Archives of Anesthesiology and Critical Care (Autumn 2024); 10(4): 398-406.

Available online at http://aacc.tums.ac.ir

Review Article

Systems and Criteria for Patient Evaluation and Discharge in the Post-Anesthesia Care Unit: A Systematic Review

Azam Saei[1], Shaqayeq Taghizadeh[2], Mohammad Mehdi Azizi Darbandi[3], Mohammad Gholamzadeh[4]*

[1]*Trauma Research Center in Police Operations, Deputy Health, Relief and Treatment, Police Command, Tehran, Iran.*

[2]*Department of Anesthesia, Faculty of Paramedical Sciences, Guilan University of Medical Sciences, Rasht, Iran.*

[3]*Department of Anesthesia & Surgical Technology, School of Allied Medical Sciences, University of Medical Sciences, Urmia, Iran.*

[4]*Department of Anesthesia, Faculty of Paramedicine, Golestan University of Medical Sciences, Gorgan, Iran.*

ARTICLE INFO

Article history:
Received 31 October 2023
Revised 22 November 2023
Accepted 07 December 2023

Keywords:
Post-anesthesia care unit;
PACU;
Recovery room;
Patient discharge;
Scoring system;
Assessment

ABSTRACT

Safe transfer of patients who have undergone anesthesia and surgery is a basic principle to maintain stability, and avoid side effects and preventable errors. Specific scoring systems or criteria may be used to assess and decide whether patients are sufficiently recovered to be safely transferred to another ward or discharged home. This study aims to answer the question, what criteria are appropriate for patient evaluation and discharge in the post-anesthesia care unit? designed.

To find documents related to writing a review article on various scoring systems for patients after anesthesia in Google Scholar, PubMed, Scopus, and ScienceDirect databases and using English keywords post-anesthesia care unit, PACU, recovery room, discharge, scoring system, Assessment was searched.

A total of 168 articles were found by searching the databases. After removing duplicates, 77 articles were evaluated. Finally, 17 articles were selected and included in the study. The included studies included a variety of tools and criteria for evaluating and discharging patients in the post-anesthesia care unit. This article separately describes each of the tools and criteria for the evaluation and discharge of patients in the post-anesthesia care unit along with the method of scoring, advantages and disadvantages of each.

A safe scoring system for discharge from PACU should evaluate important parameters after anesthesia, including alertness, blood pressure, heart rate, ventilation, oxygen saturation, and surgical site bleeding, which can cause serious complications. Considering that one of the goals of PACU is to relieve patients' pain in the post-surgery phase, the evaluation and control of pain and postoperative nausea and vomiting is effective in the satisfaction and safety of patients.

Introduction

The post-anesthesia care unit (PACU), often referred to as the "recovery room", is designed and equipped for the care of patients immediately after surgery, and the patient goes through the stages of recovery from the immediate physiological effects of anesthesia and surgery in this area. Certified nurse anesthetists manage the PACU under the supervision of an anesthesiologist. Providing quality and safe patient care requires adequate knowledge and familiarity with the correct principles of patient care in the PACU [1]. The recovery room is considered a very important part of the hospital because the patient is at risk of the most unintentional injuries. The physiological condition of the

The authors declare no conflicts of interest.
*Corresponding author.
E-mail address: mohammadmgh76hb@gmail.com

patients is unstable, so critical conditions can quickly develop and worsen. Many of these complications can be prevented, but their diagnosis and treatment depend on skilled and alert personnel who can provide thorough and continuous care [2].

Recovery is a continuous process that overlaps with the end of perioperative care. Patients can be considered fully recovered when they return to their preoperative physiological state. The healing process may take several days, but its stages can be separated [3].

Recovery after major surgery can be divided into three phases: immediate or post-anesthesia phase. The intermediate stage, including the hospitalization period; and the convalescent phase. During both immediate and intermediate phases, care mainly includes maintenance of homeostasis, pain relief, and prevention and early detection of complications. The convalescent phase starts from discharge from the hospital and continues until complete recovery [4].

