

Abstract

SG-iSRRS1049

Multicenter study investigating clinical practices relating to escalation of care and activation of Rapid Response Teams in the deteriorating patient.

¹Jeroen Ludikhuizen,²Dave Dongelmans,³Ralph So,⁴Erik Kosten,⁵Johan Stijssiger,⁶Bas Kors,⁷Wytze Vermeijden,⁸Peter Tangkau,⁹Dave Tjan,¹⁰Daryl Jones,¹¹Cor Kalkman

¹Intensive Care, Leiden University Medical Center, Netherlands

²Intensive Care, Academic Medical Center, Netherlands

³Intensive Care, Albert Schweitzer hospital, Netherlands

⁴Intensive Care, Catharina Hospital, Netherlands

⁵Intensive Care, Ikazia Hospital, Netherlands

⁶Intensive Care, Spaarne Gasthuis, Netherlands

⁷Intensive Care, Medisch Spectrum Twente, Netherlands

⁸Intensive Care, Reinier de Graaf Hospital, Netherlands

⁹Intensive Care, Hospital Gelderse Vallei, Netherlands

¹⁰Intensive Care, Austin Health, Australia

¹¹Anesthesiology, University Medical Center Utrecht, Netherlands

Objectives:

Objective

To determine the clinical practice and adherence to the RRS protocol in deteriorating patients.

Methods:

Design

Multicenter vignette-based questionnaire in nine Dutch hospitals.

Participants and methods

All hospitals included two medical and two surgical wards. Questionnaires were sent to all employees (nurses, registrars, and specialists). Participants were ≥ 18 years and could opt out from the questionnaire if they haven't been working on that ward in the past 6 months. The topics in the questionnaires were centered around demographics of the respondent, hospital and the RRT. Subsequently, based on a vignette style approach, procedural information was obtained on different levels regarding opinions, experiences and willingness to escalated care to a higher echelon and ultimately the RRT based on the (continuingly deteriorating) vignette.

Results:

In total, 2132 questionnaires were sent with an overall response rate of 29.6%. Workload by nurses was generally

perceived to be fairly heavy or to heavy (55-65%) whereas registrars and specialist generally found workloads to be balanced. Nurses experienced significant increases in patient loads with ratios increasing from 5-8 during dayshifts (52-55% of nurses) to >8 patients per nurse (84-86%) during nightshifts.

In case of a patient first triggering (within a two-tier RRS system), care wasn't escalated in 50-80% of cases. At the point in which the clinical condition of the patient (according to protocol) mandated RRT activation, this was performed in about 80-90% of cases. Interestingly, RRT activation ratios between hospitals (range 8.1-33.3 per 1000 admissions) and specialties varied widely.

Conclusions:

Conclusion

Significant variability exists in which care is provided to deteriorating patients on nursing wards. These differences exist between hospitals and between specialties. Whether this is directly related to patient outcome or RRT activation rates should be studied in more detail. This would potentially not only enhance general care but also structurally modify local responses to the deteriorating patient.