A REVIEW OF FIRST YEAR FELLOW ENDOSCOPIC SKILLS AND TIME TO PROFICIENCY

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IRB Number (if applicable): not applicable

Describe role of Submitting/Presenting Trainee in this project (limit 150 words):
Researched literature on already available research and evidence based guidelines into pediatric GI Fellow training mainly in endoscopy, with the help and guidance of the mentors, came up with the research question and analyzed the current problems surrounding it, created a fishbone and PDSA cycle to help understand the problem and created a curriculum. Data was collected and analyzed for the intervention.

Problem Statement/Question, Background/Project Intent (Aim Statement), Methods (include PDSA cycles), Results, Conclusions limited to 500 words

Problem Statement/Question:
Procedures are an integral part of the practice of pediatric gastroenterology. Fellows in training are expected to demonstrate skill competency of a wide array of diagnostic and therapeutic procedures. The acquisition of competence is a developmental process that occurs over time with practice.

Background/Project Intent (Aim Statement):
Currently, new incoming fellows are often inexperienced in endoscopy, typically taking a prolonged time to attain proficiency. This leads to poor patient satisfaction and lowered confidence in the trainee. Barriers to proficiency currently include unfamiliarity with endoscopic tools, lack of prior experience and lack of a structured curriculum. We defined the time to proficiency as the number of EGD procedures it takes the endoscopy trainee to achieve an evaluation score of at least 4 out of 5, at least 90% of the time, and so have mastered the procedure. The lack of a structured endoscopy course may be a large contributor to this problem.
Through this quality improvement project, we have assessed the current fellows’ upper endoscopy skill level during their first year and determined that the time to achieving proficiency is significantly longer than desired.

We plan to introduce a curriculum to incoming first year fellows of 2018 during their orientation which includes assigned reading materials, videos, and simulated endoscopic cases.

We aim to decrease the time to proficiency by half after implementing the endoscopy curriculum.

**Methods (include PDSA cycles):**

**PDSA**

**PLAN:** A new endoscopic curriculum will be created.

**DO:** Implementation of new curriculum during fellow orientation. Then there will be comparison against 8 other past first year fellows. We aim to decrease the time to proficiency by half after implementing the endoscopy curriculum.

**STUDY:** Check surveys from patients, attendings and fellows.

**ACT:** Implement changes as required for incoming fellows.

**Results:**

Evaluation of improvement of skills will be completed on the July 2018 incoming fellows from fellowship entry until December 2018.

This data will be compared against data from 8 other past first year fellows. We aim to decrease the time to proficiency by half after implementing the endoscopy curriculum.

Limitations to this project that could occur include failure in data collection from prior and incoming fellows’ endoscopy evaluation cards, and lack of completion of the endoscopy curriculum during the orientation.

Through this project, we hope to promote safety and increase satisfaction of patients by improving readiness, skill level, and the confidence of first year inexperienced fellows.

**Conclusions:**

Preliminary analysis of current fellows’ percentage achieving a score of 4 or 5 increased from 44% at less than 5 days of experience to 87% after 10 days of experience. This trend persisted and was maintained through the rest of the fellowship training with 99% achieving scores of 4 - 5 at more than 20 days of experience. The incoming fellows’ procedural scores are currently being analyzed for final comparison with the already analyzed data.