Safe transfer of patients after anesthesia and surgery is a fundamental principle to maintain stability and avoid side effects and preventable errors [5]. Specific scoring systems or criteria may be used to assess and decide whether patients are sufficiently recovered to be safely transferred to another ward or discharged home. After the patients are discharged from the hospital, full recovery continues at home. Scoring systems and post-anesthesia care discharge criteria have been used successfully for many years to evaluate and discharge patients from the PACU. There should be written and agreed upon safe strategies and criteria for the discharge of patients from the PACU to the common ward [6-7]. Each recovery room should have specific rules and criteria for evaluating and discharging patients to home or other wards [8]. Complete and successful recovery depends on the safe and timely discharge of unconscious patients. Early discharge of patients may result in postoperative complications and the need for unexpected readmission for reoperation or emergency care [9-10].

Failure to implement standard strategies in transferring patients from the PACU to another setting can lead to unpleasant complications, patient injury, increased costs, and patient dissatisfaction [11]. Implementation of rules and approaches to ensure safe recovery after anesthesia is required by accrediting and regulatory organizations in medical facilities worldwide [12-13]. The safe discharge of patients who have undergone anesthesia and surgery is as important as the patient's admission to the ward [14]. Considering the importance of timely and correct discharge from PACU in maintaining the safety and successful recovery of patients, and considering the fact that there is no consensus regarding the most appropriate systems for evaluating and discharging patients in the post-anesthesia care unit, this study designed to answer to the question "What criteria are appropriate for patient evaluation and discharge in the post-anesthesia care unit, how are each measured, and what are the advantages and disadvantages of each?".

Methods

In 2023, to find documents related to writing a review article on various post-anesthesia patient evaluation systems in Google scholar, PubMed, Scopus, ScienceDirect databases and using English keywords post anesthesia care unit, PACU, recovery room, discharge, scoring system, assessment was searched. First, to select the used documents, two evaluators independently checked the titles of the articles found in the databases in terms of thematic relevance. After reviewing the articles, the full text of which was available, and the subject of which was the review of patient discharge systems after anesthesia and was related to the intended purpose of the study, they were selected as references and otherwise, they were excluded from the study. Selected cases were fully studied and finalized. All the selected articles were written in English and no time limit was applied for the search. The collected materials were divided and summarized in the areas of "Definition of recovery and discharge of patients from the post-anesthesia care unit" and "Definition of various scoring systems and criteria for the discharge of patients after anesthesia" with the coordination and consensus of four evaluators (all the authors of the article).

Results

168 articles were found through searching the databases, and after removing duplicates, 77 articles were examined. We excluded 28 articles by title screening and 15 articles by abstract screening. We did not have access to the full text of 7 articles and 10 articles were removed due to inappropriate setting and intervention. Finally, 17 articles were included in this study (Figure 1).

The used studies included articles in the field of patient evaluation and discharge tools in the post-anesthesia care unit that were published from 1965 to 2023. Discussing the evaluation criteria and patient discharge and designing scoring systems for patient discharge from PACU were among the features of the included studies. The findings of this study regarding the criteria, scoring method, advantages and disadvantages of patient evaluation and discharge tools are shown in (Table 1).

