

OPAT in Infective Endocarditis – the GSTT experience

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(with thanks to Raj Thangarajah, Highly Specialist Pharmacist)

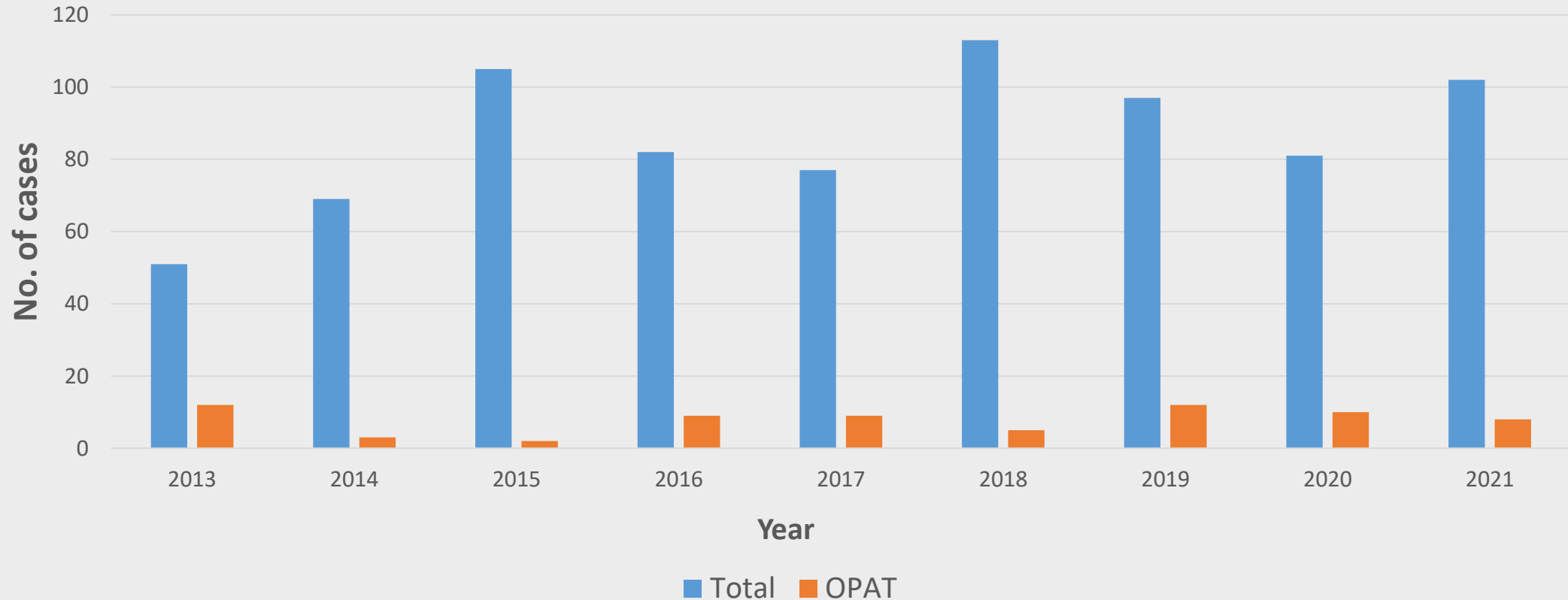
Recommendation Table 11 — Recommendations for outpatient antibiotic treatment of infective endocarditis

Recommendations	Class ^a	Level ^b
Outpatient parenteral or oral antibiotic treatment should be considered in patients with left-sided IE caused by <i>Streptococcus</i> spp., <i>E. faecalis</i> , <i>S. aureus</i> , or CoNS who were receiving appropriate i.v. antibiotic treatment for at least 10 days (or at least 7 days after cardiac surgery), are clinically stable, and who do not show signs of abscess formation or valve abnormalities requiring surgery on TOE. ^{43,401}	IIa	A
Outpatient parenteral antibiotic treatment is not recommended in patients with IE caused by highly difficult-to-treat microorganisms, ^c liver cirrhosis (Child-Pugh B or C), severe cerebral nervous system emboli, untreated large extracardiac abscesses, heart valve complications, or other severe conditions requiring surgery, severe post-surgical complications, and PWID-related IE.	III	C

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2023 ESC Guidelines for the management of endocarditis

