By Emily Robertson 2023/24

# Respite

A project proposal to create an updated Rest Relax Recharge Room within Ninewells.

# Contents

1.	Tab	ble of Figures	2
2.	Ab	breviations	3
3.	Exe	ecutive Summary	4
	3.1.	Content	4
	3.2.	Findings	4
	3.3.	Conclusion	4
4.	Me	thodology	5
	4.1.	Primary Research	5
	4.2.	Interviews	5
	4.3.	Survey	5
	4.4.	Observations	6
	4.5.	Behavioural mapping	6
	4.6.	Secondary Research	6
	4.7.	Case Studie	6
5.	De	sign Methodology	7
	5.1.	Double Diamond	7
	5.2.	Human Centred Design	7
	5.3.	Biophilic Design	7
6.	Lin	nitations	8
7.	Ain	ו	
8.	Ob	jectives	8
9.	Intr	oduction	9
	9.1.	Importance of Mental	9
		Health Within Work	
10	). Di	fferent Types of Stress in	10
	He	althcare Roles	
	10.1	. Burnout	10
	10.2	2. COVID Related Stress	10
	10.3	3 Trama	10
	10.4	. PTSD	10
	10.5	5. Moral Injury	10
11	. C	ase Studie looking at a	11-12
	V	Vellbeing Room	

12. Rest Relax Recharge Rooms	13
12.1. General Background	13
12.2. Ninewells Rest Relax	_13
Recharge Rooms	
12.3. Identified Challenges	_14
12.4. Site Analysis	_15 - 17
12.5. Staff Views on the RRR	18
Rooms	
12.6. Critical points from Staff	19
Interviews	
13. Observations	20
14. Behavioural Maps	21
15. Respite: The Proposal	_22
15.1. Colour Scheme	_22
15.2. Layout	_23
15.3. Furniture and Furnishings	24
15.4. Renders	25 - 26
15.5. Lighting and Atmosphere	27
15.6. Summary	_27
16. Conclusion	28
16.1. Reflections	28
16.2. Further Notes	28
17. Acknowledgements	29
18. References	30 - 32
19. Appendix	

# <sup>7.</sup> Table of Figures

- Figure 1 Double Diamond framework table https://www.designcouncil.org.uk/our-resources/framework-for-innovation/
- Figure 2 Image of NUH Wellbeing room https://www.nuh.nhs.uk/latest-news/new-staff-wellbeing-centres-to-support-team-nuh-throughcovid19-4564/
- Figure 3 Table showing Perceived benefits of wellbeing centres and barriers to access. (Blake et al., 2020) COVID-Well: Evaluation of the Implementation of Supported Wellbeing Centres for Hospital Employees during the COVID-19 Pandemic. International Journal of Environmental Research and Public Health, 17(24), 9401. Available at: https://doi.org/10.3390/ijerph17249401
- Figure 4 Ninewells Hospital Level 9 RRR Room Floor plan Created by Reasercher
- Figure 5 Image of poster in Ninewells Hospital Level 9 RRR Room Taken by Reasercher
- Figure 6 Image of sign in Ninewells Hospital Taken by Reasercher
- Figure 7 Image of Canteen sign outside Level 9 RRR Room in Ninewells Hospital Taken by Reasercher
- Figure 8 Image of functioning sink in old kitchen on Level 9 in Ninewells Hospital Taken by Reasercher
- Figure 9 Image of storage space in old kitchen area on Level 9 in Ninewells Hospital Taken by Reasercher
- Figure 10 Image of casrpet flooring in Ninewells Hospital Level 9 RRR Room Taken by Reaserche
- Figure 11 Image of peeling wallpaper in Ninewells Hospital Level 9 RRR Room Taken by Reaserche
- Figure 12 Image of poster in Ninewells Hospital Level 9 RRR Room Taken by Reasercher
- Figure 13 Image of poster in Ninewells Hospital Level 9 RRR Room Taken by Reasercher
- Figure 14 Image ofposter in Ninewells Hospital Level 9 RRR Room Taken by Reasercher
- Figure 15 Image of poster in Ninewells Hospital Level 9 RRR Room Taken by Reasercher
- Figure 16 Image of chairs and table in Ninewells Hospital Level 9 RRR Room Taken by Reasercher
- Figure 17 Image of hotdesk in Ninewells Hospital Level 9 RRR Room Taken by Reasercher
- Figure 28 Image of window ans exteriour view in Ninewells Hospital Level 9 RRR Room Taken by Reasercher
- Figure 29 Image of sofas and soca chairs in Ninewells Hospital Level 9 RRR Room Taken by Reasercher
- Figure 20 Image of bucket chairs and sofa in Ninewells Hospital Level 9 RRR Room Taken by Reasercher
- Figure 21 Image of dining chairs and tables in Ninewells Hospital Level 9 RRR Room Taken by Reasercher
- Figure 22 Table showing selection of responces of three questions from staff survey Created by Reasercher
- Figure 23 Ninewells Hospital Level 9 RRR Room Behaviourl map Created by Reasercher
- Figure 24 Table showing selection of responces to a question from staff survey Created by Reasercher
- Figure 25 Ninewells Hospital Level 9 Respite Proposed Floor plan Created by Reasercher
- Figure 26 Render image of Proposed space showing main area and section of amenities area
- Figure 27 Render image of Proposed space showing main area, a section of amenities area and enterance way
- Figure 28 Render image of Proposed space showing main area and section of amenities area from view of Figure 29 sheltered seating
  - Render image of Proposed space showing amenities area and enterance way
- Figure 30 Render image of Proposed space showing new RRR Room soft floor seating area, wicker Figure 31 partitions and room enterance
  - Render image of Proposed space showing new RRR Room soft floor seating area, wicker partitions



NHS - National Health Service RRR - Rest Relax Recharge UK - United Kingdom COVID - Coronavirus Disease CAD - Computer Aided Design PTSD - Post-Traumatic Stress Disorder NUH - Nottingham University Hospitals

### <sup>3.</sup> Executive Summary

### 3.1 Content

This report is a project proposal for the redesign of the Rest Relax Recharge Room (RRR Rooms) within Ninewells Hospital. It analyses the importance of mental health in the workplace and how COVID-19 has affected the mental health and wellbeing of NHS staff across the UK. The report's primary research is conducted through interviews, surveys, observations, and behavioural mapping, alongside case studies and secondary research to investigate how interior design elements in a designated area can improve staff wellbeing and provide suitable non-clinical areas to rest within Ninewells. This report aims to provide an analysis of the current RRR room and identify ways to improve it by providing a better user experience tailored to staff needs and preferences.

### 3.2 Findings

Through secondary research, this report found that NHS Staff across the country regularly experience stress and anxiety from work, which has been intensified since COVID. This stress can have a significant detrimental effect on staff mental health and wellbeing and is something that the NHS is actively trying to improve. In Tayside, the introduction of Rest Relax Recharge rooms in 13 hospitals was to provide staff with a space away from the COVID wards and clinical spaces to decompress and relax at work. However, interviews and survey responses from staff who use the RRR Room identified problems with the space and changes that could be made to provide a relaxing environment better suited for the staff. Improvements must be made in four key areas: layout, lighting, furniture, and colour.

