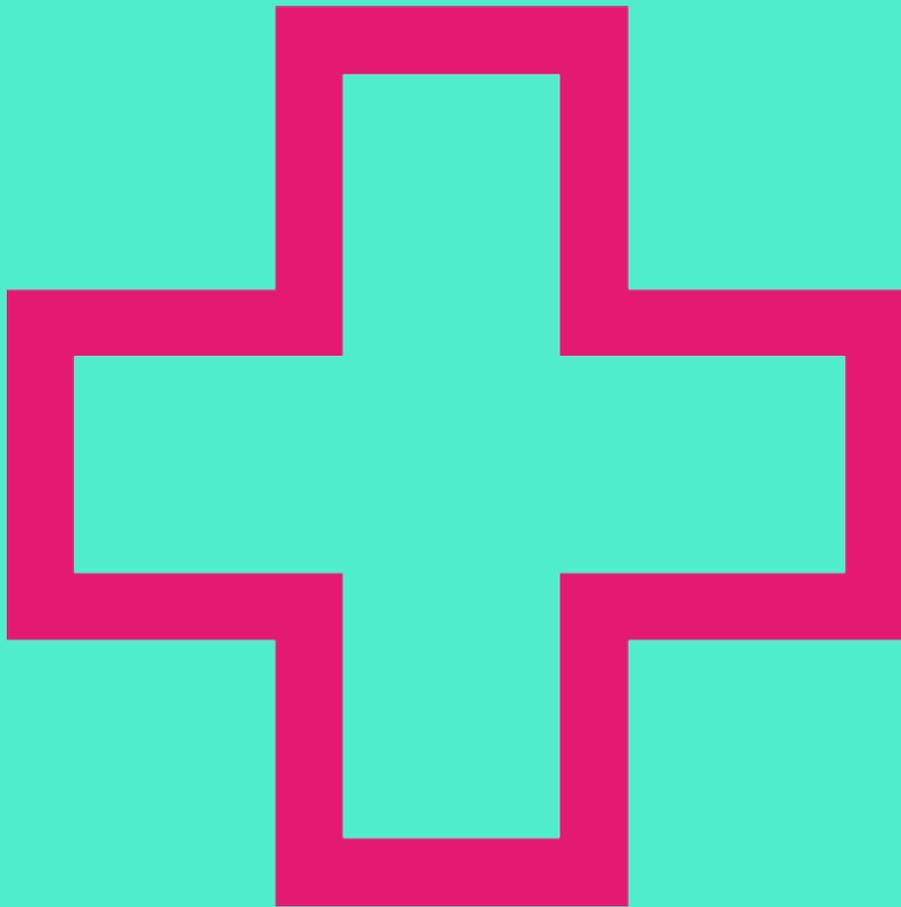


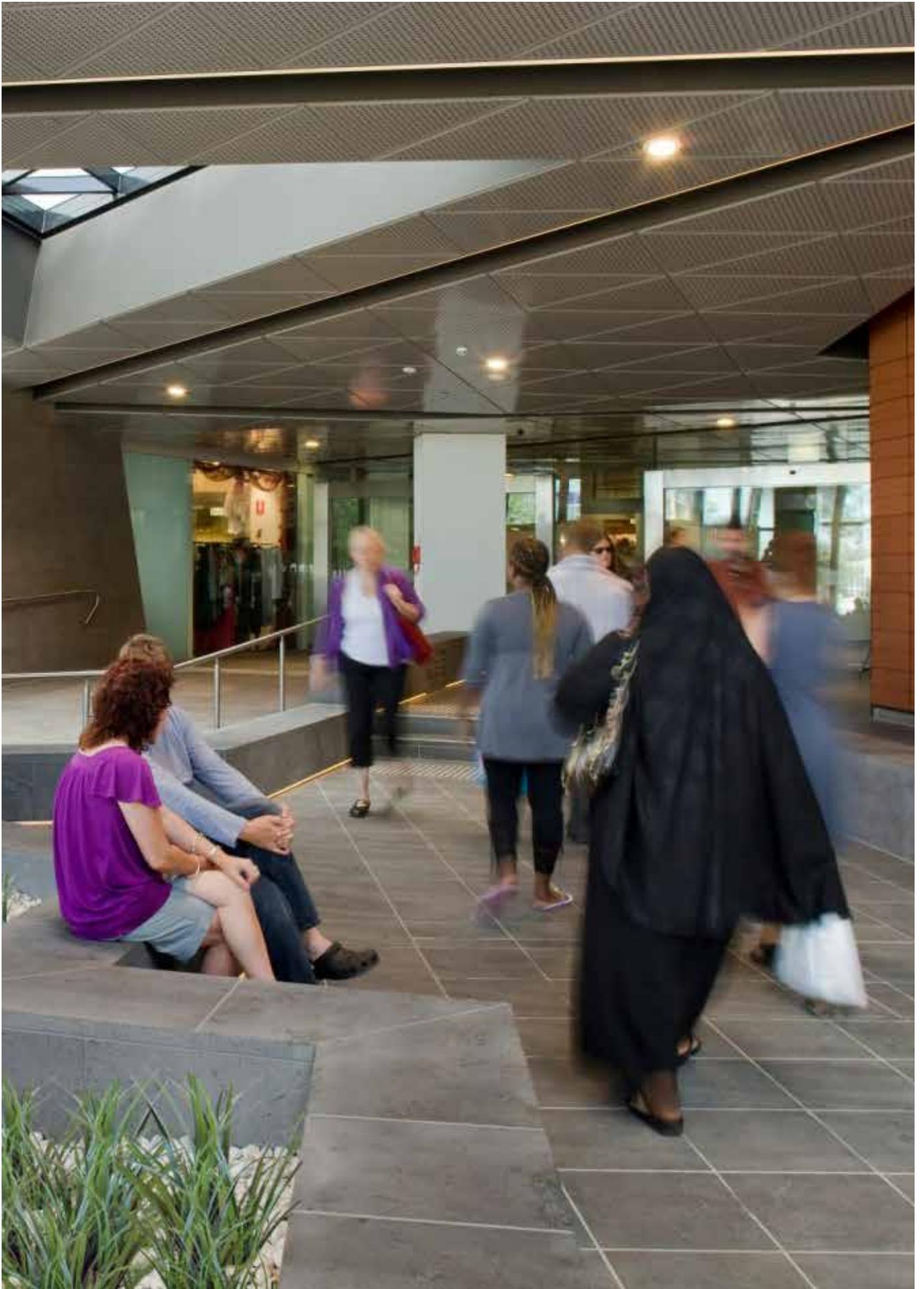
# Emergency Talks

Designing For Staff Communication

In Emergency Departments

May, 2017





Emergency Talks, May 2017



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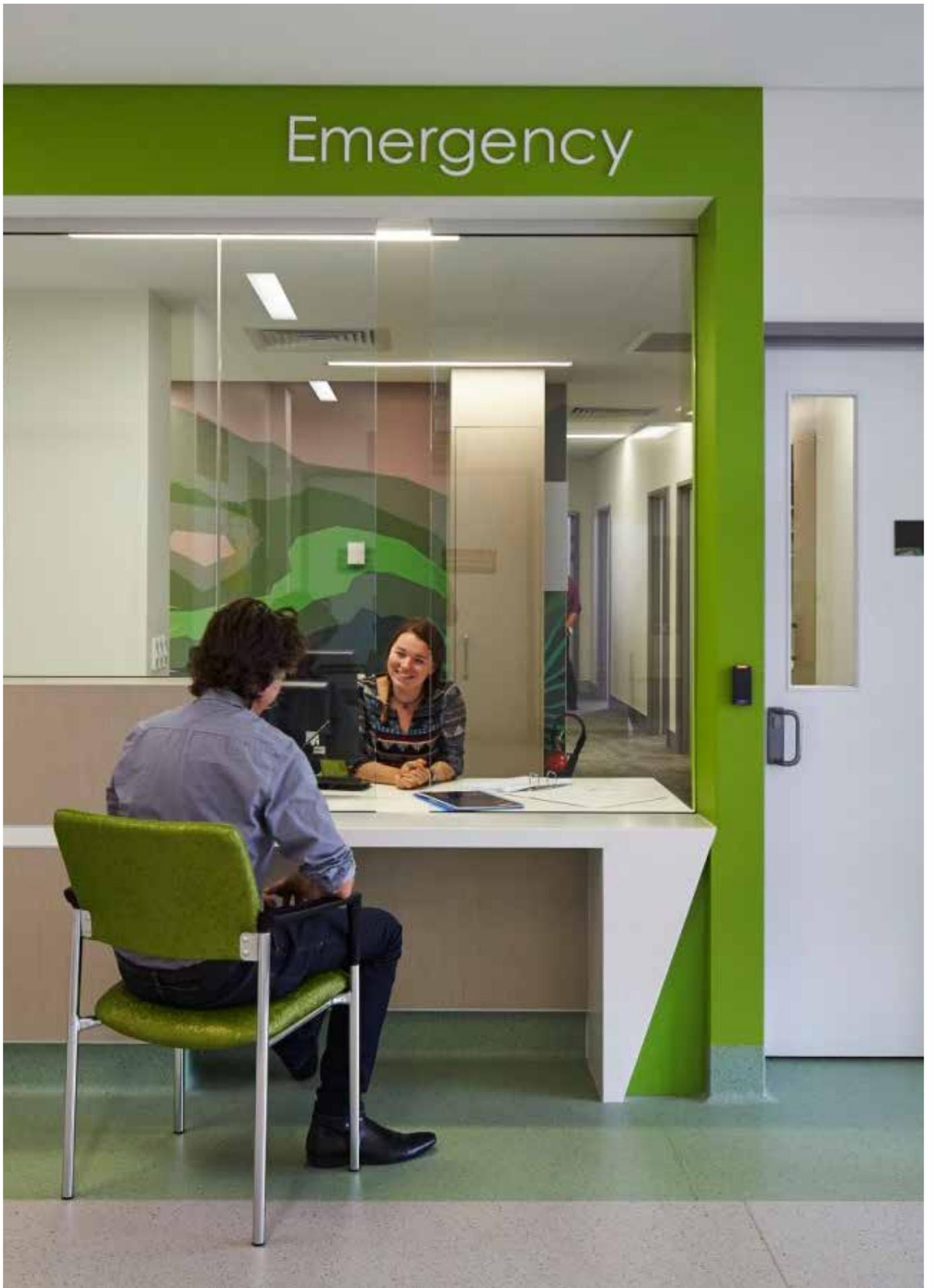
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- Associate Professor Sue Evans, Head, Clinical Registry Unit and Associate Director of the Centre of Research Excellence in Patient Safety, Monash University

Image credit:  
Royal Melbourne Hospital Emergency Department, Melbourne, Australia. Photography by Dianna Snape



Bussellton Hospital, Australia  
Photography by Peter Bennetts  
Emergency Talks, May 2017

# INTRODUCTION

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**On a typical night in any Emergency Department, staff will deal with an array of patient conditions, from broken arms to psychotic episodes, common colds to car accident injuries. In this frenetic environment, communication is the key to effective teamwork that will calm, prioritise and treat those in need.**

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Accuracy and efficiency of communication between staff and confidentiality of information are critical to patient outcomes, but there is evidence of the need to improve both in Emergency Departments.

