SIMPL evaluation completion from 24 to 147, a slope of 27.2. We had an *R* value of -0.68 ($p < 0.05$).

CONCLUSIONS: Team-based learning is an innovative way to motivate resident learning and shape resident behavior. We have found it to be a useful platform to engage residents and attending staff while encouraging friendly competition.

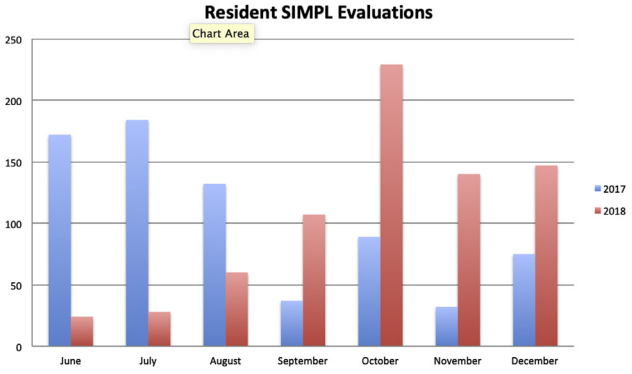

Figure.

Toward Autonomy and Conditional Independence: A Standardized Script Improves Patient Acceptance of Surgical Trainee Roles

Ava Ferguson Bryan, MD, Darren S Bryan, MD, Jeffrey B Matthews, MD, FACS, Kevin Roggin, MD, FACS
University of Chicago, Chicago, IL

INTRODUCTION: Progressive autonomy leading to conditional independence is necessary to achieve competence in surgical skills and decision-making. Trust and transparency are ethical imperatives, but practices vary on the extent of disclosure of specific resident roles. We tested whether a standardized preoperative script would improve patient acceptance of resident involvement in perioperative care.

METHODS: Patients admitted to a resident-run acute care surgery service between October 2017 and 2018 were enrolled in an IRB-approved study. During the first half of the rotation (control), operative consent was obtained according to individual practice without specified explanation of resident roles. During the second half (intervention), the senior resident read a short semi-structured script specifically explaining team roles and responsibilities, including the degree of resident independence and supervision by attendings. On postoperative day 3, patients completed a survey assessing understanding of their surgical care.

RESULTS: A total of 62 patients under the care of 10 rotating chief residents were enrolled; 46 patients completed the survey, 23 in each arm (74% response rate). Ten patients in the control arm (43%) compared with only 3 (13%) in the intervention arm indicated that residents should not be allowed to perform portions of operations (odds ratio 4.94; $p = 0.047$). Patients in the intervention arm thought that care team roles were more adequately explained to them before their operation ($p = 0.002$). There was no difference in the number of patients naming a resident as "their doctor."

CONCLUSIONS: Use of a short script specifying resident roles improves patient acceptance of trainee participation in perioperative care.

Use of the Operating Room Black Box for Structured Postoperative Team Debriefing: Lessons Learned from Discussions around Safety Threats and Resilience Support Events

Anne Sophie van Dalen, BSc, James J Jung, MD, Teodor P Grantcharov, MD, FACS, Marlies P Schijven, MD, PhD, MhSC
Amsterdam UMC, University of Amsterdam, Amsterdam; Li Ka Shing Knowledge Institute of St. Michael's Hospital, University of Toronto, Toronto, Ontario, Canada; University of Amsterdam, Amsterdam; University of Toronto, Toronto, Ontario, Canada

INTRODUCTION: Surgical adverse events are often preventable. A human factors method can be used to identify factors that are associated with adverse events and help improve safety in the operating room (OR). The aim was to characterize safety threats and resilience support events by analyzing surgical procedures recorded with the OR black box and using these reports to conduct postoperative debriefing.

METHODS: Thirty-five gastrointestinal laparoscopic cases were recorded by the OR black box. The Surgical Team Assessment Record questionnaire was administered to all the OR team members directly after the end of the procedure to assess their number of noticed aberrations during the procedure. Trained raters used a modified version of the Systems Engineering Initiative for Patient Safety framework to identify pertinent safety threats and resilience support events. Qualitative data analysis was used to identify the most commonly discussed events during the postoperative multidisciplinary debriefings, with the use of a standardized debrief model and the OR black box performance report.

RESULTS: A total of 234 Surgical Team Assessment Record questionnaires were completed. In 65 (26%) questionnaires, theatre staff answered noticed aberrations during the case. In 21% ($n = 13$), the surgeon answered this was discussed with team vs 9.7% times ($n = 6$) by the circulating nurse. A mean (SD) of 11.5 (4.2) safety threats per case were identified. Communication-related events were most often discussed during the postoperative debriefings.

CONCLUSIONS: Discussing relevant safety threats in postoperative structured multidisciplinary debriefing can be important for improving communication skills and preventing incorrect assumptions among theatre staff.