be seen for future application or reference and where lessons can be learned.

3. Findings of this POE



Catkin Centre & Sunflower House entrance

3.1. Shared findings

3.1.1. Design and layout

Upon arrival at Catkin Centre and Sunflower House visitors are met with a modern, wooden, two storey building with a car park located underneath. The placement of the buildings, raised above ground level, ensures privacy and dignity for patients, while the wooden structure emphasises sustainability and harmonises with the natural surroundings, reinforcing a connection to nature.

A shared entrance lobby provides access to Catkin Centre on the left and Sunflower House on the right. The architectural layout of the building has opted for a cloistered arrangement around courtyard gardens, and it has been designed to ensure that there is a view of a garden or the park, in which the building is situated, wherever you are in the building. This approach not only aids in wayfinding but also integrates the mental health facilities with the therapeutic benefits of nature.

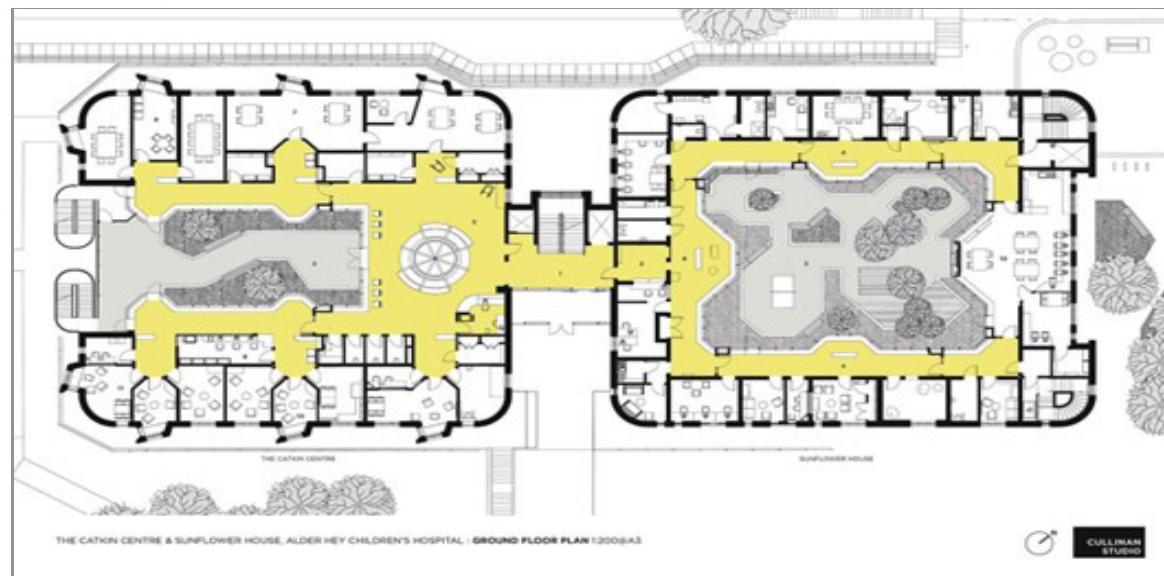
Catkin Centre houses the outpatient facilities across two floors and includes room types such as counselling rooms, family therapy rooms with observation rooms, consult/exam rooms, phlebotomy, a height and weight room, a dirty utility, a quiet room for patients who find the main waiting area over stimulating, a changing places room. The majority of the clinical spaces are on the first floor and on the ground floor there are some counselling rooms plus offices, a staff rest room and multidisciplinary team rooms, which are also used by staff from the main hospital.

3.1. Shared findings (continued)

The ground floor of Sunflower House accommodates the therapy rooms (including a family therapy room with observation room and an immersive therapy room), the school, a kitchen which the patients use as part of their therapy or with their families when they visit, a family bedroom for parents who need to stay overnight, and staff areas such as offices, a multidisciplinary team meeting room, staff rest room and changing facilities.

The first floor has 12 ensuite patient bedrooms (including two for patients with physical health issues and three high dependency bedrooms), an assisted bathroom, a seclusion room with observation lobby, de-stimulation room, social lounges, a diner where patients eat their meals, a medicine preparation room, dirty utility and staff base.

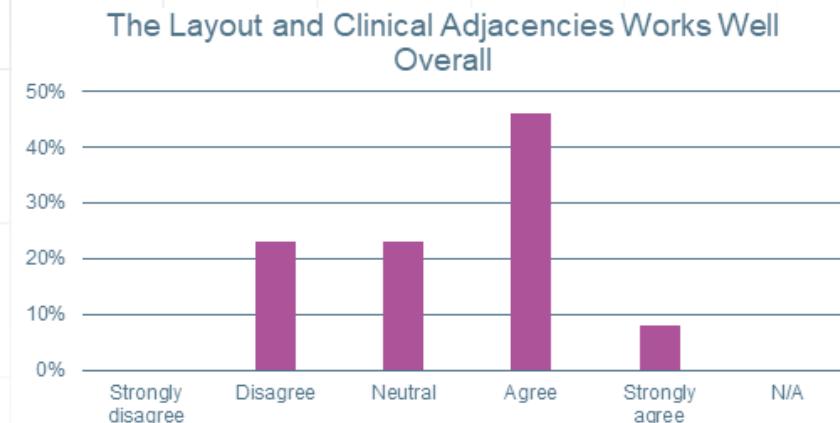
The architectural floor plans illustrating the layout of the building can be found in appendix 5.



Plan of Catkin Centre & Sunflower House

3.1. Shared findings

Feedback from the staff surveys suggest that staff had mixed opinions regarding the layout and clinical adjacencies of the building as demonstrated in the graph below.



Some staff from Sunflower House felt that the locations of the immersive therapy room, the de-stimulation room and the medicine preparation room in the inpatient unit could have been better located, further details of which can be found later in the report

The internal design of Catkin Centre does appear to be slightly confusing in places with some areas which the review team found to be unclear of their intended purpose. Examples of these included a seating area on the ground floor located outside of the staff offices and an admin office which appeared to be designed as a reception. The design of the seating area looked as though it would appeal to young children, yet it was located outside of the staff offices in an area which is not accessible by patients, which seemed to be an unusual choice of location for this feature. Also, on the ground floor of Catkin Centre there is an admin office which has a large counter window as if it was originally intended as a

reception desk and it was unclear to staff why it was designed in this way as a reception desk would not be needed in this location. Further feedback regarding the layout suggested that staff disliked the proximity of the phlebotomy room to the waiting area due to upset and anxious patients being overheard.

The main design feature of the building is its use of glass to incorporate lots of natural light into the building. The numerous windows overlooking green spaces combined with the natural wood décor used create a bright and naturally relaxing atmosphere. One member of staff from Sunflower House commented that:

“The building always looks warm and welcoming from the minute you walk in. The wooden décor creates a feeling of being at one with nature and provides a calm and relaxing environment for the treatment of children who come to us at their lowest.”



Seating area in Catkin Centre



Admin area in Catkin Centre

3.1. Shared findings (continued)

The large windows all around the inside perimeter of the building fulfil multiple purposes; as well as providing patients with the proven therapeutic benefits of natural light and nature they also provide great visibility around the building. Visibility is an important factor in a mental health facility for safety reasons and the design of Sunflower House and Catkin Centre has incorporated this very successfully. Staff commented that the windows allowed them to easily spot other members of staff or patients who might need help from anywhere in the building. The windowsills have also been specifically designed to be deep enough to sit on so that there is always somewhere to sit and look out of the window or to be able have a chat with someone which is a very effective design feature. They also provide additional seating space in the waiting areas in Catkin Centre.

The results of the surveys and interviews provided mixed opinions from the staff regarding the windows. Whilst they liked the fact that the windows provide lots of light, nice views and enable good visibility, concerns were raised around privacy, glare and heat management. Receptionists from Catkin Centre reported that they experience issues with glare from the windows. The large number of windows also make the building very hot when it is warm and sunny outside and a member of staff from Sunflower House commented that:

“When the sun shines the ward becomes like a greenhouse with no escape from the direct sunlight.”

