Measuring Colonoscopy Quality in Pediatrics – A Quality Improvement Initiative

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Background

The pediatric GI physician is expected to perform and to document the key elements of a colonoscopy. However, there are no guidelines on what constitutes a colonoscopy of quality in pediatrics. Tertiary documentation requirements have been modified with the adoption of an electronic medical record (EMR) for the outpatient endoscopy unit but appropriate use of the EMR has been haphazardly adopted. Workflow issues and time constraints have been identified as a problem in negatively impacting adequate documentation. Efforts have been made to include new “short cut” functions to assist in documenting the key elements of a colonoscopy. Further, the quality criteria developed for adults are not necessarily applicable to pediatrics. Future GI efforts depend on the standardization of the documentation and the establishment of expectations around colonoscopy.

OVERALL GOALS

1. Develop Quality Measures for Pediatric Colonoscopy
2. Perform a Quality Improvement Project
3. Develop Standard Expectations for Colonoscopy Practice and Documentation in Pediatrics

SPECIFIC AIMS

1. Choose quality indicators for colonoscopy in pediatrics by assessing adult criteria and adapting or modifying them
2. Determine baseline of the quality indicators
3. Prepare Quality report card - present to individual providers as monthly feedback
4. Train providers in functionality of the EMR
5. Measure effect of Quality report and training on individual performance with the recommended quality measures

QUALITY INDICATORS ADULT COLONOSCOPY

- Depth of Insertion
- Preprocedure Risk Assessment
- Bowel Prep
- Total Compliance Rate
- Intra and immediate post-procedural complications
- Review of path results
- Recommendation for F/U colonoscopy documented
- For rectal bleeding, documentation of lesion detected
- Recommended surveillance colonoscopy based on lesion with worrisome pathology

Rational for Choice of Quality Indicators in Pediatrics

<table>
<thead>
<tr>
<th>Adult GI Measure</th>
<th>Applicable to Pediatrics</th>
<th>Rationale</th>
</tr>
</thead>
<tbody>
<tr>
<td>Preprocedure risk assessment</td>
<td>YES</td>
<td>Management plan for patients on oral anticoagulants uncommon in pediatrics</td>
</tr>
<tr>
<td>Anticoagulants used</td>
<td>NO</td>
<td>Anticoagulants uncommon in pediatrics</td>
</tr>
<tr>
<td>Quality of prep documented</td>
<td>NO</td>
<td>Quality of bowel prep documented</td>
</tr>
<tr>
<td>Detected of adenomas in asymptomatic individuals</td>
<td>NO</td>
<td>Adenomas uncommon in pediatrics</td>
</tr>
<tr>
<td>When rectal bleeding present, rectal and type documented</td>
<td>NO</td>
<td>Uncommon in pediatrics</td>
</tr>
<tr>
<td>Withdrawal time/second in surveillance colonoscopies</td>
<td>NO</td>
<td>Uncommon in pediatrics</td>
</tr>
<tr>
<td>Details of polyps and polyp removal</td>
<td>NO</td>
<td>Relative uncomum in pediatrics</td>
</tr>
<tr>
<td>Adenoma detection rate in first time screening documented</td>
<td>NO</td>
<td>Adenoma uncommon in children</td>
</tr>
<tr>
<td>Depth of insertion to cecum is documented</td>
<td>NO</td>
<td>Modified with the adoption of EMR in assisting in good documentation</td>
</tr>
</tbody>
</table>

Quality Measure for Colonoscopy in Pediatrics

Composite measure for the 3 components
- Colorectal cancer screening statements
- Adenoma detection rate for patient population 23 years of age
- Exclusion: “all absent”, “difficult”, and/or “technically difficult” procedures

METHOD

1. Query in Provation to extract the quality measures
2. Monthly measurement
   a. Report listing performance for each individual MD given to physician
   b. Group report listing each individual’s performance, but blinded by MD reported to physicians
3. Create “shortcuts” in EMR and training and educate staff as to functionality of the EMR in assisting in good documentation
4. 1 on 1 meetings with individuals when performance lagged

RESULTS

MEASURES COMPARISONS OF THE THREE COMPONENTS TO A “GOOD” COLONOSCOPY

Conclusions

1. A quality improvement program was successful in improving documentation of important colonoscopy polypectomy (This GI project has been approved for MOC IV credit)
2. Median ileal intubation rate of 90% (mean = 90.5%) for pediatric endoscopists - this rate needs to be validated and should be considered as a benchmark for expectations of a pediatric colonoscopist.

References

Weblinks