Endocarditis cases at GSTT - numbers



Overall 9% of endocarditis patients treated under the OPAT service

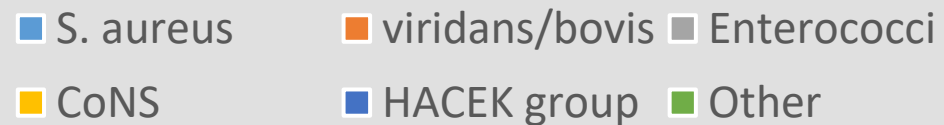
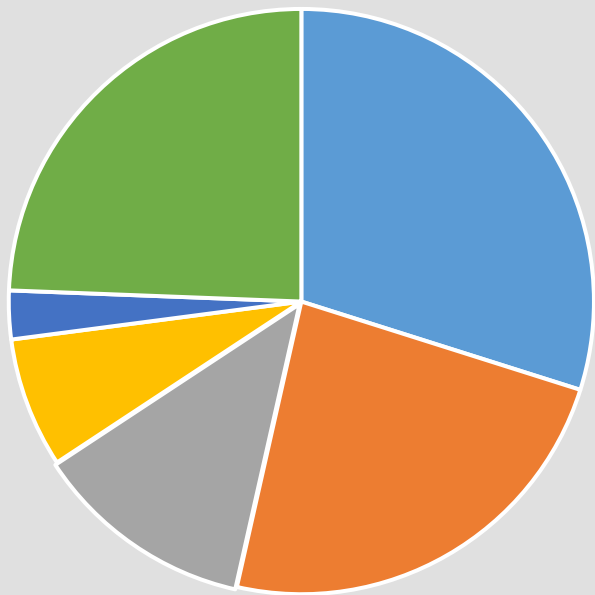
Endocarditis cases at GSTT - demographics

	All cases (820)	OPAT cases (78)
Median age	58 years	52 years (range 19-94)
Percentage male	73%	72%
Valve involved		
Prosthetic	27%	55%
Native	59%	33%
Cardiac electronic device	12%	12%

Endocarditis cases at GSTT - aetiology

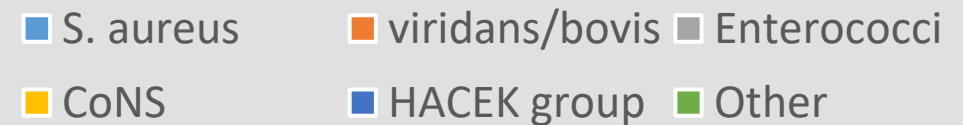
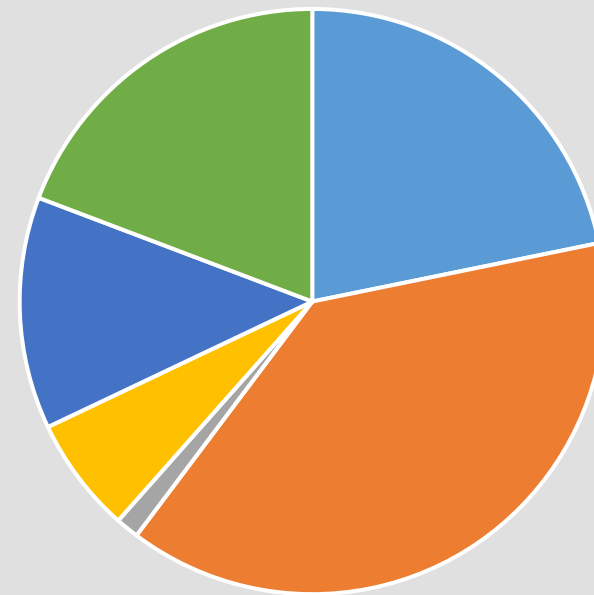
All endocarditis cases (820)

