



Improving the Rehabilitation Patient Journey

Never Stand Still

Faculty of Medicine

School of Public Health and Community Medicine

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University of NSW
Hong Kong Hospital Authority Convention
SPECIAL TOPIC VI
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Presentation Overview

- A quick tour of Utilisation Review and study findings
 - Right Patient
 - Right Time
 - Right Setting
 - Right Treatment
 - Right Outcome
- Key barriers to good patient flow
 - When to commence rehabilitation?
 - Where should rehabilitation occur?
 - Therapy intensity
 - Identifying and preventing delays in the patient journey
 - Discharge and beyond
- New rehabilitation models of care
 - Early and active rehabilitation in acute care
 - Matching therapy to need
 - Ambulatory rehabilitation programs

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RESEARCH ARTICLE

Open Access

Determining level of care appropriateness in the patient journey from acute care to rehabilitation

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ORIGINAL REPORT

EVALUATING INPATIENT PUBLIC REHABILITATION IN AUSTRALIA USING A UTILIZATION REVIEW TOOL DEVELOPED IN NORTH AMERICA

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Utilisation Review

- Utilisation review is the process of assessing the *appropriateness* of a patient's *care setting*, given their *clinical condition* and *services received and required*, for a specific *level of health care*.
- The *level of care* tested against is reflective of the health system where the utilisation review tool was developed.
- Can be *concurrent* or *retrospective*
- *Funding* and/or *clinical quality tool*

The InterQual Criteria (acute Adult)¹

Severity of Illness (SI) criteria.

- objective clinical indicators of illness.
- vital signs (e.g. heart rate, blood pressure, temperature)
- laboratory findings (e.g., arterial blood gas measures)
- Imaging findings

Intensity of Service (IS) criteria.

- monitoring and therapeutic services
- singularly or in combination
- which can only be administered at a specific level of care.

Discharge Screens.

- these look at the clinical indicators of patient stability and recommended alternate levels of care.

¹McKesson Corporation

InterQual Rehabilitation Criteria

Reflective of the way rehabilitation is practiced in the USA.

- ‘Acute’ rehabilitation – criteria plus therapy of 3+ hours per day over minimum of 5 days
- ‘Subacute’ rehabilitation – criteria plus therapy of around 2 hours per day over minimum of 5 days
- ‘Subacute therapy’ – 1 to 2 hours per day
- Skilled Nursing – up to 1 hour per day

Other criteria required for a rehabilitation level of care

- They must have had an illness, injury, surgery or exacerbation.
- They must have impairment/s requiring at least minimal assistance.
- They must meet clinical stability criteria.
- They must be able to tolerate the rehabilitation program or therapy.
- Treatment must be precluded at a lower level of care due to clinical complexity.

Findings from a Utilisation Review study in a tertiary, acute hospital in Australia

- Followed 696 episodes of care, representing 7,189 bed days, in the acute hospital
- Patients followed from admission:
 - Stroke
 - Hip fracture
 - Elective joint replacement
- Other patients were followed from the time of rehabilitation referral

Findings from patients followed from acute admission

Patient type	Episodes	Days not meeting acute criteria (%)	Total days in acute care	Mean LOS in acute care	Mean days in acute care not meeting acute criteria
Stroke	145	843 (51%)	1637	11.3	5.8
Hip Fracture	142	834 (45%)	1845	13.0	5.9
Joint replacement	134	299 (29%)	1026	7.7	2.2
Total	421	1976 (44%)	4508		

Findings from patients followed from the time of rehabilitation referral while in acute care

Patient type	Episodes	Days not meeting acute criteria (%)	Mean days in acute care post rehabilitation referral not meeting acute criteria
Other Rehabilitation referrals	275	1784 (67%)	5.8

Reasons why days in acute care were deemed 'not appropriate'