#### 3.3 Conclusion

In conclusion, this project proposal has identified key areas for improvement in the current RRR Room. These areas include layout, lighting, furniture, and colour. Through primary research methods such as interviews, surveys, observations, and behavioural mapping, alongside case studies and secondary research this report considered design techniques alongside biophilic design, a design approach which has proven positive effect of physical and mental wellbeing in users. This proposals recommendations are highlighted and supported with a floorplan and CAD rendered imagery.

# <sup>4.</sup> Methodology

Various methods were employed to collect comprehensive and significant information and data.

#### 4.1 Primary research

Primary research is a type of research that involves collecting original data directly from the source. This can be done through various methods such as surveys, interviews, observations, and experiments. Primary research aims to gather new information and insights that have yet to be previously discovered or published.

### 4.2 Interviews

This vital method of gathering research will be used to gain personal opinions and experiences of staff who use the RRR room, why they use it and their views of it, as well as finding the staff who do not use it and their reasoning behind why they do not or why they go elsewhere to have a private moment. Interviews with those who manage the space will also clarify the intent for the area, what limitations they have on the room, and any issues they can see from a managing point of view. Several people were consulted and verbal consent was given for :

Kenneth Flemming – Head of Health and Safety Services, was this proposal's initial point of contact.

(Unnamed) Dermatologist – Constant user of the RRR room, used it since it was based in level 5 café. (Unnamed) Patient History – Constant users of the RRR room sought out researchers to give their say on the space.

### 4.3 Survey

A social survey is a method of obtaining large amounts of data, usually in a statistical form, from many people in a relatively short time. It usually takes the form of a self-completion questionnaire, or an interviewer may read the guestions to the respondent and fill in the guestionnaire on behalf of the respondent. If the latter course is taken, the survey method is termed a 'structured interview'. (McNeill, P., & Chapman, Steve. 2005) This allows for data to be gathered confidentially without having to meet every single person in person and allows them to remain anonymous. It is also a more efficient way of gathering baseline data that can be analysed and expanded to provide a basis for potential interview questions. Further, an optional question to leave the participant's email if they are willing to be contacted further allows for a wider pool of potential interviewees to be identified quickly. If the response rate to this proves to be low, then small interviews can be completed within the room and paper surveys can be left in the room for staff to fill out in their own time. All questions are recorded anonymously with minimal identifying questions and relate to the room itself or the reasons behind the use of the room. Questions like; 'Do you ever feel overwhelmed by work' and 'Have you ever called off sick from work due to your mental health?' provide a baseline percentage that can be later analysed after the new design has been implemented for a period to assess whether the new design is providing a suitable area for rest. Further, questions such as 'If a space was provided for the hospital for staff to unwind, relax or decompress, especially after dealing with a difficult situation, what would be a must-have for that space?' and 'What do you not like about this space?' allow for the respondents to provide their own thoughts about the space and for it to be used throughout the design process. The full questionnaire list can be seen in the appendix

#### 4,4 Observations

This essential study allows the researcher to gather data and information about a space without disturbing the users or altering their behaviour. Conducted at different times of the day, it will enable the researcher to view the room in use throughout multiple shift patterns and times and see if there are differing levels and types of usage. If being in the room proves to be invasive or uncomfortable for the staff, then a viewpoint from outside the room could be used to determine the frequency of use and the type of people using it rather than viewing people within the RRR room. The observation criteria used during this process include several factors such as cleanliness, comfort, amenities, and intention. Additionally, the observation criteria include seating space, who uses the break room, and accessibility to the room.

### 4.5 Behavioural mapping

This crucial method will enable the researcher to identify patterns and behaviours within the room, a record of the most and least used areas and any pools of interaction within the space. It will also allow for an analysis of the space's current layout and identify whether there are any clear obstacles in the layout of the room.

#### 4,6 Secondary Research

Secondary research is a type of research that involves investigating existing data and information that already exists in studies, books, online or in journals. It is a cost-effective and time-efficient way to gather information quickly and from various sources.

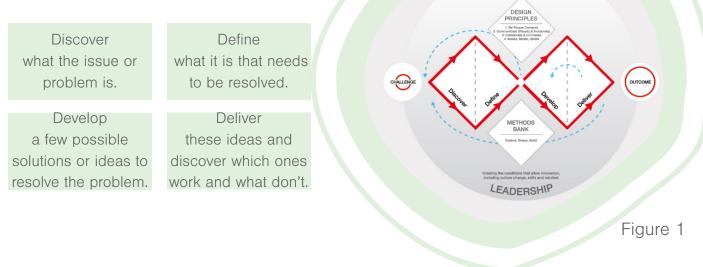
#### 4.7 Case Studies

Case studies are vital in analysing existing designs as they offer a base point and foundation to analyse. It allows the researcher to see what was successful and unsuccessful in a similar environment and adapt their ideas and research accordingly.

# <sup>5.</sup> Design Methodology

### 5.1 Double Diamond

The double-diamond design framework is used to organise the research and delivery of this project proposal. It is split into four key stages: Discover, Define, Develope, and Deliver



ENGAGEMENT

### 5.2 Human-centred Design

Human-centred design is a problem-solving technique that puts real people at the centre of the development process, enabling you to create products and services that resonate and are tailored to your audience's needs. The goal is to keep users' wants, pain points, and preferences in mind during every phase of the process. (Landry, 2020). Pairing this design technique with the findings from surveys and interviews allows the designer to prioritise the audience's preferences and tailor the outcome to suit them.

### 5.3 Biophilic design

Biophilic design relates to the human instinct to seek connections with nature and all living things (Lee E-J, Park S-J. 2022). It is a design approach that combines elements of nature to create a more balanced, beneficial environment for people, which can involve incorporating natural materials, adding plants or greenery, and using natural lighting and ventilation. Biophilic design aims to create spaces that feel more connected to nature. The benefits of biophilic design are presented with a variety of empirical evidence, ranging from biological and mental health and wellbeing, to environmental sustainability and economic efficiency. (Lee E-J, Park S-J. 2022)

### Limitations

Certain limitations may affect this proposal's outcome. Due to a time restraint, the sample size of survey responses may be limited as it could only accept responses for 1½ months over November and December. Throughout the design process, interviews were conducted with users of the space to gather vital insights and opinions. However, due to time constraints, the number of interviews was limited. To ensure a more successful proposal, a larger pool of first-hand information must be recorded and analysed throughout all design stages to obtain more conclusive results.

It must also be mentioned that interior design is an objective discipline; one style only fits some spaces or people's individual tastes, so the outcome may not be appealing to all who see or use the space.

### 7. Aim

To redesign and update the Rest Relax Recharge Room (RRR Rooms) within Ninewells Hospital to create a more welcoming and relaxing environment to help the NHS staff relax and unwind during or after their shift.

