**Problem/Goals:**

**Problem:**
- Inability to effectively share evaluation details and events with other providers resulted in costs and time delays in providing care.
- Lack of standard practices for clinic documentation, preservation of data and remote monitoring led to inefficiencies and loss of potential revenue.

**Goals:**
- Standardize documentation of evaluation of all implanted cardiac devices by clinic staff and Cardiology Fellows.
- Provide access to full data across medical center providers.
- Ensure that utilization of remote monitoring of implanted cardiac devices adheres to standard of care practices.

**Interventions:**
- Created Macro templates for 5 different types of cardiac implanted devices for clinic staff and MDs to utilize when evaluating patients’ devices for both inpatient and outpatient encounters.
- Coordinated with IT Department to facilitate a system for scanning/uploading saved PDF to OMR reports.
- Developed policies and procedures for daily monitoring of vendor websites and appropriate scheduling of transmissions.
- Initiated professional billing in addition to technical billing of all evaluations.
- Demonstrated technology and educated patients to increase acceptance and compliance with remote monitoring.
**Results:**

- Remote monitoring utilization and connectivity can be overwhelming for patients, especially elders. We need to continue to work with vendors to overcome issues and explore new modalities for education, such as video demonstrations using a tablet.

- Over 90% compliance rate with macro/template utilization for device evaluation documentation.

- Very favorable feedback from Attending Cardiologists and Fellows on timeliness of data accessibility, and communication, enabling them to provide prompt and effective care for patients.

- Implementing new process of professional billing took significant clinic staff time with education for MD as well as following through with auditing notes and having MD sign paper billing forms.

- By having more efficient practices, number of patients seen in clinic and remote transmissions the clinic has been able to more closely monitor arrhythmia status as well as keep track of missed appointments and increase revenue. See Fig. 1 and 2.

**Feedback/ Lessons Learned:**

- Remote monitoring for implanted cardiac devices is considered standard of care by The Heart Rhythm Society; attempt to get all patients remotely monitored with appropriate schedules.

- As we continue to increase the number of patients remotely monitored, we will need to consider the possibility of adding support staff to the clinic to monitor daily connectivity issues, scheduling and triaging patient contact.

- Move forward with implementation of E-ticket for both technical and professional billing of Device Clinic Evaluations.

- Develop database to better manage device clinic patients information including advisory information, patient transmissions, and clinic visits.

**Moving Forward Next Steps:**

- Remote monitoring for implanted cardiac devices is considered standard of care by The Heart Rhythm Society; attempt to get all patients remotely monitored with appropriate schedules.

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