

Introduction

Malaria is a potentially life-threatening infection that is imported by travel in Ireland, with 53 cases reported nationally in 2022.

Given its relative rarity and the serious consequences of delayed diagnosis and treatment, we reviewed cases over 5 years at UHG.

Aims

- Identify previous positive cases
- Audit diagnosis management in accordance with national guidelines
- Identify areas for further quality improvement and research

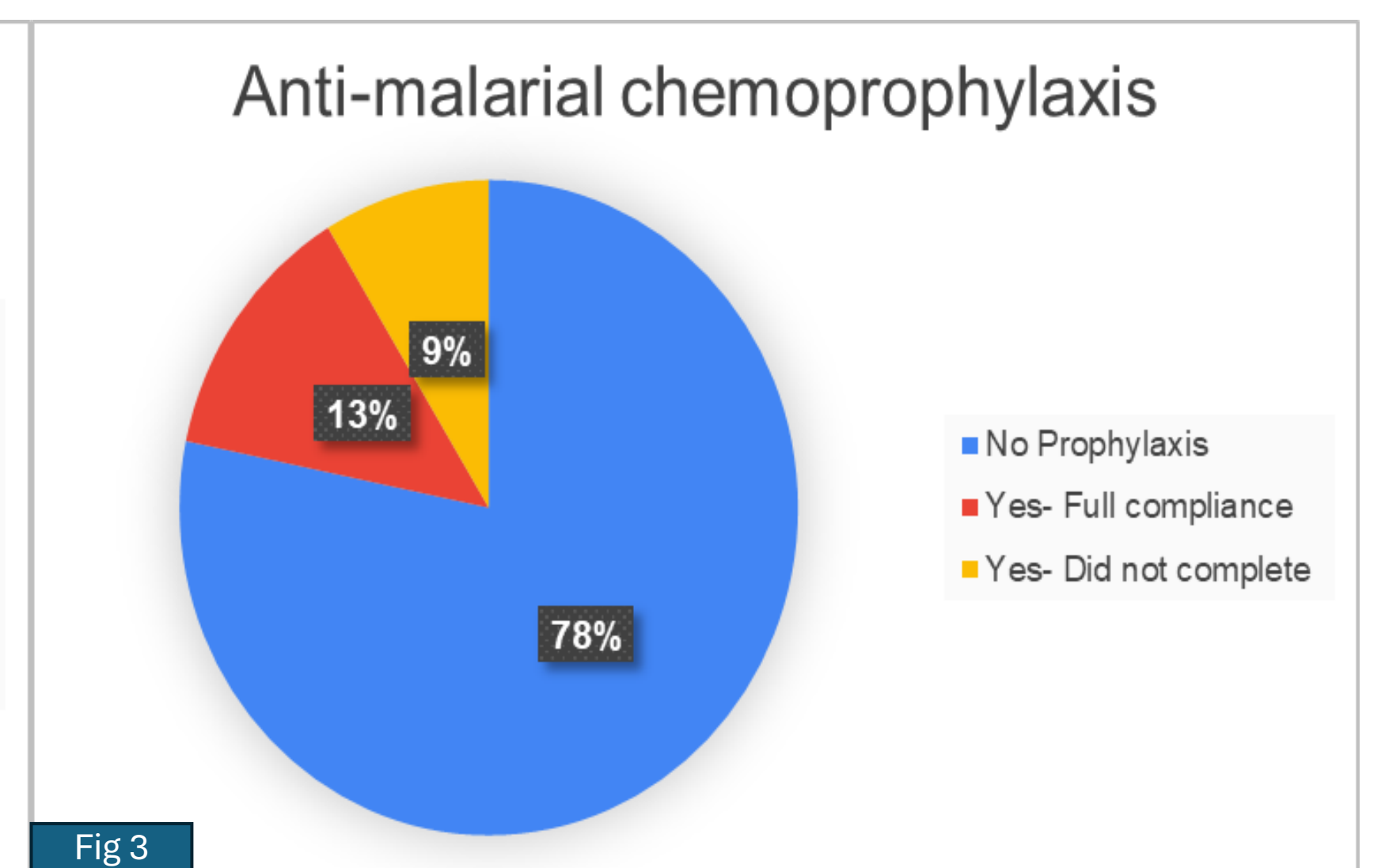
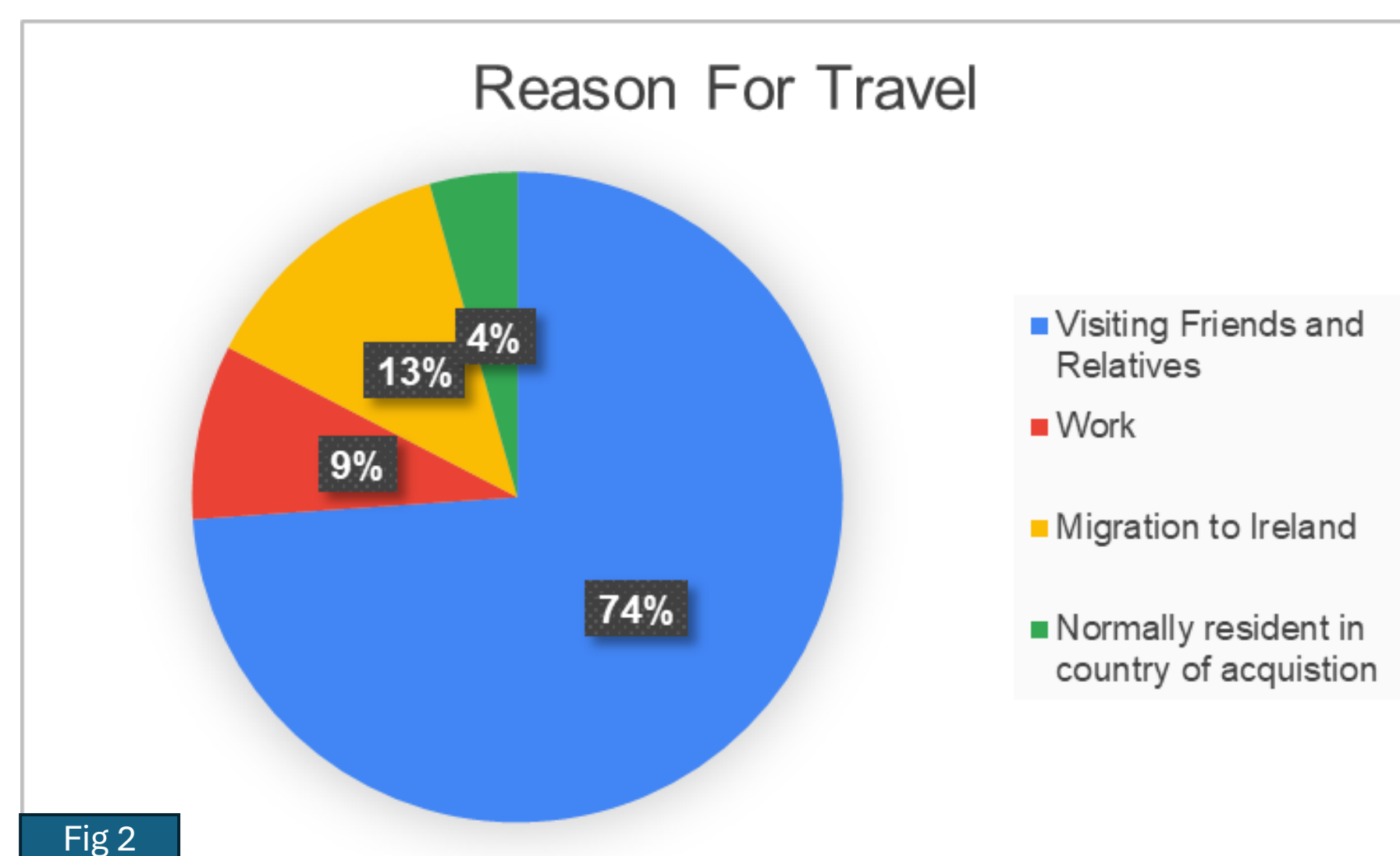
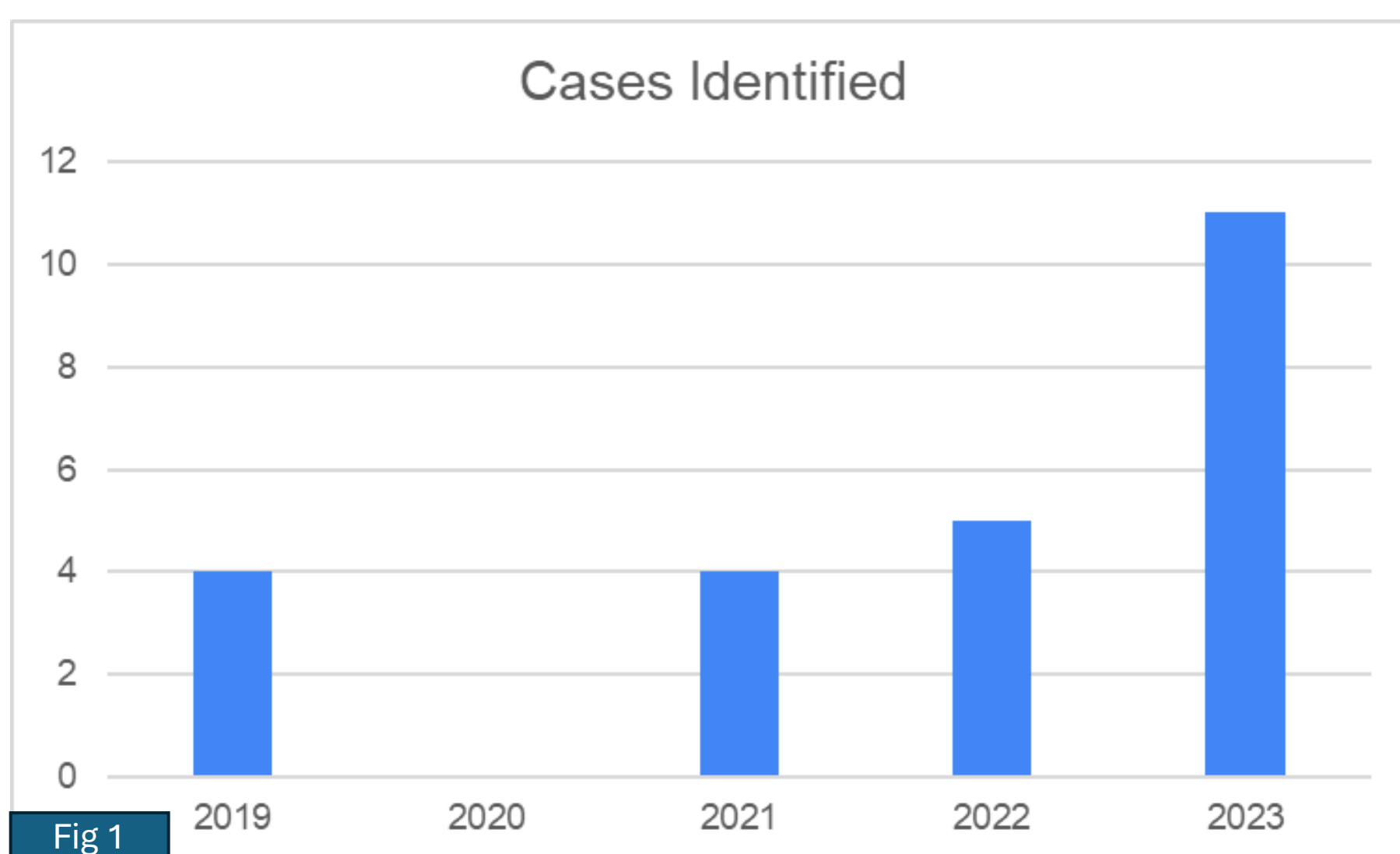
Methods