So as not to obscure visibility there are no blinds or window coverings on the windows looking out to the internal courtyards which does not help with the control of the amount of sunlight let in. The absence of window coverings also results in a lack of privacy for patients in some areas. Staff members highlighted concerns that a child having an episode or needing restraining, particularly in the HDU part of Sunflower House, where the most troubled patients might be, can be seen by everyone else around the building thus compromising their privacy and dignity.



Windows on the ground floor of Catkin Centre

Conclusions and lessons learned:

The use of lots of windows and courtyard gardens in a design provides therapeutic benefits of natural light and pleasant views.

Large windows are great for providing plenty of light and views for staff and patients, but consideration should also be given to window orientation, solar shading to prevent overheating and glare as well as providing patient privacy or staff confidentiality when required.



Outdoor signage



Lift access from car park to Catkin Centre & Sunflower House

Conclusions and lessons learned:

External signage could be larger and more visible to aid navigation to the building from the main building and grounds

Disabled access routes should be clearly and logically signposted

More internal signage would make the building easier for visitors to navigate.

3.1.3. Car parking

The building was designed with a shared underground car park for patients and staff of both the Catkin Centre and Sunflower House. Unfortunately, due to the lack of a sprinkler system which meets fire-safety guidelines this car park is not fully functional. It can only be used if there is security personnel present and cannot be used by electric or hybrid cars due to the risk of fire. The Trust are aware of this issue and have gone out to tender for a contractor to install a sprinkler system to bring the car park into full operation.

The Trust have been communicative of the issues with the car park and visitors are made aware of its restricted use via information on the Sunflower House and Catkin Centre pages of the Alder Hey Children's Hospital website.

All electric vehicles, and others when the car park is unavailable, must use the multi-storey car park next to the main hospital which is frequently at capacity and there can often be queues. Staff must also park in the main hospital car park and walk across the hospital site. Staff did raise concerns about safety, particularly when walking from the building to the main hospital and car park after late shifts, as there is no lighting along the path from Sunflower House and Catkin Centre.

Conclusions and lessons learned:

With the increased use of electric cars which pose the risk of combustion car parks should follow the latest health and safety guidance and building regulations

There has been good communication to visitors about parking restrictions via the website to allow visitors to plan their trip.

3.1.4. Visitor flows

Due to the nature of the service provided there are a number of access-controlled doors throughout the whole building which do have an effect on the visitor flows around the building.

In Catkin Centre visitors can access the main waiting areas but all corridors leading off the waiting areas have access-controlled doors preventing visitors being able to independently move around the building. As a result, a patient call system cannot be used, and clinicians must physically call their patients for their appointments and accompany them to the appropriate room. Whilst there are benches provided in the areas outside of the counselling/therapy rooms and offices (which appear to have been designed as a sub-waiting facility and are identified on the building floor plans as sub-wait areas), visitors are unable to access these areas unless accompanied by staff, due to the restricted access, and as such are not used.

In Sunflower House two respondents to the visitor survey mentioned that the building was difficult to get around as a result of the numerous access-controlled doors. Whilst they appreciated the need for the security within the setting one respondent felt that the balance between security and allowing family members to move around the building to be involved in their child's care had been better managed at the old Dewi Jones unit.



Outdoor signage

3.1.5. Heating and air conditioning

Sunflower House and Catkin Centre both experience significant challenges with temperature regulation.

Air conditioning is not provided throughout the whole building but only in specific rooms. This along with the large amount of glass used in the building, as mentioned above, does not help with the regulation of temperature and many staff commented that the temperature in the building varied quite considerably.

In the Catkin Centre staff highlighted the lack of air conditioning in the waiting area as having a negative impact on them and that this as well as the positioning and the amount of glass make it very hot. The air conditioning units in the rest of the building were reported to be sporadic and some rooms far too cold at times whilst the family therapy and observation rooms often get too hot. In the waiting area the top of the atrium does have automatic vents that open at a certain temperature. However, due to the waiting area getting very hot when busy these vents have opened even in bad weather allowing rain and even snow to enter through the vents as staff cannot manually close them.

Staff from Sunflower House also shared their dislike for the lack of air conditioning throughout the whole building and felt that the temperature was often either too hot or too cold. Staff shared their experiences of having to use heaters in the children's bedrooms during winter months, while in summer, ice packs were put in beds to combat excessive heat.

Conclusions and lessons learned:

An effective solution for the management of temperature is required in designs incorporating lots of glass.

Air conditioning throughout the building with individual thermostats in rooms would provide an optimal solution for temperature control.



Hand washing areas

3.1.6. Water

There is a significant issue with the quality of the water on site. It is currently not safe to drink or even boil the water from the taps in the building. The Trust are aware of this and have managed the issue by installing clear signs warning people not to use or drink the water wherever there is a sink, providing bottled water for staff and visitors to drink and installing filters on taps in the WCs for handwashing. The filters on the taps do make the sinks a little difficult to use due to their size and it was reported that sometimes they do stop working unexplainedly.

The measures to manage the water issues have been costly to the Trust but essential to provide safe water to the staff and visitors on site.

Conclusions and lessons learned:

Involving the water safety group and/or external expertise during the build and commissioning programme is important to reduce the risk of water contamination

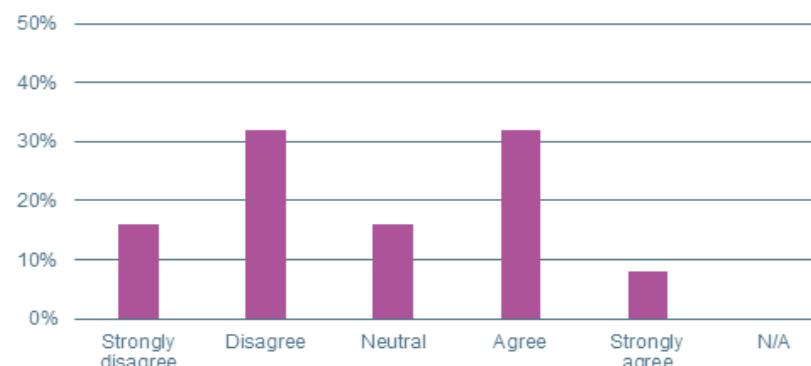
3.1.7. Staff rest rooms

Staff rest rooms are provided in both Catkin Centre and Sunflower House. Feedback from the staff at Sunflower House regarding the staff rest facilities was mixed with some staff suggesting there was not enough space and some finding it to be adequate for their needs. The staff rest room is small with a kitchen area and seating for 4 staff sitting at a dining table. Its main function appeared to be purely for staff to prepare food and eat during their breaks. It was observed to be quite stark in appearance and not particularly inviting or relaxing with a lack of comfortable, relaxed seating. Some staff mentioned in the survey responses that they found the staff rest room too small and mentioned staff having to find somewhere else to eat such as the changing room or the MDT office when the staff room is full. When asked in the survey what changes staff would make to the design of the building responses included:

“Make the staff rest facilities larger so that they can get the relaxation they need before going back into a stressful environment”

“Convert staff change room into a staff room with sofas/tv etc for staff to enjoy their break”

There are adequate staff rest facilities and they are easy to access



A view from inside a staff break room at Catkin Centre

Alternatively, the staff can use the courtyard garden during their breaks if the weather is suitable and it is not being used for therapy groups or can go to the main hospital to use the shops and cafes in the main atrium.

The staff rest room in the Catkin Centre is larger than the one in Sunflower House and does offer a selection of seating and a kitchen area. However, feedback suggested that this space is also too small for the number of staff working in the building with access to this room as well as the additional staff who come to Catkin to use the multidisciplinary team rooms.

Conclusions and lessons learned:

Staff facilities are an important consideration in the design of a healthcare setting as it is important to make staff feel valued and well looked after.

Working in healthcare can be a very stressful environment so staff need a comfortable space in which they can relax and decompress.