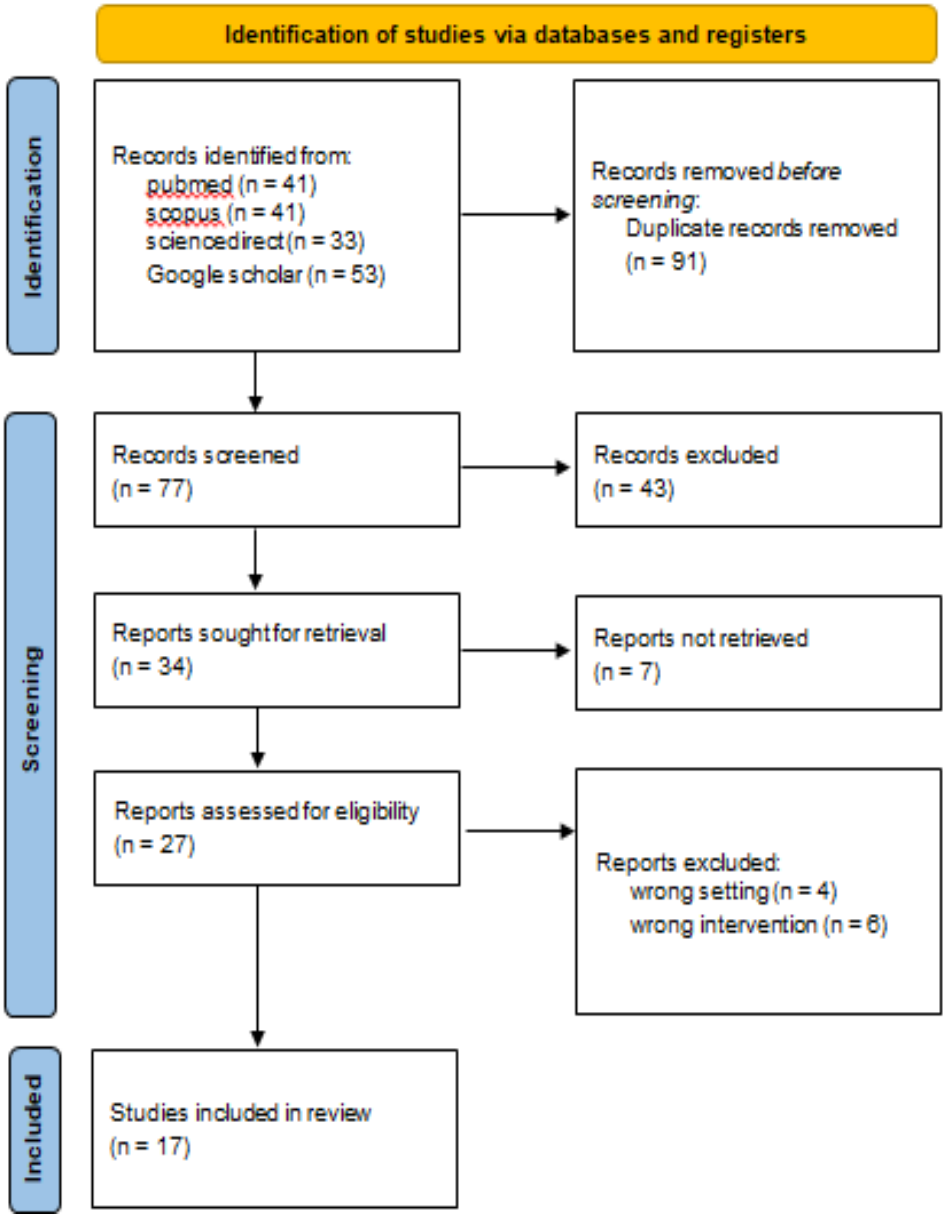

Figure 1- Flowchart of the included studies

Table 1- Tools for discharging patients from recovery

Row	The name of the tool	Number and type of criteria	Scoring method	Advantages	Disadvantages
1	Digit-Symbol Substitution Test (DSST) [15]	A subtest of the adult mindfulness scale. This is a timed test in which the patient must match the correct symbol to the number after a short practice session.	This is a speed test in which one must replace the maximum number of randomly distributed digits with the corresponding symbols within 90 seconds according to the key given at	They are sensitive to the degree of impairment in psychomotor function.	It does not provide sufficient criteria to guide discharge in the outpatient setting. It is time consuming. Instead of the patient's complete recovery, it evaluates only one part of the brain's function.