Reason	Patient days (%)
Delay in medical / allied health review	672 (17.9)
Delay in investigation or procedure	582 (15.5)
Accepted but not yet ready for rehabilitation transfer	483 (12.9)
Awaiting rehabilitation bed	473 (12.6)
Awaiting other alternative (lower) level of care	461 (12.3)
Delay in rehabilitation consultation or review	438 (11.7)
Unclear management plan (but not meeting acute LOC criteria)	201 (5.4)
Delay in discharge home	200 (5.3)
Other	250 (6.7)
Total	3760 (100)

Summary of reasons for delays affecting potential rehabilitation in acute care

- Delays in scheduling or processes of care: 45%
- Being more appropriate for rehabilitation or a lower level of care: 30%
- Being accepted for rehabilitation but not yet ready for transfer (off-site): 13%

Being accepted for rehabilitation but not yet ready for transfer

- Big issue for off-site rehabilitation facilities
- Concept of “medical stability”
 - Medical stability to be engaged in rehabilitation
 - Medical stability to be managed in the rehabilitation unit
- In our study:
 - The acute care team and the utilisation review tool deemed patients ready for rehabilitation transfer earlier than the rehabilitation team (1.4, 1.3 and 4.0 days respectively from the date of referral)
 - But **28%** of patients became medically unstable after being deemed stable by the *acute care team*, versus **9%** for the *rehabilitation team* and **11%** for the *utilisation review tool*.

Conclusions from Utilisation Review in Acute Care

- A high proportion of patient days did not meet acute level of care criteria, due predominantly to inefficiencies in care processes, or to patients being more appropriate for an alternative level of care, including rehabilitation.
- The rehabilitation team was the most accurate in determining ongoing medical stability, but at the cost of a longer acute stay.
- To improve the rehabilitation patient journey in acute care requires clinical models which provide rehabilitation within acute care, and more efficient movement to the rehabilitation setting.
- Utilization review could have a decision support role in the determination of medical stability.

Findings from a Utilisation Review study in two 'standalone' rehabilitation wards

- Data on 267 rehabilitation patient episodes (7359)
- Only 48% of patient days met utilisation review criteria for a rehabilitation category (based on the InterQual tool).
- Insufficient therapy intensity was a significant limiting factor in these units

Utilisation Review rehabilitation and subacute criteria

To meet appropriateness for admission to a rehabilitation or subacute level of care, patients must meet criteria within 5 categories:

- They must have had an illness, injury, surgery or exacerbation.
- They must have impairment(s) requiring at least minimal assistance.
- They must meet clinical stability criteria.
- They must be able to tolerate the rehabilitation programme or therapy.
- Treatment must be precluded at a lower level of care due to clinical complexity.

Reasons why a rehabilitation/sub-acute level of care was not met (bed days)

Reason why criteria not met	Bed days	(%)
Insufficient therapy time provided	1025	(27)
Awaiting long-term care	978	(26)
Appropriate for discharge home	651	(17)
Requires acute or subacute medical care	662	(17)
Not able to tolerate therapy	234	(6)
Unclear management plan	212	(6)
Patient remaining on trial discharge leave	51	(1)
Missing data	13	(0)
Total	3826	(100)

Solutions to improve the rehabilitation patient journey

- Focus on the needs of the rehabilitation patient (*patient-centred*)
 - *Their* need for rehabilitation
 - Not driven by the funding model (a hard thing to do!) or the structure of the service (co-located versus standalone rehabilitation facility)
- Identify *early* patients whose need is for rehabilitation
 - Possible role for utilisation review as a decision support tool
 - Provision of rehabilitation in acute care
 - Shared care (eg stroke units, trauma units)
 - ‘Mobile’ rehabilitation team in acute care
- Improve hospital logistics to avoid underutilised days
 - Information management systems and scheduling
- Ensure the most appropriate rehabilitation program
 - *Therapy intensity* is important
 - Other advances (eg neuroplasticity)
- Flexible service settings
 - Ambulatory models