A selection of comfortable, relaxed seating as well as formal dining spaces offer staff choice during their breaks.

3.2. Sunflower House

3.2.1. Location

Staff viewed the proximity of Sunflower House to the main hospital as largely positive. It has created a strengthened relationship and improved collaboration with the main hospital. Shared patient record systems allow staff to access patient histories swiftly if patients from Sunflower House need to attend the emergency department or medical appointments in the main hospital.

Furthermore, the convenience of transferring blood tests, samples, pharmaceutical drugs and supplies between the facilities has significantly improved. Staff at Sunflower House also reported feeling that they were now more recognised as part of the wider Alder Hey team as a result of Sunflower House being on the same site as the main hospital. The previous site was an isolated, standalone unit and other departments within the Trust were not always aware of the mental health team based there. Now, however, everyone is aware of Sunflower House and members of staff reflected on an experience where they had been contacted by a team from the main hospital for advice as to how to deal with a patient who was experiencing mental health issues.

However, while the Alder Hey Hospital site offers amenities such as a small shop that staff are able to take the children to, the previous inpatient unit site had a local cinema and beach nearby, providing more opportunities for outings without overwhelming crowds. These amenities were more accessible and offered additional recreational opportunities than the current site.

Conclusions and lessons learned:

The co-location of mental and physical health facilities is beneficial in terms of multi-disciplinary working.

The co-location with the main hospital makes the staff feel less isolated and part of the wider Alder Hey team.

3.2.2 Communal areas

Around the internal circulation of Sunflower House communal seating areas are provided. These are multi-purpose spaces used by staff to observe and talk to patients and by families when visiting.

Staff felt that these spaces are useful as they do encourage patients to come out of their bedrooms to talk to staff if they are sat there. These spaces do also end up getting used by staff to do admin work due to the lack of office space elsewhere, which is perhaps not the intended use of these spaces. This does have its advantages as staff can be observing patients at the same time as doing some admin work however confidentiality could be an issue with working in an open, communal space. Some privacy concerns around these seating areas were also identified by staff, particularly those located outside of patient bedrooms. Whilst some patients were encouraged to come out of their rooms to speak to people, these seating areas can also have the opposite effect with patients feeling that their privacy is being compromised and anxious to come out of their rooms if others are sat outside their rooms. It was mentioned that people can also be heard talking in these seating areas from within the bedrooms. their rooms if others are sat outside their rooms. It was mentioned that people can also be heard talking in these seating areas from within the bedrooms.



Communal seating area in Sunflower House

Conclusions and lessons learned:

Communal break out spaces are beneficial to encourage patient socialisation

Acoustic privacy should be considered when locating communal areas directly outside of bedrooms or therapy rooms.

Adequate office space should be provided so that communal space does not have to be used by staff to complete administration tasks.

3.2.3. De-stimulation room

The de-stimulation room provides a quiet, low stimulus space for patients experiencing high levels of stress and anxiety. Concerns regarding the safety and suitability of the de-stimulation room were identified when the unit was first opened as it only has a small viewing window which meant that the line of sight into the room was poor and there were some blind spots in which patients could hide. This issue has been addressed by retrofitting live feed cameras to the room to be able to better observe the patients and improve safety.

Some staff identified an issue with the location of the de-stimulation room. It was highlighted that the proximity of the de-stimulation room to the high dependency bedrooms on the first floor poses challenges. In order to access the de-stimulation room patients must pass other potentially distressed patients' bedrooms, potentially exacerbating their distress.

Staff expressed that it would have been more beneficial for this space to be located on the ground floor adjacent to the school, as was the case at the Dewi Jones facility. This setup would enable distressed patients to be temporarily removed from the classroom environment and return once they have calmed down. The school is a location in which patients are quite likely to experience anxiety and might need the use of the de-stimulation room but, as this is on the first floor and the school is on the ground floor and opposite side of the building, the link and route between these two spaces is not ideal.

Staff also noted the challenge of persuading children to return to the school from the de-stimulation rooms on first floor, indicating that a closer proximity to the school would facilitate a smoother transition for the patients.

The de-stimulation room is fitted out with minimal furnishings comprising of a bean bag and an interactive panel which provides games and other distraction tools. Staff acknowledged the usefulness of this technology but also noted a lack of tactile stimuli in the room for the children, highlighting the importance of tactile sensations in de-escalating distressed patients.



Interactive panel in the de-stimulation room at Sunflower House

Conclusions and lessons learned:

Observation of the entire de-stimulation room is required. There should be no blind spots or places where patients can hide within the room.

The de-stimulation room should be easily accessible by staff accompanying highly distressed patients.

Whilst technology such as interactive panels are new innovative ways of providing distraction alternative tactile stimuli could also be provided to provide a selection of distraction tools to suit all patient needs.

3.2.4. Immersive room

The immersive room houses an interactive projector offering various activities such as educational games, films, calming scenes and immersive environments like a supermarket aisle and Liverpool city centre. This technology is used as part of patients' therapy with the city centre and supermarket scenarios allowing patients to explore and acclimatise themselves to real-world scenarios before encountering them firsthand. Staff regard this space as a valuable asset with immense potential for patient support.

Whilst the immersive room is a real positive feature of the unit, some staff did feel that the room's location on the ground floor limits its utilisation. Due to access control measures and the need for staff supervision, patients must be escorted downstairs to use the room, which proves difficult when staff must simultaneously monitor patients remaining on the upper floor. Staff believe that locating the immersive room on the first floor, where the bedrooms and recreational facilities are situated, would have enhanced its accessibility and utilisation. This adjustment would allow patients to easily incorporate the room into their free time after school, maximising its benefits.



The immersive room at Sunflower House

Conclusions and lessons learned:

The use of technology as part of a patient's therapy is very beneficial

Consideration should be given to the optimal location for spaces such as an immersive room to maximise utilisation.

3.2.5. Lounges and diner

Sunflower House features two lounges and a dining room for patient use. Staff and patients expressed great satisfaction with the dining room, noting that its design as an American-style diner perfectly matched the preferences voiced by the children during the design phase. It has been designed using different seating arrangements to allow patients either to sit in small groups or socialise with larger groups depending on their preference. Staff are also encouraged to eat with the children in the diner. The only negative feedback regarding the diner was the lack of an emergency call button in the room, which staff felt would be beneficial to have here.

There was a lot of feedback from staff regarding the size of the patient lounges with many of the staff feeling that they were too small. Neither lounge can accommodate more than approximately four patients comfortably and when staff are doing one to one supervision this adds to the challenge of the space. One survey response mentioned that as the lounges are small it is: "hard to find a good space to do group work or work with the young people, or for them to have time as peers playing games etc."

Staff frequently reflected on the lounge at the previous Dewi Jones unit, which was a much larger space and a central hub for the facility where they hosted movie nights, bingo and karaoke amongst other activities for the children. This is something which the staff feel is lacking at Sunflower House. This limited social space is likely a contributing factor for why patients and staff tend to commune in the seating areas outside the patient bedrooms. Again, similar to the diner, staff also had concerns about the absence of emergency call buttons in the lounges. Staff expressed concern for the safety of patients and staff due to this oversight, referencing an episode where a patient was in distress with a single member of staff in a lounge and they were unable to both restrain the patient and call for help due to not being able to reach their personal alarm.



Sunflower House diner



Patient lounge

Conclusions and lessons learned:

Socialisation is a key part of a patient's recovery therefore consideration should be given to providing suitably sized social spaces

An understanding of the types of activities which may take place in the socialisation space would help to inform the sizing and design of these spaces

Despite staff wearing personal alarms emergency call buttons should be provided in all rooms used by patients as an alternative method for calling for help.

