

# Assessing Tumor Board Design and Quality Across the BID Cancer Network

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BIDMC Cancer Center, BID-Needham Cancer Center, Anna Jacques Hospital, Brockton Hospital

## Introduction

The treatment of cancer is an increasingly complex endeavor that involves multiple different treatment modalities and specialists. As such, multidisciplinary collaboration is an instrumental facet of high-quality oncological care. This collaboration most often occurs via tumor boards—formalized meetings between cancer health professionals that allow for a collective review of a patient’s diagnostic data and the formation of an individualized treatment recommendation. Literature reviews have shown that tumor boards impact diagnostic findings, treatment decision-making, and clinical outcomes, including improvements in mortality and patient satisfaction. To better understand our tumor board structure at BIDMC and Cancer Center affiliates, we set out to survey providers across the network on the quality and design of these meetings.

## Goal

To ensure a high standard of multidisciplinary cancer care, we assessed the design and performance of tumor boards at BIDMC, BID-Needham, Anna Jacques Hospital, and Brockton Hospital, with the goal of identifying areas of weakness that can be intervened upon to improve tumor board function and outcomes.

## The Team

- Robert N. Stuver, MD, Internal Medicine Residency Program
- Daniel Roberts, MD, Hematology-Oncology Fellowship Program
- Jessica A. Zerillo, MD, Instructor of Medicine, Medical Oncology

## Methods

- We reviewed the literature to identify a practical tumor board assessment tool that had been validated in clinical practice.
- We identified the multidisciplinary team meeting observational tool (MDT-MOT), an independent observational assessment of 10 domains of tumor board function. The MDT-MOT was formulated based on the results of a national survey of over 2000 tumor board members in the UK and has been validated in 2 subsequent studies.
- We used the MDT-MOT, modified to our local practices, and surveyed 110 respondents on 13 tumor boards at BIDMC, BID-Needham, Anna Jacques Hospital and Brockton Hospital.

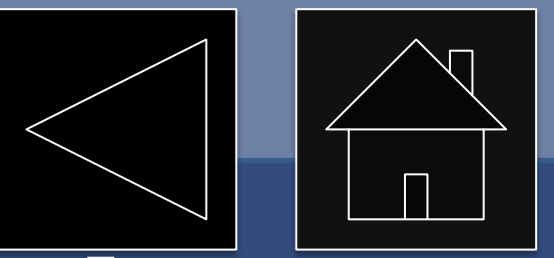
## The Assessment

<b>Attendance</b>	All treatment decisions are made with all relevant specialties present.	<b>Patient-Centered Care</b>	The patient’s views are considered when formulating treatment plans.
<b>Teamwork &amp; Culture</b>	All relevant specialties can provide input and all input is equally respected.	<b>Required Diagnostic Information</b>	There is a defined set of required information and it is available and presented.
<b>Technology &amp; Equipment</b>	Appropriate equipment is available to effectively view and share information.	<b>Treatment Options</b>	All appropriate treatments are considered and presented to the patient when relevant.
<b>Organization &amp; Administration</b>	Cases are discussed based on a prioritized agenda and discussions are concise and well-structured.	<b>Treatment Recommendations</b>	A clear recommendation is defined and documented in the patient’s medical record.
<b>Available Time</b>	There is sufficient time to discuss all cases in the agenda.	<b>Post-Meeting Coordination</b>	A physician is assigned to discuss recommendations to the patient and care team.

Figure 1. The BID Tumor Board Assessment: Respondents were asked to rate their specific tumor board on each category with scores of 1 (very poor), 2 (poor), 3 (average), 4 (good) or 5 (very good).

