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# The challenge of reducing hospital readmissions: a geriatrician's perspective

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Health professionals and politicians agree: reducing unplanned avoidable hospital readmissions is highly desirable because it may simultaneously improve patient outcomes and reduce healthcare costs. This problem mostly affects older patients. A recent study conducted in the United States revealed that up to 27% of 30-day hospital readmissions may be truly preventable [1]. This high rate was found despite the fact that, in the context of the Affordable Care Act, The United States has introduced a system with financial penalties as part of the Hospital Readmissions Reduction Program [2]. It is likely that the hospital readmission problem is even more prevalent in countries without such incentives.

Currently in Swiss Medical Weekly, Donzé and colleagues present an original study addressing the challenge of avoidable hospital readmissions. They report important confirmatory validation data on the HOSPITAL score, a brief pragmatic tool that predicts high risk of unplanned readmissions among hospitalised, mostly elderly persons [3]. They found an approximately 10% risk of 30-day readmissions in patients at low risk, as compared with 20% in patients at high risk. In an earlier report published this year, they had already shown good performance of this tool in an international study conducted in the United States, Canada, Israel and Switzerland [4]. To understand the clinical value of this risk tool, understanding the underlying causes of avoidable hospital readmissions is relevant.

Previous research identified three potentially improvable factors that may reduce hospital readmissions [1]. The first is lack of advance care planning. Second, patients may be discharged too early. This reason might recently have become more prevalent since diagnosis-related-group payment schemes serve as financial incentives for early discharge. It is conceivable that these incentives may even counteract effects of financial penalties for readmissions. Third, decisions to unnecessarily hospitalise patients at emergency departments may also cause avoidable readmissions [5]. Such decisions might be not only related to inadequate patient triage, but also due to lack of adequate community resources for ensuring adequate care and follow-up among vulnerable patients.

How can a risk score help to remediate these causes of unnecessary hospital readmission? Foremost, it might help to identify patients in need of special attention prior to hospital discharge. In fact, the HOSPITAL score includes measures of clinical instability at the time of planned patient discharge (electrolytes and haemoglobin), factors serving as potential "red flags" indicating that timing of hospital discharge should be re-evaluated. Though, even if risk assessment might be of clinical help, it is difficult to justify focussing on high-risk patients alone since as many as 10% of low-risk patients experience unnecessary hospital readmissions [3].

In the future, models of care improving management for all, not only of a high risk subgroup of, the hospitalised elderly will become more important. Models based on multidimensional geriatric assessment have been shown to be feasible and cost effective for use in unselected older hospitalised persons [6]. These models are based on the principle that treatment plans for hospitalised elderly patients are based on a multidimensional evaluation taking into account functional, psychological, social and environmental factors in addition to medical aspects. In these models, both high- and low-risk patients may benefit. Treatment plans may be more complex for a high-risk person as compared to a low-risk person, but a low-risk person may also benefit from risk factor modification. In addition, these programmes involve system change, such as organisational adaptations, process improvements and specific training of health professionals, all measures potentially benefitting both high-risk and low- risk hospitalised persons.

For effective avoidance of hospital readmissions, interventions outside the hospital setting will be needed as well. For example, a quality improvement programme implemented in the United States found promising findings on how to reduce unnecessary hospital admissions among elderly patients in nursing homes [7]. Among community dwelling older people, better coordination of preventive care and improvements in health behaviours are also likely to improve health and ultimately reduce unnecessary hospital admissions [8].

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