

Referrals for inpatient rehabilitation and the patient selection processes: Pre-pandemic challenges as a guide towards reforms moving forward

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Abstract

Purpose: To analyse data related to the referral, selection and admission processes for inpatient rehabilitation at Karin Grech Hospital, Malta. Examining pre-pandemic challenges faced can guide reform towards a more sustainable use of inpatient rehabilitation services. **Methods:** Referrals and outcomes of all patients referred for inpatient rehabilitation between April and August, 2018 were analysed. **Results:** 47% of patients referred for inpatient rehabilitation were accepted, with an average time to transfer of 4.84 days. Of the 53% deemed unsuitable, the commonest reasons were: excessively high level of independence (22%), non-weight-bearing restriction (12%) and patient refusal (12%). 90% of inpatients in rehabilitation were discharged home, 7% were transferred back due to acute complications and 1 patient was transferred to a residential home. Out of all referrals, 14 passed away within 1 year, two of these within 8 days of referral. **Conclusions:** Identifying unsuitable referrals for inpatient rehabilitation can avoid inappropriate admissions that would otherwise decrease bed availability and increase waiting times. Basing patient selection on key principles can thence ensure efficient and sustainable rehabilitation services moving forward.

Keywords

Inpatient rehabilitation, hospital, admission criteria, discharge planning

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Introduction

Physical and Rehabilitation Medicine (PRM) still remains one of the younger and less recognised specialities in modern medicine. In spite of this, the demand for its services has been overwhelming in the past few years, consistently surpassing the resources available.

From its post-war origins to its official recognition by the European Union of Medical Specialists (UEMS) in 1971, it has strived to bring together various clinicians and allied health professionals together under common goals across Europe.¹ Key amongst these is the enablement of patients with disability and the enhancement of function and independence in individuals who suffer from serious or long-term physical ailments. The World Health Organisation (WHO) defines ‘Rehabilitation’ as ‘a set of interventions designed to optimise functioning

and reduce disability in individuals with health conditions in interaction with their environment.² This was solidified in the 2001 International Classification of Functioning, Disability and Health (ICF), aimed at standardising the outlook, management and goals across the board.³

The history of Rehabilitation Medicine in Malta is still very young, with the first official PRM association being founded as recently as 2013.⁴ Malta has a government-

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funded healthcare system, with free healthcare offered to all residents in the country. The one main general hospital, Mater Dei Hospital (MDH), caters for the whole population of around half a million citizens. Karin Grech Hospital (KGH) is the main rehabilitation hospital on the island, recently privatised but still serviced by government-paid healthcare staff. The rehabilitation and treatment of patients at KGH is also offered free of charge to Maltese residents under a public-private partnership. Rehabilitation Medicine in Malta mainly spans across these two main hospitals, with KGH being the base for inpatient and outpatient services and MDH provided with outreach specialist support services. Despite the small population size of our island and the novelty of the specialty, the dynamics related to demands for inpatient beds, challenges with patient selection and struggles with identity of specialty are common with the rest of Europe. As with several government healthcare systems, the demand for beds consistently surpasses resources and difficulty with discharging patients to the community worsens yearly with ever increasing mean age and disability of patients admitted.

The science behind the selection process for patients who are deemed to have potential for rehabilitation and who are ideal for an inpatient rehabilitation programme, has been a subject of great debate yet little research. One of the few literature reviews on the topic, now published more than 10 years ago⁵ identified no more than 25 publications discussing this issue, strongly recommending further research. Numerous versions of admission criteria have been proposed over the years^{6,7} yet strict adoption of universal criteria have often lead to several challenges when actually implemented, leading to an inefficient system with poor use of resources.⁸

Since the start of the Covid-19 (or SARS – CoV-2) pandemic early in 2020, the priorities and demands on the process of inpatient rehabilitation selection and admission have been drastically altered worldwide. While a new role for rehabilitation medicine was found and valued across the board,^{9,10} the demand for bedspace to be taken up by more acute specialties was also a harsh and tangible reality. Several guidelines were issued during this time in order to help identify SARS-CoV-2 affected patients who would be deemed more suitable for inpatient rehabilitation, yet the widespread shortage of beds meant that such guidelines were not always easy to follow in all hospitals.

As we move forward, past the peak of the pandemic, and start looking ahead at a more stable patient population, it is the author's belief that an attitude of "coming back stronger" will be of great benefit to the speciality and health systems at large. The following study represents referral and admission data for rehabilitation services in Malta just prior to the pandemic. While the circumstances and scenarios had completely changed in 2020 during the pandemic, it is with the hindsight of all the challenges faced pre-pandemic that we can be guided in designing and implementing better strategies moving forward post-

pandemic. The aim of this exercise is to inspire a referral, assessment and admission selection process which is efficient, effective and appropriate, across a number of variables, in order to create a sustainable rehabilitation services framework for the speciality of tomorrow.