Organisms

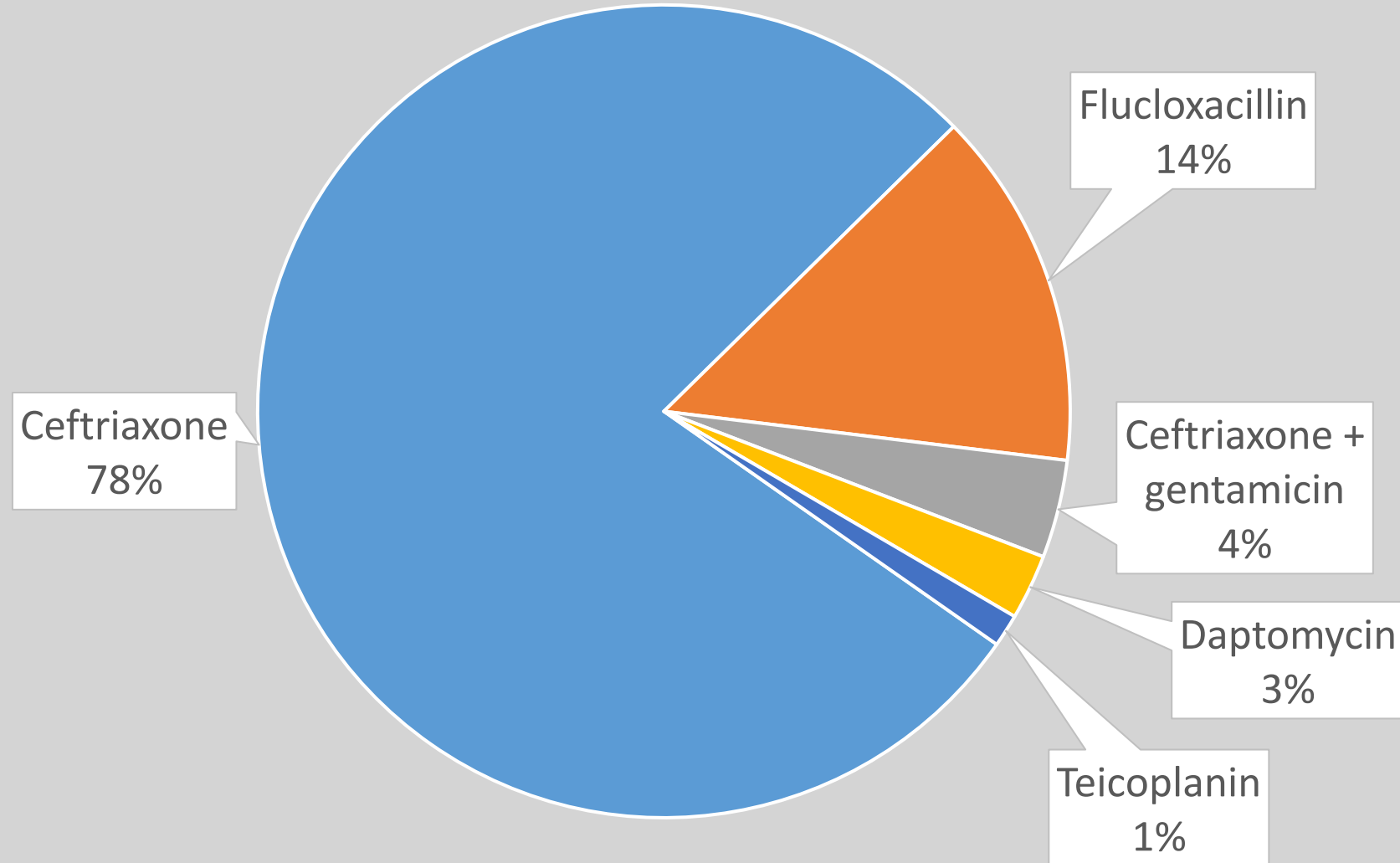


OPAT cases (78)

