

DIPLOMARBEIT
(Diploma Thesis)

**Architectural strategies for improving healthcare professionals' safety
and well-being in adolescent psychiatric facilities**

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ABSTRACT

This master's thesis explores the effects of architecture on the well-being and safety of healthcare professionals in psychiatric facilities for adolescents.

The study adopts a qualitative methodological approach, incorporating a literature review and semi-structured interviews with professionals working in psychiatry and the architectural field.

In summary, the aim of this research is to contribute to the discussion on the design of psychiatric hospital facilities for adolescents by proposing principles of architectural design that place healthcare professionals as central to spatial, functional and immaterial concerns.

Beyond its utilitarian function, architecture can also “express” or “represent” particular attention to safety, well-being, and quality of life in the workplace.

The analysis enabled the identification of several factors that promote a secure and caring work environment. Five interrelated areas emerged from the results: spatial organisation, safety infrastructure, therapeutic and natural environment, supportive staff rooms and collaborative design process.

These findings suggest that improvements in these areas can make a contribution to a supportive and effective working environment.

Keywords:

Architects, healthcare architecture, healing architecture, built environment, safety infrastructure, adolescent psychiatry, healthcare professionals

KURZFASSUNG

In dieser Masterarbeit werden die Auswirkungen der Architektur auf das Wohlbefinden und die Sicherheit des medizinischen Personals in psychiatrischen Einrichtungen für Jugendliche untersucht.

Die Studie verfolgt einen qualitativen methodischen Ansatz, mit Einbeziehung einer Literaturübersicht sowie halbstrukturierter Interviews mit Fachleuten aus dem Bereich Psychiatrie und Architektur basierend.

Zusammengefasst besteht das Ziel dieser Forschungsarbeit darin, einen Beitrag zur Diskussion über die Gestaltung psychiatrischer Einrichtungen für Jugendliche zu leisten, indem Grundsätze für eine architektonische Gestaltung vorgeschlagen werden, die das medizinische Fachpersonal in den Mittelpunkt der räumlichen, funktionalen und immateriellen Belange stellen.

Über ihre utilitaristische Funktion hinaus kann die Architektur auch besondere Aufmerksamkeit für Sicherheit, Wohlbefinden und Lebensqualität am Arbeitsplatz „ausdrücken“ oder „repräsentieren“.

Die Analyse ermöglichte die Identifizierung mehrerer Faktoren, die eine sichere und fürsorgliche Arbeitsumgebung fördern. Aus den Ergebnissen ergaben sich fünf miteinander verbundene Bereiche: räumliche Organisation, Sicherheitsinfrastruktur, therapeutische und naturnahe Umgebungen, unterstützende Räume für das Personal und partizipative Gestaltungsprozesse.

Die Erkenntnisse legen nahe, dass Verbesserungen in diesen Bereichen wesentlich zu einem unterstützenden und effektiveren Arbeitsumfeld beitragen können.

Schlüsselwörter:

Architekten, Krankenhausarchitektur, heilende Architektur, gebaute Umwelt, Sicherheitsinfrastruktur, Jugendpsychiatrie, Gesundheitspersonal

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INTRODUCTION

01

1.1 General introduction

The shift from the term “insane asylums” to the contemporary term “psychiatric facilities” reflects significant changes in public health policy, medical advancements and more open social attitude towards mental illness. Psychiatric institutions used to be places of confinement and seclusion, with a custodial and punitive approach rather than one of care.

The 20th century witnessed a significant evolution in mental health, both conceptual and therapeutic, reflecting more scientific and humane practices. As a result, architectural approaches in psychiatric hospitals began to evolve, giving priority to the design of therapeutic environments and encouraging social interaction and patient autonomy.

Today, psychiatric hospitals are conceived and designed in a way that offers patients spaces for comprehensive and adapted care, with priority given to the patient’s well-being, dignity and social reintegration (Bodryzlova et al., 2024). The aim of “humanising the hospitals” requires architecture to adopt a new perspective, that takes into account both risk and safety (Bates, 2018).

In this context, architectural design plays a major role by creating therapeutic spaces that allow patients to progress within the hospital environment while ensuring the well-being of healthcare professionals in a safe working environment. The creation of protected workspaces in the psychiatric environment highlights the multiplicity of complex factors involved in the architectural design process, which cannot be reduced only to material or technical configurations. It involves a more abstract and intangible reflection on the physical organisation of the premises, as well as conceptual considerations necessary to create an environment that is safe, therapeutic, and respectful.

Overall, the architectural design of psychiatric hospitals requires a holistic approach, understood as a process that requires balancing the needs of patients and the safety of healthcare staff. Such an approach requires architects to consider not only clinical and safety requirements, but also the specific needs of users (patients, caregivers, families) in terms of comfort, symbolic landmarks, accessibility and quality of life.

Adolescents in psychiatric care often show behaviour and emotional disorders that require specialised and targeted interventions. Professionals working in these environments face multiple risks, ranging from physical aggression to psychological stress. Therefore, the design of care spaces needs to incorporate safety features while creating a therapeutic environment conducive to patient recovery and development.

From this perspective, psychiatric hospital architecture is no longer limited to merely a place of care but becomes a keystone that supports and secures social relationships, a key theme of this research.

This thesis seeks to explore the different architectural and conceptual approaches to risk for staff in adolescent psychiatry. The research examines how the design principles of healthcare spaces can influence the safety and well-being of healthcare professionals, while promoting a therapeutic environment for patients. Additionally, the challenges and opportunities associated with creating safe spaces in these contexts will be analysed based on the data collected. This thesis is structured in several chapters, each addressing a specific aspect of creating safe spaces in adolescent psychiatry. The first chapter presents a general introduction to the research. Chapter two offers a review of the literature on the historical evolution of psychiatry, architectural design concepts in hospitals, and more specifically adolescent psychiatry and hospital care, as well as current design principles. The third chapter introduces the research methodology and the framework for analysing empirical data, leading to the presentation and interpretation of the results in chapter four. Practical implications and recommendations for future design of secure spaces in adolescent psychiatry are presented in chapter five.

In conclusion, this research aims to study architectural and conceptual approaches to risk for healthcare personnel in the specific context of adolescent psychiatry. By exploring the challenges and opportunities associated with the creation of safe healthcare spaces in this field, the research provides insights into the design of safe care and work environments that promote the safety and well-being of professionals, while supporting the recovery of adolescents in psychiatric settings.

1.2 Research question and objectives

Contemporary architecture plays a key role in the well-being and safety of healthcare professionals in adolescent psychiatric facilities (Norouzi et al., 2023). While existing research has placed greater emphasis on patients, with limited exploration of architectural concepts that can contribute to optimising the safety and well-being of healthcare professionals, this research gap leads to the central question of this thesis:

To what extent can the architectural design of inpatient adolescent psychiatric facilities enhance the well-being and safety of healthcare professionals?

The objective of this research is to explore the links between the architectural environment of psychiatric care facilities for adolescents and the well-being and safety of healthcare professionals to identify the architectural principles relevant to this relationship, and to contribute to the development of human-centred spatial concepts.

To conclude, this research is structured around three areas grounded in practice: exploration, identification and contribution, which consist of exploring how the architectural components of mental health facilities for adolescents influence healthcare staff; identifying key architectural areas that positively impact staff well-being and safety; ensuring a safe working environment and contributing practical recommendations for a more human and safety-focused healthcare architectural design.

RESEARCH BACKGROUND

02

2.1 Introduction to the theoretical framework

The historical records of the first psychiatric internments date back to the 17th century. Closed psychiatric hospitals, referred to as “insane asylums” in the vocabulary of the time, served disciplinary and custodial functions (Myers, 2021). The treatment methods were oriented towards control and punishment rather than psychological therapy and rehabilitation (Le Bonhomme & Le Bras, 2021). At that time, these institutions, often located outside cities, were not designed to meet the specific needs of patients, but served as places of confinement rather than for care. Individuals suffering from mental illness, often perceived as insane, were systematically locked up. From a Foucauldian perspective (1961), this can be described as “imprisoned bodies” or the mechanisms of “psychiatric power” playing a central role in the normalisation of behaviour (Foucault, 2003)¹. This process of confinement continued in the 18th century, mainly involving people considered deviant, such as beggars, prostitutes and the poor (Foucault, 2003). At the time, individuals deemed “useless” or disruptive to society, even those who did not fall within the psychiatric field, were locked up in places of social confinement (Le Bonhomme & Le Bras, 2021).

It was not until the early 19th century that a paradigm shift took place. In France, the medical contribution of Philippe Pinel and Jean-Etienne Esquirol helped to gradually make “insanity” a medical condition (Lomax, 2025). The moral treatment of “insanity”, based on observation, discipline, work, speech, and a certain form of respect for the patient, was introduced (Lomax, 2025).

During the 18th and 19th centuries, with the emergence of psychiatry as a medical discipline, major reforms were introduced in Europe promoting the idea that mental illness could be treated more humanely. Similar reforms were introduced in Austria and specialised asylums were designed to provide a therapeutic environment. At the beginning of the 20th century, Austrian psychiatrist Sigmund Freud found himself on the fringes of the official psychiatric system of his time. He adopted a psychodynamic approach to mental disorders, with the aim to understand the unconscious (Huber & Rider, 1985). In doing so, he shifted the treatment of insanity from the traditional asylum setting to an innovative psychoanalytic setting (Huber & Rider, 1985). This marked a shift from institutional care towards outpatient treatment.

¹ Translated by author from the original French text by Foucault (2003)

2.2 Historical context of psychiatric hospitals for adolescents

The history of psychiatric facilities reveals that people considered mentally ill were confined in isolated asylums without any treatment (Le Bonhomme & Le Bras, 2021). At that time, mental illness was poorly accepted by the society, let alone by young people. Children and adolescents admitted to adult asylums were often diagnosed with “idiocy” or “moral insanity” (Von Gontard, 1988). This assessment points out that these patients were placed in an insane asylum, which underlines that during that period, safety was the overriding architectural principle while curing the mentally ill people was considered impossible (Müller, 1997).

a) Early approaches in psychiatric institutions

The first institution in Europe exclusively intended for treatment of mentally ill patients was the “Imperial-Royal Insane Asylum of Vienna” also known as “Fools’ Tower” (“Narrenturm” in German) which opened in 1784 (Naturhistorischen museum Wien, n.d.). This historically and architecturally significant building is among the oldest structures in the world specifically designed for use as a psychiatric hospital or asylum.

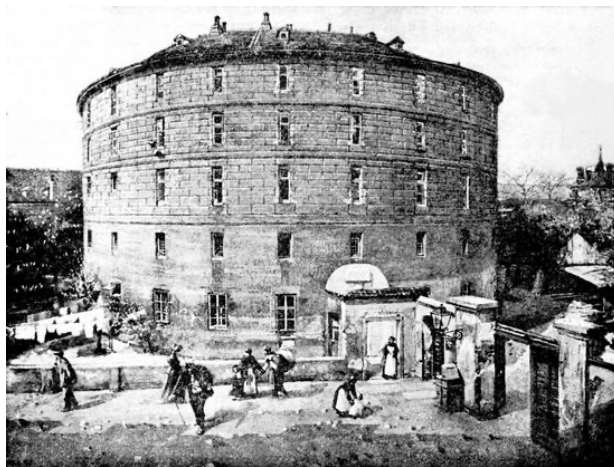


Figure 1 | The “Narrenturm” in Vienna, 1784, From Gedenkstaettesteinhof (n.d.). Retrieved from <https://www.gedenkstaettesteinhof.at/de/ausstellung/01-vom-narrenturm-zum-steinhof>

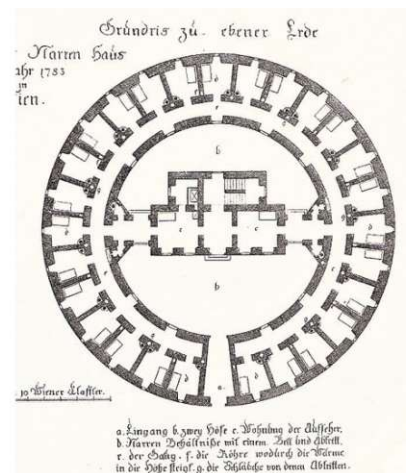


Figure 2 | Ground floor of the Narrenturm, From Beyondarts (n.d.). Retrieved from <https://beyondarts.at/guides/uniwien-campus/narrenturm/grundriss-narrenturm/>

The architecture has a distinctive circular shape with multiple floors and small individual cells to isolate individuals deemed “insane” at the time. The structure was built around a courtyard, with patients’ cells arranged along the inner perimeter to limit contact with the outside world. It is characterised by a five-storey circular building with 28 rooms per floor, each measuring 13 square metres, narrow windows and a central wing accessible via a circular corridor (Austria-Forum, 2022). Today, the “Narrenturm” no longer functions as a psychiatric hospital; it now serves as a museum highlighting medical and psychiatric history.

At a time when many inmates of asylums were still due to the lack of care, a significant development in psychiatric architecture was set by Dr Thomas Story Kirkbride (1809-1883), an American psychiatrist (PennMedicine, n.d.). Kirkbride developed the most influential architectural approach to asylums, which was widely adopted in the United States of America as the ‘Kirkbride Plan’ (University of Pennsylvania, 2011). The asylums, according to the Kirkbride plan, contained a central core with connected wings to maximise natural light and ventilation (Pérez-Fernández & López-Muñoz, 2019) (Figure 3). Furthermore, they consisted of departments separated by gender and disease and free-standing buildings to secure and treat patients (Myers, 2021). This strategy provided new perspectives on hospital typology to facilitate gradual reintegration into society and therapeutic care.

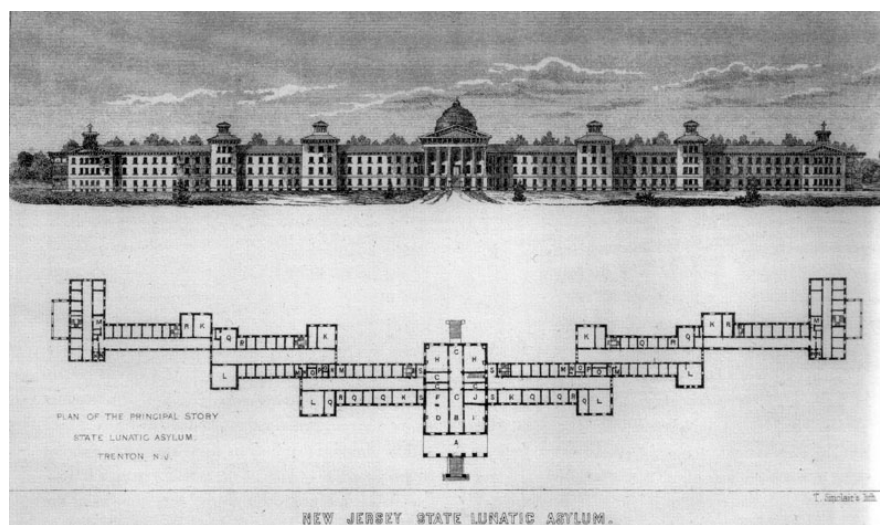


Figure 3 | New Jersey state lunatic asylum* by Kirkbride, 1848
 From Wikipedia (2025). Retrieved from https://en.wikipedia.org/wiki/Kirkbride_Plan

Kirkbride transformed the asylum into an integrated care centre, where the structure, landscape and circulation were designed to promote the mental health, organisation, safety and dignity of patients. This architectural approach marked a lasting turning point in the construction and design of psychiatric institutions. Nonetheless, the traditional asylum remained the predominant model in Europe and underwent significant changes only after the effects of the world wars, with the term “asylum” replaced by the term “psychiatric hospital” (Le Bonhomme & Le Bras, 2021).

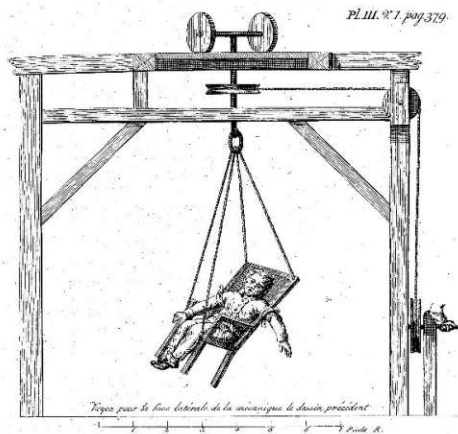
Long associated with confinement and exclusion, psychiatry has now become an institutionalised medical speciality. This fully-fledged medical discipline continued to shape hospital structures, both in terms of their architectural layout and the development of safety standards that protect both patients and caregivers.

Today, significant changes can be observed in hospital spaces, which are designed to provide care, support and protection. In adolescent psychiatric centres in particular, architectural aspects have been the subject of increasing attention. Several recent studies show that following architectural renovations in psychiatric units for adolescents, the use of coercive measures has significantly decreased, highlighting the therapeutic role of architecture (Czernin et al., 2023).

In this way, the impact of architecture is well established. Architecture can affect human perceptions and experiences of public spaces, including the healthcare environment, “from evoking emotions of grandeur and freedom, to imposing order and oppression” (Bodryzlova et al., 2024, p.94). It is therefore essential to conduct studies on psychiatric facilities for adolescents in order to better understand how architectural design can shape the requirements of an appropriate therapeutic environment and the vulnerability of young patients.

b) Historical adolescent psychiatry

Before the 20th century, young people with mental health issues were often treated within general facilities, abandoned, killed or in many cases received little to no care at all (Thun-Hohenstein, 2017). The history of mental health care for youth is marked by a lack of appropriate care and understanding, often resulting in inhumane conditions and long-term trauma (DeLano, 2023).



At that time, children and adolescents were rarely treated as a distinct patient group and often housed in asylums with adults, orphanages or prisons in which they were mistreated. The main purpose of these psychiatric institutions, particularly in the 18th and 19th centuries, was to protect society rather than treat patients. It was only with the evolution of medicine and the introduction of humanitarian reforms that these approaches were largely replaced by more therapeutic and patient-centred methods of care.

Figure 4 | Apparatus of control in the 17th century.
 From Babic, 2025. Retrieved from
<https://www.geschichte-lernen.net/kurze-geschichtepsychiatrie-antike-bis-moderne/>

The specific recognition of adolescence as a separate developmental phase from adulthood and requiring its own psychiatric approach came later. According to Nissen & Trott (1995), the term “adolescent psychiatrist” only appeared in the German literature in 1912. The development of specialised mental health facilities for adolescents came relatively late in the evolution of psychiatric care. Major transformations took place during the 19th and 20th centuries. It was not until the beginning of the 20th century that psychiatric hospitals for adolescents were established. One of the pioneers in this field was Bellevue Hospital in New York. In 1937, the hospital expanded its existing inpatient child psychiatric service and became a leading provider of psychiatric care for adolescents, responding to the special needs of young people (NYC Health + Hospitals, 2013).

After the Second World War, Western Europe saw a significant expansion of investment in public health services. Child psychiatry became increasingly medicalised, and psychiatric hospitals for adolescents emerged as part of national health services in countries such as the United Kingdom (e.g. the NHS in 1948), France and the Scandinavian countries. In Austria, this observation dates back to 1975, when child and adolescent psychiatry began to take shape, well before it was officially recognised as a speciality in 2007 (Huber & Rider, 1985). In view of the development of society, which has become more open to mental illness, and the medical developments in this field, psychiatric hospitals have changed considerably in recent years.

Nowadays, adolescent psychiatric hospitals and units are recognised as essential components of mental health care systems, offering a wide range of treatments. Adolescent psychiatric services in Europe vary from country to country, but are generally guided by principles of the United Nations Convention on the Rights of the Child (UNCRC) adopted by the United Nations General Assembly in 1989 and entered into force in 1990, after United Nations member² states ratified it (United Nations Human Rights, 1989). This convention defends the fundamental rights of children, including their right to health, dignity and a protective environment. Since the 2000s, the United Nations Committee on the Rights of the Child (CRC), the World Health Organisation (WHO) and numerous NGOs appeal for greater consideration of adolescent mental health. Despite growing awareness and progress in adolescent mental health, efforts and challenges remain evident.

² Every country in the world has ratified it, except the United States, which has signed but not ratified the Convention.



Figure 5 | The evolution of psychiatric units
From Charbonnier (1950), BWBR (2023). Retrieved from
<https://www.bwbr.com/project/child-and-adolescent-inpatient-psychiatry-unit-renovation/>; <https://www.vintag.es/2021/07/jean-philippe-charbonnier.html>

2.3 Adolescent psychiatry and inpatient care

In recent years, international cooperation between UNESCO, UNICEF, WHO, NGOs, policymakers, researchers and healthcare professionals has been established to promote global health and well-being across populations.

a) General overview on adolescent mental health

In view of the high rate of mental illness among children and adolescents, United Nations Children's Fund (UNICEF) and the World Health Organisation (WHO) actively aim to address this global concern. The "prevalence of mental health diagnoses is rising globally, with up to 20% of the world's adolescent population estimated to have a mental health condition" (UNICEF, 2021). These international organisations publish interventions to support adolescents in distress and their caregivers. Among these concerns, the influence of environmental factors on the mental health of adolescents has gained increasing attention.

The WHO (2024), identifies adolescence as a development stage, marked by physical, emotional and social changes, with a potential exposure to stress such as poverty, abuse, violence, which increase vulnerability to mental health problems. It further emphasises that one in seven adolescents is affected by a mental disorder, accounting for 15% of the disease burden in this vulnerable age group. Moreover, the report asserts that unrecognised and untreated adolescent mental health conditions become evident by adulthood, leading to impairments in both physical and mental health.

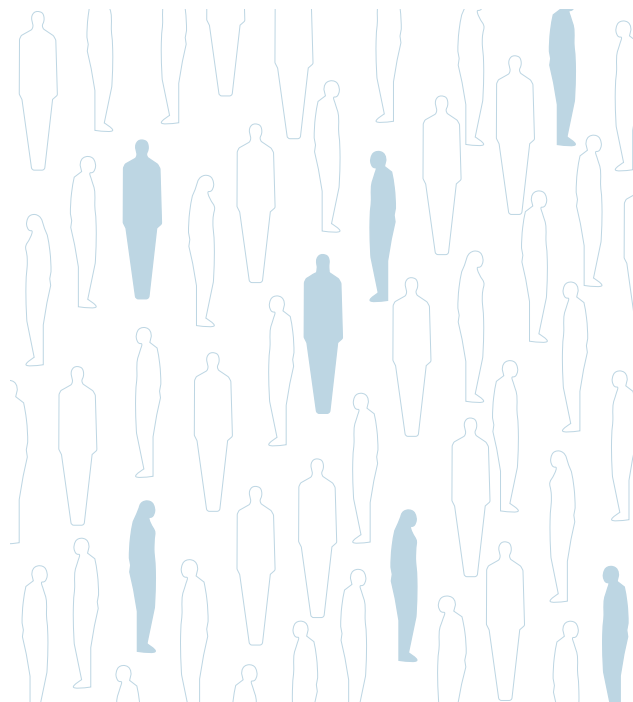


Figure 6| One in seven adolescents experience a mental disorder globally
Adapted from WHO (2024).

The European Commission (2023) reports that mental disorders in adolescents have become a growing concern globally, worsened by the COVID-19 pandemic. It is estimated that up to three-quarters of all mental illnesses occur before the age of 25 (Kessler et al., 2005). Experts are recognising the current state as “a global youth mental health crisis”, with significant implications for healthcare systems and society (Partington, 2025).

The institute for Health Metrics and Evolution (IHME) (2021) specifically identifies anxiety, depression, attention deficit hyperactivity disorder (ADHD) and conduct disorders as the four most common mental health conditions among adolescents internationally. While anxiety and depression are more prevalent between the ages of 15 and 19 (WHO, 2024) (Figure 7).

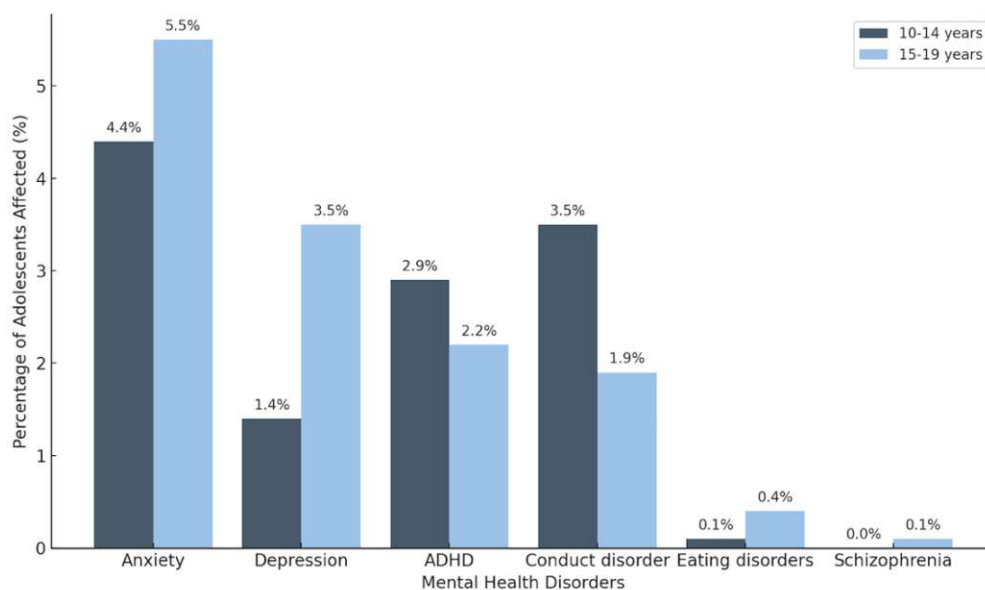


Figure 7 | Adolescents affected by mental disorders globally, 2021
Adapted from Institute for Health Metrics and Evaluation (2021)

b) Adolescents in psychiatric inpatient care

Not every mental illness in adolescents necessitates inpatient care. Psychiatric hospitalisation is generally considered a measure of last resort, usually when outpatient treatment and therapy have not been sufficient. Inpatient psychiatric care is considered if:

- there is a risk of danger to self or others (e.g., suicidal thoughts, suicide attempts, aggressive behaviour, or self-injury),
- severe symptoms occur that cannot be managed in an outpatient setting (e.g., severe depression, psychosis),
- outpatient treatment does not lead to an improvement of the situation,
- severe substance use crises (Southeast Behavioral Hospital, 2025).

During inpatient treatment, adolescents live in a highly structured facility with around-the-clock monitoring, support and treatment by healthcare professionals based on individual symptoms, with the aim of transferring them to less restrictive care (Evolve, 2023).

As stated by Bardach et al. (2014), depression is the most common and costly diagnosis in the ‘Kids’ Inpatient Database’ for inpatients aged 3 to 20 years, as shown in Figure 8.

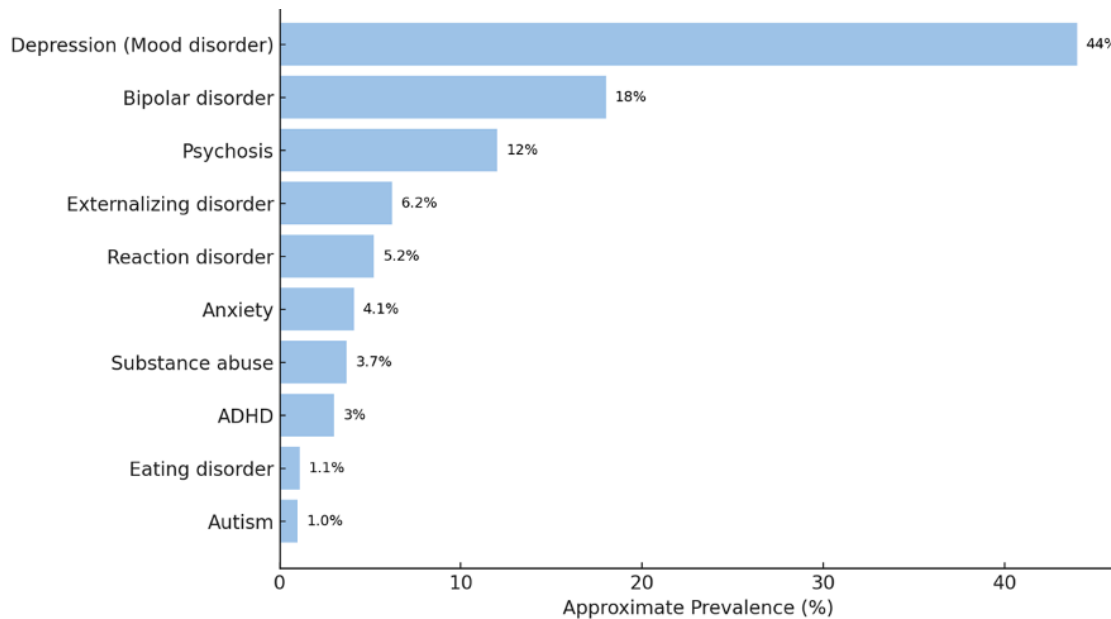


Figure 8 | Diagnoses required hospitalisation in America based on 228,808 hospitals (2009).
Adapted from Bardach et al. (2014).

Overall, depression, bipolar disorder and psychosis are the most common mental illnesses among hospitalised adolescents. They are frequently intensified by cross-cutting symptoms, which may include aggression, temper outbursts, impact of developmental trauma, self-harming behaviours and neurodevelopmental deficits (DeJong et al., 2022).

As a result, the clinical picture is different for each patient, and treatment needs to be tailored to their specific condition, including individual therapy, group and family therapy, as well as medication management (Southeast Behavioral Hospital, 2025).

c) The impact of environment on adolescent mental health

The mental health of young people is shaped by their physical and social environment and is influenced by the stress factors in their living environment (WHO, 2024). These factors are outlined in the section below.

- Social environment

The social environment is defined as the community to which the individual belongs, i.e. the neighbourhood, the workplace and politics (Yen & Syme, 1999). Supportive relationships within the community, family, peers and individual are among the most influential factors for adolescent mental health (Lin & Guo, 2024) (Figure 9). As reported by the World Health Organisation (2024), risk factors such as confrontation with exclusion, peer pressure to conform, and media influence, as well as the influence of family life and violence, can contribute to mental health problems in adolescence.

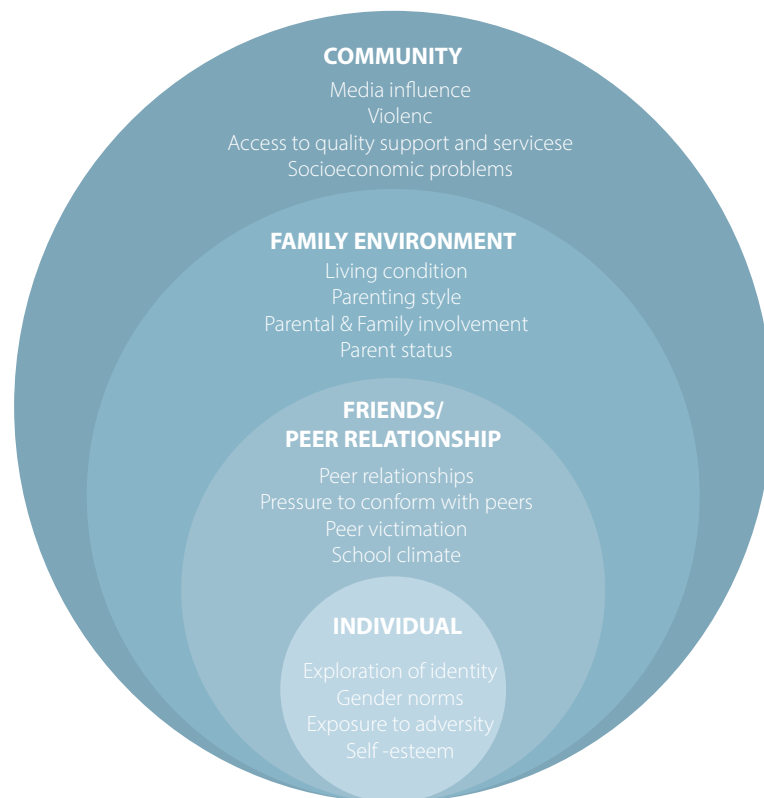


Figure 9 | Determinants of adolescents' mental health risk factors
Adapted from WHO (2024), Lin & Guo (2024)

WHO (2024) further notes that adolescents lacking support from their social environment and experiencing poor mental well-being are often targets of stigma, discrimination, exclusion, educational difficulties and risk behaviours.

- Physical environment

Current definitions indicate that the physical environment, also referred to as the built environment, can be described as structures created or modified by humans that provides living, working, and recreational spaces for individuals (US EPA, 2025). These environmental elements include measurable characteristics such as the neighbourhood socioeconomic status, built facilities, access to resources, population density and access to green space (Sheng et al., 2025). Community design, as determined by policy and practice, can have an impact on the social determinants of young people's health and on health inequalities (Bole et al., 2023). This observation is also underlined by Dr Amy Mizen (2024). From the standpoint of Mizen, international cooperation among researchers, policymakers and healthcare professionals is essential for a built environment that supports adolescent mental health, especially when combined with data collection and evidence-based strategies. For this reason, certain features of the built environment can promote adolescent mental health, warranting greater attention in design practice.

In this context the WHO, which focuses on global health, and UNICEF, which defends the rights and well-being of children and adolescents, have a clear position on the design of therapeutic spaces in healthcare facilities. According to these organisations, a balance must be reached between comfort, safety and the healing process.

Therefore, an understanding of the environmental factors is particularly important when designing therapeutic spaces such as psychiatric hospitals. Being aware of all these factors not only helps the patients but also enhances the well-being and safety of the staff working in mental health settings.

d) Age-specific spatial needs in psychiatric care

Galehouse et al. (1995) argue that young people in psychiatric inpatient units require a social environment that fosters a sense of trust, respect and validation. The researchers also emphasised a structured and supportive physical environment, especially for patients who struggle with self-regulation, impulse control or social boundaries. Additionally, “adolescents’ needs from the built environment are connected to their social and developmental needs of control, opportunities for individual growth, and positive peer-socialization” (Norouzi et al., 2023, p.113).

Furthermore, recent research shows that adolescent psychiatric facilities place greater emphasis on developmental stages, critical periods, influence of family and social context compared to adult inpatient care (Andrew, 2025). In addition, Perry (2022) points out that adults often seek psychiatric care independently, whereas adolescents are typically referred by parents, schools or

other authorities. Perry further notes that family involvement is more central than in adult psychiatric care. Hospitalisation often separates adolescents from their families, peers and school, which can increase feelings of isolation. For this reason, it is crucial to provide spaces for education, peer interaction and family involvement (Galehouse et al., 1995).

In summary, adolescent mental health and inpatient care present challenges that are influenced by social, developmental and physical factors. The increasing prevalence worldwide underscores the need for appropriate care facilities. Hospitalisation remains a last resort, but, when necessary, the social and physical environment along with the age-specific space requirements, plays a crucial role in the therapy and must be carefully considered in architectural design. A supportive environment not only contributes to the well-being of patients but also supports healthcare staff.

2.4 Healthcare professionals in psychiatric settings

Inpatient psychiatric units for adolescents rely on a multidisciplinary team of healthcare professionals, including medical, nursing, therapeutic, psychiatric, educational and social professionals to provide care tailored to the patient's therapeutic plan (Klinik Hietzing, 2025). The well-being and safety of healthcare staff are crucial to the fulfilment of their work tasks.

Hospital workplaces place significant professional and emotional demands on staff. Healthcare workers in psychiatric care are confronted daily with a multitude of complex situations inherent to hospital practice which impact their mental and psychological well-being (Ciavaldini, 2024). In this context, it is necessary to explore which factors affect the well-being and safety of these professionals and the care they provide.

a) Risk factors

In the hospital environment, the risk factors and frequent triggers are clearly identified. Sensitive areas such as emergency rooms and psychiatric wards are high-risk environments. Recent literature states that the demanding nature and working conditions in psychiatry can lead to burnout, depression, anger and physical health problems, which are influenced by factors such as patient violence and suicide, high workload, limited resources, overcrowded wards and isolation (Kumar, 2007; Kelly et al., 2016).

As stated by the WHO (2002), almost 38% of the healthcare workers are victims of physical violence at some point in their careers. The highest rates of workplace violence are among nurses in psychiatric wards, at 78.9% (Rossi et al., 2023). This increasing rate was also noted by an occupational therapist at the University Medical Centre Eppendorf (UKE): “Many colleagues [...] go to work every day with a bad feeling. Some are downright scared for themselves and their patients. [...] there are more and more patients, and at the same time more and more violence and less time to do our work as we should.” (Heinen, 2019)³. Additionally, in another scientific article, the increasing violence is highlighted by psychiatric staff members: “[...] the problem cannot be solved without a change in the framework conditions, i.e. the staffing situation and the building infrastructure. More money in stones and more money for legs.” (ver.di, 2018)⁴.

³ Translated by the author from the original German text by Heinen (2019)

⁴ Translated by the author from the original German text by ver.di (2018)

According to Romani et al. (2024), internal procedures in psychiatric care are often based on the isolation or restriction of patients. This increases risks to staff safety and retention, which in turn increases staff turnover and results in management costs. Furthermore, the factors that contribute to workplace violence in these facilities are not only the understaffing of healthcare personnel and inadequate training, but also inadequately secured environments and lack of privacy (Ayres et al., 2021).

b) Importance of supportive work environments

Environmental improvement in psychiatric facilities requires a multi-level approach that considers different levels of complexity and intensity of care, as well as the specific needs of the patients and medical staff. For architects, managing architectural projects in the hospital sector is a major challenge. As there is a profound change in hospital architecture, the architect has to deal with various types of intervention, different stakeholders and aims to promote a supportive working environment.

A supportive work environment is essential to the well-being of healthcare professionals and ensures quality patient care. Healthcare staff in adolescent psychiatric inpatient facilities face significant challenges, including stress, burnout, and safety risks associated with patient behaviour (Kumar, 2007). For this reason, the presence of a dedicated health and safety officer in healthcare facilities, particularly in psychiatric departments, is an essential factor in maintaining a safe environment for patients, staff, and visitors (Looi et al., 2024). In addition, ongoing training of healthcare professionals helps to better manage difficult situations and reduce risk factors (Kelly et al., 2016). Lastly, providing rest and relaxation rooms for healthcare professionals can help mitigate the effects of workplace stress and support productivity (Morley, 2024).

As a result, the impact of these challenges on staff well-being cannot be underestimated and should instead inform the creation of a safe and caring working environment.

2.5 Architectural challenges in adolescent psychiatric facilities

Although healthcare architecture has progressed in recent years, it still encounters some barriers. The key issue is to find the best balance between patient comfort and the efficiency of the work of the staff, who must comply with different rules, technical constraints and regulations. Architects aim not to interfere with the staff efficiency and avoid contributing to stress. Their strength lies in combining architectural expertise with an integrated, objective vision and a tailored, structured design methodology.

a) Designing for safety

Designing for safety (DfS) in healthcare architecture entails “the process of identifying and reducing safety and health risks through good design at the conceptual and planning phases of a project” (WHS Council, n.d., para. 1). When designing for a healthcare institution, the safety of patients and healthcare professionals is a key concern in the architecture.