All malaria testing requests submitted to UHG haematology lab January 2019-December 2023 were reviewed, n=23, Fig1.

For positive cases request forms, reference laboratory reports and clinical notes were reviewed.

One case was excluded due to lack of clinical information

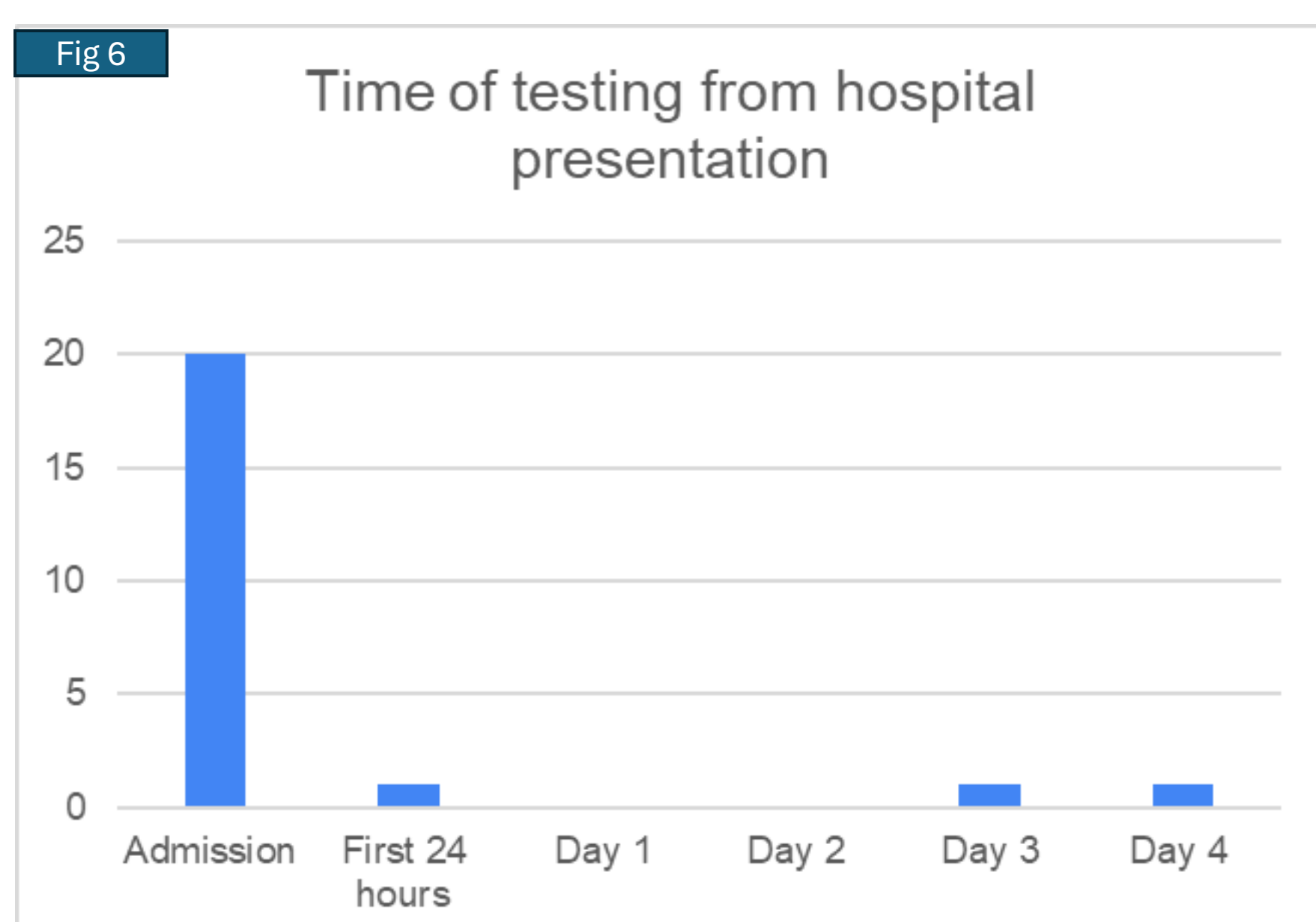
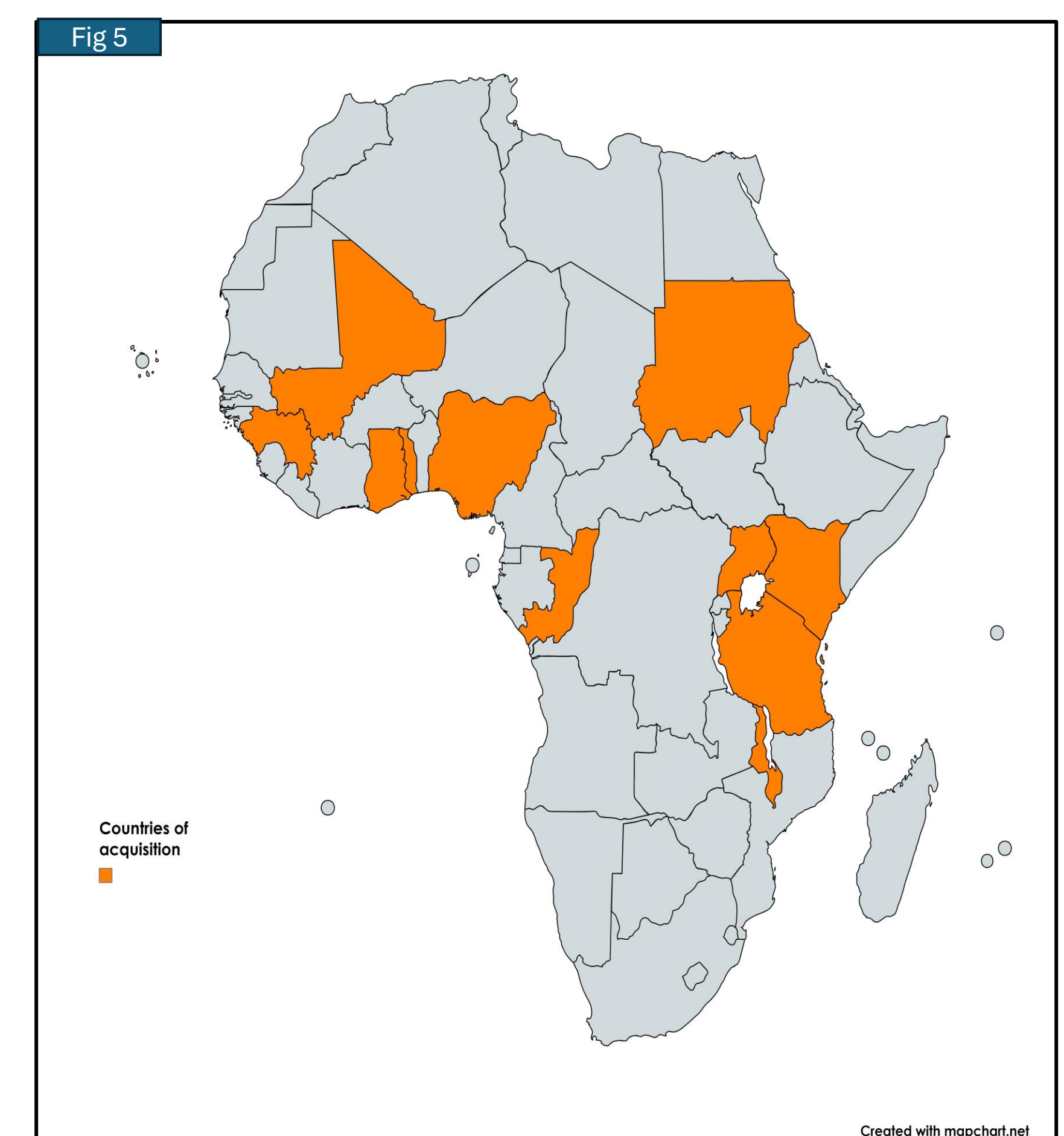
Results



