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Kennedy Institute of Ethics Journal, Volume 28, Number 1, March 2018, pp.
49-84 (Article)

Published by Johns Hopkins University Press

DOI: <https://doi.org/10.1353/ken.2018.0002>



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Assessing Rehabilitation Eligibility of Older Patients: An Ethical Analysis of the Impact of Bias

ABSTRACT. Hospitalized older patients are more vulnerable to physical or cognitive functional decline. Inpatient rehabilitation programs improve significantly their functional status and may prevent their admission to nursing homes. While inpatient rehabilitation institutions have established admission criteria that can be seen as objective, the risk of bias remains and raises the question of equitable access for more vulnerable populations such as older patients. This paper reviews some established eligibility criteria for inpatient rehabilitation by examining a framework used in Montreal, Québec, Canada for assessing rehabilitation eligibility and by applying this framework to a case study. It also highlights the unique ethical challenges presented by the assessment of older patients. We conclude that in order to appropriately protect the vulnerable population of older patients in the context of priority setting and allocation of scarce resources, there is a need to establish more specific criteria that can better guide the assessment of this particular population.

With the world's population aging, hospitals are facing pressure to adequately meet the needs of a growing number of frail older patients. For this population, comorbidities combined with a limited ability to face stressful situations contribute to frailty whereby a small injury or illness can lead to significant loss of function (Wells 2012). It is widely recognized that hospitalized older patients are more vulnerable to physical or cognitive functional decline and require increased assistance in activities of daily living (Creditor 1993; Sager et al. 1996; Mahoney, Sager, and Jalaluddin 1998; Kortebein et al. 2008; English and Paddon-Jones 2010; Covinsky, Pierluissi, and Johnston 2011; Zisberg et al. 2011; Hoogerduijn et al. 2012). This population remains in acute care hospitals longer and requires the services of different healthcare professionals.

Despite the extent of the needs of this population, ongoing concerns regarding cost containment have led acute care hospitals to decrease patients' length of stay which, in some cases, can have deleterious effects on older patients. For example, Fitzgerald and colleagues (1988) noted that, in the United States, when the mean duration of hospital stay fell from 21.9 days in 1981 to 12.6 days in 1986, the proportion of patients discharged to nursing homes rose from 38% to 60%, and the distance a patient was able to walk at the time of discharge fell from 27 to 11 meters. More recently, Hughes and colleagues (2008) found that the duration of hospital stay fell from 8.7 days in 1990 to 5.7 days in 2008. Pressure to decrease length of stay may thus result in premature discharges, where patients' functional status has not improved sufficiently and they are not ready to return home (Fitzgerald, Moore, and Dittus 1988). This reality creates additional challenges in assessing and addressing older patients' needs during acute care hospitalization as well as their discharge needs.

Allowing older patients to recover functionally may avoid or at least postpone relocation to a nursing home, thus allowing many of them to return home safely. A period of rehabilitation, whether inpatient or outpatient, might put a halt to the progression of functional decline or improve the functional ability of older patients to manage their activities of daily living and engage in valued activities (Lavie and Milani 1996; Gill et al. 2002; Austin et al. 2005; Egan et al. 2014). It has been demonstrated that older patients benefiting from inpatient rehabilitation programs specifically designed for geriatric patients improve significantly on functional outcome measures and are less often admitted to nursing homes, compared with patients undergoing usual inpatient rehabilitation (Bachmann et al. 2010).

However, inpatient rehabilitation (general or geriatrics) is a limited resource. Access to inpatient rehabilitation after a period of acute care hospitalization is influenced by factors such as national policies, third-party payers, and regional variation (Weinrich and Stuart 2011). For example, in Ontario, Canada, 28% of stroke patients have access to inpatient rehabilitation (Teasell et al. 2009) compared with 41% of German patients (Unrath, Kalic, and Berger 2013). The eligibility criteria for admission to inpatient rehabilitation vary from one institution to another depending on the availability of resources (e.g., beds or human resources) as well as specialized programs offered in the institution (Haas 1988; Poulos and Eagar 2007; New 2009). In Canada, the Canada Health Act (CHA) stipulates that each province/territory should provide health services based on needs/medical necessity (rather than ability to pay) (Landry et

al. 2008). However, covered health services are understood as physician-centered and hospital-based. Rehabilitation provided at home and in outpatient facilities does not fall within the CHA and therefore provinces/territories do not have to legally provide these services. While it often receives reasonable compensation, the mechanisms for reimbursement are not defined (Deber 2003).

It is generally recognized that in order to be an inpatient rehabilitation candidate one needs to demonstrate potential to improve with rehabilitation. Rehabilitation is therefore granted to those who are thought to have the best “rehabilitation potential” (Cunningham, Horgan, and O’Neill 2000). Rehabilitation potential has been described by Rentz as an estimate of “the individual’s capability of co-operating with a rehabilitation program and making measured functional gains in ambulation and self-care” (1991).

It is common for inpatient rehabilitation institutions to have established admission criteria that reflect an attempt to standardize access to rehabilitation. Although these criteria can be seen as more objective, the risk of bias remains in the way they are applied in individual cases. For example, a patient without family support or with low socioeconomic status might be disadvantaged (Haas 1988) because such circumstances are indirectly related to prognosis: a patient with family support or higher socioeconomic status may have a better chance of returning home following a rehabilitation period. This raises the question of equitable access for more vulnerable populations such as older patients (Haas 1988; Foster and Tilse 2003). For example, stereotypes regarding older patients as demented may bias the assessment of their capacity to reach good outcomes.

This paper reviews some established eligibility criteria for inpatient rehabilitation and highlights the unique ethical challenges presented by the assessment of older patients. The ethical framework applied to these challenges is principlism, a well-established approach often used by healthcare professionals to analyze and resolve ethical dilemmas that they face (Beauchamp and Childress 2012). Principlism highlights the principles of autonomy, beneficence and justice as being particularly relevant in the context of healthcare. In this paper we rely heavily on the principle of justice, and distributive justice in particular, since the issue of rationing rehabilitation as scarce treatment is at the heart of our discussion. As in other rationing decisions, the difficulty resides in making fair and unbiased decisions that are based on prognosis, or in this case on the utility of rehabilitation for the patient and on its expected outcomes.

The discussion of considerations of justice must take into account other relevant principles. First, the respect for individual autonomy requires that healthcare professionals take into account patient's wishes to be admitted to inpatient rehabilitation and to return home while also considering family members' desires. Second, healthcare professionals must consider beneficence and non-maleficence in order to promote patients' best interests and protect them from harm.