			the top of the worksheet, taking care not to result in the same digit appearing in any row or column.		Patients may be able to complete paper-and-pencil tests but still have pain or nausea.
2	Trieger Dot Test (TT) [16]	In this test, patients are asked to connect a series of dots to form a pattern.	The number of points lost on the drawn line represents the score. These scores improve as patients recover from anesthesia.	They are sensitive to the degree of impairment in psychomotor function.	It does not provide sufficient criteria to guide discharge in the outpatient setting. It is time consuming. Instead of the patient's complete recovery, it evaluates only one part of the brain's function. Patients may be able to complete paper-and-pencil tests but still have pain or nausea.
3	Aldert scoring system [17]	5 criteria: motor activity, breathing, blood circulation, consciousness, color	Numeric scores of 0, 1, or 2 are assigned to criteria. The maximum score is 10. When a patient scores 10 and 9, they are eligible for discharge.	Used to determine eligibility for expedited discharge.	This scoring system does not consider pain and nausea.
4	REACT [18]	5 criteria: respiration, energy, alertness, blood circulation, temperature	Numeric scores of 0, 1, or 2 are assigned to criteria. The maximum score is 10 and the minimum score for discharge is 8.	Quick assessment of the patient and ease of use of this tool is one of the advantages of this tool.	Important vital signs such as heart rate, oxygen saturation and side effects such as nausea, pain and bleeding are not mentioned in this tool.
5	Stephenson [19]	7 criteria: mental state, mobility, pain, eating and drinking, elimination, information, social factors	This tool is completed based on the words and statements of the patient.	It is a cost-effective tool in care, limited space for admitting patients and lack of personnel.	It does not include many vital signs and important parameters.
6	Clinical Recovery score [20]	7 criteria: activity, respiration, circulation, consciousness, ambulation, color, nausea and vomiting	Patients can score from 0 to 2 points in each of the first 6 criteria with a maximum of 12 points. In case of nausea or vomiting, up to 2 points can be reduced.	It does not require paper and pencil and the cooperation of the patient. This scoring system can also be very useful for people with mental and physical problems. Without having to do	Pain and bleeding after surgery, which can cause serious complications, have not been evaluated in this tool.

				things that may not be suitable for disabled people.	
7	Post Anaesthetic Discharge Scoring System (PADS) [21]	5 criteria: vital signs, activity and mental state, pain and nausea, surgical bleeding, Intake and output	Each criterion is awarded 0, 1 or 2 points. When a score of 9 or 10 is obtained, the patient is deemed fit to be discharged home.	It allows the evaluation of all patients who have had different procedures and anesthesia. Determines the optimal length of stay for the patient after outpatient surgery.	Due to the aggregation of criteria, it is relatively difficult to use and score with this tool.
8	Fast-tracking score [22]	7 criteria: consciousness, activity, haemodynamic stability, respiratory stability, oxygen saturation, pain, nausea and vomiting	Each criterion can be assigned a score of 0, 1 or 2. If the total score is more than 12, the patient can be discharged.	Used to determine eligibility for expedited discharged. For surgeries such as hysteroscopy and arthroscopic surgery, saving the time of discharge and occurrence of complications should be clinically significant for the patient.	This process of evaluating rapid recovery can be associated with an increase in delayed postoperative side effects or patient discomfort.
9	Modified Aldrete Scoring System (MASS) [23]	5 criteria: activity, respiratory, blood circulation, consciousness, oxygen saturation	Each criterion can be assigned a score of 0, 1 or 2. If the total score is 9 or 10, the patient can be discharged.	It is a well-known and common tool among recovery room personnel and is used to determine eligibility for discharge.	Important criteria such as pain, surgical site bleeding, and nausea and vomiting are not included.
10	Visual Analogue Scale [24]	It is often used to evaluate the analgesic properties of various treatments and does so by measuring pain relief or pain intensity.	A 10 cm line ranging from almost no pain to severe pain along which the patient makes a mark to make a subjective assessment of pain.	A tool for rapid diagnosis of post-operative patient pain, before the pain complication manifests itself in physiological symptoms.	Other physiological symptoms of the patient are not measured after the operation, and the measurement of pain intensity alone creates limitations.
11	Postanesthesia Recovery Score for Ambulatory Patients (PARSAP) [25]	9 criteria: activity, respiration, circulation, consciousness, dressing, pain, ambulation, fasting/feeding, urine output	Numeric scores of 0, 1, or 2 are assigned to criteria. A score of at least 16 is the criteria for patients to be discharged.	Used to determine eligibility for expedited discharge. It is important to discharge patients who receive anesthesia and measure urine output, which can be an oliguria of	This scoring system does not consider nausea and oxygen saturation.