Miscommunication between staff is a factor in up to 80 per cent of medical errors,<sup>1,2</sup> and confidentiality is inadvertently breached regularly due to the public and highly open nature of the hospital setting.<sup>3</sup>

Outside of the formal communication that happens in meetings and handovers, there are countless informal conversations between staff in passing that are just as important for patient care. In fact, staff often prefer informal communication because it is fast, efficient and convenient.<sup>4</sup>

Despite the importance of good communication, we don't fully understand how to ensure the best flow of information in this type of workplace.

In 2016, Hassell received an Australian Commonwealth Department of Industry Research Connections grant to work with The University of Melbourne and the Monash Health Partnership at Deakin University to identify design elements of Emergency Departments that enable (or inhibit) effective informal staff communication.

# EXECUTIVE SUMMARY

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## What we did

Our qualitative research project was conducted over nine months:

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### Stage 1 - Literature review

Literature review of the relationship between teamwork, communication and design

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### Stage 2 - Survey

An anonymous social network survey of 103 staff (nurses, doctors, allied health and administration) to examine patterns of informal team communication at four public hospital Emergency Departments in Melbourne, Australia

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### Stage 3 - Focus groups

Discussions with 39 of these staff who had taken photos of locations where communication was enabled or inhibited. Staff quotes from these focus groups are used throughout this document.

## What we found

The research confirmed that Emergency Departments are complex systems of action and communication. Staff talk briefly and frequently in all areas of the department. The findings reflect existing literature about how people balance their physical, functional and psychological comfort in the workplace.<sup>5</sup> They reveal some difficult trade-offs that staff make to accommodate their work and their need for occasional refuge in a stressful environment.

The most notable finding is that the current trend to de-institutionalise the hospital environment (by creating more hotel-like spaces and fewer barriers) is not necessarily what Emergency Department staff want or need - a sense of control over when and how they interact and communicate with patients.

## What it means

Three key factors influence how and where staff communicate in their workplace - safety, privacy and connection to activity.

At any given time, which of these factors is most important depends on the nature of the conversation. Staff

differentiate between two types of informal communication<sup>6</sup> and prefer different spaces for each:

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### Case talk

Patient-related conversations, which require acoustic privacy, but not necessarily visual privacy.

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### Comfort talk

Personal conversations, which are preferably out of sight and hearing of patients and sometimes, other staff.

While an Emergency Department typically provides a range of spaces that can be, and are, used for informal exchanges, many of these are not suitable for confidential conversations.

This suggests the need for small, adaptable and protected spaces that staff can use for a variety of activities, including informal communication.

Staff preferences for more enclosed and protected spaces that communicate hierarchy and separation from patients suggest that Emergency Departments need to find a balance between a clinical aesthetic for staff and a calming environment for patients.

## Recommendations

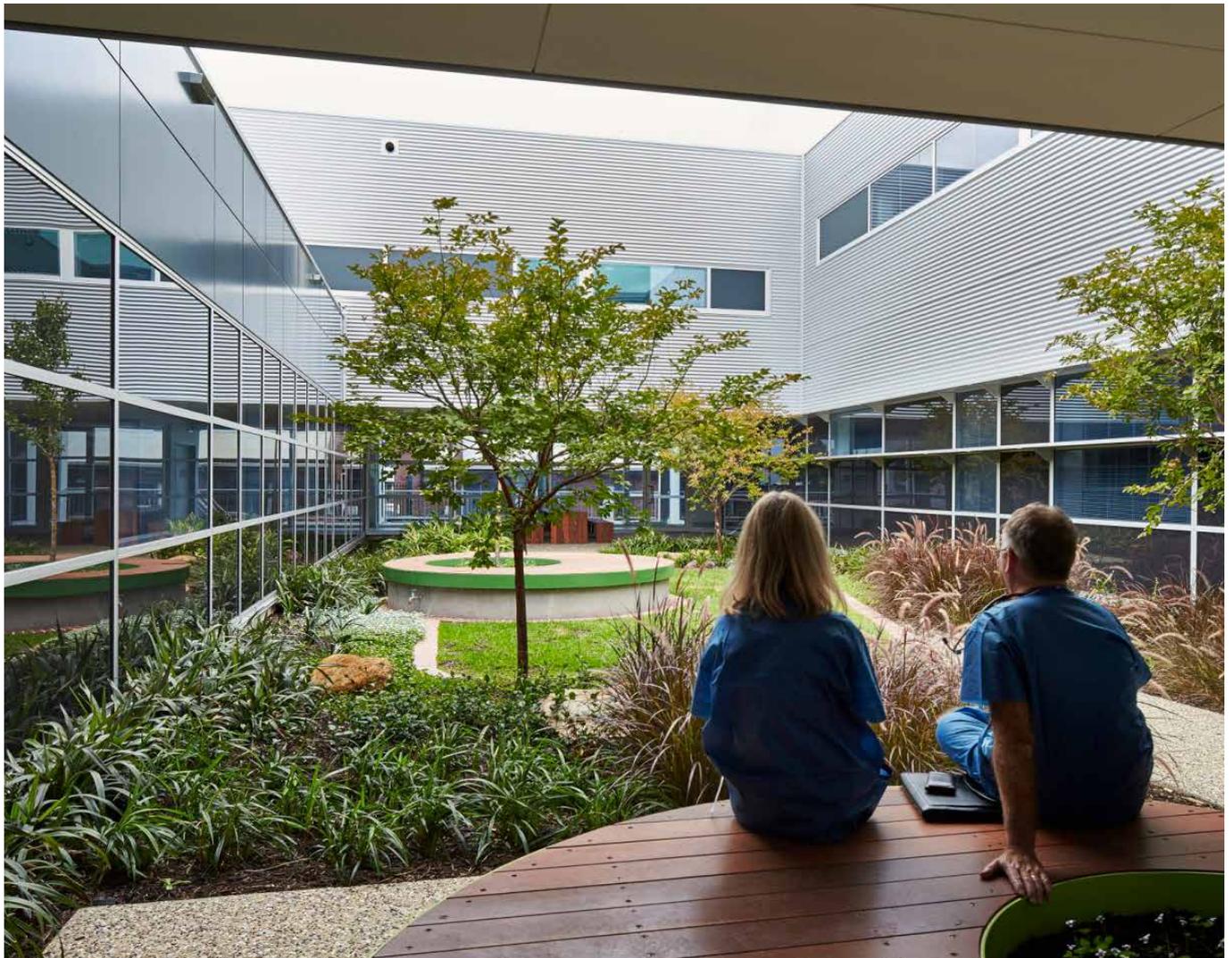
Patients are rightly the critical focus in hospital design, so it is easy to forget that it is a workplace too, where staff spend a significant amount of time.