Given the tension between considerations of justice, autonomy, and beneficence, we emphasize the potential risk of a biased interpretation of eligibility criteria in the case of older patients—bias that could be based on “ageism” as well as unfavorable views regarding what rehabilitation can achieve for this population. We demonstrate the possibility of such bias by examining a framework used in Montreal, Québec, Canada for assessing rehabilitation eligibility and by applying this framework to a case study. We then discuss the challenges that are inherent to the subjective application of such eligibility criteria in individual cases. Healthcare professionals face a situation of uncertainty when they assess the rehabilitation potential of their patients. While they wish to select those patients that have the best potential to benefit, they often do not have precise measures that would allow them to predict the outcomes. This creates more space for personal interpretation and thus may lead to more subjective assessment and hence increases the risk of implicit bias. We argue that careful framing of eligibility criteria, and specific tailoring for an older population, may reduce this risk. We conclude that in order to appropriately protect the vulnerable population of older patients in the context of priority setting and allocation of scarce resources, there is a need to establish more specific criteria that can better guide the assessment of this particular population, based on its particular needs and capacities.

REHABILITATION

The World Health Organization defines rehabilitation as “a process aimed at enabling disabled persons to reach and maintain their optimal physical, sensory, intellectual, psychological and social functional levels. Rehabilitation provides disabled patients with the tools they need to attain independence and self-determination” (World Health Organization 2015). Thus, according to this definition, the goal of rehabilitation is to get the person back to participation in the activities within the person's own limitations, and not necessarily to some ideal level of “normal” functioning. Rehabilitation is a process that combines the intervention of

a variety of healthcare professionals such as physical therapists, speech therapists, and occupational therapists, in interaction with the patient's capacity.

Rehabilitation originates from medical efforts during and after World Wars I and II to care for disabled veterans (Eldar and Jeli 2003). In the years following the world wars, rehabilitation became a medically established way of restoring individuals' ability to function after catastrophic illness or trauma in order to improve their ability to return to work and be productive (Becker and Kaufman 1988). Thus, rehabilitation has been applied primarily to persons in youth and midlife to enable them to be productive workers. Later, rehabilitation was also applied to other populations such as older patients (Hoenig, Nusbaum, and Brummel-Smith 1997; Lohr 1997; Demers et al. 2004). The goal of rehabilitating older adults is often said to allow them to be more independent by restoring their capability to live life to its full potential. It has also been argued that rehabilitation should not focus merely on restoring impaired abilities but should aim at restoring or compensating for abilities specifically required to engage in personally valued activities (Wilde 2009).

Rehabilitation is provided in various settings ranging from acute rehabilitation in hospital to inpatient and outpatient rehabilitation or community rehabilitation. Furthermore, various rehabilitation programs have been developed to address the particular needs of specific populations (e.g., stroke rehabilitation, geriatric rehabilitation, or spinal cord injury rehabilitation). In general, a rehabilitation program aims at evaluating patients' impairments and capabilities in order to help patients recover their previous level of function or to teach them how to compensate and execute activities of daily living [ADLs] and instrumental activities of daily living [IADLs] that are valued by the person (Becker 1994). ADLs are activities that are oriented toward taking care of one's own body, which include activities such as bathing/showering, dressing, eating, or feeding, whereas IADL are activities to support daily life within the home and community that often require more complex interactions than self-care used in ADL (e.g., financial management, meal preparation, shopping) (James 2014).

Rehabilitation is often requested by the patients and their families because of its potential benefits. However, while rehabilitation is not curative, the manner in which it is presented may lead individuals to believe it will provide a cure (Becker and Kaufman 1995). The expectations of patients and their families may be very high. Often, they think the patient will go back to "normal" life after rehabilitation. However, not

every patient has the potential to improve with rehabilitation. Thus, rehabilitation might be denied for individuals who do not fit certain criteria, as explained below.

This situation may create a tension between healthcare professionals, patients and patients' families. Patients and their families are focused on the benefit to the individual patient. Healthcare professionals on the other hand may have a more macro consideration of the situation and assess this potential benefit in comparison to that of other candidates, keeping in mind that a space in a rehabilitation program is a scarce resource. Professionals thus hold a comparative point of view, whereby their assessment—as uncertain as it may be—attempts to select those who are most likely to benefit. The family and the patient, on the other hand, hold a more targeted point of view and may perceive the decision to refuse rehabilitation as unfair or biased.

THE CHALLENGES OF ASSESSING REHABILITATION CANDIDACY

In this paper, we present an ethical reflection on access to inpatient rehabilitation for older patients. Therefore, it is essential to recognize the role and impact of eligibility criteria established by inpatient rehabilitation facilities to help assess the candidacy of patients having sustained an illness or injury. Such criteria are usually developed to guarantee the cost-effectiveness of the rehabilitation program. This is part of the concept of medical utility discussed by Beauchamp and Childress, where they assume that “judgments about medical utility should figure into decisions to ration scarce medical resources” (2012, 289). Some of the most commonly encountered inpatient eligibility criteria include the following: the patient is medically stable, demonstrates impairments that prevent an immediate and safe return home, is able to tolerate the rehab program, does not have behavioral problems limiting the ability to participate in the rehab program, is able to follow simple commands and presents with rehabilitation potential (GTA Rehab Network 2009; Agence de la Santé et des Services Sociaux de Montréal 2010; Tessier 2012; Willems et al. 2012).

While such criteria provide grounds for more standardized access to inpatient rehabilitation, positive rehabilitation outcomes are not guaranteed for any particular individual. Healthcare professionals are therefore faced with some level of uncertainty regarding the patient's rehabilitation potential. The evaluation of a patient's rehabilitation potential is influenced by many factors, for example, those linked to overall medical status such as pre-existing health condition, level of cognitive impairment (if any),

severity of the actual disease, and endurance, i.e., ability of the patient to tolerate an intensive rehabilitation program (Adler, Brown Jr., and Acton 1980; Kaufman and Becker 1986; Becker and Kaufman 1988). Socio-demographic factors such as age, work situation, and availability of caregivers, and personal factors such as motivation and perseverance, are also known to influence the assessment of rehabilitation candidacy (Kaufman and Becker 1986; Becker and Kaufman 1988; Becker 1994; Teasell and Foley 2008).

Although some factors are easier to assess in an objective manner, other factors are more ambiguous. For example, depression and low motivation are known to limit an individual's potential to improve with rehabilitation, but assessing these factors can prove to be challenging (Mosqueda 1993). Motivation level can be low due to depression and has been found to improve when depression is treated (Teasell, Merskey, and Deshpande 1999). Therefore, low motivation should not necessarily be an exclusion criterion. Moreover, a patient may be seen as lacking motivation and even "blamed" for not making substantial functional improvement if the goals set by the interdisciplinary team are higher than the patient's capacity or the patient's own goals (Resnick 1996).