Methods

A retrospective analysis on all data related to referrals sent for inpatient rehabilitation at KGH was performed for patients referred from April to August 2018. Referrals come from the acute general hospital MDH and go to the national rehabilitation services, with a catchment of approximately 484,640 residents of Malta and Gozo in 2018. The inpatient rehabilitation ward within KGH consists of 29 mixed-rehab beds, with the rest of the hospital consisting of mixed-geriatric beds.

Isoft and Electronic Case Summary, both digital record keeping software used locally, were used to identify data related to the patients' admission and discharge routes, including discharge dates, presence of any re-admissions and whether patients were deceased or not within 12 months of their discharge. Paper referrals were routinely being summarised into digital notes or emails during this period and these were also analysed. Excel was used to collate the data and analyse results.

Ethical approval

Retrospective data collection and analysis was approved by the research and ethics committee at KGH. All patient data was anonymised and used for the purposes of this study only.

Results

A total of 116 patients were referred for inpatient rehabilitation at KGH from the acute setting at MDH from April to August 2018. From the entire population of patients referred 47% were accepted for transfer at first instance. 83% of these were admitted to KGH for inpatient rehabilitation but 17% were discharged home from the acute hospital prior to their transfer date (Figure 1), with a median time of 12 days from the day of acceptance to KGH to the day of discharge from MDH directly to home.

The average waiting time from when patients were accepted from MDH to the day of transfer to KGH was 4.84 days with the median being 4 days. The minimum waiting time was 1 day and the maximum waiting time was 37 days (were the patient became medically unstable a few days after being accepted for transfer and had to wait to be transferred).

The average age of patients referred for rehab was 59.2 years, with 46.6% being female and 53.4% being male. The average age of patients who were accepted was 59.1 years. The largest cohort, 42%, were from orthopaedic specialties,

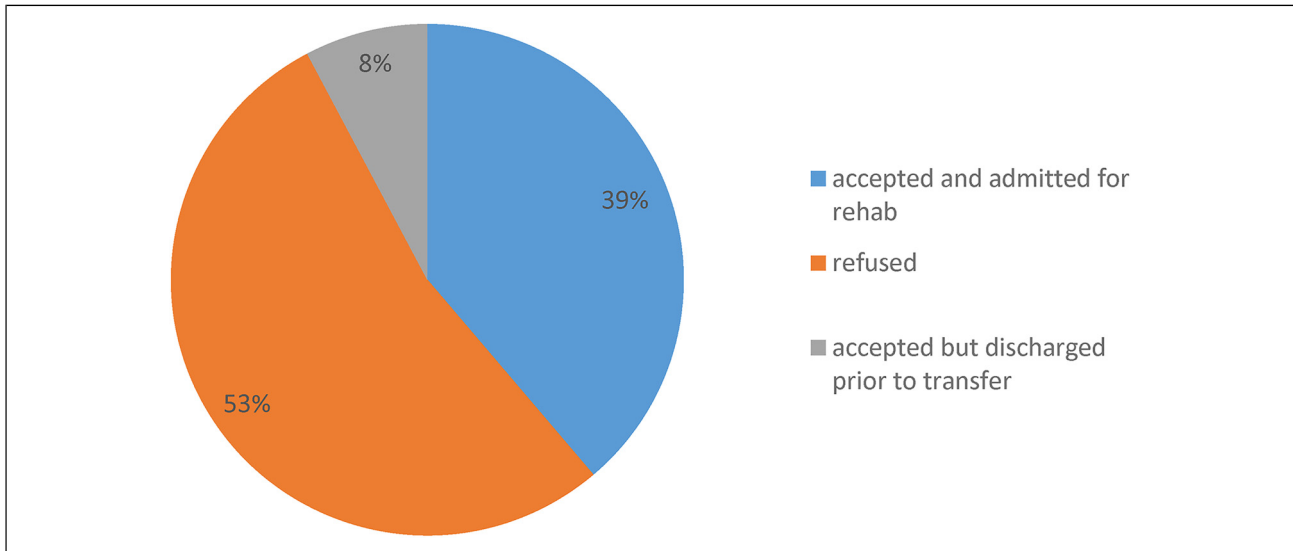


Figure 1. Referrals accepted or refused for transfer to inpatient rehabilitation at Karin Grech Hospital.

18% were from neurosurgery, 16% were from general medical specialties, 14% were from general surgical specialties, 8% were from neurology and 2% were from cardiothoracic surgery. The commonest reason for referral was following elective total knee replacements ($n=11$), followed by lower limb fractures ($n=9$) and spinal cord injuries ($n=6$).

