

Workflow Improvement in Device Clinic, Changi General Hospital

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Background and Objective

- With the ever increasing in number of arrhythmia patients (new and follow-up cases) seen in device clinic, Changi General Hospital coupled with limited physical resources, there is a need to implement a strategy to improve efficiency of the clinic
- Accordingly, we sought to determine whether this particular intervention (described under methodology section) proved to be effective

Methodology

This is a prospective study divided into two phases

Pre-intervention Phase
01 July 2014 to 30 September 2014

Intervention Phase 01 October 2014 to 31 March 2015 Intervention method:

As the follow-up cases especially patients with cardiac implantation electronic devices (CIEDs) represent up to 75% of all total patients seen in device clinic, we implemented a strategy (intervention) in which all patients with CIEDs (implanted more than 1 year with stable parameters) were given appointments at 1 year instead of every 4 to 6 months prior to implementation of this

Results

Phase	Total Clinics, n	Total Cases, n	
Pre-intervention	19	285	
Intervention	41	490	

Table 1: Total Number of Clinics Conducted and Patients Seen in Preintervention and Intervention Phase

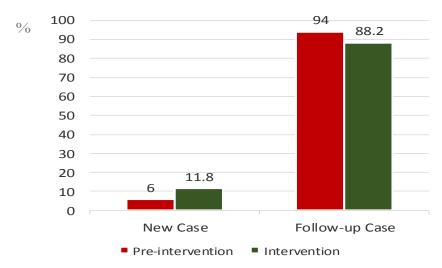


Figure 1: Comparing New Cases and Follow-up Cases Pre-intervention and Intervention Phase

Phase	Patients/clinic	New cases/clinic	Follow-up cases/clinic	p-value
Pre- intervention	15.0	0.9	14.1	0.008
Intervention	11.9	1.4	10.5	

Table 2: Comparing Pre-intervention and Intervention Patients Clinic Ratio

Limitations

• Paucity of data on device related major adverse cardiovascular events (e.g. cardiac arrhythmias) especially in intervention phase

Conclusions

This particular strategy seemed to lead to significant workflow improvement (reduction of total patients seen in each clinic with improvement in the ratio of new cases to follow-up cases) in device clinic, Changi General Hospital in the setting of ever increasing in number of arrhythmia patients coupled with limited physical resources



strategy