				anesthesia complications.	
12	time-based discharge (TBD) [8]	Patients are discharged after a fixed period of time at the behest of the anesthesiologist, when established clinical criteria are met.	This method can be different from one institution to another.	Since it can be changed from one institution to another, each institution can determine the time based on the most type of surgery or a specific center so that additional costs, time and personnel are not needed.	The rate of complications and re-hospitalization was high even for patients with discharge based on time criteria, and the most common cause of re-hospitalization was respiratory and cardiovascular complications.
13	Danish Society of Anaesthesiology and Intensive Care Medicine (DASAIM) [26]	7 criteria: nausea and vomiting, pain, sedation, breathing, oxygen saturation, blood pressure, heart rate	Numeric scores of 0, 1, 2, or 3 are assigned to criteria. A maximum of 21 will be allocated. When a patient achieves a score of 4 or no criteria greater than 1, they are eligible for discharge.	It is among the tools that the patient is examined in terms of important physiological symptoms after the operation.	In this tool, the mobility and activity of patients is not measured. As a result, in people who receive anesthesia, it is not a suitable tool to check the movement of organs.
14	Early Warning Scoring System (EWSS) [27]	6 criteria: heart rate, respiratory rate, body temperature, systolic blood pressure, oxygen saturation, response to stimulus (AVPU scale)	If the total score is ≤ 4, follow the patient again for 10 minutes, and if it is ≤ 4, continue without any other action. If it is more than 4, the patient should be followed up for 5 minutes. If the score is more than 6, treatment should be done.	It is used to evaluate primary parameters and detect early complications.	It does not include side effects such as pain and nausea, which are the main side effects after anesthesia.
15	Readiness for Discharge Assessment Tool (RDAT) [28]	10 criteria: activity , respirations, pulse, blood pressure, temperature, oxygen saturation, consciousness/mental state, pain, nausea, surgical bleeding	The patient is evaluated with a yes/no double answer, and if all the criteria are yes, the patient can be discharged.	A comprehensive tool that includes important physiological and clinical criteria and is easy to use.	The criteria can only be answered with yes and no, and the numerical scale has not been determined for the criteria and has no middle limit.
16	Discerning post anesthesia readiness for transition (DPART) [29]	16 criteria: airway, cardiopulmonary, procedure risks, respiratory function, neurological function, blood circulation (less than 12 months and more than 12 months), hydration, blood loss, temperature, oxygen	Each criterion is assigned a score of 0 or 1. The maximum score is 16.	With this tool, a comprehensive assessment can be done at any age after anesthesia.	The use of this tool in the second phase of recovery is more important and requires more time for evaluation.

		saturation, pain, nausea and vomiting. mental alertness, oxygenation, caregiver			
17	SAMPE [30]	8 criteria: vital signs, consciousness, ventilation, oxygen saturation, pain, nausea and vomiting, bleeding, limb movement	The patient is evaluated with a double answer of yes/no, and if all the criteria are yes, the patient can be discharged.	Determining the eligibility for fast discharge is used and the patient is evaluated for important physiological symptoms after the operation. It can be easily used by personnel.	The criteria can only be answered with yes and no, and the numerical scale has not been determined for the criteria and has no middle limit.

Discussion

Continuous monitoring of patients and evaluation based on criteria is required to check the degree of recovery and stability of the physiological state after anesthesia and the readiness of patients to be transferred to another department or discharged home. American Society of PeriAnesthesia Nurses (ASPAN) guidelines recommend that patient assessment information be collected and recorded for prevention or early detection of complications. PACU nurses should continuously monitor patients and record vital signs and other assessments as well as medications administered during patients' PACU stay. Evidence has shown that these measures are effective in ensuring continuity of care, accurate documentation, and improved communication within the interprofessional team. These methods promote safer and higher-quality care [31-32].

