

Bethlem Adolescent Psychiatric Intensive Care Unit (BAPICU) - The first 100 patients

Dr Mamie Shum, Dr Julio Vaquerizo Serrano, Dr Dan Hayes
South London and Maudsley NHS Foundation Trust (SLaM)

BACKGROUND

The CAMHS PICU at the Bethlem Royal Hospital in Beckenham, London (BAPICU) is an inpatient unit for acutely unwell young people aged 12 to 17 who require short-term care and treatment in a higher level of security than a General Adolescent Unit (GAU), taking referrals from any of the three trusts within the South London Partnership (SLaM, Oxleas, and South West London & St George's NHS Trust) as well as those out-of-area, depending on bed availability. The BAPICU opened in April 2018 in response to the identifiable need for more CAMHS PICU services across the country, particularly within the NHS. Most of such services remain covered by the private sector, and there is little available literature on the nature or pattern of admissions to CAMHS PICUs.

AIMS & HYPOTHESES

The aims of this descriptive study are to understand the nature of admissions requiring BAPICU and identify any discernible patterns. The authors hypothesised that length of stay may be influenced by different factors such as gender, ethnicity, diagnostic cluster or social factors (Looked After Child or LAC status).

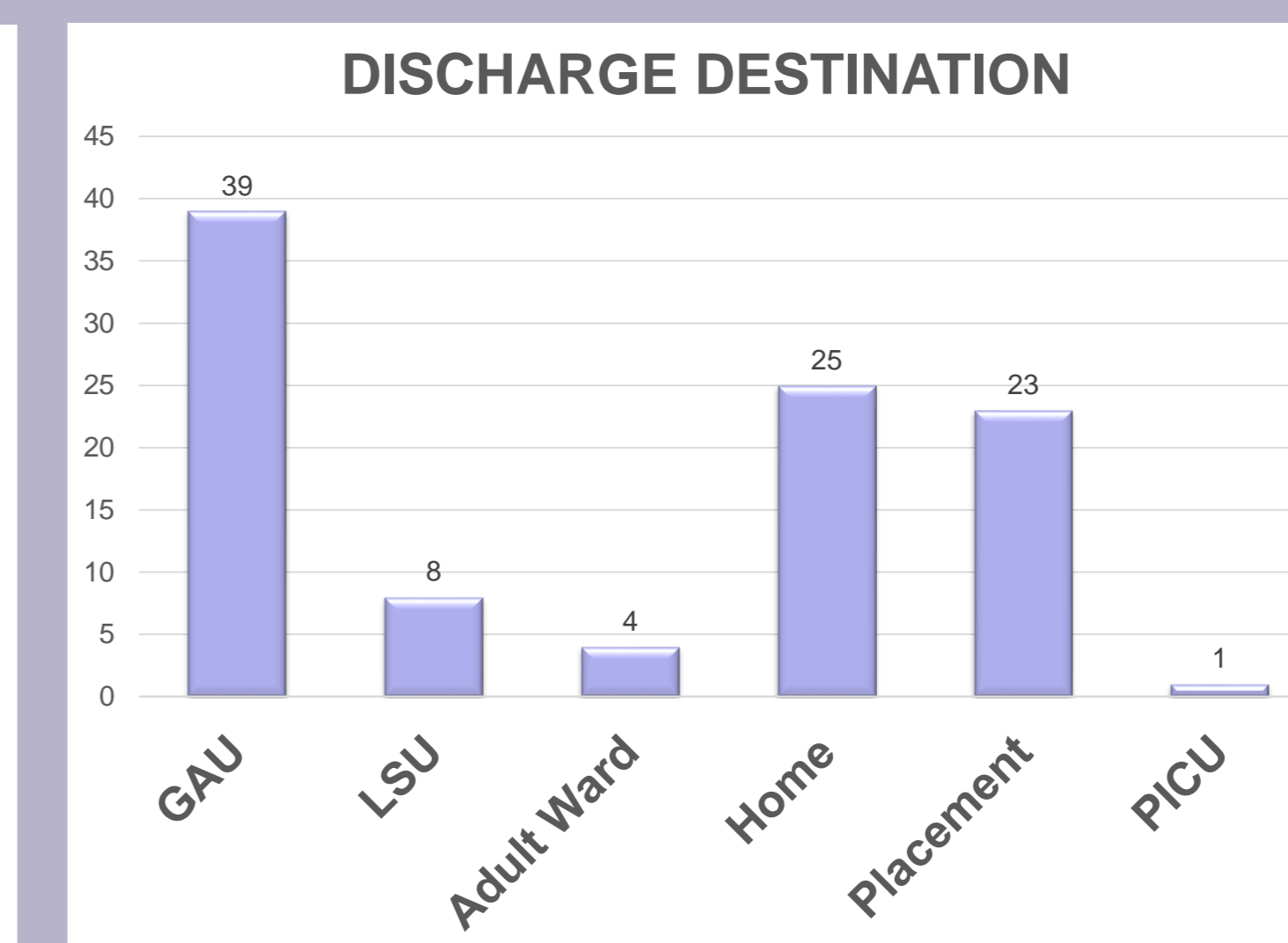
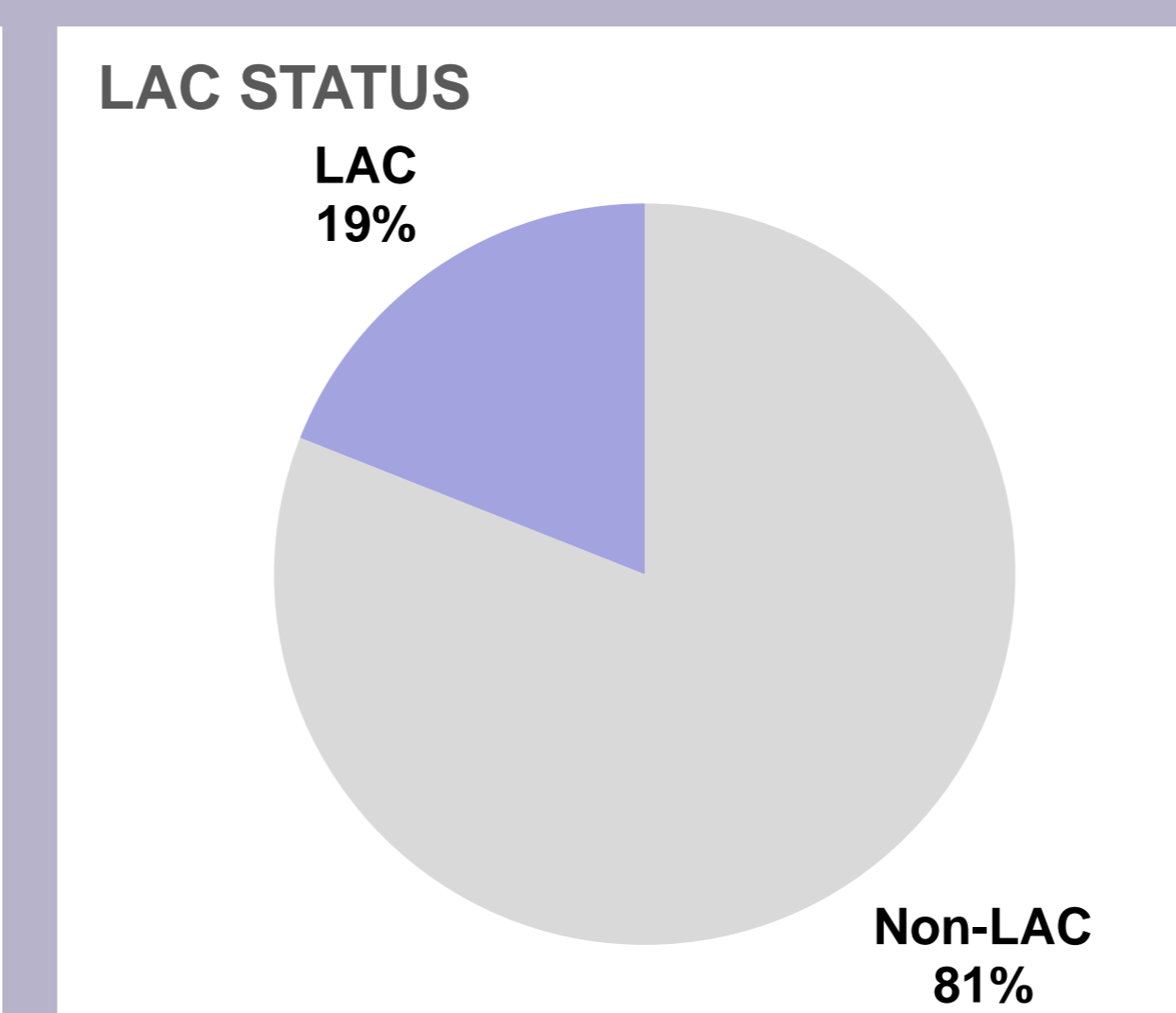
