Wayfinding Strategies for Non-Emergency Services in Australian Hospitals

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Wayfinding refers to the process of guiding individuals through built spaces, particularly in environments where navigation may be challenging due to complex layouts. In hospital settings, efficient wayfinding is essential as it directly impacts the experiences of patients, visitors, and staff. This entry focuses on wayfinding strategies in Australian hospitals, where research on this topic is limited. The entry uses a comparative case study approach to analyse various wayfinding techniques for non-emergency services, including physical signage, digital navigation systems, and spatial design elements across six hospitals in Australia. The findings indicate that combining visual cues, digital tools, and spatial planning improves navigation efficiency. However, the hospital size and layout significantly influence the effectiveness of these systems. This entry provides insights into the current wayfinding strategies and challenges in Australian hospitals and suggests further research on global case studies using the comparative framework and definitions provided here.

wayfinding Australian hospitals Australian healthcare hospital wayfinding healthcare wayfinding healthcare environment hospital environment hospital layout

Wayfinding in hospitals is critical to helping individuals navigate complex environments and for creating an accessible and user-friendly experience for all [1][2][3]. It involves using environmental cues, such as signage, architectural elements, and landmarks, to help individuals navigate complex spaces, like hospitals [4]. Cognitive mapping, defined as the mental process of acquiring, storing, and recalling spatial information to navigate built environments, is especially important in hospital settings [5]. A comparative study by Geng et al. (2021) demonstrated the importance of centralised layouts and visual connectivity for enhancing wayfinding efficiency in both Australian and Chinese hospitals [5]. This research shows that tailored spatial arrangements can improve both navigation and operational efficiency in healthcare settings [6].

In hospitals, stress and anxiety can complicate navigation as they impair individuals' ability to process spatial cues [2]. Well-designed spaces that incorporate intuitive layouts and landmarks are particularly effective in improving wayfinding for vulnerable populations [8]. The inclusion of green spaces in healthcare facilities has been shown to reduce stress and improve spatial cognition, thereby enhancing wayfinding [9]. Solutions, such as the inclusion of clear visual cues, intuitive spatial designs, and landmarks, can reduce these challenges [10]. Feedback from patients and staff is also invaluable for identifying navigation challenges and informing the development of more targeted and user-centred wayfinding designs. Previous studies have also highlighted that exploring digital orientation tools alongside traditional physical cues could enhance the navigation efficiency in complex hospital environments [2][9]. A space syntax analysis, a method for evaluating spatial configurations to predict movement

patterns and accessibility, is often applied to healthcare design to optimise navigation [4]. In large hospital campuses, clear visual pathways and spatial configurations that guide movement are essential for reducing confusion [11][12]. These factors also enhance patient satisfaction and contribute to an improved overall healthcare experience [13].

Given the significance of wayfinding in healthcare environments, this entry reviews key wayfinding strategies implemented in Australian hospitals, highlighting innovative approaches and challenges. It compares various practices through a series of case studies conducted in six hospitals. Details on the materials and research methods used for this entry are provided in the <u>Supplementary Materials</u> section at the end of the entry. Although this entry primarily focuses on general hospital wayfinding strategies, the navigation challenges faced by emergency services, where quick and accurate directions are critical, remain underexplored [14]. Future research should examine how wayfinding systems can be optimised to improve the efficiency of emergency response teams and ensure rapid access to critical areas within hospital environments.

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