

Background

- Discharge criteria at MSK was not standardized
- The lack of specific objective criteria did not permit quantification of discharge readiness
- Use of a standardized scoring tool provides consistent delivery of optimal patient care, meets TJC requirements and ASPAN recommended standards

Purpose

To develop a Post-Anesthetic Discharge Scoring Tool that would quantify when patients were clinically ready for discharge, thereby permitting patient to reach their post-operative milestones.

Methods

- A review of literature was inclusive of 86 articles
- Compared common discharge scoring tools and queried outside hospitals with similar patient populations
- MSK IRB approved retrospective study: *“Development of a Discharge Scoring Tool in the Post Anesthesia Care Unit”, WA 0277-15 (07.2015)*
- 135 consecutive patients were retrospectively reviewed who underwent major thoracic or hepatic/pancreatic surgery from January to March 2015
 - This population was selected due to being the longest length of stay in PACU

Goals



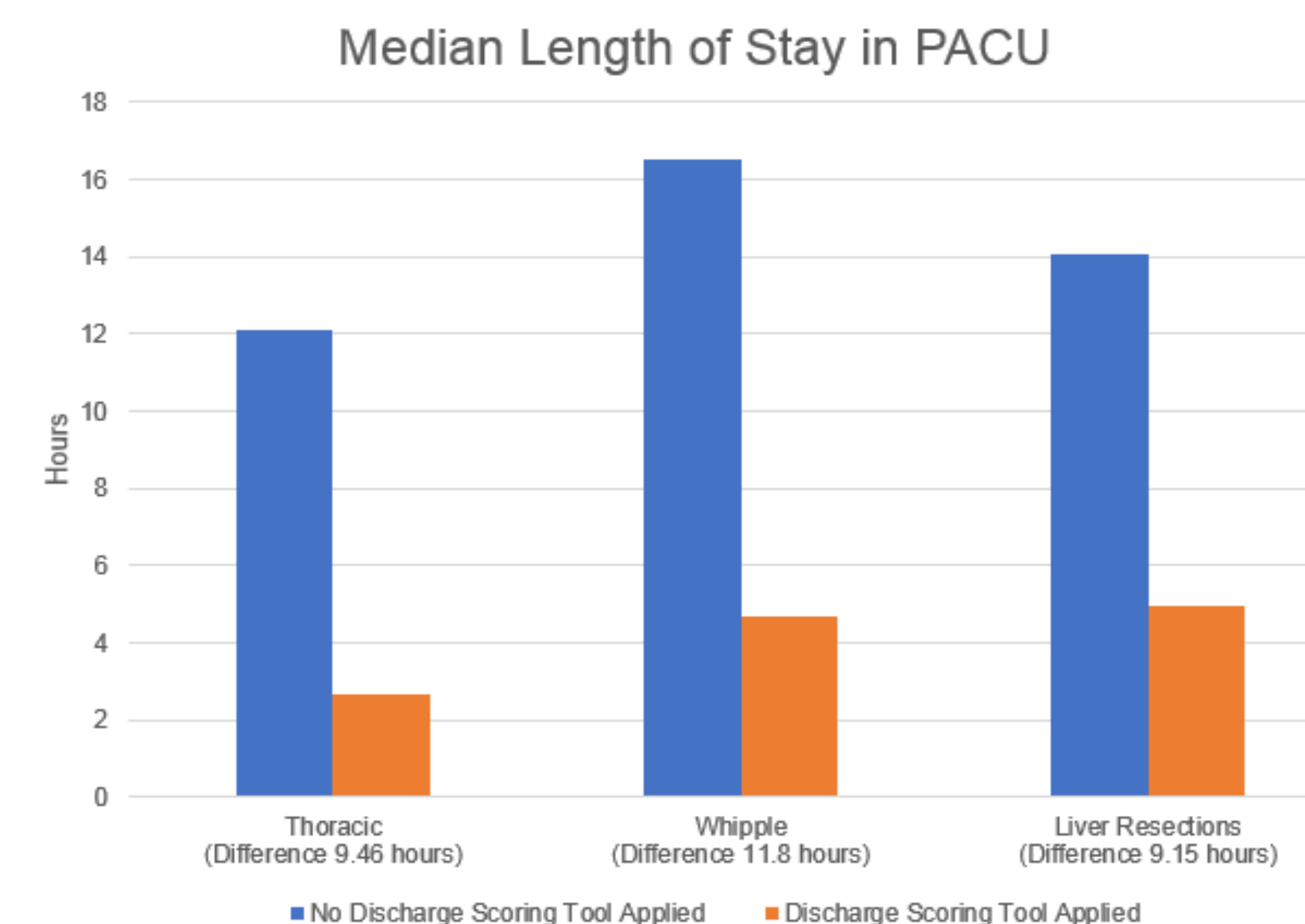
Discharge Scoring Tool

MSK Post – Anesthetic Discharge Scoring Tool (Adult)
LEVEL OF CONSCIOUSNESS
<ul style="list-style-type: none"> 2 = Awake, Easily arousable 1 = Frequently drowsy, drifts to sleep, but arousable to stimuli 0 = Minimal or no response to stimuli
OXYGEN SATURATION
<ul style="list-style-type: none"> 2 = O2 Sat ≥92% on room air 1 = O2 Sat ≥ 92% with Nasal Cannula, BIPAP, Blow-by, CPAP, Face tent, RSV hood, or Trach collar regardless of amount of oxygen delivery requirement 0 = O2 Sat < 92% or any patient on simple facemask, high flow facemask, heliox, t-piece, Opti-flow, non-rebreather, or mechanical assistance
HEMODYNAMIC STABILITY
<ul style="list-style-type: none"> 2 = Baseline SBP +/- 10 mmHg 1 = Baseline SBP +/- 11 to 30 mmHg 0 = Baseline SBP +/- >30 mmHg
POST-OPERATIVE /PROCEDURE PAIN
Numeric or Wong Baker pain scale
<ul style="list-style-type: none"> 2 = Acceptable pain level 0 = Unacceptable pain level
If FLACC or CPOT scale
<ul style="list-style-type: none"> 2 = Score of 0-2 1 = Score of 3-6 0 = Score of 7 or greater
