Using Endoscopy Discharge Scoring System to Ensure Safe Patient Discharge from Conscious Sedation in Endoscopy Center

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Introduction
In our Center, most endoscopic procedures are performed on patients who are under either local anesthesia or conscious sedations with short acting anesthetics. Despite such practice, post-endoscopy patients have to be closely monitored and evaluated by nursing staff to ensure safe discharge from recovery area. Using time-based subjective discharge protocol in the past, it was difficult for nurses to determine with certainty when it would be safe to discharge post-endoscopy patients or predict their early deteriorating trend. To ensure safe discharge of post-endoscopy patients, our Center has developed a new evidence-based Endoscopy Discharge Scoring by using a combination of Aldrete Score and Post Anesthesia Discharge Scoring System.

Objectives
1. To develop evidence-based guideline and promote standardized discharge scoring system for safe and timely discharge of post-endoscopy patients;
2. To improve patient flow through recovery area and enhance service efficiency.

Methodology
A pilot program using the new Scoring System was launched in 2014. Post-endoscopy patients with (i) blood pressure 20% higher or lower than baseline reading; (ii) oxygenation not less than 94%; and (iii) conscious or sleepy but arousal would be classified as fit for discharge and be followed up with daily ward reporting as evaluation of safe discharge. Discharged patients with deteriorating conditions requiring medical treatment would be recorded.

Result
Using the new Scoring System, out of the 703 post-endoscopy patients reviewed in the pilot program, 664 (94.4%) were discharged safely without any unexpected readmission or uncontrolled symptoms requiring treatment. The remaining 39 patients, who had desaturation or compromised blood pressure immediately after end of anesthesia (conditions which are commonly encountered after sedation), were treated and discharged at recovery after seeking medical advice. Their average length of stay in recovery area was shortened to 21 mins (ranging from 15 to 130 mins). The above
results are comparable to western studies. Using the new Scoring System and standardized clinical pathway, nurses could now predict early deterioration trend, respond quickly to clinical emergency in recovery period and better manage post-anesthesia care of post-endoscopy patients. With its rolled out in August 2015, the Scoring System has proven effective in ensuring the safe discharge of post-endoscopy patients with no record of readmission of patients due to early discharge after conscious sedations.