

Effects of Antibiotic Stewardship Program to Reduce Use of IV Quinolone in PYNEH



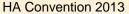
Clinical Microbiology:

Infection Control Team:

Pharmacy Department:

Team Member

Dr. R A Lee, ICO
Dr. Alan Wu, AC
Dr. Leo Lui, Resident
Ms Ida Yip, SNO
Ms Yvette Lai, APN
Ms. Angela Wong, APN
Mr. W C Lam, RN (Speaker)
Mr. S L Chan, DM
Ms Angela Liu, Senior Pharmacist





Introduction

IV antibiotics are often thought to be associated with <u>enhanced efficacy</u> when compared to their oral counterparts.

Many studies have demonstrated that <u>oral quinolone</u> have <u>good</u> <u>bioavailability</u> and <u>equivalent efficacy</u> as compared with their IV formulations.

►> A systematic IV to oral switch programme can help to:

- Reduce hospital drug budget
- Reduce hidden expenses incurred from IV drug preparation and administration
- Reduce patient discomfort
- Promote early ambulatory
- Potential shortening in hospital stay

HA Convention 2013





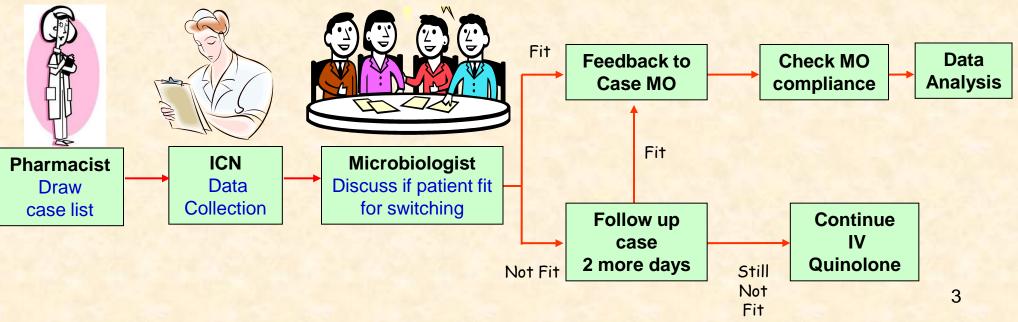
Objective :

To promote the practice of early switching of IV quinolone to oral route when medically feasible.

Department: Medical, Surgical and O&T of PYNEH

Study Period: April to December 2011

Method:





Result

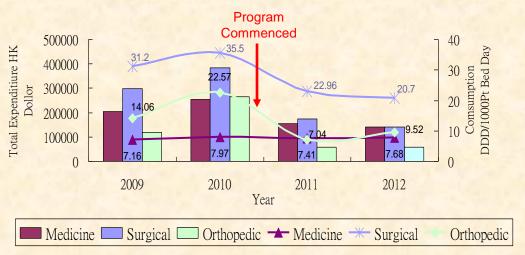
Total IV Quinolone consumption decreased by 48.5% as compare with same period in 2010

Consumption DDD/1000 Patient Bed Day

Dept.	2Q to 4Q 2010	2Q to 4Q 2011	Reduction Rate (%)
Med	9	7	22.2%
Surg	37	23	37.8%
O&T	22	5	77.3%
Total	68	35	48.5%

 Saved HK\$490,033 for drug cost (65.1% reduction) as compare with same period in 2010

Consumption and Expenditure From 2009 to 2012



No adverse outcome noted in patients with IV Quinolone to Oral switch

- Reduced 1593 IV injection procedures
- Saved 265.5 hours of nurses' time for injections and monitoring infusions

(Assume average time for preparation, administration is 10 minutes)





Conclusion

- Promote early IV to oral switch therapy for quinolone antibiotics is <u>feasible</u> and <u>cost-effective</u>.
- Appropriate oral antibiotic use produces equivalent clinical outcomes, causes <u>fewer complications</u>, <u>less patient inconvenience</u>, and is generally <u>less costly</u>.