3.2.6. Bedrooms

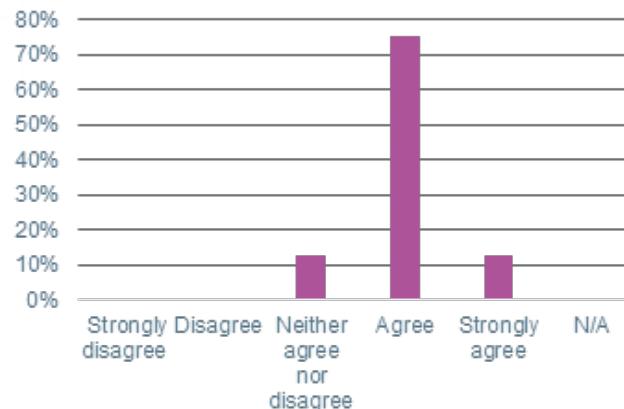
The design of the inpatient bedrooms from both staff and patients was positive overall. The patients are encouraged to customise the rooms by bringing their own bed linen and personal belongings to make the rooms feel more homely and comfortable. The majority of patient survey respondents said that they agreed or strongly agreed that the bedrooms were comfortable and the furniture met their needs. The only negative feedback from a patient was the lack of storage in the rooms.

The furniture in the bedrooms was in good condition and has been designed to minimise ligature points and the potential for patients to harm themselves. Observation into the bedrooms from the corridor is facilitated by interstitial blinds in the doors, ensuring efficient monitoring while maintaining privacy. Similarly, the ensuites offer good privacy from the bedrooms while allowing emergency access and observations if required.

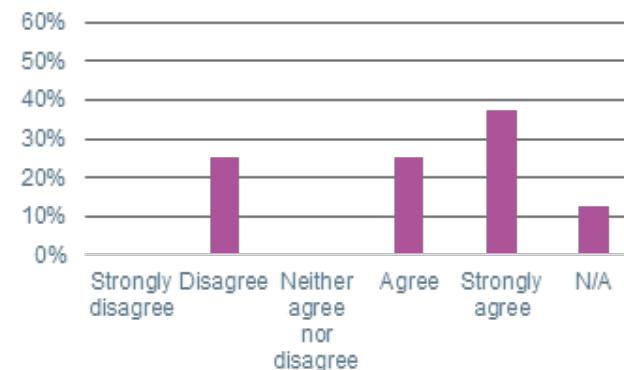
Overall, staff were satisfied with the design of the bedrooms, the only issue identified was with the blinds on the external windows which were described as not particularly effective in terms of blocking out the light. Interstitial blinds had been requested during the project design stages but were not included as part of the final design. The Trust are now planning to retrospectively replace the current blinds in all bedrooms with a more effective solution.



The bedrooms are comfortable



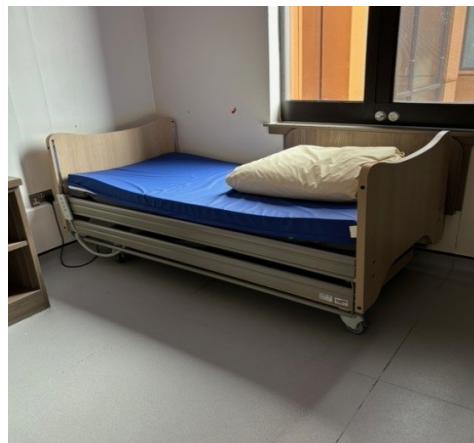
The equipment/ furniture in the bedrooms meets my needs



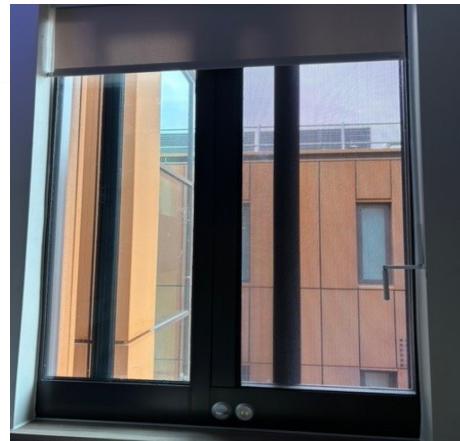
3.2.6. Bedrooms (continued)

One of the bedrooms has had to undergo some adaptation to make it more functional. This room was one of two bedrooms designed for children with physical health conditions. Once the building was in use staff found that the fixed bed in this room was not particularly suitable for patients who had physical health conditions and the room lacked sufficient space for the additional equipment needed such as wheelchairs, hoists etc. Consequently, the original bed has since been removed and replaced with a standard hospital bed which better accommodates the patient's needs and can be moved to provide more space in the room for additional equipment.

Sunflower House is only one of a few inpatient units in the country which provides a bedroom for family members to use within the unit. This is positioned on the ground floor away from the patient bedrooms. Although not heavily utilised, staff regard this as an excellent facility, providing comfort and support during challenging times and relieving stress for both the family and the patient, particularly during unplanned stays.



Room for patients with physical health conditions



View from patient's room

Conclusions and lessons learned:

The bedroom design incorporates a good balance of comfort and ligature reduction design

The ability for patients to personalise their rooms allows for a more homely environment

The need of patients with physical health conditions should also be considered in the design of mental health bedrooms

The provision of a family bedroom is an asset to the facility and shows that families of the patients have been considered in the design of the unit.

3.2.7. Therapy rooms

There are several therapy rooms situated on the ground floor including a family therapy room with observation room. The majority of staff found the therapy rooms to be suitable in providing privacy and confidentiality, although there was some feedback suggesting that the therapy rooms are not soundproof.

One member of staff also found the rooms to be a little bit small, although they were unsure if it was the size of the room or that it was perhaps that the furniture was a bit too big thus making the room feel smaller. The furniture in the therapy rooms was comfortable, of good quality and suitable for the mental health environment. It was also suggested that the doors to the therapy rooms could have been improved by having windows with interstitial blinds in them so that staff can tell if the room is in use or not. Not all of the rooms have these so, when using those without, staff rely on sticking a sign on the door indicating that the room is in use.

Conclusions and lessons learned:

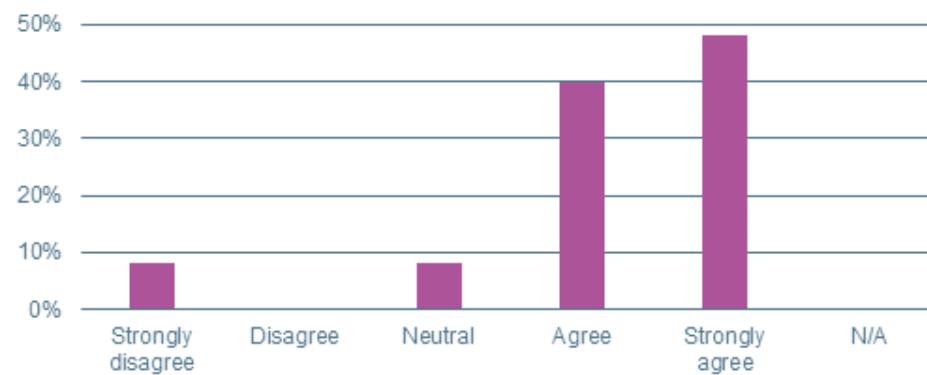
Acoustic privacy should be considered for rooms where confidential discussions may be taking place.

A way of identifying if a room is in use or not should be incorporated into the design.