Most of the medical institutions in India use the traditional method of time-based discharge (TBD) in the PACU, where patients are discharged after a fixed period of time when prescribed clinical criteria are acceptable on the orders of the anesthetist [33]. Recent studies have shown that the use of predefined physiologic scoring systems that follow the clinical criteria-based discharge (CBD) method has reduced the length of stay (LOS) in the first phase of the PACU [8]. The TBD method can vary among treatment centers, while the CBD method has the ability to standardize discharge criteria in different centers and the available evidence shows that it reduces the time spent in the PACU [17,34-35]. The findings of the studies showed that the average actual discharge time is statistically significant compared to the time-based discharge, and the rate of complications and re-hospitalization was higher in patients who were discharged with the time-based discharge method [36-37].

Today, the field of postoperative and anesthesia has changed a lot since the original version of the Aldrete tool was published 51 years ago in 1970 and the revised Aldrete tool was published 23 years ago in 1998; Therefore, the use of these tools should be revised and updated tools should be designed and developed according to the conditions of anesthesia and surgery today [39].

In a systematic review, Nicole Margaret Phillips and colleagues identified variables such as state of consciousness, blood pressure, nausea and vomiting, and pain as essential criteria and assessment of psychomotor, cognitive, and other vital signs recovery

as relevant criteria for evaluating patient readiness for PACU discharge [14]. Laura P. Dowling et al. conducted a survey of PACU nurses and found that they were not aware of the hospital discharge protocol and did not understand the steps and purpose of Aldrete scoring. This study recommended the development of a new scoring tool as a PACU Phase I discharge protocol [38].

Based on the results of Maryann Street et al.'s study, using a tool that includes structured discharge criteria increases nurses' recognition and response to patients who have experienced clinical deterioration. It also reduces the length of stay for patients who experience an adverse event in the PACU and is cost-effective [39]. In their study, Laurie Ecof et al stated that experienced nurses in the PACU may intuitively delay the discharge of patients based on their experiences and observations of their condition, even when some scoring systems indicate that patients are ready for discharge. This is despite the fact that novice nurses who do not have high knowledge and experience may only be satisfied with the criteria of a particular tool, while other evaluation criteria (pain, bleeding from the surgical site, nausea and vomiting) that are not included in this tool may not be acceptable [40].

Robert J. Hawker et al. identified airway support, oxygenation, sedation, and circulation as traditional components common to many first-stage PACU discharge assessment systems. However, in studies, measures such as heart rate, temperature, pain, postoperative nausea and vomiting (PONV), urine output, and evaluation of the surgical site are considered as important measures [41]. Shraya Banerjee et al. compared the modified Aldert score (MAS) and Fast-

Track Criteria (FTC) and showed that both tools can be good in evaluating recovery after general anesthesia in laparoscopic surgery. However, the FTC tool is better for assessing postoperative pain and nausea and vomiting (PONV) to document sufficient recovery to transfer patients from the PACU to the ward [42].

One of the limitations of this review is the lack of access to the Web of Science database.

Conclusions

Although each recovery room must have certain physiological and clinical criteria for evaluating and discharging patients, there is no consensus about which scoring system is suitable for evaluating and discharging patients from the post-anesthesia care unit. One of the features of a useful tool is its practicality, simplicity and ease of use by different caregivers. A safe PACU discharge scoring system should assess important post-anesthesia parameters including consciousness, blood pressure, heart rate, ventilation, oxygen saturation, and surgical site bleeding that can cause serious complications. Considering that one of the goals of PACU is to relieve the pain of patients in the post-surgery phase, therefore, the evaluation and control of post-operative pain and nausea and vomiting is effective in the satisfaction and safety of patients. Determining the importance of evaluating other criteria such as temperature and urinary output in the process of discharging patients from PACU requires more studies.

Acknowledgments

We would like to thank from the "Faculty of Paramedicine, Iran University of Medical Sciences".

