

# A Multi-disciplinary Antimicrobial Stewardship Programme to Improve the Appropriate Use of Antimicrobials



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## Objectives

- To **assess appropriateness** of antimicrobial use  
[mainly *Carbapenems* and *IV Fluoroquinolones (IVFQ)* ]
- To **optimize** antimicrobials use via **suggestion/feedback** to case doctor

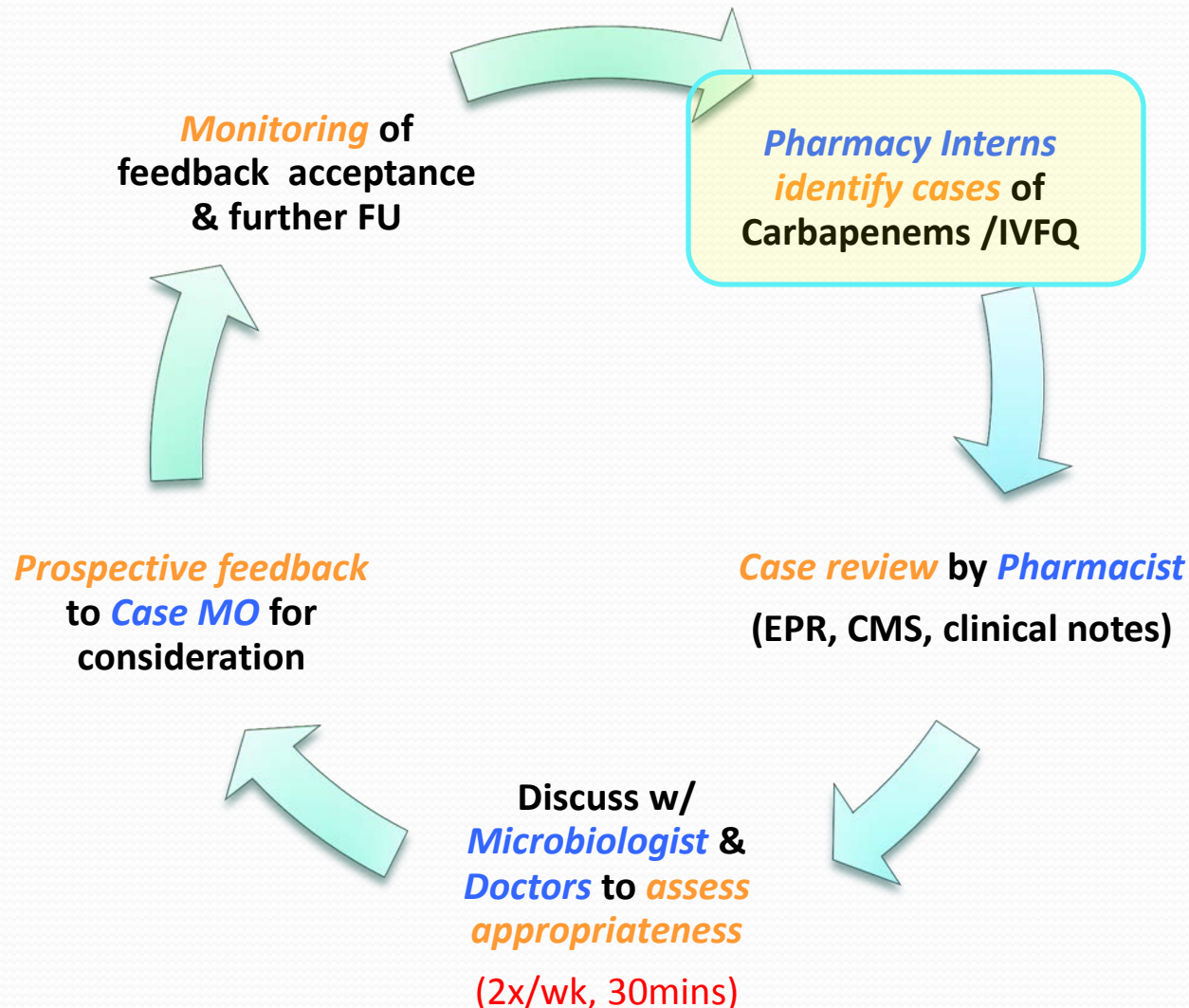
## Schedule of the meeting

- **Twice weekly** (Tue & Fri)
- **30 mins** (11:30 am – 12:00 pm)

