TEXAS MEDICAL ASSOCIATION

Physicians Caring for Texans

TexMed 2017 Quality Research Abstract

Please complete all of the following sections and include supporting charts and graphs in this document. Submit a total of two documents - this document and the Biographical Data and Disclosure Form to posters@texmed.org by midnight March 17, 2017.

Description and Selection Criteria

- Applicants should demonstrate an understanding of systematic investigation through research development, testing and evaluation designed to develop or contribute to generalizable knowledge. Judges will use the scoring described in this matrix to identify projects to be presented at the conference, as well as, projects to be considered for the awards.
- The focus for Quality Research abstracts is any project that is conducted with an intent to answer a research question or test a hypothesis related to quality improvement (QI). It is also intended to develop or contribute to generalizable knowledge. Projects in Quality Research need to have approval from an Institutional Review Board or have a formal letter of exemption. Traditional QI activities, on the other hand, cover the gamut of projects that are:
  - aimed at improving local systems of care, or improving the performance of institutional practice;
  - designed to bring about immediate improvements in health care delivery; or
  - intended to compare a program/process/system to an established set of standards such as standard of care, recommended practice guidelines, or other benchmarks.

  If you have a question about whether your project is Quality Research or a QI project, please contact us.
- These submissions should provide general information related to the one of the following categories: patient safety, patient centered care, equity, timeliness, efficiency, or effectiveness.
- Maximum points delineated with a brief explanation of the content that should be included under each section. Applicants may describe the problem and results in narrative or graphic format.

PROJECT NAME: Improving Outcomes with TACOS (Technical Analysis and Clinical Outcomes System)

Institution or Practice Name: Texas Colon and Rectal Specialists

Setting of Care: Specialty Surgical Care Clinic

Primary Author: Danielle Marie Giesler, MD

Secondary Author: J. Marcus Downs, MD

Other Members of Project Team: Jefferson Hurley, MD

Is the Primary Author, Secondary Author or Member of Project Team a TMA member (required)?

☒ Yes ☐ No

Please provide name(s):

Project Category: *(Choose all categories)*

☐ Patient Safety ☒ Patient Centered Care ☐ Timeliness ☐ Enhanced Perioperative Recovery

☐ Efficiency ☐ Effectiveness ☐ Equity ☐ Disaster Medicine & Emergency Preparedness

For this poster session, TMA is looking for research projects that demonstrate the six aspects of Quality Care as defined by the Institute of Medicine.

- Safe - avoids injuries to patients from care that is intended to help them
- Timely - reduces waits and delays for both those who receive care and those who give care
- Effective - based on scientific knowledge, extended to all likely to benefit, while avoiding underuse and overuse
- Equitable - provides consistent quality, without regard to personal characteristics such as gender, ethnicity, geographic location, and socioeconomic status
- Efficient - avoids waste, including waste of equipment, supplies, ideas, and energy
- Patient centered - respects and responds to individual patient preferences, needs, and values, ensuring that patient values guide all clinical decisions

Introduction (15 points max): *Describe 1) where the work was completed; 2) what faculty/staff/patient groups were involved, and 3) sufficient background information provided to establish the significance of the problem.*

Dramatic advances have been made in the detection, prevention, and treatment of rectal cancer (ICD9 154.1/ICD10 C20) over the last several decades. Contributing factors include early detection, neoadjuvant and adjuvant therapies such as chemotherapy and radiation, and advanced surgical techniques, including Total Mesorectal Excision (TME)[1-8]. These advancements have resulted in a nearly 40% decrease in the overall death rate since the 1970s[9].

The purpose of this study is to collect and retrospectively review our data on patients with rectal cancer, and determine how we compare to national averages. A retrospective clinical database was created to make data evaluation more complete and insightful.

Hypothesis (15 points max): *State the pertinent research or change hypothesis. Using if/then format, describe the 1) assumption; 2) condition; and 3) prediction(s).*

Retrospective review of all patients undergoing surgery by Texas Colon and Rectal Specialists in 2010 would allow five year survival data and surgical outcomes to be concluded.

Methods (25 points max): *Describe the specific methods, resources, procedures, models and/or programs used to study and test the subject of the investigation. Note charts, graphs and tables here and send as addendum with abstract form.*

Data retrospectively collected from 1/1/2010 to 12/31/10 gathered by a single specialty group of colorectal surgeons. Collected data included: surgical approach; intraoperative times; laboratory values; input fluids/blood loss volume; procedure/diagnostic codes; pathology data (tumor scoring/staging); lengths of stay; discharge disposition; patient reported quality of life outcomes and mortality rates. Eighty three (83) patients were identified with the diagnosis of rectal cancer who underwent surgical resection with or without neoadjuvant or adjuvant therapies.

Results (25 points max): *Specifically explain what was discovered, accomplished, collected and/or produced; supports hypothesis and conclusions with adequate evidence and includes quantitative data. Note charts, graphs and tables here and send as addendum with abstract form.*

These data sets were incomplete and inconclusive. Much of the data was missing due to the significant time elapsed between encounter date and data retrieval date. The pathology reports lack of standardization resulted in substantial indeterminate data.

- Mean length of stay for robotic, laparoscopic, and open techniques averaged 3.8, 6.9, and 8.7 days, respectively.
- Overall complication rate was 2.6%.

- Mean five-year survival was 75.9% compared to the national average of 65%8.

Conclusions (20 points max): *Provide a succinct interpretation of the results and evaluate what the results mean to the investigation, OR evaluate the relevance or uniqueness of what was accomplished in the immediate context of the project's purpose and describe how the investigation fits within a larger field.*

A significant portion of the medical records were incomplete with inadequate TME grading and/or lack of follow-up on 25 out of 83 patients. These data sets show that our outcomes are good, yet often incomplete. Focus is to improve this process by shortening the length of time between encounter date and data retrieval date resulting in more timely and complete data. Goals are to provide standardized treatment plans, higher quality patient care, and more complete follow-up.

We have successfully created a retrospective database that enables a more simplified, organized and detailed data entry process which will be the key to quality data collection and interpretation. Working collaboratively with pathologists, radiologists, oncologists and health statisticians, will strengthen and improve insight resulting in higher quality rectal cancer care for our patients.

Works Cited:

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