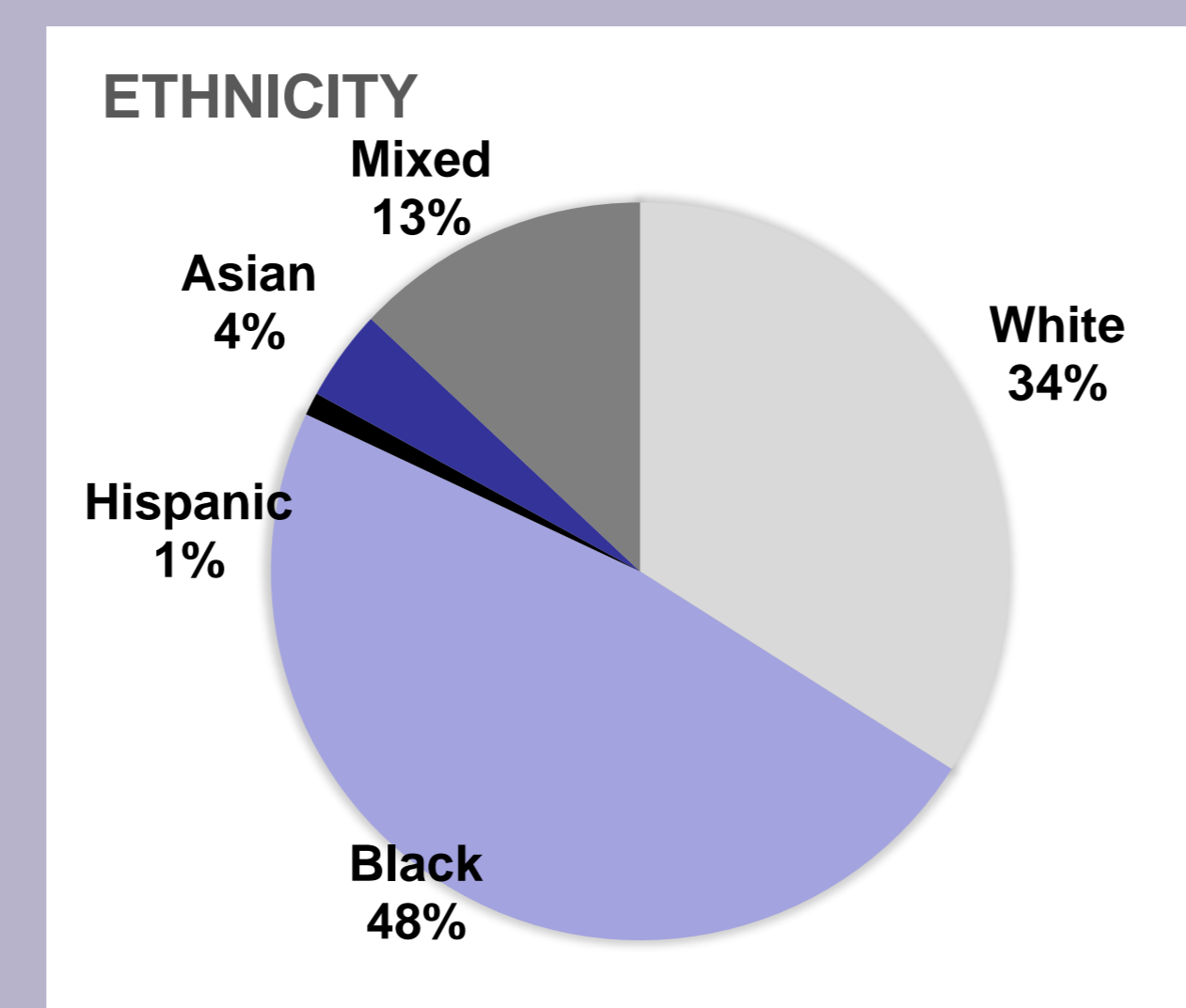
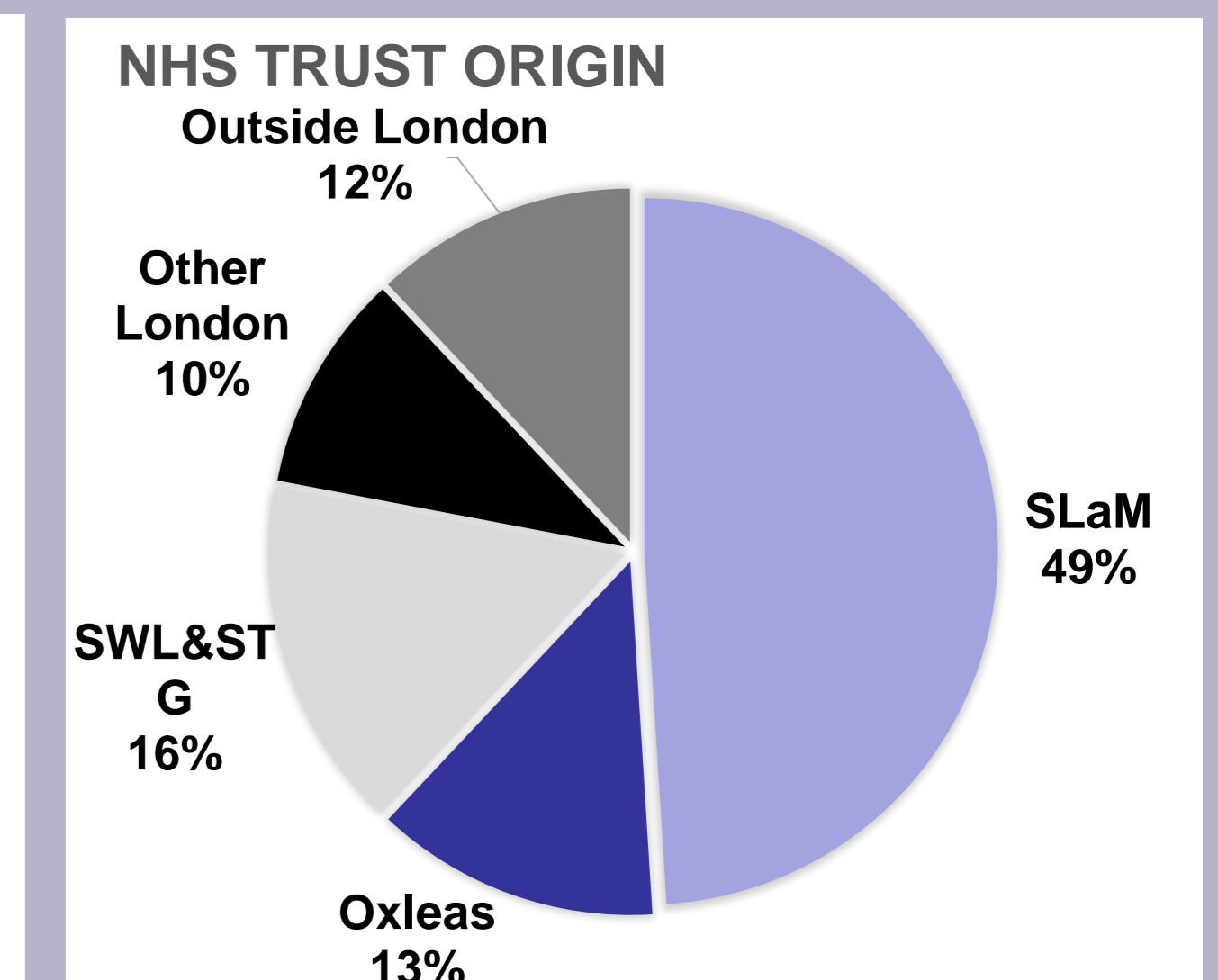
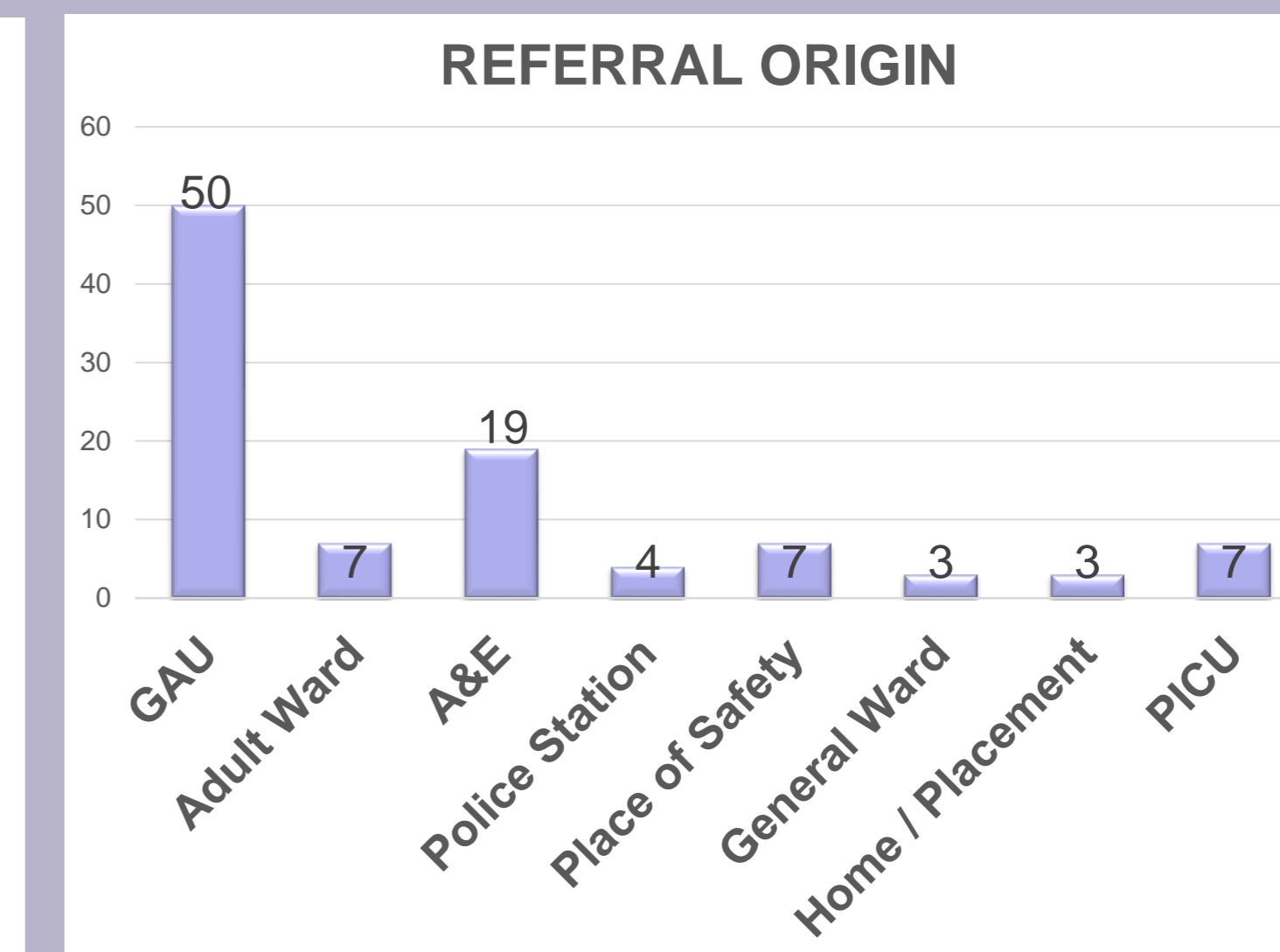
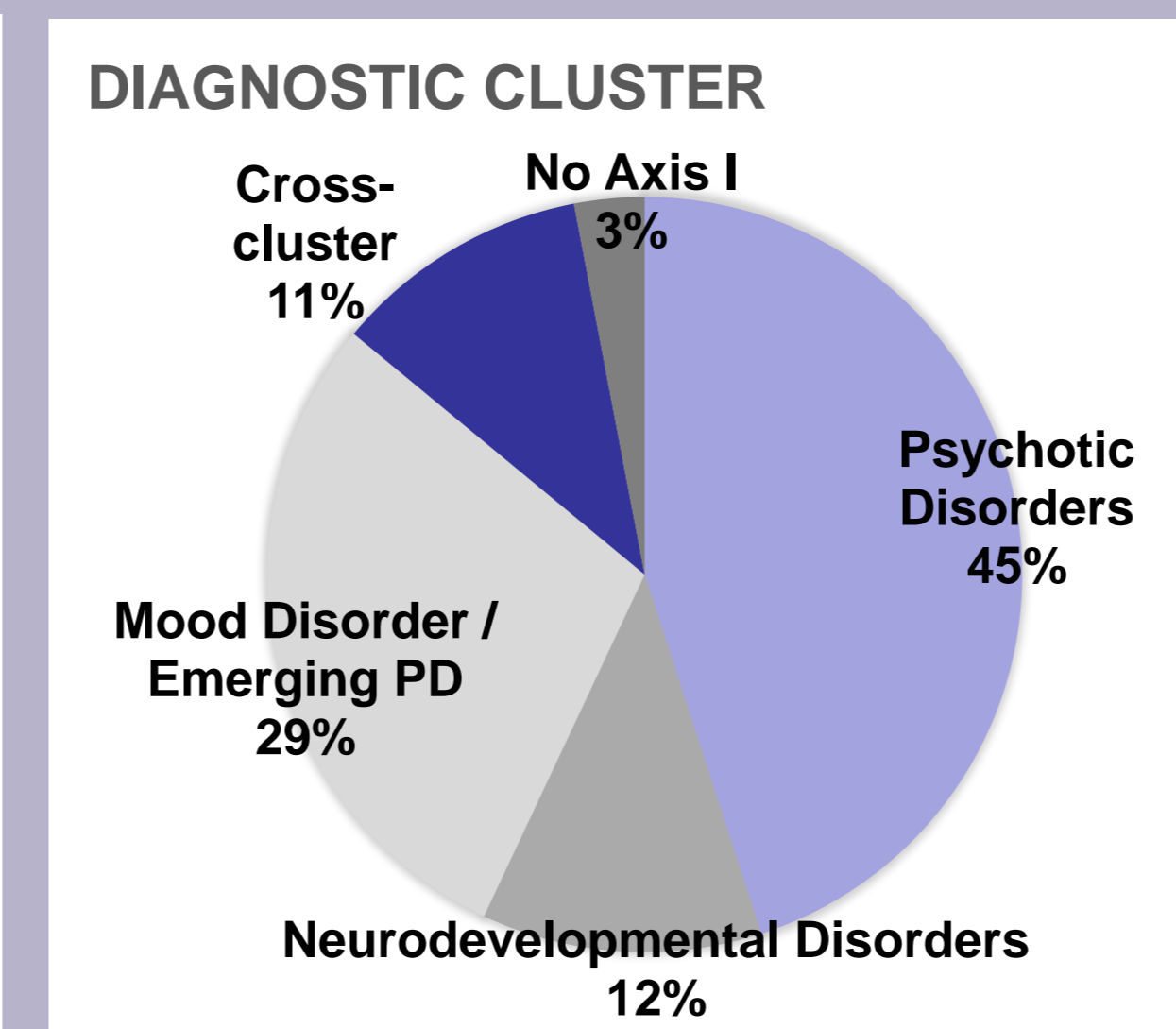
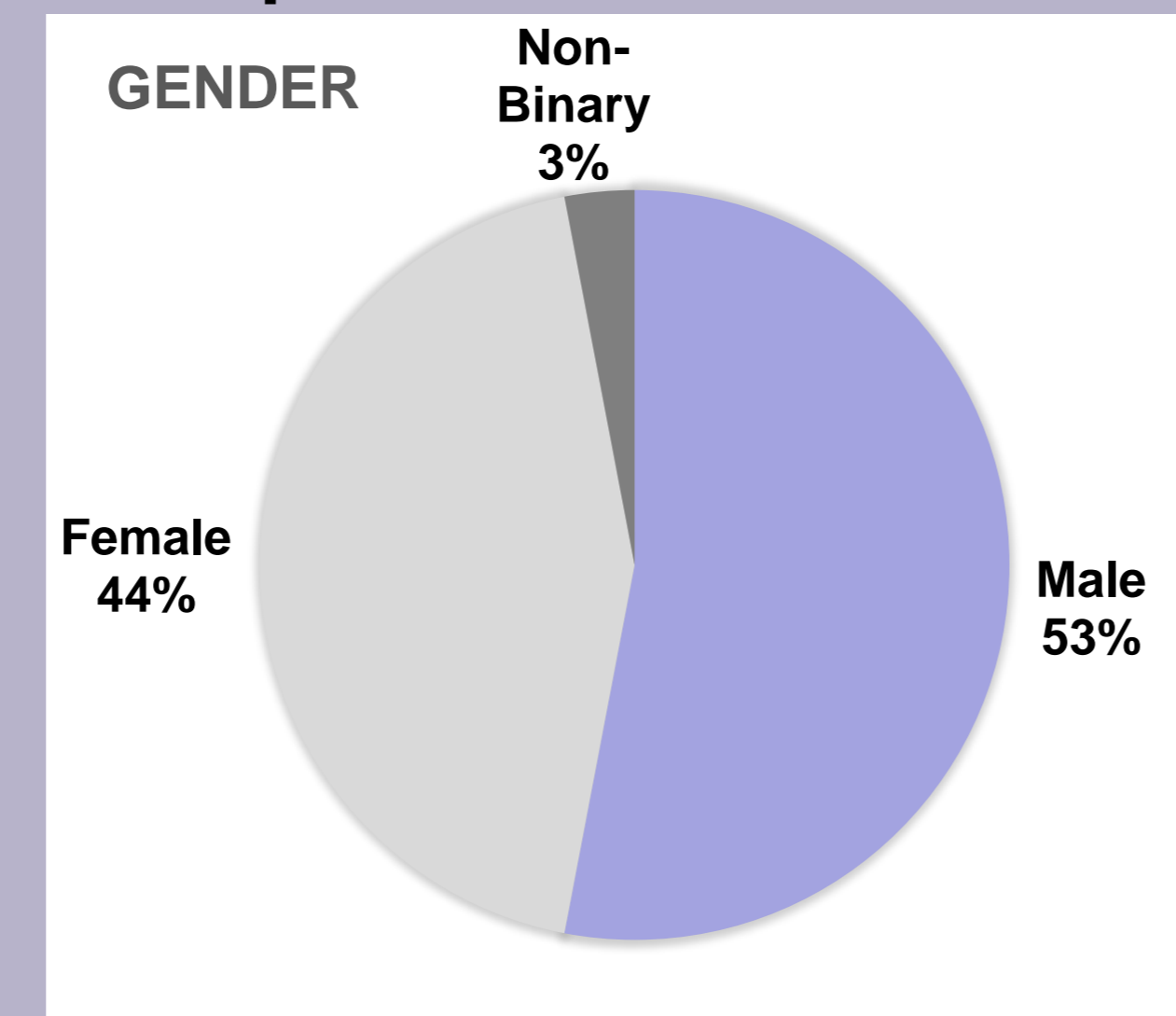
METHODS