Poorly designed units can quickly become an obstacle for healthcare professionals and cause discomfort for patients. A study by the Health Services Safety Investigations Body (HSSIB) underscored this issue. In fact, 13 out of 18 paediatric units described their environment as “unsafe” for the treatment of young people with mental health problems (University College London, 2025). Unfortunately, research on the architectural impact on healthcare workers remains limited. “Often, architectural aspects in psychiatry are only addressed in the context of suicide prevention” rather than their influence on safety and well-being (Fornfeld et al., 2024). Additionally, it has been suggested by researchers that the architectural design of such facilities has traditionally relied on clinical assumption, experience and anecdotal evidence, rather than design recommendations for minimising aggression and physical violence (Connellan et al., 2013; Karlin and Zeiss, 2006).

However, the challenge in safety design is to integrate security and safety features or elements without creating a cold, sterile, or depressing atmosphere.

b) Collaboration across disciplines

Researchers have found that when planning and building psychiatric hospitals for adolescents, different professional groups apply varying standards without sufficient evidence-based guidelines (Fornfeld et al., 2024). This observation can directly impact both healthcare workers and patients. According to Colman and Hebbar (2019), these impacts can compromise staff safety, and lead to medical errors, adverse events and poor job satisfaction, factors that are collectively referred to as latent safety risks (LSTs) or “accidents waiting to happen”. Furthermore, the authors

emphasised that LSTs are difficult to identify during a planning process, as care workflows often unfold differently and may contribute to adverse events if not addressed proactively.

This reflects the importance emphasised by Becker et al. (2018) when planning an adolescent psychiatric clinic that architects and building planners should work closely with all staff and coordinate safety-related measures in terms of practicability and functional processes.

c) Contradictory design objectives

In planning new psychiatric hospitals, design teams often face conflicting objectives that need to be balanced between safety and well-being. These objectives consist of:

- balancing a limited budget while having durable materials,
- observation requirements by the healthcare professionals while maintaining patients' privacy,
- maintaining control without compromising the dignity of patients,
- creating a stress-reducing environment while meeting security requirements (Medical Construction and Design, 2020).

These tensions can lead to some elements being neglected and/or inadequately addressed, highlighting the need to create a built environment in adolescent psychiatry that balances several important aspects, as shown in Figure 10 (Norouzi et al., 2023).

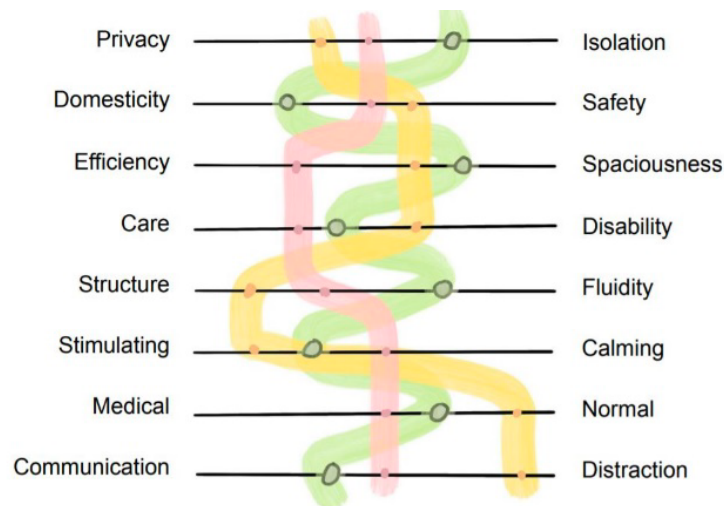


Figure 10 | Possible balance between opposing environmental characteristics
From Batrakova et al. (2019). Retrieved from <https://sintef.brage.unit.no/sintefxmlui/bitstream/handle/11250/2976126/166-DESIGN%20DILEMMAS%20IN%20MENTAL%20HOSPITAL%20ARCHITECTURE.pdf?sequence=1&isAllowed=y>

d) Regulatory frameworks

Legal regulations play a central role in architectural design and often lead to restrictions and compromises that shape the architecture and its spaces. Depending on the country and nation, architecture of adolescent psychiatric units and facilities in general is usually characterised by a comprehensive set of regulations that includes legal requirements, state laws such as building regulations and special building regulations, technical standards, laws protecting youth and staff protection laws, as well as clinical standards and guidelines. Understanding these requirements is essential not only for architects, but also for healthcare professionals involved in the planning of such facilities.

However, a key challenge in the architectural design of mental health facilities is reconciling regulatory requirements with therapeutic design principles. While regulations mandate robust physical barriers, security features, emergency systems, structures and privacy, therapeutic design emphasises openness, autonomy and normalisation to promote well-being and healing (Matsoso, 2012; Norouzi et al., 2023). The most effective architectural solutions are those that integrate these requirements into environments that foster safety, collaboration, healing and well-being for both staff and adolescent patients.

2.6 Architectural principles for staff well-being and safety

The architectural design of psychiatric facilities for adolescents and healthcare facilities in general has evolved from a focus solely on safety to actively supporting patients and staff. Central to this evolution are the architectural concepts of healing architecture and evidence-based design (EBD), which provide a theoretical foundation for creating an environment that promotes healing and well-being (DAMPA, 2024).

a) Conceptual foundations

Evidence-based design is a key methodology in healthcare architecture and is defined by The Centre for Healthcare Design (2021) as “the process of basing decisions about the built environment on credible research to achieve the best possible outcomes”. In this domain, Dr. Roger Ulrich is a leading researcher of evidence-based design in architecture. In an interview he mentioned that “EBD is not about rigid rules. The same evidence can help designers create quite different approaches for addressing similar issues or objectives” (Marberry, 2010). Ulrich’s work demonstrates that well-designed environments with data obtained through measurement and evaluation of physical and psychological impacts can reduce stress, improve patient outcomes, and enhance staff well-being (Manolakelli, 2023; Marberry, 2010).

Another complementary approach is healing architecture, which focuses on designing spaces that support the physical, mental and healing benefits for patients, staff and visitors, emphasising the importance of daylight, climate, acoustics, colour and art in creating a therapeutic environment (DAMPA, 2024).

By incorporating EBD and healing architecture principles, the healthcare and architectural design ensure that the physical environment continues to meet shifting healthcare demands in a sustainable and resilient manner, thereby enhancing patient outcomes and promoting staff well-being (Elf et al., 2024).

b) Design strategies for safety

Modern facilities incorporate a range of architectural and design strategies. Cox (2018) describes an anti-ligature design as a design that prevents objects from being used for self-harm or harming others. Additionally, the authors emphasised tamper-resistant design, including material selection and installation techniques to reduce the risk of being used as a weapon or object for self-harm, such as ceilings and ceiling fixtures. Medical Construction and Design (2020), underlines a well-thought-out spatial planning such as unsupervised dead ends. Norouzi et al. (2023) point out a key planning strategy, an open floor plan in psychiatric facilities that provides a degree of

autonomy and privacy for patients while maximising visibility and ensuring sight lines for healthcare professionals. Moreover, they note that durable and damage-resistant furniture are important safety aspects, as it cannot be removed or weaponised. The international health facility guidelines (2025) mention that doors to patient rooms and high-risk areas should open fully outward, allowing staff to access during emergencies and preventing patients from barricading themselves inside. Furthermore, multiple exit points and efficient circulation must be planned, allowing staff to quickly reach an emergency or ensuring enough evacuation routes during a crisis (Norouzi et al., 2023). Finally, seclusion rooms, also known as time-out zones, play a crucial role in supporting both patients and healthcare professionals. They provide a controlled, low-stimulus environment in where patients can de-escalate if they pose an immediate danger to themselves or others (NHS Foundation Trust, 2021).

A therapeutic and safe environment in psychiatry not only serves patients but also healthcare professionals. The patients' perceptions of comfort and safety reduce the probability of complaints or even violence towards healthcare professionals.

c) Design strategies for welfare

In addition to established safety measures and promoting a sense of well-being, there are other important architectural principles that contribute to the well-being of healthcare professionals and patients. According to Rodríguez-Labajos et al. (2024), the following EBD and healing architecture concepts are essential:

- designated workspaces and respite areas for staff,
- centralised and open nursing stations,
- sensory rooms and quiet zones,
- access to alarms and emergency systems.

In addition, a strategy mentioned by Norouzi et al. (2023) for greater well-being is access to green spaces and connection to nature, also known as biophilic design, and natural light. Furthermore, providing comfortable, private staff and break rooms promotes work engagement and indirectly increases psychological well-being (Kim & Jang, 2022). Finally, a positive atmosphere, achieved through thoughtful colours and materials can enhance the sense of well-being (Norouzi et al., 2023).

To reduce the risk of violence against healthcare professionals in potentially high-risk areas, the design of spaces must avoid features that may facilitate violence or instead incorporate elements

conducive to safety. However, highly restricted environments can encourage rule-breaking and increased aggression among patients, thereby heightening staff risk (Dresti, 2024).

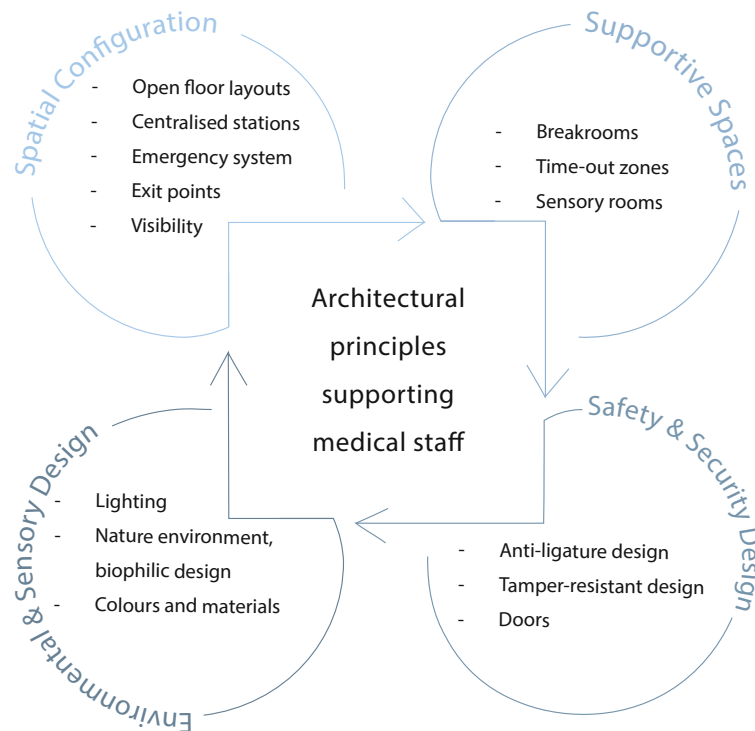


Figure 11 | Architectural principles supporting healthcare professionals
Own presentation adapted from Norouzi et al. (2023); Cox (2018); Medical Construction and Design (2020); Rodríguez-Labajos et al. (2024),

In conclusion, as illustrated in the figure above, healing architecture and evidence-based design provide a solid framework for creating adolescent psychiatric facilities that promote both patient recovery and staff well-being, thereby complementing one another.

The exhaustive review of the literature shows the current state of knowledge and the complex relationships between the various fields related to healthcare architecture, with an emphasis on the well-being and safety of healthcare professionals in the context of inpatient adolescent psychiatric care.

2.7 Built references of modern psychiatric facilities

To expound the theoretical concepts outlined above, this section presents selected examples of contemporary psychiatry facilities that adopt diverse architectural strategies to promote the safety and well-being of healthcare professionals.

De Korbeel Kortrijk, Belgium

De Korbeel became the first child and adolescent mental health hospital in Flanders, Belgium. Completed in 2022, by VK Architects+Engineers, this mental health hospital was integrated into the surrounding urban fabric through the use of similar materials, such as white bricks, in order to reduce the stigma traditionally linked to psychiatric institutions.

The architectural layout features four distinct courtyards, each configured to serve different users and activities. The safety of healthcare staff is enhanced through the use of reinforced materials, furniture and elements such as lockable sinks, fixed furnishings, and reinforced doors. In addition, technical features such as a discreet alarm system for crises and secure door mechanisms serve to reinforce safety.

Well-being is fostered by the natural light provided through large windows, courtyards at ground level, and calming materials such as wood and acoustic panels across interior spaces.

Furthermore, the building is arranged around a central, two-storey spine from which five

wings extend and contribute to efficient visual supervision

(Source: Abrahams, 2023)



Figure 12 | De Korbeel view



Figure 13 | Ground-floor plan

From Klaas Verdu (2023). Retrieved from <https://www.architecturalrecord.com/articles/16345-vks-de-korbeel-youth-hospital-opens-out-to-the-community>

Ohana Monterey, California

The Ohana is a centre for child and adolescent behavioural health in California. It opened in 2023 and was designed by NBBJ. The facility equally prioritises the needs of the patients and the cognitive skills and well-being of the staff. It was designed in close collaboration with healthcare staff and neuroscientists to ensure safety in design, layout and programming.

The facility is composed of two organic volumes, enclosing central garden spaces. The patient rooms are clustered based on the severity of mental health conditions, with the more severe conditions accommodated on the ground floor and the less severe on the upper floors. Natural daylight and biophilic design elements were important in the design of this facility completed through the use of curved corners, flowing corridors and calming materials.

Moreover, healthcare professionals benefit from soundproofed relaxation rooms featuring curated artwork, as well as private terraces on the top floor.

(Source: Zeit, 2025)



Figure 14 | Ohana side view



Figure 15 | Dedicated staff break terrace

From Dezeen (2024). Retrieved from
<https://www.dezeen.com/2024/09/03/nbbj-ohana-behavioral-health-campus-california/>

Springfield University Hospital London, England

Completed in 2023, the centre for mental health services in London was built by C.F Møller Architects. It demonstrates the application of evidence-based architecture to enhance the well-being of patients and healthcare staff.

Additionally, users were highly involved in the design process to incorporate workflow, safety and layout into the design. The spacious layout creates visual oversight in the spaces and effective sound isolation improves acoustic conditions.

Key design elements contributing to a non-institutional atmosphere included openness, noise reduction, natural light, air circulation, nature and outdoor access.

Furthermore, warm materials were used in order to promote comfort, while an atrium with artwork and courtyards fosters well-being. The modular planning allowed operational flexibility, with each ward sharing a centralized service core to optimise workflow and reduce fatigue for healthcare staff.

The open areas within the units create daylight, airflow and access to garden spaces. The architects aim to reduce the stigma of such facilities by embedding the facility within the surrounding community fabric and providing nearby retail and parks.

(Source: McGuickin, 2024)



Figure 16 | University hospital view



Figure 17 | Open area at the centre of the units

From Mark Hadden (2024). Retrieved from <https://archello.com/news/cf-moller-architects-demonstrates-importance-of-evidence-based-architecture-to-providing-therapeutic-mental-health-services>

Tampere Psychiatric Clinic Tampere, Finland

The Tampere Psychiatric Clinic was built in 2024 by C.F Møller Architects in collaboration with ARCO Architecture Company and is a notable example of evidence-based design in healing architecture.

This institution is constructed on a modular layout with paired departments and centralised staff areas, adapted to changing needs and to reduce resource requirements. Key design elements included flexibility, integration of nature and cultural elements to support both patient recovery and healthcare staff well-being.

The building itself consists of three U-shaped wards which are arranged in a semicircle, maximising privacy, safety and natural light. In the centre of the three wards is a closed inner courtyard and vertical intersections which ensure short distances, efficient workspaces and easy accessibility for the staff. Brick, ceramic and wood were the primary materials used to create a warm and inviting space. Balconies and garden access provide direct support for nature-based therapy.

(Source: McGuickin, 2025)



Figure 18 | Inner courtyard

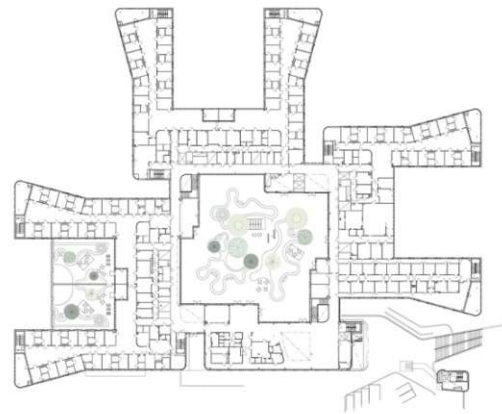


Figure 19 | Ground floor plan

From Wellu Hamalainen (2024). Retrieved from <https://archello.com/de/news/neue-psychiatrische-klinik-in-tampere-finnland-ist-ein-beispiel-fur-heilende-architektur>

Several common architectural strategies can be observed in the psychiatric facilities reviewed. All four examples highlight the integration of access to outdoor areas, natural light and the use of calming materials. This reflects the design strategies to create a therapeutic and non-institutional built environment. Another common aspect is the integration of evidence-based design, where acoustic comfort and the needs of healthcare professionals are incorporated, all with the close involvement of users in the planning process. Safety is also addressed through modular floor plans and spatial configurations that allow staff efficiency and effective supervision.

However, there are also differences among the facilities. Projects such as De Korbeel and Springfield University Hospital are incorporated into the urban surroundings to reduce mental health stigmatisation, while Ohana and Tampere Psychiatric Hospital prefer enclosed, green surrounded areas. Furthermore, the strategies for supporting the well-being of healthcare professionals also differ. Ohana incorporates dedicated retreat areas and terraces, while the other facilities integrate staff areas into centralised service zones.

Overall, these facilities show a shift from institutional, closed built environments to flexible and user-centred design strategies.

METHODOLOGY

03

3.1 Introduction to research design and approach

This architectural research explores psychiatric facilities for adolescents, particularly in the context of hospital inpatient care, and their impact on the safety and well-being of healthcare professionals. To explore what architecture can contribute to healthcare and vice versa, and to achieve the research objectives, this study examines how architectural choices support and/or spatially organise psychiatric institutions. Furthermore, to present this diploma thesis, different research strategies for qualitative data collections and analysis were used.

3.2 Data collection methods and methodology

A literature review of scientific articles was carried out before exploring the research topic. This documentary material provided insights into a variety of methodological approaches related to the subject under investigation and highlights existing challenges and knowledge gaps in the use of architecture for safety and well-being in adolescent mental health settings. From this perspective, the theoretical framework aims to provide a comprehensive examination of the multiple disciplinary interaction between healthcare practice and architectural design.

Consequently, the research draws on the practical experience of professionals working in these fields. This is where the choice of a qualitative research method becomes all the important as the experiences gained in the area help clarify the issues and build up the research results.

Semi-structured interviews with participants from diverse linguistic backgrounds were conducted during the research process. To facilitate the realisation of these interviews, the questions and the transcription were translated from Luxemburgish, German or French by the researcher into the respective language using the assistance of a translation platform (DeepL).

3.3 Semi-structured interviews

Data were collected through “semi-structured” interviews, also known as “semi-directed” interviews. This face-to-face interview method is described by Andalib (2023) as a “combination of open-ended questions with structured questions that allow for achieving rich and comprehensive answers.”

In this research, the interviews were guided by a set of questions that allowed the researcher to follow the participants’ answers in a detailed manner. This method facilitates a deeper understanding of interviewees’ experience and enables the establishment of a social relationship

between the two parties, the interviewer and the interviewee. Consequently, it contributed to developing knowledge favouring qualitative and interpretative approaches based particularly on constructivist knowledge (Charreire Petit & Huault, 2010). The outcomes highlight the participants' experiences and social representations structured by the economic, social and cultural context, which they express in their narratives and were collected (most of the time) in their mother tongue.

In summary, the aim of this study is to identify what hospital architecture might look like when shaped by the safety and well-being of healthcare professionals.

3.4 Context of the semi-structured interviews

After reading the literature and the various research methods, the researcher prepared the interview questions (Appendices A2 & A3) that guided the conversation during the semi-directed interviews. The questions were asked in the form of open-ended questions and focused on various thematic anchors in relation to the research topic. Moreover, the questions varied according to the participants' relationship to the subject of the study. These various stages of the semi-structured interviews were prepared as follows:

a) Selection of the research participants and presentations

For the purposes and reliability of the study, two main groups of participants were selected: the healthcare professionals in the medical field and the architects involved in the design and/or renovation of specialised psychiatric facilities for adolescents.

The decision to focus on the specific selection of the population enabled the study of the collaboration pattern between the key stakeholders in the field of hospital architecture and how their interaction can influence design decisions that affect the welfare and safety aspects. The stakeholders were professionals from Luxembourg and Austria contacted by mail (Appendix A1). Gathering data from different countries provide a broader perspective on the subject and contributes to the development of recommendations that are not limited to a national context but are internationally relevant.

Moreover, the respondents working in psychiatric facilities included a head physician of the psychiatric service, a head of psychiatric nursing, psychiatric nurses and de-escalation trainer. The architects interviewed consisted of both office owners and employed architects. Overall, twenty-two interview requests were made for this study. Eight participants accepted the request, represented in Figure 20, with (L) standing for Luxembourg and (A) for Austria.

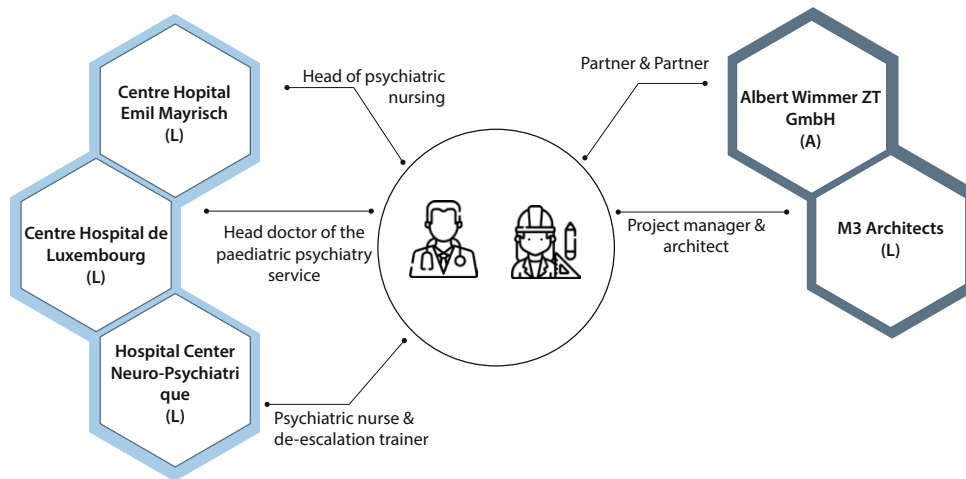


Figure 20 | Interview partners (medical staff & architects)
Own presentation

b) interview guide

An interview guide is the researcher's guideline (Appendix A). It is designed to guide the discussion towards the objectives of the qualitative study. It consists of questions and topics addressed during the interviews. In addition, the guide was used to follow a certain linearity without strictly adhering to it and leaving room for open and personal reflections.

For this research, two catalogues of questions were drawn up: one for the healthcare professionals and one for the architects. The collection of questions for the healthcare staff is divided into two sections: the first focuses on the safety and well-being in their work environment and the second explores their views on the well-being of patients in the psychiatric facility. This dual perspective facilitates the involvement of all parties and thereby contribute to an accurate answer to the research question. The questions for the architects explore their design intentions, the constraints they encountered, and their strategies for integrating safety and therapeutic aspects into their architectural concepts.

c) Interview process

Depending on the participants' availability, the interviews took place either face-to-face or virtually using video conferencing tools. The interviews were conducted in German, French, Luxemburgish depending on the participants' language preference. Each meeting lasted approximately 40 minutes and was audio recorded with the written consent of the interviewees and later transcribed by the researcher.

3.5 Data analysis methods

The data analysis was carried out systematically and iteratively using positioning architectural research within qualitative paradigms. It highlighted interpretive and constructivist stances while structuring how concepts and methods interrelate, following the methodological orientation outlined by Salma (2019)

The semi-structured interviews were transcribed by the researcher using the clean-verbatim method to improve (Gues et al., 2013) clarity by omitting filler words and non-essential statements (Appendix B).

Each transcript was line-numbered for reference purposes, and the speakers were denoted by abbreviations (“I” for interviewer, “P” for participant). A thorough reading of the transcripts enabled accurate understanding of the spoken content in relation to the interview.

Furthermore, the data were manually analysed and thematically coded using Microsoft Excel to ensure a transparent, systematic and structured analytical process (Appendix C). Statements relevant to the research were extracted from the interviews and coded with a distinction maintained between the two interview groups. The resulting codes were then grouped into broader categories (Braun & Clarke, 2006), overarching themes and spatial references based on meaning, recurring patterns and ideas (see Table 1).

This process enabled a stronger link to the participants’ responses and the research question, with safety and well-being emerging as key architectural approaches in adolescent psychiatric care.

The perspectives of the two participant groups were analysed separately to identify parallels and contrasts between planning intentions and practical experiences.

Table 1. Example of the construction of the analysis model developed in Excel

Question	Interview Nr.	Statement	Code	Category	Theme	Spatial references
Door planning?	1 [lines 1089-1093]	"[...] it is very important, especially in the more intensive areas, that you always have the second option of escaping from the room."	Escape routes for staff	Security strategy	Safety & control	Rooms

In the final phase, the analyses were interpreted in relation to the research question, thereby demonstrating how the findings reflect the impact of the build environment on health care. This serves as a foundation for the design recommendation aimed to enhance the safety and well-being of healthcare professionals.

RESULTS

04

4.1 Background analysis results

The participants surveyed were employed across a diverse range of psychiatric care institutions, including newly built hospitals or departments, repurposed older buildings, and renovated psychiatric wards. This variation in facility types provided a broad perspective on how architectural conditions, operational contexts, and the age of infrastructure influence both psychiatric care and the experiences of healthcare professionals.

The architects surveyed ranged from individuals designing a new hospital building with an integrated psychiatric ward for the first time to experienced professionals in healthcare architecture with projects spanning from new buildings to ward renovations. The experiences of staff in adolescent psychiatric care showed areas of overlap with the architects' perspectives. However, a comparison between the lived experiences of healthcare staff and the intended visions of architects revealed notable discrepancies.

The impact of psychiatric facilities and the associated spatial aspects are discussed in greater detail below (see Tables 2 & 3 for an overview of themes and categories linked to these areas). The tables summarise the principal themes that emerged from the coded interviews, the full data set is provided in Appendix C.

Table 2. Architects' experiences of psychiatric facilities for adolescents in themes, categories and spatial aspects.

Themes	Categories	(Spatial) subcategories
Therapeutic atmosphere vs. safety	Homelike vs. safety Contradictions in design	Choice/influence regarding furniture, choice/influence colour & material, spatial organisation: atmosphere vs. safety, vandalism-proof vs. comfort, (difference in) focus between staff-centred vs. patient-centred design,
Design strategies for safety & control	Safety features Technical & regulatory constraints	(containing) tamper-resistance, anti-ligature and vandal-proof features, (containing) emergency exits, (availability/lack of) standards and regulations, Technical equipment affecting safety and functionality,
Functional layout & spatial clarity	Spatial organisation Access & openness	(containing) direct accessibility to care, (containing) visibility, choice/influence over furniture positioning, (location) support centre, (containing) age clustering, (containing) openness, (availability/lack of) outdoor area, (availability/lack of) ground floor, (containing) withdrawal space,
Collaboration & innovation in planning	User involvement Interdisciplinary collaboration Innovation potential	(availability/lack of) close involvement, balance between innovation & practice, (containing) user integration when lack of knowledge, collaboration with (colour) specialist & psychologists.

Table 3. Healthcare professionals' experiences of psychiatric facilities for adolescents in themes, categories and spatial aspects.

Themes	Categories	(Spatial) subcategories
Safety challenges	Visibility & layout Infrastructure & equipment risks Safety & emergency systems	(dislike of) hidden corners, (availability/lack of) visibility, poor spatial organisation (affecting e.g circulation, doors, furniture position), again buildings, (availability/lack) tamper-resistance, anti-ligature and vandal-proof features, (dislike of) stairwells, fire safety vs escape, (containing) security staff, (containing) emergency button & monitoring, (containing) controlled access and exits
Therapeutic environment & perception	Atmosphere & design Open vs. closed settings Nature access	(dislike of) sterile ward design, psychiatric environment vs homely, (availability/lack of) colour & material, perception of “worse than prison” (P6), (availability/lack of) furniture, (availability/lack of) openness, impact on aggression & crises, anxiety vs. patient freedom, (availability/lack of) outdoor area, (dislike of) closed “cage” terrace (P2),
Spatial functionality	Safety rooms Staff rest areas Circulation & access	(dislike of) safety chamber location, (dislike of) accessibility during crises, (availability/lack of) withdrawal space, (dislike of) long circulations, (availability/lack of) ground floor units,
User involvement & planning process	Staff integration Perceived gaps	(availability/lack of) input considerations, (availability/lack of) direct exchange, (availability/lack of) inclusion until final stages.

Although the areas identified by architects and healthcare professionals assign different levels of importance, a comparative analysis reveals that their perspectives converge into four overarching categories.

- (a) safety and control;
- (b) well-being and perception;
- (c) spatial requirements and functionality;
- (d) collaboration and user integration.

These themes are presented in detail in the following results sections.

4.2 Safety and control

When comparing the themes emerged from the architects' planning perspectives and the practical experience of healthcare professionals (Table 2&3), safety and control can be identified as a key aspect. Ensuring the safety of patients and staff is generally recognised as a fundamental requirement for the built environment in adolescent psychiatry. Both architects and healthcare professionals emphasised the need for a balance of effective safety measures aimed at risk prevention and the need to ensure a non-restrictive therapeutic atmosphere.

a) Spatial layout and accessibility

Architects and healthcare professionals emphasised the importance of spatial organisation in ensuring user safety and supporting functional and efficient workflows within adolescent psychiatric care settings. As one doctor noted: “[...] Architecture and design are extremely important in psychiatry, especially in child and adolescent psychiatry” (P3).

From the perspective of the architects, safety strategies are increasingly being taken into account in the planning and design process and “topics such as openness, direct accessibility to care, [...] support centre” (P1). These elements are considered essential for enabling staff to have direct and unrestricted access to patients, particularly during crisis situations. “Short distances and the possible clarity of a ward [...] and the positioning of the furniture” (P1).

Furthermore, emergency exits, along with features such as airlocks, were identified as a critical component of the design process, as emphasised by some architects: “it is very important, especially in the more intensive areas, that you always have the second option of escaping from the room” (P2), (P7). However, as mentioned by one architect (P7), it is not always possible to ensure that doors open outwards, particularly in general hospital wards, which may pose a safety risk for staff and limit the availability of secondary escape routes. In intensive care settings, monitoring patients helps healthcare professionals to maintain an appropriate social distance, but if there is no option to leave a locked room “there is no way to escape” (P8) as one architect stated. This remains a significant concern.

Healthcare professionals validated the relevance of the architects' planning strategies based on their practical experience. They reported that design elements such as hidden corners and a disconnected layout are perceived as “catastrophic” and often pose challenges and contribute to staff stress, due to the increased risk of patient incidents going unnoticed (P4; P5). Similarly, the need to pass through “a hundred thousand doors” (P4) during crisis situations was described as a significant obstacle to rapid intervention and circulation. For safety reasons, doors must open

outwards, especially in intensive care units. In the event of technical difficulties and failures, “several systems to open” the doors should be available, however they must not open automatically when the fire alarm is activated to prevent potential misuse (P3).

b) Safety features and supervision

In addition to the spatial layout considerations, targeted safety installations and reliable supervision aspects were also identified as an important element of the care environment. Both architects and healthcare professionals emphasised the importance of integrating evidence-based design principles, such as tamper-resistance, anti-ligature and vandal-proof features, in order to reduce the risk of environmental damage and harm to patients or healthcare staff. Nonetheless, care providers noted that staff are the key guarantor of patient safety (P4;P5).

Despite the incorporation of different safety measures, some elements were identified as requiring further improvement, most notably the ceiling. This was pointed out by a doctor who mentioned that patients often demonstrate significant resourcefulness, sometimes lifting ceiling panels “we had to screw some panels down” (P2). This prompted patients to dismantle it and to flee (P6).

In case, the architects mentioned that “the ceilings are fixed, [...] If there are fixtures, then they have to be permanently screwed down” and should not be accessible for patients (P1).

In addition, the spatial positioning of the staff within the therapy rooms was discussed with the recommendation that the staff should avoid sitting with their backs to the door, in order to maintain a clear escape route if necessary (P8).

Architect (P7) further pointed out that the technical installations should be accessible from the corridor, enabling staff to respond in the event of an emergency. This requirement poses significant challenges in the design and planning of such healthcare facilities.

Moreover, an architect (P1) referred to the complexity of implementing technical equipment, within psychiatric settings, describing it as a “big issue”, particularly when balancing safety requirements with concerns such as video surveillance versus data protection, or the tensions between fire protection regulations and safety protocols. Additionally, ageing infrastructure was identified as a significant safety risk concern by healthcare professionals. All staff confirmed that there is an ongoing need for renovation and structural improvements. For instance, P4 described how certain outdated fixtures can pose dangers: “there are handles they can pull them out and break and hit someone with, threaten and so on”. Similarly, P5 pointed to the need for improved furniture design, stating that “security concepts have to be developed” especially in closed psychiatric wards.

Despite these challenges, healthcare workers all underlined the reassuring presence of safety infrastructures such as video surveillance, reliable security staff and alarm buttons. They were seen as essential for enabling and “reassuring” (P6) a rapid and effective response during risk scenarios. In addition, they feel safe because of protocols enforced security guards and the controlled access and exit points (P6).

4.3 Well-being and perception

In the analysis, architects generally placed greater emphasis on patient well-being and safety aspects. As one architect noted, “we're really more focused on patients.” (P7). In contrast, the findings demonstrate that the built environment has a significant impact on staff well-being.

a) Environmental experience and therapeutic atmosphere

The healthcare professionals and the architects emphasised that a therapeutic atmosphere necessitates a balance between safety and supportive elements. However, an architect describes this balance as “diametrically opposed and combining the two is one of the biggest challenges” (P1) in practice. Furthermore, a nurse noted that the architectural design can improve safety for all users but can also have negative effects if it is too restrictive, “impersonal and too psychiatric” (P6).

When designing healthcare structures, architects face the complex challenge of creating spaces with a “domestic normality” while maintaining security aspects. They pointed out the important role of materials and colours selection in creating a calming atmosphere. They also mentioned the value of open floor plans as they provide “opportunity to move” rather than confinement (P1); nevertheless, the implementation of such designs is lacking.

All healthcare interview participants agreed with the architects’ observations, describing their work environment as sterile, cold, or even “worse than prison” (P6), which contributes to negative emotional feelings and experiences. Additionally, they reported ongoing or completed initiatives to introduce colour to their departments recognising that colours play a “big role” in improving the atmosphere (P3). A doctor criticised overly enclosed terraces on upper floors, evoking a feeling of “cages” (P3), which undermines therapeutic intent. Similarly, furniture arrangements were also noted as suboptimal, with suggestions that alternative and more accessible furnishing “could be set up a bit differently” and could better support staff and patient well-being (P4). Interviewees emphasised the importance of spaces that allow free movement without confinement, and provide adequate areas for communal gathering (P3).

Overall, both perspectives are “convinced” (P6) that open ward designs, careful selection of colours and materials can reduce patient crises and aggression, while simultaneously enhancing staff comfort and security. These findings highlight that healthcare workers’ well-being in adolescent psychiatric facilities is closely connected to the extent to which spatial environments facilitate or restrict comfort, autonomy and control.

4.4 Spatial requirements and functions

The spatial configuration in psychiatric facilities for adolescents emerged as a recurring theme in the interviews, particularly concerning the need for designated safety rooms and planned withdrawal spaces for healthcare professionals. These spaces were highlighted as essential for maintaining both safety and operational efficiency within high-stress clinical environments.

a) Therapeutic outdoor and ground access

Both architects and healthcare workers emphasised the importance of accessible outdoor areas and the department being located on the ground floor. This ground-level placement is identified as fundamental in supporting the safety and well-being of the staff and ensuring a safe working environment. As one doctor (P3) noted such access “should almost be a norm”.

In contrast, healthcare workers expressed dissatisfaction with the current condition of their facility, where the outdoor access is limited or absent due to the departments located on upper floors. This lack of accessibility was viewed as a missed opportunity for relaxation and supporting de-escalation, particularly during crisis situations.

Higher floor units pose additional risks and challenges to staff when escorting the patients through stairwells, which is described as “not feasible from a safety point of view” (P3), presenting risks for both staff and patients. Described by P5: “I go behind, so I don’t maybe get a foot in my back and fly down three floors”. The participants of the interviews were unanimously in favour of locating closed psychiatric youth wards “on the ground floor with direct access to a secured courtyard” (P5), gardens or terraces. The therapeutic value of visual connection to outdoor spaces was regarded as essential to facilitating safer patient management and enhancing the therapeutic environment.

b) Dedicated space for safety and withdrawal

In addition to the importance of outdoor access and ground floor location, architects and healthcare workers underlined the need for purposefully designed rooms that serve therapeutic and safety functions and staff safety.

Architects mentioned the value of “spaces where employees can withdraw and take a break from the company” (P1). However, the implementation of such spaces remains in practice challenging, particularly in facilities where spatial constraints limit the ability to provide adequately sized or appropriately located staff areas (P7).

This concern was echoed by healthcare professional, who stated: “being able to pull back a bit with visibility would not be bad. Especially here in the youth area” (P5).

Healthcare staff also elaborated on infrastructural limitations of existing safety rooms, noting that they are often inconveniently located, leading to challenges during high-risk situations. Furthermore, safety chambers such as time-out spaces, surveillance chambers and rooms with fixation beds, were identified as necessary to temporarily isolate the patients in times of crisis or risk of harm. These rooms are not only critical for patient management but also play a central role in ensuring staff safety. Such spaces should be “on the floor where you have direct access” (P4) and ideally positioned “are right next to the nurse’s desk” (P3), ensuring constant contact and rapid accessibility.

4.5 Cooperation and user integration

The active involvement of users in the design process of psychiatric facilities is widely acknowledged as an essential aspect for developing functional, supportive and appropriate built environment in healthcare.

a) User involvement in the design process

Both architects and healthcare professionals emphasised the importance of end-users' input and the alignment of architectural intentions with the clinical experience and operational realities.

The architects acknowledged the importance, mentioning that “the users are very involved in every planning decision” (P1), particularly in relation to workflow, safety needs and routine practices. Architects recognised the value of close interdisciplinary cooperation noting that “it is very important to work together” (P2) and engage in interdisciplinary collaboration with other experts. One architect reflected that they “sometimes lack the contact on the other side” when it comes to innovation and “architects might have more ideas than are actually realised in practice.” (P1). Inexperienced architects in the field of healthcare architecture, also stated their reliance on user feedback to compensate for limited first-hand knowledge (P8).

