



# Readmission Risk Factors in Patients Receiving Geriatric Rehabilitation

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## INTRODUCTION

Numerous studies have been conducted on hospital readmissions among older persons within 30 days following release, but few have examined the entire procedure. In this study, we looked into risk variables that were connected to discharge, transition of care, and follow-up procedures as well as patient characteristics prior to and events during the initial hospitalisation. In order to develop strategies to reduce early readmissions in this population, we set out to identify the patients who were most at risk of being readmitted as well as the processes that needed improvement the most. In total, 720 patients were included in this comparative retrospective analysis. Variables pertaining to patient characteristics before and during the first hospital stay, as well as those pertaining to the processes of discharge, transition of care, and follow-up, were collected in a conventional manner while reviewing medical records. Student's t-test, a 2-test, or a Fisher's exact test was applied. To find factors linked to readmission, a multivariate logistic regression analysis was carried out [1].

## DESCRIPTION

The most common post-discharge negative outcome for elderly patients is readmission to the hospital. Higher readmission rates put more burdens on the patients while also increasing the demand for hospital beds and the expense of care. Depending on the time period, age group, and patient demographic, reported readmission rates range widely (5-35%). There is a dearth of research on the factors that increase the risk of readmission in individuals over 75 and those whose activities of daily living (ADL) are compromised. Only one study including patients older than 75 years was found in two systematic reviews. In that study, the presence of frailty indicators and significant self-feeding handicap were risk factors for readmission. Medication reconciliation and review during a hospital visit have been demonstrated to help older patients have fewer adverse drug events (ADEs) and use of potentially inappropriate medications (PIMs). Internationally, a number of other PIM lists are in use, with the Beers criteria possibly being the most popular. In contrast, criteria relating to European drug formularies, such as the "Swedish indicators of good medicine therapy in the elderly," have been developed because a number of the pharmaceuticals included in Beers criteria are not available in

Europe. The Swedish indicators contain guidance for prescribers in selecting medications for certain diseases as well as indicators specific to pharmaceuticals, such as clear lists of PIMs and medications that increase the risk of falling (FRIDs). A suggestion to avoid polypharmacy is also included in the indicators. Hospital admissions are on the rise as the population ages. Identification of high-risk patients and the development of tailored therapies could be made possible by defining the variables that influence the probability of hospital readmission [2].

The purpose of this study was to determine the factors that increase an elderly patient's risk of hospital readmission. By electronically scanning EMBASE, MEDLINE, CINAHL, SCI, and SSCI, a thorough examination of the literature written in English or Spanish was conducted. Aged, elder, readmission, risk, etc. were some keywords. Selection criteria included prospective cohort studies that examined the association between clinical, socio-demographic, or other characteristics and the risk of readmission in elderly hospitalised patients (aged at least 75 years) and used appropriate statistical analysis, such as logistic regression. Two reviewers examined the studies that met these requirements and retrieved the data. We performed a methodological evaluation and a narrative synthesis of the investigations. 12 papers were included in the analysis; 11 were chosen from 1392 publications found through the electronic search, and one more reference was chosen by manual examination. Only a few models used socio-demographic characteristics as explanations, while other models regularly used relevant factors including prior admissions and length of hospital stay. Incidences of morbidity and functional impairment were the most prevalent risk variables. The findings highlight the importance of paying closer attention to senior people who are admitted to hospitals and have certain characteristics, such as past hospitalizations, length of hospital stay, morbidity, and functional handicap [3-5].

## CONCLUSION

It has been demonstrated that distributing a discharge summary that includes a medication report and an updated medications list to patients, their general practitioner (GP), and, if necessary, a municipal care nurse reduces the number of medication errors and adverse drug events (ADEs) that occur after discharge. As a

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result, it plays a crucial role in helping patients move from hospitals to primary care. Since ADEs have been demonstrated to result in hospital admission as well as hospital readmission, there is reason to suspect that enhancing medication reconciliation and medication review, as well as information transfer regarding medication at discharge, may be relevant to lowering readmission to hospital, particularly in older patients using multiple medications. The Critical Appraisal Skills Programme (CASP) tool for cohort studies and the evaluation of some statistical criteria for logistic regressions as recommended by Bagley et al.<sup>8</sup> were used to determine the quality of the research. The selection of patients was not always evident, even if the study issue was generally expressed clearly and the methodology was appropriate. Additionally, because most studies examined readmission to the same hospital rather than any institution, the result was not always precisely measured, and risk variables were not always recognised and taken into account in the regression analysis. Only two research findings were reliable enough. The lack of an adequate description of the procedures was the key factor limiting the quality of these investigations.

## REFERENCES

1. Brown CJ. "The underrecognized epidemic of low mobility during hospitalization of older adults." *J Amer Geriat Soc.* 2009;57:1660-1665.
2. Kouw IW. "One week of hospitalization following elective hip surgery induces substantial muscle atrophy in older patients." *J Amer Med Dire Associ.* 2019;20:35-42.
3. Smith TO. "Interventions for reducing hospital-associated deconditioning: A systematic review and meta-analysis." *Arch Geront Geriatr.* 2020; 90:104176.
4. Rossi AP. "Hospitalization effects on physical performance and muscle strength in hospitalized elderly subjects." *J Gerontol Geriatr Res.* 2017;6:6.
5. Ottenbacher KJ. "Thirty-day hospital readmission following discharge from postacute rehabilitation in fee-for-service Medicare patients." *JAMA.* 311:604-614.