



Improvement in Acute Care Surgery Medical Student Education and Clerkships: Use of Feedback and Loop Closure

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Background

The unpredictable and sometimes chaotic environment present in an Acute Care Surgery Services (Trauma, Burn, Surgical Critical Care, Non-Trauma Emergency Surgery) can cause high levels of anxiety and stress that could impact a medical students' experience during their M3 surgical clerkship.

This negative perception perhaps is a determinant influence in diverting talented students into other medical subspecialties.

We sought out to objectively identify potential areas of improvement through direct feedback and implement programmatic changes to address these areas.

We hypothesized that as the changes were made students' perception of the rotation would improve.

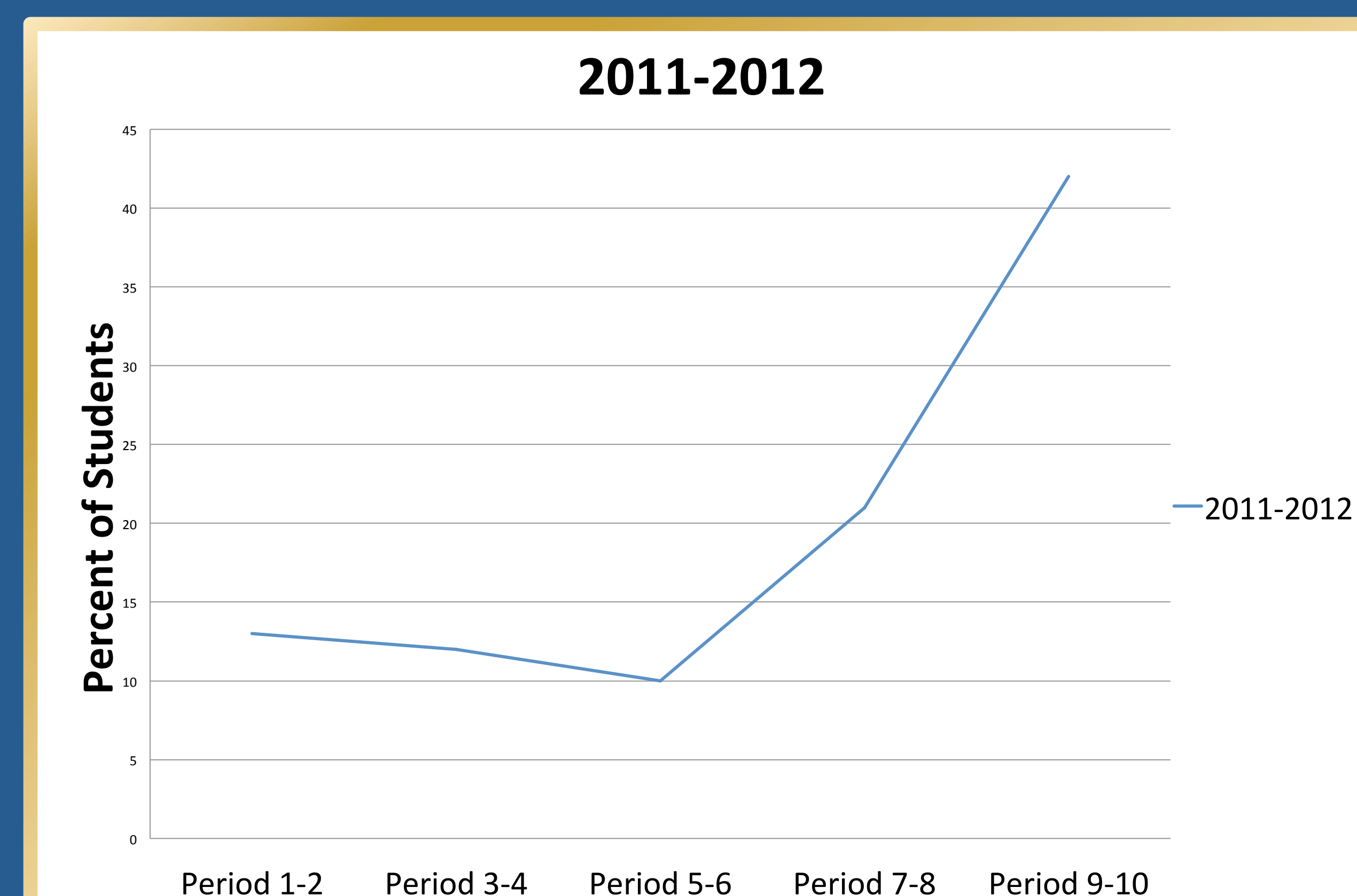
Methods and Intervention

Review of end of clerkship third year of medical school trauma burn surgery rotation evaluations and comments was performed for the 2010-2011 academic year.