From the perspective of healthcare professionals, the necessity of “direct exchange, not with the direction, but on the ground” (P3) was highlighted. Nonetheless, the staff emphasised that the meaningful dialogue with the planners supports implementation of practical requirements and development of design solutions. However, they also noted that such engagement is often limited to specific stages of the project and is not consistently maintained throughout the entire design process (P4).

4.6 Summary of findings

The results reveal the complex relationship between the built environment and safety, well-being and operational requirements of healthcare staff in adolescent psychiatric facilities.

The findings show that both architects and healthcare professionals attach great importance to safety, with architects focusing on design strategies and healthcare professionals emphasizing everyday risks and circulation issues. This distinction reflects the divergence between how safety is perceived and how it is formally planned.

While architects primarily focused on patient safety strategies, healthcare staff perceived themselves as the primary guarantors of patient safety, often at the expense of their own well-being.

Furthermore, the results indicate that architects place more emphasis on patients' well-being within the therapeutic environment, while healthcare professionals focus on how the institutional psychiatric atmosphere affects their own well-being. As a result, healthcare professionals retrospectively attempt to adjust the atmosphere through the use of colour. Nevertheless, both groups pointed out the importance of warm materials and colours. The architects describing the balance between safety and therapeutic atmosphere in planning as "diametrically opposed".

Moreover, architects and healthcare professionals underlined the need for spatial adequacy. Healthcare staff pointed out the daily risks posed by spatial organisation and unit placement, whereas architects considered these requirements primarily in terms of feasibility. Additionally, the results underline the common recognition of the importance of interdisciplinary collaboration and user involvement. Architects underscored their reliance on user input, whereas healthcare staff reported that their participation was often limited and that the practical "on the ground" knowledge was sometimes overlooked. The responses highlight the need for flexible design strategies that address both the principles of human-centred care and clinical requirements.

IMPLICATIONS FOR PRACTICE

05

This chapter outlines the practical implications of the study’s findings as a central component of this thesis. The proposed framework is intended to serve as a basis for the planning and design of renovations or future psychiatric facilities, with a particular focus on a more human-centred approach that prioritises the safety and well-being of healthcare professionals.

Existing literature shows that the built environment not only influences patient outcomes and well-being but also considerably affects the work experience, safety and mental well-being of the staff. Therefore, this section aims to bridge the gap between architectural intentions and clinical experiences by providing user-centred design recommendations. These recommendations, in accordance with the results of this research, address five specific areas intended to improve the work environment and the professional experience (Figure 21)⁵.

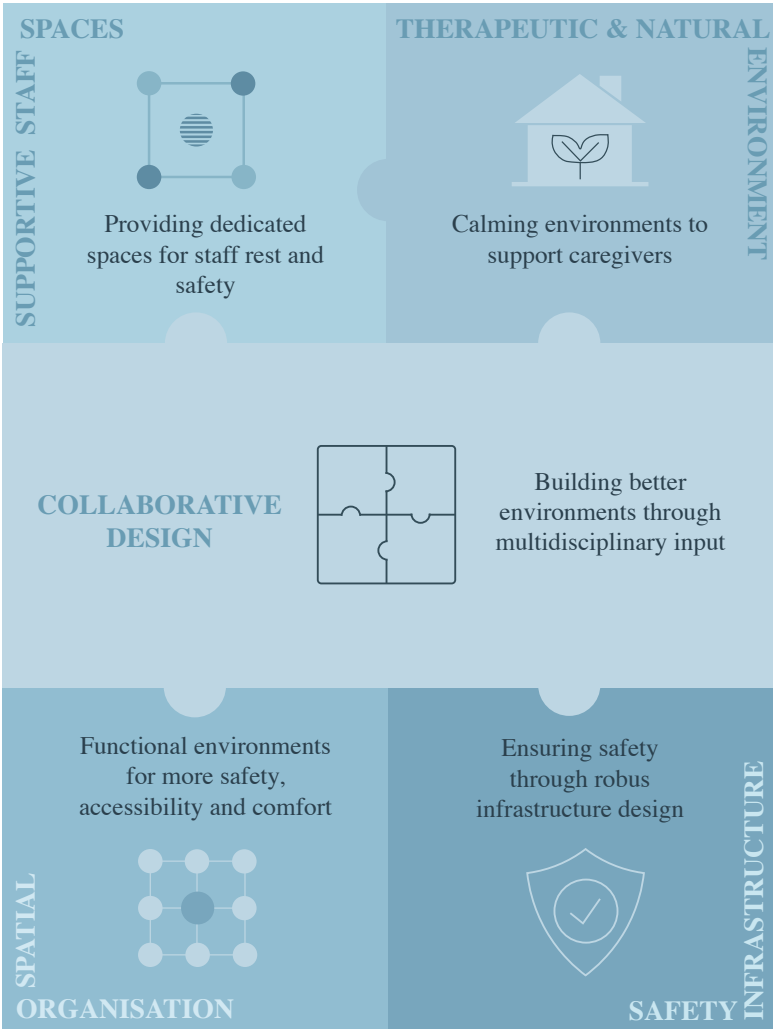
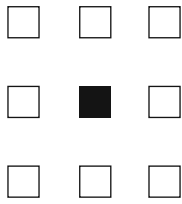


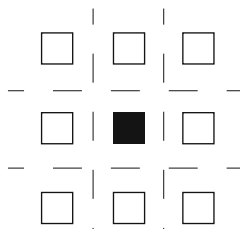
Figure 21| Identified areas for safety and well-being enhancement

⁵ Note on Figures:
All figures in Chapter 5 were created by the author.

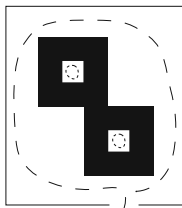
5.1 Spatial organisation



Layout



Distance



Ground floor

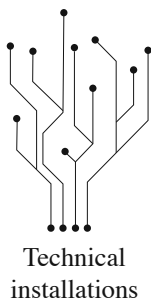
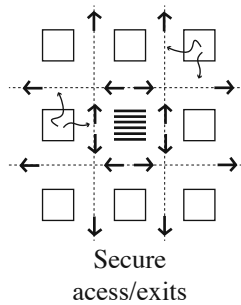
The first domain where safety and well-being of healthcare professionals can be improved is spatial organisation, which plays an important role in shaping the experiences of both patients and healthcare professionals.

Layouts should prioritise visibility throughout the units, minimising blind spots and corners while enabling rapid accessibility to ensure both functionality and safety. Centrally located staff stations, positioned for sightlines and adjacent to communal spaces, facilitate active and passive monitoring, increase accessibility and help reduce stress. The use of transparent barriers, such as safety glass at staff stations, help balance visibility with safety. Furniture should be positioned to maintain clear escape routes and prevent any obstruction or hidden areas that could obscure the view.

In addition, open floor plans, particularly in social spaces, foster a non-institutional atmosphere and facilitate supervision and rapid response during crises. This is especially effective when planned with short distances and direct connections between safety chambers, staff areas, and patient rooms.

Furthermore, it is advisable that psychiatric intensive care units be located on the ground floor to ensure the safety of users, as this facilitates direct access to secure outdoor areas and eliminates risks posed by stairwells.

5.2 Safety infrastructure



An essential component in enhancing the safety and control of healthcare professionals is the integration of supportive safety infrastructure within the built environment. Healthcare facilities should be equipped with controlled access points at all entrances, exits and internal transition points. Door hardware should allow healthcare staff rapid locking and unlocking with a secure manual override system in case of technological malfunction. In high-risk clinical areas, doors should be configured to open outward, to minimise the potential for barricading and enabling prompt staff intervention. The provision of dual exits in these areas, such as in time-out or therapeutic rooms, further contributes to risk mitigation by enabling staff to exit quickly during escalating incidents and reducing the risk of harm.

Another important aspect is the protection and accessibility of technical installations such as emergency mechanisms, surveillance and alarm systems. Such systems should be positioned to allow secure access from corridors or staff areas enabling a rapid manual response during emergency situations. The integration of both wearable and fixed installed panic devices further allows staff to alert colleagues and dedicated security teams immediately, ensuring so prompt assistance.

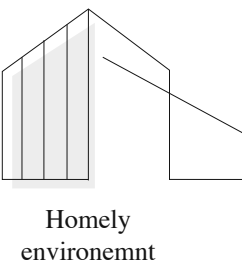
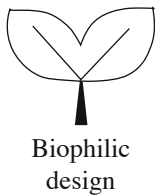
A further risk-reducing feature within the healthcare-built environment is the implementation of anti-ligature, tamper-resistant and vandal proof design to prevent harm and enhance user safety. Interior elements, including solid ceiling panels with secure, lockable access panels in all patient areas to minimise the risk of tampering. Additionally, fixtures such as sprinklers, smoke detectors and lighting must be tamper-proof. These should be fitted with security screws and recessed installation. All furniture should be durable, anti-ligature and non-removable to reduce the possibility of self-harm and violence.



Security
officer

To ensure a safe care environment, clear protocols for hazard remediation should be established and rigorously enforced. Ultimately, maintaining a reliable safety infrastructure requires renovations and investments, as outdated healthcare facilities and equipment may compromise safety and the quality of therapeutic care.

5.3 Therapeutic and natural environment

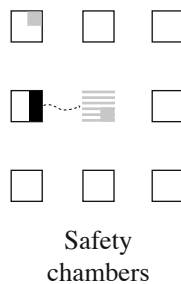
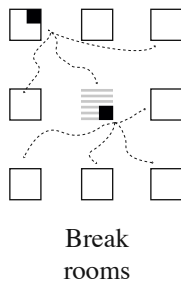


The well-being of healthcare professionals in adolescent psychiatric facilities is underpinned by a therapeutic and natural environment. Interview findings affirm that the psychological well-being of healthcare staff is substantially shaped by their work environment and atmosphere. A stress-free environment for caregivers contributes to better care for patients.

A therapeutic and natural environment can be achieved through biophilic design principles in psychiatric wards. The incorporation of direct and indirect connections to nature, including access to outdoor areas like garden and terraces and views of greenery, constitutes a vital design strategy for supporting users' well-being and reducing feelings of isolation. Outdoor areas should be secured, directly accessible, and, where possible, located on the same floor as the unit. This not only facilitates a safer and more manageable working environment, particularly in situations of crisis or de-escalation scenarios, but also encourages moments of restoration. The use of warm colours and natural materials, including wood, stone and biophilic artwork, can enhance the experience of the natural environment and counteract the cold and sterile atmosphere.

Moreover, furnishing choices can contribute to creating a more home-like environment and optimising comfort. In communal areas, selected and appropriate furniture can foster social interaction and support a non-clinical atmosphere. Poor spatial arrangements and enclosed spaces, such as framed terraces, institutional furniture and strictly standardised settings, may undermine the therapeutic intents of the desired environment.

5.4 Supportive Staff spaces

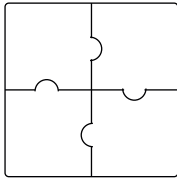


In the context of fostering healthcare professionals' well-being in adolescent psychiatric environments, the provision of dedicated supportive staff spaces is essential. The results of the interviews indicate that staff break areas, distinctly separated from work zones, remain underrepresented in planning processes and existing facilities.

Staff break or retreat rooms provided with calming and natural elements can significantly contribute to the psychological well-being of healthcare workers. Such spaces should be comfortable, appropriately furnished, located in close proximity to the patient areas, accessible exclusively to staff.

Furthermore, safety chambers and time-out rooms for patients who are in crisis situations should be integrated into the ward floor. These spaces support safe intervention during crisis and enable temporary isolation from the group within a protected environment. Key design requirements include direct accessibility, controlled access systems, and offering sufficient freedom of movement for a safe and rapid intervention. In addition, such rooms should have clear sight lines and incorporate anti-ligature design. As reported in the interviews, safety rooms that are poorly located or inadequately equipped can delay response times and may lead to an increased risk of injury during escalation.

5.5 Collaborative design



Interdisciplinary
collaboration

The final area identified as crucial for safety and well-being among staff in adolescent psychiatric facilities is the adoption of a collaborative design process. Participants underlined the importance of a continuous and direct engagement between architects, healthcare professionals, and other specialists throughout all planning phases.

End-user involvement is essential to ensure that the built environment not only supports the clinical workflows but also addresses the inherent risks of daily psychiatric care.

Including staff in the design process aligns with participatory design principles in healthcare and helps bridge the gap between theoretical models and the practical realities of clinical environments, particularly for architects with limited expertise in this domain.

Psychiatric facility projects should incorporate early user consultation and maintain iterative feedback to ensure continued input from practitioners. Interdisciplinary collaboration, involving professionals such as safety experts and colour specialists, can further strengthen both the safety and therapeutic qualities of the spaces, fostering innovative solutions that might otherwise be overlooked.

Ultimately, the success of healthcare architecture depends on genuine collaboration between stakeholders, with equal attention given to the needs of both patients and caregivers.

5.6 Recommendation conclusion

This thesis proposes a framework of design recommendations aimed at enhancing the safety and well-being of healthcare professionals in adolescent psychiatric facilities.

The proposed framework focus on five interrelated areas identified from the study's findings: spatial organisation, safety infrastructure, therapeutic and natural environments, supportive staff spaces, and collaborative design processes (see Table 4).

Table 4. Recommended framework for design

Design strategies	Practical considerations
Spatial organisation	➤ Ensuring visibility across unit ➤ Open floor plans and short distances ➤ Centralise staff stations ➤ Avoiding hidden corners ➤ Ground floor located units
Safety infrastructure	➤ Anti-ligature design, tamper-resistant design & vandal proof design ➤ Providing dual exits in high-risk rooms ➤ Secure technical/emergency installations ➤ Controlled access / exits ➤ Protocols for hazard remediation by security officer ➤ Smart arrangement of outward-opening doors ➤ Furniture arrangement for clear escape routes
Therapeutic and natural environment	➤ Warm colours and natural materials ➤ Providing access to gardens / terrace / green views ➤ Ensuring direct access from wards
Supportive staff spaces	➤ Providing safety chambers and de-escalation rooms ➤ Ensuring proximity to staff stations ➤ Including staff break/retreat rooms ➤ Homely setting ➤ Communal area
Collaborative design	➤ Involving end-users ➤ Interdisciplinary collaboration ➤ Establishing iterative feedback

The data collected indicates that targeted improvements in these areas can significantly contribute to fostering a more conducive, safer, and more effective work environment. This allows multiple stakeholders to actively participate in the design process from the earliest stages through to implementation. Consequently, architectural design is not dictated solely by the architect, but results from the dialogue between all parties (Franck & Von Sommaruga Howard, 2010). It is a multidisciplinary, often iterative approach that values shared decision-making, transparency, and the integration of diverse perspectives to enhance the design outcome (Elf et al., 2015).

Implementing a collaborative design process in psychiatric care environments offers significant opportunities but also poses unique challenges. The complexity of these environments, characterised by strict safety requirements, sensitive user needs and interdisciplinary care teams, requires a structured yet flexible approach to design collaboration. As noted by interviewees, spatial and budgetary constraints may result in the omission of essential spaces or design elements. Furthermore, the implementation of such guidelines presents challenges, as architects must balance the often-conflicting demands of regulatory compliance, cost-effectiveness, safety and therapeutic quality.

The proposed recommendations should therefore be understood as flexible and evidence-informed guidelines whose successful application depends on early and sustained collaboration between architects, healthcare professionals and stakeholders. By approaching the built environment as a critical component of both safety and care quality, adolescent psychiatric facilities can better foster a therapeutic atmosphere while ensuring the safety and well-being of staff and other users.

DISCUSSION & CONCLUSION

06

6.1 Discussion

This research contributes to the design of adolescent psychiatric facilities by identifying the necessary balance and embedding in into a coherent design framework. It emphasises the central importance of the safety and well-being of both healthcare professionals and patients and underscores the essential role of the collaborative planning.

Existing literature points out the importance of ward visibility, spatial organisation and well-being related to user's experiences (Bodryzlova et al., 2024). Similarly, Edwards and Morris (2024) demonstrate the necessary balance between safety measures and therapeutic intent in psychiatric settings. What appears new in the present findings is the extent to which healthcare professionals described their personal responsibility for patient safety, often at the expense of their own well-being, with unsafe layouts and limited accessibility.

This suggests that while a safe built environment is designed to protect users, insufficient attention is given to the spatial organisation of the healthcare professionals' work environments. Furthermore, research on therapeutic and biophilic environments in adolescent psychiatric wards shows that the use of colours and natural materials can help reduce stress (Norouzi et al., 2023).

The present research contributes to the recognition of the architectural challenge to balance a therapeutic atmosphere with safety, while the experiences of healthcare staff revealed that insufficient attention to the built environment can contribute to feelings of institutionalisation. The importance of access to outdoor areas in psychiatric units is well documented (Bodryzlova, et al. 2024; Norouzi et al., 2023). However, research has primarily focused on patient-centred recovery, with little attention to safe crisis management by staff. By emphasising the location of wards and spaces dedicated to the care providers, this study lays a foundation to contribute to healthcare staff safety and improving workflow. Previous research reflects the importance of participatory and co-design processes in healthcare to generate functional and practical solutions (Hamzah & Wahid, 2016; Becker et al. 2018). This study also identified barriers, including resource limitations and institutional priorities that architects faced during the planning process.

From this standpoint, the architectural design of adolescent psychiatric facilities cannot be limited to a purely normative or technical approach, even if the safety of healthcare staff and patients remains a priority requirement. Healthcare architecture must be understood as a complex, multidimensional, collaborative and collective process mobilising diversity of resources, tools and knowledge from multiple fields. In this way, the relevant assembly of spatial, technical, social, economic and symbolic data, produces spaces that are both functional and meaningful for

users. In line with this logic, hospital architecture functions as an active care mechanism, rooted in a reality that is both normative and human. As Pierron (2023, p.1) points out, “it opens up a space in the making”⁶, architectural spaces are constantly being constructed and transformed according to uses and healthcare practices.

In addition, contemporary architects are now confronted with the omnipresence of new technologies, a “technological ubiquity” that the Architects Renzo Piano refers to (Couton, 2021, p. 264). However, despite their usefulness, these technical advances must not dictate the pace of design: it is up to humans to retain control. In this context, architectural design, particularly in relation to hospitality, must be based on strong commitment, proven expertise and a global vision. These conditions enable the emergence of architecture that is capable of “carrying” the space, encouraging interaction and embodying a genuine focus on users. Thus, hospital architecture is not limited to a functional response, but becomes a medium of care, connection and quality.

Ultimately, the architect assumes responsibility for meeting the client’s expectations within the framework of a partnership based on a shared moral commitment. This relationship forms the foundation of any architectural project, one that is particularly resonant in the words of Pierron (2023, p.1): “it is not simply a matter of building a hospital, but of dismantling the hospital to create hospitality”⁷.

Architecture thus becomes a discreet but essential component of care, actively contributing to the well-being and the protection of healthcare professionals. Faced with this challenge, hospital architecture must avoid any form of stigmatisation or confinement, often conveyed by standardised imagery, in favour of meaningful spaces that are open to interaction and attention. It is therefore not a question of designing spaces as a simple functional framework, but rather as an active participant in care itself, capable of supporting vulnerability without accentuating it, and contributing to genuine hospitality. This perspective echoes the thoughts of Pierron (2023), who believes that hospitals, beyond their institutional function alone, must be rethought in terms of hospitality.

However, this research has certain strengths as well as limitations. The study includes a direct comparison of two perspectives, that of architects and healthcare staff from different countries. Furthermore, the recommendations are based on the diverse experiences of the participants and

⁶ Translated by author from the original French text by Pierron (2023)

⁷ Translated by author from the original French text by Pierron (2023)

across various psychiatric institutions. Nonetheless, the results obtained do not represent all relevant stakeholders in healthcare architecture. The findings therefore reflect limited perspectives. Future research could broaden the scope of the study by including a more diverse range of stakeholders and exploring the long-term effects of architectural interventions.

6.2 Conclusion

The aim of this thesis was to analyse the architecture of a psychiatric hospital for adolescents, guided by the central question: To what extent can the architectural design of inpatient adolescent psychiatric facilities enhance the well-being and safety of healthcare professionals?

This study is based on the observation that psychiatric institutions are not only places of medical and psychological treatment, but also environments that influence the well-being and safety of both patients and healthcare professionals. The existing literature has mainly focused on healing architecture and the needs of patients, particularly children and adults, leaving the perspectives of caregivers comparatively neglected. By comparing architectural design approaches with clinical experiences, the analysis identified both convergences and divergences in the priorities expressed.

The results highlighted the interdependence between safety and therapeutic quality: and overly prescriptive and institutionalised environment tends to compromise therapeutic objectives, while inadequate safety measures expose users to risks. To achieve balance, it appears necessary to focus on five interrelated areas: spatial organisation, safety infrastructure, therapeutic and natural environments, supportive staff spaces and most importantly collaborative design processes. It is essential to involve users from the planning stages onwards and to integrate design strategies that are both flexible and evidence informed.

The study thus provides a framework that integrates safety and well-being into a human-centred approach, reconciling both the therapeutic needs of patients and the working conditions of professionals. It also highlights the impact of architectural choices on crisis management and the organisation of care practices.

Through the perspectives of the various actors interviewed for this thesis, it appears that architectural design is limited to a culture of planning centred on the technical and normative organisation of spaces and does not foster a genuine culture of care that emphasises the quality of the user experience and the balance between functional safety and sensitive hospitality. This observation reflects prevailing architectural standards and calls for a focus on the quality of care in what can be described, from a philosophical perspective, as the “dialectic of the secured and

the securing”⁸: guaranteeing strict conditions of protection while creating an environment that reassures, calms and supports, in line with the approach developed by Pierron (2023, p.1).

The results of this research also revealed that, in the world of healthcare, architecture occupies a distinctive place, marked by great complexity. Consequently, the design of healthcare spaces that are both safe and caring, integrated into a therapeutic environment conducive to the recovery of patients, involves the architect in a dynamic of multiple interactions. Each intervention must be conceived from an interconnected perspective, where the various actors participate jointly in the construction of an appropriate care setting. Architectural design therefore brings together a large number of actors and mobilises a multiplicity of data within an interdisciplinary and interdependent dynamic, which, according to architect Renzo Piano, is constitutive of the very practice of architecture (Couton, 2021). Although the architect remains the central figure in this dynamic, it is in this profusion of different points of view and responsibilities that the hospital project finds its legitimacy and balance (Couton, 2021).

In summary, this thesis lays a foundation for rethinking psychiatric architecture to support the safety and well-being of healthcare professionals through the built environment. It also seeks to strike a balance between safety and therapeutic quality through collaborative, flexible and evidence-informed strategies.

⁸ Translated by author from the original French text by Pierron (2023)

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APPENDICES

08

Appendix A.

Interview guide

A1. Interview invitation email

Letter the researcher sent by e-mail to invite stakeholders to a semi-structured interview.

[recipient address]

[Date]

Dear Sir / Madam,

My name is Ines Santini, and I am enrolled in the master's programme 'Architecture and Spatial Planning' at the Institute of Architecture at the Vienna University of Technology. At the end of my studies, I am writing a research paper in which I present hospital architecture in terms of optimising the workspace of nursing and healthcare professionals in psychiatric facilities for adolescents.

As part of this research, I would like to draw on a recent study by researchers at University College London who have shown that 13 out of 18 paediatric units studied have an "unsafe" environment for the treatment of children and young people with risk behaviours associated with mental health problems. Given this recent finding, I would like to understand this challenge to design an architecture that best meets the needs of medical and nursing staff.

It is evident that the analyses after the interviews, question the space of the users of the hospital and their well-being through the design of the architect's figure and his performances. Therefore, the central question of this research is: How does a resilient architectural design in child and adolescent psychiatric facilities relate to the well-being of the healthcare professionals, their quality and their safety?

If 'architecture means turning a worthless stone into a nugget of gold', as Frank Lloyd Wright (2012) remarkably put it, then the complex link between the architectural design of healthcare facilities and the stakeholders involved can be two elements that, by coming together, can remove all the obstacles to architectural design. This is my aim, to which I will dedicate my master's thesis.

Your participation in this scientific research can therefore make an important contribution to the discussions on hospital architecture in relation to the well-being of the various stakeholders and can significantly contribute to the development of knowledge on this topic.

The protocol of the interview could be as follows, if you agree: The date will be set according to your availability in the period from 22 April to 6 May. The interview would take about 30 minutes. The time and place will depend on your availability. If you prefer an online interview, I am more flexible about the date and time between 22 April and 23 May.

I would also like to assure you that the conversation will be treated confidentially. It will be recorded and transcribed anonymously. Our exchange will be exclusively for research purposes in the field of architecture.

I am at your disposal to arrange an appointment.

Thank you and best regards,

[signature]

A2. Interview questions for the healthcare professionals

This Appendix contains the pre-written questions that the researcher asked healthcare professionals during the semi-structured interviews. It is divided into two parts, one dealing with the staff's work environment and the other focusing on their views on patient welfare.

INTERVIEW QUESTIONS

Part 1: The working environment and staff safety

- 1 Could you please briefly introduce yourself and tell us something about your role in your department?
- 2 How do you feel about the spatial design of your ward in terms of your own safety and well-being?
- 3 Which architectural elements contribute to your feeling of safety on a work basis (or not?)
 - a. Are there special retreat or safety areas for staff? How are these used?
- 4 Have you ever experienced a situation in which the spatial design helped to prevent an incident or exacerbated it? If so, which one?
- 5 Which architectural elements or safety features do you think should be improved, and why?

Part 2: Patient wellbeing: the point of view of healthcare professionals

1. In your opinion, how do the spatial needs of adolescents differ from those of children or adults in psychiatric wards?
2. In your opinion, can safety measures in certain areas improve or disrupt patient wellbeing?
3. How do you think open floor plan concepts can improve safety and working conditions?
4. Do you believe that architecture can actively contribute to care through a structuring and calming environment? If not, what are your reasons for this assessment?
5. If you could change one thing to improve both safety and well-being, what would it be?
6. Have you ever been involved in an architectural project in your department? If yes, what role did you play? If not, why do you think this might be?
7. Is there anything you would like to add about this subject that we haven't yet discussed together?

A3. Interview questions for the architects

This Appendix contains the pre-written questions that the researcher asked the architects during the semi-structured interviews.

1. Could you please briefly introduce yourself and tell me about your work experience in the field of psychiatric care?
2. Do you currently see a change in the design of psychiatric facilities for young people?
3. What tasks did/do you have in relation to psychiatric architecture?
4. What are the biggest challenges in planning psychiatric spaces for adolescents?
5. In your opinion, how do the spatial requirements in adolescent psychiatry differ from those in adult or paediatric wards?
6. How do you combine the safety of staff with the well-being of patients in your designs?
7. Can you give an example where safety aspects have directly influenced your planning?
8. Which spatial measures promote both safety and a pleasant environment?
9. How can an open floor plan layout be designed that still offers opportunities for staff to retreat?
10. Do you work with the future users (medical and/or nursing staff) throughout the entire planning and design process? If yes, does this influence the outcome? If not, for what reasons do you think?
11. Do current norms and regulations tend to promote staff well-being and safety, or do they sometimes get in the way?
12. What developments or trends in healthcare construction do you think are forward-looking, especially for mental healthcare?
13. Would you like to add anything that we have not yet discussed together?

A4. Interview Partners overview

Interview 1: Architects

Albert Wimmer ZT Gmbh Wien - Partner architects

Purschke Monika (P1)

Zubcevic Semir (P2)

Interviewer (I)

Interview 2: Healthcare professionals

Centre Hospital Luxemburg (CHL) – Head of the National Infantile Psychiatry Service & Head doctor of the paediatric psychiatry service

Dr. Claudio Pignoloni (P3)

Interviewer (I)

Interview 3: Healthcare professionals

Centre Hospitalier Neuro-Psychiatrique Luxemburg (CHNP) – Psychiatric nurse & de-escalation trainer

Ferreira Capela Carlos (P4)

Bonnert Phillipe (P5)

Interview 4: Healthcare professionals

Centre Hopital Emil Mayrisch Luxemburg (CHEM) – Head of psychiatric nursing of 3 facilities

Lereboulet Aurelie (P6)

Interview 5: Architects

M3 Architects – Architect team of “Nouveau bâtiment CHL”

Kirsten Schnaach (P7) – Project manager

Yegles Anna (P8) – Junior architect

Appendix B.

Interview transcription

B1. Original transcription

Interview 1 – Architects

1 I: Könnten Sie sich bitte kurz vorstellen und Ihre Arbeitserfahrung im Krankenhausbau oder
2 Psychiatrie nennen?

3 P1: Ja, hallo, mein Name [P1] Ich bin Architektin und beschäftige mich seit ca. 25 Jahren mit
4 Krankenhausplanung und da im Speziellen mit Healing Architecture und das Auswirken der
5 Architektur auf das Wohlbefinden der Menschen.

6 P2: Ja, mein Name ist [P2]. Auch so etwa wie die [P1] von der Länge unser Interesse in die
7 Krankenhausarchitektur. Und wir hatten die Möglichkeit, also in Wien Kinder- und
8 Jugendpsychiatrie zu planen und zu ausführen. Aber abgesehen davon auch andere
9 psychiatrische oder etwas speziellere psychiatrische Einrichtungen wie Forensik etc. Also da
10 haben wir schon ein bisschen Erfahrung, auch mit diesem quasi speziellen Fachbereich.

11 I: Sehen Sie aktuell einen Wandel in der Gestaltung von psychiatrischen Einrichtungen, speziell
12 auf Jugendliche oder allgemein? (...) Also wie im Gegenteil von früher, von jetzt, gibt es einen
13 Wandel auch in der Planung allgemein?

14 P1: Meinen Sie jetzt im Gegensatz zu früher im Sinne von vor 100 Jahren oder im Gegensatz
15 von früher vor 5 Jahren?

16 I: Ja, vor 5 Jahren. Also sehen Sie bei der Arbeit jetzt schon einen Unterschied vor 5 Jahren?

17 P2: Naja, tendenziell ist es ja quasi unterschiedlich vom Haus zum Haus, weil manche
18 Krankenhäuser gehen schon in Richtung dieser sogenannten häuslichen Normalität, was sich
19 sozusagen auf den ersten Blick, sage ich nochmal, so manifestiert, dass man nicht unbedingt in
20 meisten Zimmern typische Krankenhausbetten hat, sondern man hat eh unter
21 Anführungszeichen Betten wie zu Hause und so weiter und so weiter. Aber nochmal zu sagen,
22 unsere Erfahrungen sind schon, dass es jetzt vom Haus zu Haus unterschiedlich ist, weil
23 klarerweise, wie wohl die Zimmer, die so eingerichtet sind, dass man sich sehr wohl fühlt und
24 dass man ein bisschen die Möbel wie zu Hause hat, können dann im Ernstfall auch zu einem
25 Risiko, zu einem Hindernis werden, zu einem Mehraufwand bei der Pflege und deshalb
26 nochmal zu sagen, manche Häuser haben dann lieber doch sozusagen normale
27 Krankenhauseinrichtungen, würde ich so sagen.

28 I: Und was sind die größten Herausforderungen die Sie bisher erlebt haben bei der Planung
29 psychiatrischer Räume für Jugendliche?

30 P1: Also ich glaube, um vielleicht da anzuschließen, es ist dieser Konflikt zwischen, also wenn
31 wir jetzt gerade die Kinder- und Jugendpsychiatrie ansprechen, ist das eine, wir haben sehr
32 lange Aufenthalte zu dauern in der psychiatrischen Abteilung und daher ist man bemüht, den
33 Patienten und Patientinnen ein mögliches Ambiente zu bieten, dass sie dort heilen und gesund
34 werden und gleichzeitig wissen wir, dass es bei vielen psychiatrischen Erkrankungen auch

Aggressionen da mit einhergehen und daher diese Vandalensicherheit oder auch eine Suizidprävention in vielen Fällen, gerade was die Gestaltung betrifft, diesem Wunsch nach einer Wohlfühlatmosphäre, möglicherweise diametral entgegensteht und das miteinander zu verbinden, ist sicher eine der größten Herausforderungen.

I: Das heißt, merken Sie auch einen Unterschied zwischen Jugend- und Kinderpsychiatrie und Erwachsenenpsychiatrie, also bei der Planung jetzt?

P1: Ja, schon sehr. Also man muss ja sagen, Kinder- und Jugendbegriff heißt, das ist auch vom Land zu Land ein bisschen unterschiedlich, aber ich sage mal vom 0 bis 16 oder 18, wie die P1 gesagt hat, in einigen Fällen, wo sich die Krankheit über die Jahre hinauszieht, gibt es sogar ältere Patienten, die nach wie vor auf eine oder andere Art vielleicht nur ambulant in der Betreuung von Pflegepersonal sind. Und das heißt, es ist notwendig, eine Clusterung dieser Fachbereiche zu unternehmen, dass man altersmäßig, manchmal auch geschlechtsmäßig, man sozusagen eine kleinere Portion von 4 bis 6 Zimmer hat, die zueinander orientiert sind und dann doch irgendwie getrennt von einem anderen Cluster, weil nochmal zu sagen, zwischen Kinder, weil sie nicht 6 oder 8 Jahre alt sind, und schon Jugendlichen 15, 16 Jahre, das ist ein gewaltiger Unterschied und den kann man nicht so einfach mischen.

I: Und wie vereinen Sie dann diese Entwürfe mit Sicherheit für das Personal? Also wenn man sagt, das Wohlbefinden für die Kinder, aber auch das Wohlbefinden und die Sicherheit dann auch für das Personal, wie...?

P1: Also vielleicht noch ganz kurz auch ergänzend zu dem, was mein Kollege vorher gesagt hat, ich glaube auch ein ganz wesentlicher Unterschied ist, ist, dass man bei Kindern und Jugendlichen die Angehörigen auch noch in den Fokus rücken muss, weil auch für die muss ich was tun und die brauche ich auch, um ein Kind zu heilen, brauche ich die Eltern. Das muss ich auch berücksichtigen bei der Planung. Und den Sicherheitsaspekt das beschäftigt uns nicht nur in der Psychiatrie sondern beschäftigt uns natürlich im gesamten Krankenhausarchitektur. Und das sind Themen wie, Offenheit, direkte Zugänglichkeit eben zur Pflege, wie gestalte ich den Stützpunkt, wie schaffe ich, dass ich sichere Räume habe, wo sich dann auch die Mitarbeiter und Mitarbeiterinnen zurückziehen können und, dass die sich rausnehmen können aus dem betrieb. Das sind natürlich Themen, die wir vermehrt in der Planung schon auch spüren. Also das betrifft aber den gesamten Krankenhausbau.

I: Und auch in diesem Aspekt, welche räumliche Maßnahmen fördern sowohl die Sicherheit als auch das angenehme Umfeld? (...) Also gibt es einen Aspekt, wo Sie sagen, Sie finden das sehr wichtig?

P2: Naja, es sind schon, ich sage mal, Materialien und Farben sind sehr wichtig, weil es gibt ja schon auch Studien, welche Farben kalmieren, sozusagen, also nicht nur die psychiatrischen Patienten, sondern allgemein und so weiter und so weiter. Das heißt, es ist ja sehr wichtig, auch mit den Farbpsychologen und generell mit Leuten aus den anderen Fachbereichen

zusammenzuarbeiten, weil es ist ja auch so, dass sozusagen das, was man vielleicht manchmal als Architekt interessant oder schön findet im Sinne von einem Muster oder einem Dekor kann für psychiatrische Patienten manchmal eigentlich störend sein oder dass sie gewissermaßen sogar halluzinieren oder was auch immer. Das heißt, es ist schon sehr wichtig, in dieser Expertise auch mit Psychologen und Psychiatern zusammenzuarbeiten. Und von der praktischen Sicherheit, was Personal betrifft, ist es ganz wichtig, vor allem in den intensiveren Bereichen, dass man immer die zweite Möglichkeit aus dem Raum zu flüchten hat. Also, wie gesagt, nicht alle Räume, aber dort die Räume, wo sozusagen ältere Patienten oder Patienten, die intensivere Betreuung brauchen, oder diese kalmierenden Räume, die müssen im Prinzip zwei Türen haben, wenn der Patient irgendwie aggressiv wird und vielleicht eine Tür versperrt, das Pflegepersonal immer die zweite Fluchtmöglichkeit hat.

I: Zum Thema Türen wie machen Sie das also mit den Türen, dass diese nicht zum Hindernis werden? (...) Wie planen sie das? Eventuell auch die Richtung, wie die aufgeht zum Beispiel, kann auch schon ein Punkt sein.

P1: Ja, es ist auch vielleicht wieder übergeordnet zu sehen, klarerweise sind kurze Wege und möglich Übersichtlichkeit einer Station, das sind so Grundparameter, die ich einhalten muss, dass ich vom Stützpunkt aus eine Einsicht habe, dass ich quasi die ganze Station mehr oder minder überblicken kann oder Einsicht habe, die Positionierung der Möbel oder der Betten, in dem Fall auch Möbel, innerhalb des Zimmers, bei geöffneter Türe, wo kann ich einsehen, vom Gang aus kommen und das sind so Themen, die man natürlich bei der Grundrissplanung betrachten muss.

I: Und was halten Sie dann von einem eher offenen Grundriss, also in den Krankenhäusern, dass man schneller durchfließ, wohler fühlt oder heimlicher sowohl für das Personal? Wurde auch in der Literatur angesprochen

P1: Okay (...)? Ja, kann ich irgendwie verstehen, das heißt, es sind mehr so ein freier Grundriss mit Insellösungen, wo man sagt, okay, das sind Positionen von einzelnen

Funktionseinrichtungen und ich habe mehr die Möglichkeit, hier dazwischen mich zu bewegen.

Man muss natürlich sagen, gerade die psychiatrischen Kliniken sind vom generellen

Arbeitsablauf ganz anders als andere Stationen, weil bei anderen Stationen steht diese Effizienz

und der kurze Weg natürlich im Vordergrund vor der Aufenthaltsqualität oder möglicherweise

auch vor diesem direkten Zugang zum Patienten, damit ich schnell da bin in diesem Fall. Wir

kennen offene Grundrisse, die gibt es. Das ist, wie soll ich sagen, eine innovative Lösung, die

man durchaus anstreben kann. Da muss ich ganz offen sagen, fehlen uns manchmal die

Ansprechpartner auf der anderen Seite. Die Architekten hätten das vielleicht, hätten da mehr

Ideen als die in der Praxis dann ankommen.

I: Das wäre nämlich auch meine nächste Frage gewesen. Beim Planungsprozess, ob da immer

medizinisches-, Pflegepersonal auch dabei ist, um zusammenzuarbeiten oder auch Feedback von

denen zu bekommen, weil die ja immer im Bereich sind, also die kennen die alltäglichen Situationen, würde ich sagen. Oder gibt es da keinen Einwand?

P1: Jeder einzelne, immer. Also das medizinische Personal, das Pflegepersonal, wir nennen diese Gruppe die Nutzerinnen. Die sind bei jeder Planungsentscheidung ganz intensiv involviert. Weil klarerweise müssen wir als Planer die Arbeitsabläufe kennenlernen. Wir müssen wissen, welche Geräte sie verwenden. Wir müssen wissen, wie die Arbeitszeiten sind. Also ganz viele einzelne Schritte und die werden alle ganz intensiv mit denen abgestimmt.