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## Composite Results

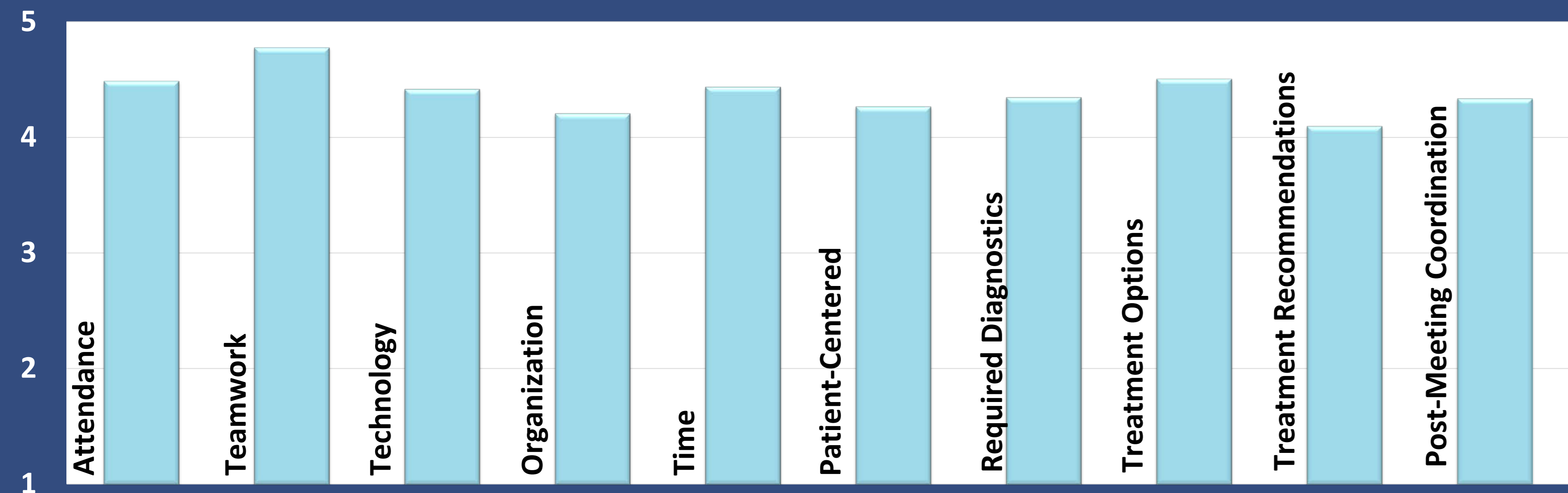
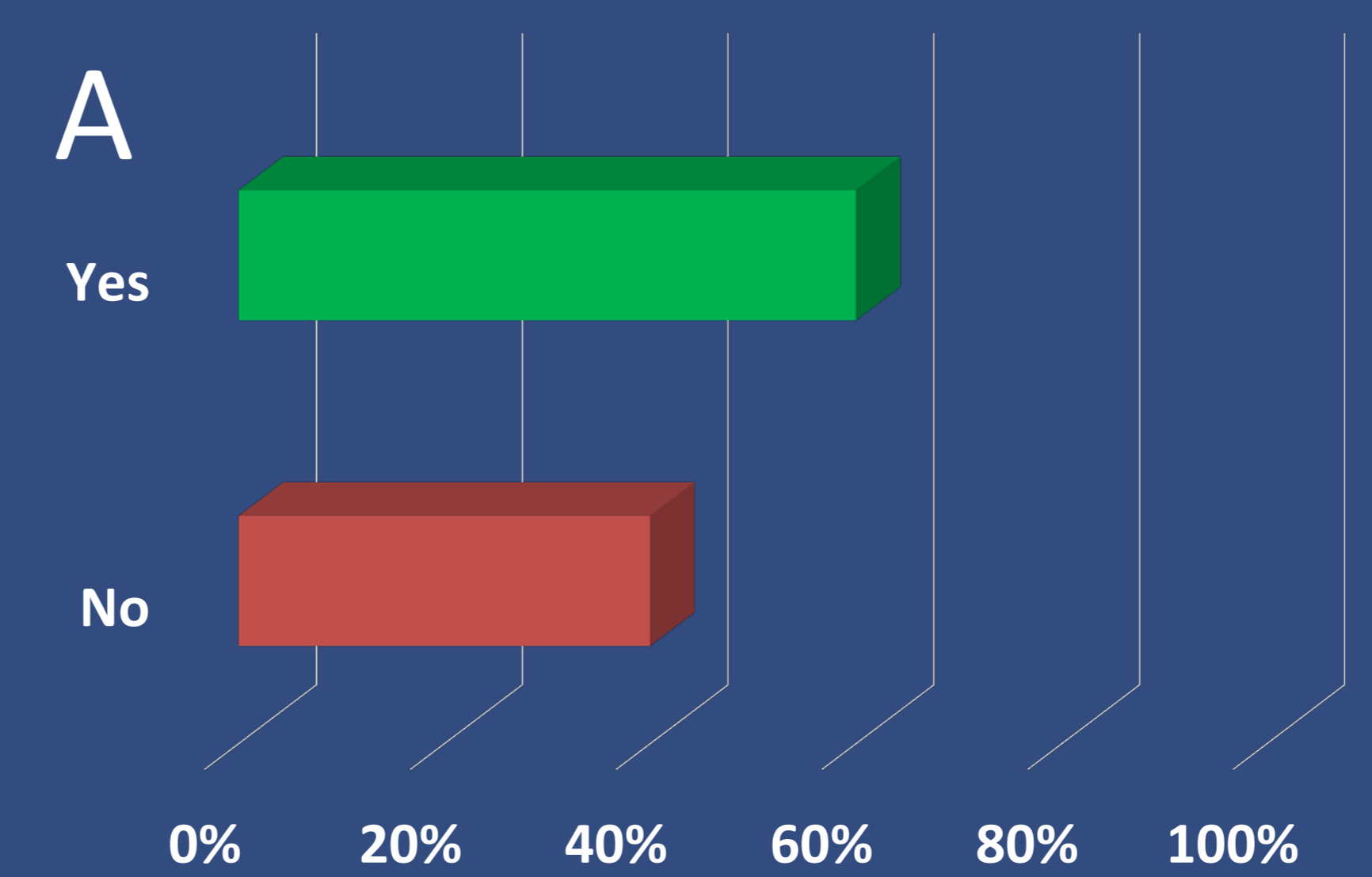