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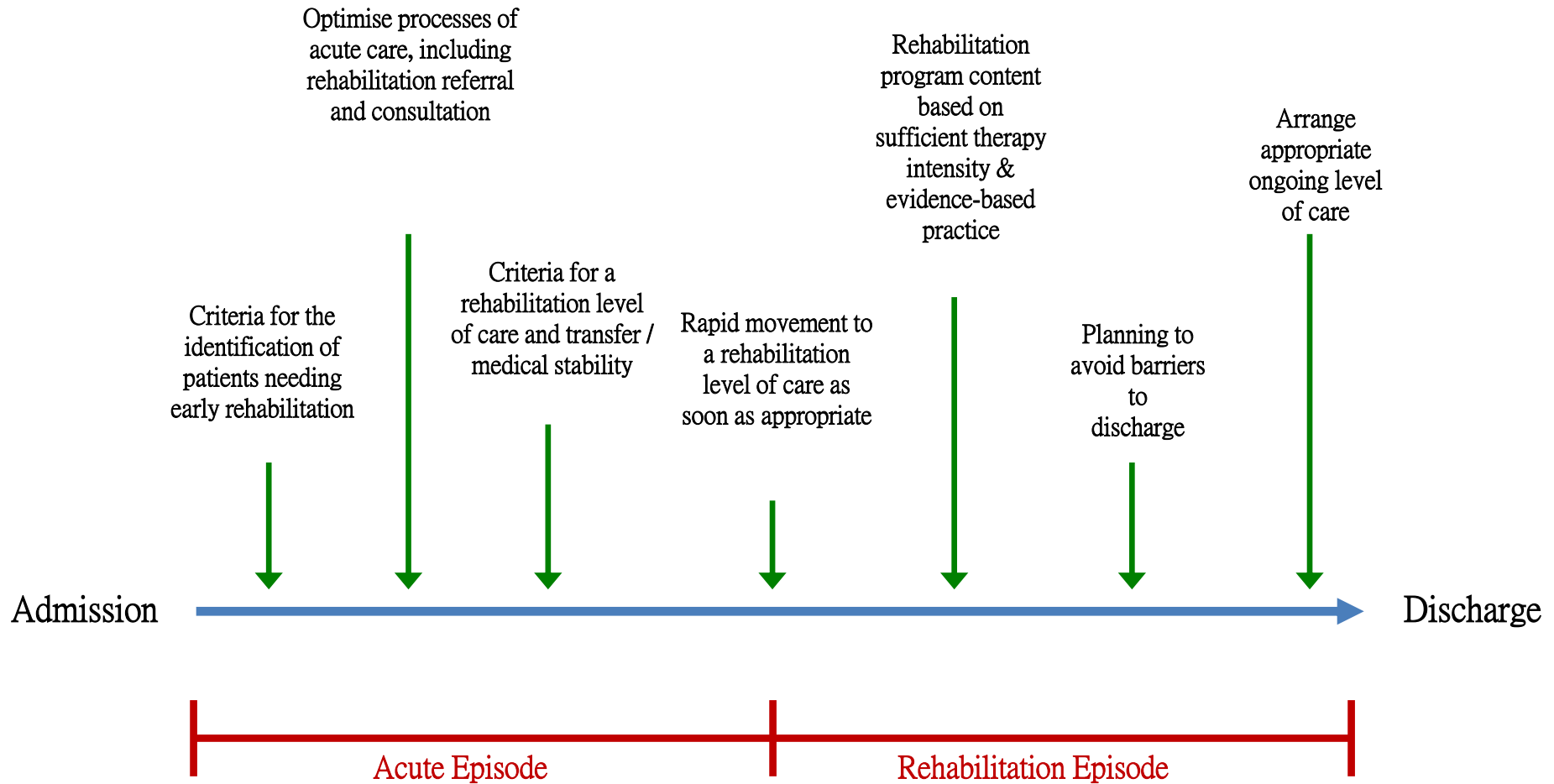
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