# Presentation Abstracts

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## Systematic review: inadequate allocation of critically ill patients in hospital settings

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**Introduction:** Inadequate allocation of critically ill patients in hospital settings poses significant challenges, potentially leading to suboptimal care, increased complications, and higher mortality rates. Factors such as ICU bed availability, variability in acuity assessment, and communication gaps among healthcare teams contribute to delays or inappropriate placement of patients in general wards or stepdown units.[1-5] **Objective:** This systematic review examines the implications of inadequate allocation of critically ill patients to wards or stepdown units. It analyzes contributing factors, clinical outcomes, and potential interventions to improve allocation practices and patient outcomes **Methods:** A systematic search of PubMed, Cochrane, and Embase databases was conducted using keywords related to critically ill patient allocation in wards and stepdown units. After screening 300 articles, 15 studies (observational and RCTs) met the inclusion criteria, focusing on allocation practices, outcomes, and influencing factors. Data extracted included study characteristics, patient demographics, interventions, and outcomes such as mortality rates and complications. Methodological quality and risk of bias were assessed using appropriate tools (*e.g.*, Newcastle-Ottawa Scale for observational studies, Cochrane risk of bias tool for randomized controlled trials). Due to study heterogeneity, a meta-analysis was not feasible, so a narrative synthesis was conducted, summarizing findings on factors contributing to inadequate allocation, clinical impact, healthcare utilization, and intervention effectiveness. **Results:** Limited ICU bed availability (n=12 studies), inconsistent acuity assessments (n=10), and communication gaps (n=10) were key drivers of inadequate allocation. This was linked to increased mortality (n=8), more complications (*e.g.*, sepsis, respiratory failure, n=7), and inappropriate care (suboptimal monitoring, medication errors, and delayed recognition of deteriorating conditions, n=9), leading to prolonged hospital stays and strained resources (n=11). Effective interventions included standardized transfer criteria, early warning systems, and improved interdisciplinary communication (n=10). **Conclusion:** Inadequate allocation of critically ill patients has significant consequences. Healthcare systems must prioritize addressing systemic challenges, including ICU capacity and communication breakdowns, to optimize patient outcomes and resource use. Future research should evaluate long-term intervention effectiveness and tailor strategies for diverse settings.

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