### <sup>8.</sup> Objectives

- Understand through secondary research why RRR rooms are needed in hospital workplaces and how successful they are.
- To identify and analyse the flaws, failures, and successes of the current RRR rooms in Ninewells through primary research.
- Discover how the current room can be changed, adapted, and redesigned to create a more welcoming, relaxing, and inviting environment through survey results and analyses.
- To create a proposal design for the RRR rooms that creates a better Rest, Relax, and Recharge zone that allows staff to relax and detox effectively.

### <sup>9.</sup> Introduction

The United Kingdom's National Health Service is arguably one of the most recognisable healthcare services in the world and one of the largest employers in the world as of 2022, with over 1.3 million staff. This makes it the most significant National Health Service in Europe. Throughout the pandemic, the NHS staff received massive recognition and public celebration, with people participating and showing their support online in the "Thank You NHS" social media movement. People were standing on their steps, clapping, decorating their houses and shops with rainbows, and posting on social media using the hashtags #ThankYouNHS, #ClapForOurCarers and #NHSheroes [Bowman, V. (2020)].

Since the official end of the pandemic, the effects of it are still widely felt across the country's health service. A survey across the NHS providers found that they "are almost unanimous in their concern for their staff, with 92% agreeing with the statement "I am concerned about staff wellbeing, stress and burnout following the pandemic." [Executive, C. (no date)] This statement is further supported by survey results stating that 44.8 per cent of staff have reported feeling sick from work-related stress. [Supporting our NHS people experiencing stress (2023) ] The COVID pandemic also increased risk to all front-line workers, with NHS staff risking their lives daily to continue caring for the sick, injured, and infected population. This increased risk also contributes to the deterioration of staff's mental and physical wellbeing as they are understaffed and overworked daily. Sadly, this trend has continued even after the pandemic, with staff wellbeing declining as inadequate working conditions become the new normal, resulting in physical and emotional damage to the NHS workforce. Whilst improving the wellbeing of the NHS staff is a significant undertaking, small steps must be introduced at varying levels to help alleviate some of the stress they experience.

As a response to these issues, this proposal aims to create a more functional and aesthetic space for hospital staff within Ninewells to go to when they are experiencing any form of emotional difficulty or stress whilst on shift at work. Situated in the existing Rest Relax Recharge Room, The Respite Zone aims to provide a comfortable and designated space for staff to experience their emotions in a safe environment and improve or manage their wellbeing during a challenging experience.

### <sup>9.1</sup> Importance of mental health within work

Mental health is a state of mental wellbeing that enables people to cope with the stresses of life, to realise their abilities, to learn well and work well, and to contribute to their communities (World Health Organization; 2022) A stable mental health allows for an individual to navigate through the naturally occurring stresses of life. A positive work environment can benefit one's mental wellbeing by increasing a sense of accomplishment and confidence and even aiding recovery from other stressors. In contrast, a negative work environment can have a drastic detrimental effect on an individual's mental and physical wellbeing.

### <sup>10.</sup> Different types of stress in healthcare

Many different kinds of stress can cause or contribute to a staff member's inability to cope with the continuing demands within a hospital environment.

10.1 Burnout - is described as a state of emotional, mental, and physical exhaustion. It is commonly caused by long periods of unwanted stress. It can often lead to feelings of inadequacy in life and at work, limited time, limited energy, and lack of enthusiasm. In healthcare, this can occur with short staffing, leading to an increased physical and mental workload, patients lashing out and poor management.

Signs and symptoms of burnout: Feeling tired, lowered immunity, change in appetite, a sense of failure and self-doubt, decreased satisfaction and sense of accomplishment, loss of motivation, isolation from others, procrastinating, and withdrawing from responsibilities. (Supporting our NHS people experiencing stress (2023))

- 10.2 COVID-related stress for NHS staff can mean an increased level of worry and anxiety about working in areas surrounded by COVID-19 and or living with the symptoms of long COVID. Watching the deterioration and death of patients for those who are working in the COVID wards would also take a massive toll on staff, both mentally and physically.
- 10.3 Trauma is an emotional response to a stressful, distressing, or frightening event, leaving a longlasting emotional impact on individuals. Trauma can also be the starting point for more serious mental health conditions.
- 10.4 Post-traumatic stress disorder (PTSD) is an anxiety disorder triggered by a traumatic event. Individuals can experience heightened feelings of irritability, isolation, and guilt, often reliving the event through flashbacks and nightmares. PTSD is complex to diagnose and identify as symptoms can present immediately, months or years later. A delay is most commonly seen in occupations with a high risk of trauma exposure. Research conducted by Neil Greenberg found that "NHS staff working in critical care reported twice the rate of PTSD typically found in military veterans" (Supporting our NHS people experiencing stress (2023))
- 10.5 Moral injury is psychological distress which stems from actions or inaction that violates their ethical or moral code. Struggling with guilt, anger, shame, disgust, and dissociation with the event they witnessed or were involved in can link or lead to an individual developing PTSD, feelings of depression and, in some cases, suicidal thoughts.

All these stressors are considered to be expected within health and social care roles across the NHS; these feelings can combine to create an individual with decreased physical and mental wellbeing. This can impact their ability to perform their job competently and be a reason for staff to call out sick. If a staff member can take a wellbeing break during their shift, it may alleviate the accumulation of stress by managing emotions whilst directly dealing with the effects of a stressor at work.

### <sup>11.</sup> Case Study looking at a Wellbeing Room

Finding a paper or a study with information on the impact of these Wellbeing rooms is a difficult task as many hospitals are still dealing with the fallout from COVID. This paper analyses the success and failings of two wellbeing rooms in Nottingham University Hospitals during COVID-19. These two rooms are no longer in use by the hospital as a whole, but smaller departmentspecific ones are used now.

Case Study - COVID-Well: Evaluation of the Implementation of Supported Wellbeing Centres for Hospital Employees during the COVID-19 Pandemic



Figure 2

One study that has been accessible is based on the success of two wellbeing rooms situated within Nottingham University Hospitals (NUH) NHS Trust; one was a purpose-built wellbeing room, and the other was a converted hospital ward. It must be noted that these wellbeing rooms are open seven

days a week from 8 am – 8 pm, offering support from Wellbeing Buddies in a comfortable environment where they can rest, recoup, talk and be supported. (NUH, 2020) They are not open to staff 24/7.

An initial usage record was completed over the first 17 weeks, and centre monitoring forms were introduced for an 11-week period from the 18th of May to the 31st of July 2020 (Blake et al., 2020). These found that the total number of attendances across 17 weeks was 14,934 (Blake et al., 2020) over the two sites. Staff employment of Nottingham University Hospitals comprised around 16,700 staff (Nottingham University Hospitals NHS Trust, 2020) in 2020, which shows that the sites were well visited in those first few weeks. The online survey completed by 819 employees which concluded in August 2020 conducted by the COVID-Well: Evaluation of the Implementation of Supported Wellbeing Centres for Hospital Employees during the COVID-19 Pandemic study found that 94% of respondents were aware of the wellbeing centres [and that] more than half of the respondents 55.2% reported that they had accessed a centre (Nottingham University Hospitals NHS Trust, 2020). This survey also recorded the benefits and barriers the respondents noted about the wellbeing centres.