High stress environments like Emergency Departments need careful design that considers the physical and functional needs of staff, but also supports their psychological comfort.

The research supports Emergency Department workspace designs that:

- recognise and support both case talk and comfort talk between staff
- include small, flexible and multi-purpose spaces that provide visibility and connectedness for staff to optimise awareness and control over their environment
- make it easy to capture relevant informal communication between staff into formal communication systems (e.g. access to workstations, mobile technology, computers)

- balance patients' and staff feelings of close proximity and safety
- appear clinical, rather than homely, to ensure an atmosphere of professionalism and hierarchy



# THREE KEY FACTORS

## Our research reveals three key factors that influence informal conversations between staff:

### Safety

Staff and management both expressed the need for a work environment that protects them from aggressive patients and families.

### Privacy

Staff felt limited in their ability to have confidential patient-related conversations (case talk) and personal conversations (comfort talk).

### Connection

Staff needed to maintain visual connection to patients to ensure ongoing care and accessibility.

Balancing these factors can be difficult. The sheer size and busyness of an Emergency Department, diverse treatment options, and the constant threat of aggressive patients all contribute to a complex system that invites trade-offs between the physical, functional and psychological comforts that we all need in our workplace.

## 1. Safety

The strongest theme to emerge from the research was staff safety. Staff felt safer in some areas than others, depending on the proximity to patients and open space.

### This isn't a hotel!

Unexpectedly, the findings indicate that staff do not necessarily support the current design approach to de-institutionalise hospitals by making them less clinical in appearance. A more open and relaxed environment intended to make patients feel less stressed may have the opposite effect on staff, despite making communication easier.

**“I like the white. It’s clinical, you’re a professional. You don’t want it too warm.”**

Focus group participant

While an inviting, hotel-like environment with fewer barriers may have benefits for patients in other areas of a hospital,<sup>3</sup> a clinical, hierarchical Emergency Department affords staff a level of control over their patients to communicate, to treat and to exclude them if necessary.

## Patient stress and aggression

In their frenetic workplace, staff seek glass barriers, doors, curtains and alcoves to provide safety and separation, while simultaneously acknowledging that this cuts them off from their patients.

Surges in demand (particularly in mental health presentations) that prolong waiting times exacerbate an already stressful time for patients. Aggressive incidents in Emergency Departments are putting staff at unacceptable risk. On a monthly basis, one Melbourne hospital reported more than 100 incidents of threatening or violent behaviour in the Emergency Department while other areas of the hospital received only 10 to 20.<sup>6</sup>

**“It’s important that the triage nurse is protected for the initial assessment.”**

Focus group participant

This is clearly a major concern for hospital management, who often protect their staff from these risks with physical barriers: glazing, walls and joinery at critical points, such as staff hubs, triage and reception.

Aggression is typically the result of non-clinical issues like parking, arrival and waiting, more than clinical care problems,<sup>7</sup> but it does present a design challenge: how to create a safe environment without compromising team work or encouraging a stressful ‘us and them’ atmosphere between the public and staff.

## 2. Privacy

The research confirms that staff are under significant work pressure. Stress and burnout in health professions is a major issue that leads to staff shortages and low morale.<sup>8</sup> Previous HASSELL research into nursing staff attraction and retention<sup>9</sup> uncovered a need in hospitals for dedicated staff spaces that allow them to get away from the patient care areas in order to alleviate stress.

The participants in this research spoke of always being in the patients' sight, and the strain that it puts on staff. They wanted spaces for refuge, places to have a quick break, or to talk privately, about their work and their personal lives.

**“Sometimes in the medication room you can have a bit of a chat. You can see and nobody can hear. But it looks like you’re doing work.”**

Focus group participant

With all available space dedicated to patient care, storage and administration, staff use medication rooms, quiet corridors and empty offices to talk in private. The multi-purpose nature of these spaces is important, because they allow staff to continue to work while they talk, and to be conveniently located near patient activity.

