



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

**Convention ID:** 924

**Submitting author:** Ms Y C YAU

**Post title:** Ward Manager, DKCH, HKWC

**Effectively reducing readmission rates after Total Joint Arthroplasty -  
Experience from the Hong Kong Island Joint Replacement Centre**

*Yau YC(1), Dr. Fu HCH(2), Wong ILC(1), Lo ELC(1)*

*1: Nursing Division, The Duchess of Kent Children's Hospital at Sandy Bay*

*2: Department of Orthopaedics and Traumatology, The University of Hong Kong*

**Keywords:**

unplanned readmission rates

Total Joint Arthroplasty

**Introduction**

In July 2015, the Fifth Joint Replacement Centre under the Hospital Authority at The Duchess of Kent Children's Hospital at Sandy Bay (DKCH) came into service. Fast track arthroplasty principles were strictly adhered to with an average length of stay of 4.4 days. Despite the outstandingly short length of stay, 30 day unplanned readmission rates were an issue, ranging from 9% in 2015 and subsequently 12.1% in 2016. Amongst the readmissions, a large percentage was attributed to patients' misunderstanding on their wound condition and unaddressed concerns about postoperative changes. Upon reviewing the investigations and management undertaken after the readmissions, it was deemed that majority of these readmissions could have been prevented with appropriate expectation management.

**Objectives**

To reduce readmission rates after Total Joint Arthroplasty

**Methodology**

From 21/3/2017 to 16/6/2017, the DKCH implemented the joint replacement clinical pathway, which was the product of multidisciplinary collaboration between surgeons, anaesthetists, nurses, physiotherapists, occupational therapists and medical social workers. Using protocol driven management schemes designed by specialized arthroplasty team, patient care became well structured and standardized. The clinical pathway facilitated close collaboration amongst team members, who could provide individualized care which based on their needs.

To address the problem of unplanned readmissions, several specific measures were implemented. Preoperative and postoperative education concerning realistic expectations after joint arthroplasty were reviewed and reemphasized. A tailor made discharge leaflet to educate patient about wound care, exercise and medication was designed. Nurses would explain in detail of what to expect after surgery, patients were encouraged to call back in case of problems, so our nursing specialist could address their concerns. Patients who are at risk for wound problems despite having a normal wound condition upon discharge would be scheduled to return for an early ward followup assessment.

To supplement the gaps between discharge to followup, since April 2017 our nursing staff have implemented the post discharge telephone followup program, where our specialized nurses would actively call the patients 3 days after discharge to check on their condition, give them rehabilitation advice and support.

### **Result**

From the new clinical pathway, effective documentation and direct communication amongst the professional team was established. With a protocol driven approach, patients deviating from the protocol were easily identified and individualized care could be swiftly implemented. Together with enhanced patient education, discharge leaflet and telephone follow up service, we have drastically decreased the 30 day readmission rates to 0.42% in 2017.

Conclusions:

Fast track joint replacement arthroplasty can be provided in a safe and efficient manner with low readmission rates without compromising the length of stay.