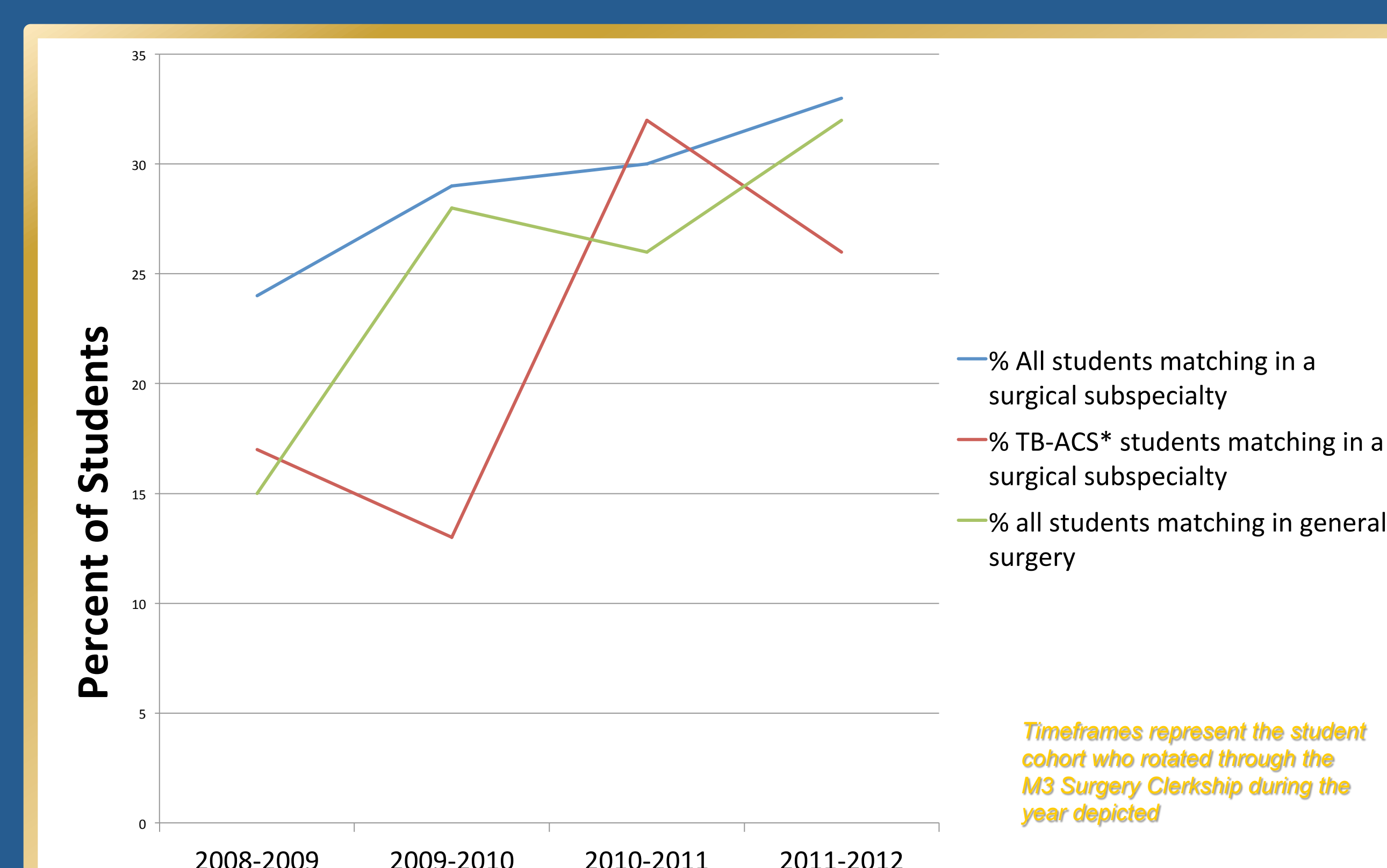
Trends in negative feedback were identified and categorized into five areas for improvement as follows: logistics, student expectations, communication, team integration, and feedback. A plan was designed and implemented for each category.

Feedback on improvements to the rotation was monitored via surveys and during monthly end of rotation face-to-face student feedback sessions with the rotation faculty facilitator and surgery clerkship director.

Category	Criticism	Corrective Action
Logistics	The rotation is unorganized	Student schedule Defined roles Prioritized responsibilities Operative case hierarchy
Expectations	Need more specific orientation	Pre-rotation welcome email Orientation Tour Grading Policy
Team Integration	Do not feel part of the team	Assigned team Reinforce M3 inclusion to team Procedure list requiring sign-offs Trauma pager & Trauma shears Assigned clinic Lockers
Communication	Cannot figure out how to know where they need to be	Weekly Service email Weekly check-in meetings
Feedback	Not getting adequate/enough Feedback	Feedback from the entire team Formal feedback session



Percent of students choosing Trauma/Burn as their first choice for either a core block or a specialty block rotation after implementation of the changes.



Percent of students who matched in a Surgical Specialty Residency.
*TB-ACS: Trauma-Burn Acute Care Surgery rotation

Results

Perceptions of the rotation markedly improved within the first month of the changes and continued to improve over the study time frame (2011-2013) in all five categories.

We also observed an increase in the number of students selecting a surgical residency in the National Resident Matching Program match from a low of 8% in 2009-2010 before any interventions to 25% after full implementation of the improvement measures in 2011-2012.

Lessons Learned

A systematic approach using direct feedback from students to address service-specific issues improves perceptions of students on the educational value of a busy trauma-burn acute care surgery service and may have a positive influence on students considering surgical careers to pursue a surgical specialty.

Future Applications and Next Steps

Student perceptions of an acute care surgery service clerkship can be improved by use of direct and indirect student feedback, systematic action plan implementation, and ongoing loop closure.

In the future we will be using these concepts to continually improve the acute care surgery experience for all levels of learners.

Reference

J Surg Res. 2015 Jun 5. pii: S0022-4804(15)00679-4. Jun 5. PMID:26148827