

Care at Home: Groundbreaking or Overhyped?

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Abstract. This study investigates the viability of home care for patients with chronic conditions, focusing on the key factors that influence successful transitions from hospital to home settings: medical stability, care needs, the availability of digital and technological support, and caregiver preparedness. While home care can offer advantages in certain contexts, such as improved patient comfort and reduced institutional costs, its effectiveness is limited for patients with complex medical conditions or cognitive impairments. Key challenges include high costs, the need for continuous monitoring, and the reliance on skilled caregivers. Based on the insights from our general use case and current insights into care initiatives, we suggest that home care may not be a viable solution for patients requiring intensive, long-term care. Nursing homes and long-term care facilities, with their more consistent resources and infrastructure, may provide a safer and more sustainable environment. Consequently, the research advocates for prioritizing investment in these facilities over expanding home care infrastructure.

Keywords. Home care, hospital at home, chronic conditions, nursing care services, nursing homes.

1. Introduction

Home care refers to the provision of healthcare services and support within an individual's residence, rather than in institutional settings like hospitals or nursing homes [1]. It encompasses a range of services, including medical treatment, daily living assistance, and emotional support, delivered by professional caregivers, family members, or both [2]. In recent years, the healthcare system has increasingly embraced home care due to its potential to enhance patient comfort, reduce institutional care costs, and allow individuals to remain in familiar environments [3]. This trend is fueled by advancements in medical technology, the growing aging population, and the desire to provide more personalized care solutions.

While home care offers substantial benefits, its success is not guaranteed universally [4]. This paper aims to identify the factors that contribute to both its successes and its shortcomings. It seeks to determine whether home care truly introduces innovative approaches or if it represents a rebranding of traditional home care, which is increasingly digitalized and more integrated with patient and physician interfaces. Understanding

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these dynamics is crucial for evaluating whether home care can deliver on its promise of providing high-quality, compassionate care within the most supportive environment.

2. Methods

This study employs a case study approach to examine the transition dynamics in home care, focusing on Mr. Rubens, a 78-year-old patient with chronic heart failure who lives alone and receives routine home care. Following multiple hospitalizations due to recurrent cardiac decompensation, he developed hospital-acquired delirium during his most recent stay, complicating discharge planning. Physicians are exploring strategies to minimize hospital stays while ensuring safe, feasible, and sustainable post-discharge care. This case offers insight into the medical, logistical, and psychosocial factors influencing the decision to transition a complex patient to home care [5].

2.1. Medical Stability

A prerequisite for home care eligibility is that the patient's condition is clinically stable, meaning it no longer necessitates continuous inpatient monitoring or access to high-intensity interventions. Stability is often defined by normalized vital signs, manageable symptoms, and the availability of a structured care plan. In conditions like chronic heart failure patients may be considered for discharge when risk factors for acute exacerbation are mitigated. The capacity to detect early warning signs remotely significantly broadens the scope of safe discharge for high-risk individuals.

2.2. Care Needs and Home-Based Resources

The complexity of the patient's care needs must align with the capabilities of the home care environment. Essential services such as medication management, wound care, physiotherapy, or oxygen therapy must be deliverable by visiting healthcare professionals or competent informal caregivers. In Mr. Rubens' scenario, for instance, ensuring regular monitoring of fluid retention, blood pressure, and signs of delirium recurrence would require coordinated input from nursing staff and family caregivers. Moreover, geographic and socioeconomic factors – such as rural location or limited home care staffing – can severely constrain the feasibility of such transitions.

2.3. Digital and Technological Support

Advancements in telemedicine and remote patient monitoring have increased the viability of home care for patients with chronic conditions. Technologies such as wearable ECG monitors, smart pill dispensers, and telehealth platforms enable healthcare teams to monitor patient status in real time and intervene proactively. For Mr. Rubens, a Bluetooth-enabled wearable ECG synced to a clinician dashboard could allow for early detection of arrhythmias or fluid overload. However, successful implementation depends on reliable internet infrastructure, caregiver digital literacy, and patient willingness to engage with technology [6]. Integration of these tools into care workflows also requires training, technical support, and data management protocols, ensuring the system is both usable and clinically meaningful.

