



**Service Priorities and Programmes**  
**Electronic Presentations**

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**Submitting author:** Ms Miu Ching CHAN

**Post title:** Advanced Practice Nurse, Queen Elizabeth Hospital, KCC

**Safety and Effectiveness of Anticoagulation Nurse Clinic for Chinese patients with mechanical heart valves on health care utilization in a major territory hospital**

*Chan MC, Lee MKY, Ng SY, Wong BY, Lam CB, Chan SW, Lau V, Tsoi A, YW Cheng, CF Tsang, Kwok CK, Luk NH, WS Kwan, Cheng YH, SF Chui, Chan LK, Chan KC, Wong, CY, Ma HS, Fu CL, LY Tam, Chan CW, Chan KT, Ho KC, Chiang CS, Li P*

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**Introduction**

Introduction: Warfarin was shown to be effective for patients at risk from thromboembolic events especially patients with mechanical heart valve implanted. According to AHA guideline, INRs under suboptimal findings should be hospitalized for heparin infusion until target INR is reached. In the past, patients with INR < 1.5 would be hospitalized for 3-5 days for warfarin titration, this causes great burden on our health care system especially for the tight hospital bed situation in Queen Elizabeth Hospital. With the extension of nursing practice (Harris & Redshaw, 1998), nurse-led practice has developed in many areas in health care including anticoagulant service.

**Objectives**

To evaluate the safety and effectiveness of Anticoagulation Nurse Clinic for Chinese patients with mechanical heart valves on health care utilization in QEH

**Methodology**

From April 2009 to Jan 2013, 200 patients were referred from SOPC or in-patient service to Cardiac Ambulatory Centre. Warfarin dosage was titrated +/- bridging therapy according to protocol endorsed by KCC Anticoagulation Working Group. After stabilization, these patients will be referred back to SOPC for follow up.

**Result**

Results: 200 patients (80 male, 120 females) with mean age 62.98 +/- 11.62, mean INR 1.28 +/- 0.13 were referred. These patients would be managed as day-patient in our cardiac ambulatory centre with warfarin dosage adjusted and subcutaneous low molecular weight heparin given as bridging therapy. No patients were found to be admitted for thromboembolic or haemorrhagic complication related to warfarin after discharge 6 months from our clinic. None of the patients were reported to have mechanical valve abnormalities confirmed by echocardiogram. The mean score of patient satisfaction level is 9.11 (10 is the highest). Assuming 3 bed-days were required for warfarin titration in the past practice; avoidable admissions amounted to 600 hospital bed-days and \$1.8 million were saved. Conclusions: With the

development of tailor-made protocol for warfarin titration for Chinese patients and the expanding role of nursing practice, our Anticoagulation Nurse Clinic is shown to be safe and effective in handling these high-risk patients with mechanical heart valves on an ambulatory basis.