Out of the 116 referrals reviewed, 53% were deemed unsuitable for inpatient rehabilitation transfer at first instance. The commonest reason for this was a significantly high level of independence, at 22% of all rejection decisions. Tied in second place at 12% were the presence of a non-weightbearing instruction limiting rehabilitation during this time and the patients themselves refusing to continue rehab at an inpatient rehabilitation hospital. Following these, causes for patients being rejected included being too confused (10%), the unlikelihood of discharge into the community after rehabilitation (due to functional, social or other situations, 9%), the patient being discharged home prior to being reviewed by the clinician receiving the referrals (9%), presence of pending investigations or treatment in an acute hospital setting (7%), patients being unconscious or having a very poor potential for improvement (7%), being medically unstable (6%) (Figure 2).

The average MDH stay of all patients referred was 36.7 days (median 12 days) and that of KGH stays was 59.1 days (median 22 days). The maximum stay at MDH was 240 days and that at KGH was 324. Out of all patients referred, 14 patients passed away within 1 year, with the median time of death from consultation being 71 days. Two patients passed away within 8 days of being referred for rehabilitation. Of the 14 patients who eventually passed away, only 2 were accepted and transferred to KGH, although both of these were then re-referred back to MDH due to development of acute medical complications, where they

subsequently passed away. No patients passed away while being admitted in KGH.

Out of all patients who were accepted and transferred for rehabilitation at KGH, 90% were discharged to their own home (with a mean stay of 54.5 days, median 21.5 days), 7%, were transferred back to MDH because of acute medical illness which could not be treated in KGH (these never returned to KGH, 2 of which passed away in MDH) and only 3% of patient were discharged to a residential home (Figure 3).

From the population of patients who were either refused, or for some other reason did not come to KGH, 64.7% were discharged to their own home, 10.3% were transferred to Saint Vincent de Paul Residence (SVPR, a government-funded long-term care hospital), 5.9% were transferred to another residential home in the community, 2.9% were transferred to a geriatric rehabilitation bed within KGH itself, another 2.9% were transferred to the palliative ward at Sir Anthony Mamo Oncology Centre (a branch of MDH), one patient was transferred to Mount Carmel Hospital (a psychiatric hospital), one was repatriated to a hospital at the patient's home county and one was still at MDH during the time of the audit. 8.8% passed away at MDH prior to being discharged (Figure 4).

Discussion

Admission data analysed from 2018, well before the effects of COVID-19 pandemic, showed more than half of all patients referred to the rehabilitation services at KGH were deemed unsuitable for inpatient rehabilitation. Such a large number of patients being refused inpatient rehabilitation is not desirable. It reflects a whole plethora of problems which is difficult to summarise succinctly and