Item	Frequency (n)	Percent of Responses † (%)	Percent of Cases ‡ (%)
Benefits of access (n = 450)			
Time out/work break	360	17.2	82.6
Rest and Relaxation	313	15.0	71.8
More hydrated	239	11.4	54.8
Improved mental wellbeing/less stressed	230	11.0	52.8
Social contacts/Peer support	169	8.1	38.8
Access to charitable donations	146	7.0	33.5
Better work relationships	126	6.0	28.9
More positive outlook	115	5.5	26.4
Chance to eat	89	4.3	20.4
Getting personal health or wellbeing advice	65	3.1	14.9
Better patient care	64	3.1	14.7
Changes to work activities	50	2.4	11.5
Signposted to other services	47	2.2	10.8
Getting job-related information or advice	41	2.0	9.4
Other benefit	36	1.7	8.3
Barriers to access (n = 365)			
Break not long enough	102	18.2	27.8
Room too far away	97	17.3	26.4
Unable to take a break	77	13.7	21.0
Prefer to take a break in private	69	12.3	18.8
Not felt the need	60	10.7	16.3
Remote working/working from home	45	8.0	12.3
Lack of awareness of the centres	38	6.7	10.4
Not enough space/seating	15	2.7	4.1
No Wellbeing Buddy available	7	1.2	1.9
Other barriers	51	9.1	13.9
		Fiç	gure 3

This survey further states that there were no significant differences in perceived job stressfulness, job satisfaction, presenteeism or turnover intentions between those who did or did not access a centre. However, participants who had accessed a centre were more likely to report higher work engagement than those who did not access a centre. (Nottingham University Hospitals NHS Trust, 2020) so there is proof of some benefit in implementing and using wellbeing rooms. This survey could yield a better crop of results if repeated post-COVID pandemic gives the wellbeing rooms and their users longer to experience them and their benefits.

Overall, this case study has proved helpful as it highlights users' preferences and recommendations that can be utilised in the Ninewells RRR redesign. Recommendations included better provisions, longer open times, and better promotion of the space and who can use it.

#### **Rest Relax Recharge Rooms** 12.

#### 12,1 General Background

Implemented during the first wave of the COVID-19 pandemic, the Rest Relax Recharge Rooms (RRR Rooms) aimed to provide NHS staff across Tayside a quiet, less clinical space to relax and have a break from the pressures of caring for patients with the option for free hot food and drinks 24/7. Initially only meant to be a temporary area, the Scottish government mandated that these spaces now must be available to staff continuously.

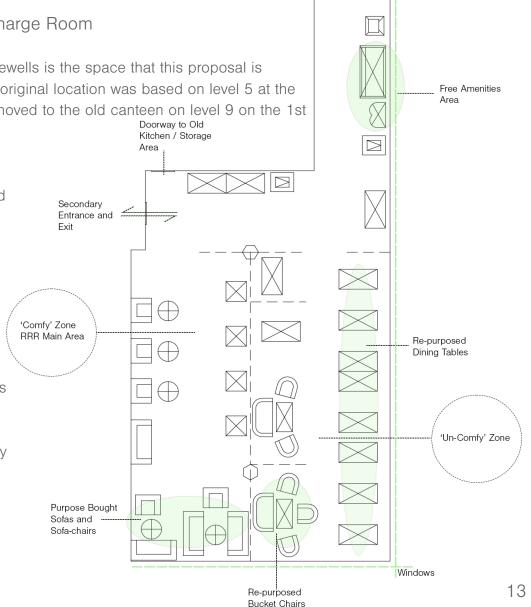
There are 13 rooms in RRR Rooms based within hospitals in the Tayside area: Ninewells, Carseview Centre, Strathmartine Centre, Royal Victoria Hospital, and Kings Cross, to name a few. Each of Figure 4 these wellbeing rooms are unique and individual regarding size, shape,

and furnishings, as each room was built with a different initial purpose before being converted. The Rest Relax Recharge areas are designed as a dedicated space away from clinical settings, encouraging staff to unwind, read a book and just relax. These calm spaces are for everyone, whether a medical, clerical or support services member of staff. NHS Tayside wants to ensure that all staff will be able to benefit from these spaces. (NHS Tayside Trust. n.d.)

#### 12.2 Ninewells Rest Relax Recharge Room

The RRR Room located in Ninewells is the space that this proposal is analysing and redesigning. Its original location was based on level 5 at the Aroma Café. However, it was moved to the old canteen on level 9 on the 1st

of August 2020 as the Aroma Café was due to return to its original function on the 3rd of August 2020. The space is laid out in a manner that adheres to the recommended 2-meter distancing rule as set out during COVID and has a mix of repurposed and purposebought furnishings. It is an unstaffed zone that, during COVID, would provide free hot meals for staff; these hot meals were pot noodles that could be cooked and eaten in the room along with complimentary hot drinks, fruit and biscuits; it also has a fridge for milk and water as well as two vending machines providing crisps, chocolate, porridge, energy bars and other snacks.



Main Entrance

 $\square$ 

and Exit

#### 12.3 Identified Challenges from an unstructured interview with Kenneth Flemming

From an informal initial interview with Kenneth Flemming, he identified multiple issues that he had seen or been informed of with the RRR Room and how it is being used by staff.

Misuse of free food – Staff have been seen taking a mass of excess free food and snacks from the room. It was noted that staff had brought in a carrier bag and filled it with biscuits before leaving the room. Kenneth mentioned that they had thought about using a card swipe system to monitor the complimentary snacks' consumption but were unsure how to implement it or if it would be beneficial.

Misuse of seating areas – the room's layout has a mix of comfy low chairs/sofas and a section of tables and chairs, and some staff have been using this area to hold formal meetings with colleagues. There are many other open areas where these meetings could take place, and they should not be happening in an area meant to break away from the stressors of a working environment.

Figure 5

These points have been an ongoing issue as in a staff brief issue 24/7 published on the 29th of April 2022, it states, "Some staff members have raised concerns that the room has been used for meetings. We would politely request that the RRR rooms are not used for meetings. Please also refrain from moving the furniture. We would also like to remind staff that the complimentary food and drink must be consumed within the RRR room, and please only take what you need." (NHS Staff Tayside, 2022) These issues have been identified by staff, and there is signage up to discourage people from using the space for meetings or taking more than needed.

This proposal addresses these aspects through layout, design, and furnishings whilst trying to minimise the need for signage to communicate to room users.



Kenneth mentioned that although the RRR Rooms

were not initially intended as a lunch location, people often use them as a lunchroom. They bring their food and use the provided microwave to heat it before eating in the RRR Rooms. Kenneth understands that staff may need to relax during their lunch break and that the RRR Room could be the only place they can visit. Therefore, he is completely fine with people taking their lunches in the RRR Room.

