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## MSQC Video Review Program

**Target audience** - General and colorectal surgeons in any of the 70 hospitals that are members of the Michigan Surgical Quality Collaborative (MSQC) who perform laparoscopic colectomy surgeries.

**Problems with current practice** - "Surgical training emphasizes the primacy of the surgeon in determining the outcomes of our patients. As a result, many surgeons struggle with the current focus on a systems view of quality and safety and the apparent incongruity with the traditional surgical value of personal responsibility. Despite the focus placed on personal performance during residency, once training is complete, there is a lack of structured programs to support individual surgeons in examining their skills and their own individual improvement." (Greenberg et al.).

This QI initiative uses a <u>video review tool</u> consisting of 10 questions with 1-5 Likert scale ratings that has been validated for laparoscopic right colectomy by the American Society of Colon and Rectal Surgeons (ASCRS). This allows surgeons to use a standardized tool to objectively grade technical skills in a peer to peer review of de-identified videos. Participating surgeons will also receive blinded feedback on their skills from 10 peer surgeon reviewers.

Colorectal surgery was selected as the first surgical targeted procedure in the project due to its high complication rate. Laparoscopic approach was chosen because it is a preferred approach and can be easily video-recorded without compromising patient, surgeon and staff identities.

**Expected results of the activity** - Birkmeyer et al. (2013) demonstrated a significant linear relationship between surgeon technical skill (as rated by peer assessment of videos) and surgical outcomes. Reviewing and providing feedback on multiple surgeries will provide exposure to several peer surgeons' technical skills and allow for critical consideration of the skills and techniques employed for a narrowly-defined, commonly-shared surgery. Video-based peer feedback encourages surgeons to be continuous learners, challenging assumptions and approaches, and to seek new and better ways of improving performance, quality, and outcomes. After completing this program, surgeons have learned and performed the following:

- Learned how to use the video review tool
- Performed self-evaluation using the video review tool
- Evaluated and provided peer to peer feedback to 10 other surgeons
- Received peer to peer feedback from 10 other surgeons

#### Content and format -

After joining MSQC Video Review Program, surgeons will receive an email containing a URL and login for the system, the video review tool questions, and instructions for completing the following steps:

- Surgeons utilize the recording capability inherent in a laparoscope device to record a colectomy surgery. This recording is exported to upload to a secure online application (Box) folder using a computer or device with internet capacity. The uploaded video should be free of patient, surgeon and staff identifiers. There are no other technical requirements. *Note: The consent for surgery allows for the use of photos or video for educational purposes.*
- Once the video is uploaded, program staff verify that all identifiers have been omitted. Videos are then edited by volunteer surgeons to a 20-minute clip that captures the most salient portions of the surgery, and uploaded to the secure online review application within the MSQC workstation.
- Surgeons are then asked to objectively grade technical skill of 10 other surgeons using the <u>video review</u> <u>tool</u>, Viewing and giving feedback will take roughly 30 minutes for each video. CME credit will be awarded once the surgeon has completed 10 reviews and the program evaluation.
- Surgeons submitting a video are asked to perform a self-evaluation of their own video after it has been edited, using the video review tool.
- In addition, each surgeon will receive feedback of their own video submission from 10 of their peer surgeons.

**Evaluation of the activity -** A Qualtrics survey will be sent to each surgeon who completes the required 10 video reviews and provides feedback to their fellow surgeons. The survey will serve as an evaluation of this QI initiative and asks about the surgeon's likelihood of changing their surgical clinical techniques/practice based upon the feedback received. The survey will conclude with claiming 5.0 *AMA PRA Category 1 Credit(s)*<sup>TM</sup>.

Disclosures - Faculty planners of this activity have no commercial relationships to disclose.

Operational processes: Control of content and point of contacts:

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**Accreditation-** MSQC funded the development and CME offering of the Video Review Program. There is no fee.

The University of Michigan Medical School is accredited by the Accreditation Council for Continuing Medical Education (ACCME) to provide continuing medical education for physicians. The University of Michigan Medical School designates this enduring material for a maximum of 5.0 *AMA PRA Category 1 Credit(s)*<sup>TM</sup>. Physicians should claim only the credit commensurate with the extent of their participation in the activity.

This CME activity was prepared for release in May 2018. CME credit may be awarded for a maximum of three years from its release date, specifically from May 2018 through May 2021.

### Video-Based Surgical Coaching - An Emerging Approach to Performance Improvement

Greenberg CC, Dombrowski J, Dimick JB, JAMA Surg. 2016;151(3):282–283. doi:<u>10.1001/jamasurg.2015.4442</u>

### Surgical Skill and Complication Rates after Bariatric Surgery

Birkmeyer JD, Finks JF, O'Reilly A, Oerline M, Carlin AM, Nunn AR, Dimick JB, Banerjee M, and Birkmeyer NJ, for the Michigan Bariatric Surgery Collaborative. N Engl J Med 2013; 369:1434-1442 October 10, 2013, DOI: <u>10.1056/NEJMsa1300625</u>

# A randomized controlled study to evaluate the role of video-based coaching in training laparoscopic skills

Singh P, Aggarwal R, Tahir M, Pucher PH, Darzi A. Ann Surg. 2015 May;261(5):862-9. doi: <u>10.1097/SLA.00000000000857</u>

### Coaching Surgeons: Is Culture Limiting Our Ability to Improve?

Mutabdzic D, Mylopoulos M, Murnaghan ML, Patel P, Zilbert N, Seemann N, Regehr G, Moulton CA. Ann Surg. 2015 Aug;262(2):213-6. doi: <u>10.1097/SLA.00000000001247</u>