NAUSEA / VOMITING
<ul style="list-style-type: none"> 2 = None or mild nausea with no active vomiting 1 = None or mild nausea with vomiting; moderate nausea with no vomiting 0 = Moderate nausea with vomiting; Severe nausea with or without vomiting; Or unable to assess nausea.

MSK Post – Anesthetic Discharge Scoring Tool (Pediatrics)
LEVEL OF CONSCIOUSNESS
<ul style="list-style-type: none"> 2 = Awake, Easily arousable 1 = Frequently drowsy, drifts to sleep, but arousable to stimuli 0 = Minimal or no response to stimuli
OXYGEN SATURATION
<ul style="list-style-type: none"> 2 = O2 Sat ≥94% on room air 1 = O2 Sat ≥ 94% with Nasal Cannula, BIPAP, Blow-by, CPAP, Face tent, RSV hood, or Trach collar regardless of amount of oxygen delivery requirement 0 = O2 Sat < 94% or any patient on simple facemask, high flow facemask, heliox, t-piece, Opti-flow, non-rebreather, or mechanical assistance
HEMODYNAMIC STABILITY
<ul style="list-style-type: none"> 2 = Appropriate for age, or at baseline (both SBP and DBP baseline parameters) 0 = Does not meet BP parameter guidelines or match baseline
POST-OPERATIVE /PROCEDURE PAIN
Numeric or Wong Baker pain scale
<ul style="list-style-type: none"> 2 = acceptable pain level 0 = unacceptable pain level
If FLACC or CPOT scale
<ul style="list-style-type: none"> 2 = Score of 0-2 1 = Score of 3-6 0 = Score of 7 or greater
NAUSEA / VOMITING
<ul style="list-style-type: none"> 2 = None or mild nausea with no active vomiting; Or age ≤ 3years, unable to assess nausea with no vomiting 1 = None or mild nausea with vomiting; moderate nausea with no vomiting 0 = Moderate nausea with vomiting; Severe nausea with or without vomiting; Or age ≤ 3 years old unable to assess nausea, with vomiting

Study Outcomes – Length of Stay Comparisons

- The proposed tool was utilized with data from the retrospective review to identify what the time of discharge would have been had it been applied to practice and then compared against current state
- Use of the tool was shown to have potential to reduce length of stay by an average of 8 hours