This aspect will be assessed alongside survey results for this proposal to provide a suitable solution that addresses the space's misuse but still allows staff to take their lunch break in the space.

### <sup>12.4</sup> Site Analysis

All images below were taken by the reasercher during site visits.

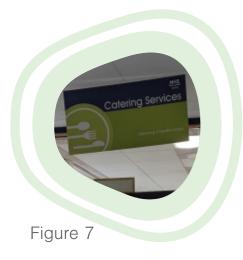
The Rest Relax Recharge Room is located on the 9th floor of the main Ninewells building; the 9th floor is used explicitly for admin and office space, so there is no easy direct access for the public or patients.

The RRR Room is not stated on any signage around the hospital; however, "Level 9 Restaurant" is the room's location, so the signage is yet to be updated.

#### HR Offices

Level 9 Finance Department Human Resources/Person Level 9 Restaurant Nursing Directorate Nursing Bank - Nursing Pr Services Procurement Departme Site/Support Service

Figure 6



The site's prior function was as a canteen/dining area, as can be seen from the old signage still posted above the main entrance, with only an A4 poster to identify the room as the Rest Relax Recharge Room. The history of the space can further be seen from the old canteen hatch that has been boarded over.

Figure 8



excess storage and has a functioning sink in the storage area. This area is separate from the redesign as the storage space is needed. However, a note to make is that this is a lot of unused space that could be beneficial and better suited to a different redesign other than storage. Figure 9



The walls are a beige cream wallpaper, which is pealing in some areas, making the room look neglected. There are two hexagonal pillars along the partition line, which are also wallpapered but with wooden edge finishings, which gives a very outdated look. The flooring is a mix of red carpet in the seating areas and wood effect lino in the corridor-like areas.



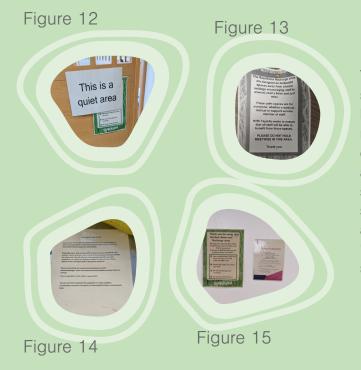


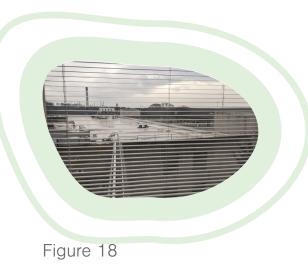
Figure 11

There are many posters dotted around the room; some are pinned to the walls, and some are left loose on the tables. Several have conflicting messages printed on them, and there is no cohesion of design between any of them. Some are printed in colour, others in black and white, some are instructional, some are general, and some are apologetic. One which is apologising for a vending machine being faulty has been written on "2 weeks" suggesting that repairs to the room are slow.

A half-wall wooden and plastic-coated partition divides the main floor space in half. It has electrical wiring running through it with access to numerous electrical outlets, at one point during COVID, this space was used as office space. The wall must stay due to cost concerns around removing it, but it has the potential to be adapted. The partition also divides up the two main seating areas, and a single computer desk or 'Hot Desk' remains from COVID.

Figure 16

Th



There are <sup>3</sup>/<sub>4</sub> length windows that look out onto the roof of another building and out onto other buildings within the hospital grounds. It does, however, have unobstructed natural light from two sides.

On any visit, off-white blinds have not been moved from a partially open position. The blinds are broken, and the windows have not been replaced since the building was erected in 1975. It is obvious that a draft has been an issue as the sides of some of the windows have been taped over with white tape in a temporary fix attempt.

The two partitioned sides have been furnished differently. The 'Comfy' side is furnished with green and purple sofas, sofa chairs and fabric seats with a mix of standard square tables and low circular coffee tables placed accordingly that were purpose-bought for this space.

The individual sofa seats have been positioned against a wall in a way that, when in use, the individual's line of sight is directly onto the tables by the partition.

The table and chair setup are such that there is minimal privacy from any area except for the partition wall on one side.



Figure 20

Figure 21

The two partitioned sides have been furnished differently. The 'Un-Comfy' side is furnished from repurposed furniture consisting of old dining room tables and chairs and black leather-like bucket chairs and sofas. The layout of the black furniture is suited to small groups sitting together, and the dining room tables and chairs provide space for staff to sit and work or eat alone or in a group, as the tables are movable.

### <sup>12.5</sup> Staff views on the RRR Room

Throughout the analysis stage, staff opinions were gathered by conducting in-person interviews and via a survey distributed via the NHS Staff Brief Issue 404 - 24-11-23. In-person interviews were completed informally in the RRR Room in December on weekdays and weekends and at varying times of the day to cover as many shifts and pools of staff as possible. The survey responses closed on 11-12-23 to allow for analysis and implementation of ideas in the proposal.

From a total of 51 responses to the survey,

86% felt overwhelmed by work.

51% said they have either called off work sick or thought about it due to their mental health. 59% do not use the RRR room for varying reasons.

Below is a simplified table pulling some common informative points raised by staff via the survey.

If a space was provided for the hospital for staff to unwind, relax or decompress, especially after dealing with a difficult situation, what would be a must-have for that space?	What do you not like about this space?	What other spaces in the hospital do you use to rest and relax in?
Hot drink facilities	Limited accessibility and changing location and authorisation of use	Outdoor space
Privacy	Can be loud and very bright.	Doctors Mess, private registrar offices, private teaching spaces
Comfy soft furnishings	It's dated, unwelcoming and unable to relax	Cafe on Level 5
Waterfountain	Not well maintained, unnecessary	Nurse's staff room on ward
Quiet	it still feels like the old cantee	My office, go outside
Relaxing music	Not well maintained, unnecessary	the garden area
Snacks	some of the furniture the layout not cosy.	department coffee room
Easily accessible	Big groups and meetings	Canteens
Natural light	It's cold, dirty and the list goes on	Outside the back door
Nice wall coverings	Too open plan, too noisy	Ninewells Community Garden
Private space, individual pods and booths		ian low centre
Differing seats modes for individauls and groups		
TV		
A calm homely atmosphere		

Figure 22

As seen from these survey results, it is evidently clear that staff want what NHS Tayside are trying to provide; they want a place that they can go to take a break and relax in their own way, whether it is sitting alone with a cup of tea or coffee or having lunch with their friends and colleagues, they want it in a managed, aesthetic and maintained space. A common complaint from both staff and management was the misuse of the space, with the room being used for meetings and lunches, activities which are in direct conflict with the NHS Statement that these spaces are to "Enjoy this quiet space to get away from your daily routine. Take time for yourself: no meetings, no lunches." (NHS Tayside Trust (2022))

However, with staff only getting limited break times, their lunch break may be their only time to relax as well as eat. With such ample space, this proposal aims to include both the desire for a private space with individual areas as well as the desire for spaces for small groups to relax together.