Therapy room

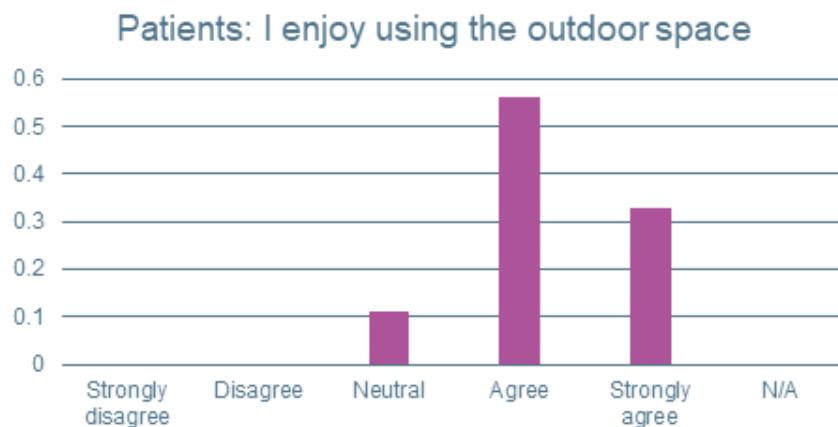
Staff: The therapy/counselling rooms provide privacy and confidentiality



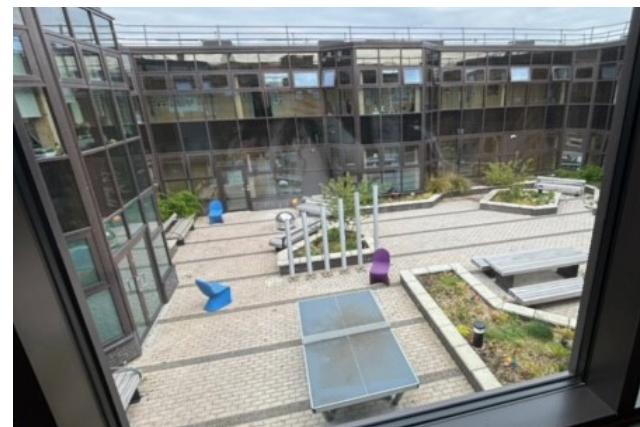
3.2.8. Outdoor spaces

Sunflower House provides plenty of outdoor space for patients to use. There is a large internal courtyard which is used as a therapy garden, sometimes hosting picnics and music and drama workshops as part of the patients' therapy. There is also an outdoor play area with sports equipment at the side of the building. Both spaces are used on a daily basis and positive feedback surrounding the outdoor space was received. Patients said that they had enjoyed using the outdoor spaces during their stay and staff also appreciated the access to these spaces both in terms of the patients' recovery and for themselves.

The only issue regarding the outdoor spaces mentioned was that children had expressed that they did not like the open wire fencing used to surround the outdoor play area on the side of the building. Whilst this style of fencing does provide the children with views out, as the building is located in a public park area members of the public can walk past and see into the play area whilst it is in use. To address this issue management are planning to put some screens in place.



Outdoor play area at Sunflower House



Therapy garden

Conclusions and lessons learned:

Outdoor space has therapeutic purposes and can improve recovery rates so is an essential requirement

The privacy of users should be considered in the design of outdoor spaces on the external facades of buildings.



Sunflower House dirty utility room



Assisted bathroom

3.2.9. Clinical support spaces

On the first floor amongst the patient bedrooms there is a dirty utility and medicine preparation room. Staff reported that the dirty utility is not frequently used and has been largely repurposed as a storage room, with cupboards soon to be retrofitted to support additional storage capacity.

In contrast the medicine preparation room is frequently used but is smaller than the dirty utility. This room is used for storing medicines, preparing feeds and height and weight measurements. A survey response stated that this room is “too small for the clinical needs and if two people are in the room it is too crowded.”

This opinion was echoed by other staff in the interviews. It was also mentioned that it was difficult to take patients in there for height and weight measurements due to the cramped space and that ideally there would be a bed in this room for giving patients feeds. Due to the room not being big enough to take a bed other spaces have to be used for patient feeds such as the lounges or seclusion room. It was suggested by several staff that due to the larger size and brighter natural light, the medicine preparation room would have been better located where the dirty utility is as it provides a better atmosphere for children to have height and weight measured and receive feeds, as is the original purpose of the space.

As is a common problem within healthcare facilities, staff consistently reported on a lack of storage space. One staff survey response noted that there was a: “complete lack of storage, no storage room or adequate areas to store numerous items.”

3.2.9. Clinical support spaces (continued)

While another staff member suggested that an improvement to the building could be: “more storage space for larger equipment we might need, for example a hoist.”

As a result, the medicine preparation room and dirty utility have become cluttered and difficult to use for their intended purpose and unused patient bedrooms and the assisted bathroom are used to store bulkier, mobile equipment. During the interviews, one member of staff suggested that the deep windowsills which line the corridor could have doubled as additional storage space.

Conclusions and lessons learned:

Understanding the activities which will take place in the spaces will allow for appropriate design of space.

Adequate storage should be provided to prevent clinical spaces being used for storage and becoming cluttered.

3.2.10. Staff areas

Located on the first floor with glass windows, the staff base offers an excellent vantage point with a view of the courtyard and most of the facility. However, its limited size poses challenges in terms of the number of staff who can work there and storage for files and paperwork. Several staff said that this area is too small making it difficult to find space to work, resulting in them using communal seating areas around the corridor. They added that the space always “looks messy no matter how tidied up the area is”

There are also offices and a multidisciplinary team (MDT) room on the ground floor. Feedback from staff concluded that they found the meeting and working spaces to be too small and insufficient for their needs. Several staff reported that the MDT room is not big enough to accommodate the amount of people needed for large meetings. When the full team is in some have to join meetings from another location as not everyone can fit in the room. It was also mentioned that the seating in this room is uncomfortable, particularly in long meetings.

The offices were also reported to be small. Responses to the staff survey regarding this subject included comments such as:

“I dislike how crammed some of the offices can get – I find this difficult for me to concentrate on my work”

“I have really struggled with the lack of space for working with a table/computer”

“often find because of how small if you leave a desk space for a quick meeting someone has had to sit there in that time.”

Whilst there are policies in place for staff to work from home on busy days, workspace is difficult to find. There is usually a spare room free which can be used for phone calls or unplanned meetings but at times the staff room has had to be used which is not ideal. Several commented that more office/computer space for nursing and clinical staff would be useful. A member of staff suggested that having the offices located next to one another and away from the therapy rooms.

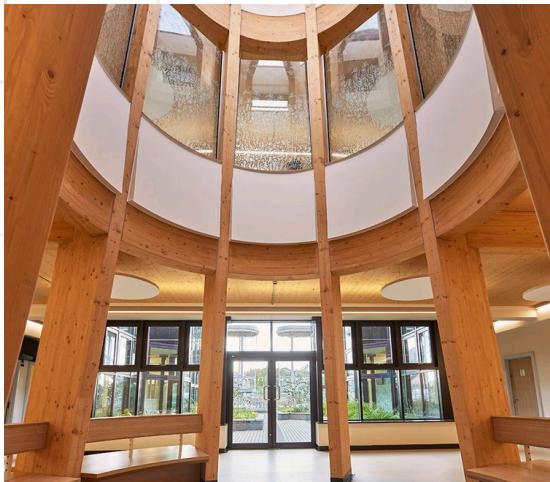
Conclusions and lessons learned:

The location of the staff base provides an excellent vantage point offering visibility over much of the facility.

Desk space is limited. With hotdesking becoming more common booking systems could be considered to manage the use of admin spaces.

Locating offices together in one area could improve communication and collaboration between teams.

Multidisciplinary team rooms should be designed to comfortably fit large groups of people.



Waiting area



Seating area

3.3. Catkin Centre

3.3.1. Waiting area

Catkin Centre features two waiting areas, one on each floor. A circular wooden structure spans both floors, serving as a focal point. The beautiful feature adds interest to the space and provides natural light into the area and a seating solution. It gives the space a modern feel, setting it apart from traditional healthcare settings.

Whilst the wooden structure adds interest to the waiting areas there were some practical issues identified regarding this feature. Staff highlighted safety concerns, particularly as the facility caters to children. They have witnessed children using it as a climbing structure and also throwing small objects over the top of the glass panels on the first-floor, which then land on the ground floor.