Cognitive status is another important factor to consider, since inability to understand instructions or remember information may impair progress (Ruchinkas, Singer, and Repetz 2001). It has been shown that patients with cognitive deficit are less likely to achieve independence in ADLs and ambulation (Diamond et al. 1996; Goldstein et al. 1997). Nonetheless, several studies have also shown that some cognitively impaired patients may still benefit from geriatric rehabilitation (Diamond et al. 1996; Goldstein et al. 1997; Heruti et al. 1999; Ruchinkas, Singer, and Repetz 2001). Heruti and colleagues (1999) found that both cognitively intact and cognitively impaired patients' functional statuses improved with rehabilitation, although the cognitively intact patients had better results. One of the challenges is to determine the degree of cognitive impairment that is compatible with successful rehabilitation. Some patients with cognitive deficits may have the potential to reengage in valued activities. However, if older patients with cognitive deficit are systematically denied rehabilitation, some patients may be excluded unfairly.

Healthcare professionals often believe that their evaluation of rehabilitation potential is based on "scientifically valid judgements as to what constitutes need, what treatment modalities are most likely to be effective, and which cases deserve priority" (Mechanic 1989). However,

disagreement may occur between professionals within a multidisciplinary team, reflecting differences in their ways of assessing or in their concepts of what constitutes rehabilitation potential (Cunningham, Horgan, and O'Neill 2000). Non-clinical factors, sometimes unrelated to the individual patient—including the healthcare professional's opinion and interpretation of potential and outcome—also influence the determination of rehabilitation candidacy (Caplan, Callahan, and Haas 1987; Wrigley et al. 1994; Hughes and Griffiths 1997; Foster and Tilse 2003; Putman et al. 2007). Assessment of rehabilitation potential and determination of rehabilitation candidacy are thus not purely based on an objective process, but are rather subject to interpretation. Such interpretation can be influenced by healthcare professionals' views and values, as well as by organizational factors such as the length of the wait time for admission to inpatient rehabilitation or the urgency of the acute care hospital's need to free up beds (Foster, Tilse, and Fleming 2004; Lam Wai Shun et al. 2015).

A further challenge in assessing rehabilitation candidacy is related to the fact that there is neither clear agreement nor uniform mechanism to measure the benefits of rehabilitation or what can be considered a successful rehabilitation outcome. For example, how significant should the measured improvement in functional status be to consider rehabilitation as having been "sufficiently beneficial" to the patient? If the patient's functional status improves, but the patient still needs relocation to a nursing home, do we consider that the patient failed rehabilitation? Can the benefits of rehabilitation be measured only in terms of improvement in functional status or also in terms of improvement in quality of life, satisfaction with life, or achievement of the patient's own personal goals or capacity for valued activities?

The scientific literature has paid considerable attention to factors most predictive of rehabilitation outcomes. Studies on indicators of rehabilitation outcome indeed show which groups of patients are most likely to demonstrate measurable functional gains from a rehabilitation program, but are far from being able to predict how an individual patient will benefit from rehabilitation. Numerous models have investigated different variables that predict outcomes for diverse clienteles. For example, Burke and colleagues (2015) developed a multivariate model to predict treatment gains from a rehabilitation program in patients with stroke. Their model explains 44% of the variance in outcome. This is better than single-measure models that explain only up to 24% of the variance, but

still leaves 56% of unexplained variance. This example illustrates how uncertain the prediction of rehabilitation success can be for stroke patients.

Furthermore, these studies assume that rehabilitation success can be determined by measuring functional gains or discharge disposition. However, in the older population for whom functional gains may be limited compared to a younger population, successful rehabilitation may be better understood by measuring satisfaction with life or resumption of valued activities following rehabilitation. The focus on functional gain in the assessment of rehabilitation potential can hence amplify biased interpretations. Thus, the complexity and the uncertainty in predicting outcomes raise significant ethical challenge, because rejecting a candidate due to false assumptions of failure might lead to unjustly denying the patient a chance despite the fact that he/she could benefit from rehabilitation.

In fact, rehabilitation might increase the chances of an older patient returning to his previous living setting, rather than being relocated to an institutional setting. Even if the older patient's rehabilitation goals are more modest compared to those expected for a younger patient, possible long-term benefits should not be ignored. First, even small improvements in functional status, such as the ability to function at home with the assistance of one person rather than two, could guarantee a discharge to the patient's home. Second, even when older patients are relocated to an institution after rehabilitation, they might need fewer services. This would not only allow them to remain more independent and autonomous within the institutional setting, but cost less in the long run. What seems to be less cost-effective in the short term, might prove to be—from a systemic perspective—a good investment in the long term.

Additionally, older people might see their quality of life improved with rehabilitation, where they do not have to stay in bed, may be able to ambulate more easily, and has less contractures. This could mean, for example, that the patient may be able to sit in a chair when eating his meal rather than in bed, which could have significant quality of life benefits. One could argue that despite not being “productive”; at this stage in life, older patients who contributed to society throughout their lives deserve every effort made to improve their quality of life.

REHABILITATION OF OLDER PATIENTS

Rehabilitation is very important for older patients, due their high incidence of disability and decreased reserves (Stott and Quinn 2013). It usually involves diverse professionals, such as physicians, nurses, dieticians,

occupational therapists, and physical therapists, working with the patient as a team with a holistic and individualized approach. The ultimate goal is to improve the functional status of older patients, allowing them to live to their fullest potential. Rehabilitation of older patients may include subspecialties such as stroke rehabilitation or orthogeriatrics, depending on the specific needs of the patients. This paper focuses on the rehabilitation of older patients in general, since the ethical challenges are similar regardless of the specific program.

REHABILITATION OUTCOMES OF OLDER PATIENTS

There is conflicting evidence in the literature about the effect of age on rehabilitation (Andrews et al. 1984; Ory and Williams 1989). The chronological delineation of “old” is itself not well defined and varies among studies (Becker and Kaufman 1988). Older age has been linked by some investigators with severity of conditions and poor prognosis for rehabilitation (Aho et al. 1980; Ahlsio et al. 1984; Shah, Vanclay, and Cooper 1990). The most salient difference between older and younger patients is the higher burden of comorbid conditions (Wells et al. 2003a). Older patients tend to be frail and fragile. Frailty is defined by Wells and colleagues as “a complex interplay of a person’s assets and deficits, including health and illness, attitudes, practices, resources, and dependence on others” (2003a, 891). Older patients may thus have poorer rehabilitation outcomes than younger patients, such as poorer performance in motor function skills upon discharge, the need for paid caregivers and nursing home placement (Falconer et al. 1994; Rosenberg and Popelka 2000). Falconer and colleagues (1994) explain these differences by decreased physiologic reserve, unavailability of a healthy spouse, comorbidities, tenuous finances, and other social support factors.