It can also be seen that there is some need for an outdoor space when wanting somewhere to rest and relax, with 24% of respondents preferring to go outside of the building when they need to relax, weather permitting. By incorporating aspects of biophilic design, this proposal aims to bring elements of the outside in to create features of a natural environment.

Further, this survey has highlighted that 38% of respondents felt that there is no actual area within Ninewells that is designed for staff to relax in, with one response being, "Unfortunately, there is a severe lack of space for NHS staff to have lunch and relax."

# <sup>12.6</sup> Critical points from the staff interview

During a site visit, two employees offered themselves for an interview to express their thoughts about the room. Both had similar fundamental feelings and opinions about the Rest Relax Recharge room, which also further supports the responses from the survey and the points raised by Kenneth in his interview.

Meetings taking place in the space were a point which was brought up: "I think the problem is, we've got a hot zone here, right behind you, which is used for the nurse bank. So they are using part of this rest and relaxation for work purposes." This statement is supported by the observation research, which saw the nurse bank use the space as a waiting room for individuals to sit in.

They were also bothered by those who abuse the facilities: "You're getting a lot of people that are just coming in, lifting a load of stuff, and going. So, they are not actually using it. Thats rest and relax, but they're just seeing free tea and coffee and helping themselves and going back to work. So, they are not actually doing the purpose of what this thing is put in place for, which is for people to come and relax. Take a break" as well as people disposing of rubbish down the back and sides of the sofas, which has also become a main frustration to the cleaning staff. A full transcription of this joint interview can be found in the appendix.

It is important to remember that these interview points have all been made and taken from only two members of staff and conducted over a short period of time, so the results are limited. To get a more accurate view of the staff's opinion of the room, further analysis would need to be completed in both interviews and surveys over a more extensive timeframe and involve a much wider pool of respondents from within the hospital.

### <sup>3.</sup> Observations

Observations of the space were conducted on the 8th of December and the 19th of December at varying times each day.

The observations made are as follows:

- There is no visible external signage identifying the RRR Room or any signs directing staff to the room on the 9th floor.
- The RRR Room is used by staff from all areas of the hospital.
- The room is being used as a place to have small meetings, meetings with groups of people ranging from 2 5 people.
- The quiet zone is not a respected quiet zone, as conversations are had on both sides of the partition.
- People are using the space to make personal phone calls.
- Staff are using the room as a shortcut from one area to another.
- People are using the tea and coffee facilities and then leaving the room with their drinks and biscuits.
- The complimentary biscuits and fruit are being abused by numerous staff, taking pockets and bags full.
- Bins are not being used to dispose of rubbish.
- The nurse bank appears to be using the room as a waiting area for visitors.
- On one occasion, a corner of the room was used as a prayer place.
- Small groups and individuals often use the space to have lunch.
- Individual staff members sit on the 'comfy' side rather than the dining side.

# <sup>14.</sup> Behavioural maps

Behavioural mapping was conducted in the RRR Room alongside observations to understand how people use and move around the space, what they interact with, and places that they avoid. It is evidently clear that the main entranceway leading into the room and the complimentary amenities stand are clear hotspots within the space as a whole, with some people just coming in, taking what they like, and leaving, as well as staff using this L-shaped passage as a way-through shortcut from the nurse's bank to the main lifts. Small groups tend to use the dining table side compared to individuals who are far more frequently seen on the 'comfy' side of the room.

This new proposal aims to minimise this come-and-go nature and encourage people to visit the space rather than fly through it as a grab-and-go site. A new design and an altered layout should change the general atmosphere of the space and discourage people from using it as a corridor and viewing it as a room with a porpoise.

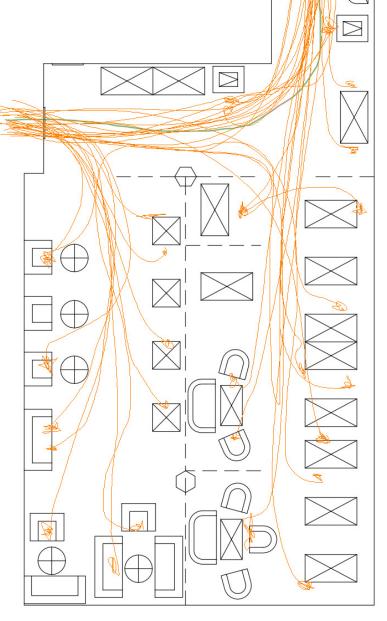


Figure 23

### Respite: The Proposal

The aim of this proposal is to consider all the identified issues of the current RRR Room and propose a design that combats these issues in an aesthetic functioning environment whilst considering the room's intended function and staff comments and suggestions for improvements. The leading suggestions from staff that should be considered are listed in the table and are implemented throughout the redesign of the Respite zone.

If you could change something about this space, what would it be?			
Proper coffee machine rather than instant coffee.			
Ensure private spaces for use.			
Stocked with refreshments on a regular basis			
I would have lots of plants			
More colour , comfortable sofas			
Wall coverings, nice furniture and blinds for the windows			
more welcoming			
Modernising but relevant mode to relax and enjoy time out	t with a refreshment		
relaxation music make it feel homely			
Less noisy. More comfortable chairs. Space dividers to inc Plants/greenery or a connection with nature	rease privacy/reduce noise.		
I would change the way the supplies are provided. It needs up there, there is sure to be supply of the free hot drinks?			
Add lots of plants! Reduce the amount of light and have ic table. That should be enough if you are going on your ow pop or rock - something chilled.			
Change the seating, split the room up with some partitions remove the dining tables, more soft furnishing	to quieten down the noise levels,		
Maybe a number of smaller "quiet" spaces would be better	r		
More privacy and comfort and a more homely feel to small	er spaces		

Figure 24

### <sup>15.1</sup> Colour scheme

Considering colour theory is crucial in the proposal. It can be seen throughout the entire hospital, with each floor being colour-coded and coloured lines decorating the floors to aid in directions to specific areas within the hospital.

Colour is proven to have an impact on people's moods. As stated by R. Küller, it is evident that the light and colour of the workplace itself had an influence on the mood of persons working there and that following their study involving colour and light and how it affects staff in the workplace, it was found that emotional status was higher throughout the year for those who had the most colourful work environment. (Küller, R. et al. (2006))

When considering colours for the space, it makes sense to use green as it is associated with the RRR Rooms on all media outlets. The choice of green further suits this new design as out of all the colours on the colour wheel, green is regarded as the most restful and relaxing colour for the human eye (Braam, H. van (2022)) and is further associated with growth, restoration, positiveness, hopefulness, and balance. When choosing shades of green for a design, it is better to opt for lighter and more natural hues. This avoids the use of bright and overpowering colours that can bring negative connotations such as jealousy and envy. By doing so, the design will align with the natural aspects linked to biophilic design elements.