I: Das heißt auch alle Sicherheitsmaßnahmen? Das heißt gibt es auch manchmal Fälle, wo die sagen, nein, das gefällt mir nicht, diese Sicherheitsmaßnahmen sind nicht gut genug, dann wird das wieder geändert?

P1: Ja. Ja. Und natürlich muss man jetzt sagen, klarerweise jeder, der in einem Betrieb lebt, kennt die Dinge, die in seinem Betrieb verwendet werden. Das heißt wir sind natürlich auch schon aufgefordert hier neue Lösungen und innovative Ansätze aufzuzeigen und denen vorzustellen, damit diese Dinge dann halt vielleicht umgesetzt werden können.

I: Und was können Sie mir über die Sicherheit von Decken? Also zum Beispiel diese abgehängten Decken, wo man auch Sachen verstecken kann und dabei die Sicherheit des Personals eingeschränkt wird. Oder zum Beispiel über die Türgriffe.

P2: Na ja, wie gesagt, es ist schon ein wenig abhängig, wer wirklich die Patient*innen sind. Also wenn wir in die extremeren Situationen gehen, dann bescheuen wir uns, es gibt Facetten der Planung quasi von innen und von außen. Das heißt, der Patient darf nicht quasi von außen in Gefahr kommen, aber er darf sich selbst auch nicht in Gefahr bringen. Und da gibt es ja auch diese sogenannte Anti-Ligatur Aspekte.

Und noch einmal zu sagen, abhängig von der Diagnose kann das wirklich sehr extrem sein, weil bei jeder Tür oder Schrank oder was auch immer, man kann sich einklemmen oder beim Fenster. Und da gibt es ja mittlerweile ganz spezielle Produkte, in dem Sinne auch vom Antisuiizid oder Anti-Ligatur design, die das sozusagen unmöglich machen. Das wird aber dann trotzdem, ich schätze es jetzt, also in einem normalen Krankenhaus, schätze ich das vielleicht auf 10 bis 20 Prozent. Ja die meiste andere Patienten sind eigentlich freiwillig im Krankenhaus, das heißt sie können theoretisch auch einfach wegspringen. Sie haben auch freien Zugang zum Garten oder zu einer Außenfläche oder können sich noch einmal zu sagen frei bewegen. Und da kommt viel mehr, wie gesagt, dieser Prinzip der häuslichen Normalität, als man denen eigentlich eine Atmosphäre wie zu Hause anbietet. Diese Kontakte mit der Pflege, mit den Nutzerinnen, das ist immer so ein bisschen zweischneidig. Und das ist auch in der Literatur beschrieben, weil klarerweise die Nutzerinnen, die gehen immer von dem, was sie kennen. Und manchmal ist es auch schwierig, sie für etwas Innovatives oder Neues zu überzeugen, weil per se hätten sie wahrscheinlich genau das Gleiche, nur ein bisschen schöner und neu wieder, ja, das ist schon ein Prozess in beiden Richtungen.

146 I: Ja, verstehe

147 P1: Und vielleicht nochmal ergänzend, weil Sie das angesprochen haben, sehr konkret die
148 Decke. Da gibt es so Best-Practice-Vorgaben, wo man sagt okay, innerhalb einer
149 psychiatrischen Abteilung sind das feste, verschlossene Decken ohne Einbauten. Wenn es
150 Einbauten gibt, dann müssen die fix verschraubt sein, nicht offenbar für die Patienten usw. Oder
151 wir haben diese Anti-Ligatur Ausstattung, dass das Haken sind, die verhindern, dass bei
152 gewissen Lasten, brechen sie die Türschnallen, die verhindern, dass dort jemand usw. Also da
153 gibt es mittlerweile Produkte. Und ich glaube, das, was wir unterscheiden müssen, ist, entweder
154 habe ich diesen Schutz des Patienten vor sich selber, das heißt, ich verhindere, dass er
155 Gegenstände nehmen kann, mit denen er sich selbst verletzt, oder aber ich mache es
156 Vandalensicher und da sind wir Gott sei Dank in den seltensten Fällen. Aber auch das kommt
157 vor. Und Vandalensicherheit heißt einfach, es ist quasi, da sind wir ganz am anderen Spektrum,
158 da ist dann mit Wohlfühlen gar nicht mehr.

159 I: Ja, okay, verstehe. Und wenn wir jetzt von Entwicklung oder Trends im Gesundheitsbau
160 reden, welche Vorschläge finden Sie zukunftsweisend, also welche sagen Sie ist besonders
161 wichtig oder kommt noch in der Zukunft auf uns zu?

162 P1: Welche, das habe ich jetzt akustisch nicht verstanden, was glauben wir, was?

163 I: Welche Entwicklungen oder Trends im Gesundheitsbau halten Sie für zukunftsweisend, also
164 speziell in psychiatrische Versorgung? Welche architektonischen Elemente kommen noch auf
165 uns zu?

166 P1: Also ich, wie wir alle und auch, glaube ich, die Wissenschaft wird jeder Ihnen beantworten,
167 das ist sicher die künstliche Intelligenz, die hier den meisten Unterschied machen wird. Dazu
168 vielleicht, ich habe heute in der Früh zufälligerweise einen Beitrag gelesen über die Zunahme
169 der quasi Besprechung oder der mehr oder weniger therapeutischen Wirkung von KI, weil die
170 Menschen zunehmend das als Ansprechperson verwenden. Das heißt, und hier gibt es natürlich
171 Einsatzmöglichkeiten, die können wir noch gar nicht abschätzen, aber die Therapie, die
172 Gesprächstherapie durch eine KI bietet uns schon große Möglichkeiten.

173 I: Ja okay, verstehe. Und hätte ich noch eine Frage, ob die Normen oder die Vorschriften, also
174 zum Beispiel jetzt in Österreich, das Wohlbefinden oder die Sicherheit des Personals fördern
175 oder finden Sie, dass die eher im Weg stehen?

176 P2: Also im Weg stehen sie nicht und es ist eigentlich, was das betrifft, sehr wenig überhaupt
177 normiert. Wir hatten Anforderungen, dass wir zum Beispiel Anti-Suizid-Maßnahmen, wie soll
178 ich sagen, technisch zusammenstellen oder beschreiben etc. Und da haben wir auch selber
179 gefunden, dass es sehr wenige Normen gibt.

180 Es gibt ja Best Practice Beispiele, es gibt ja auch Literatur, aber eigentlich, es gibt auch
181 Versuche in Deutschland, dass man Sachen normiert, aber eigentlich sind bis jetzt sehr wenige
182 Normen in dem Bereich.

I: Okay, verstehe, und würden Sie noch etwas ergänzen, was in meiner Arbeit wichtig ist, im Gegenzug von Sicherheit und dem Personal in psychiatrischen Einrichtungen für Jugendliche, was wir noch nicht besprochen haben?

P2: Also was ich glaube, was ganz wichtig ist, zusätzlich zu dem, was wir noch nicht besprochen haben, ist die technische Ausstattung. Aber das ist ein großes Thema, gerade in der Psychiatrie, das ist einerseits eine Videoüberwachung und da kommen wir in diesen Konflikt mit dem Datenschutz, mit Patientenadvokatur und so weiter, das ist ein großes Thema. Das andere ist dieser Konflikt zwischen Brandschutz und Sicherheit, weil klarerweise möchtest du nicht, dass Menschen eigenständig diese Funktionseinheit verlassen können, weil das könnte dazu kommen, dass sie sich gefährden. Gleichzeitig ist es aber notwendig, dass sie selbstständig flüchten können im Brandfall. Und dieser Konflikt ist auch technisch sehr aufwendiger. Was ich noch sage, das hat jetzt nicht unbedingt mit Sicherheit zu tun, aber ich werde Ihnen nachher eine Einladung weiterleiten, die Sie auch gerne Ihren Kolleginnen und Kollegen, die sich für Krankenhausarchitektur im weitesten Sinne interessieren. Es gibt eine Ausstellung am Otto Wagner Real zu dem Thema, bei der wir mitgearbeitet haben über gesunde Architektur, wie kann Architektur heilen. Und da wird es am 22.05. eine Gesprächsreihe geben werden, in welche Richtung geht der Gesundheitsbau. Und dort werden vier aus Deutschland, die Petra Wörner, die dort schon sehr egal sind, und aus Österreich Expertinnen und Experten darüber diskutieren. Und da werden Sie viele Antworten auf Ihre Fragen vielleicht auch noch zusätzlich bekommen.

I: Finde ich super. Dankeschön für die Information. Ich glaube, ich habe alle meine Fragen.

P2: Ja, ich hätte vielleicht noch, dass wir es nicht vergessen, Außenflächen. Garten und Terrassen, ja. Also es ist sehr wichtig für die Jugendlichen, dass sie auch ein bisschen eine intimere Ecke hatten, wo sie sich unter Anführungszeichen ein bisschen verstecken können. Also wenn es die Möglichkeit gibt im Verband des Krankenhauses, ist es sehr wichtig, auch diese Außenflächen anzubieten.

I: Da ist es auch wieder dann mit der Sicherheit?!

P2: Selbstverständlich, ja. Also wenn es oben ist, dann ist der Geländer etwas höher. Wir haben zum Beispiel in einem großen Krankenhaus, haben wir, abgesehen jetzt von der psychiatrischen Abteilung, gibt es auch eine Schule. Also Schule, sind ja eineinhalb Klassen, aber nachdem die Kinder und Jugendlichen etwas längere Zeit dort verbringen, dann muss die Schule auch dabei sein. Und da haben wir aber diese Einrichtung, und das war auch die Idee vom Personal, dass wir das aber eigentlich nicht in der Nähe, sondern etwas entfernt im Haus planen, so dass sie unter Anführungszeichen auch einen Schulweg haben, den sie auch selbst bestreiten, weil das ist auch ein Teil der Genese. Und genau aus dem Grund war das in einem Obergeschoss und sie hatten eine kleine Terrasse und die hatte dann, glaube ich, einen Zaun mit zweieinhalb Metern Höhe oder sowas. Genau aus dem Grund der Sicherheit. Aber es ist ganz wichtig, dass die

220 Jugendlichen und die Kinder auch nach außen, also nicht nur im Inneren, im Zimmer und in
221 irgendwelchen Wohnräumen, sondern dass sie auch kurz nach außen gehen können. Also die
222 Kinder und Jugend Psychiatrie ist, wie gesagt, idealerweise im Erdgeschoss mit einem schönen
223 Therapieladen davor.
224 I: Super, dann bedanke ich mich vielmals für Ihre Zeit. Hat mich sehr gefreut und auch für den
225 Input.

Interview 2 – Healthcare professionals

226 I: Kënnt Dir Iech kuerz virstellen an mir e bëssen iwwer Är Roll an Ärem Spidolsberäich
227 erzielen?

228 P3: Jo, also mäin Numm ass [P3] Ech sinn Kanner- a Jugendpsychiater an och Psychotherapeut,
229 psychiatresch, an am Moment sinn ech de Chef de Service vum Service National vun der
230 Kannerpsychiatrie. Et ginn zwéi Servicer nationaux, also Kannerpsychiatrie a
231 Jugendpsychiatrie. Dat ass um Kierchbierg, dat kéint och interessant sinn. Voilà, dat heescht,
232 ech leeden dann de Service, do ginn et verschidden Unitéiten, eng Consultatioun, de Centre de
233 Jour an d'Hospitalisatioun.

234 I: Dat heescht, Dir sidd och mat de Jugendlechen a Kontakt?

235 P3: Also jo, also eng enk Zesummenaarbecht mat der Jugendpsychiatrie, well eis Patienten
236 fänken jo méi kleng un, mee mir maachen awer regelméisseg Transfere bei si. D'Suivien, déi en
237 cours sinn, halen net op, wann se den Alter vu 13 Joer erreechen. 13 Joer ass d'Schnëttstell
238 tëscht eisem Service an deem vun der Jugendpsychiatrie. An der Consult hu mir och
239 Jugendlecher, an da schaffe mir an enger enker Zesummenaarbecht mat der Pädiatrie. An der
240 Pädiatrie leien och Jugendlecher, zum Beispill no engem Selbstmordversuch.

241 I: Gutt ze wessen, wei erliewt Dir d'Raumgestaltung op Ärer Statioun a Besuch op Är eege
242 Sécherheet oder fum personal

243 P3: Also, bon, ech schaffen jo elo net direkt an der Hospitalisatioun, mee hunn awer gutt
244 Kenntnisser. Also, d'Hospitalisatioun, den Stack ass elo nei, mir si lescht Joer am Juni
245 geplënnert, an do hate mir Chance fir eng enk Zesummenaarbecht ze hunn mat den Architekten,
246 mam Service technique an och mat der Chef-Infirmière, genau heescht et de cadre soignant, fir
247 d'Raumgestaltung, haaptsächlech fir aide-soignant. Dat heescht, den neie Stack, dee mir de
248 Moment hunn, géif ech emol mengen, dass deen zimlech gutt ausgeduecht ginn ass, fir
249 d'Sécherheet vum Personal, awer och d'Sécherheet vum Patient. Well et kann een déi zwee
250 Saachen net ausschléissen, dat ass e Ganzt.

251 I: Eng froo wier och gewiercht, ob dir schon engkeier an engem Bauprojekt oder am Kader fun
252 äurer Erfahrung mat anbezunn geift? Wéi eng Roll hutt Dir dobei gespilt? (....) Wéi eng
253 Elementer déi dir derno gesot hutt, déi och implementéiert ginn sinn?

254 P3: Also, et war eng Aarbechtsgrupp, op been gestallt ginn, an d'Pläng sinn och duerchgekuckt
255 ginn an sinn och gehéiert ginn. Ech kann mech elo net méi erënneren, well et war e Projet, deen
256 iwwer Joren gaangen ass, mais dat meescht ass awer ugeholl ginn. An der Raumgestaltung fun
257 den Zëmmeren, een Beispill wann mir eng Persoun en "prise en charge" hunn weens
258 Iesssteuerungen dann haaten mir gefrot, fir d'Zëmmeren euni Buedzëmmeren. Fier do den
259 Kontroll zum acces zu den Buedzëmmeren ze hunn, well déi Patienten Waasser vum Krunn
260 drénken fir provisoersch gewiicht beizehuelen. Voilà wéi gesot esou Saachen. Gestaltung och

261 fun den Zëmmer, et ass een Time-out, en ass ganz gepolstert, mat Videoiwwerwaachung, fun
 262 zwou visuelle Iwwerwaachung, eng mat Video an eng direkt Iwwerwaachung visuell. An och
 263 do am Time-out, do konnten mir och matschwetzen, deen ass direkt beim Desk fier
 264 d'Infirmièren, Beispill.
 265 I: Daat heescht, d'Raim sinn och mat grouse Fënsteren ausgestatt, dass Infirmièren se vun
 266 baussen kenne gesinn, oder?
 267 P3: Also, den Time-out huet eng Fënster, et kennt natierlech Luucht erann, an dann déi aner
 268 Säit, kennt op Fënster un an d'Positioun, et ass eng kleng Fënster mat Storen, an do kennen
 269 d'Infirmièren, déi beim Desk sinn, eng direkt Vue hunn vum Time-out.
 270 I: Wéi eng architektonesch Elementer oder Sécherheetsmoosnamen keinten ärer Meenung no
 271 verbessert ginn, geif Iech do en Aspekt anfaalen? (...) Oder fannt Dir, dass et am Moment
 272 schonn gutt gereegelt ass?
 273 P3: Also nee, de Punkt Sécherheet, dee ass zimlech gutt gereegelt, well mir net vun Ufank u
 274 ugefaangen hunn, do wou mir virdru waren, an der Kannerpsychiatrie selwer implementéiert.
 275 Elo si mir am Annexe 2, do sinn 40 Säck nogebaut ginn, awer attendant zum CHL. Den aneren
 276 hat 2008 opgemaach, dat heescht, mir haten awer 15 Joer Erfahrung. Dunn wousste mir awer,
 277 wat ze vermeiden am Punkt Sécherheet. Mir hu och op Sécherheet – also dat ass een Aspekt –
 278 wou mir och versicht hunn ze hunn, dass d'Kanner, Patienten, Personal, dass déi sech
 279 wuelspiere
 280 I: Jo, effektiv, et ass awer eng schwéier Balance, d'Sécherheet an d'Wuelbefannen vun den zwee
 281 Gruppen ze geréieren.
 282 P3: Jo, genau! Bon, ech fannen, do kann een ëmmer besser maachen. Et si verschidde
 283 Contrainten, et bleift awer ëmmer e Spidol, soit wéinst der Sécherheet an awer och Hygiène.
 284 Préventioun vun den Infektiounen, awer och Préventioun vun der Aggressivitéit vum Patient an
 285 och Préventioun vun der Selbstverletzung, an, an, an... An dass weuer, muss een all déi
 286 verschidden Aspekter an Betruecht huelen an do eraus e Kompromëss muss fannen. Also ech
 287 hunn perséinlech e bessen, weu ech schued fannen: dass keen direkten Accès dobaussen. Daat
 288 fannen ech zum Beispill un de Psychiatrien, dat misst bal eng Norm sinn. Et géif jo heeschen,
 289 dass Psychiatrien éischter um Rez-de-chaussée missten sinn, well den Accès zu engem Gaart,
 290 oder, nach besonnesch bei Kanner, däerf een net vergiessen, hunn Kanner Rechter, si hunn och
 291 d'Recht, e puer Mol am Dag eraus kënnen ze goen. Wann et natierlech kee direkten Accès no
 292 baussen gëtt, kann dat ëm sou méi komplizéiert ginn. Mir maachen et awer – si müssen do e
 293 ganze Wee maachen, intern am Stack, fir do kënnen op d'Spillplaz, mee déi ass an der
 294 Maternité. An do, zum Beispill, ass dann d'Fro vun der Sécherheet. Natierlech ass et anescht,
 295 wann der zum Beispill e Patient hutt, deen an enger Kris ass, ouni direkten Accès no baussen
 296 hätten. Natierlech en Accès zum Gaart, deen sécuriseiert ass, wou se net kënnen esou einfach
 297 fortlafen.

298 Weu een kann, ganz leicht mam Patient, kann eraus goen kann, och nemmen een Gaart, geht
 299 duer, fir dass hien sech berouegt. Hei an eisem Dispositif: mir musse vum 5. Stack vun der
 300 Annexe 2 ganz erofgoen, entweder mam Lift oder Trapp, an dann de Wee no baussen. Also et
 301 ginn zwou Optiounen: entweder baussen bis d'Spillplaz vun der Maternité, oder d'Tunnellen
 302 benotzen, fun der, bei der Annexe 2 fum CHL an d'Maternité an d'Kannerklinik si verbonnen
 303 duerch Tunnellen. Ech weess net, ob Der d'Geleeënheet hat, dat ze gesinn. Voilà, dat heescht, et
 304 ass ultra komplizéiert, do verstitt Der direkt, wann e Patient an enger Kris ass, zum Beispill,
 305 kënne mir net einfach mat him op d'Spillplaz goen.
 306 Dat fannen ech zum Beispill schued, an dat geet net, well Punkto Sécherheet, geet net. De
 307 Patient wiert sech, riskéiert een sech ze verletzen, riskéiert sech ze verletzen. Par contre, wann
 308 mir eng grouss Dier hätten, mat engem direkten Accès zu engem Gaart, kéint een soen: Komm,
 309 mir ginn e bësse raus. Dat fannen ech perséinlech schued, well ech hunn och gemierkt, dass, net
 310 ëmmer de Fall natierlech, awer ganz oft, an de Spideeler, generell Spideeler, déi hir
 311 Spezialitéiten hunn, wou och eng Psychiatrie ass, huet een d'Tendenz, d'Psychiatrie op de
 312 leschten Stack ze setzen.
 313 I: Dat ass och de Fall elo beim neie CHL-Gebai.
 314 P3: Jo, si sinn net um Rez-de-chaussée, um wéivillten Stack, dat weess ech net, also dat ass
 315 wierklech net korrekt. Ausnamen, déi een huet, sinn psychiatresch Spideeler, wéi zum Beispill
 316 CHNP. Do si och Servicer, wéi se en am CHNP hunn, e Tuerm hunn, do si och Servicer, déi en
 317 direkten Accès hunn. Beim CHNP, déi hunn eng Jugendpsychiatrie, si hunn eng Terrass.
 318 I: Awer eng déi zou ass?
 319 P3: Déi zou ass, déi gesäit méi wéi e Käfig aus wéi eng Terrass. Trotzdem, si hunn en Accès
 320 direkten op eng Terrass, dat hu mir elo leider hei net.
 321 I: Dat ass en interessanten Punkt. Dir hutt virdru och Dieren ugeschwat, gëtt et eng Richtung
 322 vun den Dieren, déi méi sécher gemaach kéinte ginn? Wann een seet, dass se eng Porte
 323 coulissante solle sinn, dass dat besser wier, fir a Krisesiatiounen aus dem Raum eraus kënnen
 324 ze goen, oder gesitt Dir do keng Gefor un den Dieren?
 325 P3: Dat ass eng gutt Fro. Ech mengen net, dass et um System läit. Mir hu zwou Zorte Dieren
 326 ënnerscheid, déi fir verschidde Situatiounen. Also, wéi gesot, bei eis si se bis 13, dat heescht,
 327 mir hu och Patienten, déi 12 Joer an 10 Méint al sinn, déi scho méi jugendlech sinn ewéi
 328 Kanner. Ech hat dann Situatiounen, wou an der Kris déi eng d'Dier geklaakt hunn, dat kann
 329 dann natierlech geféierlech sinn am Punkt Sécherheet. Mä och eng Porte coulissante kann een,
 330 kann een se mat Schrumm fest zou maachen, da klaakt se an dageet se och zeréck. Dat heescht
 331 schonn déi zwéi Systemer, dass net een déi mei sécherelo wier ewéi dat anert. Wat sécher ass
 332 an enger Krise, wann zum Beispill wannde Patient, misst an den Time-out begleeten, do muss
 333 een un de Wee denken, deen esou Kuerz an esou Sécher ewéi méiglech. Dat heescht wa

334 méiglech eis net un dräi Dieren dohi setze bis een den Time-out erreecht huet. Dieren a punkto
 335 Sécherheet musse verschidde Systemer hunn, fir se op ze kréien.
 336 I: A Krisesituatiounen, wou geet d'Personal dann hin? Hunn Sie e séchere Raum, wou se
 337 trotzdem iwwerwaache kënnen an awer geschützt sinn?
 338 P3: Jo, also mir hunn zwee Räim. Dat ass de Raum, deem am séchersten ass, well deem ass
 339 komplett gepolstert. Et ass zwar eng Fënster, wou sech Patienten an der Theorie mam Kapp
 340 kéinte géintstoussen. Meeschtens mécht een dat eemol oder zweemol, an da hält een op, well et
 341 wéi deet. Dee ass zimlech gutt geséichert. An d'Personal kann entweder mam Patient am Time-
 342 out bleiwen oder sech zrëckzéien, eng visuell Iwwerwaachung, eng direkt Iwwerwaachung bis
 343 eng Videoiwwerwaachung. Da just niewendrun hu mir en Zëmmer, dat nennt een eng chambre
 344 de surveillance. Dat ass en Zëmmer, wat net e grousst Zëmmer ass, mat engem Bett a Schief.
 345 Do kann een de Patient entweder vun der Gruppe isoléieren, Beispill-Zëmmeren, eenzel
 346 Zëmmeren, Zëmmeren mat zwee Better an zwee Noperen, wou streiden oder sech net eens ginn,
 347 kënnen mir si trennen an een Patient an der chambre de surveillance hinsetzen. Chambre de
 348 surveillance, a punkto Sécherheet, zum Beispill, wann en elo eng Grippe hätt oder eng Gastro,
 349 dann kann een deem Patient och an der chambre de surveillance hinsetzen, fir ze vermeiden, dass
 350 en aner Patiente ustécht. Oder wann mir müssen eng méi offensiv, eng
 351 Selbstmordiwwerwaachung maachen, surveillance suicide. Beim Time-out an an der chambre
 352 de surveillance sinn Nopeschzëmmeren, an déi sinn wierklech ganz direkt beim Desk Infirmier.
 353 Do sinn zwou Fënsteren, dat heescht, d'Infirmiëren hunn wierklech ëmmer eng visuell
 354 Iwwerwaachung.
 355 I: Dat heescht, et ginn och Miwwelen, déi gerecht sinn, fir sech net wéi ze doen?
 356 P3: Bein, Schief, eis Schief si aus, wat ass dat fir e Material? MDF-Placken, all fest intégréiert.
 357 Dat heescht, et kann een se net ëmkippen. An der chambre de surveillance hu mir en Dësch mat
 358 Still. Eis Still si aus Plastik an zimlech liicht, an den Dësch, deem weit scho, e Patient kritt en
 359 normalerweis net opgehuewen. Still si schon um Pult, dat ass scho Limit. Bon, an do ass och
 360 e Bett ouni Rieder, dat heescht, deem ass schwéier, do kann een net vill maachen. Am Time-out,
 361 par contre, do ass eng Matratz. Do ass esou ee Sockel, deem gebaut ass, an do läit d'Matratz
 362 drop. Dat heescht, och wann de Patient d'Matratz géif geheien, dat ass natierlech mëll, do kann
 363 en wierklech näischt maachen. Klenschen, zum Beispill, muss en un sech, wéi gesot, dass
 364 d'Personal esou wéi och de Patient, d'Klenschen déi hunn en Wénkel, déi sinn net senkrecht,
 365 déi hunn en Wénkel, géif soen 90 Grad, esou dass ee sech net erhänke kann. D'Spigel en
 366 en extra Material, dat kee Glas ass. Duschrideaen, déi fest dru sinn, déi packen, mengen ech,
 367 just 5 kg, wann een fest dru zitt, fale se erof. Dat si wierklech esou Standard Norme bei de
 368 Spideeler.
 369 I: An d'Luuchten, kéint een déi einfach erofhuelen? Oder, zum Beispill, Plafong, ass et e Stéck
 370 oder sinn et déi eenzel Paneelen?

P3: Jo, et sinn déi Paneelen. Kann een soen, bon, do muss een scho dru kommen, do muss een scho de Schaf opmaachen, drop klammen an déi Paneelen ophiewen. Mir haten dat scho, Kanner, déi ganz kreativ waren. Do misste mir dunn Paneelen fest uschrauwen. Mee bis elo ass keen op d'Iddi komm, mee theoretesch wier dat machbar. Bei de Sprinkleren och zum Beispill: wann een een huet, esou e klenge roude, dat ass aus Glas, gell? Dat ass, ech weess net, wéi eng Kapsel aus Glas, an dat geet jo futti mat der Hëtzt, voilà, an da kënnt d'Waasser eraus. Bon, do haten mir och um aneren Stack Patienten, déi hu mat Saachen drop geschoss. Wann se dat getraff hätten, an d'Glas wier gebrach, wier Waasser direkt erauskomm, ouni Feier, da hätten mir direkt eng Iwwerschwemmung gehat. Dat heescht, eis Sprinkleren, déi sinn esou geduecht, dass an den Tuyau, déi sinn laut Techniker net arméiert, do ass kee Waasser dran, also net direkt, fir dat ze vermeiden, zum Beispill. Eis Dieren, ginn och net automatesche op, mam Knäppche vun der Feieralarm. Do wier et och vläicht eng Kéier interessant, mam Service Technique ze schwätzen. Dat ass natierlech, Patienten, déi wëlle fortlafen, déi drécken op de Knäppche vum Feieralarm, Dieren ginn op, an si sinn fort, dat heescht, do goufen Mesuren geholl.

I: Dat heescht, et goufen scho vill Mesuren geholl am neie Gebai?

P3: Hei am neie Stack, jo, jo. Och mat den Dieren, wat ech nach well soen, wat interessant ass, muss een ëmmer verschidde Systemer hunn, fir Dieren kënnen opzemaachen. Dat heescht, Schlëssel ass eng Method. Eis Dieren, entweder mam Badge oder mam Schlëssel. Mam Badge, de Problem bei engem Stroumausfall oder engem Problem mam Circuit, da kritt een d'Dieren net méi op. Dann muss een ëmmer mat engem Schlëssel kënnen opkréien.

I: Fannt Dir, dass Dieren och kënnen en Obstakel duerstellen? Zum Beispill an enger Krisesituatioun, wou den Infirmier op der anerer Säit vum Stack ass, ass et dann schwéier, direkt un de Patient dru ze kommen? Oder fannt Dir, dass de Plang vum Stack gutt duerchduecht ass?

P3: Jo... Also, bei eis ass et, den Stck vun der Erwuessenerpsychiatrie méi ewéi bei der Jugendpsychiatrie, an deem Sënn. Mir hu méi mat Kanner ze dinn. Kanner sinn jo vill manner selbststänneg wéi jugendlech Patiente an erwuessen Patiente. Erwuessen a jugendlech Patiente hunn jo och Momenter, wou se ënner sech sinn, wou se net onbedéngt mat Aide-Soignanten sinn. Bei de Kanner, Moyenne ass awer zimmlech 10 Joer, do ass praktesch ëmmer en Soignant dobäi, een oder zwee Soignanten dobäi.

Si hunn just zweemol am Dag 30 Minutten, wou se solle an hirer Kummer bleiwen. An dat ass komplizéiert, en Deel kritt et hin, en aneren Deel, do ass et onméiglech, fir eleng oder mam Noper ze sinn. Dat heescht, et ass éischer, normalerweis kann et net virkommen, dass Kanner eleng sinn, ouni iwwerwaacht ze sinn. Dat heescht, et ass een oder zwee Soignanten, an de Stack ass net ultra grouss. Dat heescht, wann do e Soignant Hëllef brauch, hu si e roude

407 Knäppche. Wann se drop drécken, da schellt et, dat ass en Alarm, an da kënnt jidderee kucken,
 408 wat do lass ass. Dat heescht, et geet intern un d'Psychologin, Famillientherapie, den Dokter...
 409 I: Okay, dat heescht genuch Leit déidann hëllef kenne kommen.
 410 P3: Plus theoretesch och Leit aus anere Servicer, wéi zum Beispill déi vum 5. Stack, deen ass
 411 um selwechten Niveau wéi deen vun der Erwuessenerpsychiatrie. Dat heescht, wann et muss
 412 sinn, kënne mir Hëllef kréien vun den Infirmieren vun der Erwuessenerpsychiatrie. An mir hunn
 413 och Hygiène, Hygiène kann och geruff ginn.
 414 I: Okay, a wéi ënnerscheeden Ärer Meenung no d'Räimlechkeeten vun de Jugendlechen a
 415 Kanner? Dat ass jo awer eng aner Altersgrupp, déi eng sinn nach e bësse méi spillerech, an déi
 416 aner gesinn sech scho méi erwuessen.
 417 P3: Dat ass eng interessant Fro. Bon, ech mengen scho: Jugendlecher sinn an engem anere
 418 Entwécklungsstadium. E Kand, déi brauchen eng grouss Intimitéit. Dat heescht,
 419 d'Raumgestaltung muss anescht geluecht ginn, vun den Zëmmeren och. Natierlech, mir hu e
 420 Spillzëmmer. Bei de Jugendlechen, ech mengen, si hunn och eng Auszäit-Zëmmer, vläicht net
 421 mat Spillsaachen, mee mat anere Medien. Mee et sinn awer och vill Saachen, déi gläich
 422 bleiwen. Bei de Jugendlechen, wann ech meng Stagen gemaach hunn, koum och d'Fro vun den
 423 Zigaretten. Et ass verbueden ze fëmmen. Wéi ech zu Bréissel war, haten déi Jugendlecher awer
 424 e Raum, wou se konnte fëmmen, zum Beispill. Mee dat, mengen ech, wier awer och interessant
 425 ze kucken um Kierchbiere, an der Jugendpsychiatrie, wéi si d'Raumgestaltung hunn an och am
 426 CHNP.
 427 I: Dat heescht, elo sinn Kanner oder Jugendlecher an engem Raum mat 2 Patienten. Wier et
 428 besser, Ärer Meenung no, Eenzelzëmmeren ze hunn oder awer nach Duebelzëmmeren, fir eng
 429 Connectioun mat engem aneren ze hunn?
 430 P3: Ech fannen, eng Mëschung ass ideal, kënnen déi zwou Saachen ugebueden ginn. Well et
 431 ginn och Kanner, déi léiwer eleng an der Kummer sinn. Dat kann awer och ganz flott
 432 Dynamiken ginn, déi sech géigesäiteg hëllefen. Et ass awer och wichteg, kënnen
 433 Eenzelzëmmeren un ze bidden.
 434 I: An gleew dir, dass Architektur Aktive zur ärer Betreuung beidroen kann duerch eng mei
 435 secher, structurant Umgebung?
 436 P3: Jo! Also jo, nee, kloer. Den Ëmfeld, dat heescht praktesch Architektur an d'Gestaltung. Den
 437 Ëmfeld ass super wichteg an der Psychiatrie, an der Kanner- a Jugendpsychiatrie. Schonn
 438 nëmmen den éischten Androck, deen een huet, ass awer ganz anescht, wann een op enger Plaz
 439 ass, wou een sech direkt wuel fillt, wéi wann een den Androck huet, dass et just ass... Do ginn et
 440 ganz vill schéin Projeten. Zum Beispill war ech virun e puer Méint an der Université catholique
 441 de Louvain, am Flammësche Deel, déi hunn Hospiten, déi ausgesinn wéi en Familljenhaus, guer
 442 net wéi e Spidol.
 443 I: Dat heescht, méi heemlech, Patiente fille sech méi wuel.

P3: Ah, bon, jo – dat spillt mat am Heelprozess. Eise Stack gesäit einfach ze vill no engem
 Spidol aus. Dat heescht, d'Sécherheet ass, mengen ech, ganz gutt, mee wann een erakënnt,
 mierkt een, dass et e Spidol ass. Et ass wäiss, et si keng Faarwen. A mir schaffen elo un
 Projeten, fir Faarwen eran ze bréngen. Mee sécherlech, dat spillt eng grouss Roll. Dat apaiséiert
 éischerens, och Räumlechkeeten, wou een d'Gefill huet, dass een op ass, dass een zirkuléiere
 kann, dass et fléissend ass an een net d'Gefill kritt, dass een agespaart ass. Dat mécht och
 schonn vill aus, an och genuch Plaz. Wann Der eng Grupp vu Patiente an engem enkene Raum
 hisetzt, deen och en plus onfrëndlech ass, do si Krisen virprogramméiert. Wann Der déiselwecht
 Grupp awer an engem Raum setzt, deen accueillant ass, deen flott gestalt ass – éischerens ass et
 manner Stress fir de Patient, deen fillt sech méi wuel. An wann se och genuch Plaz hunn, fir
 sech heiansdo e bësse zrëckzezéien, ouni dass een elo de Patient aus den Aen huet, dat vermeit
 heiansdo schonn eng ganz vil Krisen. En plus, wann een dann nach d'Méiglechkeet huet, en
 direkten Accès no baussen, da si mir wierklech gutt. An do fannen ech, do misst een méi
 dru schaffen. Leider hunn, wéi gesot, déi meescht Psychiatrien an den Hôpitaux généraux dat
 net. Et ginn awer Ausnamen... (...) Dat ass e super Service. Wann Dir eng Kéier
 d'Méiglechkeet hutt, emol dohinner ze goen, Iech dat unzekucken, dass wierklech ganz, ganz
 flott.

I: Dir hutt och elo vun oppene Räumlechkeeten, also engem „plan libre“, geschwat. Och an der
 Literatur gëtt et ugeschwat, dass et besser wier, méi en oppe Stack ze hunn. Wat haalt Dir
 dovunner? Erméiglecht et eng méi einfach Aarbechtsbedingung oder erschwéiert déi se?

P3: Nee, nee, ech sinn ganz dovunner iwwerzeegt, an ech mengen, et ginn och vill konkret
 Beispiller, déi dat bewisen hunn. Dass Krisen, Aggressivitéit, (??) erofgaange sinn, well se aus
 engem zouene Service en oppene Service gemaach hunn. Jo, jo, dat Zousperren ass eng
 Konsequenz vun den Angoissen vun den Soignanten, alles wëllen zousperren a Kontroll hunn.
 Mee domat setzt een de Patient ënner Drock. An da kritt een Krisen an déi Situatiounen. An ech
 mengen, dann ass et och méi komplizéiert fir de Soignant. Déi hätte besser, dass d'Patiente
 manner Krisen maachen, sech wuel fille, méi Fräiheete hunn, well esou wéi esou. Dat ass,
 mengen ech, scho laang gewosst a bewisen, dass dat Aggressivitéit an Zwangsmoossnamen
 erofsetzt. An an deem Moment ass et méi einfach fir de Soignant an fir de Patient. Mee de
 Soignant muss och mat senger Angoisse besser eens ginn, a soe kënnen: „Okay, dat ass vläicht
 méi op a manner sécher ...?“ Mee dat ass och en Deel am Kapp.

I: Dat heescht, d'Sécherheitsmoossnamen kënnen d'Wuelbefannen vum Patient verbessern,
 also, dass si sech méi wuel fille?

P3: Jo, also do spillt d'Raumgestaltung eng wichteg Roll. Och Faarwen, zum Beispill,
 d'Faarwen hunn och e groussen Impakt. E Zëmmer, dat ganz giel ass, huet net déiselwecht...
 oder ganz rout huet net déiselwecht Virdeeler. Ech mengen, do si och Etüden gemaach ginn.