In fact, one of the main social support factors resides in being in a relationship (e.g., married or living with a significant other or a family member). It has been suggested that patients who are married or have a partner are between 1.5 and 2 times more likely to attend outpatient cardiac rehabilitation programs (Molloy et al. 2008). Although this information might be very useful, taking into account the marital status of older rehabilitation candidates might disadvantage them as a population, since many have already lost their spouses. Additionally, older women might be the most disadvantaged category since women live longer and therefore spend the last years of their lives living alone. Women who took care of their spouses are now living alone with no support and thus

might not be considered as rehabilitation candidates. This raises ethical challenges and may be considered unjust. The years women spend as informal caregivers to their spouses saved the healthcare system large sums of money (Bookman and Harrington 2007; Canadian Health Services Research Foundation 2011; Alzheimer's 2013), but when it is their turn to benefit from rehabilitation they are denied access due to lack of support.

Another category of older patients might suffer from lack of social support. Since Lesbian, Gay, Bisexual, and Transsexual (LGBT) older patients are “less likely to be partnered or married,” they are more likely than their heterosexual peers to experience decreased social support (Fredriksen-Goldsen et al. 2011, 49). In fact, one-fifth of LGBT boomers report not being sure if they will be cared for when they become dependent. This worry arises especially in the case of those that have no spouse or partner, as one-third of them are unsure who would take care of them in the future (Metlife Mature Market Institute and The Lesbian and Gay Aging Issues Network of the American Society of Aging 2010, 41). Therefore, taking into account the available social support of older patients when making decisions about rehabilitation candidacy, may lead to particular discrimination against LGBT older patients.

Some studies of factors related to rehabilitation outcomes show that age, up to the ninth decade of life, is generally not related to the outcomes of rehabilitation for older patients (Feigenson et al. 1977a; Feigenson et al. 1977b; Lind 1982; Andrews et al. 1984; Wade, Langton-Hewer, and Wood 1984). Parry found rehabilitation to be specifically effective for patients over 85, as 71% either returned to the same setting as before hospitalization or moved in with family members after rehabilitation (1983). Couser and colleagues note that “comprehensive outpatient and inpatient pulmonary rehabilitation programs are as beneficial in older patients (≥ 75) with COPD as they are in younger patients (64 ± 1) with similar lung function abnormalities” (1995, 730). Bagg and colleagues note in their study that “there is no justification to deny patients to rehabilitation solely because of advanced age” (2002, 179). These examples demonstrate that while there are conflicting views regarding what older adults can achieve with rehabilitation, there are definitely cases where rehabilitation of older patients can be as successful as that of younger ones. Therefore, systematically denying older patients access to rehabilitation due to their advanced age and to assumptions stemming from stereotypes would be unjust.

THE RISK OF AGEISM IN REHABILITATION

Becker found that even when healthcare professionals value the rehabilitation of older frail patients, they still experience feelings of futility about the outcome of their efforts, because they feel that elders with disability are slow and unproductive, and therefore they do not seem to be “worth” the cost of rehabilitation (Becker 1994). Several studies found that in rehabilitation more resources are spent on younger patients than on older ones (Kvitek et al. 1986; Osberg et al. 1990). The negative images of aging held by healthcare professionals and their lack of interest in rehabilitating older patients have been illustrated by several studies (Ciliberto, Levin, and Arluke 1981; Kvitek et al. 1986). Consequently, the notion of rehabilitating chronically impaired older patients so that they may return to the community may not be as frequently pursued by healthcare professionals (Becker and Kaufman 1988). Indeed, some facilities are unjustifiably selective specifically with respect to patients over 80 (Henriksen 1978).

While it is true that chronic conditions and frailty increase with age, age alone should not be considered an exclusion criterion and should not bias the selection process of rehabilitation candidates. Healthcare professionals need to be aware of their possible prejudices regarding the physical and cognitive capacities of older patients, to avoid the bias often called “ageism.” Ageism is defined by Butler as “a process of systematic stereotyping of and discrimination against patients because they are old, just as racism and sexism accomplished this with skin color and gender” (1975, 12). Several studies indicate that old age may have an increased impact on clinical decisions, such as taking older patients’ level of comorbidity and potential risks into account (Mendelssohn, Kua, and Singer 1995; Rynänen et al. 1997; Lamping et al. 2000; Dale 2003; Penson, Daniels, and Lynch 2004; Collinson et al. 2005). Overt ageism is rarely reported in the literature (Pedersen et al. 2008). However, many articles indicate covert ageism in the selection of older patients for the treatment of some conditions, such as acute coronary syndrome or cancer (Arnesen, Erikssen, and Stavem 2001; Yong et al. 2004; Collinson et al. 2005). While this type of ageism is subtle, one editorial stated that “whenever a clinical stone is turned over, ageism is revealed” (Young 2006, 508).

In rehabilitation decisions, older patients may be subjected to disadvantaging stereotypes where they are categorized as senile, infirm due to loss of functional ability, lacking competence to manage their own lives, and unable to make decisions (Butler 1975; Becker 1994; Frost 2001;

Williams 2007; Sherwin and Winsby 2011). Often, those stereotypes are inaccurate generalizations and reflect what people think an older person should be, rather than the reality. Gaynor and colleagues systematically reviewed the literature to assess the extent of ageism in stroke rehabilitation studies. They discovered that the mean age of patients included in these studies was almost a decade younger than those seen by stroke physicians in daily practice. They conclude that ageism undoubtedly exists in stroke rehabilitation studies (Gaynor, Geoghegan, and O'Neill 2014).

ETHICAL CHALLENGES FOR HEALTHCARE PROFESSIONALS

Unfortunately, not every older patient is found to be a candidate for a rehabilitation program. For example, when the extent of cognitive deficit limits the ability of the patient to participate actively in a rehabilitation program, when the patient does not recognize the need for rehabilitation, or when the patient has multiple comorbidities that significantly limit endurance, healthcare professionals are reluctant to recommend transfer to inpatient rehabilitation. They often recommend discharging the patient home with home care/community services if possible or relocation into an institution such as a nursing home. The patient and/or his family might object to this decision, arguing that the patient should be given the opportunity to at least try rehabilitation. This is based on the perception that even a small amount of progress can make a difference in the patient's functional status and quality of life.

