Improving guideline adherence for management of donors after brain death

Researchers in Belgium conducted an observational, cross-sectional multicentre study related to donation after brain death (DBD). They performed an importance-performance analysis linking guideline adherence rates to expert panel ratings of importance; results show compliance to guidelines for DBD management proved moderate with substantial room for improvement.

"These findings underscore the need for a strategy to improve implementation and documentation of evidence-based guidelines, for which an importance-performance analysis may prove useful," according to the study published in Journal of Critical Care.

Guideline adherence for the management of DBDs is largely unknown and most studies have focused on brain death diagnosis. Besides brain death determination, management of a potential DBD should also take into account other issues, including maintenance of adequate perfusion to all organ systems, early referral to the organ procurement organisations, and family support.

To improve potential DBD management, the researchers say key interventions (KIs) should be prioritised in order to guarantee high quality care. However, targeting the right areas for improvement remains difficult. Focusing on all the KIs as a whole can prove burdensome and complex. An importance-performance analysis, originally a marketing research technique, can be an alternative method of prioritising KIs by linking KI expert panel ratings of importance to the performance indicator of guideline adherence rates.

In the current study, a retrospective review of patient records of adult DBDs between 2013 and 2016 used 67 KIs to describe adherence to guidelines. The study covered a total of 296 patients at 21 Belgian intensive care units (ICUs).

Investigators found that 35 of 67 KIs had a high level of adherence congruent to a high expert panel rating of importance. Nineteen of 67 KIs had a low level of adherence despite a high level of importance according to expert consensus. However, inadequate documentation proved an important issue, hampering true guideline adherence assessment.

"Apart from the impact of under documentation on determining true guideline adherence, documentation shortages as such may represent a quality problem in daily practice for any complex care process, in terms of coordination and continuity of care. When an intervention is not mentioned in the patient record, other healthcare providers are not aware of its performance, possibly leading to duplication of interventions," the research team points out.
Overall, adherence ranged between 3 and 100 percent for single KI items and on average, patients received 72 percent of the integrated expert panel recommended care set.

The research team notes that, in many European Union member states including Belgium, donor coordinators have been appointed in hospitals with an intensive care unit, where organ retrieval from deceased donors can be considered. Donor coordinators have clearly defined responsibilities in establishing, managing and reviewing the deceased donation processes in their hospital.

In conclusion, the researchers say three post procurement KIs should be prioritised based on their importance-performance analysis. “These interventions are expected to fall under the responsibility of a well-trained donor coordinator on the ICU. The performance rate of a written report on detection of serious adverse events was only 3%, debriefing about the results of the transplantation to the relatives, healthcare professionals and primary care physician 57%, and ensuring that the hospitalisation invoice of the patient is excluded of any medical, pharmaceutical or hospital costs after the determination of brain death and legal declaration of death 73%,” the researchers write.

Source: Journal of Critical Care
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