



Service Priorities and Programmes Electronic Presentations

Convention ID: 316

Submitting author: Dr Joyce CHAN

Post title: Health Informatician, Finance Division, HO

Safeguarding allergy incident by incorporating "NSAID" as structured allergy

Chan JKY (1), Cheung NT (1), Ng CHY (2), Chiang SC (2)

(1) Health Informatics, (2) Pharmacy Informatics and Automation Technology

Keywords:

allergy

medication incident

structured allergy

Introduction

Patients presented with drug allergy were not uncommon. Hospital Authority Clinical Management System (HA CMS) helped preventing patient with drug allergy if the allergen was documented in structured format in HA CMS. Overriding reasons were needed if in the case of no other alternative. However, those free text drug allergy was not able to be checked by HA CMS upon prescription to patient with allergy to corresponding allergen, it would endanger to both patients, clinicians and corporate.

Objectives

Objective: (1) Identify common free text allergen group (2) Add common free text allergen as structured allergen group in CMS (3) Auto-conversion by system for previous record

Methodology

Free text allergy entry data was retrieved from HA CMS in the period of 1995-2013. The pattern was studied and common free text allergen group was identified. Sentinel & Untoward Event (SUE) related with allergy were reviewed. Common free text allergen with great clinical impact would be incorporated as structured allergen group in HA CMS. Auto-conversion by system for previous record was studied.

Result

There were total 150356 free text allergy records in HA CMS from 1995 to 2013. Of which, around 120000 (80%) was drug-related free text records. Among the drug-related free text records, 95% was uncertain antibiotic allergy, unknown allergen or unknown manifestation. Around 3000 (2.5%) was Chinese medicine related and 3381 (2.8%) was documented as "NSAID" as the exact drug name of NSAID was not known when patient presented allergic symptoms. Unfortunately, there were 8 out of 37 (21.6%) SUE related to allergy documented as "NSAID" from Sep 2011 to August 2012. Although the percentage was low, the impact of prescribing NSAID group to patients with "NSAID allergy" was high. To safeguard by computer checking in the case of unintentional prescription of NSAID group to patients with "NSAID allergy", NSAID was incorporated as a structured allergen. Previous free text "NSAID allergy" record would be converted to structured allergy record automatically by well-defined

clinical rules in order to prevent future NSAID related allergy incident. As a result, patients with "NSAID allergy" would be protected against future possible drug allergy upon unintentionally prescription of NSAID group with the incorporation of NSAID as a structured allergen and auto-conversion of previous free text entries to structured entries in HA CMS.