## 3. Connection

Staff identified the need to see and hear patients and other staff whenever and wherever possible, in direct contradiction of their other stated need for respite and disconnection from patients for confidentiality. It’s a wicked dilemma.

Visual connection is important for the safety of patients (eliminating falls, anticipating aggression etc.), while auditory connection allows fast and effective flow of information.

Designers and staff alike grapple with this balance as hospitals become larger and more complex. Priorities will vary between hospitals, and each Emergency Department will require

a different design solution that relies on specific functional needs as well as a thorough understanding of organisational culture.

And the healthcare sector is not alone in its need for ongoing assessment of competing space needs. These dilemmas echo debates in current commercial office and higher education design about space allocations for individual focused work versus collaborative team work.<sup>10,11,12</sup>

The same parameters apply – sometimes workers need to work together, and sometimes they need to work quietly alone.

**“The break in the glass allows easy access to the person over in the corner saying 'are you free - can you help me for a minute?'"**

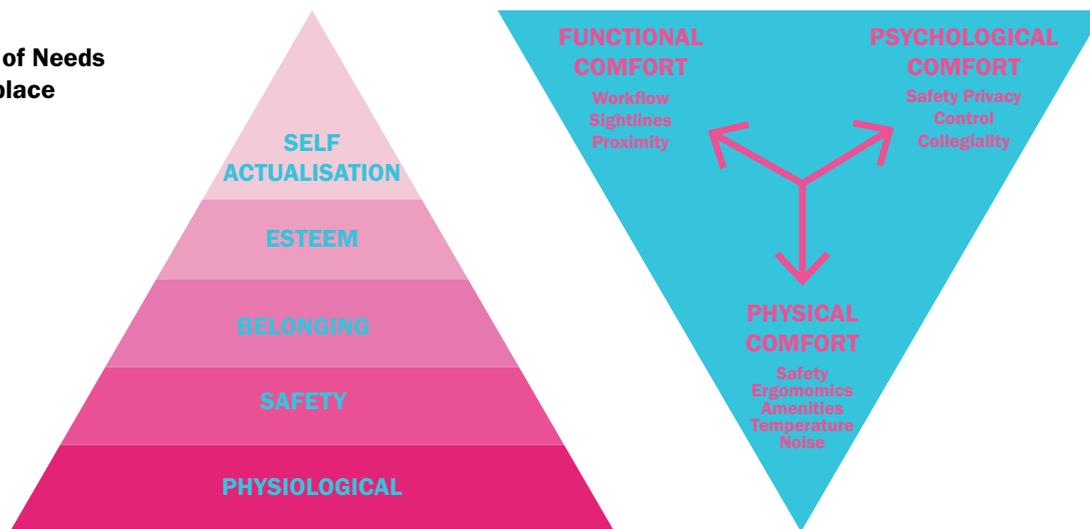
Focus group participant



Fiona Stanley Hospital, Perth, Australia  
Photography by Peter Bennetts

# FINDING THE BALANCE

**Figure 1.**  
Maslow's Hierarchy of Needs  
and Vischer's Workplace  
Comfort Model



**Emergency Department staff are always time poor and managing competing staff and patient demands. In this context, much communication is unplanned or opportunistic. It occurs in whichever setting is most convenient rather than most appropriate.**

## Workplace comforts

Maslow identified in his hierarchy of needs a progression of requirements from physiological to more social needs for humans (Figure 1).<sup>13</sup>

Jacqueline Vischer's model of workplace comforts<sup>5</sup> works in a similar, linear way – physical comforts are required, followed by functional and then psychological needs.

