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Posted Date: 5 November 2024

doi: 10.20944/preprints202411.0233.v1

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Review

The Transition Dilemma: Barriers to Safe Disposition in Older Adults After Hospitalization

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Abstract: The safe transition of older adults from hospital to home or other care settings is a critical aspect of healthcare that significantly impacts patient outcomes. Barriers to safe social disposition may include clinical, healthcare system, or social factors. Despite advances in medical care, many older adults face these barriers during the transition process, which can lead to adverse health events, re-admission, and decreased quality of life. This review explores the obstacles to safe disposition for older adults post-hospitalization and discusses potential strategies to mitigate these issues.

Keywords: older adults; barriers; safe disposition; hospitalization

Introduction

The aging population is proliferating, leading to an increased number of elderly patients requiring hospitalization. According to the World Health Organization (WHO) 2024 world report on aging and health, individuals aged 65 and older will outnumber youth and are projected to reach 2.1 billion by 2050 compared to 1 billion in 2020 [1]. Many factors are playing a role in older adults' health, ranging from physical and social environments – including their homes and communities– to personal characteristics – including gender, race, socioeconomic status, and genetic factors. Physical and social environments can affect health directly or through barriers or incentives that impact opportunities, decisions, and health behavior. Older patients suffer from more morbidities than younger patients, leading to prolonged hospitalization and increased healthcare needs [2]. Safe disposition—transitioning patients from hospital care to their homes or other care environments—is vital for ensuring continuity of care and optimizing health outcomes. A safe disposition process may prevent errors during care transitions that are often preventable, leading to a reduced risk of re-admissions and adverse drug events after discharge [3,4]. However, numerous barriers can impede this process, necessitating a comprehensive understanding of older adults' challenges in the post-hospitalization phase. Efficient discharge planning is an essential component of high-quality inpatient care, especially in older adults with multimorbidity and complex medical needs [5]. Efficient discharge planning aims to improve a patient's quality of life by ensuring continuity of care and reducing the rate of readmissions and/or complications, which may decrease the healthcare system's financial burden [6,7]. This review highlights the multifaceted barriers to safe disposition in older adults' post-hospitalization and emphasizes the importance of coordinated efforts to improve care transitions.

Clinical Barriers

1. **Complex Medical Needs:** Multimorbidity (the coexistence of multiple chronic diseases) exists in 35% to 80% of older adults [8]. Multimorbidity causes disability, poor quality of life, and high health care utilization and costs, thereby complicating the discharge process [9]. In addition,

very old patients present with dementia, limiting their ability to understand discharge instructions, which leads to a major challenge for the services provided [10].

2. **Polypharmacy and Medication Reconciliation:** Polypharmacy is defined as using more medications than are medically necessary and may include medicines that are not indicated, are ineffective, or constitute a therapeutic duplication. There is no standard cut point about the number of medications, but in most studies, five or more drugs are defined as polypharmacy [11,12]. Polypharmacy is common among older adults due to multimorbidity. Hajjar E et al., in their study of 384 elderly hospitalized patients, found that 58.6% of patients took one or more unnecessary prescribed drugs [13]. Polypharmacy leads to adverse drug events, increased healthcare costs, medication non-adherence, functional decline, and increased risk of cognitive impairment and falls [14]. Inadequate medication reconciliation during discharge can result in medication errors, non-adherence, and subsequent health complications [15].
3. **Cognitive Impairment:** Decline in mental performance is typical in older adults, and older patients hospitalized with stroke, heart failure, or lung disease have an increased risk for cognitive decline. The cognitive decline can lead to confusion and non-compliance with treatment recommendations. The mental deterioration may also be caused by delirium in hospitalized elderly patients [16]. Delirium is a potent risk factor for hospital-related complications, including more extended hospitalizations, unplanned ICU admission, discharge to a nursing facility, and all-cause mortality [17].
4. **Mental Health Issues:** About 15% of the population above 60 years suffer from mental disorders that may be depression, anxiety, loneliness, or substance abuse, with depression being the most prevalent [18,19]. Suicide rates in older adults are as high or higher than in young individuals, the major contributory factors being physical illness, functional impairment, and stressful life events [20]. A study by Lin P et al. found that the incidence of mental problems in older hospitalized patients was 78%, and 53.8% of older patients with chronic diseases take negative coping styles that can aggravate the negative impact of the disease [21].
5. **Functional decline:** Functional decline (FD), defined as a loss of independence in one or more basic activities of daily living (ADL), is a severe problem among hospitalized older adults. About 20%-30% of older adults experience a functional decline at hospital discharge, leading to increased dependency on ADLs, inpatient length of stay, hospital readmission rate, and mortality; the oldest old revealed the highest functional decline [22,23]. A meta-analysis by Geyskens L et al. identified living in a nursing home, instrumental activities of daily living (IADL) impairment, history of falls, cognitive impairment, dementia, delirium, malnutrition, hypoalbuminemia, comorbidity, and the presence of pressure ulcers as significant risk factors for functional decline [24].