## Team members

- **Microbiologist** (Dr W K Luk)
- **Medical Doctors** (Dr C K Lau; Dr C F Choy)
- **Pharmacists** (J Chen, H Y Koo, L K Lui)

# Methodology



- Review Period:  
5/2016 – 12/2016  
(*8 months*)
- Inclusion Criteria:  
*All inpatient wards*
- Exclusion Criteria:  
*ICU/CCU/HDU/  
EMW/Paed/  
Day Care Units*
- Major Target Abx:  
*Carbapenems & IVFQ*

# Results: Acceptance & Financial Savings

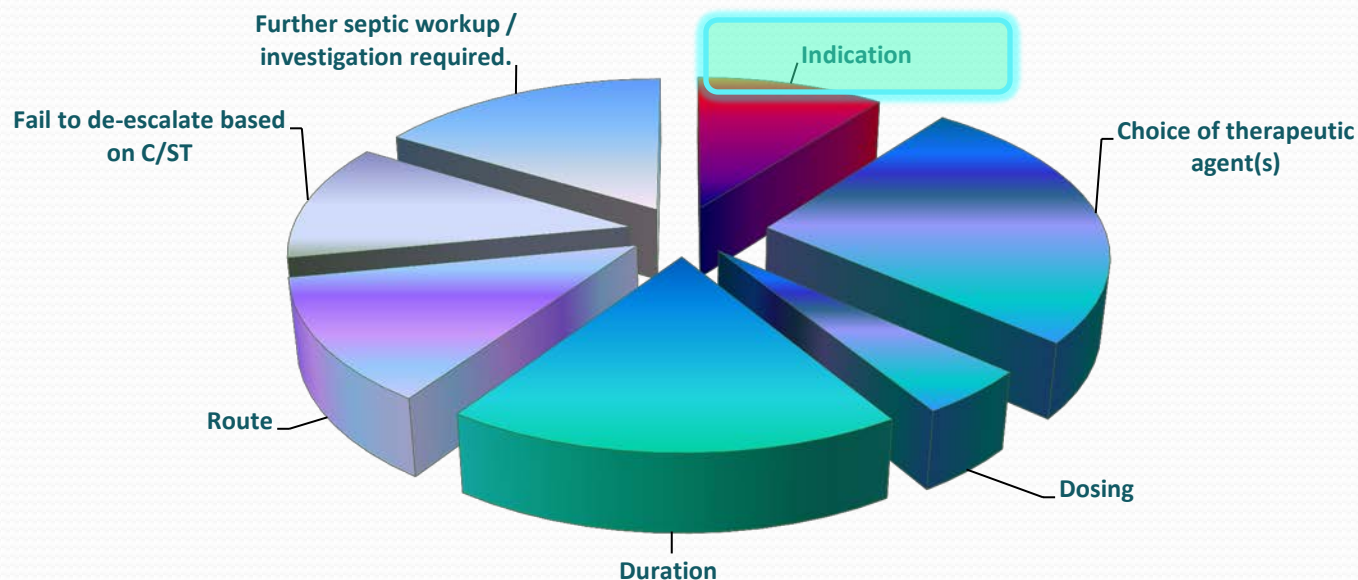
1 May 2016 – 31 Dec 2016

Targeted antibiotic groups	No. cases prescribed	No. of cases reviewed (%)	No. of cases w/ feedback (%)	No. of acceptance (%)
Carbapenems, IVFQ	602	328 (54.5%)	137 (41.8%)	97 (70.8%)

	Drug utilization as Defined Daily Dose “DDD” (2015 vs 2016)	Reduction of drug expenditure (2015 vs 2016)
Carbapenems	25.1 versus 19.5 DDD/1000 BDO	\$235,740 (-37.7%)
IVFQ	7.92 versus 5.62 DDD/1000 BDO	\$13,334 (-19.8%)

# Results: Types of feedback (n=153)

Categories	No.	%
Indication	16	10.5
<i>Choice of therapeutic agent(s)</i>	<b>40</b>	<b>26.1</b>
Dosing	7	4.6
<i>Duration</i>	<b>28</b>	<b>18.3</b>
Route	19	12.4
Fail to de-escalate based on C/ST	18	11.8
Further septic workup / investigation required	25	16.3



# Conclusion – Multi-disciplinary ASP Round

- Significantly reduce *inappropriate/unnecessary* use of antimicrobials
- Enhance clinical *safety, governance* & *quality* of patient care
- Promote substantial *financial savings*
- Provide *education* and regular *updates* on antibiotic prescribing