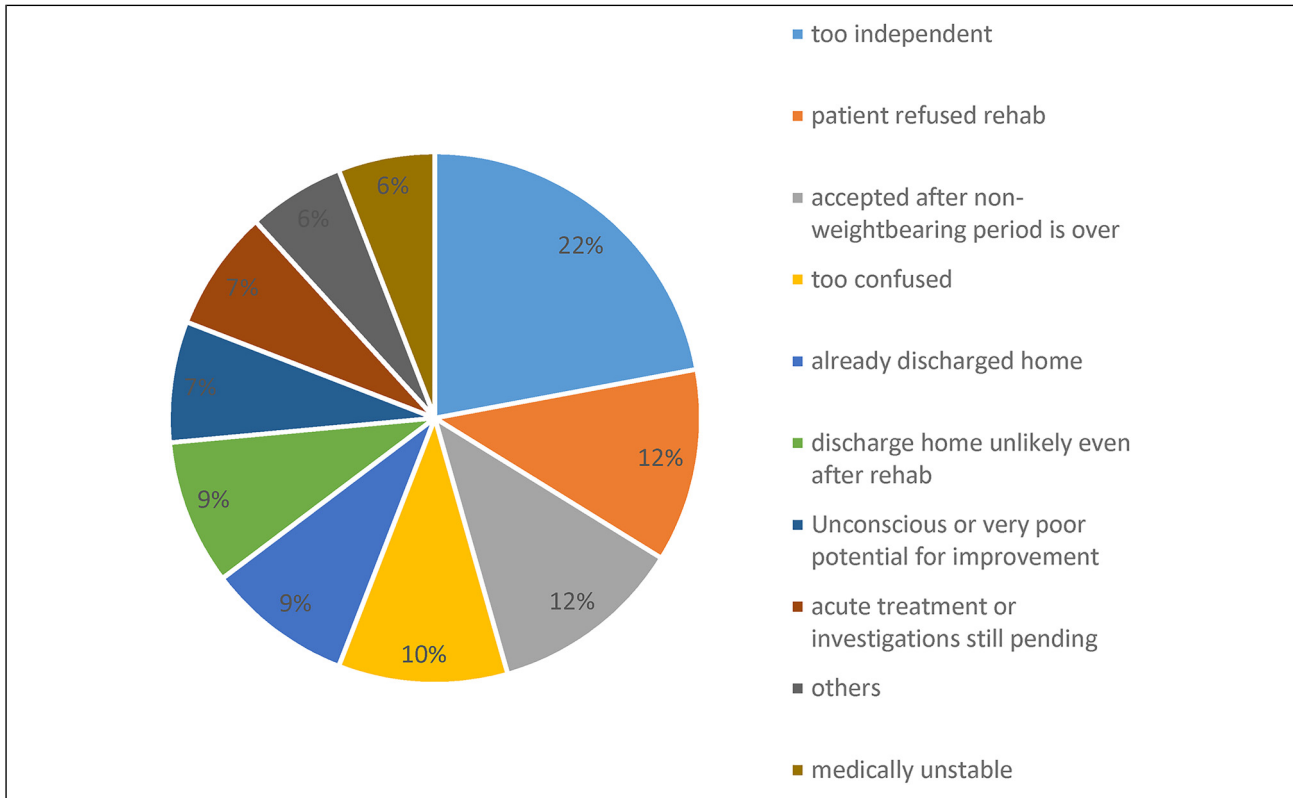


Figure 2. Reason for refusal of patients for transfer to inpatient rehabilitation at Karin Grech Hospital.

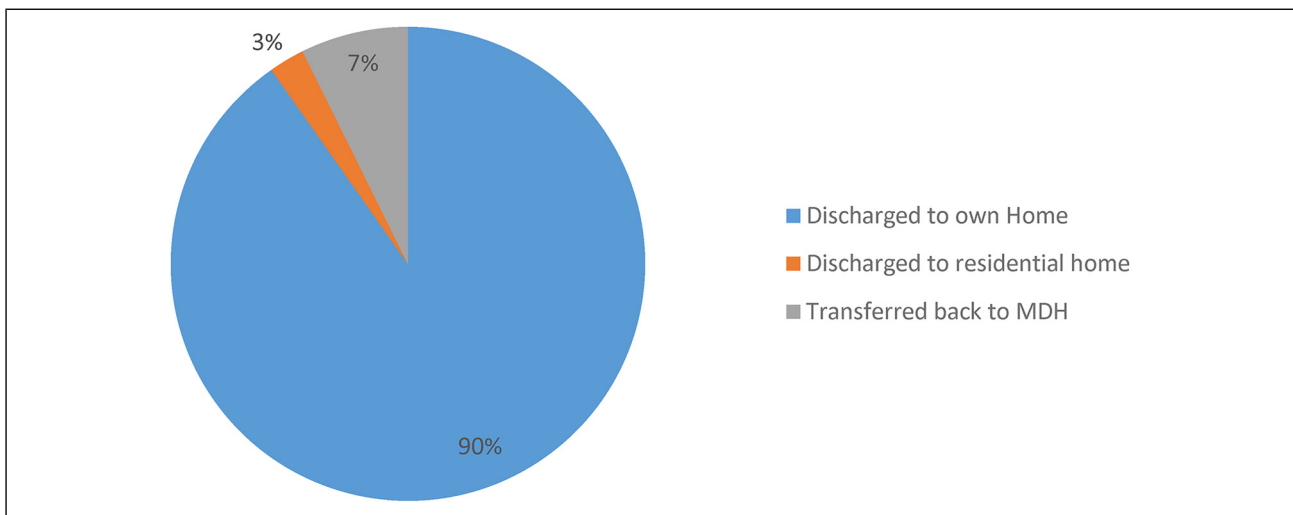


Figure 3. Outcome of inpatients at Karin Grech Hospital (MDH = Mater Dei Hospital).

include issues spanning from inappropriate referrals, stemming from misconceptions of the speciality, to increasing social problems and support networks. Nevertheless, one of the key factors at play is the consistently tight balance between resources and demand. Ensuring a steady turnover of patients in a limited 29-bed rehabilitation ward that needs to cater for the rehabilitation needs for an entire population, creates challenges which cannot be dealt with without

facing dilemmas. This is done in part to ensure that a reasonable waiting time (which was a median of 4 days in our study) is maintained, especially for patients who require intense rehabilitation as early as possible.