2.4. Patient and Caregiver Readiness

The success of home care hinges not only on clinical criteria but also on patient and caregiver preparedness. Patients must possess the physical and cognitive capacity to engage with their care plan, or at minimum, cooperate with caregivers and adhere to instructions. In Mr. Rubens' case, cognitive impairment from delirium poses a challenge to self-management, placing greater responsibility on caregivers. These individuals must be trained to administer medications, monitor symptoms, and recognize red flags that warrant medical attention. Equally important is the psychological readiness of both parties: patients often associate hospitals with safety, and transitioning home may provoke anxiety. Structured education, reassurance, and gradual handover of responsibilities can improve confidence and adherence [7].

3. Results

This section critically evaluates whether Mr. Rubens, a 78-year-old patient with chronic heart failure and recent hospital-acquired delirium, is a candidate for safe transition to home care.

3.1. Patient and Caregiver Readiness

Delirium reflects acute clinical instability and poses a significant discharge risk. It increases the likelihood of falls, medication errors, and cardiac complications. Hospital-based interventions—such as medication adjustment, hydration, and cognitive support—are essential until the condition resolves or stabilizes. Discharging Mr. Rubens prematurely shifts the burden of risk and decision-making to caregivers, often without sufficient support or clinical oversight.

3.2. Care Needs and Support Availability

Delirium management requires continuous observation, which cannot be assured in Mr. Rubens' case due to his solitary living situation. While he receives periodic home care services, these are insufficient for acute cognitive episodes. Discharge could only be considered if:

- A trained, full-time caregiver is present.
- Daily professional visits are guaranteed.
- Emergency protocols, including telehealth and rapid readmission plans, are in place.

These conditions are currently unmet.

3.3. Technological Considerations

Digital tools like wearable ECGs and telemedicine platforms are useful for managing heart failure but inadequate for delirium. Cognitive disturbances require immediate in-person responses that technology cannot deliver. Although home care environments may reduce hospital-induced delirium, this benefit presumes strong support systems, which Mr. Rubens lacks.

3.4. Patient and Caregiver Readiness

Delirium compromises Mr. Rubens' ability to participate in his care, making him reliant on external support. Without a live-in or highly available caregiver, home care poses significant risks. Neither his cognitive condition nor his social context supports a safe discharge. Mr. Rubens' case highlights the limitations of home care for patients with combined cognitive and cardiac instability. Home care requires medical stability, caregiver availability, and appropriate infrastructure. None of these criteria are currently met. While digital tools can enhance monitoring, they cannot replace in-person care for conditions like delirium. Three scenarios emerge:

- Independent patients – home care is unnecessary.
- Stable patients with support – home care is feasible.
- Unstable patients without support – home care is unsafe.

Mr. Rubens was categorized in the third group (Unstable patients without support), given his ongoing delirium and lack of caregiver support post-transfer. While there was hope for stabilization, his cognitive and cardiac instability persisted, making home care unfeasible. The assumption was that recovery would improve with time and intervention, but this did not materialize. Without the necessary support, home care can pose more risks than benefits, reinforcing the need for institutional care. This is supported by a systematic review, which found that high-complexity interventions were not that effective in reducing readmissions [8]. The study also highlights the critical role of post-discharge support, which was lacking in Mr. Rubens' case, leading to higher readmission risks. Overall, home care may not be suitable for such patients, reinforcing the value of institutional care and tempering enthusiasm for home care.

4. Discussion and Conclusions

One of the central challenges identified here is the lack of medical stability in patients with complex, chronic conditions such as heart failure complicated by delirium. For individuals like Mr. Rubens, the transition to home care is fraught with clinical risk due to the need for close monitoring and the unpredictable nature of both cognitive and cardiovascular deterioration. While home care may be effective for medically stable patients, its long-term viability for those with frequent exacerbations and cognitive impairment is limited. Recurrent crises often lead to repeated hospital readmissions [9], undermining both the continuity of care and the economic rationale for home-based treatment. In such cases, the resource demands of in-home monitoring and emergency intervention may exceed the cost of institutional care, especially when compared to established models such as nursing homes or long-term care facilities [10].

From an ethical perspective, discharging patients like Mr. Rubens to home care presents significant dilemmas. Healthcare systems must balance patient safety with the transfer of responsibility to unprepared caregivers, often family members, who lack the training and resources for complex care [11]. Without strong support systems, this shift may lead to caregiver burnout, emotional distress, and worsened patient outcomes. Policymakers must recognize that universal promotion of home care risks overlooking these challenges and diverting attention from improving institutional care, potentially exacerbating disparities in care quality.