480 I: Dann hätt ech nach eng Fro: Wann Dir eng Saach ännere kéint, déi gläichzäiteg fir
 481 d'Sécherheet vun den zwou Acteuren an d'Wuelbefannen kéint verbessern, ausser elo den
 482 Zougang zu engem gréngen Beräich, wéi een wier dat?
 483 P3: Dat heescht, eng Sécherheet, fir déi zwee, fir d'Patientenan d'Aide soignaten?
 484 I: Jo, dass hier Wuelbefannen awer elo net manner gött
 485 P3: (...) Wéi gesot, dat Éischt, wat mir elo kënnt, dat ass: Wann ech an mäi Stack erakommen,
 486 hunn ech d'Gefill, an et gesäit een, dass et an engem klineschen a septesche Spidol ass. Dat
 487 stéiert mech. Dat ass vläicht net eng Saach direkt vun der Sécherheet, mee indirekt spillt dat
 488 awer mat. Ech mengen, wann een sech méi wuel fillt, da hëlleft dat och am Punkt Krisen,
 489 Aggressivitéit, op der anerer Säit och un der Sécherheet. An vläicht dat anert: déi verschidde
 490 Raim, déi gemeinsam sinn, dass do vläicht e bësse ze vill Dieren sinn. Jo, do hätt een vläicht
 491 kéinten anescht denken. Mee et wier besser, fir dass et besser zirkuléiert.
 492 I: einfach mei fléissend ?
 493 P3: Jo! Sécherlech, jo!
 494 I: Ganz interessant, dann nach meng lescht fro, gött et dann nacheppes wat Dir wëllt bäisetzen
 495 wat mir nach net beschwat hunn, a wou ech misstvirlescht drun denken als zukünftegt
 496 Architektin wann ech esou een Etablissement bauen?
 497 P3: Erwäant schonn, ech ginn Iech emol roden: esouwisou, wann Der esou en Optrag géift
 498 kréien, gitt Iech schonn am Ausland déi verschidden Etablissementer an Institutiounen ukucken.
 499 Well mir musse de Rad jo net nei erfannen. Do si schonn vill Saachen geduecht ginn, gemaach
 500 ginn. Huelst Iech genuch Zäit, fir déi verschidden auslännesch Institutiounen, wéi an
 501 Däitschland, Holland, ganz vill gutt Projete, an der Belsch och. Frankräich, weess ech net. En
 502 tout cas, sécherlech dat, fir emol gutt Iddien ze kréien. Natierlech ass net ëmmer alles machbar,
 503 vill Contrainten, mee dat fannen ech super wichteg. Mee och kucken, wat ass scho alles
 504 iwwerluet ginn? Wat gouf scho alles gemaach? Genaueg probéieren: Wat funktionéiert, wat
 505 funktionéiert net? An dann dat anert, wat ech perséinlech fannen, wat awer och fehlt: dat ass den
 506 direkten Austausch, net mat den Direktiounen, déi e bësse ze wäit ewech si vum Terrain, mee
 507 den direkten Austausch um Terrain. Well et sinn déi, déi wëssen, wat de Raum brauch.
 508 Et huet een awer oft d'Tendenz: mécht een de Projet, den éischte Projet, an da, wann deen
 509 gemaach ass – da gött deen net virgestallt un d'Equipen. Ech fannen, et ass e bësse schued, well
 510 da seet een: „Ok, mee dat do ass net gutt“, an da muss een kënnen soen: „Dat wier besser.“
 511 Direkt d'Leit um Terrain mat anzebannen an um Projet mat ze denken.
 512 I: Sinn ech och ärer Meenung. Ma da soen ech Iech villmools mercifir dat interessant
 513 Gespréich an och är zeit déi dir iech geholl hutt.
 514 P3: Gär geschitt, ma dann: bonne continuation

Interview 3 - Healthcare professionals

I: Kënnt Dir Iech kuerz virstellen an mir e bëssen iwwer Är Roll an Ärem Spidolsberäich erzielen?

P5: Ech sinn den [P5], ech infirmier psychiatrique, daat heescht infirmier mat spezialisatioun an der psychiatrie. Ech schaffen elo baal 20 joer hei am haus. Awer och elo reicht kanpp iwert 1 joer an der jugendpsychiatrie. Ech hunn fierdrun ganz vill forensesch psychiatrie gemach. Daat heescht mat psysesch kranken strooftäter an och am Prison. An fier mech ass et elo einfach zeit ginn eppes neies ze machen an dofier jugendpsychiatrie. Daat huet mech elo schon laang interesseiert an ech sinn och deaskalatiouns trainer daat heescht och internen formateur an deinskalatioun. Dass schein dass emol een un eis denkt.

P4: Ech sinn den [P4], ech sinn 19 joer hei am Haus. Ech sinn infirmier fun beruf an sinn och adjoint hei am service. Bon, ech haat chance fierun 19 joer de service mat opzemaachen an der jugendpsychiatrie, dei geuf 2006 opgemaach. Den CHNP haat demols den optrag, eng statioun opzemaachen fier Jugendlecher, well emmer mei Jugendlecher an den Prison komm sinn. An eben fier daat ze vermeiden geuf den Service eben opgemaach 2006.

I: Villmols merci, wei erliewt Dir d'Raumgestaltung op Ärer Statioun a Bezuch op Är eege Sécherheet an d'wuelbefannen?

P4: Also wann ech elo unfänken dierf, ech soen direkt daat waat ass, mir hunn effektiv ganz vill eseu verstoppten ecker. Et ass schon fier eis net ideal, well och fier d'secherheet fum Patient, et kann een se och net alleng loosene, muss een och ebessen oppassen, et hänt och emmer dounner oof weien clientele een huet an et kritt een och net emmer alles mat. Dass alles eseu, guer net, net iwersichtlech. Effective d'raim, d'kummeren sinn an engem eck. Mir sinn matzen an engem Aquarium, nennt een daat, mir sinn matzen an engem stack. An du geseis amfong juste bei d'kummeren an den recht geseis de amfong net. Mir hunn och aktiviteitsreraim, och dejours an weu mir iessen, ass an engem ganz aaneren bereich, an wann mir net graat dobei sinn, dann kritt een daat net mat. Ech fannen daat schon guer net iwersichtlech. Daat steiert mech och schon ebessen, well...

P5: Et muss een natierlech och soen dass mir hei an engem Gebai sinn waat net nei gebaut geuf, mais waart et seit den 80er gett, an do sinn halt dei bestehend raimlechkeeten do, ech denken sie hunn probeiert den maximum rauszehuelen. Mais et ass och fier mech, als deaskalatiouns trainer deen vue ebessen op d'secherheet huet, ech fannen et katastrophal. Et ass alles vill ze weit eweg, vill ze weit auserneen.

P4: Mir hunn schon ebessen emgeenert, soss haaten mir freier weu mir opgemaach hunn, waren d'raim ebessen aanesters, zum beispill kanner hunn duerften Fernseh kucken obwuel mir guer keen canape hunn. Daat hunn mir alles verreckelt asw. Daat heescht mir probeieren och schon

549 eseu am alldaag an och owes an den Proramm ebessen all beieneen ze hunn fier d'ass mir en
550 iwerbleck kennen hunn.

551 P5: Daat heescht awer och dass mri deelweis och am Gang müssen setzen. Wann ech Ferseh
552 kuken ass daat schon leiwer gemittlech op engem Canape oder eseu. Mais aaneschters geht et
553 net. Mir kreien neicht mat sie hunn ganz seier raus weini och dei bescht momenter sinn, wann
554 se gären eppes Plangen .

555 P4: An och par rapport, wann se duschen . Mir hunn och duschen weu zum beispill , d'jongen
556 an d'meedecher seit , dei sinn getrennt, an wann d'jongenduschen ze goen dann müssen se
557 carrement riwer bei d'meedecher goen, an do muss een permanent awer oppassen an kuken ,
558 waat se maache. Ech mengen an deem Alter weu se hunn, mat den hormonier an eseu weider,
559 muss een awer ebessen oppassen.

560 I: Mais , geif dir soen et ginn och architektonesch Elementer dei dozou bäi droen, dass Dir Iech
561 secher fillt, oder ass et mei dass dir iech onsecher fillt?

562 P4: Also wei den [P5] seet d'Gebai ass ganz aal, an wei soll ech daat elo soen, et fällt net alles
563 auserneen, mais d'sachen ginn awer mei seier futti. Daat beseit awer och eng gewessen
564 onsecherheet, verletzungsgefoor. Ech mengen wann een Fensteren kukt , do sinn Greffer dei
565 kennen se raus rappen an futti machen an een dommader schloen an bedroen asw. Et brengt
566 eng gewessen onsecherheet do rann. Et ass keng 100% secherheet do.

567 P5: Ech mengen awer och d'opdeelung fun der Statioun, mecht zum beispill awer och. Wann
568 ech hei sinn, dann probeieren ech awer och den maximum hei ze sinn . Ech hunn schlecht gefill
569 wann ech, sie emol 10 min engkeier alleng loosn billard spillen oder eseu. Ech sinn dann awer
570 och emmer eseu an spaanung, well ech se einfach net am aan hunn.

571 P4: Et ass och am punkto reimlechkeeten. Ech mengen och hier Kummeren, do ass alles
572 geännert ginn, et ass alles um buedem fest gemach ginn, Bett, den Schaaf, Still ass alles um
573 Buedem fest. Well mir haaten an der Zeit, do sinn saachen futti gemach ginn voila an waat net
574 nach alles. Am Punkto Raimlechkeeten, dass effective wei den [P5] seet. Wann mir awer elo
575 raimlechkeeten op d'sait loosn, müssen mir awer och schon d'präsenz weisen beim Patienten .

576 I: Daat heescht, gett et awer och en speziellen raum nemmen fier Iech, weu dir Iech zereck
577 kennt zeien oder erhuelen kennt an awer eng visibiliteit hudd?

578 P5: Bein, mir hunn eisen Buro, wei den [P4] soot, daat waat mir een Aquarium nennen, deen ass
579 schon op allen seiten op, ausser no hannen, daat heescht no lenks geseis de eraus, no riets geseis
580 de raus, dass een relative greussen raum, mais dommader ass een deel fun den Kummeren
581 oofgedeckt an dann och net alleguer, an dann dohannen am eck och nach eseu een weu een
582 nemmen iwert spigelen eppes geseit. Awer dann deen deel, wann se zum beispill owes am
583 openthaltsraum sinn, weu se pingpong an eseu saachen spillen do hunn mir null anbleck aus
584 dem raum, null.

585 I: Daat heescht awer dir geif Iech daat awer dann wenschen dass der dei visibiliteit hudd?

586 P4: Also am beschten schon
587 P5: Am beschten schon, muss een natierlech dann och ebessen dann, wann ech elo ebessen
588 zereck denken un dei aal zeit, daat dreit dann och dozeu bei, dass Personal dann och ebessen
589 mei dacks dann do setzt an sie dann kukt anstatt an Präsenz do ze sinn. Natierlech, dass emmer
590 eseu eng saach weu ech soen ass schon gutt dass mir müssen Präsent sinn, an se unschwetzen
591 kennen, mais ebessen zereck ze zeien mat ableck daat ass schon net schlecht. Zumols hei am
592 Jugendbereich , ab enger bestimmten Auerzeit, am speiden nometteg, daat geet schon fierun.
593 P4: Et hänkt och oof weieng Clientele et een huet. Pro Konstellatoun fum gruppe, heinsto kanns
594 de der et erlaaben se einfach eseu gewärden ze loosn, mais et sinn awer och phaasen weu een
595 se net kann alleng loosn an wierklech muss oppassen.
596 I: Daat heescht Dir musst net konstant bei hinnen sinn?
597 P4: Also wei gesoot et ass emmer fun Gruppe oofhängesch. Ech mengen et ass eng saach fun
598 vertrauen. Wann een elo am Büro setzt, an sie spillen Kicker oder Billard, also daat ass een
599 Raum weu mir guer net gesinn fum Büro aus, voila an daat ass ampfong net gutt, well Billard
600 bedeit Kugeln an Kö asw. Material weu se kennen benotzen, fier engem wei ze doen. An mir
601 hunn och schon Saachen futti gemaach kritt asw. Mir müssen awer och schon Präsenz weisen.
602 P5: Ech soen elo net dei ganz Schicht, mais awer emmer erem regelmeisseg sech weisen awer,
603 mir sinn do wann eppes as.
604 P4: Wann mir mirken datt, mir leieren patienten io och kennen, am laaf fum daag erkennt een
605 och op se ungespaant sinn oder net, wei se reageieren. Dann kann een och soen „ok mir loosn
606 se elo emol puer min alleng, daat geet schon“ an et sinn och eseu fällt weu mir och soen „nee“
607 muss een permanent bei hinnen sinn.
608 P5: Also ech muss ganz eierlech soen, wann ech kuken fierun engem joer, an der
609 erwuesenpsychiatrie, do ass et op enger gewessen auerzeit, speiden nometteg, weu een leit baal
610 alleng leist, dei lecht 2-3 stonnen fun der schicht, reueg verlaaf fier jideren. Ech muss soen hei
611 ass schon um niveau präsent awer mei.
612 I: Ech verstinn, weieng architektonesch Elementer oder secherheitsmoosnahmen sollen ärer
613 Meenung no verbessert ginn ?
614 P4: Alos, mir sinn io an enger Psychiatrie, an enger Psychiatrie geheieren io softsäll, mir nennen
615 daat hei bei eis Mauererdeis. Dann ass een sall weu dier zeugemach gett, weu den Patiernt sech
616 net verletzen kann, wann en aggressive ass oder eng Kriese gemacht huet. Mir hunn awer och en
617 Fixationsbett. Ech mengen an enger Psychiatrie geheieren fixeierer delweis. Zum beispill, wann
618 ech hei elo vergelichen, weu mir eis Foixationsbett hunn. Ech kann daat kengem zielen mais,
619 do müssen mir 3 Dieren opmaachen, befier mit daat bett kennen benotzen. An daat hellt ganz
620 vill zeit eweg . An den vum Personal deen muss io och deen moment dann do eraus goen, fier
621 daat sichen ze goen. Do geif ech dann emol unfänken, daat steet ganz gnaz schlecht
622 fixationsbett. Am Endeffekt, misst een einfach eseu een Raum hunn um Stack mat engem

623 Fixationsbett prett, fier wann eppes ass weu et muss ganz schnell goen. Eis Sofftsäll, leien net
 624 immenz gutt, mir müssen do eng dier opmachen fier an en gewissen gank erann ze goen, daat
 625 ass och net Ideal. Well am endefekt, fannen ech, dei zwee Räum missten mir amfong op engem
 626 Stack hunn weu een net nach honnert dausedn dieren muss opmaachen, weu een direkt den
 627 Zeugang huet wann eppes ass.
 628 P5: Daat waat ech net Ideal fannen daat ass, mir sinn hei op engem dretten stack, daat heescht
 629 mir hunn och een gesecherten Haff mat hinnen eroof ze goen. Natierlech müssen mir drei etagen
 630 zu feuß eroof goen, weu mir wessen an den Traapen kennen och ganz vill saachen gescheien.
 631 Ech sinn zum beispill een deen Grupp fierleist an ech ginn hannendrunn, fier net emol villeicht
 632 een feus an den reck ze kreien an 3 etagen eroof ze fleien. Daat heescht fier mech, wier et ideal,
 633 all psychiatrie, eseu een geschlossenen service, misst Rez de chausse sinn, mat direktem acces
 634 zu engem gesecherten Haff.
 635 P4: Dann ampfong bei der Jugend ganz wichteg, misst een einfach eng sportshaal hunn.
 636 P5: Jo, ech fannen daat och
 637 P4: Well mir hunn awer Patienten dei keen recht hunn eraus ze goen, well dann dauert daat 1,2-
 638 3 wochen bisden accord do ass fun der Juge, an fier einfach och eben ze ermeigelegen, dass se
 639 kennen ebessen sport machen, Team sport, voila an dann einfach en zeugang hunn zu engem
 640 Haff, enger Terasse fier, sportsanlaag.
 641 I: Daat heescht ären Haff ass deen komplett zeu oder och op?
 642 P5: Nenene, deen ass komplett gesechert, mat relative heigem Zaun. 4-5m heisch. Daat heescht
 643 mir kenne och mat hinnen do sinn, an do ass flucht gefahr baal wei 0.
 644 P4: Ausser et ass iegendeen deen vergesst Dier zeuzesperren. An et wier een Patient deen
 645 dohinner leeft, mais soss net.
 646 I: Wei ennerscheeden sech d'raimlechkeeten fun den Jugendlechern am verglach fun Kanner
 647 oder Erwuesener, well Jugendlecher sinn dann awer an engem aaneren Entwicklungsstadium
 648 wei Kanner elo zb. Fann Dir et misst do awer en ennerscheid gemaach ginn?
 649 P4: Also ech soen emol do, reng hei fum service. Mir kuken emmer dass all Jugendlechen
 650 alleng an senger Kummer ass. Fier einfach kennen privatsphär ze hunn. Well an enger
 651 geschlossener Psychiatrie, deen eenzegen Raum deen Sie hunn, daat ass den Privatsphär, daat
 652 geheiert dir ass ampfong hier schloofkummer. Mir kuken halt emmer dasss jidereen alleng ass.
 653 Elo zu den Erwuesener do hunn ech manner erfaahrung wei den [P5].
 654 P5: Jo mais och do kennen mir net wierklech vergleichen well bei den erwuesenen ass et an
 655 engem heischhaus an engen building waat et seit 60er schon do steet, waat och architektonesch
 656 katastrophal ass also et besteet io elo den neien projet fier dei nei rehaklinik hei ze bauen. Ech
 657 hoffen dass mir dann, also ech kann do elo och net soen waat mir do spezifesch aanestes ass.
 658 I: Mais gidd dir do mat anbezunn, oder geuf dir schon engkeier bauprojekt mat anbezunn?

P5: Also ech selwer ech kann elo dofunner soen, dass ech engkeier fierun 10 joer, weu daat ungefangen huet mat nei rehakliniken weu dei echt denger komm sinn, do war ech puermol mat an den reiniounen, waat mat architekten waren eweu ebessen gruppen zusummengesaat geufen ob infirmier, doktoren , ebessen fun allem, ech io.

P4: Io ech och, mengen fierun 2-3 joer ass daat ebessen mei aktuell gewiercht ewei se do ungefangen hunn pläng ze machen, mir also equipe weu mir epuer mool gefroot geufen, an an dei eng oder dei aaner versammlung mat waren, wei mir eis daat dann fierstellen an Zukunft, wei daat dann soll asugesinn an eseu weider. Fir eben dei Problemer dei mir deen moment haaten, fier dei einfach ze vermeiden.

I: Gidd dir juste am ufank fum projet mat anbezunn oder och bis zum schluss?

P4: Bis elo nemmen den ufank, dei pläng stinn iegendsweich eseu ebessen an der loft. Ob daat elo eseu konkret ass an weini sie unfänken daat wessen mir net, elo momentan ass eseu eng kleng Paus doteschent. Mei wees ech elo do zumbeispill net. Mais pläng sinn do fier deen ganzen site nei ze machen.

I: Super. An waan mir elo erem zereck ginn op raim, Zemmeren fier Jugendlecher. Gesidd dir fun Bausen do erann, sinn do fensteren

P4: [No sign with the head]

I: Ass alles zeu?

P5: Zeu

I: An wei fannt dir daat? Also weinst der visibiliteit

P4: Ech fannen et gut, also fier mech schon, well ewei gesoot, daat ass fie rmech eng privatsphäre. Daat ass ampfong, ewei ech et erklärt hunn, sie kennen sech eseu zereckzeien, se kennen alleng sinn, daat ass hier wull amfong.

P5: Den problem ass, dass de daat baal net kanns machen eichtens emol. Fier mech geseit et soss ze vill no prison aus, mat den visieren, weu een eng Klappe opmecht an kann kuken. An dei aaner Jugendlecher, ginn andauernd laanst dei Zemmeren an wärten sech amuseieren fier sech dei visieren opzemachen. Vierun allem och wann ma leit dei an eng Krise sinn, an net onbedengt an den Time-out ginn, mais soen „hei zei dech emol an dein Zemmer zereck“, dann fannen ech daat net ganz unbruecht, dass do jidereen keint daat fun bausen erann kuken. Also daat ass meng Meinung.

P4: Ne ne daat ass richtig, daat sinn hier privat sachen.

I: An och nach eng Fro zu den Dieren, hudd der schon Erfahrung gemacht, dass eng richtung fun den dieren ewei se opginn besser wier. Zum beispill, no bannen opgeet.

P5: Ech gesinn et aaneschters, am Punkto secherheet muss Dier richtung gang opgoen. Well wann sie neemlech hannendrunn eppes verstoppen oder verbarikadeieren, an ech misst Dier opdrecken, kommen ech net erann. Ech muss Dier kennen zeien, fier mech muss daat absolute sinn.

696 I: An zum beispill, wann den feieralam geht, ginn Dieren all automatesch op?
697 P4: Dieren sinn nie zeugespaart, hei sinn keng zeugespaart. Alles waat am Patientengang ass do
698 gett neicht zeugespaart. Ausser sie verlossen den Stack an ginn an den Weekend zum beispill,
699 an fier dass neicht an der Kummer geklaut gett oder eseu dann ginn se mam Schlessel
700 zeugespaart. Awer keen Patient an senger kummer gett fun bausen zeugesperrt.
701 P5: Daat eenzegt waat mam feieralarm geif zeugoen, daat sinn eis Feierdieren. Dei ginn zeu
702 awer. Also elektronesch sinn mir elo net mega, an deem aalen Gebai hei. Mais ewei gessot, et
703 ass wei den [P4] seet, zeugesperrt sinn se seuwieseu net.
704 P4: Also am Punkto secherheet, waat Dir vileicht misst wessen Architektonesch, Fenstere. Hei
705 ech weisen Iech engkeier ewei daat ebessenausgeseit. Do gesidd dir Fensteren ganz uerwen, dei
706 kleng ass op.
707 I: Daat ass dei eenzeg dei op geet?
708 P4: Jo jo, do kann den Patient ampfong dei op an zeu machen. Dei greuss net, dei sinn mam
709 Schlessel zeugespeert.
710 I: An daat och um ganzen Stack?
711 P5: Um ganzen Stack, juste dei kleng uerwen kann een opklappen.
712 I: Kennen ärer Meenung no secherheitsmoosnamen fum Patient positive oder negative
713 beanflossen?
714 P4: Ech well elo net soen, dass den service ze secher ass. An effektive Dieren do kann jidereen ,
715 wann en engkeier 2-3 mool gudd mam feuss dranschleit futti machen. Ech kann Iech engkeier
716 een Beispill ginn fun enger Situation, weu mir een Patient haaten, deem war 3 deeg hei, deem war
717 an engem Gespreich mam Foyer, mat engem fun eis, deem war dono eseu op honnert dausend an
718 enger Krise, deem huet et ferdeg bruecht, 2 dieren mam Feus futti ze schloen an fort ze laafen.
719 Do soen ech mir awer grad eseu gutt, ech hunn leiwer hien mecht eng dier futti, ewei wann een
720 elo een funn eis schleit oder eis probeiert den schlessel ze klauen an eseu weider. Dann fannen
721 ech daat awer gutt dass daat eseu ass.
722 P5: Jaecin, ech sinn do ebessen Zwiigespalten. Natierlech kann extrem secherheetoch fördern,
723 dass sie sech net eseu supper spieren, an dei aaner seit wann sachen mei secher wären oder mir
724 hätten mei , mir keinten mei ann aaner säll anbleck hunn. Dann keint een se natierlech och mei
725 alleng loosene, an net vileicht emmer een fun eis do dobei stoene. Ech hunn elo net, ech hunn
726 ebessen eng gedeelten Meenung do driwer.
727 P4: Ech mengen et ass emmer oofhängesch fum Gruppe dei een huet , daat spillt wierklech eng
728 greus roll.
729 P5: Jo daat spillt wierklech eng enorm roll.
730 P4: Et kann een en Gruppe hunn , deem weu een wierklech permanent muss dobei sinn an
731 oppassen dass se net vieliecht klauen oder probeieren fortzelaafen oder eseu. Et huet een einfach
732 Gruppen weu een wees dei kann ech einfach elo ebessen matreu loosene.

P5: Daat ass hei, an daat muss ech och wierklech soen, opgefall, daat ass deen enormen
ennerscheed, zweschen der Erwuesener an der Jugend Psychiatrie , eichtens hunn mir hei ganz
anner bienen, mir hunn hei net wei an der Erwuesener Psychiatrie Patienten bis 3-5 Joer hei
sinn, mais kann een soen wanns de 3 wochen am Conge wars dann kann et sinn dass hei 3 neier
waren an 3 erem entloos ginn sinn. Daat heescht fier mech muss schon, en gewessenen niveau
un secherheet sinn, fier och kennen all den Patienten gerecht ze ginn, an daat ass wei den [P4]
seet, mir haaten elo laang, meinten laang, een Gruppe weu neicht war, easy, an dann enners de
3 Patienten wei am moment, dann ass et erem mei schwierereg.

P4: An d'secherheet gett eis io och eng gewessen secherheet oder den Leit dei ebessen manner
erfahrung hunn. Et fillt een sech do duerch einfach mei secher.

P5: Fier mech ass eseuwieseu dei greissten secherheet fier Patienten daat sinn mir. D'Personal
waat do ass, wanns de eng chance hues ewei hei, wierklech eng gudd equipe, dass en gudden
mix tescht den mei jonken an den mei aalen, dei erfahrung hunn aus den verschidden bereicher,
fier mech sinn mir nach emmer den greisten Kader fun Secherheet dei et gett.

I: Jo, verstinn. An wann mir fun oppen räumlechkeeten schwetzen, einfach oppen säll och do
weu sech Gruppen ophaalen, wei gesidd dir daat? Keint daat är Arbescht erliechteren?

P4: Also mir hunn een ganz greussen oppen Raum, do weu mir iessen, weu den kiker an billard
steet, do kann een se och emol einfach spillen loosene, an do baut sech dann och eng ganz gutt
ambiance op, eng gutt atmopshäre. An daat awer och erem oofhängesch fum Gruppe deen een
huet. An daat spillt erem eng gewessen roll, ech mengen dann fillt een sech och mei wuel, wann
een muss froen mach mir Dier op mach mir Dier zeu. Soss , geet halt dass daat gebai eseu aal
ass, hunn mir halt net dei meigelegkeeten.

P5: Mais och elo den dooten raum, wann mir dier zeumaachen, müssen sie eis froen kommen.
Do sinn gruppen, weu ech dann ganz eierlech muss soen, weu ech den raum dann och emol
noom ower iessen op loosene weu se sech dann och kennen frei bewegen. Mais daat ass och dei
Späzifiteit un dem jugendbereich, dass net alles schwarz oder weis. Also ech hunn schon gär
wann ech wees ween weu ass. Daat muss ech ganz eierlech soen.

I: Daat heescht, gidd dir awer och an ären Büro 1-2 mool am Daag oder baal guer net?

P4: Dach mir müssen och ebessen schreiwene, telefoneieren, Medikamenter, sortie machen,
Saachen eraus an erann ginn.

P5: Mais och do sinn mir nie alleng, hunn mir Dier op dann sinn nach aaner 3 bei eis. Well
wann mir sie net siche, siche sie eis. Sie siche och ganz ganz vill Kontakt, „et ass ma
langweileg“, „maachen mir eppes“. Wann eis Dier zeu ass, ass et ganz schlemm, dann peschen
se widert eiser Fenster.

P4: Wann Dier op ass dann kennt heinsto och keen, an wann Dier bis zeu geet dann mengen se
dann müssen se elo kuken kommen, an dann stinn der beemol puer 3 steck do.

769 I: Wann Dir eng saach kennt ennere, daat är Secherheet an d'wuelbefannen keint verbessern,
 770 waat wier daat?
 771 P4: Schon visibiliteit fum Büro aus einfach an vielleicht ebessen mei oppen Raim weu een awer
 772 alles am Bleck huet, net eseu vill ecker. An ech soen och elo emol Fixationsbett an softsäll,
 773 dass dei direkt um service matdrann ass, daat spillt schon en gewessen roll.
 774 P5: Also daat ass definitve een Thema weu ech soen, daat muss iwerluecht ginn, do müssen
 775 perfekt räimlechkeeten an raum fonnt ginn. An fier mech ass et einfach, dei saachen müssen all
 776 op engem rezde chausse sinn. Mat zeugang zu engem Gaart oder engem Haff weu een sie och
 777 emol einfach kann alleng eraus kennen goen loosene, oder soen „ok, tescht moies an mettes
 778 ausserhalb fun den Aktivitäten kennt die an den Gaart“ op dei mir dann och andauernd vue
 779 hunn. Daat ass waat ech mir wierklech wenschen. Mais daat ass och an der Erwuesener
 780 Psychiatrie wichtig, wei dei fun der Forensik, weu een seet, komm mir ginn emol ebessen
 781 eraus.
 782 P4: Mais am endeffekt ass et emmer den Patient, weu am endeffekt eis grenzen sinn. Eseu wei
 783 einfach elo dei Clientelle, kennt eng aaner clientelle dei eis ob aaner saachen opmierksam
 784 maachen an dann erem op aaner saachen. Ech mengen et gett haut erem gebaut, an dann ass et
 785 herno seuwieseu net mei aktuelle.
 786 P5: Ech hunn fierun 5 joer mein Haus renoveiert, an haut geif ech doen daat daat daat an daat
 787 geif ech aaneschers maachen. Ech mengen daat ass ebessen waat den [P4] seet.
 788 P4: Genau, genau
 789 I: An punkto farwen, punkto heelend architektur, waat kennt dir mir dozeu soen?
 790 P5: Ech perseinlech haalen dofener ganz ganz vill. Ech hunn neemlech fierun ee puer joer am
 791 building um 5 stack ungefangen. Deen war knetsch orange ungestrach, an dunn haaten mir eng
 792 Madame dei daat ganzt aanescht gemacht huet, och mat mei bereugenden farwen. Ech muss
 793 schon soen daat war herno en riesen riesen ennerscheed.
 794 I: Net nemmen fier Patienten, mais och fier Iech huelen ech un?
 795 P5: Fier jidereen. Dei bereugend farwen, ewei daat knall oranged, daat war wierklech signal
 796 farw. Ech wees net ween op dei Idee komm ass, mais bon, hei war et och eseu .
 797 P4: Daat hei huet sech elo wierklech vill geännert , am punkto farwegheet. Ech mengen wann et
 798 och machbar wier, dem Patient seng Kummer einfach unstreichen oder dei farw wielen kann dei
 799 hien well, daat wier och vielleicht ideal. Bon, op daat emmer eseu machbar ass, well patienten
 800 awer fun enge gruppe op dei aaner ginn, heinsto müssen mir dann ebessen emstellen, well den
 801 Patient vielleicht, deen ganz hannen am Eck ass net mei eseu gutt ass an vielleicht dann fier bei
 802 den Büro muss kommen, daat wier vielleicht. Mir haaten am ufank, oder ab enger gewessener
 803 Zäit, haaten mir 2 rosa Kummern, ech mengen dei waren an der schweiz gemacht ginn, sollten
 804 ganz bereugend wierken, daat war awer net ganz ideal fier d jugendlecher, sie hunn sech ganz
 805 vill do driwer beschweiert, an deier rosaer kummer ze sinn.

806 I: an dann hudd Dir daat erem geännert?
807 P4: Daat geuf dono erem geännert, jo, eng neutral farw.
808 P5: Ech mengen io seuwieseu do ginn et ganz vill, weu do drann faalen, an mir hei am service
809 am CHNP, weu mir schaffen mat der milieuthérapie, hudd der bestemmt schon heieren, do
810 faalen dei saachen matdrann. Wann ech elo emol dei Statioun drenner kuken, bon dei leit sinn
811 all freiwelleg do, mais et geseit schon ebessen mei wunnleg bei hinnen aus. Do kennt een erann,
812 geseit aus wei eng Stuff. Bon hei sinn mir einfach an engem beraich oder Forensik, weu et un
813 grenzen kennt well et müssen gewessen secherheets konzepter entstoen.
814 I: Well dir daat elo ungeschwaat hudd, soll den stack wunnlech wierken oder awer nach wei een
815 krankenhaus soen ech elo emol. Do spaltet sech Meinung, well Dr zum beispill soen dass
816 krankenhaus Anrichtung heinsto besser ass wei dei wunnlesch adapteiert miwelen?
817 P5: Ebessen eppes zesummen meschen dat wier daat bescht. Ech muss soen, daat gett et, well
818 ech war fierun kuerzen zu frankfurter op enger formatioun, an do waren hersteller fun miwelen,
819 wierklech secherheets miwelen an dei ginn an d'richtung do mengers de et wier eng stuff. Also
820 dei hunn daat konzept iwerholl, dass et wunnlesch ausgeseit an awer secher ass. Also ech war
821 ganz iwerrascht, well mir kennen daat aus der Forensik dei ellen blo fotellen, wanns de daat
822 scheiss dann geschitt dir neicht, mais daat hei huet schon richtig gutt ausgesinn.
823 P4: Jo, ech mengen an dem punkt hunn mir schon vill fortschretter gemach, an ech mengen dass
824 effektive och am punkt aanescht ze ginn. Wei den [P5] seet, dass fier dei mei wunnlesch. Mir
825 hunn och canape kritt, dei beim fernseh, daat geseit och elo schon emol ebessen aaneschters aus,
826 wei elo an enger psy weu alles fest ass. Effektive et keint ebessen aanest agerischt sinn.
827 P5: Freier daat war einfach ze kaal! Waar alles Klinik, alles mat platescher, wei do an der
828 Forensik, dei Statiounskummer, och do weu Better stinn, dass alles mat eseu ellen plätescher,
829 arggg, ech nee!
830 I: jo, do kann een sech net wuel fillen.
831 P5: Et ginn eseu fällt. Mir sinn awer an enger Psychiatrie, dass eppes aanescht wei wann, ech
832 soen emol, eng normal Klinik. Hei spillt d'wuelbefannen vill mat, bei eis sinn se awer laang hei.
833 I: Gett nach eppes waat dir elo geift dobei setzen, waat mir nach net unbeschwaat hunn, punkto
834 secherheet and wuelbefannen?
835 P4: Wuelbefannen, wann ech elo Architektur eweg loosene, et feelt mir un vill saachen, mais dei
836 geheieren net heihinner. An soss boff jo, ech wees mir sinn schon limiteiert un budget meisseg
837 asw. Ech mengen et ass wei den [P5] seet, mir sinn amfong dei leit dei fier d'secherheet
838 suergen, mir sinn och zeustänneg dofier, ech mengen dass och emmer wie mir riwer komme
839 asw, an den recht jo... Wei gesoot haut ass et gutt muer ass et villeicht net gutt. Dass eng saach
840 fun clientelle asw.
841 P5: Ech mengen et ass wei emmer eng fro fun budget. Ech hätt och leiwer mir wieren vieleicht
842 nach een mei, an mir wieren nach mei formeiert, jo..., daat ass..., daat ass..., egal ob hei,

843 deutschland, et as iwerall eseu an daat selwecht. Mais soss, muss ech awer soen een deen
844 nemmen an eseu beräicher geschafft huet, fillen ech mech elo hei net onsecher.
845 P4: Nee mir kennen eis hei net bekloen, ech mengen et ginn aaner platzen weu et vill mei
846 schlemm ass, ech mengen eis geht et net schlecht, ech mengen mir hunn filles weu mir
847 probeieren eis bescht ze machen. An leit eseu wei Dir, an do ebessen eppes maachen an ebessen
848 relanceiert.
849 P5: Ech mengen do hätt dir och ebessen eng verantwortung herno, als Architekt dei dann och zu
850 enger Direktioun soen, mir wellen gären Leit fum Terrain an mir maachen daat net euni.
851 P4: An och vielleicht deen een oder deen aanere Patient, deen erfahrung huet, deen do sein input
852 kann ginn. Ech mengen sie sinn einfach dei, dei eis emmer un grenzen setzen, daat klappt daat
853 klappt net, daat mussen mir vielleicht verbessern.
854 P5: Well mir schaffen juste hei, sie lierwen hei. Ech mengen sie hunn nach ganz aaner ideeen,
855 daat geif ech effektive och gutt fannen, wann daat iegendsweich meigelg wär.
856 I: Ma daat war dann och meng lescht froo. Dann soen ech Iech villmols merci fier är zeit an den
857 Interview.
858

Interview 4 – Healthcare professionals

859 I : Pourriez-vous vous présenter brièvement et parler de votre rôle dans le service ?

860 P6 : Oui, donc moi c'est Aurélie [P6], je suis responsable infirmière au centre hospitalier Émile
861 Mayrisch dans les services de psychiatrie depuis maintenant un peu plus de 5 ans et je suis
862 infirmière depuis un peu plus de 20 ans. J'ai des services de psychiatrie ouvertes et fermées. J'ai
863 un service fermé qu'on dit intensif où on a des patients qui perdent leur liberté et leurs droits. Ils
864 sont là sans leur consentement. Et puis sur Niederkorn, j'ai deux services de psychiatrie ouvertes
865 où j'ai des patients qui viennent avec tout type de pathologie pour de l'alcool, de la dépression,
866 des psychoses mais ils sont quand même plus ou moins stabilisés. Et puis j'ai des services
867 ambulatoires, donc un hôpital de jour dans une maison à l'extérieur de l'hôpital. J'ai un service
868 de soins à domicile. J'ai une équipe de liaisons qui se déplacent dans tous les sites parce que le
869 CHEM c'est sur Dudelange, Niederkorn et Esch. Donc ils vont voir les patients dans les autres
870 services quand il y a des problèmes de chirurgie ou de médecine et qu'il y a un trouble de santé
871 mentale qui est associé. Donc voilà, ça c'est sur mes services. Et donc moi je coordonne la
872 continuité des soins et les soins et donc j'essaie de développer surtout les réseaux sur le sud du
873 Luxembourg pour en fait favoriser une continuité des soins en dehors de l'hôpital aussi.

874 I : Comment vivez-vous l'aménagement spatial de votre service par rapport à votre propre
875 sécurité et bien-être ?

876 P6 : Alors le service intensif, c'est un service fermé, il est assez petit, il est sur Esch. Et je dois
877 dire que là on est content parce qu'il y a eu des travaux qui ont été réalisés l'année passée.
878 Et on avait vraiment besoin des travaux en termes de sécurité justement pour les patients et pour
879 les collègues. Donc on a refait pas mal de choses et puis on a aussi fait en sorte que ça soit plus
880 sympathique aussi pour les patients. Donc on a mis en fait dans les chambres un matériau, parce
881 que souvent ils dessinent sur les murs, donc ils abîmaient finalement les murs. Et donc là on a
882 mis, comment ça s'appelle, ce sont des panneaux de porte d'armoire. Et en fait si jamais on écrit
883 ou on dessine dessus, ça s'efface. Donc c'est vraiment de la bonne qualité, c'est ce qu'ils avaient
884 mis dans le fumoir parce que j'ai un fumoir intégré, parce que ces patients-là ne peuvent pas
885 sortir à l'extérieur. Et donc ça, dans la durée, on va dire que c'est quelque chose qui reste bien
886 dans le temps et qui est de qualité. C'est du très bas, non ? Du très bas ou quelque chose comme
887 ça ? Bon, voilà.

888 I : Quel élément architectural contribue à votre sentiment de sécurité ou pas ?

889 P6 : Dans la psychiatrie fermée, je dois dire qu'on se sent en sécurité parce qu'on a une porte
890 avec badge, avec un accès badge. Et ce qui est rassurant, c'est qu'on a un sas. Et le sas, en fait,
891 depuis qu'on l'a mis en place, on n'a plus jamais eu de fugue de patients. Donc ça c'est
892 important.

Ce qui me rassure, c'est aussi d'avoir un long couloir où finalement on a mis les services ambulatoires, qui sont présents du coup pour les collègues du service fermé au cas où. Donc ça c'est rassurant aussi en termes d'architecture. On a mis des caméras aussi pour surveiller les points d'entrée et de sortie. Donc ça c'est plutôt rassurant aussi. Et tout le monde ne rentre pas comme il veut dans le service. C'est-à-dire que c'est vraiment un accès badge personnalisé et donc même les infirmiers, les médecins des autres services ne peuvent pas forcément rentrer dedans. Ça c'est rassurant.

I : Et s'il y a un feu, les portes s'ouvrent automatiquement ?