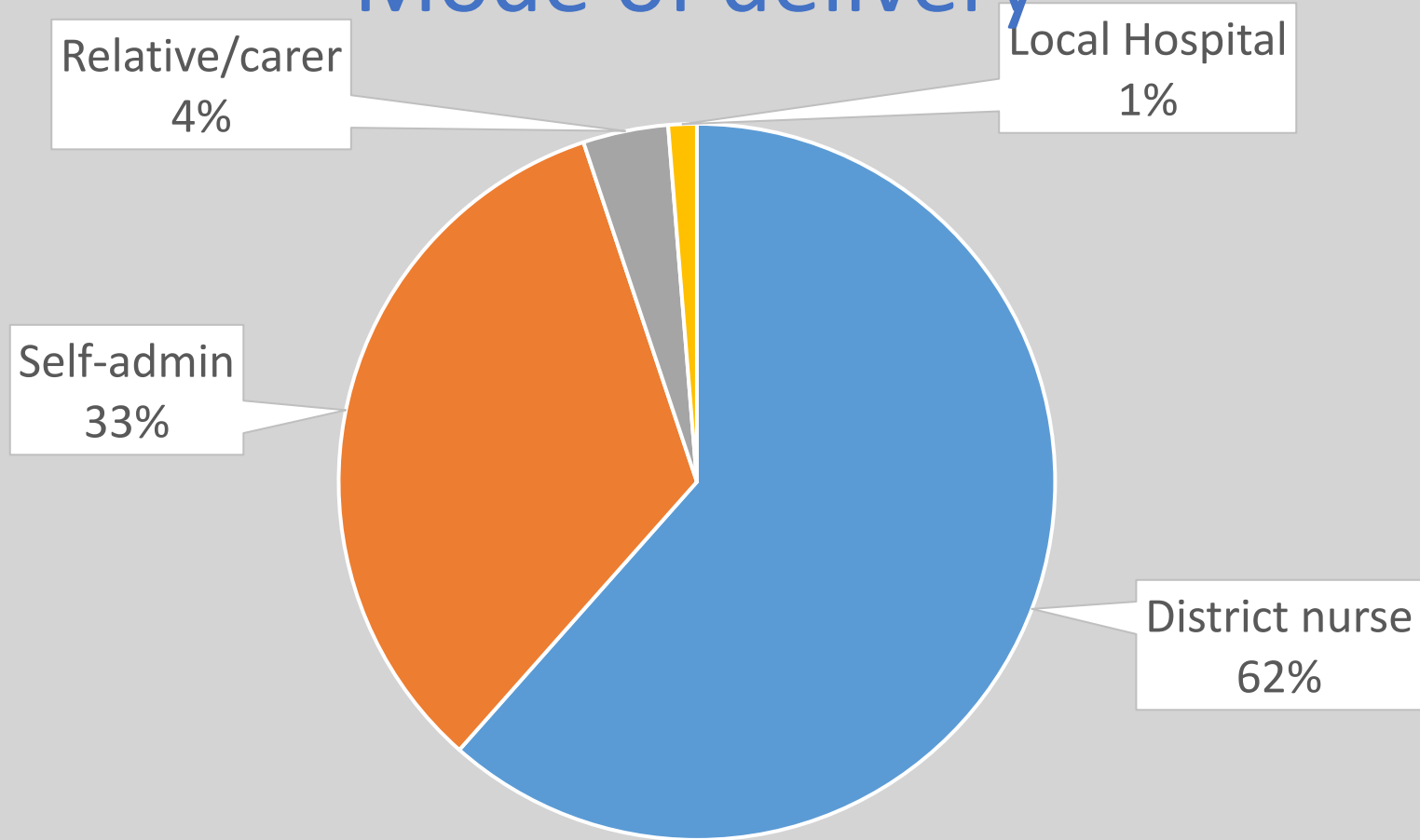
Organisms



Antimicrobial choices



Mode of delivery



Median number of days on OPAT: 15 (range 1-58)

Complications

- No deaths
- One line-related – sterile phlebitis
- Drug-related (all on ceftriaxone)
 - ALT rise (3)
 - thrombocytopaenia (1)
 - drug fever (1)
- **Seven emergency re-admissions (9%) of which four were cardiac:**
 - Worsening AR (re-do surgery)
 - Two with late septic pulmonary embolism (one needed re-do PV surgery)
 - Worsening MR (prosthetic valve – needed re-do surgery)

Discussion points and conclusions

- OPAT in endocarditis is safe with careful patient selection
- Few contra-indications to OPAT in most recent guidelines
- Prosthetic valve IE predominates in our series – reflecting requirement for 6/52 Rx
- Enterococcal endocarditis rarely included – patients often elderly/frail, renal impairment, 4 hourly amoxicillin!
- Option of oral antibiotics less applicable to our practice as
 - Often truncate antibiotic course after valve surgery
 - Selective use of TOE
 - Concern over compliance