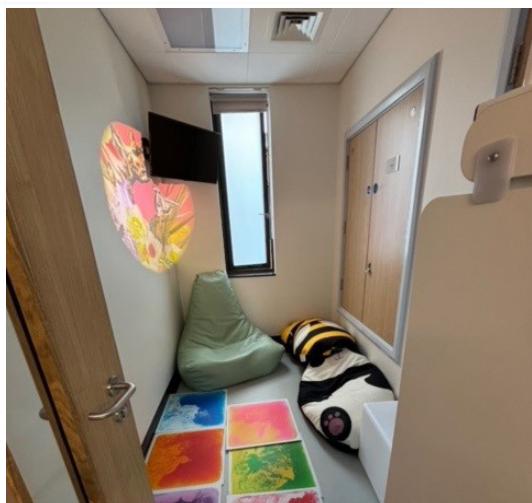
The circular wooden structure also poses challenges with visibility and sound clarity across the waiting area. The structure obstructs the views from the reception desks, meaning that reception staff do not have a clear view of the whole waiting area. Also, as there is no patient call system in the building, when clinicians come to call patients for their appointments, they can experience problems locating them. Our review team observed patients and their families experiencing difficulties identifying where their names were being called from due to the wooden structure blocking their view of the clinician, causing confusion on where they needed to go.

Seating areas are sparse with only a small sofa and chair on each floor offered as alternatives to wooden benches on the central circular feature. Feedback from the visitor survey highlighted that people found the wooden seating to be uncomfortable, especially as parents can be waiting for extended periods while their children go to their appointments alone. A staff member said: "Catkin has uncomfortable seating and is quite stark in appearance."

Sofas in the waiting seemed to be used regularly, indicating a preference or softer seating or maybe confusion as to the purpose of the wooden structure. Beanbags added to the first floor waiting area have been well-received by children, suggesting the potential benefit of more soft furnishings in the waiting space.



Waiting area



Quiet room

3.3.1. Waiting area (continued)

There is a TV on each floor. When our team visited, the ground floor TV was set to radio and the first floor TV was not working. The reception team said that they are usually set to radio as many visitors cannot see them from the the waiting area.

As there is no café within the building, vending facilities have been added to to provide snacks an beverages to visitors waiting for long periods. There is also good access to WCs and a changing room on the ground floor.

Although the waiting areas are sparse in terms of furniture, some visitors appreciated the calming environment. One parent commenting that the space was: "a lovely, calming place and friendly for autistic individuals." Due to the nature of the services provided in Catkin Centre, an uncluttered space was perhaps the intention in order not to overstimulate patients.

Just off both waiting areas a quiet, sensory room for those who find the main waiting area overstimulating. These spaces are small and compromised by the fact that they have riser doors within them. Due to the size of these rooms, they are not particularly suitable for wheelchair users, although this is the patient group which may have the most requirement for access, and one member of staff described them as not fit for purpose.

Conclusions and lessons learned:

A choice of different style seating in waiting areas is appreciated by visitors

Comfort of visitors should be considered, particularly if they may be waiting for long periods of time

Architectural features do provide a 'wow factor', but the practicalities of installing these features need to be considered

Reception desks should have a clear unobstructed view of the waiting area and access routes to clinical areas as per HBN 00-03

Access to refreshments enhances the visitor experience

All areas need to be accessible for wheelchair users.

3.3.2. Clinical rooms

The clinical rooms generally benefit from natural light and outdoor views. However, some first-floor rooms are quite small and dark, resulting in them being less frequently used as staff opt for more favourable spaces when booking rooms.

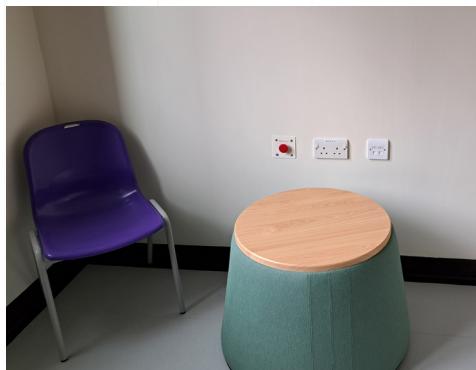
The counselling and therapy rooms are of a good size, although some do have unusual shapes, and provide enough space for the required activities and furniture. Good levels of privacy are provided as the doors are solid with peep holes rather than having glazed vision panels, however this does make it difficult to see if a room is occupied, particularly due to the unusual room shapes.

The furniture in the counselling and therapy rooms was observed to be in good condition with just some wrinkling of the fabric on some of the large counselling chairs. The colour choices and styles of furniture however did appear rather mismatched in some places.





Warning sign in counselling room



Emergency button next to seating area

3.3.2. Clinical rooms (continued)

Some safety issues in the counselling and therapy rooms were identified by staff. There have been problems with the fixing of the blinds in these rooms and there have been several instances where the blinds have fallen down hurting people when visitors have attempted to adjust them. As a result, signs have been installed in rooms indicating that visitors should not adjust the blinds to prevent accidents.

There are also concerns about the placement of emergency call buttons in some rooms. It was noted that the buttons are not all located in the same position in rooms or fixed at the same height, some of which are at a relatively low height. The low fixing height of some of the call buttons often leads to instances of the buttons being pushed accidentally as they have been knocked when moving furniture or are just at the right height for inquisitive children. Additionally, some rooms have been fitted with multiple call buttons which may be excessive given the nature of the outpatient appointments.

Feedback was also received regarding the height and weight room. This space was described by staff as being “unorganised”, “not adequate”, “feels claustrophobic” and “not really fit for purpose”. The long, thin shape of the room makes it an unpractical space and a desktop has been replaced with a mobile workstation to try and create more space in the room. It was suggested by staff that the height and weight room could be made: “more accessible and child friendly instead of being very clinical.”

Conclusions and lessons learned:

Natural light and outdoor views are beneficial in clinical spaces and provide a pleasant environment for both staff and patients.

Colour coordinated furniture can improve the aesthetics of rooms.

Fixtures and fittings should be securely fixed

Panic alarm buttons should be fixed at a suitable height where they can be reached easily but not knocked accidentally.

Clinical rooms should be designed to be a suitable size and shape for the activities taking place.



3.3.3. Outside space

Catkin Centre has an attractive landscaped courtyard garden which provides pleasant views from inside the building. Unfortunately, however, the garden is currently unavailable for use due to a health and safety risk. Feedback from staff and visitors suggested that people found the lack of access to the garden disappointing.

Conclusions and lessons learned:

Access to outdoor space has therapeutical benefits and is appreciated by both staff and patients. This should be prioritised as an essential requirement.

4. Conclusion

Catkin Centre and Sunflower House is a great example of a modern, progressive healthcare facility. It has been successful in its objective of bringing together the previously fragmented children's mental health services in Liverpool and co-locating these services with the main acute hospital. It is a building which has been well received by patients and visitors and staff consistently reported that they enjoyed working there.

The building has a calm, relaxing feel enhanced by the natural light, links to nature and the décor of wood and pastel colours, which is exactly the kind of environment needed for the treatment of patients who can be experiencing high levels of anxiety or are at their lowest.

The building is designed to incorporate nature and natural light, factors which are known to have therapeutic effects and aid physical and mental recovery, by being built around courtyard gardens and having plenty of windows providing a view of the gardens or the park in which the building is situated wherever you are in the building. As well as flooding the building with lots of natural light the windows provide the building with excellent visibility, an important feature particularly for Sunflower House as it allows staff to be able to spot patients or other staff members who might need help from anywhere in the building.

However, although the use of glazing throughout the building offers many benefits it also presents some challenges in terms of privacy, glare and heat management. The lack of window coverings, which provides the required visibility, results in a lack of privacy for vulnerable patients who may be having an episode or need restraining in the corridor. The issue of heat management was a recurring theme from the feedback gathered in this POE, with staff describing the building as a greenhouse in the summer and reporting the need for icepacks in Sunflower House to keep patients cool. The lack of air conditioning throughout the whole building contributes to the difficulties in regulating its temperature.

4. Conclusion (continued)

Access to Sunflower House and Catkin Centre could be improved with better signposting from the main hospital and it was reported that some visitors do struggle to find the building on the hospital site. Internally the wayfinding could also be improved with more information particularly for outpatient visitors as to which services are on which floor.