Figure 2. Assessment Results: Each bar represents the average score for each assessment domain of the BID Tumor Board Assessment amongst the 110 survey respondents.

## Documentation



## CME Credit

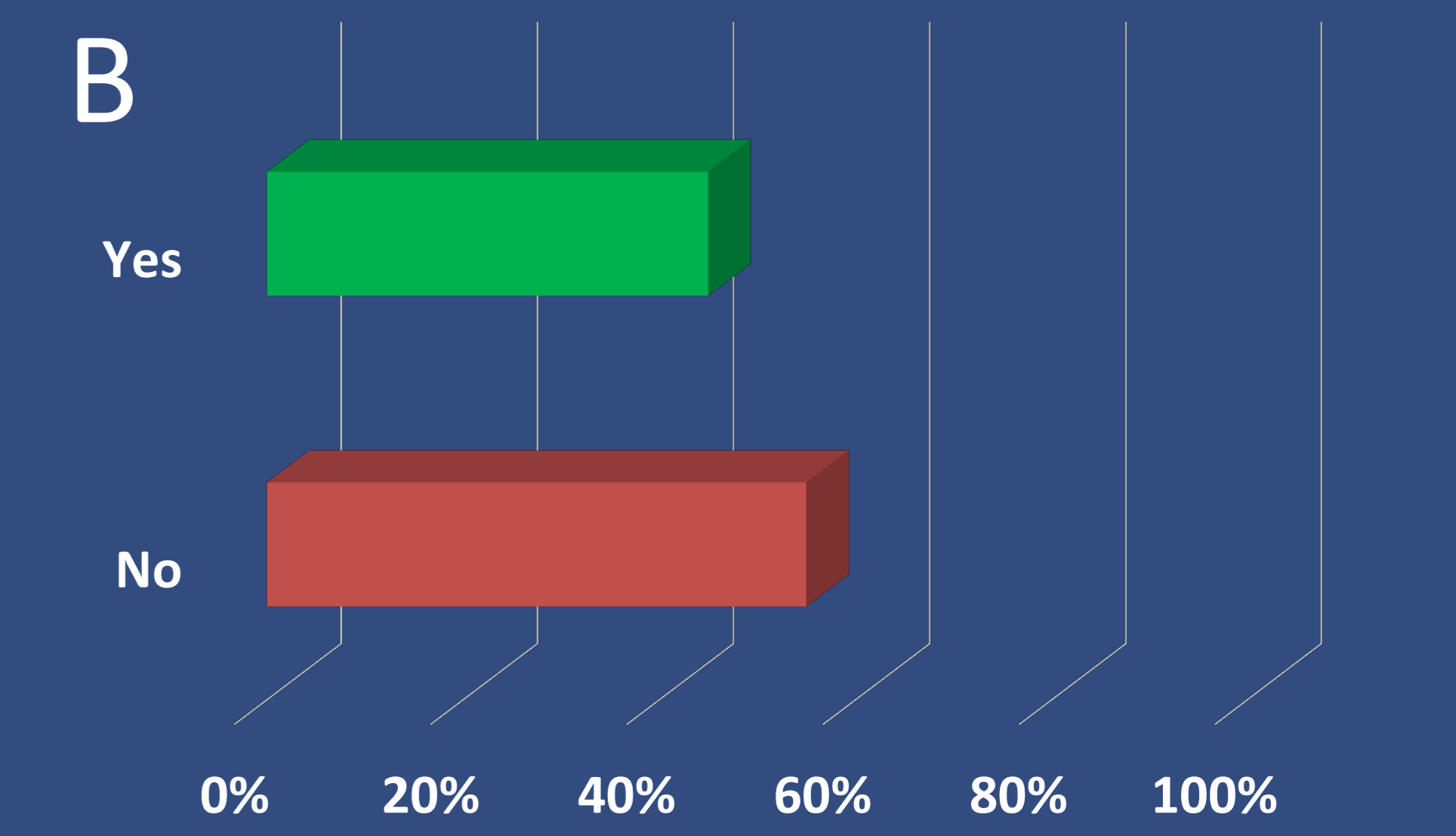


Figure 4. Documentation & Credit: In our survey on tumor board design characteristics, we found that 40% of tumor boards do not document treatment recommendations and 55% do not offer CME credit.

## Treatment Recommendations: An Opportunity for Improvement

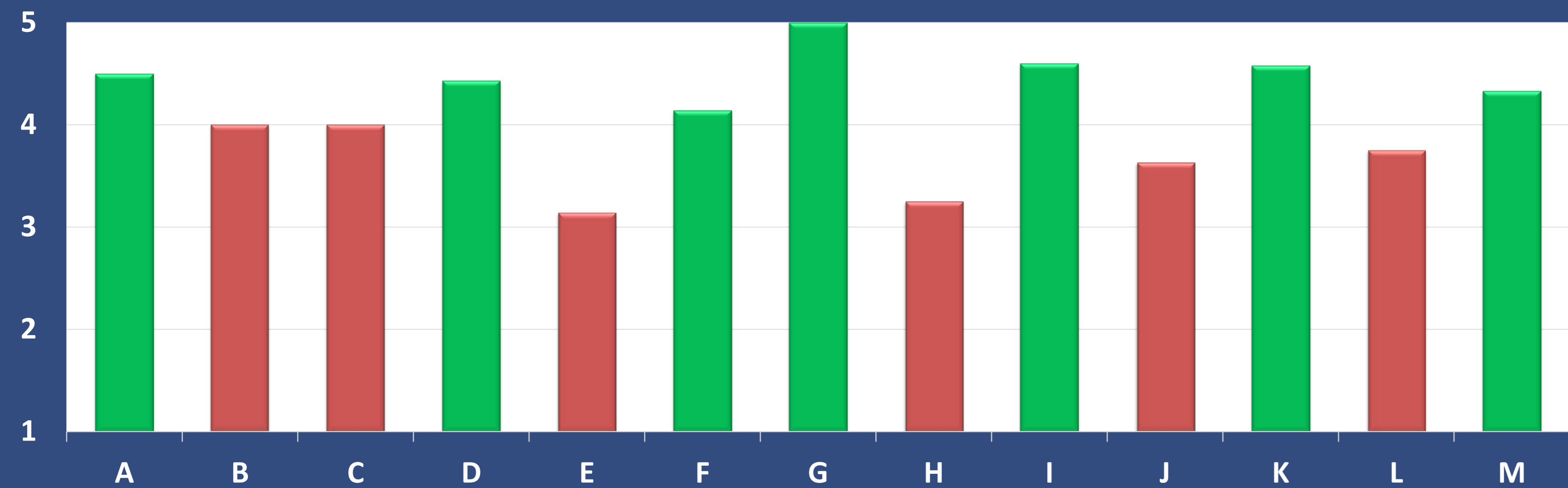


Figure 3. Tumor Board Treatment Recommendations: The worst-performing domain was “Treatment Recommendations.” Each bar represents an anonymized tumor board’s average response for this domain. Any score  $\leq 4$  ( $\leq$  good) is highlighted in red. Six out of 13 (46%) of tumor boards scored  $\leq 4$ .

## Key Lessons Learned

- Our modified version of the MDT-MOT was practical to administer in the academic and community setting and provides for a valid assessment of tumor board function.
- We identified a globally low score for the treatment recommendations domain. We hypothesize that low scores reflect disparities in documentation requirements and practices.
- We identified other areas of weakness—such as the offering of CME credit and the availability of remote virtual attendance—that will provide further opportunities for improvement.

## Next Steps

- We will provide each tumor board with their scores in comparison to other blinded tumor boards performance to allow for internal review of each groups strengths and weaknesses.
- We will explore options to improve documentation processes, achieve CME credit, and offer virtual remote attendance in order to continue to provide safe and high-quality cancer care.

**For more information, contact:**

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