The Effect of NAPRC Accreditation Process on Compliance with Rectal Cancer Care Standards

Garrett W Peters, Gregory Thomas MD, Forrest Bohler, Shelli Bergeron RN, MBA, Harry J Wasvary MD
Department of Colon and Rectal Surgery, Corewell Health William Beaumont University Hospital, Royal Oak, MI, USA.

Background
• The National Accreditation Program for Rectal Cancer (NAPRC) was developed to decrease variability and increase a multidisciplinary approach among rectal cancer care.
• There is considerable variability among institutions in compliance with the “Patient Care: Expectations and Protocols” standards, and it is unclear how compliance changes once an institution undergoes the accreditation process.
• Corewell Health William Beaumont University Hospital (formerly Beaumont Hospital, Royal Oak) is a large-volume institution that adopted the NAPRC process into clinical practice starting in August 2019.
• In this study, we evaluate institutional compliance before and after NAPRC accreditation adoption was undertaken.

Methods
• Retrospective chart review for the standards (Table 1) was conducted on all rectal cancer patients receiving care at our institution from August 2016-August 2019 (pre-NAPRC group).
• Findings were then compared to the prospective data of rectal cancer patients collected from August 2019-2023 (post-NAPRC group).

Results

Table 1. NAPRC patient care standards and their inclusion or reason for exclusion from the study

<table>
<thead>
<tr>
<th>Accreditation Standard</th>
<th>In Study</th>
<th>Reason for not including (if applicable)</th>
</tr>
</thead>
<tbody>
<tr>
<td>5.1 Review of Diagnostic Pathology</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>5.2 Staging before Definitive Treatment (Local and systemic)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
| 5.3 Standardized Staging Reporting for MRI Results | | MRI percentage reported in 5.2
| 5.4 Carcinoembryonic Antigen Level | X | |
| 5.5 Rectal Cancer Multidisciplinary Team Treatment Planning Discussion | | Documentation not available prior to 2019
| 5.6 Treatment Evaluation and Recommendation Summary | | Documentation not available prior to 2019
| 5.7 Treatment Timing | X | |
| 5.8 Surgical Resection and Standardized Operative Reporting | X | |
| 5.9 Pathology Reports after Surgical Resection | | |
| 5.10 Photographs of Surgical Specimens | X | |
| 5.11 Multidisciplinary Team Post-Surgical Treatment Outcome Discussion | | Documentation not available prior to 2019
| 5.12 Post-Surgical Treatment Outcome Discussion Summary | | Documentation not available prior to 2019
| 5.13 Adjuvant Therapy after Surgical Resection | Beginning 01/01/2023, Standard 5.13 is retired.

Table 2. Compliance with five NAPRC standards increased significantly between the pre-NAPRC and post-NAPRC patients.

- Of the 320 rectal cancer patients included, 138 were pre-NAPRC and 182 were post-NAPRC. Of the eight compliance measures analyzed, three were fully met in the pre-NAPRC group, while seven were fully met in the post-NAPRC group (Figure 1).
- Compared to pre-NAPRC, the post-NAPRC patients had a significant increase in compliance in obtaining a CT/PET CT (NAPRC Standard 5.2), MRI (5.2), and CEA (5.4) before definitive treatment. Additionally, there was a significant increase in pathology reports completed within 2 weeks (5.9) and surgical specimen photographs (5.10) (Table 2).
- There was no significant difference in compliance with diagnosis confirmed by biopsy (5.1), definitive treatment start date (5.7), and operative reporting (5.8) (Table 2).

Conclusion
• Adoption of the NAPRC accreditation process into clinical practice at a single institution significantly improved compliance with multiple patient care standards.
• Staging of rectal cancer both systemically with CT/PET and locally with EUS/MRI, both standards of care, increased after NAPRC adoption.
• In four years of institutional changes, our institution transitioned from not meeting NAPRC accreditation in multiple patient care areas to fully meeting all with the exception of one.

Contact
• Garrett Peters, BS – gpeters@oakland.edu
• Harry Wasvary, MD - harry.wasvary@corewellhealth.org

Figure 1. Our institution after Aug. 2019 reached required accreditation level compliance in seven of eight compliance standards, an increase from three standards before Aug. 2019.