Healthcare System Barriers

1. **Fragmented Healthcare Systems:** Lack of proper communication with patients and caregivers, improper coordination among healthcare providers, and resources not being distributed according to patients' actual needs can result in disjointed care and unsafe transitions, leading to decreased patient satisfaction, longer lengths of stay, increased healthcare costs, and increased mortality [25–27].
2. **Insufficient social worker involvement:** Social workers play a crucial role in the discharge process of older patients by evaluating their social, emotional, and economic needs, collaborating with healthcare teams to develop discharge plans, connecting patients and caregivers with community resources, and advocating for the rights and needs of older patients, by providing education to patients and families about the discharge process and arranging follow up visits to monitor the patient's well-being [28]. Barriers to hospital discharge can arise from insufficient involvement of social workers.
3. **Inadequate Discharge Planning and Coordination:** Comprehensive discharge planning is an essential feature of healthcare systems. The aim is to improve the coordination of services from the hospital to the community to ensure seamless discharge for the patient, resulting in a

decreased length of stay in the hospital and a reduced rate of re-admissions [29]. Older adults have more complex needs, may have multiple comorbidities, and often take longer to recover following an illness, requiring more focused discharge planning to get them home or to a long-term care facility [30]. Discharge summaries are frequently delayed, of deficient quality regarding follow-up plans, and with improper medication reconciliation, which leads to confusion among patients and caregivers and may result in decreased compliance with the treatment and increased readmission rates [15,31].

Social Barriers

1. **Limited Social Support/Housing Instability:** Older adults turn to their families for help, neighbors, and finally to formal sources of social support such as social workers. Family can support older patients by providing care to the patient and working together with the health care team, thereby ensuring safe discharge [32]. Many elderly patients lack robust social networks or family support systems, crucial for ensuring safety and adherence to post-discharge plans. Isolation can hinder recovery and increase the risk of readmission. Unsafe living conditions, homelessness, overburdened caregivers, financial strain on caregivers, and geographic distance from the patient are some of the factors that can lead to prolonged hospitalization, increased healthcare utilization, and unsafe discharge. [33].
2. **Health Literacy:** Inadequate health literacy is recognized as a stronger predictor of poor health than age, income, employment status, education level, or race and is an independent factor for 30-day hospital reutilization after discharge [34,35]. Patients with low health literacy may not follow the medical instructions provided to them at their hospital discharge, and the consequent inability to attend follow-up visits and delays in seeking medical attention may lead to increased all-cause mortality [36,37]. Older patients have a significantly higher rate of inadequate health literacy than younger patients, which may be attributed to the decline in comprehension, memory, and word recognition abilities [38,39]. A study by Shahid R et al. showed that in patients over 65 years of age, 45.6% had inadequate health literacy, and 22.8% had marginal health literacy [38].
3. **Language barrier:** Due to poor communication, patients with limited English proficiency have a poor understanding of follow-up visits and medications post-discharge. This leads to longer hospital stays and higher readmission rates [40,41]. The combination of low educational/health literacy with a language barrier places many patients in 'double jeopardy' of not understanding critical information and increasing risks at discharge [41].
4. **Transportation Challenges:** Access to reliable transportation is often a significant barrier for older adults seeking follow-up care or rehabilitation services. Limited mobility can prevent them from attending appointments and adhering to treatment plans. Annually, transportation barriers prevent 3.6 million people in the United States from obtaining medical care [42]. Transportation is the third most cited barrier to accessing health services for older adults [43]. Studies have shown that individuals who are older, less educated, female, minority, or low-income, or have a combination of these characteristics are affected more by transportation barriers [44]. Transportation challenges may include limited availability and routes, overcrowding on trains and buses, safety issues, high fares cost, lack of a personal vehicle, long travel distances, lengthy waiting times, and inconvenient time schedules [43,44].