Such scenarios create an ethical challenge, implicating the patient's autonomy and right to choose, the need to be protected from harm if discharged to an environment in which the patient cannot function safely, as well as issues related to just allocation of resources and the right to fair and equitable access (Beauchamp and Childress 2012). Thus, healthcare professionals employ—whether or not they are doing so consciously—the principlist ethical framework. The principles of autonomy, beneficence/non-maleficence, and justice guide their reflection and decisions. They believe that they ought to respect the patient's autonomy, but at the same time that they should protect patients from potential harm. They wish to allow the patient access to services that might provide benefit, but are aware of considerations of just and effective resource allocation. They concretely experience in their clinical practice the ethical tensions that principlism—as a conceptual approach—was developed for. As acknowledged by Beauchamp and Childress: “various moral principles, rules, and rights can and do conflict in the moral life. These conflicts sometimes produce

irresolvable moral dilemmas. . . . Explicit acknowledgment of such dilemmas helps deflate unwarranted expectations about what moral principles and theories can do. . . . In some cases the dilemma only becomes more difficult and remains unresolved even after the most careful reflection” (2012, 12–13).

Thus, although the conflict between competing principles might remain unresolved, the application of moral principles remains appropriate and useful. The principles reflect common morality shared by the majority of healthcare professionals and hence allow a shared language and provide a powerful tool for analyzing the tensions surrounding these decisions that are necessary in daily practice. The tension between these principles forces healthcare professionals to balance them against each other in the search of the most ethically justified resolution. Beauchamp and Childress define balancing as “the process of finding reasons to support beliefs about which moral norms should prevail. Balancing is concerned with the relative weights and strengths of different moral norms. . . . Balancing seems particularly well suited for reaching judgments in particular cases” (2012, 20). Such an exercise of balancing competing principles is one that healthcare professionals must engage in each time they discuss a case of patient with borderline potential for rehabilitation.

Often, healthcare professionals are uncertain whether they are required to give every patient a chance at rehabilitation, knowing that very little benefit is to be expected. One example of such a scenario is when the patient and/or the family request to prolong hospitalization in order to allow the patient more time to progress so that he may emerge as a rehabilitation candidate. This situation uncovers the recurrent ethical tension between the interests of the individual patient and those of society. While prolonging the hospitalization of the patient might be beneficial and allow him/her to improve their functional status in order to become a rehabilitation candidate, it may decrease the capacity of other patients to be admitted to the hospital, a consideration that healthcare professionals are aware of.

The decision regarding rehabilitation potential may be crucial to a patient’s ability to return home rather than be relocated. For this reason, patients and/or their families often “fight” for the right to benefit from rehabilitation services. In this context of competition over scarce resources, and in light of the need to prioritize those candidates who stand to benefit the most and in the shortest amount of time, decisions made by healthcare professionals regarding the potential for rehabilitation have an important

impact on the patient—and the family’s—future life plans and quality of life. Moreover, the ability to navigate the health system is a non-clinical factor influencing the access to care. Patients that are more prompt to file a complaint or that are calling a department with insistence (Martone 2001; Hoyt-Hallett et al. 2009; Carrier, Levasseur, and Mullins 2010) or parents that can better articulate the need of their child (Martone 2001; Feldman et al. 2002) will have faster access.

ETHICAL CHALLENGES AT THE ORGANIZATIONAL LEVEL

Since health resources are limited, healthcare professionals are under pressure to demonstrate the positive outcomes of their interventions (Brock et al. 1998; Yoward, Doherty, and Boyes 2008). Additionally, healthcare professionals need to spend public money wisely according to evidence-based choices of intervention, while being transparent and explicit about the basis of their decisions. Often, healthcare professionals are asked to shorten patients’ length of stay, mainly in order to contain expenses and to decongest crowded emergency rooms, allowing more patients to be admitted to the hospital. Finally, returning home promptly may often be a wise choice for the patient (if they have the appropriate community care and services required by their condition) as hospitals present many risks such as nosocomial infections and deconditioning due to decreased opportunity to mobilize.

At the same time, decreasing the length of stay at the hospital may not allow enough time for the patient to recover and emerge as a rehabilitation candidate. Some patients with specific conditions such as stroke may need more time to recover or to gain motor return that would increase their chances of being accepted for rehabilitation.

Rehabilitation facilities are also under pressure to shorten patients’ length of stay. This is part of the cost containment measures that are required in the healthcare system, especially when it is publicly funded, in order to allow a greater number of citizens to benefit from such services. Consequently, rehabilitation facilities use a cost-effectiveness approach when they assess rehabilitation potential and are inclined to choose candidates who are most likely to meet the objectives of their rehabilitation in a limited time, and who are most likely to be able to return home rather than be relocated into a nursing home. At the end of the rehabilitation episode, if patients are not able to be discharged home, they must wait for a place in a nursing home, which may prolong the length of their stay in the rehabilitation facility. This generates feelings of failure, the patient

cannot return home as hoped, and of frustration, as the patient now takes up a bed that could be better used by another rehabilitation candidate. Moreover, numerous authors note rehabilitation centers' tendency to prefer candidates who achieve better results in a shorter period, as they are financially rewarding for the facility (Putman et al. 2007; Ilett et al. 2010; Kennedy et al. 2012).

Older patients require longer hospital stays, as well as longer rehabilitation stays than younger ones to reach the goals of rehabilitation (Kennie 1983). However, despite the fact that age was found to have significant effect on the speed and completeness of recovery, age alone is a weak predictor of functional improvement and therefore does not constitute a contraindication to rehabilitation (Teasell and Foley 2008; Bartolo et al. 2012). This reality means that some will be denied access to rehabilitation due to the fact that they require more time—and thus elevate the cost to the system—despite the fact that they stand to benefit. This raises complex ethical challenges.

Every healthcare institution, whether it is an acute care or a rehabilitation facility, attempts to improve its length of stay and decrease its costs. In some cases, the hospital wishes to rush the older patient early to the rehabilitation facility while the rehabilitation facility refuses to take the patient, claiming more time is required in the hospital for the patient to recover enough to be eligible, i.e., to become a candidate that stands to make fast progress and benefit from a short rehabilitation episode. As a result, the patient may end up being relocated to a nursing home prematurely, despite the fact that the patient could have returned home if given enough time to recover at the hospital or to benefit from rehabilitation. In the long run, the healthcare system does not necessarily benefit from this strategy, since nursing homes cost more than maintaining the patient at home. Consequently, the focus on the benefits for each institution is not benefiting the system. Therefore, more collaboration between institutions is required in order to increase the efficiency of the overall system.