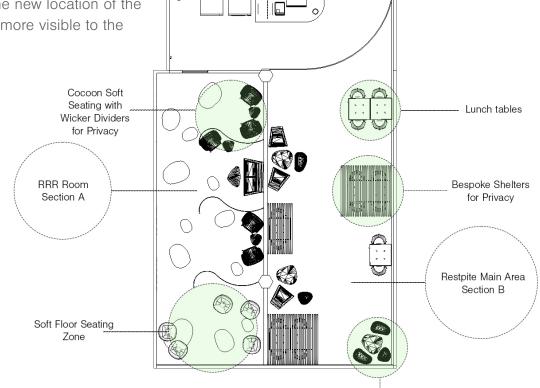
### <sup>15.2</sup> Layout

One notable change in the RRR Room redesign is the updated layout. After conducting interviews and surveys, it was clear that the main pain points were the need for more private space and the misuse of space with people having meetings and lunches. On top of that, the large open space allows for discussions to be heard throughout the room, making relaxing in the space difficult at times due to the volume. The solution was to divide the space into two main sections that could cater to the differing ideals for the space. This is done by adapting the centre partition into an entire dividing wall and constructing a second wall to create a new individual room within the space.

Section A is a smaller, secluded room that was created to allow for a quiet, private seating area where individuals could reflect and manage their emotions. Section B is a Main Entrance and Exit larger, more open section designed to welcome small groups to visit, sit, relax, and converse with each other in a peaceful setting whilst still allowing for it to be used as a lunch break location. Moving the area with complimentary amenities away from the entranceway corridor creates a more open and welcoming entrance to the space. Instead of encountering a queue of people or a messy station, visitors are greeted with a clear line of sight from the main Free Amenities entrance into the open-plan section B. The relocation Area of the amenities section to the room's central area is expected to discourage individuals from taking more than needed and deter them from leaving the room without using the space. The new location of the amenities section makes it more visible to the

entire room, which should encourage self-accountability among individuals.

Moreover, the blank wall can be utilised to showcase a mural or artwork display in a similar way to what has been done with many of the corridors around the hospital.



### <sup>15.3</sup> Furniture and furnishings

With the current furniture being an assortment of purpose-bought and repurposed and following on from some staff statements of "chairs are uncomfortable, especially the green and purple, more chairs and small table areas, instead of dining chairs at large tables for often one or two people" The decision was made to keep only the square tables and introduce new furniture, along with some bespoke creations, to revitalise the room.

#### Section A

Section A is an entirely new section with a focus on natural elements and biophilic design. It features several fake moss wall indents along a fake stone facade, which provides a feel for a rural garden wall. The flooring is made of loop pile carpet, with a grass green colour for the main body and some cutouts filled with a grey stepping stone pathway leading to the back of the room. In the back, there is an array of beanbags and pillows that allow for floor sitting, which can be an unconventional but comfier, more relaxing, and grounding alternative to chairs.

Wicker room dividers have been added to create semi-private pod areas that offer a level of privacy while maintaining natural lighting throughout the room. The seating arrangement has been designed to allow staff to sit alone while still being in close proximity to others so that no one feels completely isolated. The cocoon-style chairs from Hitch | Mylius recognise the requirement for privacy within public spaces with the introduction of a sheltering cocoon (hitchmylius (2021)) this slightly sheltered seating allows the user to hide their face behind the side walls if they wish for that extra bit of privacy.

#### Section B

The main area features a combination of original square tables and new chairs arranged for groups of two to four people to sit comfortably. Additionally, there are new bespoke shelters that help to divide the room and create private areas for visitors. The mix of dining and coffee shop furniture provides a variety of options for visitors to choose from, depending on the purpose of their visit. The bespoke shelters would be constructed from MDF and cut into a selection of archways to create a panelled effect. For finishing, they could be painted or varnished in a range of shades to match the room's aesthetic. The carpeting would be a loop pile carpet in a grey shade, as they are a hardwearing carpet suited to a room with heavy footfall. Keeping this area carpet is a conscious choice as during the interview, staff indicated that the carpet made it feel more homely and less hospital-like than a lino flooring.

# <sup>15.4</sup> Renders



Figure 26



Figure 27



Figure 28

### Renders



Figure 29



Figure 30



# <sup>15.4</sup> Lighting and Atmosphere

In a study conducted by Rikard Küller, Seifeddin Ballal, Thorbjörn Laike, Byron Mikellides, and Graciela Tonello (2006), it was found that the light and colour of the workplace itself also had an influence on the mood of persons working there. The workers' mood was at its lowest when the lighting was experienced as much too dark. The mood then improved and reached its highest level when the lighting was experienced as just right, but when it became too bright, the mood declined again. When considering this and looking at the room's current lighting, which is quite bright and cold, a simple change of lighting will have a positive effect on this space. Moving away from clinical lighting and introducing a warmer white light will create a cosy and inviting atmosphere that can help promote relaxation and comfort. This type of lighting is often associated with feelings of warmth, security, and intimacy. It can also help reduce stress and anxiety levels. (The Ultimate Guide to Lighting Colour Temperature (No Year))

This change will create a more welcoming, homely, and relaxing atmosphere in the rooms, especially in section two, where rest, relaxation and recharge are the sole focus of the space. The staff's request for plants and a more naturalistic environment and feel to the room can only be ascertained by the introduction of the fake moss walls and fake plants and greenery due to a restriction on real plants not being allowed within Ninewells due to infection control regulations. The introduction of fake plants to the shelters, on the walls and in planters brings a sense of connection to nature, which is desirable in restorative design. These nature connections are further seen in the wall decoration with forestry imagery and garden wall wallpaper to enhance the outdoor naturalistic aesthetic.

### <sup>15.5</sup> Summary

Based on all the research gathered throughout this report proposal, this report recommends the following design changes be made in order to provide a functional Rest Relax Restore Room for staff within Ninewells.

- The introduction of a separate space solely for a Relax Relax Restore place within the larger Respite zone.
- Move the self-service zone out of the entrance corridor.
- Introduce shelter booths for additional privacy.
- Include fake greenery, murals, and wall art to decorate the space.
- Change the lighting to remove the sterile feel of the room.
- Provide more seating options.
- Introduce a coffee machine providing a variety of hot drinks.

### <sup>16.</sup> Conclusion

#### 16.1 Reflections

Based on the analysis of the research presented in this report, it can be concluded that the Respite Zone design could be beneficial for the staff at Ninewells Hospital. If further research and prototyping is carried out over an extended period of time, it is likely that the Respite Zone will prove to be a successful and advantageous addition to both the hospital and the RRR Rooms across Tayside, which can use the updated room as a model for improvement. However, to move forward with the project, more research would need to be conducted into the cost, time frame, and funding requirements .

#### 16.2 Further Notes

Other potential ways to improve the area as well as its management were identified but not included in the final proposal for various reasons. These improvements are listed below.

During the interview, Kenneth suggested implementing a token system for biscuits and fruit. This idea was also mentioned in a survey response. By using a token-fed vending machine, management could prevent people from taking an excessive number of free snacks and it would also allow them to track points of high usage throughout the day.

Provide a suitable waiting area outside the nurse's bank that does not infringe on the Respite or RRR Room; consider implementing sofas or seating outside the nurses' bank.