The first 100 admissions covered the period between April 2018 to February 2021. Using a combination of existing record keeping and manually searching SLaM electronic records (ePJS), we extracted the following data: Age on Admission (calculated using Date of Admission and Date of Birth), Gender, Ethnicity, Diagnosis, Length of Stay, Origin of Referral, Discharge Destination, Trust and LAC Status. We then grouped diagnoses into the following clusters: 1. Psychotic Illnesses, 2. Neurodevelopmental Disorders, 3. Mood and Emerging Personality Disorders, 4. Cross-cluster, and 5. No Axis 1 Diagnosis.

Analysis was then performed using the IBM SPSS Statistics software, version 26.0. We ran descriptive, bivariate correlation and linear regression analysis. The relationships between (i) length of stay and diagnostic cluster, (ii) length of stay and LAC status, (iii) length of stay and ethnicity, (iv) length of stay and gender, and (v) ethnicity and diagnostic cluster were analysed using Spearman's correlation coefficient and linear logistic regression model, adjusting for gender and ethnicity.

RESULTS

Descriptive Statistics:



The mean age on admission was 16.14.
The mean length of stay was 47.88 days, and the median length of stay was 27 days.

Regression and Correlation Analysis:

1. Female gender was associated with a shorter admission.
2. Male gender was associated with a longer admission.
3. Mixed race ethnicity was associated with a longer admission.
4. White ethnicity was associated with a longer admission and with psychotic illness.
5. We did not find a significant association between LAC status and length of stay, or diagnostic cluster and length of stay.

	CORRELATION	P VALUE	LINEAR REGRESSION	P VALUE
LoS and Diagnostic Cluster	0.067	0.506	-0.140	0.889
LoS and LAC Status	-0.159	0.113	0.914	0.363
LoS and Ethnicity	0.215*	0.032	2.701*	0.008
LoS and White Ethnicity	0.191	0.057	2.159*	0.033
LoS and Mixed Race	-0.167	0.096	-2.478*	0.015
LoS and Gender	0.267*	0.007	2.082	0.040
LoS and Females	-0.244*	0.014	-2.492*	0.014
LoS and Males	0.236*	0.018	2.407*	0.018
Ethnicity and Diagnostic Cluster	-0.260*	0.009	-2.249*	0.027

CONCLUSIONS

Based on the data collected thus far, certain groups were represented in a higher proportion than others: males (53%), black ethnic group (48%), psychotic illnesses (45%), admissions from GAU (50%), discharges to GAU (39%), SLaM origin (49%), and non-LAC (81%). Psychotic illnesses (45%) are over-represented in BAPICU admissions when compared with only 4% of children in CAMHS units overall (Children's Commissioner Report 2020).

The overall average length of stay on BAPICU was shorter than the national average from 2019/2020: 47.88 days, with a median of 27 days for BAPICU, compared with an average of 90 days, with a median of 59.50 days for CAMHS PICUs nationwide (Children's Commissioner Report 2020).

Predictors of BAPICU length of stay were namely gender and ethnicity, whilst LAC status and diagnostic cluster did not correlate with length of stay. There are further complexities to consider such as treatment resistance, overall length of stay in hospital, and delayed discharge status due to bed or placement availability. Further study of CAMHS PICUs nationwide can help further our understanding of admission patterns.