

Global Challenges in Triage and Discharge Services Available to Intensive Care Patients. A Mixed-Methods Study.

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Background

Health care services embedded in a process that provides a continuum of care are called integrated. Integrated care improves patients' outcome. Integration of services to provide care for the critically ill includes appropriate triage processes and delivery of post intensive care treatment in order to promote continuity of care. It is hypothesised that low resource settings are limited in their ability to provide integrated care.

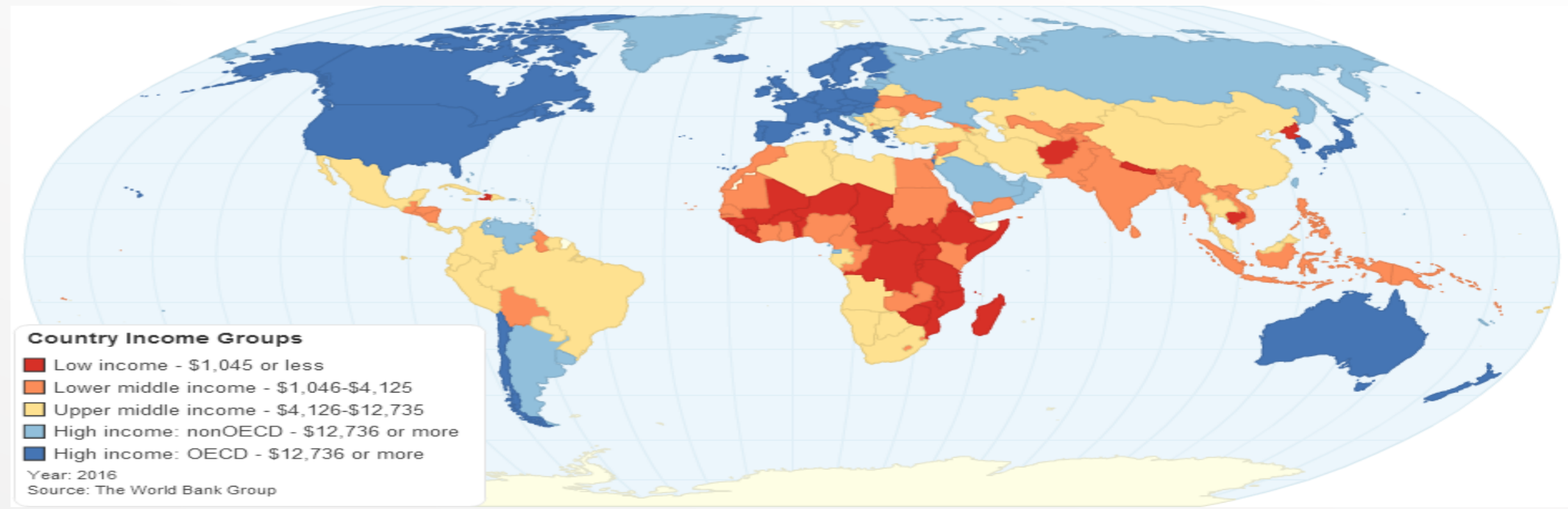
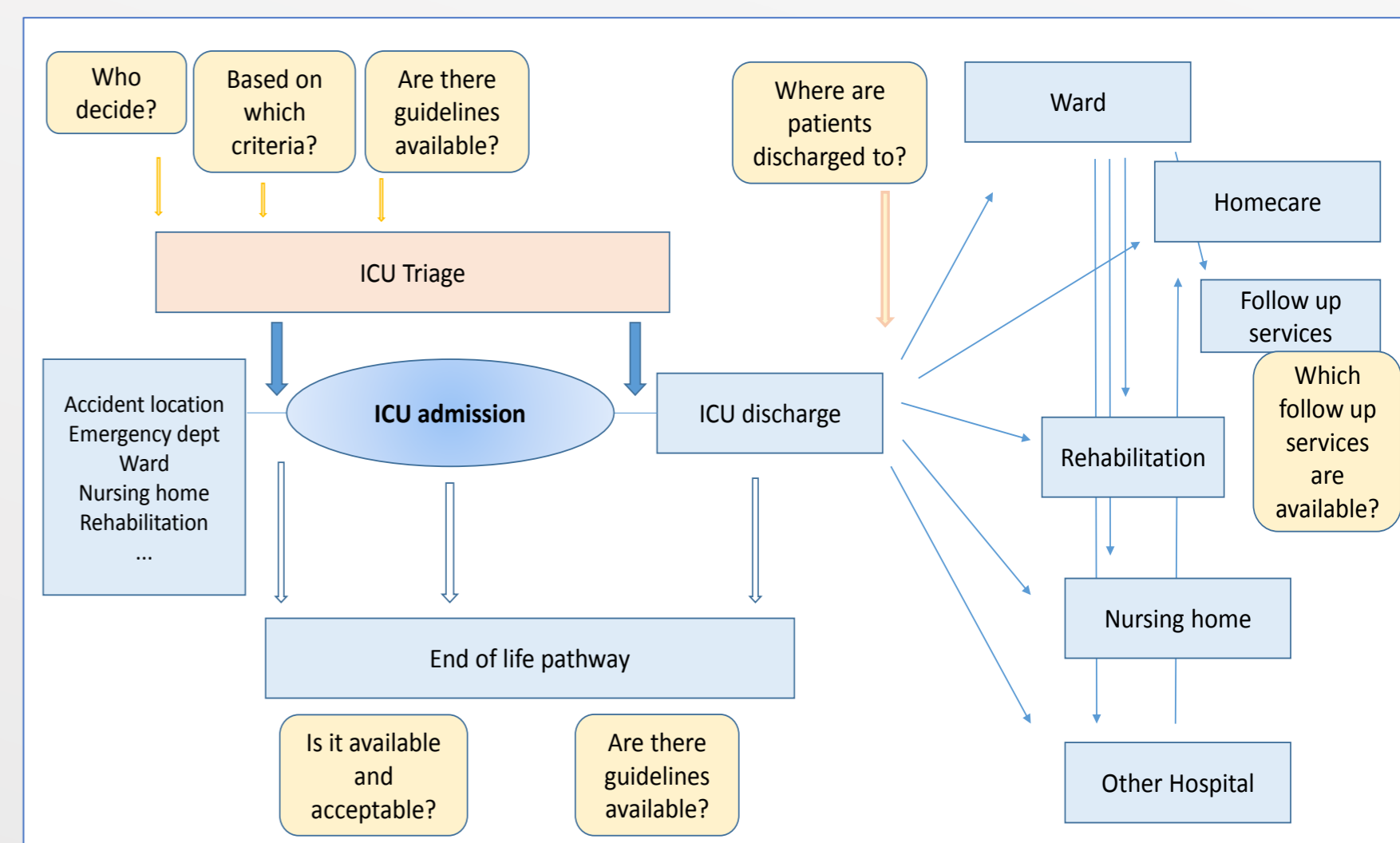