P6 : Oui, oui. Il y a des portes coupe-feu. Et on fait très attention à ne rien laisser traîner devant ces portes. Il y a des sécuricorps qui passent de façon systématique tous les jours vérifier les accès portes et qui valident ou invalident justement la sécurité de ces portes. Donc c'est plutôt rassurant. Et pour les patients, comme le service est petit, c'est plutôt rassurant aussi en fait ses contenants.

I : Et y a-t-il aussi des zones réservées au personnel pour se retirer ou se protéger ?

P6 : Il y a le bureau qui est accessible uniquement aussi par badge. Donc là, ils peuvent se mettre en sécurité. Et de toute façon, j'ai un effectif de sécurité. Ils sont minimum trois dans le service avec un homme par shift. Donc ils n'ont pas le droit de quitter le service à plus qu'une personne pour rester toujours à deux.

I : Mais y a pas une autre zone pour se retirer ?

P6 : Non, non, non.

I : Et y en a aussi pas besoin ou ? vous pensez que c'est assez un bureau ?

P6 : En tout cas aujourd'hui, on n'a pas eu besoin parce qu'en fait, on a un système d'alerte sur nos téléphones. Donc si on a un souci, on appuie sur ce bouton rouge et en fait, y a tout l'hôpital qui a accès à notre service. Du coup, les portes là au niveau des badges, elles se désactivent. Et donc, on est toujours en nombre suffisant pour pouvoir se protéger.

I : Et avez-vous déjà vécu une situation où la conception de l'espace a permis d'éviter ou d'aggraver un accident ? Peut-être les portes, trop de portes, un élément comme ça ?

P6 : Qui a pu éviter un accident ? Je dirais que la manière dont on a aménagé les chambres, c'est-à-dire le mobilier, on a mis du mobilier non dangereux. On a vraiment étudié tout. On a mis des pouffes et des tables en mousse. Donc on a fait attention à tout ça. Et c'est vrai que comme on a connu des événements graves dans le service, on a tenu compte de tout ça pour justement adapter notre environnement. Les lits aussi sont des lits spécifiques. Il n'y a plus de piste électrique, donc pas de risque de suicide. On ne peut pas démonter non plus les lits pour nous les mettre dans le visage ou contre les portes. Donc tout a été étudié vraiment pour la sécurité.

I : Et aussi, il y a des salles de soft, je ne sais pas comment vous l'appellez, time-out ?

P6 : Oui, oui. Non, là par contre, c'est vrai que ça, ça manque par contre. C'est quelque chose qui manque, je pense, pour le service fermé à Esch. Il faudrait encore un espace parce qu'on a un espace salon où ils peuvent manger, regarder la télévision. Grâce à la direction, on a encore une salle supplémentaire où on peut faire des réunions, où on peut prendre des patients d'entretien. Mais il manque quand même dans ce service-là, je pense, un accès pour l'extérieur, déjà, pour qu'ils puissent quand même aller respirer l'air frais, même si c'était une heure par journée. Et je pense qu'il manque aussi une salle de repos supplémentaire. Quelque chose où on peut faire une salle d'apaisement, pour qu'on peut éteindre du sport, quelque chose comme ça. Ça, ça manque dans le service-là.

I : Et c'est-à-dire, si les patients font une crise, ils restent dans leur chambre ?

P6 : C'est ça. Ils restent dans leur chambre, elle est adaptée pour qu'en fait, il ne puisse pas se passer un danger pour eux.

I : Et aussi, le plafond, il est...

P6 : Il est étudié avec des sortes de trappes. Les trappes sont fermées de façon sécuritaire pour pas qu'ils puissent s'enfuir. Parce que pareil, dans le passé, on a quelqu'un qui avait réussi à démonter et à passer dans les plafonds. Donc aujourd'hui, c'est plus possible.

I : Et quels éléments architecturaux ou dispositifs de sécurité devraient être améliorés, selon vous ?

P6 : De sécurité, aujourd'hui, je ne devrais dire rien. Parce que je pense que ça a vraiment été étudié pour. Par contre, comme je vous disais, pour améliorer, oui, cette salle d'apaisement, où on pourrait faire un peu de sport, ça serait pas mal.

I : Et pour le bien-être du personnel ?

P6 : Plus que l'architecture, je dirais que, que ce soit le personnel ou les patients, ça serait des activités thérapeutiques. Permettre aux gens de faire plus d'activités encore. Pour ne pas s'ennuyer dans les services et justement avoir le temps de se dire, ben tiens, comment on ferait pour sortir d'ici ? Ou j'en ai marre d'être ici ? Enfin, voilà.

I : Et aussi, les couleurs, c'est tout blanc ou c'est... Il y en a quand même des couleurs ?

P6 : J'ai beaucoup de blanc, mais je suis en projet pour pouvoir améliorer, en fait, le visuel des services. Donc, je suis en train de réfléchir sur les couleurs ou sur éventuellement des peintures, des choses comme ça. Parce que le blanc, c'est trop stérile, quoi. C'est froid, voilà.

I : Et selon vous, en quoi les besoins spatiaux des adolescents, devraient-ils, sont différents par rapport aux enfants ou adultes ?

P6 : Ben, les adolescents, oui, ils ont besoin d'avoir des pièces où ils peuvent se retirer, en fait, je pense. Parce que c'est pas évident. La collectivité pour des adolescents, c'est compliqué. Les enfants, les petits, on sait qu'ils aiment être ensemble. Les adultes, ils ont leur chambre et puis ils ont quand même cet espace-là où il y a la télé, effectivement. Mais les ados, des fois, ils n'ont

965 pas envie d'être ensemble, en fait. Donc ça, je crois que c'est important qu'ils puissent avoir un
966 endroit où ils peuvent se retirer un peu. Quelque chose un peu juste pour eux, quoi.

967 I : Et des mesures de sécurité peuvent-elles améliorer ou nuire au bien-être des patients ? Vous
968 pensez quoi ?

969 P6 : Vous pouvez répéter la question ?

970 I : Des mesures de sécurité peuvent-elles améliorer ou nuire au bien-être des patients ?

971 P6 : Ben, en fait, ça dépend. On parle toujours d'architecture. Oui. Je pense que ça peut
972 améliorer la sécurité parce que tout ce que je viens de vous expliquer, je pense que ça améliore
973 la sécurité pour tout le monde, pour les patients, mais aussi pour les équipes. Et après, ben oui,
974 ça peut nuire parce que ça peut être contraignant, quoi. Parce qu'on peut avoir du mobilier
975 réduit. Il peut que ça ne soit pas adapté forcément à nos attentes. Impersonnalisé. Enfin, voilà,
976 que ça ne fasse trop psychiatrie aussi. Donc, voilà.

977 I : Et par rapport aux espaces ouverts ou à un plan d'étage ouvert, peuvent-ils améliorer la
978 sécurité et la condition du travail ?

979 P6 : Persuadé. Persuadé. J'en suis sûre.

980 I : Et pourquoi, pensez-vous ?

981 Ben parce qu'on a tous besoin d'avoir des espaces un peu de liberté et puis d'ouverture sur
982 l'extérieur. On a tous besoin de respirer l'air frais. Et je pense que ça a aéré l'esprit et que, du
983 coup, ça améliore les conditions. Ça doit éviter d'avoir certaines tensions, quoi. C'est-à-dire,
984 dans un service fermé, complètement fermé. D'ailleurs, ce que j'ai moi ici à Esch, c'est l'horreur.
985 Les gens, c'est pire que la prison. Parce que les prisons, on sait qu'ils peuvent tous aller dehors
986 au moins une heure par jour. Là, chez nous, les patients, c'est pas possible. Ils n'y vont pas.

987 I : Il n'y a aucun... pour aller dehors, même pas au rez-de-chaussée ?

988 P6 : Non, il n'y a rien du tout. Non. Ils n'ont pas le droit d'aller dehors. Ils n'ont pas de sortie
989 accompagnée. Et c'est avec le collègue inchaïer. Et encore, il faut qu'il y ait du personnel.
990 C'est pas évident, quoi. Et aussi, il y a des fenêtres en face des chambres des patients où c'est
991 tout fermé.

992 P6 : Dans les chambres, il y a des fenêtres, oui.

993 I : Et il y a aussi des rouleaux, après, dehors, pour les fermer ?

994 P6 : Oui, il y a des volets, oui.

995 I : Et si vous pouviez changer un élément pour améliorer à la fois la sécurité et le bien-être, quel
996 serait-il ?

997 P6 : Ça serait la fameuse pièce d'apaisement. Ça, c'est sûr et certain. Que ce soit en service
998 ouvert ou fermé, je ferais une pièce supplémentaire d'apaisement avec un accès aussi sur le sport.

999 I : Alors, il y a seulement une chambre pour manger ?

1000 P6 : Sur le service fermé, il y a la chambre pour manger. Et puis, il y a une pièce avec la
1001 télévision. C'est une pièce commune. Et sur les services ouverts, ils ont une salle de télé. Mais

- 1002 par contre, ils peuvent aller dehors. Eux, sur Niderkorn, ils peuvent aller dehors. Donc, ils
1003 peuvent aller dans le jardin. Là, ils ont quand même plus d'accès sur l'extérieur. C'est vraiment...
1004 Moi, je vous parle du service fermé. Là, il manque une salle d'apaisement.
1005 I : Mais vous dites que la sécurité, elle est déjà bien pour le personnel ?
1006 P6 : oui, oui
1007 I : Et avez-vous déjà été impliquée dans un projet architectural lié à votre département
1008 hospitalier ?
1009 P6 : Oui, parce que là, je vous dis, récemment, on a fait les travaux en service fermé. Donc, moi,
1010 j'ai contribué à tous ces travaux de sécurité. Oui. Mais on ne pouvait pas agrandir le service.
1011 Donc, on était quand même limités.
1012 I : Et vous étiez aussi au début jusqu'à la fin ou seulement au début ?
1013 P6 : Du début à la fin. Et là, sur Niederkorn, on a des travaux d'amélioration de la qualité aussi
1014 au niveau infrastructure. Et on est impliqués du début à la fin.
1015 I : Et aussi, une question par rapport aux portes. Si les portes, elles ouvrent par pousser ou par
1016 tirer, comment c'est mieux pour vous en termes de sécurité ?
1017 P6 : Eh bien, nous, on a des... Ici, au Luxembourg, il y a une norme de sécurité pour la
1018 psychiatrie. Alors, je ne sais plus si elle s'ouvre de l'intérieur ou de l'extérieur. Mais en tout cas,
1019 nous, on respecte la norme qui est demandée. C'est la norme ITM pour la psychiatrie. Et là, on
1020 la respecte, justement. Les portes doivent s'ouvrir d'une certaine façon.
1021 I : Est-ce que vous souhaitez apporter un complément dont nous n'avons pas encore parlé
1022 ensemble ?
1023 P6 : Non. Non. J'ai tout dit.
1024 I : Je crois que j'ai tout posé. Eh bien, je vous remercie beaucoup.

Interview 5 – Architects

I: Könnt ihr euch bitte kurz vorstellen und mir etwas über ihre Arbeitserfahrung erzählen im Bereich psychiatrischer Bau?

P7: Mein Name ist [P7], ich bin Architektin bei dem Projekt und unter anderem für die Station der Psychiatrie, für die Planung mit involviert gewesen.

P8: Ich bin die [P8], ich habe fast zwei Jahre Erfahrung als Architektin hier im Büro auf dem Projekt und bin jetzt sozusagen verantwortlich für die Planung von diesem Geschoss, wo auch die Psychiatrie drauf ist und ich hatte auch schon Besprechungen mit den Nutzern.

I: Welche Aufgaben habt ihr in Bezug auf psychiatrische Architektur?

P7: Im Moment oder ganz am Anfang war eigentlich die größte Herausforderung, es suizidhemmend auszubilden. Das war eigentlich das große Thema. Wir haben zwei Stationen, die offene und die geschlossene, ne wir sagen nicht geschlossene wir sagen, die intensive und allgemeine Psychiatrie, nicht geschlossen. Und in der intensiven Psychiatrie war es eben wichtig, alle möglichen Vorkehrungen zu treffen in der Architektur mit den Ausstattungen, dass keiner eben Suizid begehen kann.

P8: Ja, mir wurde der Grundriss, als ich angefangen habe, eben gezeigt und dann habe ich auch deutlich diese zwei Stationen erkannt. Aber für uns waren es trotzdem drei, weil wir haben dann eben diese allgemeine, diese intensive, aber auch in der intensiven haben wir drei Zimmer, die noch intensiver sind sozusagen, wo der Suizidhemmungsgrad noch intensiver ist und wo wir auch wesentlich mehr, wie soll ich das sagen, vandalinsichere Ausstattungen und so haben. Und meine Aufgabe da drin war dann, sicherzustellen, dass die Zimmer, in denen sich die Patienten dann befinden, noch immer einheitlich sind mit dem Rest vom Gebäude, weil was uns wichtig war, ist, dass die Patienten sich nicht wie in der Psychiatrie fühlen, sondern weil wir ja im Krankenhausbau sind, noch immer im Krankenhaus sind. Und dass sie dann eigentlich in einem Standard Krankenzimmer sind, was dann eben nur den psychiatrischen Anforderungen im Bau entspricht.

I: Was würdet ihr sagen, war die größte Herausforderung bei dieser Planung?

P8: Ja, eben das Mittelmaß zwischen dem Standard Krankenhausbau und dann den intensiven Anforderungen eben bei den Suizidhemmungen, wenn oder Ausstattungen und so zu finden. Also schlussendlich gibt es dann trotzdem ein paar Abweichungen zu den normalen Zimmern, wie jetzt im Bad, da haben wir dann, normalerweise hat man dann so Schnuren, wo man dran zieht, wenn man Hilfe braucht. Hier können wir keine Schnuren haben, weil die Leute sich dann sonst damit ersticken würden. Ich glaube, wir haben noch keine Vorhänge. In den sehr intensiven Zimmern ist die Ausstattung auch fest am Boden verschraubt, was in den anderen Zimmern gar nicht der Fall ist. Da haben wir normale Stühle, normale Tische, hier können die

gar nichts bewegen. Und wir haben sogar Ausstattungen aus Edelstahl, was man ja auch in Gefängnissen wiederfinden würde.

I: Sind diese intensiven Räume sofort beim Pflegepersonal ?

P7: Ja, und die können auch, das ist auch ein wichtiger Punkt, die ganzen Installationen sind vom Flur her zugänglich. Das ist auch eine Besonderheit, die dann eine Herausforderung ist, mit der Haustechnik zu schauen. Das war ja schon kompliziert, das überhaupt mal zu verstehen, wie ein Patient in der Psychiatrie, das kann man sich ja alles gar nicht vorstellen, dass jemand den Deckel abmontiert und das Bad unter Wasser setzt. Oder das Personal muss die Möglichkeit haben, Wasser abzustellen. Und so haben wir eben in Besprechungen mit den Nutzern, wie [P8] ja gesagt hat, auch einiges darüber gelernt.

P7: Genau, wir waren da mit dem Leiter von der Station, der hat uns dann gesagt, ja, die Wände sollen abwischbar sein, weil die Patienten sehr viel Fantasie haben und auf die Wände mahlen würden. Genau, dass sie sich mit dem Klo zum Beispiel ertrinken, weil sie das dann mit Papier aufstupfen, bla bla. Und deshalb haben wir die Besonderheit wie [P7] gesagt, dass wir Revitüren in den Fluren haben, so müssen die Pfleger gar nichts ins Zimmer rein, um da was zu machen, sondern vom Flur aus sofort die Leitungen absperren können.

I: Wenn wir schon von den Türen reden, in welche Richtung gehen die auf?

P8: Die gehen nach außen auf, in der intensiven. Wir haben aber Fälle, in der allgemeinen haben wir auch Doppelzimmer und da gehen sie nach innen auf und das hatte der Nutzer schon kurz bemängelt, aber wir hatten keine andere Möglichkeit.

P7: Standard ist eben so, deshalb sind wir da von hier auch ausgegangen und haben das dann weitergeführt.

I: Gibt es irgendwie, einen Unterschied gibt zwischen Jugend- und Erwachsenenpsychiatrie, da man irgendwas beachten muss?

P7: Weiß ich nicht.

P8: Nee, das wissen wir nicht.

I: Wie vereint ihr in euren Entwürfen die Sicherheit des Personals mit dem Wohlbefinden auch? Weil man redet immer von Suizid, aber Personal rückt eher so in den Hintergrund.

P7: Ja, da fällt mir gerade ein, ganz am Anfang, als wir die Möblierung gemacht haben für einen Therapieraum mit einer Liege und immer wieder ging es darum, ob der Therapeut mit dem Rücken nah zur Tür sitzt. Und direkt flüchten kann.

P8: Ja genau, weil in allen Räumen sitzt der Arzt oder so zur Tür, also der schaut auf die Tür rein, um die Patienten dann willkommen zu heißen, aber hier in diesem Raum ist tatsächlich umgedreht, damit der flüchten kann im Fall, wo jemand aggressiv wird.

I: Aber es gibt keine zwei Türen zum Rausfliehen?

P7: Nee, also wir haben diesen Time-Out Raum, der eine Schleuse hat, wo das Personal rausgehen kann, also der hat zwei Türen.

P8: Wir haben auch eine Tür, die größer ist, damit der Patient mit dem Bett reinkommen kann, aber die wird eher selten dann benutzt und dann eben diese famöse Schleuse. Aber wir haben auch ein Sichtfenster zu dem Raum hin, von einem Überwachungsraum, was dann auch getönt sein wird. Und der Patient hat dann auch sein eigenes Bad, wo dann auch bis in eine Schnittstelle mit Sicherheiten steht, weil dürfen wir dann eine Kamera in dem Bad haben?

P7: Eher nicht.

P8: Aber wir wollen ihm ja auch seine Privatsphäre geben, sonst können wir es auch nicht offen lassen.

P7: Ja, erst war keine Tür geplant, dann haben wir doch eine Tür.

P8: Ja stimmt, also wir gucken schon, dass die Person nicht in einem Gefängnis sitzt, sondern in einer Psychiatrie, da sie sich wohl fühlen kann, auch ihre Privatsphäre hat, aber auch eben zu einem gewissen Maß. Und weil wir die Erfahrungswerte ja nicht auf dem Terrain, im Gebiet haben, lassen wir es dann von den Nutzern beraten.

I: Was würdet ihr sagen, sind räumliche Maßnahmen, die sowohl Sicherheit als auch ein angenehmes Arbeitsumfeld bieten?

P8: Haben wir Sichtfenster in den Türen?

P7: Ja, ich glaube in diesen dreien da, ja auf jeden Fall.

P8: Und Kameras, glaube ich auch.

P7: Angenehmes Arbeiten...

P8: Also gibt es zum Beispiel spezifische Personalrückzugsmöglichkeiten?

P7: Nein, es gibt den normalen Stützpunkt.

P8: Ja, ich bin mir nicht mehr sicher, ob wir Kameras haben, wenn ja, ich glaube schon, weil die Aussage war, dass die Leute dann über Kamera überwacht werden, also dann extern eben, dann muss das Personal nicht ins Zimmer rein, sondern extern schaut sie rein. Also bei den intensiven, intensiven ja, allgemein sicher nicht. Bei den mittleren, sag ich jetzt mal, bin ich mir nicht mehr sicher. Aber das Personal geht schon auf Distanz, wenn es jetzt um das Intensive geht, deshalb haben wir auch diese Sichtfenster. Ich glaube, die gehen wirklich in einem schlimmen Fall ins Zimmer rein. Aber ja, wenn sie bis ins Zimmer sind, dann sind sie drin und dann gibt es keine Fluchtmöglichkeiten.

I: Und bei den Alarmknöpfen zum Beispiel, wenn Patienten die drücken, dann gehen alle Türen auf oder sind die alle offen die Türen? Kann man die schließen automatisch?

P7: Die Patientenzimmertüren, die sind auf, bis auf bei den dreien gibt es die Option abzuschließen. Die anderen werden auf gar keinen Fall abgeschlossen, bei den dreien gibt es die Option.

I: Wenn man den Alarm drückt, dann gehen die auf.

P7: Das ist eine gute Frage.

P8: Also die im Flur, die sind sicher zu. Die können nur in ihrem Bereich dann.

P8: Also wenn du zum Beispiel flüchten musst, aber es ist trotzdem eine gute Frage für den... Ich glaube offiziell wird kein Raum abgeschlossen. Weil normalerweise, wenn man eine Tür abschließt, hast du eine Antipanik, aber das würde in dem Fall bedeuten, also sagen wir so, wenn der Nutzer jetzt sagt, diese drei Räume schließen wir definitiv ab, dann wird es einen Alarmknopf geben, der gedrückt wird und dann wird die Tür freigeschaltet unter dem Alarm. Also kannst ja keinen im Prinzip jetzt so gesehen einschließen, das stimmt. Und dann bräuchte man ein Fluchttürterminal, was man irgendwie komplett einbaut. Das ist natürlich auch der Missbrauch. Aber es ist eine super Frage. Wir haben diese Türterminals klar an allen Fluchtwegen, da kommt keiner raus ohne Alarm. Diese Türen sind alarmgesichert so gesehen, aber diese drei Türen da, muss man nochmal nachfragen.

I: Wie könnte ein offener Grundriss gestaltet werden in Bezug auf Psychiatrie und auch das Rückzugsmöglichkeiten für Personal bietet?

P8: Also Rückzugsmöglichkeiten haben wir auch nicht, weil es schon ein kleinerer Raum ist und der Platz nicht reicht.

P7: Also Sie haben einen Personalaufenthalt, haben die schon? Der ist aber wie auf jeder Station auch, das ist jetzt kein...

P8: Ich denke, hätten wir das Krankenhaus jetzt gebaut wie eine Psychiatrie und die ganze Abteilung wie eine Psychiatrie, hätten wir andere Entscheidungen getroffen. Aber da wir im Standard Krankenhausbau sind, haben wir die normalen Patientenschränke, die sie haben, übernommen etc.

I: Aber wenn man jetzt von einem neuen Entwurf redet, ein offener Grundriss für Psychiatrie, eher ja oder eher nicht geeignet?

P7: Du hast ja trotzdem ein Zimmer, ne?

I: Es geht eher um die Stützpunkte, um die Wohnräume.

P8: Allgemein haben wir das schon, wir haben da einen Patientenaufenthalt, wo die Waschmaschine haben, der auch wesentlich größer ist. Wir haben sogar einen Raucherraum, die haben eine Terrasse zur Verfügung, wo sie rausgehen können an die frische Luft. Wir haben schon versucht, ihnen da ein angenehmes Umfeld zu ermöglichen, wo sie dann auch mehrere Monate verbringen können. Aber ob es jetzt so gemütlich ist wie zu Hause, sicher nicht.

I: Ihr habt ja schon gesagt, ihr arbeitet auch mit den Nutzern. Von wem redet man da genau? Sind die von Anfang bis Ende dabei oder waren die nur am Anfang kurz?

P8: Der Bauherr hat drei stellvertretende Personen ausgesucht, davon sind zwei Ärzte und eine Krankenschwester...Leiterin des Pflegepersonals. Und die treffen grundsätzlich die meisten Entscheidungen, aber die wissen auch, wen sie kontaktieren sollen, wenn eine spezifischere Frage ist. Wir haben öfter die Hygiene-Personen dabei, aber jetzt in dem Fall von der Psychiatrie hatten wir dann auch den Chef von der ganzen Station. Ich weiß den Namen jetzt nicht mehr.

P7: Der ist aber auch Pfleger.

P8: Und der kam dann, als wir wirklich um die Psychiatrie geredet haben, dazu und hat uns dann seine Erfahrungswerte mitgeteilt.

I: Und jetzt eher eine rechtlichere Frage. Fördern die aktuellen Normen oder Vorschriften das Wohlbefinden oder Sicherheit des Personals oder geben die gar nichts her?

P7: Doch, da steht viel drin in diesen Normen. Es gibt die Psychiatrie-Normen.

I: Aber sind die eher nur so auf Suizid bezogen und für den Patient oder gibt es da auch einiges fürs Personal?

P7: Nein, es gibt auch fürs Personal. Das muss man dann ja einhalten. Also das ist hier auch berücksichtigt. Aber das stimmt, ich finde es super interessant schon, weil du auch eher in Richtung Personal und wir wirklich eher in Richtung Patienten.

I: Das stimmt, das ist mir auch aufgefallen. Ja, also ich glaube, es sind alle meine Fragen.

P7 : Ja, super.

I : Dankeschön.

B2. Translated transcription

Interview 1 - Architects

1025 I: Could you please briefly introduce yourself and tell us about your work experience in hospital
1026 construction or psychiatry?

1027 P1: Yes, hello, my name is [P1] I'm an architect and I've been involved in hospital planning for
1028 about 25 years, specifically with healing architecture and the impact of architecture on people's
1029 well-being.

1030 P2: Yes, my name is [P2]. Like [P1], we were interested in hospital architecture for a while.
1031 And we had the opportunity to plan and realise child and adolescent psychiatry in Vienna. But
1032 apart from that, we also designed other psychiatric or somewhat more specialised psychiatric
1033 facilities such as forensics, etc. So, we already have a bit of experience there, even with this
1034 quasi-specialised field.

1035 I: Do you currently see a change in the design of psychiatric facilities, specifically for adolescents
1036 or in general? (...) So, in contrast to the past, now, is there a change in planning in general?

1037 P1: Do you mean in contrast to the past in the sense of 100 years ago or in contrast to 5 years ago?

1038 I: Yes, 5 years ago. So do you see a difference at work now compared to 5 years ago?

1039 P2: Well, it tends to vary from hospital to hospital, because some hospitals are already moving
1040 towards this so-called domestic normality, which manifests itself, so to speak, at first glance, I
1041 say again, in that you don't necessarily have typical hospital beds in most rooms, but you have
1042 beds like at home and so on and so forth. But again, our experience is that it varies from home
1043 to home, because it's clear that rooms that are furnished in such a way that you feel very
1044 comfortable and that you have a bit of furniture like at home can also become a risk in an
1045 emergency, an obstacle, an additional expense for care, and that's why I would say that some
1046 homes prefer to have normal hospital facilities, so to speak.

1047 I: What are the biggest challenges you have experienced so far when planning psychiatric rooms
1048 for young people?

1049 P1: So I think, perhaps to follow on from that, there's this conflict between, well, if we're talking
1050 about child and adolescent psychiatry right now, one thing is that we have very long stays in the
1051 psychiatric ward and therefore we endeavour to offer patients the best possible environment so
1052 that they can heal and recover there and at the same time we know that many psychiatric
1053 illnesses are also accompanied by aggression and therefore this vandalism safety or suicide
1054 prevention in many cases, especially with regard to the design, this desire for a feel-good
1055 atmosphere, may be diametrically opposed and combining the two is certainly one of the biggest
1056 challenges.

1057 I: Do you also notice a difference between adolescent and child psychiatry and adult psychiatry,
1058 i.e. in the planning now?

P1: Yes, very much so. Well, you have to say that the concept of children and adolescents varies a bit from country to country, but I would say from 0 to 16 or 18, as [P1] said, in some cases where the illness extends over the years, there are even older patients who are still perhaps only cared for by nursing staff on an outpatient basis in one way or another. And that means it is necessary to cluster these departments so that you have a smaller portion of 4 to 6 rooms, so to speak, in terms of age, sometimes also in terms of gender, which are orientated towards each other and then somehow separated from another cluster, because to say again, between children, because they are not 6 or 8 years old, and adolescents 15, 16 years old, that is a huge difference and you can't mix them so easily.

I: How do you then combine these designs with safety for the staff? So when you say the well-being of the children, but also the well-being and safety of the staff?

P1: So perhaps I should briefly add to what my colleague said earlier, I believe that there is also a very significant difference in that you also have to focus on the relatives of children and young people, because I also have to do something for them and I also need them to heal a child, I need the parents. I also have to take that into account when planning. And the safety aspect is not just a concern for us in psychiatry, but of course for the entire hospital architecture. And these are topics such as openness, direct accessibility to care, how do I design the support centre, how I create safe spaces where employees can withdraw and take a break from the company. Of course, these are topics that we are increasingly recognising in planning. But that applies to all hospital construction.

I: Which spatial measures promote both safety and a pleasant environment? (...) So is there an aspect where you say you find this very important?

P2: Well, I would say that materials and colours are very important, because there are also studies that show which colours have a calming effect, so to speak, not just on psychiatric patients, but in general and so on and so forth. In other words, it's very important to work together with colour psychologists and generally with people from other specialist areas, because it's also the case that what you might find interesting or beautiful as an architect in terms of a pattern or decor can sometimes be disturbing for psychiatric patients or even cause them to hallucinate or whatever. In other words, it is very important to work together with psychologists and psychiatrists in this area of expertise. And in terms of practical safety, as far as staff are concerned, it is very important, especially in the more intensive areas, that you always have the second option of escaping from the room. So, as I said, not all rooms, but the rooms where older patients or patients who need more intensive care, so to speak, or these calmer rooms, must in principle have two doors if the patient somehow becomes aggressive and perhaps blocks a door, the nursing staff always have a second escape option.

I: How do you make sure that the doors don't become an obstacle? (...) How do you plan this? Possibly also the direction in which they open, for example, can also be an issue.

P1: Yes, it's perhaps also important to look at the bigger picture, of course, short distances and the possible clarity of a ward, these are basic parameters that I have to adhere to, that I have a view from the base, that I can more or less overlook the whole ward or have a view, the positioning of the furniture or the beds, in this case also furniture, within the room, with the door open, where can I see, from the corridor and these are issues that you naturally have to consider when planning the floor plan.

I: What do you think of a more open floor plan, i.e. in the hospitals, so that you can flow through more quickly, feel more comfortable or more secretive both for the staff? This was also mentioned in the literature

P1: Okay (...)? Yes, I can kind of understand that it's more of a open floor plan with island solutions, where you say, okay, these are positions of individual functional facilities, and I have more opportunity to move between them. Of course, you have to say that psychiatric clinics in particular are very different to other wards in terms of the general workflow, because in other wards this efficiency and the short distance are of course more important than the quality of stay or possibly also before this direct access to the patient, so that I can get there quickly in this case. We know open-plan layouts, they exist. That is, how should I put it, an innovative solution that you can definitely strive for. I have to say quite frankly that we sometimes lack the contacts on the other side. The architects might have more ideas than are actually realised in practice.

I: That would have been my next question. In the planning process, whether medical and nursing staff are always involved in order to work together or to get feedback from them. Or is there no objection?

P1: Every single one, always. So the healthcare professionals, the nursing staff, we call this group the users. They are very closely involved in every planning decision. Because, of course, as planners we have to familiarise ourselves with the work processes. We need to know what equipment they use. We need to know what the working hours are. So there are lots of individual steps and they are all very closely coordinated with them.

I: For all the safety measures? Does that mean that there are sometimes cases where they say, no, I don't like it, these safety measures aren't good enough, then it's changed again?

P1: Yes. Yes. And of course, you have to say that everyone who lives in a company knows the things that are used in their company. This means that we are of course called upon to come up with new solutions and innovative approaches and present them to them so that these things can perhaps be implemented.

I: And what can you tell me about the safety of ceilings? For example, these suspended ceilings where you can hide things and restrict the safety of the staff. Or about the door handles, for example.

P2: Well, as I said, it depends a bit on who the patients really are. So if we go into the more extreme situations, then we are modest, there are facets of planning from the inside and from the

outside, so to speak. In other words, the patient must not be put in danger from the outside, so to speak, but they must not put themselves in danger either. And there are also these so-called anti-ligature aspects. And once again, depending on the diagnosis, this can be very extreme, because you can get trapped by any door or cupboard or whatever, or by a window. And there are now very special products, in the sense of anti-suicide or anti-ligature design, that make this impossible, so to speak. However, I estimate that in a normal hospital, I would put this at maybe 10 to 20 per cent. Yes, most of the other patients are actually in hospital voluntarily, which means they can theoretically just walk away. They also have free access to the garden or an outdoor area or can move around freely. And there is much more, as I said, this principle of normality at home, as they are actually offered an atmosphere like at home. These contacts with the nursing, with the users, are always a bit double-edged. And this is also described in the literature, because it's clear that the users always go from what they know. And sometimes it's also difficult to convince them of something innovative or new, because they would probably have exactly the same thing, just a bit nicer and new again, yes, that's a process in both directions.

I: Yes, I see

P1: And perhaps to add to that, because you mentioned the ceiling very specifically. There are best practice guidelines where you say okay, within a psychiatric ward these are fixed, closed ceilings without fixtures. If there are fixtures, then they have to be permanently screwed down and cannot be opened for patients, etc. Or we have this anti-ligature equipment, which are hooks that prevent the door buckles from breaking under certain loads, which prevent someone from getting in there, etc. So there are now products available. And I think we have to differentiate between either protecting patients from themselves, i.e. preventing them from taking objects with which they can injure themselves, or making it vandal-proof, which thankfully we rarely do. But that also happens. And vandal-proofing simply means that we're at the other end of the spectrum, so to speak, and there's no more feeling comfortable.

I: And if we are now talking about developments or trends in healthcare construction, which proposals do you think are forward-looking, so which do you think are particularly important or are still to come in the future?

P1: Which, I didn't understand that acoustically, what do we think, what?

I: Which developments or trends in healthcare construction do you think are forward-looking, specifically in psychiatric care? What architectural elements are still to come?

P1: Well, I, like all of us, and also, I think, science will answer you that it is certainly artificial intelligence that will make the most difference here. Perhaps I happened to read an article this morning about the increase in quasi-meetings or the more or less therapeutic effect of AI, because people are increasingly using it as a point of contact. In other words, and of course

1169 there are potential applications here that we cannot yet estimate, but therapy, talk therapy
1170 through an AI already offers us great opportunities.

1171 I: Do the standards or the regulations, for example in Austria, promote the well-being or the
1172 safety of the staff or do you think that they tend to get in the way?

1173 P2: Well, they don't get in the way and there is actually very little standardisation at all as far as
1174 that is concerned. We had requirements that we, for example, compile or describe anti-suicide
1175 measures, how should I put it, in technical terms, etc. And we also found ourselves that there are
1176 very few standards. There are best practice examples, there is also literature, but actually, there
1177 are also attempts in Germany to standardise things, but there are actually very few standards in
1178 this area so far.

1179 I: Would you add something else that is important in my work, in return for safety and staff in
1180 psychiatric facilities for young people, which we haven't discussed yet?

1181 P2: So what I think is very important, in addition to what we haven't discussed yet, is the
1182 technical equipment. But that's a big issue, especially in psychiatry, which is video surveillance
1183 on the one hand and that's where we come into this conflict with data protection, with patient
1184 advocacy and so on, that is a big issue. The other is this conflict between fire protection and
1185 safety, because clearly you don't want people to be able to leave this functional unit on their
1186 own, because that could put them at risk. At the same time, however, it is necessary for them to
1187 be able to escape independently in the event of a fire. And this conflict is also technically very
1188 complex. What else I want to say does not necessarily have anything to do with safety, but I will
1189 pass on an invitation to you later, which you are welcome to share with your colleagues who are
1190 interested in hospital architecture in the broadest sense. There is an exhibition at the Otto
1191 Wagner Real on the subject of healthy architecture and how architecture can heal. And on 22
1192 May there will be a series of talks on the direction healthcare construction is taking. And there
1193 will be four experts from Germany, Petra Wörner, and from Austria discussing this. And you
1194 will perhaps get many additional answers to your questions.

1195 I: I think that's great. Thank you for the information. I think I have all my questions.

1196 P2: Yes, I might have added that we shouldn't forget outdoor areas. Garden and terraces, yes. So
1197 it's very important for the young people that they also had a bit more of an intimate corner
1198 where they can hide away a bit in inverted commas. So if there's the possibility in the hospital
1199 association, it's very important to also offer these outdoor areas.

1200 I: So that's where the safety comes in again?!

1201 P2: Of course, yes. So if it's upstairs, then the railing is a bit higher. For example, in a large
1202 hospital, apart from the psychiatric ward, we also have a school. So the school is one and a half
1203 classes, but since the children and young people spend a longer period of time there, the school
1204 also has to be there. And we have this facility, and that was also the idea of the staff, that we
1205 don't actually plan it nearby, but a little further away in the building, so that they also have a

1206 way to school, which they also do themselves, because that is also part of the genesis. And that's
1207 exactly why it was on an upper floor, and they had a small terrace and I think it had a fence two
1208 and a half metres high or something like that. Precisely for security reasons. But it's very
1209 important that the adolescents and children can also go outside, so not just inside, in the room
1210 and in some of the living rooms, but that they can also go outside briefly. So, as I said, the child
1211 and adolescent psychiatry department is ideally on the ground floor with a nice therapy shop in
1212 front of it.
1213 I: Great, then thank you very much for your time.

Interview 2 – Healthcare professionals

1214 I: Could you briefly introduce yourself and tell me a bit about your role in your hospital
1215 department?

1216 P3: Yes, so my name is [P3]. I am a child and adolescent psychiatrist and also a
1217 psychotherapist, psychiatric, and currently I am the Head of the National Service for Child
1218 Psychiatry. There are two national services, child psychiatry and adolescent psychiatry. That's
1219 in Kirchberg, which might also be interesting. So, this means, I lead the service, there are
1220 different units, a consultation unit, the day centre, and inpatient care.

1221 I: That means you are also in contact with the adolescents?

1222 P3: Yes, we work closely with adolescent psychiatry because our patients start younger, but we
1223 regularly transfer them to adolescent psychiatry. The ongoing treatments don't stop when they
1224 turn 13. Thirteen is the dividing line between our service and adolescent psychiatry. In the
1225 consultation unit we also see adolescents, and we work closely with paediatrics. Adolescents are
1226 also in the paediatric ward, for example after a suicide attempt.

1227 I: How do you experience the spatial design of your unit in terms of your own safety or that of
1228 the staff?

1229 P3: Well, I don't work directly in the inpatient unit right now, but I'm well informed. The
1230 inpatient unit, the floor is new, we moved there last June, and we were lucky to have close
1231 collaboration with the architects, the technical services, and also the head nurse, officially called
1232 the "cadre soignant", for the spatial design, mainly for the healthcare assistants. So, the new
1233 floor we currently have, I would say, is quite well thought out in terms of staff safety, but also
1234 patient safety. Because you can't separate those two things, it's all one.

1235 I: Another question would be whether you were ever involved in a construction project or
1236 through your experience? What role did you play in it? (...) What elements that you mentioned
1237 were also implemented?

1238 P3: Well, a working group was set up, and the plans were reviewed and considered. I can't
1239 remember everything, because it was a project that lasted for years, but most of it was approved.
1240 Regarding room layout, for example, when we had someone in treatment for an eating disorder,
1241 we asked for rooms without bathrooms, to control access to the bathrooms, since patients
1242 sometimes drink tap water to temporarily gain weight. So, things like that. The design of the
1243 rooms, there is a time-out room, it's fully padded, with video surveillance, two kinds of visual
1244 monitoring: video and direct observation. And there too, in the time-out room, we had input, it's
1245 located right next to the nurse's station, for example.