It is important to lock the secondary door to the room to prevent it from being used as a shortcut. However, this point needs to be alongside health and safety.

# <sup>17.</sup> Acknowledgements

I would like to thank all the Ninewells staff who participated in interviews and surveys, they accepted me into their rest area and gave me valuable insights throughout all my visits. I would like to especially thank Elaine Mallows who was my first and main point of contact throughout the whole process and Kenneth Fleming who provided me with a wealth of knowledge on the room and liaised with the board of directors to get me approval to use the space.

### 18. References

Blake, H., Yildirim, M., Wood, B., Knowles, S., Mancini, H., Coyne, E., & Cooper, J. (2020). COVID-Well: Evaluation of the Implementation of Supported Wellbeing Centres for Hospital Employees during the COVID-19 Pandemic. International Journal of Environmental Research and Public Health, 17(24), 9401. Available at: https://doi.org/10.3390/ijerph17249401

Braam, H. van (2022). Green color psychology, symbolism and meaning, Color Psychology. Available at: https://www.colorpsychology.org/green/ (Accessed: 28 December 2023).

Design Council (2023). Framework for innovation. [online] www.designcouncil.org.uk. Available at: https://www.designcouncil.org.uk/our-resources/framework-for-innovation/.

Dou, S., & Wang, Z. (2022). Influence of color emotion expression in packaging design on psychological behavior of patients with depression. Article © Medicinska naklada, 34(34), 920-924. Available at: https://www.psychiatria-danubina.com/UserDocsImages/pdf/dnb\_vol34\_noSuppl%204/dnb\_ vol34 noSuppl%204 920.pdf (Accessed 14 Nov. 2023).

Greden, J. F., Garcia-Tosi, R., Harrington, A. W. (2019). Healthy Minds at Work: Challenges and Strategies for Businesses. In: Riba, M., Parikh, S., Greden, J. (eds) Mental Health in the Workplace. Integrating Psychiatry and Primary Care. Springer, Cham. Available at: https://doi.org/10.1007/978-3-030-04266-0\_1.

Hitchmylius (no date). HM87 cocoon - hitchmylius.design, hm87-Cocoon-brochure.pdf. Available at: https://hitchmylius.design/wp-content/uploads/2021/11/hm87-Cocoon-brochure.pdf (Accessed: 31 December 2023).

How to choose the right type of carpet: Carpetright (no date) carpetright.co.uk. Available at: https://www.carpetright.co.uk/commerce/categories/carpets/carpet-buying-guide/choose-rightcarpet-type/

(Accessed: 31 December 2023).

Jonauskaite, D., Abu-Akel, A., Dael, N., Oberfeld, D., Abdel-Khalek, A. M., Al-Rasheed, A. S., Antonietti, J.-P., Bogushevskaya, V., Chamseddine, A., Chkonia, E., Corona, V., Fonseca-Pedrero, E., Griber, Y. A., Grimshaw, G., Hasan, A. A., Havelka, J., Hirnstein, M., Karlsson, B. S. A., Laurent, E., ... Mohr, C. (2020). Universal Patterns in Color-Emotion Associations Are Further Shaped by Linguistic and Geographic Proximity. Psychological Science, 31(10), 1245-1260. Available at: https://doi.org/10.1177/0956797620948810.

Küller, R., Ballal, S., Laike, T., Mikellides, B., & Tonello, G. (2006). The impact of light and colour on psychological mood: a cross-cultural study of indoor work environments. Ergonomics, 49(14), 1496–1507. Available at: https://doi.org/10.1080/00140130600858142.

Landry, L. (2020). What Is Human-Centered Design? | HBS Online. [online] Business Insights Blog. Available at: https://online.hbs.edu/blog/post/what-is-human-centered-design.

Lee E-J, Park S-J. (2022). Biophilic Experience-Based Residential Hybrid Framework. International Journal of Environmental Research and Public Health, 19(14), 8512. Available at: https://doi.org/10.3390/ijerph19148512#

Lee, E-J., Park, S-J. (2022). Biophilic design: A literature review and conceptual framework. Building and Environment, 193, 107604.

McLeod, J. (2016). Colour psychology today. O Books.

McNeill, P., & Chapman, Steve. (2005). Research methods (3rd ed.). Routledge.

NHS Staff Tayside (2022). Staff Brief, Issue 247. [online] Available at: https://www.nhstaysidecdn.scot.nhs.uk/NHSTaysideWeb/idcplg?IdcService=GET\_SECURE\_ FILE&dDocName=PROD\_356058&Rendition=web&RevisionSelectionMethod=LatestReleased&noSaveAs=1 [Accessed 12 Nov. 2023].

NHS Tayside Trust (2022). Relax Recharge Rooms Rooms have been supported by. [online] Available at: https://www.nhstaysidecdn.scot.nhs.uk/NHSTaysideWeb/idcplg?ldcService=GET\_SECURE\_ FILE&Rendition=web&RevisionSelectionMethod=LatestReleased&noSaveAs=1&dDocName=prod\_338457

NUH (2020). New Staff Wellbeing Centres to support Team NUH through Covid-19 | Latest news. [online] NUH. Available at: https://www.nuh.nhs.uk/latest-news/new-staff-wellbeing-centres-to-supportteam-nuh-through-covid19-4564/ [Accessed 10 Nov. 2023]

Nottingham University Hospitals NHS Trust (2020). .1.1.1 eFRONT COVER. [online] Available at: https://www.england.nhs.uk/wp-content/uploads/2021/08/nottingham-university-hospitals-nhstrust-ara-2019-20.pdf.

Supporting our NHS people experiencing stress (2023) NHS Employers. Available at: https://www.nhsemployers.org/articles/supporting-our-nhs-people-experiencing-stress (Accessed: 17 October 2023).

The BMA (2023) NHS under pressure Scotland, The British Medical Association is the trade union and professional body for doctors in the UK. Available at: https://www.bma.org.uk/advice-and

The Ultimate Guide to Lighting Colour Temperature (no date) Lighting Style. Available at: https://www.lightingstyle.com.au/guide-to-lighting-colour-temperature.html#:<sup>~</sup>:text=Warm%20 white%20(2700K%2D3000K)%3A,reduce%20stress%20and%20anxiety%20levels. (Accessed: 31 December 2023).

WHO guidelines on mental health at work. (2022). World Health Organization Available from: https://www.ncbi.nlm.nih.gov/books/NBK586384/

The Mental Health and wellbeing of the medical workforce – BMA (No date) Available at: https://www.bma.org.uk/media/2475/bma-covid-19-and-nhs-staff-mental-health-wellbeingreport-may-2020.pdf (Accessed: 11 October 2023).

Staff wellbeing: NHS 24 (no date) Staff wellbeing | NHS 24. Available at: https://www.nhs24.scot/staff-information/staff-wellbeing/ (Accessed: 12 October 2023).

### <sup>19.</sup> Appendix

The format, layout, and page sizes in the appendix differ from the rest of the document due to tabling issues and to maintain text legibility. For this, I apologise