



Singapore Healthcare Management 2019

Community OPAT (CoPAT): Greater Comfort, Risk Reduction and Cost Saving!



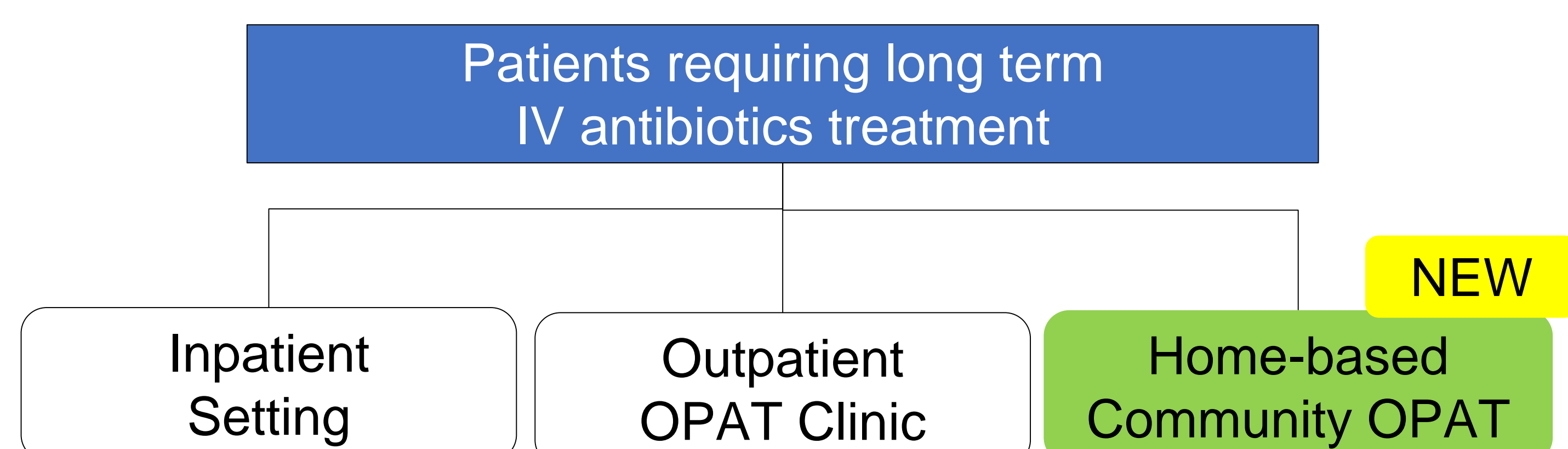
Singapore General Hospital

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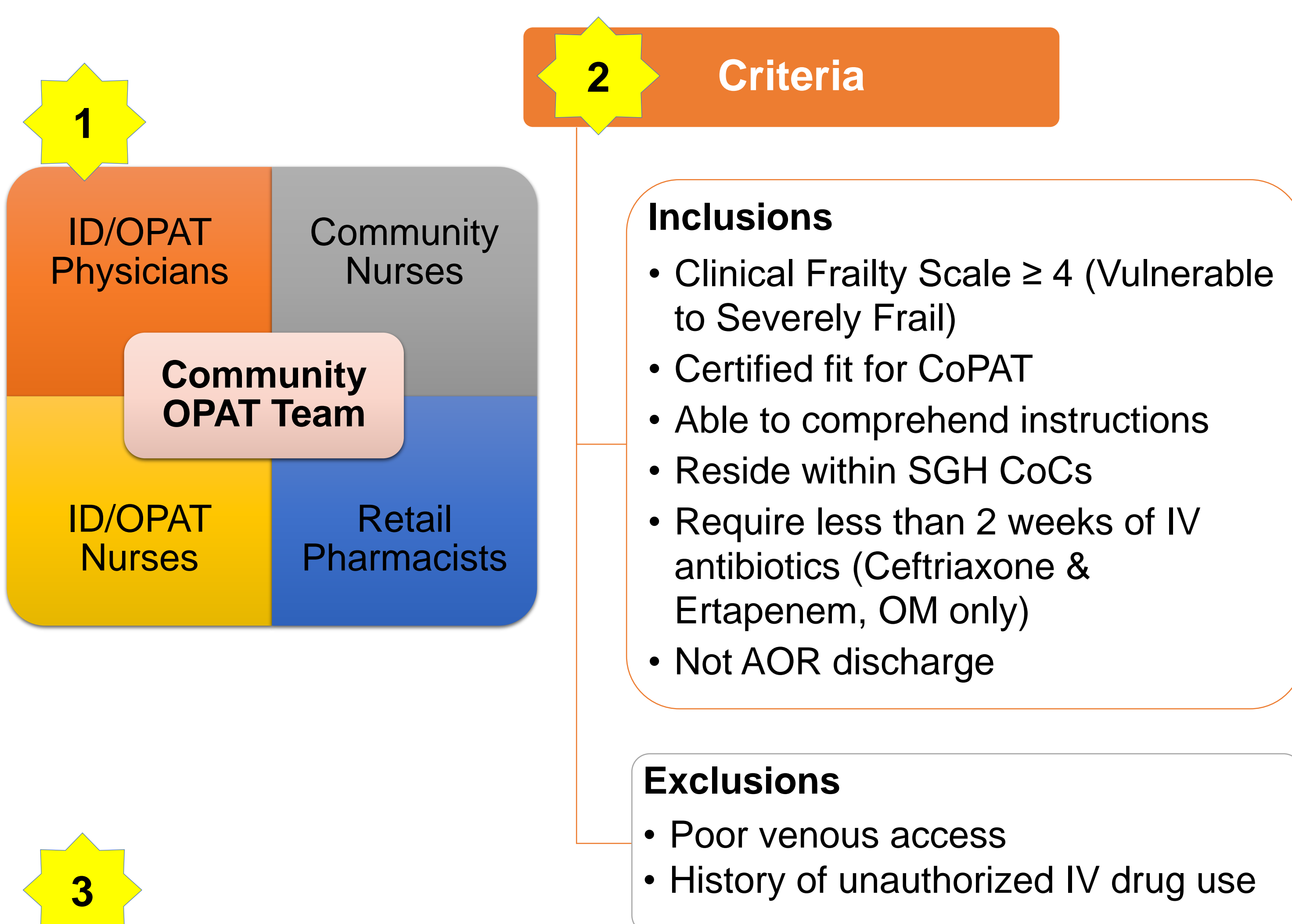
Introduction

Outpatient Parenteral Antibiotic Therapy (OPAT) refers to an approach for delivering Intravenous (IV) antimicrobials in the outpatient setting or community. OPAT services in Singapore are mainly available at outpatient clinics in hospitals. However, this service may not be accessible to patients who are frail or with limited mobility. They may have to remain hospitalized to complete their treatment course and as such have (1) higher risk of developing nosocomial complications, (2) incur higher cost and (3) restricted control over their daily activities as a result of the prolonged hospitalization.