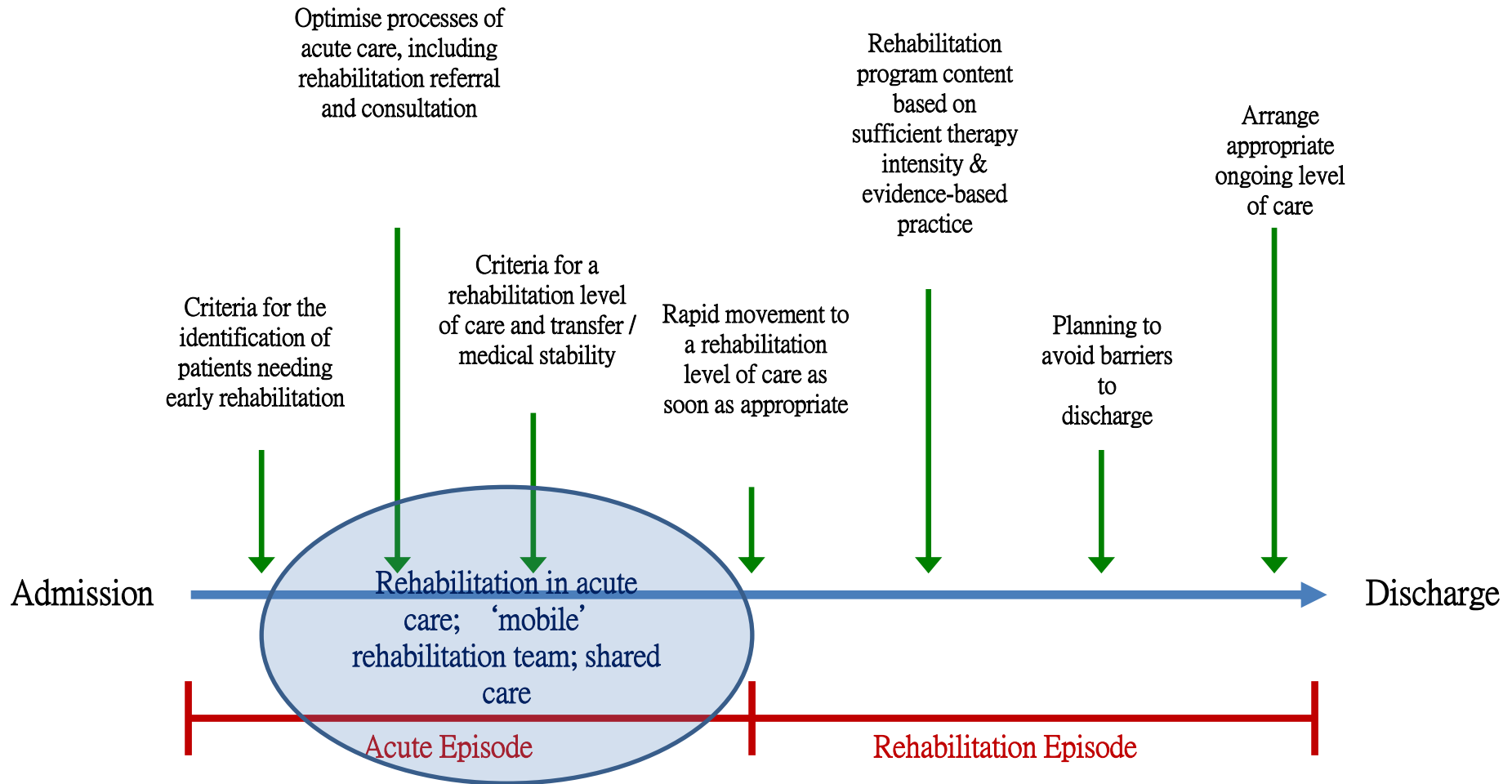
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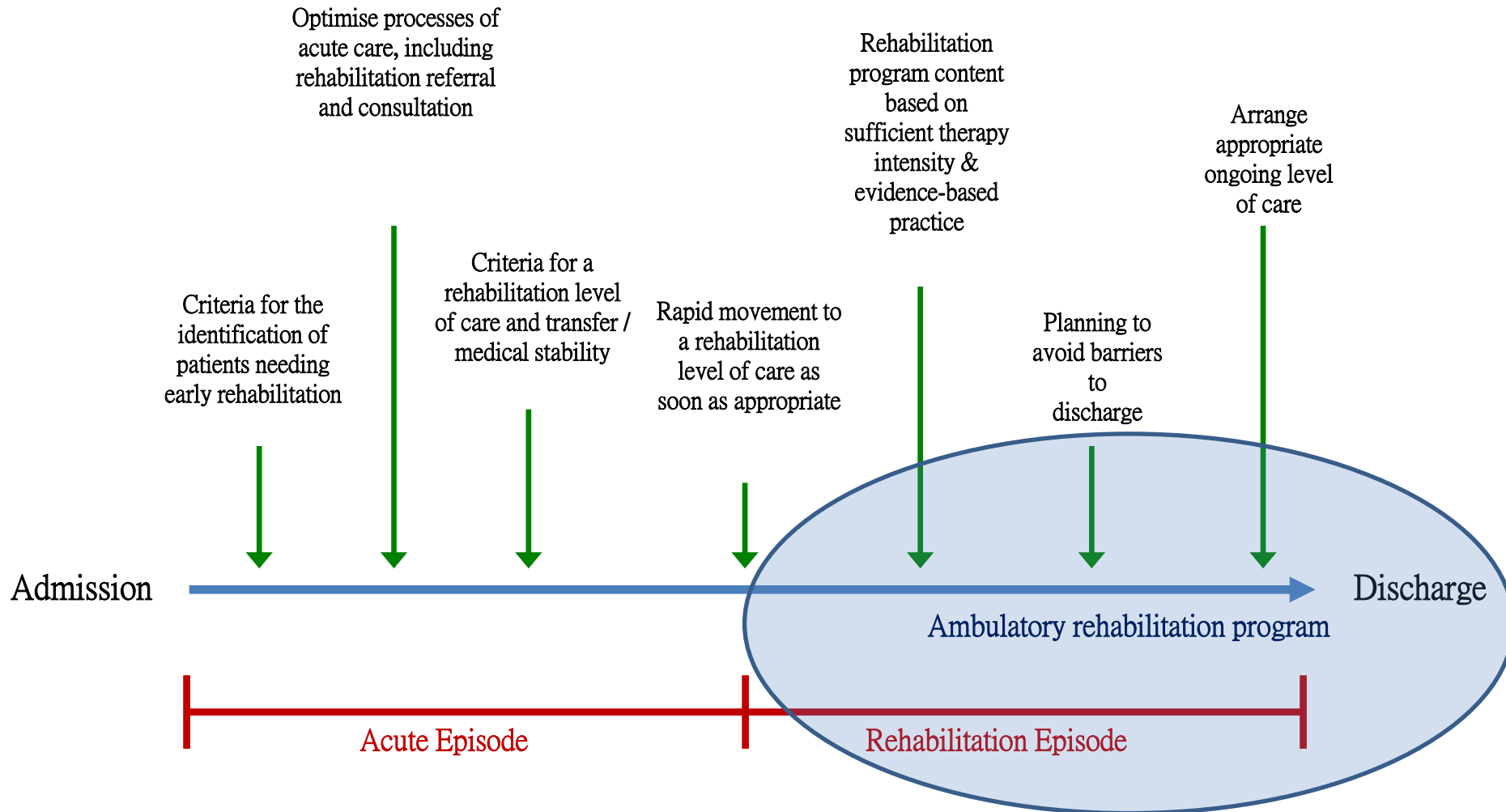
The Rehabilitation Patient Journey



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Questions?

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