References

[1] Hatfield A. Foreword. The Complete Recovery Room Book: Oxford University Press; 2014. p. 0.
[2] Heydari F, Comprehensive recovery book, ed. 1. 1400, Tehran: Jame Negar.
[3] Steward DJ, Volgyesi G. Stabilometry: a new tool for the measurement of recovery following general anaesthesia for out-patients. Can Anaesth Soc J. 1978; 25(1):4-6.
[4] Rosen JE. Postoperative Care. In: Doherty GM, editor. Current Diagnosis & Treatment: Surgery, 15e. New York, NY: McGraw Hill LLC; 2020.
[5] Advani R, Stobbs NHW, Killick N, Kumar BN. @ Safe handover saves lives: results from clinical audit. Clinical Governance: An International Journal. 2015; 20:21-32.
[6] Marshall SI, Chung F. Discharge criteria and complications after ambulatory surgery. Anesth Analg. 1999; 88(3):508-17.
[7] McGrath B, Chung F. Postoperative recovery and discharge. Anesthesiol Clin North Am. 2003; 21(2):367-86.
[8] Truong L, Moran JL, Blum P. Post anaesthesia care unit discharge: a clinical scoring system versus traditional time-based criteria. Anaesth Intensive Care. 2004; 32(1):33-42.
[9] Awad IT, Chung F. Factors affecting recovery and discharge following ambulatory surgery. Can J Anaesth. 2006; 53(9):858-72.
[10] Brown I, Jellish WS, Kleinman B, Fluder E, Sawicki K, Katsaros J, et al. Use of postanesthesia discharge criteria to reduce discharge delays for inpatients in the postanesthesia care unit. J Clin Anesth. 2008; 20(3):175-9.
[11] Prates A, Colognese B, Caumo W, Stefani LC. Development of a recovery-room discharge checklist (SAMPE checklist) for safe handover and its comparison with Aldrete and White scoring systems. Braz J Anesthesiol. 2022; 72(2):200-206.
[12] Merchant R, Chartrand D, Dain S, Dobson G, Kurrek MM, Lagacé A, et al. Guidelines to the Practice of Anesthesia - Revised Edition 2016. Can J Anaesth. 2016; 63(1):86-112.
[13] Scott AM, Li J, Oyewole-Eletu S, Nguyen HQ, Gass B, Hirschman KB, et al. Understanding Facilitators and Barriers to Care Transitions: Insights from Project ACHIEVE Site Visits. Jt Comm J Qual Patient Saf. 2017; 43(9):433-47.
[14] Phillips NM, Street M, Kent B, Haesler E, Cadeddu M. Post-anaesthetic discharge scoring criteria: key findings from a systematic review. Int J Evid Based Healthc. 2013;11(4):275-84.
[15] Vickers MD. THE MEASUREMENT OF RECOVERY FROM ANAESTHESIA. Br J Anaesth. 1965; 37:296-302.
[16] Newman MG, Trieger N, Miller JC. Measuring recovery from anesthesia--a simple test. Anesth Analg. 1969; 48(1):136-40.
[17] Aldrete JA, Kroulik D. A postanesthetic recovery score. Anesth Analg. 1970; 49(6):924-34.
[18] Fraulini KE, Murphy P. R.E.A.C.T. A new system for measuring postanesthesia recovery. Nursing. 1984; 14(4):101-2.
[19] Stephenson E. Discharge criteria in day surgery. J Adv Nurs. 1990;15(5):601-13.
[20] Quinn CL, Weaver JM, Beck M. Evaluation of a clinical recovery score after general anesthesia. Anesth Prog. 1993; 40(3):67-71.
[21] Chung F, Chan VW, Ong D. A post-anesthetic discharge scoring system for home readiness after ambulatory surgery. J Clin Anesth. 1995; 7(6):500-6.
[22] Lubarsky DA. Fast track in the postanesthesia care unit: unlimited possibilities? J Clin Anesth. 1996; 8(3 Suppl):70s-2s.
[23] Aldrete JA. Modifications to the postanesthesia score for use in ambulatory surgery. J Perianesth Nurs. 1998; 13(3):148-55.
[24] Nicola C. Visual analogue scale(VAS). J clin nurs. 2001; 10(5).