Figure 1 (below). Critically ill potential trajectories (blue boxes) and study questions (orange boxes)



Methods

14 intensive care doctors from Europe, Africa, America and Asia participated in a online survey and five of them in in-depth interviews. The survey included three sections in order to collect data on the services' context, the triage and the post ICU practice (figure 1). Descriptive statistics and thematic analysis have been used to analyse data. Triangulation has been applied to identify convergence, complementarity or discrepancy between data collected via the two research methods.

Qualitative results

Two major themes emerged from the interviews. Here are represented with their sub-themes:

- barriers and facilitators of ICU triage and discharge**
 - Decision making
 - Resources
 - Capacity and capability
 - Legal implications
 - of end of life procedures
 - Strategies to overcome barriers
- family input**
 - Support
 - Awareness

Samples of participants' quotes:

[03 HIC] I would say that it may happens that sometimes patients who should not be admitted to ITU, the decision should have been made much, much earlier than when is made...

[04 LMIC] ...end of life decision it must be guided by law of the country [...] ... the law stands from it is the culture of the people, it is the culture that actually leads to the creation of the law... [...] Life in this country is sacrosanct [...]. It is up to the caregiver and family to discuss...

[08 LMIC] ...sometimes we will ask the families to buy few things in advance before they are admitted, so we are sure that at last for the first 48 hours we will have enough stuff to work with... I would say even in ICU family is very important. If we don't have enough nurses it is the family who will, you know, that will have to clean the patient, sometime even feed the patient through the NG tube, stuff like that, yeah. Actually in our settings, we realised that when family is in the ward and give patient care in ICU they actually have better outcomes. I think is simply because there is always someone present at the bedside, which is what really what ICU is all about, having someone always present at the bedside...

Nine of the 14 participants who completed the questionnaire described practice in a Low-Middle-Income Country (LMIC), while five respondents provided examples of High-Income Country (HIC) practice. The following are examples of collected data.