The quest for efficiency at the organizational level, combined with the personal (and potentially biased) assumptions of healthcare professionals that older patients cost more in rehabilitation than younger patients, can lead to systematic discrimination against older patients, where they are unjustifiably denied access to rehabilitation. The cumulative effect of organizational pressure to achieve optimal cost-effectiveness and implicit ageist biases underlying the assessment of older patients may end up undermining their opportunity to get into a rehabilitation program.

Despite the fact that older patients may cost the healthcare system more than younger ones, we argue that they should not be systematically denied access. First, from an ethical perspective the right to healthcare is universal and no population should be a priori excluded from receiving a service that may benefit it. The Canadian healthcare system is based on values of solidarity and equity, expressed through the notion of universal access. While the benefits of rehabilitation for older patients may not be enormous, their impact on quality of life may still be significant. This means that regardless of age, patients who can benefit from rehabilitation should have access to such services.

Second, a short-term vision may be too myopic in determining cost-effectiveness to the healthcare system. Even a small amount of functional improvement in an older patient may delay relocation to a nursing home, which could save the system money in the long run. Moreover, many improvements in functional status mean that less care at home is required, which also reduces the cost to the system. Thus, access to rehabilitation for the older population should be assessed based on justified and unbiased criteria, and with a systemic long-term vision of cost-effectiveness.

THE CHALLENGE OF ASSESSING REHABILITATION CANDIDACY OF OLDER PATIENTS

In Montreal (Québec, Canada), a “framework” is employed for the referral of patients to post-hospital inpatient rehabilitation facilities (hereinafter the “Montreal Referral Framework”) (Agence de la Santé et des Services Sociaux de Montréal 2010, 18). This framework was developed under the authority of the Agency of Health and Social Services of Montreal, by a committee composed of inpatient rehabilitation administrators, professionals, and physicians. It reflects an attempt to standardize the referral process of patients from acute care to inpatient rehabilitation. It includes admission criteria such as loss of functional autonomy, presence of physical or cognitive deficits impairing ADLs and IADLs, the need for rehabilitation services on a daily basis (as opposed to outpatient rehabilitation services that require two to three sessions weekly), patient’s consent to rehabilitation, patient stability from a medical, surgical, and psychiatric point of view, and absence of uncontrollable (e.g., aggressive) behavior that might put the patient or others at risk.

Another key admission criterion is “*rehabilitation potential*,” defined by the Montreal Referral Framework as including the four following components:

- Favorable prognosis for improvement at the level of autonomy;
- Potential for recovery, learning potential, or potential to compensate for incapacities;
- Capacity to understand and to follow simple instructions;
- Capacity to participate actively in rehabilitation.

These components are defined for the general population and they are indeed very helpful in guiding the selection of rehabilitation candidates by both the acute-care hospital and the inpatient rehabilitation facility. However, we argue that they should be specified and tailored to the particular needs of the older population. Taking the criterion of rehabilitation potential as an example, we demonstrate how its four components remain too general to address the circumstances of older patients and how this can promote a biased interpretation that may disadvantage them. Furthermore, we demonstrate how the components of rehabilitation potential may be better defined and specified and how such specification can better protect the older population.

In what follows, we use a case study to demonstrate how each component may be subject to different interpretations by healthcare professionals working in both acute-care hospitals and inpatient rehabilitation facilities. We highlight how certain interpretations may be influenced by personal biases stemming from—conscious or subconscious—“ageist” assumptions. We show how such biases may disadvantage geriatric candidates for rehabilitation and pose barriers to their admission.

Mrs. F., 78 years old, is admitted for a myocardial infarct complicated by a stroke. She lives alone in a split-level house with stairs. Prior to hospitalization, she was functionally independent regarding ADLs and IADLs and was able to drive her car. During hospitalization, she presents a long-standing delirium lasting several weeks, requiring continuous close supervision in order to prevent wandering and falls. This, as well as the prolonged length of stay due to the delirious state, is very costly. Prior to hospitalization Mrs. F. never had any cognitive deficit. Her delirium may be a result of her stroke as there is no evidence of infectious process as an etiology for the delirium. As a result of her stroke, Mrs. F. has a right hemiparesis and ataxia, impairing her gait and ADLs and putting her at risk for falls.

The acute-care multidisciplinary team feels that she might require a period of rehabilitation but is unsure about the progress she would be able to make. They are also uncertain regarding the final discharge destination after rehabilitation, since if she returns home alone, Mrs. F. would need to manage her everyday tasks independently. They question whether she will be able to go back home or require relocation into a nursing home. The

team wonders whether Mrs. F. should be given a chance to try inpatient rehabilitation in order to see how much improvement she can accomplish.

REHABILITATION POTENTIAL COMPONENTS

1. *“Favorable Prognosis for Improvement at the Level of Autonomy”*

Improving the level of functional autonomy is the ultimate goal in rehabilitation. A good prognosis is translated functionally by gains in functional autonomy. While the amount of improvement in older patients may be small, its impact on their daily life is important. An older patient might not necessarily walk independently, drive a car, or go back to work, but being able to walk few steps to the bathroom might improve significantly the quality of his life and even allow the patient to stay home.

While significant improvement at the level of functional autonomy may not always be attainable for an older patient, rehabilitation may contribute significantly to improve quality of life. For example, sitting rather than lying in bed may not constitute an improvement from a functional autonomy perspective, as the patient may still require the same level of care and support as before, but it may greatly enhance the quality of life of the patient. The focus on improvement of autonomy may therefore—in itself—disadvantage older patients who cannot meet this criterion but may still benefit from rehabilitation in important ways.

We argue that the distinction between quality of life and functional autonomy is particularly relevant in the aging population, where many of the “improvements” that can be achieved through rehabilitation enhance quality of life, but do not necessarily promote significant functional autonomy. For example, improving the ability of the patient to transfer independently instead of transferring with supervision promotes the patient’s quality of life. If Mrs. F. were able to sit when she wants to, or transfer without waiting for assistance, this would significantly improve her quality of life. Even a small improvement such as being able to change her position in bed independently would make the patient more comfortable and even reduce the risk of pressure ulcers, a main complication of immobility.

We therefore recommend tailoring this first rehabilitation potential component to the ageing population by supplementing it with the notion of improvement in quality of life: “Favorable prognosis for improvement at the level of autonomy or in the quality of life of the patient.” By being

sensitive to quality of life considerations, more older patients will be given the chance of rehabilitation regardless of their ultimate discharge destination. For example, while Mrs. F. may ultimately need relocation after rehabilitation, even small improvements may improve her quality of life in a significant way.