1246 I: So the rooms also have large windows so that nurses can see in from outside?

1247 P3: The time-out room has a window, light comes in naturally, and on the other side, there's a

1248 small window with blinds, and the nurses at the desk can have a direct view of the time-out
1249 room.

1250 I: Which architectural elements or safety measures do you think could be improved? Any
1251 aspects that come to mind? (...) Or do you feel it's already well set up?

1252 P3: No, the safety aspect is quite well covered because we didn't start from scratch, where we
1253 have been before, in the child psychiatry service itself. Now we're in Annex 2, 40 new beds
1254 were added, still within the CHL. The other part opened in 2008, so we already had 15 years of
1255 experience. We knew what to avoid in terms of safety. We also aimed to ensure that children,
1256 patients, staff, all feel comfortable.

1257 I: Yes, exactly, it's a tough balance to manage safety and wellbeing for both groups.

1258 P3: Yes, exactly! I think there's always room for improvement. There are various constraints,
1259 it's still a hospital, so you also have to consider hygiene, infection prevention, preventing patient
1260 aggression and self-harm, etc. You have to take all these factors into account and find a
1261 compromise. One thing I personally find a shame: there's no direct outdoor access. I think in
1262 psychiatric facilities, this should almost be a norm. It would mean that psychiatry units should
1263 ideally be on the ground floor, since access to a garden, especially for children, is a right.
1264 Children have the right to go outside multiple times a day. If there's no direct outdoor access, it
1265 becomes much more complicated. We still do it, but they have to walk a whole way internally
1266 on the floor to reach the playground, which is in the maternity unit. And then there's the safety
1267 concern. Of course, it is different, if you have a patient in a crisis and there's no direct access
1268 outside. Of course, an access to an enclosed, secure garden, where they can 't run away. Where
1269 we can, very easy with the patient, go out, also just a garden would be enough, so he can calm
1270 down. In our setup, we have to go all the way down from the 5th floor of Annex 2, either by
1271 elevator or stairs, and then go outside. There are two options: either outside to the maternity
1272 playground, or through tunnels connecting Annex 2 to the maternity and children's clinic. I
1273 don't know if you had the chance to see that. So yes, it's very complicated, and you can
1274 understand immediately, if a patient is in crisis, we can't just take them to the playground. I find
1275 that unfortunate, and it's not feasible from a safety point of view. The patient might resist, and
1276 someone could get injured or himself. On the other hand, if we had a large door with direct
1277 access to a garden, we could say: "Let's step outside for a bit." I find that personally
1278 unfortunate. I've also noticed, not always, of course, but very often, in general hospitals that
1279 also have psychiatric wards, there's a tendency to place psychiatry on the top floor.

1280 I: That's also the case for the new CHL building.

1281 P3: Yes, they're not on the ground floor, I don't know which floor exactly, but that's really not
1282 right. The exceptions are specialized psychiatric hospitals, like CHNP. There they also have
1283 units with direct access, CHNP has a youth psychiatry ward with a terrace.

1284 I: But one that's closed?

P3: It's closed, it looks more like a cage than a terrace. Still, they have direct access to a terrace, we don't have that here.

I: That's an interesting point. You also mentioned doors earlier, is there a door design that could be safer? Like sliding doors being better in crisis situations to allow staff to exit the room more easily? Or do you see no risk with the doors?

P3: That's a good question. I don't think it's about the system itself. We have two types of doors for different situations. As mentioned, we treat children up to 13, so we also have patients who are 12 years and 10 months, already more like teenagers. I've had situations where someone slammed a door in a crisis, that can be dangerous safety-wise. But even a sliding door can be jammed shut and then slammed too. So neither system is inherently safer than the other. What matters in a crisis, for example when escorting a patient to the time-out room, is to have the shortest and safest route possible, ideally not having to pass through three doors. Doors in terms of safety need different systems to open them.

I: In crisis situations, where does the staff go? Is there a safe room where they can still supervise and be protected?

P3: Yes, we have two rooms. The safest one is completely padded. There's a window, where theoretically a patient could bump their head, but usually they do it once or twice and stop because it hurts. It's quite secure. Staff can either stay with the patient in the time-out room or retreat. A visual monitoring, there's direct and video monitoring. Then next door we have a surveillance room, not a large room, with a bed and cupboard. There we can isolate a patient from the group, for example, if there's conflict in shared rooms, we can separate them and place one in the surveillance room. It's also used if a patient has the flu or gastro, to avoid spreading infection. Or for suicide watch. The time-out chamber and the surveillance room are right next to the nurses' desk. There are two windows, so nurses always have visual contact.

I: So there is also furniture that is designed to prevent self-harm?

P3: Well, our cupboards are made from MDF panels, all fixed, can't be tipped over. In the surveillance room we have a table with chairs. The chairs are plastic and quite light, and the table is heavy, patients can't usually lift it. The bed has no wheels, so it's heavy and can't be done much. In the time-out room, there's a built-in platform with a mattress. Even if the mattress is thrown, it's soft, so no harm can be done. For the door handles, for example, they need to be, as I said it's for the staff and for the patients, the handles have a certain angle, they are not vertical, they have an angle, I would say 90 degrees, so that you cannot hang yourself. Mirrors are made from a special, non-glass material. Shower curtains detach with 5 kg of force, if pulled hard, they fall off. These are standard norms in hospitals.

I: What about the lights, could they be removed? Or the ceiling, is it one piece or individual panels?

P3: Yes, they are panels. You'd have to open a cabinet, climb up, and lift the panels. We already had that. Kids who are very creative. We had to screw some panels down. But for now no one ever came to that Idea, but theoretically it would be possible. Also the sprinklers: if someone throws something at them and breaks the little red glass bulb, the water comes out immediately, even without fire. Then we would have a flooding. So our sprinklers are designed so the pipes aren't filled with water by default, well not directly, so to avoid such things. Our doors also don't open automatically when the fire alarm is pushed. This would also be interesting to talk about it with the technical service. This is, of course, for the patient who want to run away, they only ned to push the button, the doors open and they are gone, so this means there were measures taken.

I: So many safety measures have already been implemented in the new building?

P3: Yes, definitely. Also with the doors, what's interesting is that you need several systems to open them. A key is one method. Ours open with a badge or a key. The problem with badges is if the power goes out, you can't open the door. That's why you always need a key backup.

I: Do you think doors can be an obstacle? In a crisis where the nurse is on the other side of the unit, is it hard to reach the patient quickly? Or do you think the floor plan is well thought out?

P3: Well... In our case, it's more of an issue in adult psychiatry than in youth psychiatry. We work more with children. Children are far less autonomous than adolescents or adults. Adults and adolescents, they also have some moments, where they are among themselves, where they are not necessarily with a nurse. But with children, the average age is around 10, they're almost always accompanied by one or two care workers. Only twice a day, for 30 minutes, they are meant to stay in their room. That's hard, some manage, others can't be left alone or with a roommate. So usually children are not unsupervised. The floor isn't huge, if a staff member needs help, they press a red button and an alarm goes off. Everyone comes to check, psychologist, family therapist, doctor...

I: So enough people can come help then.

P3: Plus theoretically also people from other units, like from the 5th floor, which is on the same level as adult psychiatry. If needed, we can get help from adult psychiatry nurses. We also have hygiene staff who can be called.

I: In your opinion, how do the rooms for adolescents and children differ? That's a different age group, some are still playful, and others already see themselves as more grown-up.

P3: That's an interesting question. I think so, adolescents are at a different developmental stage. A child needs a lot more intimacy. So the room layout must be adapted, including the bedrooms. Of course, we have a playroom. For adolescents, I believe they also have a freetime room, maybe not with toys but other media. Still, there are many common elements. In the adolescent unit, during my internships, the issue of cigarettes also came up. Smoking is forbidden. When I was in Brussels, they had a designated smoking room for adolescents, for example. I think it

would also be interesting to see how the Kirchberg adolescent psychiatry unit and CHNP are laid out.

I: So, currently children or adolescents are in rooms with two patients. Do you think it would be better to have single rooms, or do shared rooms also help with connection to others?

P3: I think a mix is ideal, being able to offer both options. Some children prefer being alone. But shared rooms can also create positive dynamics where they support each other. It's also important to be able to offer single rooms.

I: Do you believe that architecture contributes to your work through a safer, more structured environment?

P3: Yes! Absolutely. The environment, that is, architecture and design, are extremely important in psychiatry, especially child and adolescent psychiatry. Even the first impression matters, it's completely different if you walk into a place where you feel at ease right away, compared to feeling like you're just ... There are many beautiful projects. For example, a few months ago I was at the Université Catholique de Louvain, in the Flemish part, they have hospitals that look like family homes, not like hospitals.

I: So more homelike, patients feel more at ease.

P3: Yes, exactly, that plays a role in the healing process. Our floor looks too much like a hospital. The safety is, I think, very good, but when you walk in, you notice it's a hospital. It's white, no colours. We're currently working on projects to add colour. But certainly, that plays a big role, it's calming. Spaces where you feel like you can move freely, that flow well, where you don't feel locked in, that already makes a big difference. Also having enough space. If you put a group of patients in a cramped, unfriendly room, crises are inevitable. If you put the same group in a welcoming, nicely designed room, there's less stress for the patient, they feel more comfortable. And if they also have enough space to withdraw sometimes, without being completely out of sight, it can already prevent many crises. Plus, if you also have direct outdoor access, then you're really well off. I think more effort needs to go into that. Unfortunately, most psychiatric units in general hospitals don't have that. But there are exceptions... It's a great service. If you ever get the chance, go visit, it's really, really nice.

I: You also spoke about open spaces, a "open floor plan". In the literature, it's also said that it's better to have a more open floor. What's your take on that? Does it make work easier or harder?

P3: No, I'm very convinced by it, and I think there are many real examples that show it. That crises and aggression decrease when a closed ward is turned into an open one. Yes, yes, locking everything is often a result of the caregivers' anxiety, wanting to lock everything and control everything. But that puts pressure on the patient. That leads to crises. I think it's more difficult for staff that way. It's better when patients have fewer crises, feel comfortable, have more freedom. It's long been known and proven that this reduces aggression and restraint measures.

In that case, it's easier for both caregivers and patients. But the caregivers also need to learn to

- 1395 manage their own anxiety and say: “Okay, maybe it’s more open and less secure...?” But that’s
1396 also a mindset thing.
- 1397 I: So safety measures can improve patient wellbeing, helping them feel more comfortable?
- 1398 P3: Yes, space design plays an important role. Also colours, colours have a big impact. A room
1399 that’s entirely yellow doesn’t have the same... or all red doesn’t offer the same advantages. I
1400 think studies have been done on this.
- 1401 I: If you could change one thing that would simultaneously improve safety for both patients and
1402 staff, and their wellbeing, aside from access to green space, what would it be?
- 1403 P3: So, safety for both, for patients and caregivers?
- 1404 I: Yes, but without decreasing wellbeing.
- 1405 P3: ...Well, how I said, the first thing that comes to mind is: when I enter our floor, I feel, and
1406 you can see, that it’s a clinical, sterile hospital. That bothers me. It may not be directly a safety
1407 issue, but indirectly it plays a role. I think if people feel more comfortable, it also helps with
1408 crises and aggression, and thus safety. The other thing: the shared spaces, maybe there are too
1409 many doors. That could have been planned differently. It would be better for smoother
1410 circulation.
- 1411 I: Simply more flowing?
- 1412 P3: Yes, absolutely!
- 1413 I: Is there anything else you’d like to add that we haven’t discussed, something I should
1414 definitely keep in mind as a future architect if I were to design such a facility?
- 1415 P3: I already mentioned this, but here’s my advice if you ever get such a project, definitely go
1416 abroad and look at different facilities and institutions. We don’t need to reinvent the wheel.
1417 Many things have already been thought through and implemented. Take enough time to visit
1418 different institutions, Germany, the Netherlands have many great projects, also Belgium.
1419 France, I’m not sure. But definitely that, to get good ideas. Of course, not everything is always
1420 feasible, there are constraints, but I find that super important. Also check what’s already been
1421 done, what worked, what didn’t? And the other thing I personally feel is lacking: direct
1422 exchange, not with the direction, which is often too far removed from the field, but direct
1423 exchange on the ground. Because it’s those people who know what the space needs. There’s
1424 often a tendency: a project is designed, the first version is made, and then it’s not presented to
1425 the teams. I find that a bit unfortunate. Because then people say, “Okay, but this isn’t good,”
1426 and they need to be able to say, “That would be better”. Involve the people on the field directly
1427 and include them in the project thinking.
- 1428 I: I completely agree. Then thank you very much for the interesting conversation and for taking
1429 the time.
- 1430 P3: My pleasure, and all the best for your work.

Interview 3 – Healthcare professionals

1431 I: Could you briefly introduce yourself and tell me a bit about your role in your department?

1432 P5: I'm [P5], I'm a psychiatric nurse, that means nurse with specialization in psychiatry. I've
1433 been working here in the house for almost 20 years now. And just for a little over 1 year now in
1434 adolescent psychiatry. Before that, I did a lot of forensic psychiatry. That means working with
1435 mentally ill offenders and also in prison. And for me, it was just time to do something new and
1436 that's why adolescent psychiatry. I've been interested in that for a long time and I'm also a de-
1437 escalation trainer, that means internal trainer in de-escalation. And it's nice that someone thinks
1438 also of us here.

1439 P4: I'm [P4], I've been here in the house for 19 years. I'm a nurse by profession and I'm also
1440 adjoint here in the service. Well, I had the chance 19 years ago to help set up the adolescent
1441 psychiatry service, which opened in 2006. Back then, CHNP had the mandate to open a ward
1442 for adolescents, because more and more adolescents were ending up in prison. And to avoid
1443 that, the service was opened in 2006.

1444 I: Thank you very much. How do you experience the spatial design of your ward in terms of
1445 your own safety and wellbeing?

1446 P4: So if I may start, I'll say directly how it is, we effectively have many hidden corners. It's
1447 really not ideal for us, because also for the safety of the patient, you can't leave them alone, you
1448 also have to watch out, it always depends on the clientele you have, and you don't always notice
1449 everything. It's all, not at all, not visible. Indeed, the rooms, the bedrooms are in a corner. We
1450 are in the middle of an aquarium, that's what we call it, we are in the middle of a floor. And you
1451 basically just see the rooms and not the rest. We also have activity rooms, also day rooms where
1452 we eat is in a completely different area, and if we're not there, you don't notice what's
1453 happening. I find that really not visible. That bothers me a bit because...

1454 P5: One must also say that we are here in a building that wasn't newly built, but has been there
1455 since the 80s, and so there are just the existing spatial layouts, I think they tried to get the
1456 maximum out of it. But for me too, as a de-escalation trainer who has an eye a bit on safety, I
1457 find it catastrophic. It's all much too far apart, much too spread out.

1458 P4: We have already changed things a bit, otherwise when we first opened, the rooms were a bit
1459 different, for example children were allowed to watch TV although we didn't even have a
1460 couch. We rearranged all that and so on. That means we already try in everyday life and also in
1461 the evening in the program to bring everyone together a bit so that we can have an overview.

1462 P5: But that also means that we sometimes have to sit in the hallway. When I watch TV, I'd
1463 prefer to be comfortably on a couch or something. But otherwise, it doesn't work. Otherwise we
1464 don't notice anything, they quickly realise when it's the best time to plan something.

1465 P4: And also regarding, when they shower. We also have showers where, for example, the boys
 1466 and girls are separated, and when the boys go to the showers, they have to actually go over to
 1467 the girls' side, and you have to constantly watch and check what they're doing. I think at the age
 1468 they are, with the hormones and so on, you have to be a bit careful.

1469 I: Would you say there are also architectural elements that contribute to you feeling safe, or is it
 1470 more that you feel unsafe?

1471 P4: Well, as [P5] says, the building is very old, and how should I put this, it's not all falling
 1472 apart, but things do break more quickly. That also brings a certain level of insecurity, risk of
 1473 injury. I think when you look at the windows, there are handles they can pull out and break and
 1474 hit someone with, threaten, and so on. It brings a certain insecurity into it. There's no 100%
 1475 safety.

1476 P5: I also think the layout of the ward makes a difference, for example. When I'm here, I try to
 1477 stay here as much as possible. I have a bad feeling if I let them play billiards alone even for 10
 1478 minutes or so. I'm always a bit on edge because I just don't have them in sight.

1479 P4: It's also about the spatial design. I think also their rooms, everything has been changed
 1480 there, everything is fixed to the floor, bed, closet, chair, everything is fixed to the floor. Because
 1481 we had times when things were broken and so on. Regarding spatial aspects, as [P5] says, if we
 1482 leave the spatial design aside, we do have to show presence with the patients.

1483 I: That means is there also a special room just for you where you can retreat or recover but still
 1484 have visibility?

1485 P5: Well, we have our office, as [P4] said, what we call the aquarium, it's open on all sides
 1486 except at the back, so to the left you can look out, to the right you can look out, it's a relatively
 1487 large room, but part of the rooms are covered and not all, and then at the back corner there's
 1488 another where you can only see something via mirrors. But then the part, for example when
 1489 they're in the common room in the evening, where they play ping pong and things like that, we
 1490 have zero view into that room, zero.

1491 I: So you would wish to have that visibility?

1492 P4: Ideally yes

1493 P5: Ideally yes, of course you then have to also a bit, if I think back a bit to the old times, that
 1494 also contributes to the staff sitting there more often and watching them instead of being present.
 1495 Of course, it's always something where I say it's good that we have to be present and can talk to
 1496 them, but being able to pull back a bit with visibility would not be bad. Especially here in the
 1497 youth area, from a certain time in the late afternoon, then it starts.

1498 P4: It also depends on the clientele you have. Depending on the group constellation, sometimes
 1499 you can allow yourself to just let them run free, but there are also phases where you can't leave
 1500 them alone and really have to watch.

1501 I: So you don't have to be with them constantly?

P4: As I said, it always depends on the group. I think it's a matter of trust. If you're sitting in the office and they're playing kicker or billiards, that's a room we can't see at all from the office, so that's basically not good, because billiards means balls and cues and so on, material they can use to hurt someone. And we've already had things broken and so on. We really have to show presence.

P5: I'm not saying the whole shift, but regularly showing yourself, we're there if something happens.

P4: When we notice that, we also get to know the patients over the course of the day, you can tell if they're tense or not, how they react. Then you can also say, "Okay, we'll leave them alone for a few minutes, that's okay," and there are also cases where we say "No," you have to be permanently with them.

P5: So I have to be very honest, when I look at a year ago, in adult psychiatry, there comes a certain time, late afternoon, when you leave people almost entirely alone, the last 2-3 hours of the shift are calm for everyone. I have to say here, the level of presence is higher.

I: I understand. Which architectural elements or safety measures should in your opinion be improved

P4: Well, we're in a psychiatry, and in a psychiatry, you need soft rooms, we call them "Mauererdeis" here. That's a room where the door is closed, where the patient can't hurt themselves if they're aggressive or have had a crisis. We also have a fixation bed. I think in psychiatry, you partially need fixators. For example, if I compare, when we need our fixation bed here, I can't tell anyone, but we have to open three doors before we can use the bed. And that takes a lot of time. And the staff member also has to go out at that moment to go get it. There I would start, it is really bad located the fixation bed. In the end, you would just need a room on the floor with a fixation bed ready, so that if something happens, you can act very quickly. Our soft rooms are not ideally located, we have to open a door to go into a certain hallway, that's also not ideal. In the end, I think we should have those two rooms on one floor where you don't have to open a hundred thousand doors, where you have direct access if something happens.

P5: What I don't find ideal is, we are here on a third floor, that means we also have a secured courtyard to go down with them. Of course, we have to go down three storeys of stairs, where we know a lot can also happen on the stairs. I'm someone who leads groups, and I go behind, so I don't maybe get a foot in my back and fly down three floors. That means for me, ideally, every psychiatry, such a closed service, should be on the ground floor, with direct access to a secured courtyard.

P4: Then basically with the youth, it's very important, you should simply have a sports hall.

P5: Yes, I also think so

1538 P4: Because we have patients who don't have the right to go outside, because then it takes 1, 2,
1539 3 weeks until the judge's approval is there, and simply to make it possible for them to do some
1540 sports, team sports, and just have access to a courtyard, a terrace, a sports facility.

1541 I: So your courtyard is completely closed or also open?

1542 P5: No no no, it's completely secured, with a relatively high fence, 4–5 meters high. That means
1543 we can be there with them, and the risk of escape is almost zero.

1544 P4: Except if someone forgets to lock the door. And if there were a patient who runs there, but
1545 otherwise no.

1546 I: In your opinion, how do the spatial needs of adolescents differ from those of children or
1547 adults in psychiatric wards?

1548 P4: Well I would say here just in this service we always make sure that each adolescent has their
1549 own room simply to have privacy because in a closed psychiatry the only room that belongs to
1550 them is basically their sleeping room. We always make sure that everyone is alone. Now with
1551 the adults I have less experience than [P5]

1552 P5: Yes but we also can't really compare because in the adult section it's in a high-rise building
1553 from the 60s which is architecturally catastrophic so now there's the new project to build the
1554 new rehab clinic here. I hope that we, I also can't say right now what exactly is different there.

1555 I: Are you involved in the planning or have you been involved in a construction project before?

1556 P5: Well I personally can say that once about 10 years ago when it started with new rehab
1557 clinics when the first things came, I was a few times in meetings where architects were there
1558 where small groups were put together with nurses doctors a bit of everything, I yes.

1559 P4: Yes me too, I think about 2–3 years ago that became a bit more current when they started
1560 making plans we as a team were asked a few times and were in one or the other meeting how we
1561 envision it in the future how it should look and so on, simply to avoid the problems we currently
1562 have.

1563 I: Are you only involved at the start of the project or also until the end?

1564 P4: So far only at the start, the plans are somehow still a bit up in the air whether that's now
1565 concrete and when they start we don't know, at the moment there's kind of a small pause in
1566 between, I don't know more right now but there are plans to redo the whole site.

1567 I: And if we go back to rooms bedrooms for adolescents. Can you see inside from outside are
1568 there windows

1569 P4: [Shakes head no]

1570 I: Everything is closed?

1571 P5: Closed

1572 I: And how do you feel about that in terms of visibility?

1573 P4: I think it's good for me yes, because as I said for me that's privacy. That's basically as I
1574 explained it, they can withdraw, they can be alone that's theirs basically.

1575 P5: The problem is that you can almost never actually do that in the first place. For me it
1576 otherwise looks too much like prison with the observation windows where you open a flap and
1577 can look in. And the other adolescents constantly go past the rooms and like to play with
1578 opening the flaps. Especially also when you have people who are in a crisis and not necessarily
1579 going into the time-out, but just say go back to your room, then I find it not very appropriate
1580 that everyone can look inside from the outside. That's my opinion.

1581 P4: No, no, that's right those are their private things.

1582 I: Have you had experience in which the direction of the door opens is better. For example if it
1583 opens inward?

1584 P5: I see it differently. In terms of safety the door must open toward the hallway. Because if
1585 they hide something behind it or barricade it and I have to push the door open I can't get in. I
1586 have to be able to pull the door for me that's absolutely necessary.

1587 I: If the fire alarm goes off do all the doors open automatically?

1588 P4: The doors are never locked, here nothing is locked. Everything that's in the patient corridor
1589 nothing is locked. Except if they leave the floor and go for the weekend for example then to
1590 make sure nothing is stolen from the room then they are locked with a key. But no patient in
1591 their room is locked from the outside.

1592 P5: The only thing that would lock with the fire alarm are our fire doors. Those do lock. But
1593 electronically we're not very advanced in this old building here. But as [P4] said nothing is
1594 locked anyway.

1595 P4: So in terms of safety what you should maybe know architecturally the windows. Here I'll
1596 show you what it looks like. You see the small window at the top that's openable.

1597 I: That's the only one that opens.

1598 P4: Yes, yes, the patient can basically open and close that one. The big ones no those are locked
1599 with a key.

1600 I: And that's the same on the whole floor?

1601 P5: On the whole floor, only the small top one can be tilted open.

1602 I: In your opinion can safety measures have a positive or negative influence on the patient?

1603 P4: I don't want to say that the service is too secure. And indeed the doors, anyone can if they
1604 kick them hard two or three times, break them. I can give you an example of a situation where
1605 we had a patient who was here for three days who was in a conversation with the foyer with one
1606 of us and then suddenly went into a huge crisis, he managed to break two doors with his foot
1607 and run away. And then I say to myself well okay, I'd rather he breaks a door, than hits one of
1608 us or tries to steal the keys and so on. Then I think it's actually good that it's like that.

1609 P5: Yes and no, I'm a bit torn about that. Of course extreme security can also foster that they
1610 don't feel as comfortable and on the other hand if things were more secure or we had more, we
1611 could have more visibility in other rooms. Then you could of course also leave them alone more

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1612 and not maybe always have one of us standing there. I don't now I have a bit of a mixed opinion
1613 on that.

1614 P4: I think it always depends on the group you have, that really plays a big role.

1615 P5: Yes that really plays an enormous role.

1616 P4: You can have a group where you really have to be permanently present and watch so they
1617 don't maybe steal or try to run away or so. You also have groups where you know you can just
1618 leave them a bit more freely.

1619 P5: That's here and I really have to say the enormous difference between adult and youth
1620 psychiatry, firstly here we have completely different dynamics, we don't have like in adult
1621 psychiatry patients who are here for 3–5 years, but you can say if you were on vacation for three
1622 weeks, then maybe there were three new ones here and three discharged again. That means for
1623 me there has to already be a certain level of security to be able to do justice to all the patients
1624 and as [P4] says we had a long time, well months long, a group where nothing happened, easy,
1625 and then three patients change, like now, then it's more difficult again.

1626 P4: And the security also gives us a certain sense of security or to the staff who have a bit less
1627 experience. You just feel safer because of that.

1628 P5: For me really the biggest security for the patients is us. The staff who are there, if you're
1629 lucky like here to really have a good team a good mix between the younger and the more
1630 experienced who bring experience from different areas, for me we are still the greatest
1631 framework of security which exists.

1632 I: And when we talk about open spaces, simply open areas, where groups gather how do you see
1633 that ? Could that make your work easier?

1634 P4: Well we have a very large open room where we eat, where the kicker and billiards are,
1635 where you can just let them play sometimes and that also builds a very good atmosphere, a good
1636 vibe. And that again depends on the group you have. And that again plays a certain role I think,
1637 then you also feel more comfortable, rather than to ask to open the door, close the door.
1638 Otherwise well since the building is old we just don't have those possibilities.

1639 P5: But also this room, when we close the door, they have to come ask us. There are groups
1640 where I honestly say, where I leave the room open after dinner where they can just move freely.
1641 But that's also the specificity of the youth area, that not everything is black or white. I also
1642 really like to know where everyone, I have to honestly say that.

1643 I: So do you go into your office once or twice a day or almost never?

1644 P4: Yes, we also have to write, make phone calls, prepare medications, make discharges, bring
1645 things in and out.

1646 P5: But even then, we're never alone, if we have the door open, then there are another three
1647 with us. Because if we don't look for them, they look for us. They seek a lot of contact, "I'm

bored” “let’s do something”. If our door is closed, it’s very bad, then they stick against our window.

P4: If the door is open, then sometimes no one comes, but if the door is closed, then they think they have to come check, and then suddenly there are three of them standing there.

I: If you could change one thing that could improve your safety and wellbeing, what would it be?

P4: Visibility for sure, from the office and maybe a bit more open spaces where you have everything in view, not so many corners. And I also say fixation bed and soft rooms, that they are directly included in the ward, that already plays a certain role.

P5: So that’s definitely a topic where I say, that needs to be thought about, they have to find perfect rooms and space. And for me it’s simple those things all have to be on a ground floor. With access to a garden or a courtyard where you can just let them go out alone sometimes or say “okay between morning and afternoon outside of activities you can go into the garden” where we also have constant view. That’s what I would really wish. But that’s also important in adult psychiatry, like in forensics, where you say, come on let’s go out a bit.

P4: But in the end, it’s always the patient who ultimately sets our limits. Just like the current clientele, a different clientele brings our attention to other things and then again to other things. I think today they’re building and then later it’s somehow no longer up to date.

P5: I renovated my house five years ago and today I would do this, this and this differently. I think that’s a bit what [P4] says.

P4: Exactly, exactly.

I: And regarding colours, regarding healing architecture what can you tell me about that?

P5: I personally believe a lot in that. A few years ago, I started in the building on the 5th floor. That was painted bright orange and then we had a lady who redid everything also with more calming colours. And I have to say that was a huge, huge difference.

I: Not just for patients but also for you I assume.

P5: For everyone. The calming colours. compared to the bright orange, that was really a signal colour. I don’t know who came up with that idea, but well here it was like that too.

P4: That has really changed a lot now, regarding colours. I think, if it were also possible for the patient to simply paint their room or choose the colour, they want that would also be ideal. Well, whether that’s always feasible, because patients are moved from one group to another, sometimes we have to adjust a bit, because maybe the patient who’s all the way in the back corner is no longer doing so well and maybe then needs to come closer to the office, that might be. We had in the beginning, or after a certain time, we had two pink rooms. I think they were done in Switzerland, they were supposed to be very calming, but that wasn’t ideal for the adolescents, they complained a lot about being in the pink room.

I: And then you changed it again?

1685 P4: That was later changed again yes to a neutral colour.

1686 P5: I think there's definitely a lot where that plays in and here in the service at CHNP where we
1687 work with milieu therapy, you've probably heard of that those things, fall under it too. If I look
1688 at the ward downstairs, well those people are all there voluntarily, but it already looks a bit more
1689 homely there. When you come in it looks like a living room. Well, here we're simply in an area
1690 or forensics where it reaches its limits because certain security concepts have to be developed.

1691 I: In your opinion, should the ward have more homely adapted furniture or hospital furnishings?

1692 P5: Mixing a bit of both, that would be the best. I have to say that exists, because I was recently
1693 in Frankfurt at a training and there were manufacturers of furniture, really security furniture and
1694 they go in the direction where you think it's a living room. So, they've adopted the concept that
1695 it looks homely but is still safe. I was very surprised because we know from forensics, the ugly
1696 blue armchairs, where if you throw them nothing happens, but this here already looked really
1697 good.

1698 P4: Yes, I think in that regard we've already made a lot of progress, and I think indeed also
1699 going more in that direction. As [P5] says for the more homely. We also got couches by the TV
1700 that already looks a bit different now compared to a psych ward where everything is fixed.
1701 Indeed, it could be set up a bit differently.

1702 P5: Before it was just too cold! It was all clinical everything with pavement, like in the
1703 forensics, the station rooms, even where the beds are it was all with those ugly pavements ugh, I
1704 no! There are cases, but we are in a psychiatry, that's something different than let's say a
1705 normal clinic. Here well-being plays a big role, they're still here for a long time.

1706 I: Is there anything else you would add that we haven't discussed yet regarding safety and well-
1707 being?

1708 P4: Well-being, if I now leave out architecture, I'm missing a lot of things, but those don't
1709 belong here. And otherwise well, yes, I know we're already limited by budget and so on. I think
1710 as [P5] says we are basically the people who ensure the safety, we're also responsible for that. I
1711 think it also matters how we come across and so on, and the rest well as I said, today it's good,
1712 tomorrow maybe it's not good. That's a matter of clientele and so on.

1713 P5: I think it's always a question of budget. I would also prefer if maybe we were one more and
1714 we were even better trained, yes, that's no matter whether here, Germany, it's the same
1715 everywhere. And otherwise, I have to say as someone who has only worked in such areas, I
1716 don't feel unsafe here.

1717 P4: No, we can't complain here, I think there are other places where it's much worse. I think
1718 we're not doing badly, I think we do a lot, we try our best. And people like you doing
1719 something and pushing things forward a bit.

1720 P5: I think you also have a bit of responsibility, later as an architect, to say to the direction we
1721 want people from the field and we're not doing this without them.

1722 P4: And maybe also involve some patient, who has experience, who can give their input. I think
1723 they're simply the ones who always set our limits what works what doesn't, maybe we need to
1724 improve that, ...
1725 P5: Because we just work here, they live here, I think they still have completely different ideas.
1726 I would find it good if that were somehow possible.
1727 I: Thank you very much for your time and the interview.

Interview 4 – Healthcare professionals

I: Could you briefly introduce yourself and talk about your role in the department?

P6: Yes, so my name is [P6], I've been head nurse at the Émile Mayrisch hospital in the psychiatry department for just over 5 years now and I've been a nurse for just over 20 years. I work on both open and closed psychiatry wards. I have a closed ward, known as an intensive ward, where patients lose their freedom and their rights. They are there without their consent. And then at Niederkorn, I have two open psychiatric wards where I have patients who come with all types of pathology for alcohol, depression and psychosis, but who are more or less stabilised. I also have outpatient services, including a day hospital in a house outside the hospital. I have a home care service. I have a team of liaisons who travel to all the sites, because CHEM covers Dudelange, Niederkorn and Esch. So they go to see patients in the other departments when there are surgical or medical problems and there is an associated mental health problem. So that's my departments. So I'm coordinating continuity of care and I'm trying to develop networks, especially in the south of Luxembourg, to encourage continuity of care outside hospital too.

I: How do you feel about the layout of your ward in terms of your own safety and well-being?

P6: Well, the intensive care unit is a closed unit, it's quite small, it's in Esch. And I have to say that we're pleased about that because some work was carried out last year. And we really needed the work in terms of safety for patients and colleagues. So we've redone quite a few things and we've also made things more pleasant for patients. So we actually put a material in the rooms, because they often draw on the walls, so they end up damaging the walls. So we put up what we call wardrobe door panels. And in fact, if you ever write or draw on them, they fade away. So it's really good quality, that's what they had put in the smoking room because I have a built-in smoking room, because these patients can't go outside. So, over time, it's something that stays good and is of good quality.

I: What architectural elements contribute to your feeling of security or not?

P6: In the closed psychiatric ward, I have to say that we feel safe because we have a door with a badge, with badge access. And what's reassuring is that we have an airlock. In fact, since we installed the airlock, we've never had a patient run away. So that's important. I'm also reassured to have a long corridor where we've finally put the outpatient departments, who are therefore available to colleagues in the closed ward in case. So that's also reassuring in terms of architecture. We've also installed cameras to monitor entry and exit points. So that's reassuring too. And not just anyone can enter the service. It's really a personalised badge access, so even nurses and doctors from other departments can't necessarily get in. That's reassuring.

I: And if there's a fire, the doors open automatically?

P6: Yes. There are fire doors. And we're very careful not to leave anything lying around in front of these doors. There are security guards who systematically come in every day to check door access and validate or invalidate the security of these doors. So, it's quite reassuring. And for the patients, as the department is small, it's also rather reassuring in terms of the contents.

I: And are there also areas reserved for staff to withdraw or protect themselves?

P6: There's the office, which is also only accessible by badge. So, they can be safe there. And in any case, I have a security team. There are at least three in the department, with one man per shift. So, they're not allowed to leave the department with more than one person so that there are always two.

I: But isn't there another area where you can withdraw?

P6: No, no, no.

I: And there's no need for that either? do you think it's enough to have an office?

P6: In any case, we didn't need it today because we've got an alert system on our phones. So if we have a problem, we press this red button and the whole hospital has access to our department. As a result, the doors on the badges deactivate. So there are always enough of us to protect ourselves.

I: And have you ever experienced a situation where the design of the space prevented or aggravated an accident? Perhaps the doors, too many doors, something like that?

P6: Who prevented an accident? I'd say that the way we arranged the rooms, i.e. the furniture, we put in non-hazardous furniture. We really studied everything. We put in footstools and foam tables. So we paid attention to all that. And it's true that as we've experienced some serious events in the department, we took all that into account to adapt our environment. The beds are also special beds. There's no electric track, so there's no risk of suicide. Nor can the beds be dismantled and placed in our faces or against the doors. So everything has been designed with safety in mind.

I: And there are also soft rooms, I don't know what you call them, time-out rooms?

P6: Yes, yes. No, it's true that that's missing though. It's something that's missing, I think, for the closed ward in Esch. We still need more space because we have a lounge area where they can eat and watch TV. Thanks to the management, we still have an extra room where we can hold meetings, where we can take maintenance patients.

But I still think that this department lacks access to the outside, so that they can still go out and breathe the fresh air, even if it's just for an hour a day. And I think we also need an extra rest room. Something where you can have a quiet room, where you can switch off from sport, something like that. That's what's missing in this department.

I: So if patients have a crisis, they stay in their room?

P6: Yes, they do. They stay in their room. The room is adapted so that they can't be in any danger.

- 1799 I: And also, the ceiling, it's...
- 1800 P6: It's designed with traps. The hatches are closed securely so that they can't escape. Because,
- 1801 in the past, someone managed to dismantle it and get through the ceiling. So that's no longer
- 1802 possible.
- 1803 I: And what architectural elements or safety features do you think should be improved?
- 1804 P6: As far as safety is concerned, I wouldn't say anything today. Because I think it's really been
- 1805 designed for that. On the other hand, as I was saying, to improve, yes, this calming room, where
- 1806 we could do a bit of sport, that wouldn't be bad.
- 1807 I: What about the well-being of the staff?
- 1808 P6: More than the architecture, I'd say that, whether it's the staff or the patients, it would be
- 1809 therapeutic activities. Enabling people to do even more activities. So that they don't get bored on
- 1810 the wards and just have time to say to themselves, well, how would we like to get out of here?
- 1811 Or am I fed up with being here? So there you go.
- 1812 I: And also, the colours, is it all white or is it... Are there any colours at all ?
- 1813 P6: I have a lot of white, but I'm working on a project to improve the visual aspect of the
- 1814 services. So I'm currently thinking about colours or possibly paint, things like that. Because
- 1815 white is too sterile. It's cold.
- 1816 I: And in your opinion, how do you think the spatial needs of teenagers are different from those
- 1817 of children or adults?
- 1818 P6: Well, yes, I think teenagers need to have rooms where they can withdraw. Because it's not
- 1819 easy. The community for teenagers is complicated. We know that children like to be together.
- 1820 Adults, they have their room and then they have this space where they can watch TV. But
- 1821 teenagers, sometimes they don't have that space don't want to be together, in fact. So I think it's
- 1822 important for them to have a place where they can retreat for a while. Something just for them.
- 1823 I: And can security measures improve or harm patients' well-being? What do you think?
- 1824 P6: Can you repeat the question?
- 1825 I: Can safety measures improve or harm patient well-being?
- 1826 P6: Well, it depends. We're always talking about architecture. Yes. I think it can improve safety
- 1827 because everything I've just explained to you, I think it improves safety for everyone, for
- 1828 patients, but also for the teams. And then, yes, it can be detrimental because it can be restrictive.
- 1829 Because you can have reduced furniture. It may not necessarily be adapted to our expectations.
- 1830 Impersonal. I mean, it might not be too psychiatric. So there you go.
- 1831 I: And in relation to open spaces or an open floor plan, can they improve safety and working
- 1832 conditions?
- 1833 P6: I'm convinced. I'm sure. I'm sure of it.
- 1834 I: And why do you think that is?

