



## Service Priorities and Programmes Electronic Presentations

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### **An Audit on Adherence to Proton Pump Inhibitor Use for Patients on Aspirin with High Gastrointestinal Risk in a Primary Care Clinic**

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#### **Introduction**

Around 1,000 chronic disease patients are on long term Aspirin in West Kowloon General Outpatient Clinic (WKGOPC). According to American College of Gastroenterology Practice Guidelines, patients on NSAIDs including Aspirin with high gastrointestinal (GI) risk shall be prescribed proton pump inhibitor (PPI) to decrease risk of upper gastrointestinal bleeding.

#### **Objectives**

To evaluate and improve the adherence of PPI prescription recommendation in patients taking Aspirin with high GI risk in WKGOPC.

#### **Methodology**

Patients with high GI risk were defined as (1) having history of peptic ulcer disease (PUD) or complication, (2) having concomitant use of anticoagulants, antiplatelet agents, corticosteroids or NSAIDs. Patients taking Aspirin were identified with Clinical Data Analysis and Reporting System (CDARS) and randomized samples were drawn for record review via Clinical Management System (CMS). Data was collected from September 2013 to September 2014 in phase I, and from May 2015 to October 2015 in phase II. Between the two phases, the Intervention period was from November 2014 to April 2015. Intervention: Measures to improve adherence included raising awareness on PPI use in clinic meeting, setting reminder via CMS for high risk patients identified and reminder card on NSAIDs and PPI use in consultation rooms.

#### **Result**

In phase I, there were 1036 patients taking Aspirin. Among 182 randomized subjects, 10% of the patients had high GI risk while 22.2% of them were prescribed PPI. The adherence of PPI prescription in patients with history of PUD and that of concomitant use of NSAIDs was 18.2% and 0% respectively. The main reasons for non-adherence are being unaware of history of PUD (43%) and concomitant NSAIDs prescribed by other specialties (21%). In phase II, there were 980 patients. Among 271 randomized subjects, 11.4% of the patients had high GI risks while 64.5% of them

were prescribed PPI. The overall adherence of PPI prescription recommendation improved from 22.2% to 64.5 after intervention ( $p=0.01$ ). Conclusions: Significant number of patients taking aspirin is at high GI risk in WKGOPC and warranted for PPI as ulcer prophylaxis. The adherence of PPI prescription recommendation improved significantly after intervention. Clinical audit at a larger scale involving other primary care clinics shall be considered.