Demographics

- Mean age: 38 years (Range 10-58)
- 4 patients <16 years
- Gender: Male=17, Female= 6
- 2 patients were pregnant
- Reason for travel: Visiting friends and relatives (74%) (fig 2)
- Most frequent country of acquisition: Nigeria (12/23, 52%) (fig 5)
- Born in Ireland: 3/23, 13%
- Acquired illness in country of birth: 19/23, 82%

All cases were unrelated



Presentation

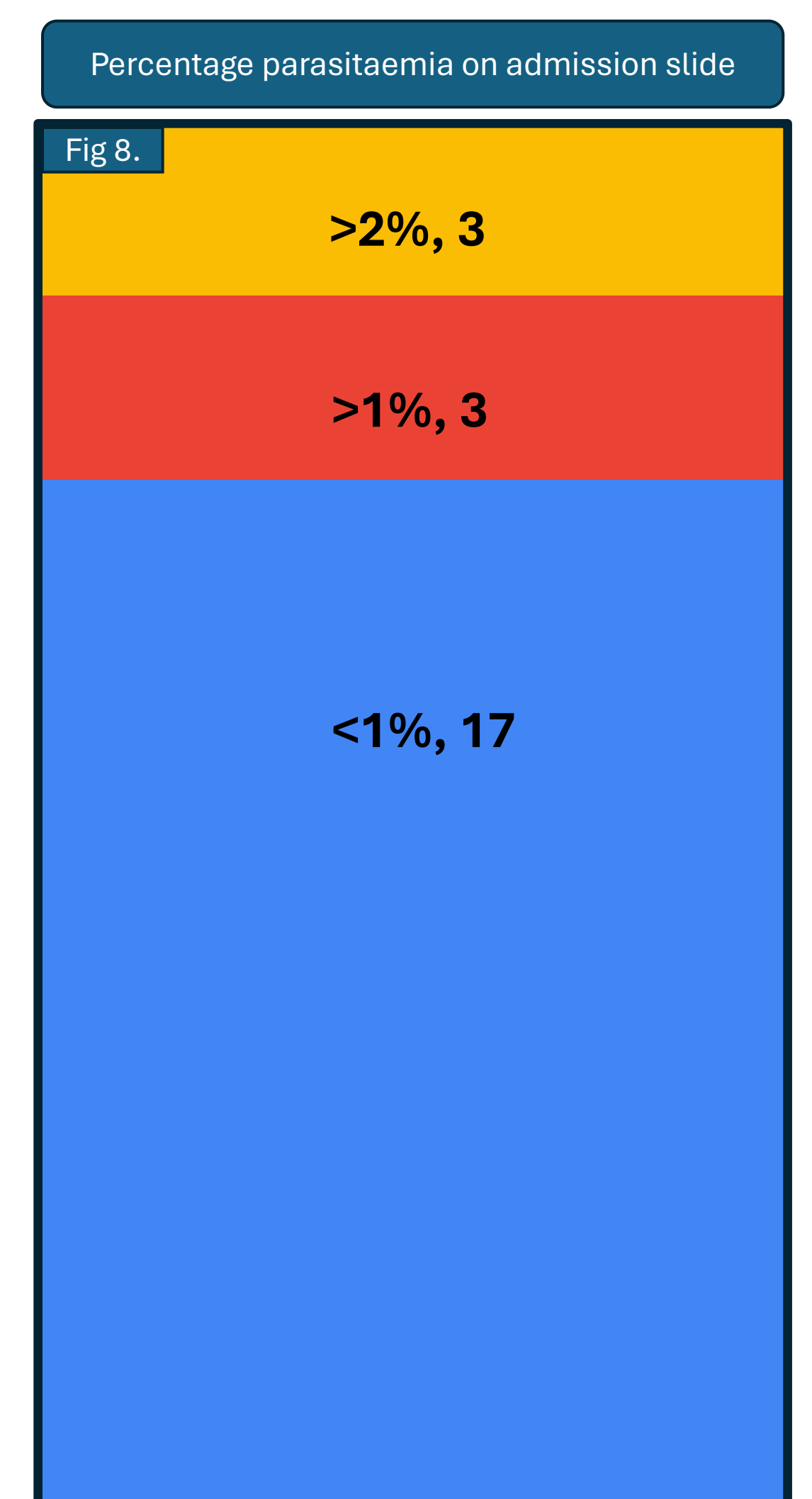
- Mean time of symptom onset to presentation at healthcare: 6 days
- 3 had sought treatment abroad in country of acquisition
- Mean time since leaving malaria endemic area: 12.5 days (Range 4-365) 1 undocumented length
- Previous malaria infection documented: 8 cases
- Most frequently reported symptom: Fever (22/23). 96%

Laboratory findings

Parasitaemia on presentation: >2%= 3, >1%=3, <1% =17 (fig 8)

No mixed infections identified

P. Falciparum: n=20 87%, *P. Ovale* n=3 13% (fig 4)



Hospital Course

-Length of stay

Mean length of stay 5.7 days
ICU Admission: 6 cases
ICU Mean Length of stay: 4 days
Total hospital bed days over review period- 132 days

