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Methods and Perceived Quality of Care of Elderly Persons in the Emergency Department: Effects on the Risk of Readmission

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Key Implications for Decision Makers

Elderly persons being readmitted to the emergency department a short time after an initial visit poses a frequent, upsetting, and costly problem that is associated with a greater risk of functional decline and hospitalization. These unplanned readmissions, which may be a consequence of inadequate care during or after the first visit to the emergency department, also contribute to an excessive burden on the healthcare system and to emergency room overcrowding.

By comparing elderly patients involved in early and unplanned readmissions to the emergency department with those who have not returned, the study shows that:

- Age, a functional deficit, lack of a family physician, reduced social support and heart disease all increase this risk of return to the emergency department.

- Greater effort should be made in emergency settings to educate elderly people about the importance of having a family physician.

- Where needs are the same, patients who are referred to homecare services — who also receive information about appointments and tests to be run or the range of services available following a visit to the emergency department — pose less risk of an unplanned readmission.

- People with a less favourable perception of the quality of care at the emergency department are more likely to be involved in an early readmission. Managers should focus more attention on patient opinions, develop tools for measuring these perceptions and ensure that patients leave the emergency department feeling that their visit contributed to their well-being.

The study also suggests that:

- Improvements to the front-line network could reduce the frequency of early readmissions to the emergency department by promoting access to family physicians and other healthcare professionals who know their patients.

- Improved ability of emergency departments to detect loss of independence problems and forging links to refer patients to homecare services help to reduce the risk of an early readmission.

Executive Summary

Context

Frequently, elderly people have unplanned readmissions to the emergency department a short time after an initial visit, and this is upsetting for patients. It is also a costly problem that is associated with increased risk of hospitalization and loss of independence. Readmissions may be the consequence of poor discharge planning during the first visit. The research sought to determine:

- The characteristics of elderly patients that affect their risk of an early and unplanned readmissions to the emergency department.
- Whether certain resources or actions in the emergency department (organizational methods) during the initial visit may affect the risk of readmission.
- Whether a patient's (or his caregiver's) perception of the quality of preparation for discharge from the emergency department may affect his risk of readmission.

Consequences

Unplanned readmissions by elderly patients alone represent approximately 10,000 visits a year to emergency departments in the Montreal area. Most of these readmissions are probably due to an inevitable deterioration in patients' health, but the interest of our study lies in identifying potentially avoidable risk factors. For instance, a high proportion (37 percent) of patients in our study could not rely on the availability of a family physician and these patients were twice as likely as others to have to return to the emergency department. For elderly people or their caregivers, fast and timely access to a healthcare professional who knows them appears to be vital after a visit to the emergency department. Improvements to Montreal's front-line network and some programs of integrated care that promote access to family physicians or other healthcare professionals can reduce the frequency of early readmissions to the emergency department.

Furthermore, a large part of patients in our sample had or were at risk of developing a functional deficit when they visited the emergency department, and few received homecare services—two factors associated with the risk of return. This highlights the need to improve the ability to detect problems of loss of independence in the emergency department and to forge the necessary links so that patients receive support after returning home.

Some discharge planning processes (information about tests, appointments and the range of services available, prescription of homecare services) help reduce the risk of readmission. Professionals in the emergency department must be made aware of these easily changeable aspects of the organization that would probably contribute to keeping patients in the community.

Finally, poorer perception of the quality of care, especially the technical skills of professionals and the worthiness of the visit, was associated with greater risk of readmission to the emergency department. Managers therefore should pay attention to the opinion of patients and their caregivers, develop tools to measure these perceptions and

ensure that patients leave the emergency department with a feeling that the visit contributed to their well-being.

Findings

The 593 patients in the sample formed a group whose health was seriously compromised, although all returned home. A large proportion had a loss of independence and had no family physician available, while few received homecare services. Eight percent of patients in the cohort were involved in an unplanned readmission to a hospital emergency department within two weeks of their discharge.

Age, a functional deficit, lack of an available family physician, reduced social support or heart disease all independently increased the risk of a necessary early and unplanned readmission to the emergency department. Where needs are the same, patients referred to homecare services — who also receive information about appointments and tests to be run or on the range of services available following a visit to the emergency department — are less at risk of an unplanned readmission. Finally, individuals with a less favourable perception of the quality of care at the emergency department were more likely to be readmitted.

Approach

We conducted a case-control study in which patients age 70 or over who made an unplanned return to the emergency department less than 15 days after an initial visit were compared with patients who did not return during this period. The subjects took part in an interview in the emergency department and in telephone interviews two and 15 days after their return home. An organizational questionnaire was administered to a key informant from each of the four participating emergency units. Logistical regression was chosen to link the individual factors, organizational methods and perceived quality on the one hand, and the risk of readmission on the other.

Users informed us of their perception of the quality of preparation for discharge *(perceived quality)* and provided us with information on the discharge planning processes *(organizational methods).* Dispensers informed us about the discharge planning structure and the links maintained with community healthcare organizations (*organizational methods)*. The findings of this study provide important information that ultimately will improve discharge planning for elderly patients in the emergency department.

Further research

It is essential to continue examining existing organizational structures in the emergency department and their links with discharge planning processes and the risk of readmission. A larger scale study is indicated to develop a typology of organizational methods for discharge planning in the emergency department and to assess the respective benefits of each type of intake.

In the current context, it would also be relevant to assess the potential effect of emergency department overcrowding on discharge planning activities and the risk of early readmission. Furthermore, the imminent introduction of family medicine teams in Quebec will probably have an impact on the availability of family physicians. It will be important to check the effect of these new organizations on early readmissions and the use of emergency department services in general.

Finally, the findings of this study provide avenues for fast, targeted actions in the emergency department for which the costs and benefits should be assessed.