The building does unfortunately suffer from some operational issues. As well as the problems with heat management there is an issue with the use of the car park under the building and with the water supply. Whilst these are quite significant issues the Trust are aware of these and have implemented successful measures to manage these.

Sunflower House was well received by the staff who worked there, and it was felt by those staff who had also worked in the previous unit to be an improvement. The relocation of the inpatient facilities from the previously isolated Dewi Jones unit to being on the main children's hospital campus was found by the staff to be beneficial, improving communication and collaboration with teams in the main hospital, improving access for patients with physical health issues and making the team at Sunflower House feel more recognised as part of the wider Alder Hey team.

There was mixed feedback regarding the individual spaces within Sunflower House. Patient spaces such as the bedrooms, diner, therapy rooms, outside spaces and the communal areas generally received positive feedback with staff suggesting that these areas meet the patients' needs with the diner being a particular success, reflecting exactly the vision of the children who had inputted into the design of this space. There was however some dissatisfaction with the sizes and locations of some rooms within the unit.

The patient lounges were felt by many staff to be too small, therefore restricting their use for larger group activities and the lack of emergency call buttons in these rooms was also a concern amongst staff. The medicine preparation room was also reported as being too small for the number of people needing to use this room and the activities which should take place in there.

The locations of the immersive room, seclusion room and de-stimulation rooms were also a common theme amongst the feedback gathered. Whilst staff appreciated the state-of-the-art technology provided by the immersive room it was suggested that this may be used more frequently if it had been located on the first floor closer to the patient bedrooms. Oppositely some staff felt that the de-stimulation room may have been better located on the ground floor in close proximity to the school providing an easier route for transferring patients from the school to an area where they can calm down.

The staff facilities were found to be quite limited. The only staff rest room in the unit is small and cannot accommodate many people resulting in staff having to find other locations such as the changing room or MDT room, if available, to take a break and eat meals which is not ideal. Staff also felt that there is not enough office space provided in the unit and again often need to find alternative locations from which to work from such as unoccupied therapy rooms, the MDT room or even the communal seating areas around the corridor. The MDT room was also noted to be too small for the number of people which need to use it at times. On occasions when larger meetings need to take place it is a struggle to accommodate everyone and sometimes people need to join remotely from other locations.

Catkin Centre has an impressive entrance with its beautiful wooden structure acting as an interesting focal point in the waiting areas. As with Sunflower House it is light, bright and calming, although perhaps a little bit stark in its appearance due to the lack of colours and soft furnishings. The wooden structure in the waiting areas does also pose some issues with it being a tempting climbing structure for children and also causing visibility problems, blocking patients views of the TVs in the waiting area and more importantly the clinicians calling patients for their appointments.

4. Conclusion (continued)

The building does give a sense of some confusion in its design and layout. The wooden structure in the waiting area may not be overly obvious to first time visitors that it is meant to be used as a seating area and there are some other areas in the building which the review team and staff found to be unclear of their purpose such as the benches outside of the counselling rooms and a cubby hole seat outside of the staff offices.

As with Sunflower House there were also some rooms in Catkin Centre which were identified as being too small. The quiet rooms, adjacent to the waiting areas, providing a sensory environment for over stimulated patients and the height and weight room were two examples of areas which staff found to be too small and unfit for purpose. Generally, however the therapy and counselling rooms were well received and found to be of good size with access to natural light and views, small improvements such as ensuring the blinds are securely fixed to the windows and co-ordinated furniture could make them better.

Whilst the building does have its problems some of which are being managed and there are plans in place to address others it is overall a building which portrays a sense of positivity. Its non-traditional external appearance gives a new outlook to mental health facilities and this continues inside with its light, bright and airy spaces and views of nature contributing to the calming feeling throughout the building and providing an environment conducive to recovery and healing.

Contact us



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5. Appendices

Appendix 1: Visitor surveys

Appendix 1: Visitor survey

Patient/carer Catkin Centre post occupancy evaluation survey

Rate the following statements from 1-6

1. Strongly disagree 2. Disagree 3. Neither agree nor disagree 4. Agree 5. Strongly agree 6. N/A

The location of the health centre was convenient for me to get to 1 2 3 4 5 6

The building is easy to navigate with easy to follow signage 1 2 3 4 5 6

The waiting area was welcoming 1 2 3 4 5 6

I feel calm and relaxed in the centre 1 2 3 4 5 6

The garden is easily accessible 1 2 3 4 5 6

There is easy access to toilets 1 2 3 4 5 6

The therapy/counselling rooms are comfortable and spacious 1 2 3 4 5 6

The equipment/furniture in the clinic rooms meets my needs 1 2 3 4 5 6

The therapy/counselling rooms support my privacy and dignity 1 2 3 4 5 6

What features of the building do you like or dislike?

Appendix 1: Visitor survey

Patient Sunflower House post occupancy evaluation survey

Age:

Rate the following statements from 1-6

1. Strongly disagree 2. Disagree 3. Neither agree nor disagree 4. Agree 5. Strongly agree 6. N/A

It is easy to find my way around the building with easy to follow signage 1 2 3 4 5 6

The garden is easily accessible 1 2 3 4 5 6

I enjoy using the outdoor space 1 2 3 4 5 6

There is easy access to toilets 1 2 3 4 5 6

The bedrooms are comfortable 1 2 3 4 5 6

The equipment/furniture in the bedrooms meet my needs 1 2 3 4 5 6

The therapy rooms support my privacy and dignity 1 2 3 4 5 6

I enjoy using the social spaces in the building 1 2 3 4 5 6

I feel safe in the building 1 2 3 4 5 6

What features of the building do you like or dislike?

Appendix 2: Staff surveys

Appendix 2: Staff survey

Catkin Centre post occupancy evaluation staff questionnaire

Staff:

Role:

Rate the following statements from 1-6

1. Strongly disagree 2. Disagree 3. Neither agree nor disagree 4. Agree 5. Strongly agree 6. N/A

The layout and clinical adjacencies of the building works well overall 1 2 3 4 5 6

The building is easy to navigate with simple to follow signage 1 2 3 4 5 6

There are adequate facilities for visiting families 1 2 3 4 5 6

I can clearly observe patients from where I work 1 2 3 4 5 6

I never feel isolated or alone in the department 1 2 3 4 5 6

There is easy access to clinical support rooms e.g. clean & dirty utilities 1 2 3 4 5 6

There is easy access to a staff base/office/computer workstation 1 2 3 4 5 6

There is easy access to staff toilets 1 2 3 4 5 6

There are adequate staff rest facilities and they are easy to access 1 2 3 4 5 6

The therapy/counselling rooms provide privacy and confidentiality 1 2 3 4 5 6

There is sufficient space in the therapy rooms for the required activities 1 2 3 4 5 6

The equipment/furniture in the therapy rooms is of a suitable quality 1 2 3 4 5 6

The access control and security in the building is of a suitable standard 1 2 3 4 5 6

The building is a pleasant environment to work in 1 2 3 4 5 6

The building is a pleasant environment for patients and families 1 2 3 4 5 6

What features of the building do you like or dislike?

What changes would you make to the design of the building if you were able to?

Appendix 2: Staff survey

Sunflower House post occupancy evaluation staff questionnaire

Staff

Role:

Rate the following statements from 1-6

1. Strongly disagree 2. Disagree 3. Neither agree nor disagree 4. Agree 5. Strongly agree 6. N/A

The layout and clinical adjacencies of the building works well overall 1 2 3 4 5 6

The building is easy to navigate with simple to follow signage 1 2 3 4 5 6

There are adequate facilities for visiting families 1 2 3 4 5 6

I can clearly observe patients from where I work 1 2 3 4 5 6

I never feel isolated or alone in the department 1 2 3 4 5 6

There is easy access to clinical support rooms e.g. clean & dirty utilities 1 2 3 4 5 6

There is easy access to a staff base/office/computer workstation 1 2 3 4 5 6

There is easy access to staff toilets 1 2 3 4 5 6

There are adequate staff rest facilities and they are easy to access 1 2 3 4 5 6

The therapy rooms provide privacy and confidentiality 1 2 3 4 5 6

There is sufficient space in the therapy rooms for the required activities 1 2 3 4 5 6

The equipment/furniture in the therapy rooms is of a suitable quality 1 2 3 4 5 6

The access control and security in the unit is of a suitable standard 1 2 3 4 5 6

The building is a pleasant environment to work in 1 2 3 4 5 6

The building is a pleasant environment for patients and families 1 2 3 4 5 6

What features of the building do you like or dislike?