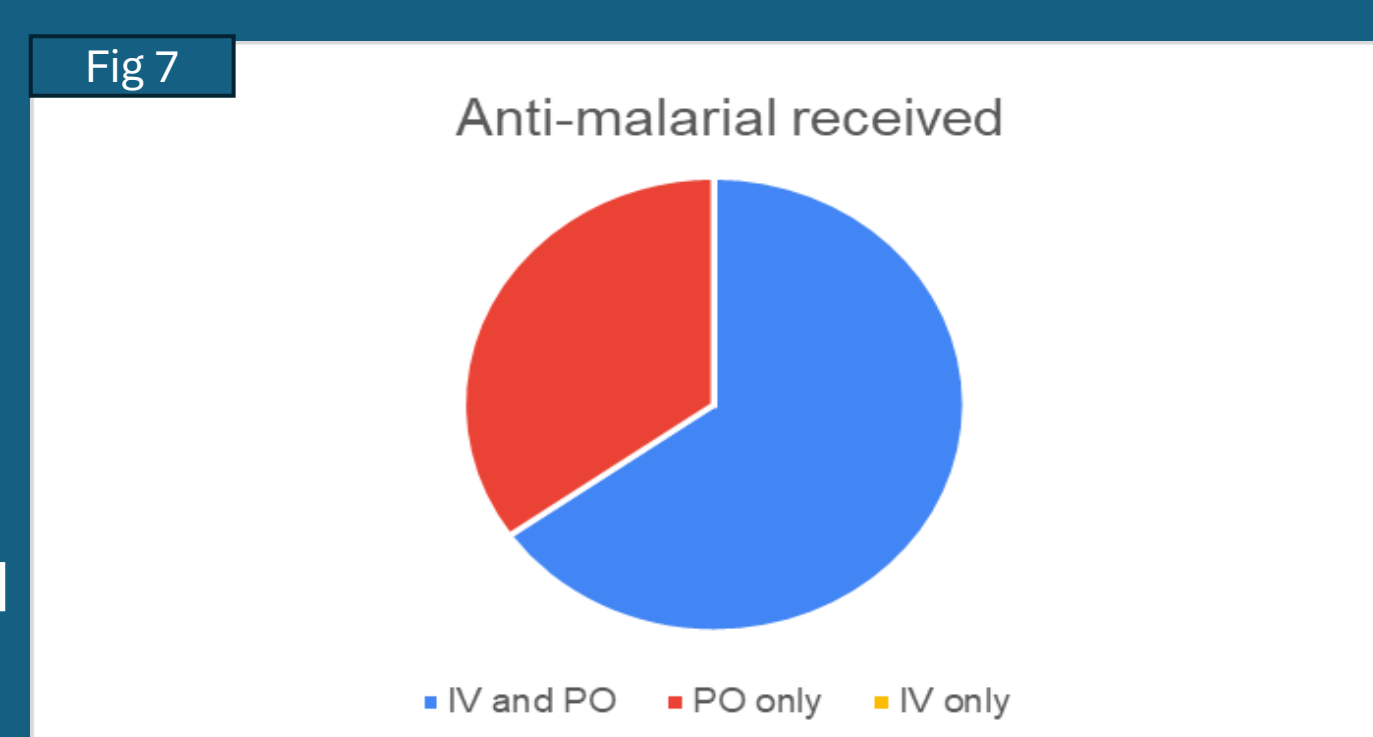
100% of patients had blood cultures sent. No growth in any blood culture

Treatment received (fig 7)

- 15 received combination IV and PO treatment
- 8 received PO only

One Adverse reaction to artesunate- mild
No treatment failures

15/23 received antimicrobial treatment alongside antimalarials.



Follow up

100% of patient had advised or planned follow up with infectious diseases

2 did not attend

All Patients with *P.Ovale* infection (n=3) had G6PD testing with subsequent follow up Chloroquine administration

Counselling re future chemoprophylaxis- Documented in 11 cases

Conclusions

- Results are in keeping with nationally and internationally reported data on patient cohorts, risk factors and parasite species.
- Increased travel post lockdown has resulted in corresponding increase in cases but a lack of appropriate chemoprophylaxis.

Future work

- Pre travel screening and risk stratification for people likely to travel to visit friends and relatives
- Raising awareness of non-falciparum species to encourage testing with more distant travel history
- Collaborative lab project to assess parasitaemia measurement pathway on call