Additionally, we suggest that rehabilitation programs be adapted to the specific situation of older patients so that the goals of rehabilitation take into consideration improvement in quality of life as opposed to focusing solely on functional autonomy, independence, or productivity such as going back to work. This component could be supplemented with some specific indicators for measuring expected progress and expected outcomes. Each patient presents a different set of needs and may wish to engage in a specific set of valued activities. Considering we argue in favor of considering improvements in quality of life as an appropriate way of determining a “favorable prognosis,” the objectives of rehabilitation should take into consideration patients’ unique needs and preferences. For instance, rehabilitation potential may be considered sufficient if a progress can be expected from being chair bound to being able to walk indoors for an older adult who remains mainly indoors and has family support for activities requiring community interaction, while this outcome may be unacceptable to a patient living alone with no social support.

Furthermore, the concept of “improvement at the level of autonomy” is framed very broadly. There are no specific indications regarding what level of improvement is expected or what attained degree of functional autonomy may count as sufficient to justify admission to rehabilitation. The absence of such detail may disadvantage patients whose primary objective is to be able to return home after a period of hospitalization. For an older patient, being able to return home may require only a small degree of improvement or be possible even based on a minimal degree of functional autonomy, whereas for younger patients whose objective is to return to an active productive life, the required improvement might be much higher.

Since this component remains general and does not provide any indicators for measuring or quantifying the required level of improvement or of the level of autonomy to be attained, it is left wide open to interpretation. Different healthcare professionals may thus interpret it from their own personal or professional perspectives of what counts as significant improvement and what counts as sufficient functional autonomy. They may also be influenced by the way their own values frame

the competition for the scarce resource that is inpatient rehabilitation. From such a personal perspective, to meet this criterion, a patient may be expected to show a degree of improvement that many older patients are unable to demonstrate. The generality of this component therefore carries the risk of disadvantaging older patients who may require a smaller degree of improvement to obtain their desired degree of functional autonomy or desired engagement in valued activities that may lead to a more satisfying life.

For example, a patient seeking to return to an active productive life may see the improvement from being bedridden to being able to walk independently as the minimal required degree of improvement. However, a patient seeking to return home rather than relocate to a nursing home may see the improvement from being bedridden to being able to transfer with assistance as sufficient, because such improvement may allow her to return home with the care of a loved one. The “quantified” improvement may be very small compared with the improvement that can be attained by a younger candidate, but when evaluated from the perspective of the patient’s own individual goals or ability to engage in valued activities, it can be seen as sufficient.

Moreover, the incapacity of a younger patient is often perceived as tragic, leading to a perception of the investment in rehabilitation as more justified as it attempts to correct the wrong induced by injury or illness. Inversely, healthcare professionals tend to be more reluctant to invest rehabilitation resources in older patients, because the increased prevalence of chronic conditions promotes an association of aging with infirmity and an assumption that loss of function is normal in advanced age (Mittiness 1987; Minkler 1990) and thus does not require any intervention to rehabilitate the older patient. A study of the factors associated with referral to rehabilitation found that age was a significant factor, with older patients referred more often to out-patient rehabilitation or not referred to any type of rehabilitation at all (Foster et al. 2000). Indeed, Becker found that younger patients were often considered rehabilitation candidates, while older patients were thought to need “babysitting” (basic care such as bathing, help with feeding, etc.) because, in the healthcare professionals’ opinion, they did not have the potential to succeed with the rehabilitation program (Becker 1994).

We therefore argue that research is required to develop more specific indicators regarding what can be considered acceptable improvement for older patients, to allow better identification of suitable rehabilitation

candidates. This would also allow tailoring this component specifically for older patients for whom even small steps may allow staying at home, engaging in valued activities, or more broadly retaining more control over their lives. Such tailoring would increase the chances of older patients to gain access to rehabilitation based on an understanding of their particular needs. This is particularly important when no geriatric rehabilitation programs are available, so that older patients find themselves competing against younger ones for limited resources.

2. *“Potential for Recovery, Learning Potential or Potential to Compensate for Incapacities”*

This component includes the important distinction between recovery and compensation (Becker 1994). Recovery in rehabilitation generally refers to remedial approaches that aim at restoring function and usually imply interventions aiming at improving a skill that was lost with the goal of enhancing performance in everyday activities (e.g., rehabilitation interventions aiming at increasing lower extremity muscle strength and coordination with the goal of improving the ability to walk). Compensation generally refers to adaptation through modification of the environment or the use of devices, to allow the patient to perform a task even though there is permanent loss of a skill (e.g., learning how to walk with a prosthetic leg following amputation) (Youngstrom and Brown 2005). Both recovery and compensation may be viewed by some as implying that the objective of rehabilitation is always the attainment of the level of functioning that was lost.

Healthcare professionals' interpretation may be influenced by their perceptions and values regarding the level of autonomy and productivity expected of those benefitting from the scarce resource that is rehabilitation. If they implicitly link recovery and compensation with the capacity to lead a productive life, and not only with improvement in functioning for reasons based on quality of life and dignity, they may intuitively favor younger patients who stand to benefit from rehabilitation in a way that would allow them to regain their lost functions and even go back to work. However, an older patient such as Mrs. F. may not require attaining the same level of functioning she had prior to hospitalization, but rather some improvement in basic abilities that would allow her to return home rather than be relocated to a nursing home. Framing the expectations of healthcare professionals in terms of recovery and compensation may thus bias their perception of the rehabilitation potential of older patients.

3. “Capacity to Understand and to Follow Simple Instructions”

The vague term “simple instructions” lacks specificity and is therefore open to interpretation by healthcare professionals. The level of simplicity of the instructions can thus be determined by healthcare professionals and may depend on their own values and expectations of rehabilitation. If they tend to favor younger candidates, they may interpret “simple” in a more demanding way and expect only candidates who demonstrate better cognitive capacity to be eligible. On the other hand, those who believe in the benefits of rehabilitation for the older would have a more expansive interpretation and include even very simple instructions. They would see it as appropriate to guide the older through each step, not require great retention of information, or be willing to repeat the same instructions and information daily.

Although cognitive status can limit rehabilitation potential in older patients, effective physical rehabilitation of patients with cognitive impairment shows considerable potential (Dowd and Dowd 1981; Heyn, Johnson, and Kramer 2008; Rabadi et al. 2008). Rehabilitation may be implemented according to the level of cognition and the goals of rehabilitation need to be adequately tailored to the individual case (Heruti et al. 1999; Heruti et al. 2002).