In spite of this seemingly strict patient selection process leading to a high refusal rate, a significant number of patients accepted in our study still occupied a bed for a longer-than-expected period of time, which

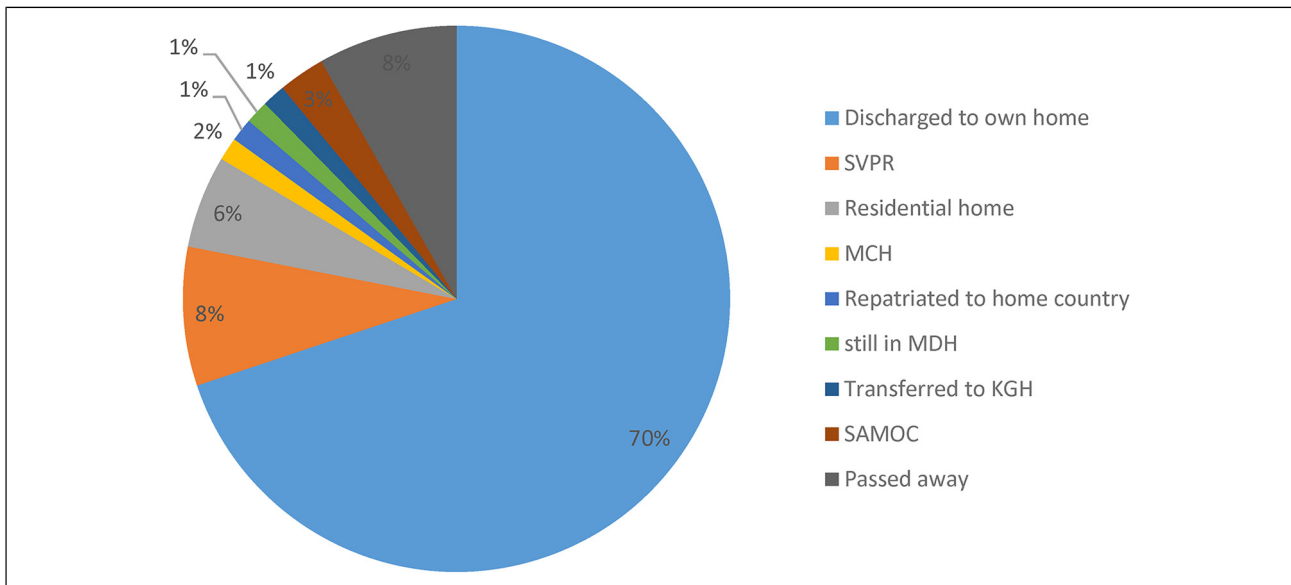


Figure 4. Outcome of patients *not* transferred to KGH (SVPR=Saint Vincent de Paul Residence (long-term care); MCH = Mount Carmel Hospital (psychiatry); MDH = Mater Dei Hospital; SAMOC = Sir Anthony Mamo Oncology Centre).

creates a bed shortage and in turn risks delays and longer waiting lists. In particular, it was estimated that 12% of the observed admissions to KGH had a failed discharge pathway, with an average stay between them of 200 inpatient days. The reasons for these delays are often multiple but lack of sufficient care in the community on discharge is often a predominant one. This is often overlooked by referring physicians, with unrealistic expectations from relatives sometimes contributing to the scenario. It is for this reason that the selection process involved in choosing patients who should be transferred to rehabilitation from those who should not, is not only challenging but also crucial for the efficient running of an inpatient rehabilitation service. This is particularly difficult for patients who are both medically unwell and in need for rehabilitation for a better chance of recovery. Nevertheless, the limited acute medical resources and facilities in most rehabilitation hospitals still often creates unnecessary delays in actual rehabilitation. In our study, 7% of admissions were transferred back to MDH for further acute medical treatment, with these not being referred back for rehabilitation. However, even more patients were transferred to MDH, during their rehabilitation process to undergo investigations such as CT and MRI scans, which are not available in the rehab hospital. All this creates delays in rehabilitation that are both disruptive to the patient and inefficient to the rest of the rehabilitation services, when the bed could have been offered to other more suitable patients in the meantime. It would thus be ideal to ensure medical optimisation and investigations are done in the acute hospital prior to transferring of patients to off-site rehabilitation facilities as much as possible.

On the other hand, 8% of patients who were accepted for transfer to KGH, notably failed to be transferred as they were discharged home prior to a bed becoming available, with a median waiting time of 12 days in this subcategory. This, once again reflects a number of problems but may highlight two opposite ends of the spectrum. Firstly, the importance of keeping waiting times to a minimum which may have prevented more suitable patients from missing out on rehabilitation by being discharged home prior to their transfer. On the other hand, some patients are referred for inappropriate reasons, such as bed-pressures in an acute hospital, and subsequently these would have been discharged once a quicker route to discharge becomes available, irrespective of the location. This is further reflected by another 9% of patients referred for inpatient rehabilitation and who were not even reviewed since they had already been discharged home prior to the clinician reviewing them in the acute hospital. Rehab specialist reviews in the acute hospital were at the time being done once or twice a week, translating to patients being discharged at least within 7 days of being referred for rehabilitation and discharged before a review could be completed.

