Problem Definition

Setting: TJUH
Healthcare Service: Echo Lab

Problem: At present, there is no streamlined protocol in place for attending echo readers to contact and report abnormal echo findings to primary patient care teams. The biggest barrier to reporting is the inability to easily access/find the primary care team's/ordering provider's contact information within Epic readily while finalizing the echo read. Often the reading attending will need to access the last progress note, search through the banner, and/or inefficiently scroll through the echo order to attempt to identify the ordering provider contact. These inefficient steps lead to a decrease in efficiency while creating an inconsistent reporting system and sub-optimal care for our patients.

Aims For Improvement

Aim: To improve the rate of reporting abnormal echo findings verbally to primary patient care teams.

Goal: Increase the rate of attending reported abnormal echo findings to a patient's primary team by 75% in 6 months.

Strategy and Measurements

Methods:
- Patients in the last 2 years who have had first time TTE's done at TJUH while inpatient were extracted from Epic. Resulting in 854 patients.
- These patients were reviewed to identify those with clinically significant abnormal TTE’s. Of the patients with clinically significant abnormal TTE’s, those that were reported to primary teams were distinguished from those that were not through the conclusion section of the report.

Criteria for clinically significant abnormal TTE:
- Moderate/Severe SWMA
- Severe Pulmonary HTN
- RV dysfunction
- Moderate/Severe Valvular disease (stenosis, regurgitation)
- LV dysfunction (moderate or severe)
- Significant pericardial effusion
- Any vegetations

Results

- Reported: 39%
- Unreported: 61%

Next Steps

- Review this data with the head of Echo department and Echo QI Dr. Mehrotra and Dr. Owen.
- Meet with Epic Team to devise a way for the reporting interface to display the current inpatient encounter with patient care team contact information.
- Discuss with Epic Team the utility of a pop up that shows primary team contact information before reading provider exits the report.
- Create a mandatory step for TTE ordering provider to input a valid contact phone number in the TEE order itself.
- Formalize the criteria for clinically significant abnormal TTE findings and distribute readily in Echo lab.
- Repeat Methods after the above have been employed to gauge impact of the intervention.

Lessons Learned

- The rate of reporting abnormal TTE findings to primary teams is below expected.
- There is room for improvement within the Epic system to standardize the communication of abnormal TTE findings to primary teams.