Expanding Nurses Role- PACED: Patient-centred And Cardiac-nursing Engaged Device Service, A Five Years Evaluation

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Introduction
Cardiac Implantable Electronic Device (CIED) service has been challenged greatly for the rapidly and constantly growing population worldwide. Impact in Hong Kong (HK) is more severe as device patient is follow up by cardiologist indefinitely. Delivering device service with engagement of trained and experienced cardiac nurse is one of the pioneers among HK. PACED service has been established in UCH since 2011, collaborates with EDU and UACC; follow-up intermittently with cardiologists during patient most needed period: From pre to post-implantation until stabilized. With the expanding role of nurses, through individualized assessment and counselling; device settings previously underappreciated are now optimized based on unique patient lifestyle and physiological needs. “We aren’t retaining heart rhythm only, but also empowering patient’s life being PACED again”. This service has achieved Hospital Authority nurse clinic accreditation in 2014.

Objectives
To evaluate the service effectiveness and safety

Methodology
Data on three domains in 2014-2015 have been collected and analyzed

Result
1) Health service utilization: Over 500 individual nurse clinic attendances per year with <1% overall default rate. Alleviated cardiac clinic workload by 50% during acute and early phase, hence shortened new case waiting time in a consequence. 2) Clinical outcomes: complications are monitored and managed earlier, including 25% minor wound complications and 10% unstable parameters to 170-180 device patients each year. No adverse effect is noticed. Around 30% patient have over-avoidance in retaining social activity; most have showed improvement after nursing interventions like counselling and optimizing device functions, some even retained jobs afterwards.
Only 3-4% cases need cardiologist attention e.g. symptomatic arrhythmia for medical treatment or prophylactic stroke prevention. 3) Client’s outcomes: Patient and care-giver rated self-care competence at 4.75 and 4.81 and overall satisfaction at 4.94 and 4.82 subsequently (5-points scale). Knowledge score on living with device (10-point scale) also improved from 4.74 to 8.67 and sustained at 7.85 in a 2-6-months evaluation. The service has shown to be safe and effective. Care delivery model has and is changing in coping with the rapidly and constantly growing CIED demand.