A comprehensive care plan must also address non-medical determinants of health, including emotional well-being and social support. Loneliness, disorientation, and feelings of abandonment are common in older adults living alone and can exacerbate both physical and cognitive decline [12]. For patients like Mr. Rubens, access to psychological care, companionship programs, and community services should be considered essential components of any home care strategy. The absence of such support risks undermining the therapeutic potential of home care and may accelerate deterioration rather than promote recovery. In addition, the feasibility of home care is closely linked to the broader healthcare infrastructure. In regions with shortages of trained home care professionals or inadequate access to telehealth, medical equipment, and emergency services, home care becomes an inconsistent and potentially unsafe alternative. Unequal distribution of resources means that home care remains realistically viable only for a limited subset of patients – typically those with stable conditions, strong caregiver networks, and access to supportive health systems. Promoting home care without addressing these disparities may exacerbate inequalities in access and outcomes.

In conclusion, while home care may benefit select patients, it is not universally applicable, particularly for those with complex medical needs, cognitive impairments, and insufficient support. While intuitively appealing, the real-world costs and risks – both human and financial – are often underestimated. Indirect costs, such as income loss, training, and emotional strain on family caregivers, are difficult to quantify, complicating cost assessments. These hidden costs can make home care appear cheaper, despite potentially being more expensive in the long term. Rather than creating new infrastructures for home care, investing in the modernization of institutional care may be a more effective solution. Thus, the growing enthusiasm for home care must be tempered with a critical evaluation of its limitations and practical realities.

References

- [1] Levine DM, Pian J, Mahendrakumar K, et al. Hospital-Level Care at Home for Acutely Ill Adults: a Qualitative Evaluation of a Randomized Controlled Trial. *J Gen Intern Med* 2021; 36: 1965–1973.
- [2] Leong MQ, Lim CW, Lai YF. Comparison of Hospital-at-Home models: a Systematic Review of Reviews. *BMJ Open* 2021; 11: e043285.
- [3] Brückner S, Brightwell C, Gilbert S. FDA Launches Health Care at Home Initiative to Drive Equity in Digital Medical Care. *Npj Digit Med* 2024; 7: 1–3.
- [4] Valizadeh L, Zamanzadeh V, Saber S, et al. Challenges and Barriers Faced by Home Care Centers: An Integrative Review. *Med - Surg Nurs J*; 7. Epub ahead of print 2018. DOI: 10.5812/msnj.83486.
- [5] Danielsen BV, Sand AM, Rosland JH, et al. Experiences and Challenges of Home Care Nurses and General Practitioners in Home-Based Palliative Care – a Qualitative Study. *BMC Palliat Care* 2018; 17: 95.
- [6] Hung L-P, Lin C-C. A Multiple Warning and Smart Monitoring System using Wearable Devices for Home Care. *Int J Hum-Comput Stud* 2020; 136: 102381.
- [7] Becqué YN, Rietjens JAC, van Driel AG, et al. Nursing Interventions to Support Family Caregivers in End-of-Life Care at Home: A Systematic Narrative Review. *Int J Nurs Stud* 2019; 97: 28–39.
- [8] Tyler N, Hodkinson A, Planner C, et al. Transitional Care Interventions From Hospital to Community to Reduce Health Care Use and Improve Patient Outcomes: A Systematic Review and Network Meta-Analysis. *JAMA Netw Open* 2023; 6: e2344825.
- [9] Werner RM, Coe NB, Qi M, et al. Patient Outcomes After Hospital Discharge to Home With Home Health Care vs to a Skilled Nursing Facility. *JAMA Intern Med* 2019; 179: 617–623.
- [10] Chiu L, et al. Comparisons of the Cost-Effectiveness among Hospital chronic care, nursing home placement, home nursing care and family care for severe stroke patients. *J Adv Nurs* 2001; 33: 380–386.
- [11] Kim E-Y, Yeom H-E. Influence of Home Care Services on Caregivers' Burden and Satisfaction. *J Clin Nurs* 2016; 25: 1683–1692.
- [12] Lethin C, Renom-Guiteras A, Zwakhalen S, et al. Psychological Well-Being over Time among Informal Caregivers Caring for Persons with Dementia Living at Home. *Aging Ment Health* 2017; 21: 1138–1146.