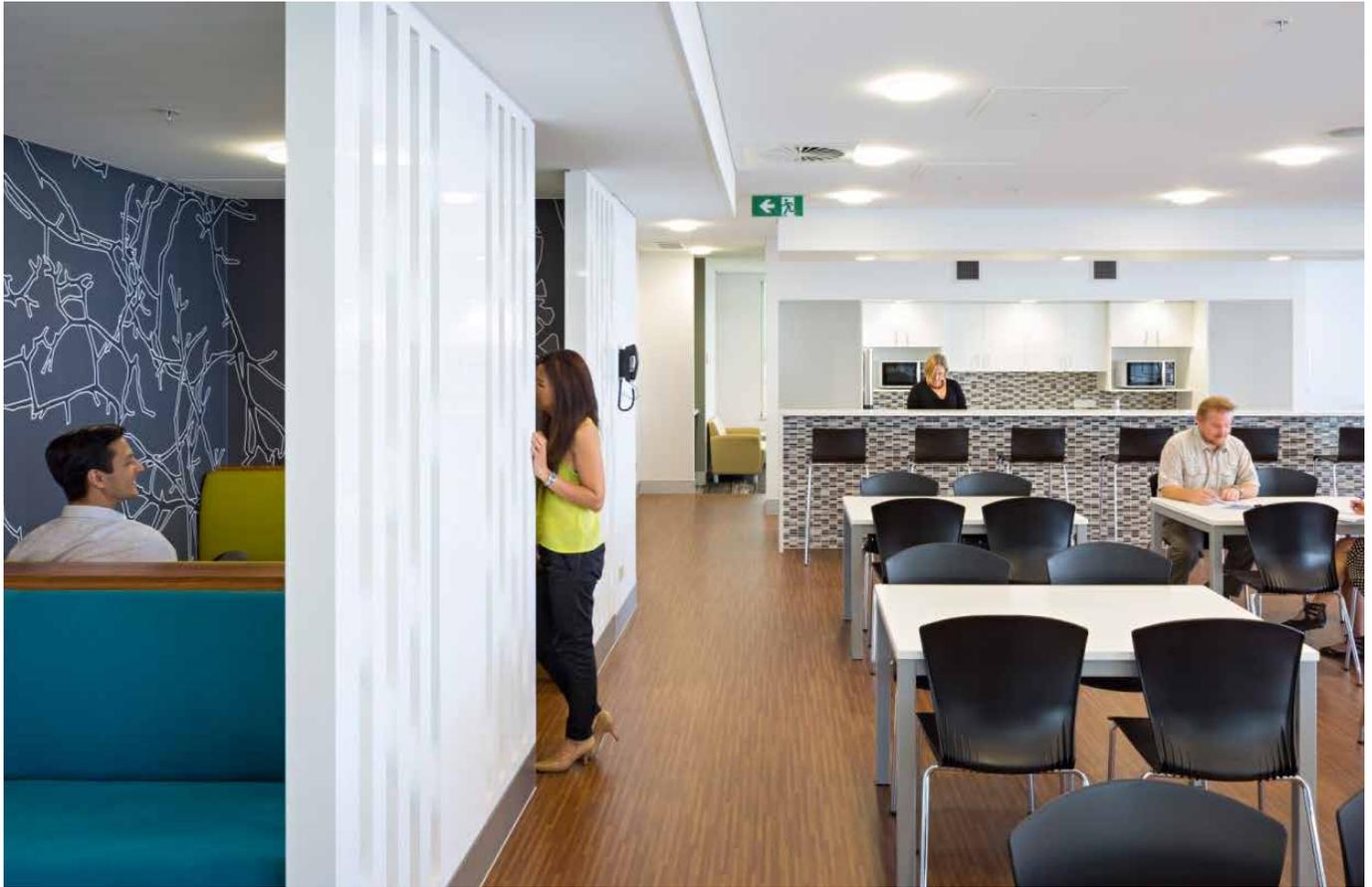
But our research suggest that in the Emergency Department, these three types of comfort are ambiguous (the staff or patients'?) and in constant competition.

Staff are willing in some situations to compromise their own physical comfort (not sitting down for a break) in order to satisfy other more functional needs such as maintaining staff numbers on the floor.

Or, staff may need to sacrifice their safety (take an aggressive patient into a quiet room) for the benefit of their patient's need for urgent attention. This creates a dynamic tension in the workplace that affects communication:

Is it safe to stop in the corridor to address an urgent medical situation, even though the patient's irate family are within hearing distance? Is it OK to have a joke in the medication room? If a curtain is pulled around a cubicle for a confidential conversation, will it impede the nurses' sight lines to other patients?

When prompted with images of spaces that were attractive or comfortable (to sit, talk, learn or relax), staff often viewed them as impractical ("We haven't got time to sit") or undesirable ("I prefer stools rather than chairs, to encourage people to keep moving").



**“You need a balance between security and visual awareness.”**

Focus group participant

Gold Coast University Hospital, Southport, Australia.  
Photography by Christopher Frederick Jones

**Design that influences communication**

Emergency Departments have a range of work areas to meet functional needs, but an absence of dedicated spaces for confidential conversations, professional or private, that support the psychological comfort of staff.

A number of specific design elements support some comforts while compromising others.

In particular, designs that enhance staff perceptions of safety and control are preferred over aesthetics and physical comforts. This may undermine the use of environmental design to influence behavioural outcomes.

- Glazing enables acoustic privacy and visual connection. But it also enables patients to judge staff on their busyness.
- Joinery and furniture provide separation between staff and patients, which in turn provides a perception of safety. But this separation can interfere with work flows.
- Curtains provide visual privacy, but seriously compromise confidentiality.
- Tea rooms provide a relaxed atmosphere for personal conversations, but are often too far from treatment areas for fast responses to patient needs.

Refer page 8 for participant observations on where they communicate informally in their workplace, and why.

# DESIGN IMPLICATIONS

## How can designers better accommodate safe and private informal interactions without compromising connections to patients and fellow staff?

How can designers better accommodate safe and private informal interactions without compromising connection to patients and other staff?

Figure 3 below illustrates the locations that staff from the focus groups communicate informally (and formally, in some cases). It also shows the general proximity to patient activity of those locations, the level of confidentiality that is commonly achieved, and in which of those locations staff felt safe. Comfort and case talk

The layout of spaces in every Emergency Department varies, and will influence the best locations for on-the-go exchanges, but some spaces are more appropriate than others, depending on whether the conversation is personal comfort talk or professional case talk.<sup>14</sup>The difference between these two types of communication is important. Both may require confidentiality, but staff consistently referred to the need for comfort talk to occur away from patients.

While conversations should and will continue to happen throughout all Emergency Department areas, our research indicates that small, enclosable multi-purpose spaces dedicated to non-patient activity (store rooms, medication rooms, and staff offices) are ideal for informal comfort talk.

Larger open spaces such as nurses' stations, staff hubs, and specialist areas are more likely to be used for formal and informal case talk about patients. Corridors are also used frequently for informal communication, but are not sufficiently private. Spaces far from patient areas such as the tea room or cafeteria are inconvenient for impromptu discussions, but ideal for more general social interaction.

