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

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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).

Accreditation Standard	In Study	Reason for not including (if applicable)
5.1 Review of Diagnostic Pathology	X	
5.2 Staging before Definitive Treatment (local and systemic)	X	
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 Definitive Treatment Timing	X	
5.8 Surgical Resection and Standardized Operative Reporting	X	
5.9 Pathology Reports after Surgical Resection	X	
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 1. NAPRC patient care standards and their inclusion or reason for exclusion from the study

Results

	Pre-NAPRC Patients (2016- Aug 2019)			Post-NAPRC Patients (Aug 2019- 2023)			P-Value
	Number of patients compliant with standard	Number of patients not compliant with standard	Compliance Percentage	Number of patients compliant with standard	Number of patients not compliant with standard	Compliance Percentage	
Diagnosis confirmed by biopsy (5.1)	136	2	98.6%	180	2	98.9%	0.780
CT or PET/CT prior to treatment (5.2)	128	10	92.8%	181	0	100.0%	**<0.001**
MRI or EUS prior to treatment (5.2)	113	24	82.5%	166	15	91.7%	**0.013**
CEA level obtained prior to treatment (5.4)	103	35	74.6%	178	3	98.3%	**<0.001**
First definitive treatment within 60 days of initial evaluation (5.7)	106	26	80.3%	123	21	85.4%	0.259
Operative reports of surgical resections (5.8)	104	0	100.0%	75	1	98.7%	0.265
Pathology reports completed within two weeks of surgical resection (5.9)	95	9	91.3%	83	1	98.8%	**0.023**
Photographs of surgical specimens (5.10)	5	99	4.8%	74	5	93.7%	**<0.001**

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).

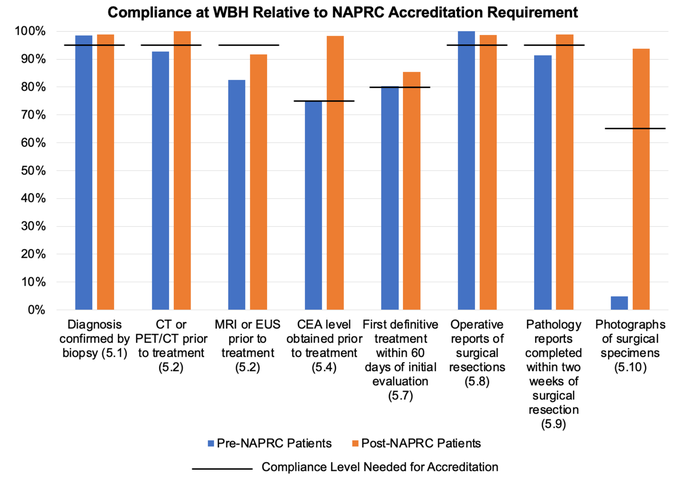

Figure 1. Our institution after Aug. 2019 reached required accreditation level compliance in seven of eight compliance standards, an increase from three standards before Aug. 2019.

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.

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