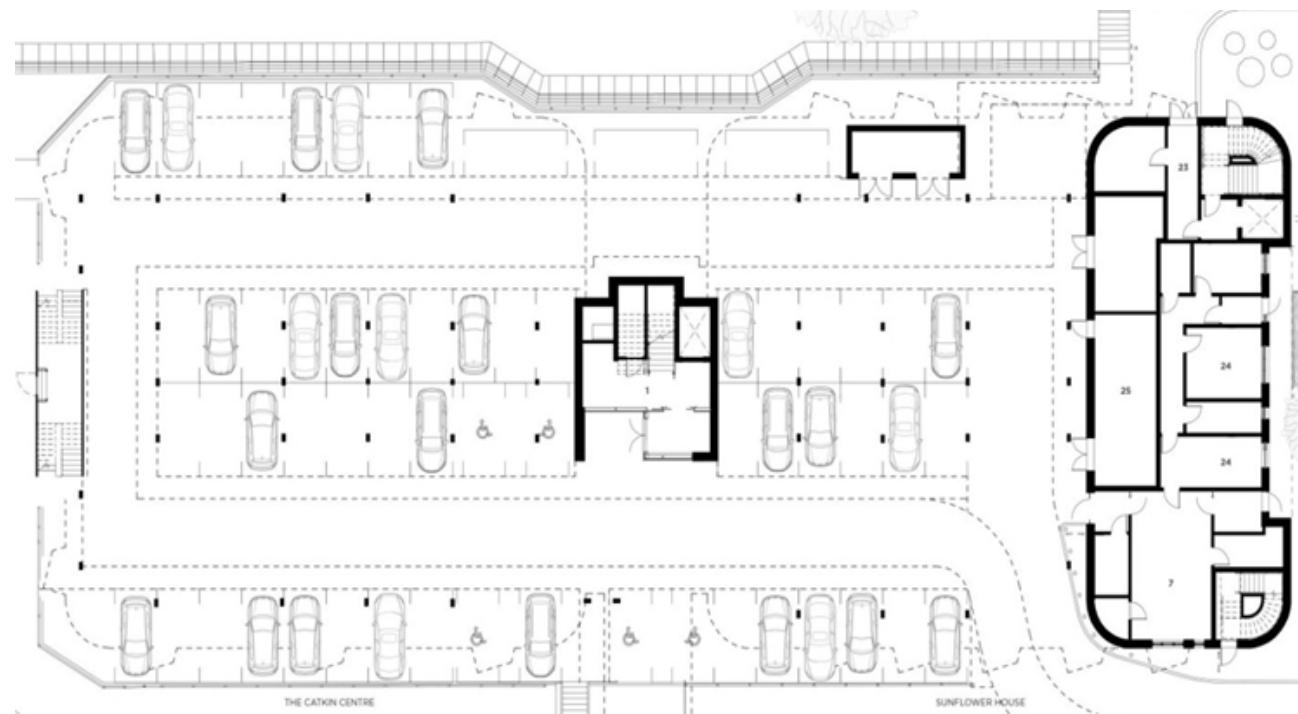
What changes would you make to the design of the building if you were able to?

Appendix 3: Visitor survey results

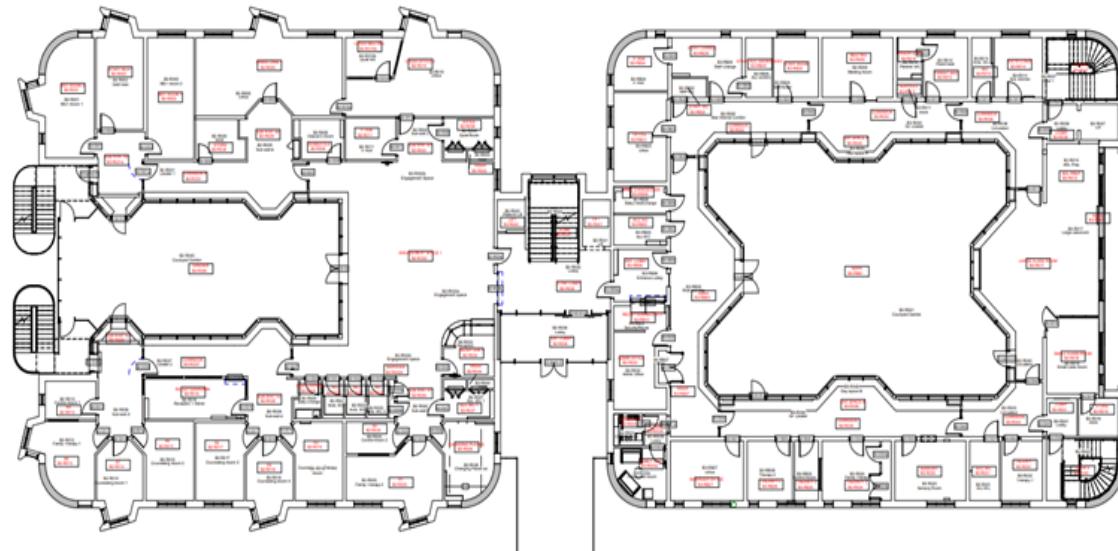
Appendix 4: Staff survey results

Appendix 5: Floor plans

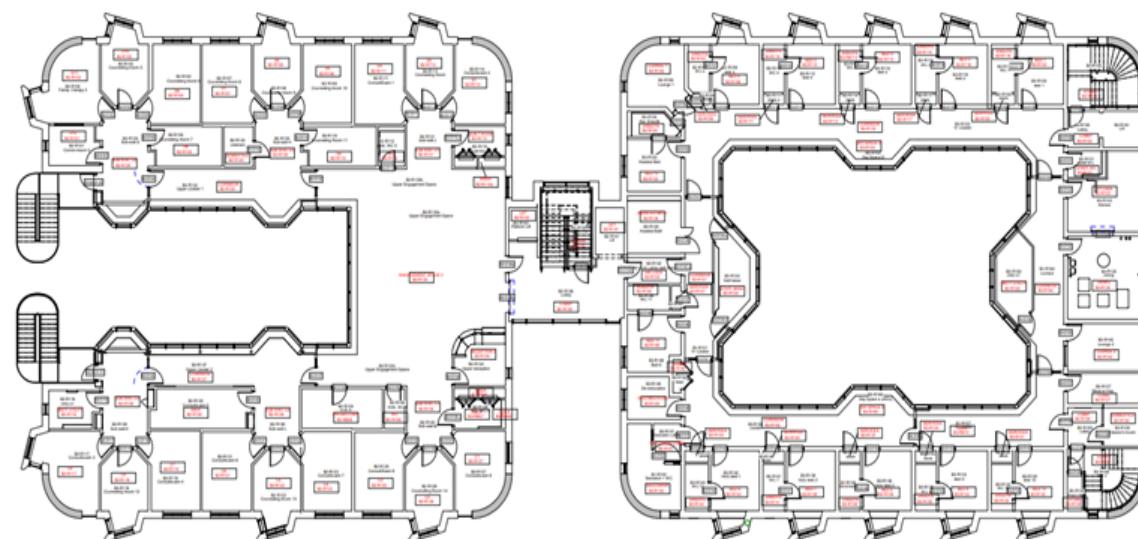
Appendix 5: Lower ground floor



Appendix 5: Ground and first floor



Ground floor



First floor

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