In the cohort of referrals studied in this audit, one of the main reasons for a patient to be deemed unsuitable for inpatient rehabilitation was an excessively high level of independence. Although patients in this category might sometimes still benefit from intense therapy and often have some potential for improvement, it can often be effectively done on an outpatient basis. While not free from its own shortcomings (example waiting times and shortage of outpatient therapy slots), this has several advantages. Primarily, it allows patients who are medically stable to go back to their home, family and lives more quickly,

while at the same time relieving bed pressures from both the acute and the rehabilitation inpatient hospitals. Tools like Barthel and Functional Independence Measures (FIM) are often used to help in this assessment but in addition, the need (or lack thereof) of nursing care or 24 h medical supervision in an acute hospital setting are often taken into consideration when assessing which patients can be safely discharged directly home.

The presence of non-weight bearing statuses, often post-fracture, frequently creates a dilemma in this regard. While often being unable to live full independently and often times requiring heavy nursing care, the reason for their inappropriateness for rehabilitation is their inability to take part in an intense therapy programme until this non-weight bearing period is over. These patients are generally not refused but put on a separate list to be reviewed again once their non-weight bearing status is over, however patients are often discharged home prior to completion of this period (which often ranges from 3 to 9 weeks) partly because of bed pressures in acute hospitals and sometimes because of patient's wishes to go back to their family earlier.

Equally frequent as a reason for refusal is the patient's wishes not to come for rehabilitation in general. While reasons for this may be varied (for example wanting to be close to family, uncomfortable in a hospital environment etc.) this reflects a lack of proper communication with the patients in the acute setting. The scenario usually implies that patients have often been referred for further rehabilitation without their knowledge or consent. This also stems from the unfortunate reality that some referrals are done more in the hope of a quick discharge route rather than

based on the rehabilitation needs and potential of said patient.

Patients who are too confused at the time of review are also poor candidates for rehabilitation as they pose a high risk to self and others around them, while often being poorly compliant to therapy. These are often reviewed at a later date and re-considered once the confusion has decreased.

The discharge route envisaged after rehabilitation is also an important consideration, for several reasons and with significant ethical burdens associated with it. A poor chance of a patient being discharged home can create profound impacts on bed availability and patient turn-over in a small ward, with patients sometimes spending more than a year occupying a rehabilitation bed while waiting for re-location. Yet, from an ethical perspective, this poses great dilemmas related to the principle of justice: while some may argue that it would be unjust to deny rehabilitation to a patient based on social and logistical biases, it would also be unjust to create unacceptable delays in rehabilitation to patients who might benefit more from intense early therapy but would be unable to get this due to a shortage of bed availability.

Similarly, controversy sometimes surrounds the appropriateness of patients with poor prognosis, being treated at end-of-life or palliative stages. Some centres do specialise in this niche of rehabilitation and cancer rehabilitation, for instance, is a growing specialty in itself. Nevertheless, in the absence of such allocated beds, the decision to admit patients for inpatient rehabilitation who have a generally poor predicted outcome is contentious at best. In view of this, the relatively high 1-year mortality rate seen in referrals in our short study, especially the two patients passing away within a week of being referred, reflects the lack of clarity on what the role of inpatient rehabilitation is within the healthcare system.

Such ethical issues are at the core of what rehab specialists face when undergoing their role as "gate keepers".¹¹ While balancing individual patient needs against resource management of a rehabilitation service, physicians are faced with choices that are often very difficult to define and resolve. The appropriateness of patients for an inpatient rehabilitation setting needs to remain at the core of each individual choice yet guidelines have often been difficult to define.⁸ Diagnosis often plays a primary role in preliminary patient selection. A 'Traffic Light' classification of patient appropriateness for a rehabilitation programme, published in a 2009 literature review by Peter New,⁵ reflects the varied and subjective nature of the diagnosis parameter in the selection process, bound to be fraught with exception and debate (Table 1).

A more recent paper published in 2020 by Merlo *et al.*⁷ proposed new admission criteria for inpatient rehabilitation, based on expert advice by 53 healthcare professionals in the rehabilitation field in Italy. Three pillars mentioned as

Table 1. A 'Traffic Light' classification of patient appropriateness for a rehabilitation programme (from New, 2009⁵).