Strategies to Mitigate Barriers

1. **Enhanced Discharge Planning/Interprofessional Team Collaboration:** The goal of efficient discharge planning is to improve a patient's quality of life by ensuring continuity of care and reducing the rate of unplanned readmissions and/or complications, which may decrease the healthcare system's financial burden [7]. Effective collaboration is the key to successful discharge planning. Initiating discharge planning upon admission involving a multidisciplinary team, patients, and families can ensure that all aspects of a patient's care are addressed. This is particularly important for older adults with a more complex discharge plan and requires more

assistance in executing the necessary elements [45]. Comprehensive geriatric assessment by thorough evaluation of the patient's medical, cognitive, social, and functional needs and implementing standardized discharge planning protocols can improve transition safety [46].

2. **Medication Reconciliation Efforts:** Medication reconciliation is a formalized process that considers all the drugs taken and to be taken by the patient when drafting a new prescription. Establishing robust medication reconciliation processes during discharge can ensure that patients and caregivers understand the medication regimen [47]. Integrating skilled pharmacists into allied healthcare teams can identify and address medication-related problems [48]. The objective is to prevent medication errors by promoting the transmission of complete and accurate patient medication information among healthcare professionals at each transition point in the care pathway.
3. **Patient and Caregiver Communication and Education:** Proper communication about the disease process and discharge planning and providing education and resources for family caregivers can empower them to support older adults' post-hospitalization, ensuring better adherence to care plans and improving outcomes. In addition, family members taking on caring roles should be given information about support systems that can support them emotionally and practically. The different aspects of being a carer should be discussed in family meetings to gauge the family's understanding and preparedness for the role of caregiving [49,50].
4. **Patient-centered Care:** Discharge safety is an evaluative concept, and therefore, one should consider a patient's values about well-being, risk, and a meaningful life. Our findings support that increasing patients' medication understanding in their preferred language is an essential component of interventions to prevent medication errors and reduce re-hospitalizations [41].
5. **Community Support Programs:** Developing community resources and support networks can help address social barriers. Community support programs should be able to cover the following services: 1. Interventions to optimize functional capacity and independence. 2. Slow-stream rehabilitation. 3. Case managers for caregiver support and home health services. 4. Addressing transportation, housing, and food security issues [51].
6. **Telehealth and Remote Monitoring:** Utilizing telehealth services is a cost-effective way to facilitate follow-up care, making it easier for elderly patients to connect with healthcare providers without needing transportation. Telehealth significantly improves health outcomes in terms of readmission rates, mortality rates, and quality of life in older adults at high risk of readmission [52].

Conclusion

The safe disposition of older adults' post-hospitalization is fraught with barriers that can significantly impact health outcomes. By recognizing the clinical, healthcare system, and social challenges that older adults face, healthcare providers can implement targeted strategies to enhance the transition process. Addressing these barriers improves patient safety, reduces readmission rates, and contributes to a higher quality of life for elderly patients. Continued research and policy efforts are essential to develop effective interventions that support safe transitions in this vulnerable population.

Funding Statement: No funding was received.

Acknowledgments: None.

Conflicts of Interest: None.

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