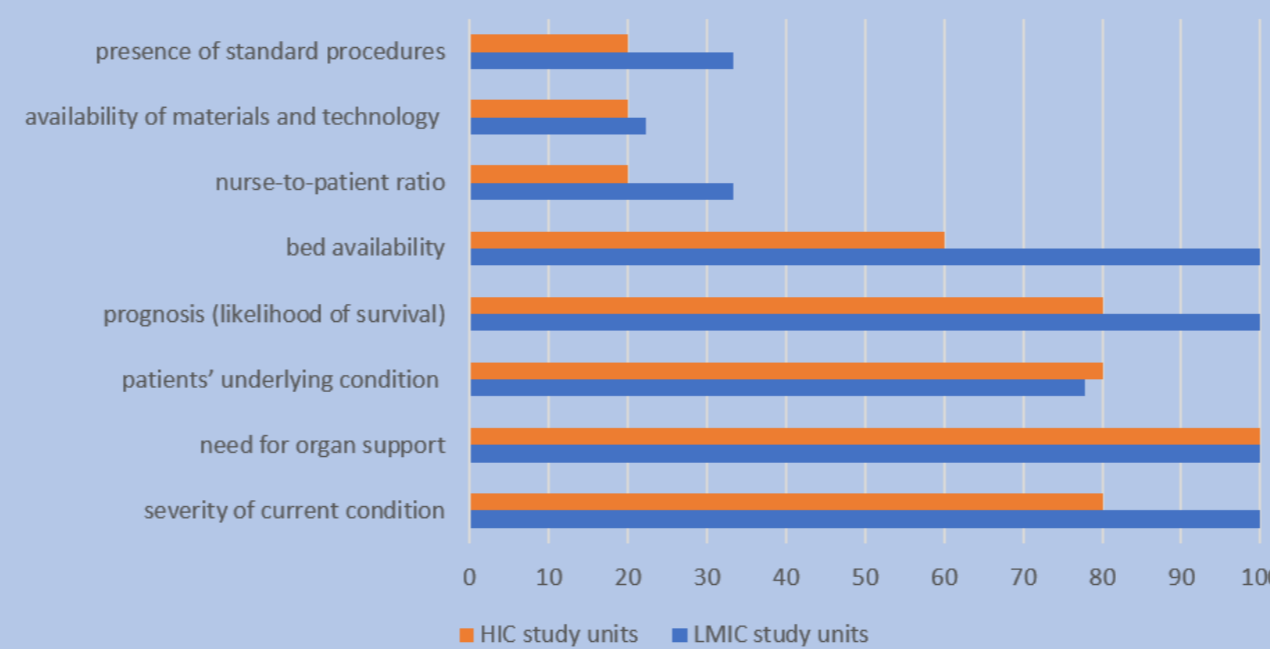


Figure 2 (left). The factors that contribute to the decision of admitting a patient in the unit expressed in percentage of units that consider them.

Quantitative results

Figure 3 (below). Percentage of study units divided by country income with access to the named equipment.