1835 Well, because we all need to have a bit of freedom and be open to the outside world. We all
1836 need to breathe fresh air. And I think it opens up our minds and improves conditions as a result.
1837 It's bound to relieve some of the tension. This means, in a closed department, completely closed.
1838 In fact, what I have here in Esch is horrifying. The people are worse than prison. Because in
1839 prison, we know that they can all go outside for at least an hour a day. Here, with us, the
1840 patients, it's not possible. They don't go outside.
1841 I: There's no... to go outside, not even on the ground floor?
1842 P6: No, there's nothing at all. No. They're not allowed to go outside. They don't have any
1843 accompanied outings. And that's with the inhamier colleague. And even then, there have to be
1844 staff. It's not easy. And also, there are windows opposite the patients' rooms where everything is
1845 closed.
1846 P6: There are windows in the rooms, yes.
1847 I: And there are also rollers outside to close them?
1848 P6: Yes, there are shutters, yes.
1849 I: And if you could change one thing to improve both safety and well-being, what would it be?
1850 P6: It would be the famous soothing room. That's for sure. Whether it's an open or closed ward,
1851 I'd make an additional calming room with access to sport too.
1852 I: So there's only one room for eating?
1853 P6: On the closed ward, there's a dining room. And then there's a TV room. It's a communal
1854 room. On the open ward, they have a TV room. But they can go outside. On Niederkorn, they
1855 can go outside. So they can go into the garden. There, they have more access to the outside. It's
1856 really... I'm talking about the closed ward, it lacks a relation room.
1857 I: But you're saying that safety is already good for the staff?
1858 P6: Yes, yes
1859 I: And have you ever been involved in an architectural project related to your hospital
1860 department?
1861 P6: Yes, because I'm telling you, we recently carried out work in a closed ward. So I contributed
1862 to all the safety work. But we couldn't expand the ward. So we were limited.
1863 I: And were you there from start to finish, or just at the beginning?
1864 P6: From start to finish. At Niederkorn, we're also working on improving the quality of the
1865 infrastructure. And we're involved from start to finish.
1866 I: There's also a question about the doors. If the doors open by pushing or pulling, how is that
1867 better for you in terms of safety?
1868 P6: Well, we have... Here in Luxembourg, there's a safety standard for psychiatry. I don't know
1869 whether it opens from the inside or the outside. But in any case, we comply with the required
1870 standard. It's the ITM standard for psychiatry. And that's exactly what we do. The doors have to
1871 open in a certain way.

- 1872 I: Is there anything else you'd like to add that we haven't yet discussed together?
- 1873 P6: No. No. I've said everything.

Interview 5 – Architects

I: Could you please briefly introduce yourselves and tell me a little about your work experience in the field of psychiatric construction?

P7: My name is [P7], I am an architect on the project and was involved in the planning of the psychiatric ward, among other things.

P8: I am [P8], I have almost two years of experience as an architect here in the office on the project and am now responsible for the planning of this floor, which also houses the psychiatric ward, and I have already had meetings with the users.

I: What are your tasks in relation to psychiatric architecture?

P7: At the moment, or right at the beginning, the biggest challenge was actually to design it in a way that would prevent suicide. That was actually the big issue. We have two wards, the open and the closed one, well, we don't say closed, we say intensive and general psychiatry, not closed. And in intensive psychiatry, it was important to take all possible precautions in the architecture and furnishings so that no one could commit suicide.

P8: Yes, I was shown the floor plan when I started, and then I clearly recognised these two wards. But for us there were still three, because we have this general ward, this intensive ward, but even within the intensive ward we have three rooms that are even more intensive, so to speak, where the level of suicide prevention is even more intensive and where we also have much more, how shall I put it, vandal-proof equipment and so on. And my job there was to ensure that the rooms where the patients are located are still consistent with the rest of the building, because what was important to us was that the patients don't feel like they're in a psychiatric ward, but because we're in a hospital building, they're still in a hospital. And that they are actually in a standard hospital room, which then only meets the psychiatric requirements in the building.

I: What would you say was the biggest challenge in this planning?

P8: Yes, finding the middle ground between standard hospital construction and the intensive requirements for suicide prevention, equipment and so on. So ultimately, there are still a few differences compared to normal rooms, such as in the bathroom, where you normally have cords that you pull if you need help. We can't have cords here because people would suffocate themselves with them. I don't think we have any curtains yet. In the high-dependency rooms, the furniture is also bolted to the floor, which is not the case in the other rooms. There we have normal chairs and tables, but here they can't move anything. We even have stainless steel furniture, which you would also find in prisons.

I: Are these intensive rooms right next to the nursing staff?

P7: Yes, and they can also, and this is an important point, all the installations are accessible from the corridor. That's also a special feature, which is a challenge when it comes to building

1909 services. It was already complicated to understand how a patient in a psychiatric ward could do
1910 something like that. It's hard to imagine someone removing the lid and flooding the bathroom.
1911 Or the staff must have the option of turning off the water. And so, as [P8] said, we learned a lot
1912 about this in meetings with the users.

1913 P7: Exactly, we were there with the head of the ward, who told us that the walls should be
1914 wipeable because the patients have a lot of imagination and would draw on the walls. Exactly,
1915 that they would drown themselves in the toilet, for example, because they would dab it with
1916 paper, blah blah. And that's why we have the special feature, as [P7] said, that we have valves in
1917 the corridors, so the nurses don't have to go into the room to do anything, but can shut off the
1918 pipes immediately from the corridor.

1919 I: Speaking of doors, which way do they open?

1920 P8: They open outwards in the intensive care unit. But we have cases in the general ward where
1921 we also have double rooms, and there they open inwards, which the user had already briefly
1922 complained about, but we had no other option.

1923 P7: That's the standard, so we started from there and continued with it.

1924 I: Is there any difference between youth and adult psychiatry in terms of anything that needs to
1925 be taken into account?

1926 P7: I don't know.

1927 P8: No, we don't know.

1928 I: How do you combine staff safety with well-being in your designs? Because people always
1929 talk about suicide, but staff tend to be pushed into the background.

1930 P7: Yes, that reminds me, right at the beginning, when we were furnishing a therapy room with
1931 a couch, the question kept coming up as to whether the therapist should sit with their back close
1932 to the door. And escape immediately.

1933 P8: Yes, exactly, because in all the rooms, the doctor or whoever is sitting facing the door, so
1934 they can look in and welcome the patients, but here in this room, it's actually reversed so that
1935 they can escape in case someone becomes aggressive.

1936 I: But there aren't two doors to escape through?

1937 P7: No, we have this time-out room, which has an airlock where the staff can go out, so it has
1938 two doors.

1939 P8: We also have a door that is larger so that the patient can come in with the bed, but that is
1940 rarely used, and then there is this famous airlock. But we also have a viewing window to the
1941 room from a monitoring room, which will also be tinted. And the patient also has their own
1942 bathroom, which is connected to a security interface, because are we allowed to have a camera
1943 in the bathroom?

1944 P7: Not really.

1945 P8: But we also want to give him his privacy, otherwise we might as well not leave it open.

- 1946 P7: Yes, at first there was no door planned, but then we decided to have one after all.
- 1947 P8: Yes, that's right, so we make sure that the person is not in a prison, but in a psychiatric
- 1948 ward, where they can feel comfortable and have their privacy, but only to a certain extent. And
- 1949 because we don't have any experience in this area, we let the users advise us.
- 1950 I: What would you say are spatial measures that offer both security and a pleasant working
- 1951 environment?
- 1952 P8: Do we have viewing windows in the doors?
- 1953 P7: Yes, I think in these three there, yes, definitely.
- 1954 P8: And cameras, I think.
- 1955 P7: Pleasant working conditions...
- 1956 P8: So, for example, are there specific areas where staff can retreat to?
- 1957 P7: No, there's the normal base.
- 1958 P8: Yes, I'm not sure anymore whether we have cameras, but if so, I think so, because the
- 1959 statement was that people are monitored by camera, i.e. externally, so the staff don't have to go
- 1960 into the room, but look in from outside. So for the intensive cases, yes, but generally speaking,
- 1961 definitely not. For the moderate cases, I'm not sure anymore. But the staff do keep their distance
- 1962 when it comes to intensive care, which is why we have these viewing windows. I think they
- 1963 only go into the room in serious cases. But yes, if they are in the room, then they are in there
- 1964 and there is no way to escape.
- 1965 I: And with the alarm buttons, for example, when patients press them, do all the doors open or
- 1966 are all the doors open? Can they be closed automatically?
- 1967 P7: The patient room doors are open, except for the three that have the option of being locked.
- 1968 The others are never locked, but the three have the option.
- 1969 I: When you press the alarm, they open.
- 1970 P7: That's a good question.
- 1971 P8: So the ones in the corridor are securely locked. They can only be opened in their area.
- 1972 P7: So if, for example, you have to escape, but it's still a good question for the... I don't think
- 1973 any room is officially locked. Because normally, when you lock a door, you have an anti-panic
- 1974 feature, but in this case, let's say the user says, 'We're definitely locking these three rooms,' then
- 1975 there will be an alarm button that can be pressed, and then the door will be unlocked under the
- 1976 alarm. So, in principle, you can't lock anyone in, that's true. And then you would need an escape
- 1977 door terminal, which you would have to install completely. Of course, that could also be
- 1978 misused. But it's a great question. We have these door terminals at all escape routes, so no one
- 1979 can get out without triggering the alarm. These doors are alarm-secured in that sense, but you
- 1980 would have to ask again about those three doors.
- 1981 I: How could an open floor plan be designed in relation to psychiatry and also offer retreat
- 1982 options for staff?

- 1983 P8: Well, we don't have any retreat options either, because it's a smaller room and there isn't
 1984 enough space.
- 1985 P7: So you have a staff lounge, do you? But it's like on every ward, it's not...
- 1986 P8: I think if we had built the hospital like a psychiatric ward and the entire department like a
 1987 psychiatric ward, we would have made different decisions. But since we are in a standard
 1988 hospital building, we have adopted the normal patient cabinets that they have, etc.
- 1989 I: But if we are talking about a new design, an open floor plan for psychiatry, would that be
 1990 more suitable or less suitable?
- 1991 P7: You still have a room, don't you?
- 1992 I: It's more about the support centres, the living spaces.
- 1993 P8: In general, we already have that. We have a patient lounge where they have a washing
 1994 machine, which is also much larger. We even have a smoking room, and they have a terrace
 1995 where they can go out and get some fresh air. We have tried to create a pleasant environment for
 1996 them, where they can spend several months. But it's certainly not as cosy as home.
- 1997 I: You already said that you also work with the users. Who exactly are you talking about? Are
 1998 they there from start to finish or were they only there briefly at the beginning?
- 1999 P8: The client has selected three deputies, two of whom are doctors and one is a nurse...head of
 2000 nursing staff. They basically make most of the decisions, but they also know who to contact if
 2001 there is a more specific question. We often have hygiene staff with us, but in this case, in the
 2002 psychiatric ward, we also had the head of the entire ward with us. I can't remember his name
 2003 now.
- 2004 P7: But he's also a nurse.
- 2005 P8: And he joined us when we were talking about the psychiatric ward and shared his
 2006 experiences with us.
- 2007 I: And now a more legal question. Do the current standards or regulations promote the well-
 2008 being or safety of staff, or do they offer nothing at all?
- 2009 P7: Yes, there's a lot in these standards. There are psychiatric standards.
- 2010 I: But are they mainly related to suicide and for the patient, or is there also something for the
 2011 staff?
- 2012 P7: No, there are also standards for staff. These must be complied with. So that is also taken
 2013 into account here. But you're right, I find it really interesting because you're more focused on
 2014 staff and we're really more focused on patients.
- 2015 I: That's right, I noticed that too. Yes, I think that's all my questions.
- 2016 P7 : Yes, great.
- 2017 I : Thank you.

Appendix C.

Interview analysis

C1. Architects

Interview Nr.	Statement	Code	Category	Theme	Spatial references
1 [lines 1039-1045]	"vary from hospital to hospital[...]some are moving towards this so-called domestic normality, [...] you feel very comfortable and [...] a bit of furniture like at home, can also become a risk in an emergency, an obstacle, an additional expense for care,[...]."	Clinical vs homelike furniture; Homely vs. safety risk;	Homelike vs. Safety	Therapeutic atmosphere vs safety	Furniture
1 [lines 1053-1056]	"vandalism safety or suicide presentation[...] with regard to the desire for a feel-good atmosphere, may be diametrically opposed and combining the two is one of the biggest challenges"	Contradiction between atmosphere and safety	Contradictions in design	Therapeutic atmosphere vs safety	General
1 [lines 1059-1067]	"Yes, very much [...], it is necessary to cluster these department [...] that is a huge difference and you can't mix them so easily."	Adolescents vs Adult psychiatric facilities	Spatial organisation	Functional layout & spatial clarity	Rooms
1 [lines 1073-1078]	"The safety aspect [...], these are topics such as openness, direct accessibility to care, how do I design the support centre, how I create safe spaces where employees can withdraw and take a break from the company."	Retreat & access zones	Access & openness	Functional layout & spatial clarity	Bases & Staff rooms
1 [lines 1081-1087]	"Materials and colours are very important [...], colours have a calming effect [...] pattern or decor can sometimes be disturbing for psychiatric patients or even cause them to hallucinate."	Material & colour impact	Contradictions in design	Therapeutic atmosphere vs safety	Interior design
1 [lines 1084-1088]	"[...] it's very important to work together with colour psychologists, generally with people from other specialist areas, [...] psychologists and psychiatrists [...]."	Interdisciplinary collaboration	Interdisciplinary collaboration	Collaboration & innovation in planning	/

1 [lines 1089-1093]	"[...] it is very important, especially in the more intensive areas, that you always have the second option of escaping from the room."	Escape routes for staff	Safety features	Design strategies for safety & control	emergency exits
1 [lines 1096-1099]	"[...] important to look at the bigger picture short [...] distances and the possible clarity of a ward, these are basic parameters [...] and positioning of the furniture [...] when planning the floor plan."	Importance of short distances, ward clarity, and furniture positioning	Spatial organisation	Functional layout & spatial clarity	Station layout
1 [lines 1105-1113]	"[...]open floor plan [...] I have more opportunity to move [...]. I have to say quite frankly that we sometimes lack the contacts on the other side. The architects might have more ideas than are actually realised in practice."	Open floor plan & implementation barriers	Design vision vs. Reality	Balance between innovation & practice	Station floor plan
1 [lines 1117-1123]	"[...] the users, [...] are very closely involved in every planning decision. Because, of course, as planners we have to familiarise ourselves with the work processes. [...] what equipment they use [...] what the working hours [...] individual steps and they are all very closely coordinated with them."	User participation	User involvement	Collaboration & innovation in planning	Planning process
1 [lines 1024-1027]	"[...] knows the things that are used in their company. [...] we are of course called upon to come up with new solutions and innovative approaches [...] these things can perhaps be implemented."	Innovative approaches	Innovation potential	Collaboration & innovation in planning	Planning process

1 [lines 1131-1147]	"[...]extreme situations, 'dann bescheuen wir uns',there are facets of planning from the inside and from the outside, so to speak. In other words, the patient must not be put in danger from the outside, so to speak, but they must not put themselves in danger either. Anti-ligature aspects. [...] a process in both directions.	Anti-Ligature-Design	Safety features	Design strategies for safety & control	General
1 [lines 1150-1153]	"There are best practice guidelines[...] within a psychiatric ward these are fixed, closed ceilings without fixtures. If there are fixtures, then they have to be permanently screwed down and cannot be opened for patients, etc. Or we have this anti-ligature equipment, hooks that prevent the door buckles from breaking [...]. So there are now products available.	Fixed ceilings and secured fixtures as safety measures; Anti-Ligature-Design	Safety features	Design strategies for safety & control	Ceilings; equipment
1 [lines 1154-1158]	"[...] we have to differentiate between either protecting patients[...] or making it vandal-proof [...], vandal-proofing simply means that we're at the other end of the spectrum [...] there's no more feeling comfortable."	Tension between anti-ligature/vandal-proof features and comfort	Contradictions in design	Therapeutic atmosphere vs safety	General
1 [lines 1167 - 1170]	"[...] science will answer you that it is certainly artificial intelligence that will make the most difference here. [...]therapeutic effect of AI. [...] we cannot yet estimate, talk therapy through an AI already offers us great opportunities."	Future use of AI	Innovation potential	Collaboration & innovation in planning	General

1 [lines 1173-1178]	"They don't get in the way and there is actually very little standardisation [...]. [...] anti-suicide measures, [...] we also found ourselves that there are very few standards. There are best practice examples, literature, [...] also attempts in Germany to standardise things, but there are actually very few standards in this area so far."	Lack of binding standards	Technical & regulatory constraints	Design strategies for safety & control	General
1 [lines 1182-1188]	"Very important [...] technical equipment [...] a big issue, especially in psychiatry, which is video surveillance [...] and [...] data protection, with patient advocacy [...]. The other is this conflict between fire protection and safety [...]. At the same time, however, it is necessary for them to be able to escape independently in the event of a fire. And this conflict is also technically very complex."	Conflicts between safety, surveillance, and regulatory requirements	Technical & regulatory constraints	Design strategies for safety & control	Surveillance infrastructure, emergency exits, fire protection systems
1 [lines 1196-1199]	"Outdoor areas [...] are very important [...] an intimate corner [...] go outside briefly [...] ideally on the ground floor."	Need for accessible outdoor space with privacy	Access & openness	Functional layout & spatial clarity	Outdoor area
5 [lines 1882 - 1896]	"[...]the biggest challenge was actually to design it in a way that would prevent suicide."	Suicide prevention design	Safety features	Design strategies for safety & control	Patients' rooms
5 [lines 1891 - 1896]	"My job was to ensure that the rooms where the patients are located are still consistent with the rest of the building, because what was important to us was that the patients don't feel like they're in a psychiatric ward, [...]And that they are actually in a standard hospital room, which then only meets the psychiatric requirements in the building."	Suicide prevention design / Patient experience design	Contradictions in design	Therapeutic atmosphere vs safety	Patients' rooms

5 [lines 1898 - 1905]	"finding the middle ground between standard hospital construction and the intensive requirements for suicide prevention, equipment [...]there are still a few differences compared to normal rooms, [...] the bathroom, [...]. We can't have cords here [...] in the high-dependency rooms, the furniture is also bolted to the floor [...] even stainless steel furniture, which you would also find in prisons."	balancing safety and normality	Contradictions in design	Therapeutic atmosphere vs safety	Patients' rooms
5 [lines 1907 - 1912]	"Yes,[...] an important point, all the installations are accessible from the corridor. That's also a special feature, which is a challenge when it comes to building services. It was already complicated to understand how a patient in a psychiatric ward could do something like that. It's hard to imagine someone removing the lid and flooding the bathroom. Or the staff must have the option of turning off the water. And so, as [P8] said, we learned a lot about this in meetings with the users."	Staff accessibility Safety features Design challenges	Safety features	Design strategies for safety & control	Corridors / Intensive rooms
5 [lines 1916 - 1918]	"[...]the special feature, [...] valves in the corridors, so the nurses don't have to go into the room to do anything, but can shut off the pipes immediately from the corridor."	Safety features in the corridors	Technical & regulatory constraints	Design strategies for safety & control	Corridors
5 [lines 1920 - 1922]	"They open outwards in the intensive care unit. [...] cases in the general ward [...] there they open inwards, which the user had already briefly complained about, but we had no other option."	Door safety / User feedback	Safety features	Design strategies for safety & control	Doors
5 [lines 1926 - 1927]	"Don't know"	No knowledge	NA	NA	NA

5 [lines 1930 - 1932]	"[...]a therapy room with a couch, the therapist should sit with their back close to the door. And escape immediately"	Staff positioning in therapy rooms	Safety features	Design strategies for safety & control	Therapy rooms
5 [lines 1937 - 1938]	"No, we have this time-out room, which has an airlock where the staff can go out, so it has two doors."	Airlock for safety	Safety features	Safety & control	Door systems / emergency exits
5 [lines 1939 - 1943]	"We also have a door that is larger so that the patient can come in with the bed, [...]airlock. [...] viewing window to the room from a monitoring room, which will also be tinted. [...] patient also has their own bathroom, which is connected to a security interface."	large door / airlock / monitoring room	Safety features	Safety & control	General
5 [lines 1949]	"[...]we don't have any experience in this area; we let the users advise us."	No knowledge	Interdisciplinary collaboration	Collaboration & innovation in planning	General
5 [lines 1958 - 1964]	"[...] people are monitored by camera, i.e. externally, so the staff don't have to go into the room, but look in from outside. So for the intensive cases, yes, but generally speaking, definitely not. [...] staff do keep their distance when it comes to intensive care, which is why we have these viewing windows. I think they only go into the room in serious cases. But yes, if they are in the room, then they are in there and there is no way to escape."	Monitoring / staff retreat lack	Safety features	Design strategies for safety & control	Patients room / Staff base
5 [lines 1970 - 1980]	"That's a good question.[...] ones in the corridor are securely locked [...] an alarm button that can be pressed, and then the door will be unlocked under the alarm. [...] These doors are alarm-secured in that sense, but you would have to ask again about those three doors."	Door locking	Safety features	Design strategies for safety & control	Door systems / emergency exits

5 [lines 1983 - 1984]	"we don't have any retreat options either, because it's a smaller room and there isn't enough space."	Lack of retreat and space	Contradictions in design	Therapeutic atmosphere vs safety	Staff rooms
5 [lines 1987 - 1988]	"But since we are in a standard hospital building, we have adopted the normal patient cabinets that they have, etc."	Lack of retreat zones	Contradictions in design	Therapeutic environment & perception	Staff rooms
5 [lines 1999 - 2003]	"The client has selected three deputies, two of whom are doctors and one is a nurse...head of nursing staff. They basically make most of the decisions, but they also know who to contact if there is a more specific question. We often have hygiene staff with us, but in this case, in the psychiatric ward, we also had the head of the entire ward with us."	Staff involvement in planning	User involvement	Collaboration & innovation in planning	General
5 [lines 2009- 2014]	"there's a lot in these standards[...] also standards for staff. But you're right, I find it really interesting because you're more focused on staff and we're really more focused on patients."	Standards focus Staff safety recognition	Technical & regulatory constraints	Design strategies for safety & control	General

C2. Healthcare professionals

Interview Nr.	Statement	Code	Category	Theme	Spatial references
2 [lines 1233-1234]	"[...] staff safety, but also patient safety [...] you can't separate those two things, it's all one."	Interdependence of staff and patient safety	Spatial design factors affecting safety and functionality	Safety & control	/
2 [lines 1238-1239]	"A working group was set up, and the plans were reviewed and considered [...], but most of it was approved."	User participation	Staff integration	User involvement & planning process	Planning process
2 [lines 1242-1245]	"[...] time-out room, is fully padded, with video surveillance, [...] and direct observation, [...] we had input, it's located right next to the nurse's station."	Strategic room placement based on user input	Safety room	Spatial functionality	Care centre / time-out room
2 [lines 1258-1261]	"I think there's always room for improvement. There are various constraints, it's still a hospital, so you also have to consider hygiene, infection prevention, preventing patient aggression and self-harm, etc. You have to take all these factors into account and find a compromise."	Balancing clinical requirements and safety with therapeutic quality	Design conflict	Safety challenges	General
2 [lines 1261-1265]	"One thing I personally find a shame: there's no direct outdoor access. I think in psychiatric facilities, this should almost be a norm. It would mean that psychiatry units should ideally be on the ground floor, since access to a garden, especially for children, is a right. [...] If there's no direct outdoor access, it becomes much more complicated."	Lack of outdoor access & base location	Nature access	Therapeutic atmosphere vs safety	Outdoor area / location in the building
2 [lines 1273-1278]	"[...] it's very complicated, [...], if a patient is in crisis, we can't just take them to the playground. I find that unfortunate, and it's not feasible from a safety point of view. The patient might resist, and someone could get injured or himself."	Lack of direct garden access in crises	Nature access	Therapeutic atmosphere vs safety	Outdoor area

2 [lines 1282-1286]	"There they also have units with direct access, [...] with a terrace. [...] It's closed, it looks more like a cage than a terrace. Still, they have direct access to a terrace, we don't have that here."	Terrace access & perception as a "cage"	Nature access	Therapeutic atmosphere vs safety	Outdoor area / terraces
2 [lines 1295-1296]	"What matters in a crisis [...] is to have the shortest and safest route possible, ideally not having to pass through three doors."	Safe routing in crisis situations	Security strategies	Safety challenges	Corridor & door layout
2 [lines 1307-1308]	"The time-out chamber and the surveillance room are right next to the nurses' desk. There are two windows, so nurses always have visual contact."	Visual supervision and proximity to staff	Safety & emergency systems	Safety & control	Time-out/ safety room
2 [lines 1310-1317]	"Our cupboards are made from MDF panels, all fixed, can't be tipped over. [...] The chairs are plastic and quite light, and the table is heavy, patients can't usually lift it. The bed has no wheels, so it's heavy and can't be done much. In the time-out room, there's a built-in platform with a mattress. Even if the mattress is thrown, it's soft, so no harm can be done. For the door handles, [...] they are not vertical, they have an angle, so that you cannot hang yourself. Mirrors are made from a special, non-glass material. Shower curtains detach with 5 kg of force [...]."	Anti-ligature furniture & equipment	Safety & emergency systems	Safety challenges	Furniture / equipment / door systems
2 [lines 1310-1317]	"[...] panels. You'd have to open a cabinet, climb up, and lift the panels. We already had that. Kids who are very creative. We had to screw some panels down. But for now no one ever came to that Idea, but theoretically it would be possible."	Ceiling construction & improvised risk behaviour	Safety & emergency systems	Safety & control	Ceilings

2 [lines 1323-1326]	"The sprinklers: if someone throws something at them and breaks [...], the water comes out immediately,[...] we would have a flooding. So our sprinklers are designed so the pipes aren't filled with water by default, well not directly, so to avoid such things."	Adaptation of technical systems for risk prevention	Safety & emergency systems	Safety challenges	Ceiling installation / sprinkler system
2 [lines 1326-1330]	"Our doors also don't open automatically when the fire alarm is pushed. [...]. This is, of course, for the patient who want to run away, they only need to push the button, the doors open and they are gone, so this means there were measures taken."	Fire safety vs. elopement prevention	Safety & emergency systems	Safety challenges	Door systems / emergency exits
2 [lines 1332-1334]	"[...] with the doors, [...] you need several systems to open them. [...] The problem with badges is if the power goes out, you can't open the door. That's why you always need a key backup."	Redundant access systems for emergencies	Safety & emergency systems	Safety challenges	Door systems / access mechanisms
2 [lines 1343-1344]	"[...] if a staff member needs help, they press a red button and an alarm goes off."	Red button emergency system	Safety & emergency systems	Safety challenges	Emergency button
2 [lines 1367-1368]	" [...] architecture and design, are extremely important in psychiatry, especially child and adolescent psychiatry."	Importance of architecture in psychiatric care	Atmosphere & design	Therapeutic environment & perception	General
2 [lines 1375-1377]	"[...]when you walk in, you notice it's a hospital. It's white, no colours. We're currently working on projects to add colour, [...] it plays a big role."	Colour design & atmosphere	Atmosphere & design	Therapeutic environment & perception	Interior design / colour concept

2 [lines 1377-1382]	"Spaces where you feel like you can move freely, that flow well, where you don't feel locked in, that already makes a big difference. Also having enough space. If you put a group of patients in a cramped, unfriendly room, crises are inevitable. If you put the same group in a welcoming, nicely designed room, there's less stress for the patient, they feel more comfortable. And if they also have enough space to withdraw sometimes, without being completely out of sight, it can already prevent many crises."	Room quality & crisis prevention	Atmosphere & design	Therapeutic environment & perception	Common rooms and quiet rooms
2 [lines 1388-1395]	"I'm very convinced by it, [...] crises and aggression decrease when a closed ward is turned into an open one. [...] locking everything is often a result of the caregivers' anxiety, wanting to lock everything and control everything. But that puts pressure on the patient. That leads to crises. I think it's more difficult for staff that way. [...] this reduces aggression and restraint measures. In that case, it's easier for both caregivers and patients. But the caregivers also need to learn to manage their own anxiety [...]."	Open wards	Open vs closed settings	Therapeutic environment & perception	Open floor plan / interior design
2 [lines 1405-1408]	"[...] when I enter our floor [...] you can see that it's a clinical, sterile hospital. [...] It may not be directly a safety issue, but indirectly it plays a role. I think if people feel more comfortable, it also helps with crises and aggression, and thus safety."	Sterile vs. homely design	Atmosphere & design	Therapeutic environment & perception	Ward design
2 [lines 1408-1410]	"[...]the shared spaces, [...] there are too many doors. [...] It would be better for smoother circulation."	Circulation & Space Flow	Circulation & access	Spatial functionality	Common Areas

2 [lines 1421-1427]	"[...] I personally feel is lacking direct exchange, not with the direction, which is often too far removed from the field, but direct exchange on the ground. Because it's those people who know what the space needs. There's often a tendency: a project is designed, the first version is made, and then it's not presented to the teams. [...] Involve the people on the field directly and include them in the project thinking."	Direct user participation	Perceived gaps	User involvement & planning process	Planning process
3 [lines 1446-1449]	"[...] we effectively have many hidden corners. It's really not ideal [...] for the safety of the patient, you can't leave them alone, [...] you don't always notice everything. It's all, not at all, not visible [...]."	Lack of visibility	Visibility & layout	Safety challenges	Ward layout
3 [lines 1457]	"I find it catastrophic. It's all much too far apart, much too spread out."	Disconnected layout	Visibility & layout	Safety challenges	Ward layout
3 [lines 1460-1464]	"in the evening [...] to bring everyone together a bit so that we can have an overview [...] that also means that we sometimes have to sit in the hallway. [...] But otherwise, it doesn't work. Otherwise we don't notice anything, they quickly realise when it's the best time to plan something."	Disconnected layout	Visibility & layout	Safety challenges	Ward layout
3 [lines 1471-1472]	"the building is very old,[...], things do break more quickly. That also brings a certain level of insecurity, risk of injury"	Aging infrastructure and perceived safety risks	Infrastructure & equipment risks	Safety challenges	General
3 [lines 1473-1475]	"[...]when you look at the windows, there are handles they can pull out and break and hit someone with, threaten, and so on. It brings a certain insecurity into it. There's no 100% safety."	Anti-vandalism design	Infrastructure & equipment risks	Safety challenges	Windows

3 [lines 1476-1478]	"[...] the layout of the ward makes a difference, [...]. I have a bad feeling if I let them [...] alone even for 10 minutes or so. I'm always a bit on edge because I just don't have them in sight."	Limited visibility causes anxiety	Visibility & layout	Safety challenges	Ward layout / common areas
3 [lines 1480-1481]	"[...] everything is fixed to the floor, bed, closet, chair [...] Because we had times when things were broken."	Anti-vandalism design	Safety & emergency systems	Safety challenges	Patients' rooms
3 [lines 1485-1490]	"We have our office,[...] what we call the aquarium, it's open on all sides except at the back, [...] when they're in the common room [...] we have zero view into that room, zero."	Lack of visual control from staff office	Visibility & layout	Safety challenges	Office/ common areas
3 [lines 1496-1497]	"[...] being able to pull back a bit with visibility would not be bad. Especially here in the youth area,[...]"	Need for retreat space with maintained visibility	Staff rest areas	Spatial functionality	Staff rooms
3 [lines 1521-1526]	"[...] when we need our fixation bed here, [...] we have to open three doors before we can use the bed. And that takes a lot of time. And the staff member also has to go out at that moment to go get it. [...] it is really bad located the fixation bed. In the end, you would just need a room on the floor with a fixation bed ready, so that if something happens, you can act very quickly."	Inadequate placement of fixation room	Safety rooms	Spatial functionality	Fixation room / emergency room
3 [lines 1526-1529]	"Our soft rooms are not ideally located, we have to open a door to go into a certain hallway, [...]. we should have those two rooms on one floor where you don't have to open a hundred thousand doors, where you have direct access if something happens."	Poor accessibility of emergency rooms	Safety rooms	Spatial functionality	Time-out/ safety room / access

3 [lines 1530-1533]	"We are on a third floor, [...] we have to go down three storeys of stairs, where we know a lot can also happen on the stairs. I'm someone who leads groups, and I go behind, so I don't maybe get a foot in my back and fly down three floors."	Risks due to vertical circulation	Circulation & access	Spatial functionality	Stairwell
3 [lines 1533-1535]	"[...] every psychiatry, such a closed service, should be on the ground floor, with direct access to a secured courtyard."	Ground-level placement for secured outdoor access	Circulation & access	Spatial functionality	Outdoor space
3 [lines 1556-1558]	"[...] once about 10 years ago [...] I was a few times in meetings where architects were there where small groups were put together with nurses doctors a bit of everything."	Staff involvement in planning	Staff integration	User involvement & planning process	Planning process
3 [lines 1559-1562]	"[...] about 2-3 years [...] we as a team were asked a few times and were in one or the other meeting how we envision it in the future how it should look and so on, simply to avoid the problems we currently have."	Staff involvement in planning	Staff integration	User involvement & planning process	Planning process
3 [lines 1584-1586]	"In terms of safety the door must open toward the hallway. Because if they hide something behind it or barricade it and I have to push the door open I can't get in. I have to be able to pull the door for me that's absolutely necessary."	Door opening direction for emergency access	Safety & emergency systems	Safety challenges	Patients' rooms / doors
3 [lines 1603-1608]	"[...] the doors, anyone can if they kick them hard two or three times, break them. I'd rather he breaks a door, than hits one of us or tries to steal the keys and so on. Then I think it's actually good that it's like that."	Controlled vulnerability of materials to prevent escalation	Safety & emergency systems	Safety challenges	Doors
3 [lines 1626-1627]	"And the security also gives us a certain sense of security or to the staff who have a bit less experience. You just feel safer because of that."	Security measures enhance perceived safety for staff	Safety & emergency systems	Safety challenges	General
3 [line 1665]	"I think today they're building and then later it's somehow no longer up to date."	Architecture quickly becomes outdated	Infrastructure & equipment risks	Safety challenges	/

3 [lines 1670-1675]	"I personally believe a lot in that. [...] that was a huge, huge difference [...] for everyone. The calming colours. compared to the bright orange, that was really a signal colour.	Use of calming colours improves environment	Atmosphere & design	Therapeutic environment & perception	General
3 [lines 1689-1690]	"Well, here we're simply in an area or forensics where it reaches its limits because certain security concepts have to be developed."	Limits of spatial design & furniture in high-security settings	Atmosphere & design	Therapeutic environment & perception	Furniture
3 [line 1692]	"Mixing a bit of both, that would be the best."	Limits of spatial design & furniture in high-security settings	Atmosphere & design	Therapeutic environment & perception	Furniture
3 [lines 1699-1701]	"[...] for the more homely, we got couches by the TV that already looks a bit different now compared to psych ward where everything is fixed. Indeed it could be set up a bit differently."	Integration of homely elements to enhance atmosphere	Atmosphere & design	Therapeutic environment & perception	Communal areas
3 [lines 1702-1705]	"Before it was just too cold! It was all clinical everything with pavement, like in the forensics, the station rooms, even where the beds are it was all with those ugly pavements ugh, I no! [...] we are in a psychiatry, that's something different than let's say a normal clinic. Here well-being plays a big role, [...]."	Cold clinical design undermines well-being	Atmosphere & design	Therapeutic environment & perception	General
3 [lines 1720-1721]	"You also have a bit of responsibility, later as an architect, to say to the direction we want people from the field and we're not doing this without them."	Inclusion of staff in planning process	Staff integration	User involvement & planning process	/
4 [lines 1744-1746]	"We really needed the work in terms of safety for patients and colleagues. So we've redone quite a few things and also made things more pleasant [...]."	Architectural renovation improves safety and patient experience	Atmosphere & design	Therapeutic environment & perception	General

4 [lines 1753-1760]	"[...] we feel safe because we have a door with a badge access, [...] an airlock[...], a long corridor [...], also installed cameras to monitor entry and exit points, [...] a personalised badge access [...]. That's reassuring."	Security infrastructure contributes to staff safety	Safety & emergency systems	Safety challenges	Airlock, cameras, secure badge access, corridors
4 [lines 1763-1764]	"[...] security guards who systematically come in every day to check door access and validate or invalidate the security of these doors"	Security protocols	Safety & emergency systems	Safety challenges	Doors
4 [lines 1767-1770]	"There's the office, which is also only accessible by badge. [...] in any case, I have a security team. There are at least three in the department, with one man per shift. So, they're not allowed to leave the department with more than one person so that there are always two."	Staff safety measures / Controlled access	Safety & emergency systems	Safety challenges	Office
4 [lines 1774-1777]	"If we have a problem, we press this red button and the whole hospital has access to our department. As a result, the doors on the badges deactivate."	Red button emergency system deactivates badge locks for staff support	Safety & emergency systems	Safety challenges	General
4 [lines 1780-1786]	"[...] the way we arranged the rooms, i.e. [...] non-hazardous furniture, [...] footstools and foam tables. [...] we've experienced some serious events in the department; we took all that into account to adapt our environment. The beds are also special beds. There's no electric track [...] Nor can the beds be dismantled and placed in our faces or against the doors."	Anti-vandalism design	Safety & emergency systems	Safety challenges	Furniture
4 [lines 1789-1795]	"We still need more space [...] this department lacks access to the outside, [...] we also need an extra rest room, [...] a quiet room. That's what's missing in this department."	Lack of quiet/rest space, no access to outdoors	Nature access. Safety rooms	Therapeutic environment & perception. Spatial functionality	time-out/ safety room / outdoor

4 [lines 1799-1800]	"It's designed with traps. The hatches are closed securely so that they can't escape. Because, in the past, someone managed to dismantle it and get through the ceiling."	Secured ceiling after escape attempt	Infrastructure & equipment risks	Safety challenges	Ceilings
4 [lines 1813-1815]	"[...] I'm working on a project to improve the visual aspect of the services [...] about colours or possibly paint, [...] white is too sterile. It's cold."	Colour design & atmosphere	Atmosphere & design	Therapeutic environment & perception	Interior design / colour concept
4 [lines 1826-1830]	"[...] architecture [...] can improve safety [...] for everyone. [...] it can be detrimental because it can be restrictive. Because you can have reduced furniture. It may not necessarily be adapted to our expectations. Impersonal [...] too psychiatric."	Architecture improve safety and be detrimental	Atmosphere & design	Therapeutic environment & perception	Interior design
4 [lines 1833-1838]	"I'm convinced. I'm sure of it. [...] We all need to have some space, a little freedom and openness to the outside world [...] it opens up our minds and improves conditions as a result. [...] bound to relieve some of the tension. In a closed department [...] is horrifying [...]it's worse than prison."	Open wards	Open vs closed settings	Therapeutic environment & perception	Outdoor space/ Open space