[25] Saar LM. Use of a modified Postanesthesia Recovery Score in phase II perianesthesia period of ambulatory surgery patients. J Perianesth Nurs. 2001; 16(2):82-9.
[26] Gärtner R, Callesen T, Kroman N, Kehlet H. Recovery at the post anaesthetic care unit after breast cancer surgery. Dan Med Bull. 2010; 57(2):A4137.
[27] Pazar B, Yava A. Evaluation of Early Warning Scoring System and Nursing Guide Application in Post-Anaesthesia Care Unit. Turk J Anaesthesiol Reanim. 2013; 41(6):216-22.
[28] Ecoff L, Palomo J, Stichler JF. Design and Testing of a Postanesthesia Care Unit Readiness for Discharge Assessment Tool. J Perianesth Nurs. 2017; 32(5):389-99.
[29] Whitley DR, Crow PH, Gore PC, Gregory VK, Pfeiffer KG, Taylor YJ. Discerning Post Anesthesia Readiness for Transition (DPART): A Measurement Tool. J Perianesth Nurs. 2020; 35(2):160-70.
[30] Prates A, Colognese B, Caumo W, Stefani LC. Development of a recovery-room discharge checklist (SAMPE checklist) for safe handover and its comparison with Aldrete and White scoring systems. Braz J Anesthesiol. 2022; 72(2):200-6.
[31] Phillips NM, Haesler E, Street M, Kent B. Post-anaesthetic discharge scoring criteria: A systematic review. JBI Libr Syst Rev. 2011; 9(41):1679-713.
[32] Apfelbaum JL, Silverstein JH, Chung FF, Connis RT, Fillmore RB, Hunt SE, et al. Practice guidelines for postanesthetic care: an updated report by the American Society of Anesthesiologists Task Force on Postanesthetic Care. Anesthesiology. 2013; 118(2):291-307.
[33] Kulkarni S, Harsoor SS, Chandrasekar M, Bhaskar SB, Bapat J, Ramdas EK, et al. Consensus statement on anaesthesia for day care surgeries. Indian J Anaesth. 2017; 61(2):110-24.
[34] White PF. Criteria for fast-tracking outpatients after ambulatory surgery. J Clin Anesth. 1999; 11(1):78-9.
[35] White PF, Song D. New criteria for fast-tracking after outpatient anesthesia: a comparison with the modified Aldrete's scoring system. Anesth Analg. 1999; 88(5):1069-72.
[36] Fredman B, Sheffer O, Zohar E, Paruta I, Richter S, Jedeikin R, et al. Fast-track eligibility of geriatric patients undergoing short urologic surgery procedures. Anesth Analg. 2002; 94(3):560-4.
[37] Song D, van Vlymen J, White PF. Is the bispectral index useful in predicting fast-track eligibility after ambulatory anesthesia with propofol and desflurane? Anesth Analg. 1998; 87(6):1245-8.
[38] Dowling LP. Aldrete Discharge Scoring: Appropriate for Post Anesthesia Phase I Discharge? 2015.
[39] Street M, Phillips NM, Kent B, Colgan S, Mohebbi M. Minimising post-operative risk using a Post-Anaesthetic Care Tool (PACT): protocol for a prospective observational study and cost-effectiveness analysis. BMJ open. 2015; 5(6):e007200.
[40] Ecoff L, Palomo J, Stichler JF. Design and testing of a postanesthesia care unit readiness for discharge assessment tool J Perianesth Nurs. 2017;32(5):389-99.
[41] Hawker RJ, McKillop A, Jacobs S. Postanesthesia scoring methods: An integrative review of the literature. J Perianesth Nurs. 2017; 32(6):557-72.
[42] Banerjee S, Kohli P, Pandey M. A study of modified Aldrete score and fast-track criteria for assessing recovery from general anaesthesia after laparoscopic surgery in Indian adults. Perioperative Care and Operating Room Management. 2018; 12:39-44.