Green Light (Admit Always)	Orange Light (Consider with Caution)	Red Light (Not Appropriate)
Acute onset illness or surgical event resulting in severe activity limitations that restricts ability of patients to return home. Willing to participate in rehabilitation. Previously living in community.	Conversion Disorder Personality Disorders Obese patients requiring bariatric equipment not routinely available Patients with special nursing care needs not routinely managed in the rehabilitation unit eg. Patients with tracheostomy	Limited life expectancy eg. <3 months (consider palliative care) Patient makes informed decision to refuse and is competent to do so Severe Dementia (consider Skilled Nursing Facility or Geriatric rehabilitation unit)

Table 2. British Society of Rehabilitation Medicine admission criteria [6] and rules for appropriateness in admission to rehabilitation by Merlo *et al.*⁷

British Society of Rehabilitation Medicine Admission Criteria ⁶	Rules for Appropriateness in Admission to Rehabilitation ⁷	
	Rules for Appropriateness	Appropriate if the Following Criteria are Met Sequentially:
Patients requiring 24-h nursing and medical supervision for their rehabilitative needs.	Rule 1: Patient's admission to rehabilitation in ordinary regimen	<ul style="list-style-type: none"> • A functional improvement is conceivable in order to raise his level of self-sufficiency (favourable rehabilitative prognosis) • Daily nursing and medical care are needed; • His degree of clinical and mental instability is not likely to undermine the rehabilitation plan and the patient safety could be guaranteed; • An integrated interdisciplinary rehabilitation approach is needed (simultaneous presence of at least 2 of the following rehabilitation disciplines: physiotherapy, occupational therapy, logotherapy, cognitive therapy, orthotic therapy)
Patients with disabling conditions (mainly neurological and musculoskeletal disorders), who have the capacity for, require and who will benefit from rehabilitation, i.e. patients in whom the evidence shows that active intervention improves function, life satisfaction or prevents deterioration.	Rule 2: Admission to rehabilitation for a patient with a pre-existing disability without a cognitive deficit that could affect the collaboration to the treatment	<ul style="list-style-type: none"> • A decay of his level of self-sufficiency occurs, leading to a score 4 according to the modified Rankin Scale ("Moderately severe disability: no longer able to walk without help, nor to take care of himself); • A functional improvement is conceivable in order to raise his level of self-sufficiency (favourable rehabilitative prognosis); • Daily nursing and medical care are needed.
Severely disabled patients whose needs can only be met by a multi-professional team practising inter-disciplinary rehabilitation.	Rule 3: A late responder patient's (i.e. tracheal cannula, PEG etc) re-admission to rehabilitation in ordinary regimen	<ul style="list-style-type: none"> • In order to re-evaluate the targets of the global rehabilitation plan, which are not totally achieved yet (in an initial phase of disability); • A functional improvement is conceivable in order to raise his level of self-sufficiency (favourable rehabilitative prognosis).
Patients with complex needs, i.e. requiring more than 2 professionals working in a team.	Rule 4: It is appropriate to hospitalise in ordinary regimen the patient with a severe acquired neurological pathology	<ul style="list-style-type: none"> • A functional improvement is not conceivable (i.e. vegetative state), but the rehabilitation intervention is focused on reducing the complexity of patient's management (i.e. cannula removal etc.); • Daily nursing and medical care are needed
Some very severely disabled patients with little hope of improvement in personal functioning, but who require assessment and appropriate equipment and whose families require education for caring purposes.	Rule 5: Admission to rehabilitation in ordinary regimen for a patient undergone functional surgical procedure	<ul style="list-style-type: none"> • The aim is to reduce his level of disability; • A functional improvement is conceivable in order to raise his level of self-sufficiency (favourable rehabilitative prognosis); • Daily nursing and medical care are needed

driving goals for appropriateness were: improvement in healthcare quality, cost saving and system sustainability. Direct comparison with admission criteria proposed by the British Society of Rehabilitation Medicine almost 20 years previously⁶ show that, while significant work has been put in to create a more robust admission criteria, most of the core points remain unchanged (Table 2).

Some of the reasons behind the struggles related to the referral and admission processes stem from ‘misconceptions’ which are common throughout the medical field when rehabilitation medicine is in question. Qureshi *et al.* defines five contributing misconceptions (Table 3) but ultimately identifies the main culprit as being the lack of understanding of what inpatient rehabilitation is all about.¹² Several direct examples can be seen from our own data, as discussed previously, and can be attributed to a number of factors, from the fact that the specialty is still young and very small in size to the lack of coverage of rehabilitation medicine in undergraduate and post graduate medical and healthcare courses. A game-changing step to increasing awareness related to definitions and roles of rehabilitation medicine would definitely be the inclusion of related modules in these education programmes, boosting both knowledge and interest in the field.