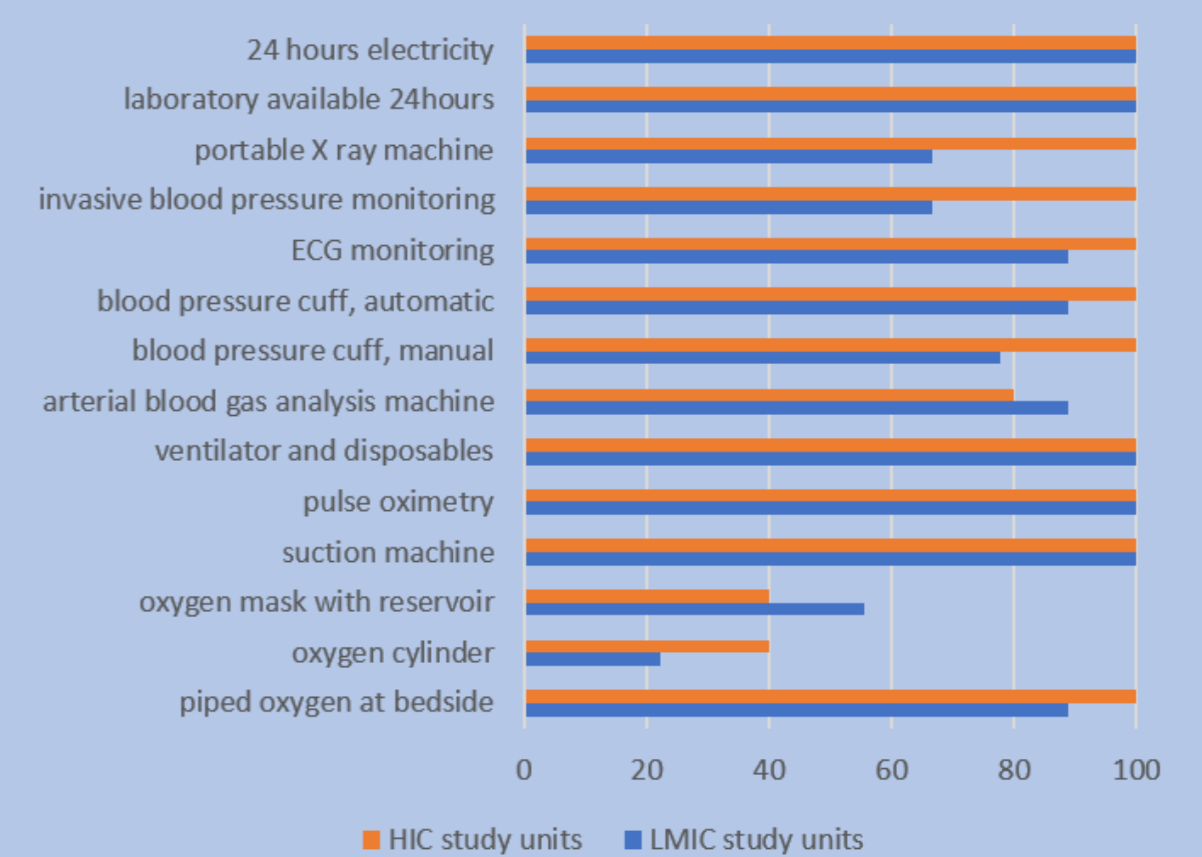
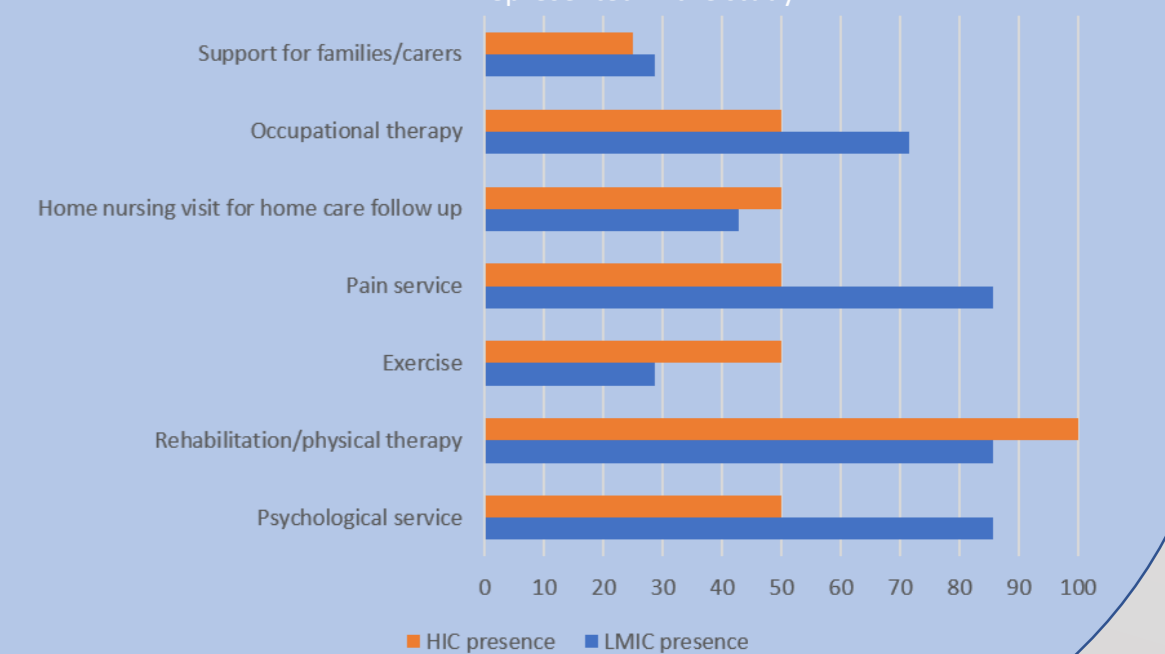


Figure 4 (below). Post discharge facilities available to ICU survivors discharged from the units represented in the study.



Conclusions

- Barriers and facilitators of triage are similar between LMIC and HIC study units despite resources available;
- Capacity of triage and post discharge services are limited in settings where relatives need to contribute to cost of care;
- Lack of standardise end of life procedures in LMIC make triage a challenging process;
- Outreach services are key for appropriate triage and after discharge monitoring;
- Post ICU services should be designed to provide holistic care;
- Family input and support are important, especially in LMIC, and could mitigate the impact of shortage of staff.

References: The European Framework for Action on Integrated Health Services Delivery 2016 @ www.euro.who.int ; Critical care and the global burden of critical illness in adults, *Lancet*, 376(9749).

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