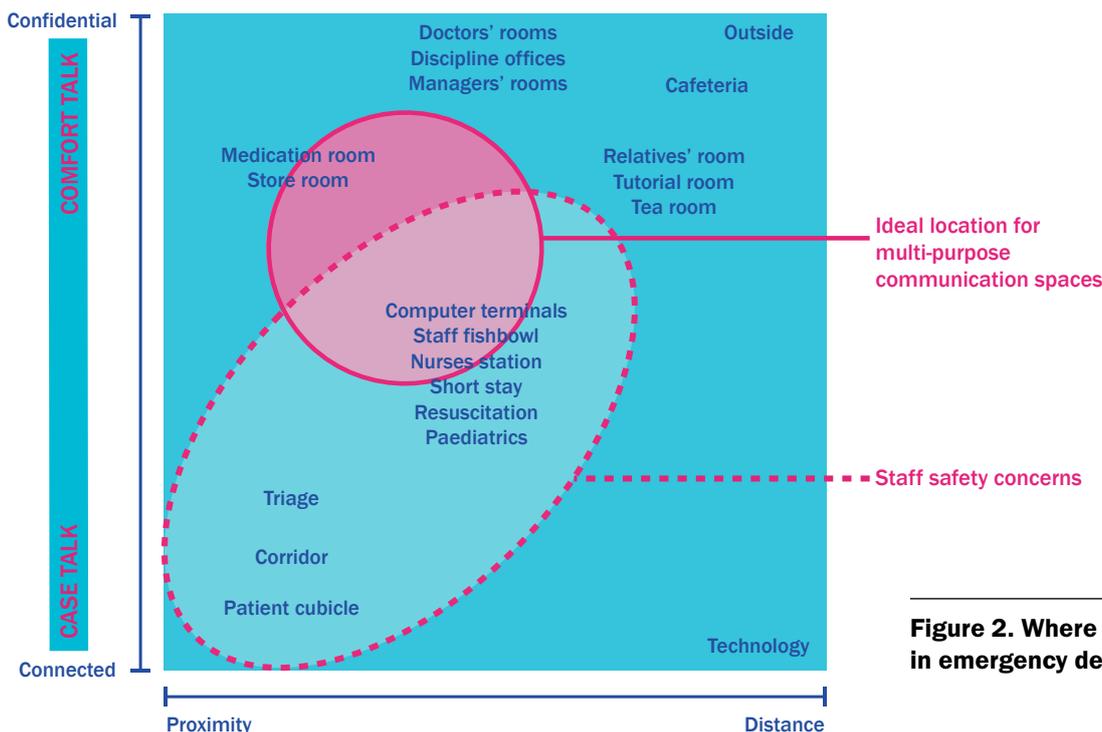


Figure 2. Where staff communicate in emergency departments

## Ideas from other workplaces

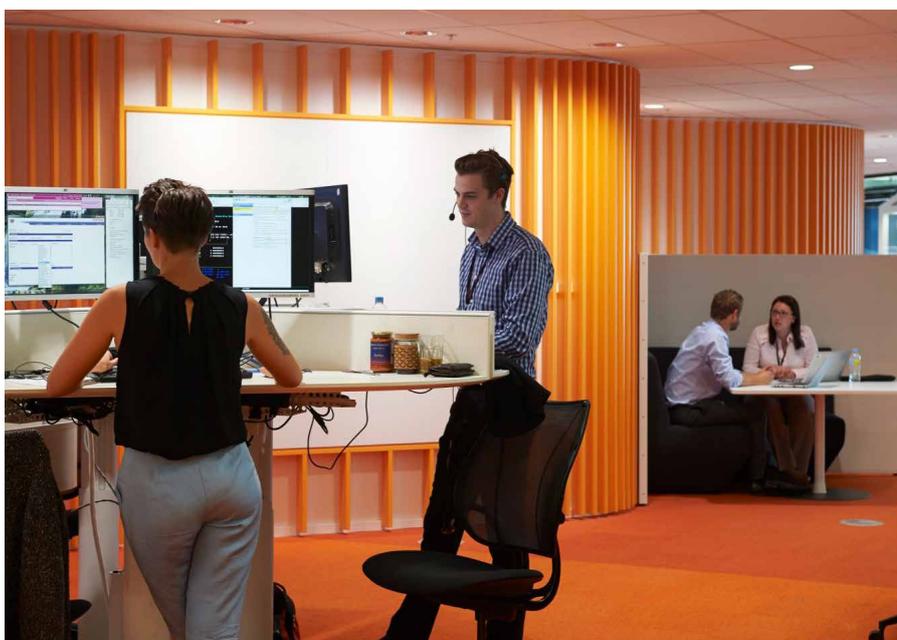
Dedicated areas for informal conversations are unlikely to be allocated in Emergency Departments because of tight space constraints. The key, then, is to provide small, easily adaptable spaces that keep staff visually connected and acoustically separated, and can be used for a variety of activities.

Recent developments in commercial workplace design may be suitable for this purpose: stand-up furniture that clearly conveys the space is transitory and conversational (high benches, stools etc.) and lightweight physical barriers such as screens or acoustic partitions help to convey a degree of privacy (see images below).

While small niches in corridors may seem to be the solution for informal communication, these inevitably attract equipment - wheelchairs, heart monitors and computers on wheels etc.

Instead, small glazed rooms or booths that cannot accommodate large equipment are more likely to remain free of clutter, and can double as meeting spaces, and documentation areas. These should be as close to patient activity as possible.

A more spacious and inviting tea room can be located further away, but still within the Emergency Department.