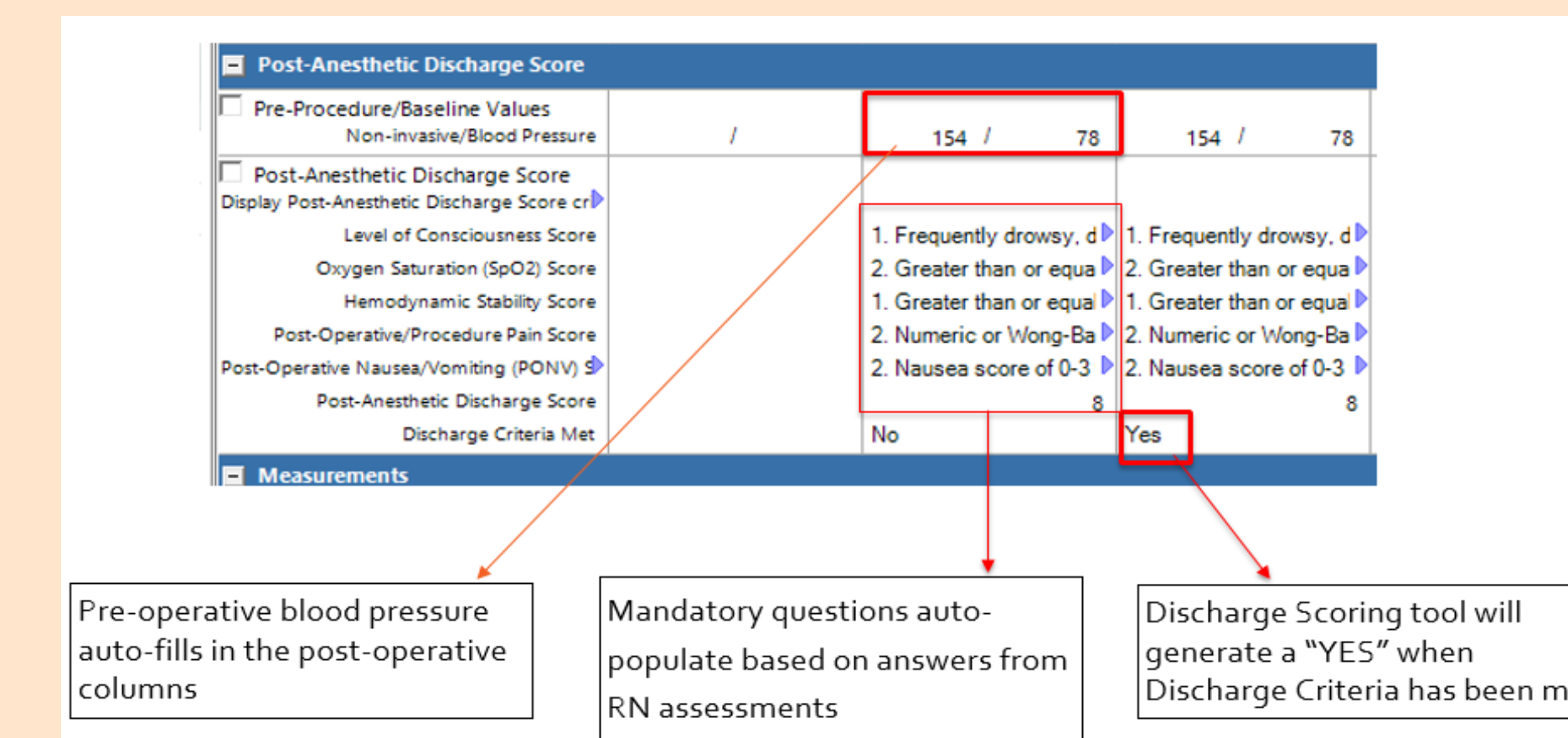


Guiding Principles

- An acceptable discharge assessment score is defined as a calculated tally of 8 or greater with no zeros in any parameter
- Criteria consists of 2 consecutive acceptable discharge assessment scores
- If patient criteria is not met and the healthcare team considers the patient ready for discharge, documentation is required by both the RN and APP

Application to Practice

- In collaboration with nursing informatics, the tool was integrated into the electronic medical record
- Data is automatically pulled from nursing documentation to calculate a readiness score
- Implemented for all patients receiving anesthesia and recovering in the PACU
- Education was provided to PACU nurses and APP through PowerPoint presentations and interactive demonstrations
- Tool compliance is measured to identify clinical relevance and challenges
- Variability in documentation has been assessed to enhance tool accuracy



Pre-operative blood pressure auto-fills in the post-operative columns

Mandatory questions auto-populate based on answers from RN assessments

Discharge Scoring tool will generate a "YES" when Discharge Criteria has been met

Implications

- A prospective study is needed to confirm clinical safety in practice and evaluate patient outcomes
- Utilization in the pediatric population and IR procedure recoveries is needed to look at application in varied populations
- Organizations stand to improve throughput and Length of Stay by standardizing discharge criteria