ADVANCES IN ENDOSCOPY

Current Developments in Diagnostic and Therapeutic Endoscopy

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OMED Guidelines for Credentialing and Quality Assurance in Endoscopy

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G&H How do the World Organization for Digestive Endoscopy guidelines on endoscopic credentialing and quality assurance differ from the guidelines published by other professional societies?

DF Prior guidelines have been country or region specific. For example, there are guidelines for the United States, Canada, Europe, Australia, and so on. With the World Organization for Digestive Endoscopy (OMED) guidelines, we have attempted to create a consensus document relevant to a worldwide audience, including countries without guidelines.

Additionally, prior guidelines have been more narrowly focused, dealing with privileging, credentialing, or quality improvement. In these guidelines, we have developed concise recommendations that cover these topics and have included a set of quality indicators useful for worldwide application. We have also further expanded the focus of quality improvement beyond the single endoscopist to discuss quality improvement in the endoscopy unit and also quality benchmarking.

G&H What are the main core competencies that trainee endoscopists must master?

DF In general terms, the core competencies are: performance of a complete endoscopic examination; correct interpretation of endoscopic findings; successful application of endoscopic interventions (biopsy, therapy); using the findings of endoscopy to create an appropriate management plan; communication of the endoscopic findings, diagnoses, and management plan; and performing all of these skills while minimizing the risks to the patient. To illustrate these principles, colonoscopy can be used as an example. For colonoscopy, a complete examination would include full insertion to the cecum and a careful examination of the mucosal surface. Successful application of interventions would include polypectomy, biopsy, or treatment of bleeding lesions, for example. The endoscopist would then take the findings to create a management plan, such as the appropriate interval to the next examination or the institution of immunosuppressants in inflammatory bowel disease. The endoscopist would need to create a full and detailed endoscopy report to communicate the diagnoses and plan. Although the procedure would need to be performed in a skillful manner to minimize the risks, the endoscopist would also need the expertise to recognize and manage any complications that do occur.

G&H Could you explain the basis for endoscopic competency in OMED's view?

DF Competency is the minimal level of skill, knowledge, and/or expertise derived through training and experience that is required to safely and proficiently perform a task or procedure, without assistance or supervision. As applied to endoscopy, this means that the endoscopist has completed the training to develop the requisite skills and acquire the knowledge base needed to safely perform and interpret endoscopic procedures, and to correctly manage their findings.

G&H What are the goals of quality assurance and quality improvement?

DF Quality assurance is the process of assessing specific quality metrics to determine areas of underperformance. For example, in colonoscopy, one might measure endoscopists' adenoma detection rates as a means of ensuring that high-quality screening procedures were being performed. Quality improvement takes this one step further by identifying areas of underperformance and then insti-

tuting an improvement plan. In our example, if one of our endoscopists had a low adenoma detection rate, we might implement a plan to use a timer to slow their withdrawal time, as this method has been shown to improve adenoma detection.

G&H What are sentinel events, and why are they important to track?

DF The term sentinel events is used to describe significant deviations from optimal patient care. These deviations include departures from hospital policy or accepted standards of care, as well as major procedural adverse events (complications). They can be adverse outcomes of sedation or of the procedure itself, such as cardiopulmonary compromise, bleeding, perforation, or infections, or procedure-specific events such as post–endoscopic retrograde cholangiopancreatography (ERCP) pancreatitis. Examples of departures from hospital policy include inappropriate use of prophylactic antibiotics, inappropriate procedures, lack of written informed consent, inadequate or delayed endoscopy reports, or performance of sedated procedures in unsafe locations within the institution.

G&H Could you discuss examples of quality indicators in esophagogastroduodenoscopy, colonoscopy, and ERCP?

DF After reviewing the relevant literature, we chose indicators that had general applicability, ease of measurement, and strength of supporting evidence. There are several indicators that are generic and apply to all procedures. These indicators include appropriate indication, informed consent, and preprocedure risk stratification.

For esophagogastroduodenoscopy, we recommended biopsy of gastric ulcers (to exclude malignancy), treatment of ulcers with high-risk stigmata (active bleeding, visible vessel), testing of ulcer patients for *Helicobacter pylori* infection, and use of variceal band ligation for treatment of esophageal varices.

For colonoscopy, we recommended use of appropriate surveillance intervals, cecal intubation rate, adenoma detection rate in patients undergoing screening colonoscopy, colonoscope withdrawal time, and recording of the quality of bowel preparation.

For ERCP, we recommended cannulation of the desired duct, post-ERCP pancreatitis rate, biliary stone extraction, and biliary stent insertion (in patients with distal obstruction).

G&H How is benchmarking defined?

DF Benchmarking entails measuring endoscopist- or unit-specific indicators in a reproducible manner and then comparing these results with the results of other endoscopists or units in the database. The purpose is to determine levels of performance and evaluate one's own performance against others. This allows for the detection of areas of underperformance and rational planning for progress as part of the continuous quality improvement process. Benchmarking also allows local, regional, and national healthcare systems to allocate resources appropriately to achieve quality improvement. International benchmarking would allow individual countries to assess the quality of the endoscopic services they provide.

G&H Does OMED believe that certain minimum volumes of procedures performed annually are necessary for maintenance of credentials?

DF It is clear that competency, once attained, must be maintained. OMED endorses granting privileges for defined periods of time, which then must be renewed. Maintaining competency requires an adequate case volume, but also ongoing continuing medical education and, ideally, participation in quality improvement projects. It is unclear what the minimum procedure volume should be, and we have left this issue to individual healthcare institutions to define.

Suggested Reading

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