In this context, the distinction between delirium and dementia is important. Delirium is sudden, acute, and reversible, often caused by infection. Dementia is progressive, organic, caused by major changes in the brain, degenerative, and irreversible. The assessment of rehabilitation potential may be significantly different if a cognitive deficit is seen as stemming from dementia rather than delirium. Healthcare professionals may tend to interpret cognitive deficit in an older patient as dementia, rather than as delirium, based on age and a stereotypic view of an older person as demented. Additionally, the stage of dementia is important. In fact, if the dementia is in the early stage, the patient might still be able to follow instructions and participate in a rehabilitation program. Also, studies showed that in the early stage of dementia, patients’ broad decisional capacity is not diminished (Moye et al. 2004).

However, an older patient such as Mrs. F. may be suffering from temporary and reversible delirium for weeks, and then fully recover. Even if a patient is known to have dementia, signs of cognitive deterioration may be observed simply because of unfamiliar environments, so the evaluation in a hospital setting could underestimate the patient’s true abilities in a more familiar environment such as home. Patients with dementia thus require

not only specific rehabilitation programs, but also an adapted approach to assess their potential for improvement. In the case of Mrs. F., if the acute-care team is prone to making rapid decisions regarding rehabilitation potential, they may interpret her disorientation and confusion as signs of dementia or as signs of permanent damage from the stroke and therefore view her as having little rehabilitation potential. However, Mrs. F.'s cognitive state could well be related to a temporary state of delirium, in which case, if the delirium subsides, she could present with cognitive abilities that would then portray her as a good rehabilitation candidate. Therefore, in most cases, providing comprehensive multidisciplinary team assessments and allowing appropriate recovery time are essential for an adequate evaluation.

4. *“Capacity to Participate Actively in Rehabilitation”*

The vagueness of the term “actively” leaves it open to interpretation on two levels: how should “actively” be measured, and what degree of activity constitutes a sufficient threshold to justify rehabilitation. To actively participate in rehabilitation could mean that a patient must a) have the physical endurance to do what is required; and b) have the cognitive capacity to retain what was learned or already achieved so that progress can be made from day to day. If cognitive impairment entails incapacity to retain information or learned skills from day to day, then active participation might be viewed as impossible. If the same instructions have to be repeated daily, progress is slowed down or may even become impossible. Moreover, older patients may not show enough motivation, which may lead healthcare professionals to develop an impression that rehabilitation would be futile (Becker and Kaufman 1988). However, motivation itself is another feature assessed by healthcare professionals that inherently involves subjective assumptions and may not reflect the patient's real ability and desire to participate in rehabilitation (Mold, McKeivitt, and Wolfe 2003).

However, since cognitive impairment is more prevalent in the older population than in the younger population (Weber, Fleming, and Evans 1995), adjusting this component to the geriatric context would require specifically defining what level of cognitive capacity is considered minimal for “active” participation in rehabilitation. Without such specifications, the interpretation of “actively” remains open and may be greatly influenced by the perceptions and biases of healthcare professionals. Older patients who are slower to learn and to improve may be perceived as not being

able to actively participate in rehabilitation if they are evaluated based on the same measures as younger patients, who can learn and progress faster. However, if specific indicators are developed to address the capacity and the objectives of this population, the same candidate may be perceived as able to achieve the required threshold.

In the case of Mrs. F., how can her capacity of participating actively be assessed? While she is suffering from delirium that impairs her memory, she is still able to follow instructions if they are repeated daily and can show improvement in functional status. The evaluation of her participation as “active” therefore depends greatly on the sensitivity of the interpretation of this component to the unique needs and capabilities of an older patient.

CONCLUSION

The Montreal Referral Framework presents many advantages. First, it is a general guide that helps healthcare professionals show transparency in their decision-making process and justify their decisions to the patient and/or the family. Furthermore, it promotes equitable access by attempting to standardize rehabilitation admission criteria. Finally, it facilitates the communication between the referring team at the hospital and the admitting team at the rehabilitation facility, by ensuring that both teams use the same criteria in their assessment of the patient.

However, bias may be easily introduced into the assessment of rehabilitation potential through the interpretation of criteria that lack specificity, under the influence of ageist assumptions. Such biases, in addition to the effort to ensure cost-effectiveness, can potentially jeopardize the patient’s chance to be eligible for rehabilitation, leading ultimately to premature relocation to a nursing home, increased burden on caregivers or diminished quality of life.

In this paper, we used the example of the Montreal Referral Framework to illustrate the risk of ageist bias in interpretation of rehabilitation potential and rehabilitation candidacy of older adults. However, this ethical analysis may apply to other inpatient rehabilitation referral guidelines as well, as they have similarly general criteria that are vague and open to interpretation. For example, in Ontario (G.F. Strong Rehab Centre 2009) and British Columbia (GTA Rehab Network 2009; Island Health 2015), several institutional guidelines list the potential to improve with rehabilitation as one of the admission criteria, without any specification of the amount and the measurement of that potential.

In conclusion, guidelines may present two sources of injustice towards older patients. The first resides in the criteria themselves. They might be imprecise, vague, and not adapted to the needs and potential of older patients. Such criteria would give way to ageist assumptions, where older patients are perceived as not responding to criteria that are developed with younger patients in mind. The second source of injustice resides in the potential ageist bias of healthcare professionals in the interpretation and application of these criteria in ways that depend on their individual value systems and (possibly misguided) perceptions of the older.

Consequently, such guidelines open the door to unfair limitations on access to rehabilitation due to ageism and to the interference of social factors, giving way to inequity. Frameworks such as the Montreal Referral one are not well adapted to the specific situation of older patients. In a universal healthcare system, every citizen should have the right to rehabilitation depending on her ability to benefit from it, according to a set of objectives that are set in accordance with the person's needs. Referral Frameworks should thus include specific criteria adapted to each category of patients, and especially to the older population. For example, the goals of rehabilitation should respect their needs, as the expected outcome is not to be able to go back to work, but rather to allow the older patient to accomplish small improvements in the functional status such as being able to walk a few steps or to eat without assistance. In the long term, these small improvements may prove to be very cost-effective for the healthcare system as well.

More research is therefore needed in order to develop more specific criteria that promote the transparency and the equity of the selection process. More specific criteria would allow a more objective assessment and ensure that decisions are not made based on age-bias but rather based on justifiable criteria that are applied equitably. Finally, healthcare professionals should be aware of their possible bias and examine their own beliefs in order to avoid any implicit ageism that may create unjustified barriers to access.

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