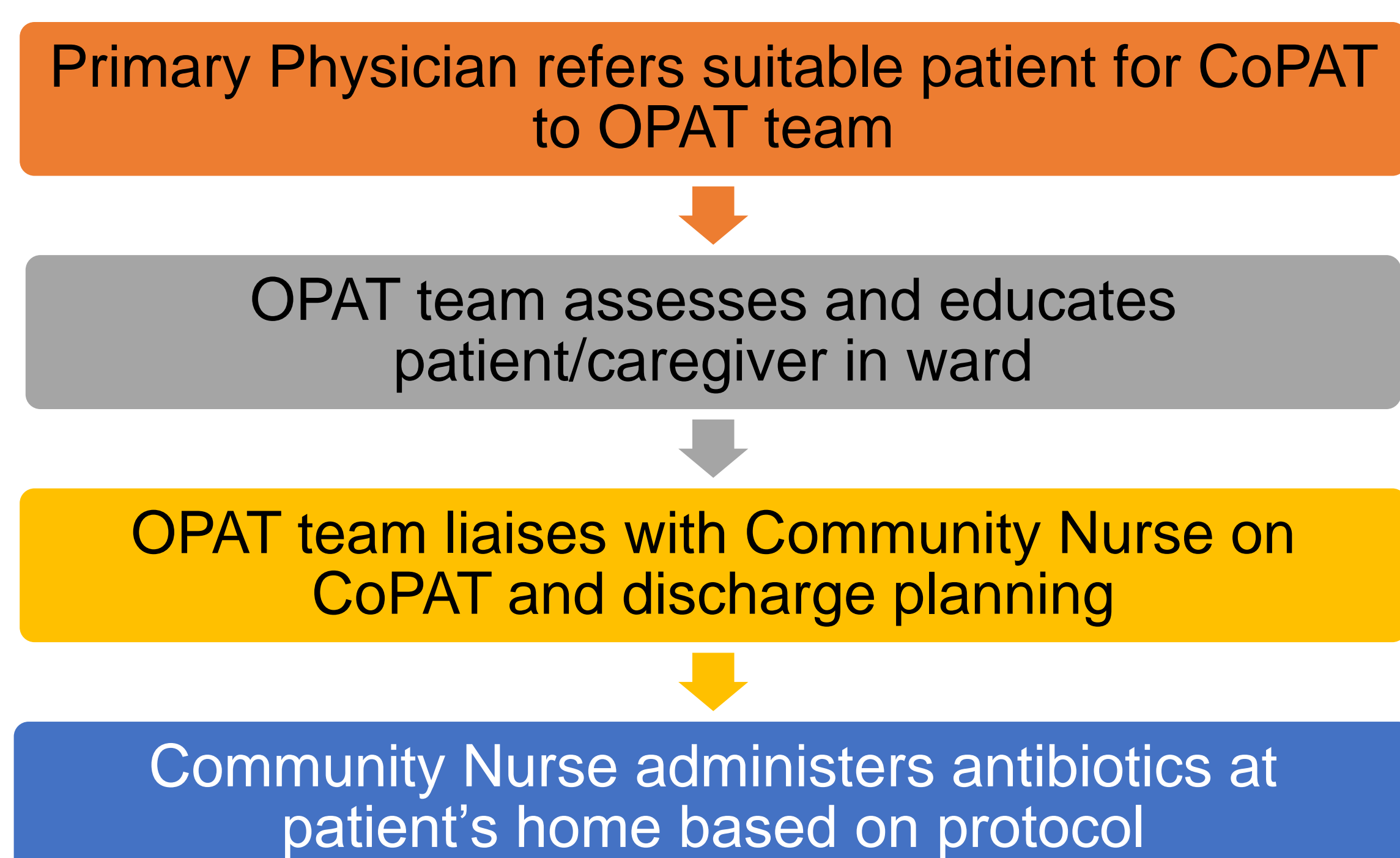
SGH Community Nursing and Department of Infectious Diseases (ID) piloted Community OPAT (CoPAT) to reduce the length of hospital stay for residents residing within SGH's five Communities of Care (CoC), i.e. Bukit Merah, Chinatown, Tiong Bahru, Telok Blangah and Katong.



Methodology



Referral Process and Workflow:



Service-related Charges

Service and Consumables	Charges
1. Community Nurse service (Transport + Nurse Visit)	Subsidised
2. Retail pharmacy consumables <ul style="list-style-type: none">Administration setCannulation setOther consumables	Inpatient bill
3. Medications	Inpatient bill

Results



Name	Ward Class	LOS	Bill size (before subsidy)	Bill size (after subsidy)	Average daily bill (after subsidy)	Days of CoPAT	Total cost saved by patient (after subsidy)
Patient 1	B2	6	\$ 7,950.62	\$3,076.09	\$513	9	\$4,617
Patient 2	C	7	\$ 6,802.17	\$2,329.61	\$333	7	\$2,331
Patient 3	B2	7	\$13,748.49	\$5,507.30	\$787	8	\$6,296
Patient 4	B2	7	\$10,667.26	\$3,975.16	\$568	6	\$3,408
Grand Total						30	\$16,652

Four patients were enrolled for the pilot between September and November 2018. They were on IV Ceftriaxone 2gm (n=3) and IV Ertapenem 1gm (n=1) once a day dosing. No adverse effects were reported and there was a total of 30 bed days saved for the hospital and \$16,652 saved for the patients.

Families and patients were very satisfied with the home service resulting in shortened stays and reduced costs whereby patients can resume their normal activities at the comfort of their own home. They also feedback on observed significant improvements in the state of the patients' health and mood in comparison to past treatments in hospital.

Conclusion & Future Plan

This patient-centric CoPAT service is an initiative to shift care beyond hospital to the heartlands and community. It offers greater comfort (patient's home), risk reduction and cost savings (shortened hospitalisation stay; reduced associated risk of hospital acquired infections) to frail patients requiring prolonged intravenous antibiotics therapy. With the promising outcomes, the scope of service will continue to evolve to benefit more patients.

Moving forward, this service will be scaled up to reach out to more patients who could benefit from this initiative, including those requiring prolonged antibiotics (all antibiotics except Vancomycin) through peripherally inserted central catheter and residing outside the service boundaries.