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Category: Quality improvement (Systematic and continuous actions leading to measurable improvement in health care service and/or health status)

Title: The Heart Team: Implementation of a Patient-Centered Multidisciplinary Team for High Risk Cardiovascular Patients

ABSTRACT BODY

Background:

Sanger Heart & Vascular Institute performs ~ 450 coronary & valve surgeries yearly, with ~ 25% considered “high risk”. In 2016, coronary artery bypass (CAB) surgery 30-day risk-adjusted mortality was 3.3%, exceeding the Society of Thoracic Surgery (STS) average of 2.3%. In reviewing the mortalities, patient selection opportunities existed.

Decision making by a single surgeon can be siloed resulting in variability in care across a team and contributing to poor surgical outcomes. The Heart Team (HT) consists of multiple cardiac surgeons, interventional cardiologists, heart failure experts, and critical care physicians, leveraging the expertise of multiple clinical specialties to provide a patient-centered, collaborative evaluation approach.

Methods:

A HT was initiated in April 2017 to improve outcomes. Patients considered high-risk for cardiac surgery (STS mortality risk > 3.5% and/or morbidity risk >20%) automatically generated a HT request. Clinical data, imaging and STS risk scores were reviewed during HT to identify optimal therapeutic intervention, with the consensus HT decision presented to the patient and relevant providers.

Results:

The HT reviewed 187 patients, with 117 (62%) meeting STS mortality and/or morbidity risk criteria. HT recommended 74 (40%) patients for surgery, 75 (40%) for medical therapy including hospice and 33 (18%) for PCI, 4 expired during evaluation, and 1 left AMA. Of the 74 patients HT recommended for surgery, 73 had surgery with 4 mortalities. Of the 33 patients HT recommended for PCI, all underwent PCI with 3 mortalities.

Conclusions:

The HT uses shared decision-making to guide therapy and results in an objective decision process. Our HT appears to be successful in improving mortality by reducing variability and bias in care decisions. Despite implementation challenges, the HT has become an integral part of our care delivery and has improved surgical outcomes.

Clinical Implications: My study will help enable cardiovascular clinicians to implement a Heart Team as an integral part of their care delivery, leveraging the vast clinical knowledge, they will improve quality while offering high-risk patients the most appropriate treatment