Images:  
1. Citrix, Sydney, Australia. Photography by Nicole England  
2. Optus ABW, Sydney, Australia. Photography by Nicole England  
3. Westpac Kogarah, Sydney, Australia. Photography by Nicole England  
4. Medibank Place, Melbourne, Australia. Photography by Earl Carter

# STAFF QUOTES AND PHOTOGRAPHS

## 1. Central work areas

- Nurse stations, staff hubs and desks
- Suitable for case talk due to acoustic separation combined with patient and staff visibility. Not suitable for comfort talk because of the need to appear to patients to be busy and professional.



"I like the ideas of glass because you are separating yourself from the patients. You're able to have informal communication and it's protected within that area."  
"Barriers send a visual message - I'm looking at you, but I am not available. Leave me alone."

## 2. Dedicated rooms

- Medication/store rooms, offices, family and mental health rooms
- Highly sought after for comfort talk because they are close to patient activity, can be closed off with a door, and used for other activities ("looks like you're working").



"People talk in the drug room a lot. It's my number one go-to place."  
"I go to the family room or nay room where I can close the door and close the curtain."

## 3. Transit spaces

- Corridors, benches, waiting areas
- Convenient for conversations with passing staff but can inhibit movement in high traffic areas. Limited confidentiality for either case or comfort talk.



"A lot of our communication is on the fly. When you're in the corridor, that the opportunity to talk to your buddy or a senior nurses going past."

## 4. Communal spaces

- Tea room, tutorial room, cafeteria
- Less convenient, but more relaxed environment for catching up on personal conversations. Often crowded, so can be difficult to have confidential discussions.



"Sometimes you want to be away from your colleagues, but you've got to go outside or all the way down to the cafeteria."  
"We need a quiet tearoom, a confidential space."

## 5. Patient spaces

- Empty cubicles, treatment rooms
- Convenient to activity. Highly public, so not ideal for confidential patient conversations, but often the only option.



"There's no privacy with a curtain, as much as we like to think there is."  
A few patients have commented on what we've said. They know everything that goes on. There's no division, it's only curtain."

# REFERENCES

1. Knoll Inc., 2008. Open plan and enclosed private offices: Research review and recommendations. [www.knoll.com/media/878/738/OpenClosed\\_Offices\\_wp.pdf](http://www.knoll.com/media/878/738/OpenClosed_Offices_wp.pdf)
2. Glymph DC, et al. 2015. Healthcare Utilizing Deliberate Discussion Linking Events (HUDDLE): A Systematic Review. *AANA J.* 2015 83(3):183-8.
3. Rabøl LI, et al.. 2011. Descriptions of verbal communication errors between staff. An analysis of 84 root cause analysis-reports from Danish hospitals. *BMJ Qual Saf.* 2011;20(3):268-74.
4. Ulrich, R., Quan, Zimring, Joseph, Choudhary. 2004. The Role of the Physical Environment in the Hospital of the 21st Century: A Once-in-a-Lifetime Opportunity. Website at [www.healthdesign.org/sites/default/files/Role%20Physical%20Environ%20in%20the%2021st%20Century%20Hospital\\_0.pdf](http://www.healthdesign.org/sites/default/files/Role%20Physical%20Environ%20in%20the%2021st%20Century%20Hospital_0.pdf)
5. Safran C, et al., 1999. Online medical records: a decade of experience. *Methods of Information in Medicine.* 38(4/5):308-12.
6. Vischer, J. 2008. Towards an environmental psychology workspace: How people are affected by environments for work. *Architectural Science Review.* 51:2, 97-108.
7. Worksafe Victoria, 2008. Health Services – Aggression in Emergency Departments. Website at [www.worksafe.vic.gov.au/\\_\\_data/assets/pdf\\_file/0004/14449/HSS0028\\_Aggression\\_in\\_emergency\\_departments.pdf](http://www.worksafe.vic.gov.au/__data/assets/pdf_file/0004/14449/HSS0028_Aggression_in_emergency_departments.pdf)
8. Design Council UK, 2014. Improving patient experience in A&E 2014. Website at [www.designcouncil.org.uk](http://www.designcouncil.org.uk)
9. Centre for Workforce Intelligence (2014) Horizon 2035 International responses to big picture challenges. Website at [www.cfw.org.uk/publications/horizon-2035-international-responses-to-big-picture-challenges/@publication-detail](http://www.cfw.org.uk/publications/horizon-2035-international-responses-to-big-picture-challenges/@publication-detail)
10. Hassell, 2016.. Design Matters for Nurses. Website at [www.hassellstudio.com](http://www.hassellstudio.com)
11. Maxwell, 2013. The Future of Work, Australian Financial Review Boss Magazine, February 2013, pp 26-29
12. Haynes, B. 2007. The Impact of the Behavioural Environment on Office Productivity. *Journal of Facilities Management* Vol. 5 No.3 pp158-171
13. Gorgievski, van der Voordt, van Herpen, van Akkeren, 2010. After the Fire: New Ways of Working in an Academic Setting. *Facilities*, Vol 28, no.3/4. 2010. Pp206-22 Website at [www.emeraldinsight.com/0263-2772.htm](http://www.emeraldinsight.com/0263-2772.htm)
14. Maslow, A. 1943. A Theory of Human Motivation, Originally Published in *Psychological Review*, 50, 370-396. Website at <http://psychclassics.yorku.ca/Maslow/motivation.htm>
15. Dean, M., R. Gill, and J.B. Barbour, 2016. "Let's Sit Forward": Investigating Interprofessional Communication, Collaboration, Professional Roles, and Physical Space at EmergiCare. *Health Communication*, 31(12): p. 1506-1516.

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