While the recent COVID-19 pandemic has created new roles and dynamics within the rehabilitation medicine specialty,¹⁰ unprecedented pressures on acute hospitals and bed shortages meant that a compromise was necessary when it came to the selection and admission processes of patients for inpatient rehabilitation services. Looking ahead at a more stable patient population in the coming months however, it is the authors’ opinion that there is a unique opportunity to re-establish core elements of rehabilitation medicine within the healthcare system and an ideal chance to implement new strategies and guidance for more sustainable selection and admission processes involved in inpatient rehabilitation.

In view of this, and based on the challenges and lessons learnt from pre-pandemic problems with rehabilitation services workflow, we propose the following six key features

to be considered prior to the acceptance and transfer of a patient to an inpatient rehabilitation facility:

1. **Goal Oriented** – reason for admission should be goal oriented, with clear objectives and targets defined. These may very well be difficult to attain or maybe ambitious at times, but need to be realistic in the context of the patient’s current status and likely prognosis. For example, a patient diagnosed with secondary progressive multiple sclerosis exhibiting a slow but steady decline in motor function may benefit from physiotherapy but unless realistic prospects and plans for specific improvements during an inpatient rehabilitation stay are envisaged, this would not be an ideal candidate for inpatient rehabilitation. Alternatively, a patient with secondary progressive multiple sclerosis who has been deconditioned due to a recent long hospital stay but who aims to return back to his home in his previous independence level might be a good candidate for an inpatient rehabilitation transfer
2. **Time-bound** – goals defined can realistically be achieved in a reasonable amount of time. Some centres commission a maximum of 3 months but this can be flexible. Without a clear timeframe for specific goals, admissions to an inpatient rehabilitation facility can remain for an extended amount of time without clear gains and direction to their rehabilitation process.
3. **Discharge oriented** – the probability that a patient can be discharged home after a brief rehabilitation stay has to be taken into account. If this is unlikely, plans for discharge following the brief rehabilitation stay need to be considered and prepared for prior to transfer. This ensures a good bed-turnover and avoids beds being occupied by patients who are not benefiting from rehabilitation any longer and who are just waiting for relocation.
4. **Medical stability** – different rehabilitation centres are equipped with different resources when it comes to staff, equipment and medications that can deal with acutely unwell patients and emergencies. Nevertheless, patients should generally be medically stable prior to transfer to an inpatient rehabilitation facility, where the focus should be on therapy rather than acute medical treatment. Medically unstable patients put an extra demand on staff which would otherwise be dedicating this time to other rehabilitation patients. At the same time, these patients would also not be benefiting from the rehabilitation facilities available due to being too unwell to participate in therapy. This is all compounded by the fact that their acute medical illnesses are often treated to a lower standard of care than would be possible in an acute hospital, owing to the resources and multi-specialist

Table 3. Misconceptions related inpatient rehabilitation admission (from Qureshi *et al.*¹²).

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1. Transfer to inpatient rehabilitation because there is a disposition issue
 2. Patients can be transferred to inpatient rehabilitation prior to establishing diagnosis
 3. Understanding of the terms “medically stable, medical appropriateness and medical necessity”
 4. Transfer to inpatient rehabilitation based upon therapist’ recommendations and patient’s wishes
 5. Transfer to inpatient rehabilitation because a previous patient with the same diagnosis was accepted for inpatient rehabilitation too
-

cover that is often lacking in a rehabilitation hospital (for example Cardiology, ENT etc.)

5. **Not pending diagnosis, investigations or treatment** – the assignment of a diagnosis is very important prior to the transfer of a patient. This aids prognosis and goal planning and often shapes the rehabilitation programme. When investigations and active treatment is still on going, goal planning is difficult to set. Plans are often interrupted and need to be changed, creating unnecessary pressures on staff whilst also making the rehabilitation programme inefficient.
6. **Multi-professional and/or care needs** – for best utilisation of resources, only patients who require multi-professional input and/or care in an inpatient setting should be transferred for inpatient rehabilitation. Some exceptions would benefit from inpatient rehabilitation if they require very intensive rehabilitation for one isolated field (for example severe aphasia), however in general, if a patient is able to perform all activities of daily living alone back at his home, an outpatient programme should be considered.

In conclusion, it is clear that the appropriate selection of patients for inpatient rehabilitation is both challenging and crucial for the efficient running of the services. Increased awareness and education on definitions and roles of rehabilitation medicine can significantly improve the referral and admission process, allowing for maximum utilisation of the services within current resources. It is the author's strong belief that further research is thus necessary in order to improve on the short comings and allow for evidence-based guidelines for international institutions moving forward.

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