ELECTRONIC DATA REGISTRY TO HELP INFORM THE EMERGENCY DEPARTMENT ON KEY PERFORMANCE INDICATORS

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VANUATU 2ND HEALTH RESEARCH SYMPOSIUM
Holiday Inn, Port Vila
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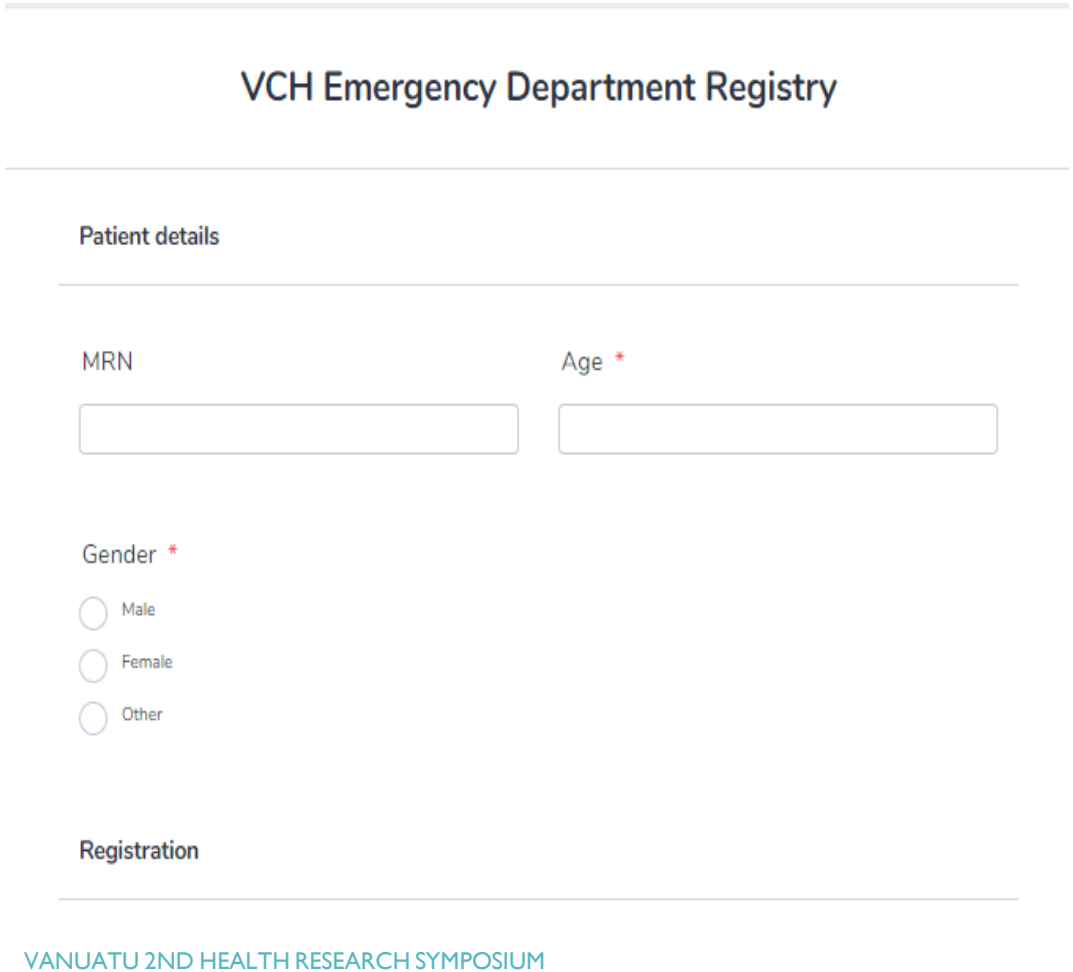
INTRODUCTION

- Key Performance Indicators an essential tool to assess patient safety satisfaction
- Provides objective information on crucial aspects of treating patients
- electronic registry system was implemented in Vila Central Emergency Department

METHODS

- In 2021 an electronic data registry was implemented in which patient information including demographics, presenting complaint, timeline of stay in the Emergency Department, diagnosis and interventions performed. It also provided data on Health surveillance including communicable, non-communicable diseases and research conditions. Data

METHODS



VCH Emergency Department Registry

Patient details

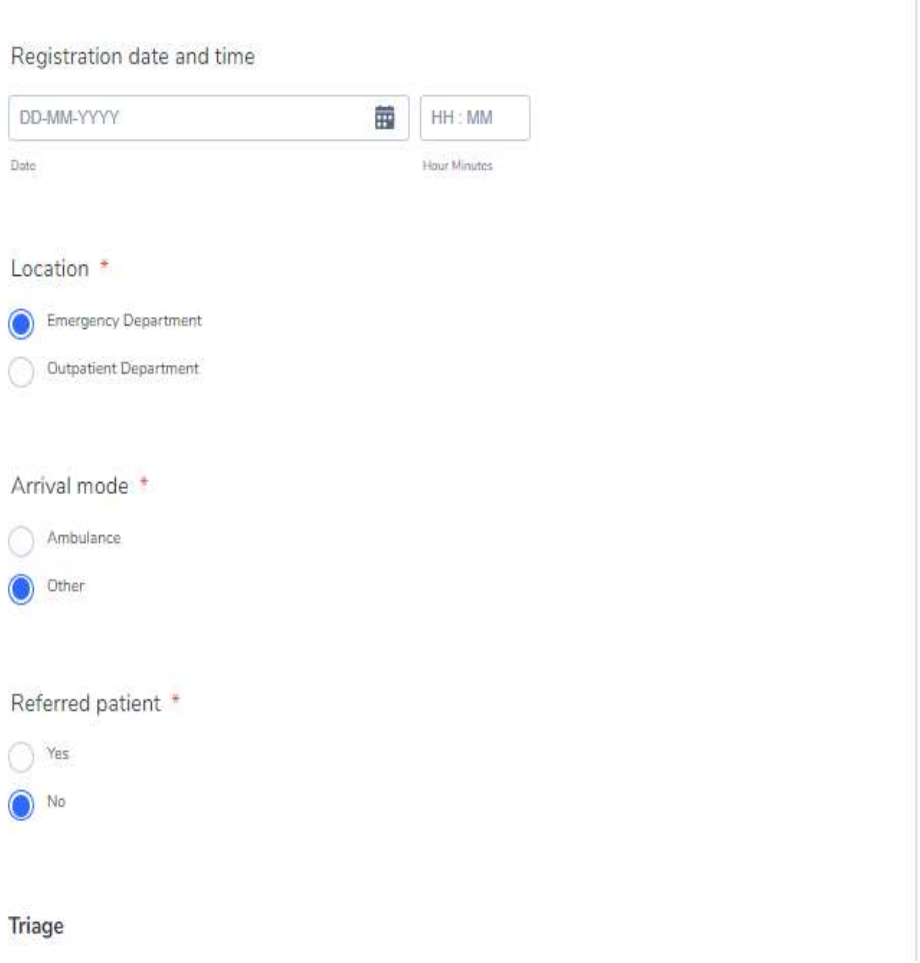
MRN

Age *

Gender *

- Male
- Female
- Other

Registration



Registration date and time

DD-MM-YYYY

HH : MM

Date

Hour Minutes

Location *

- Emergency Department
- Outpatient Department

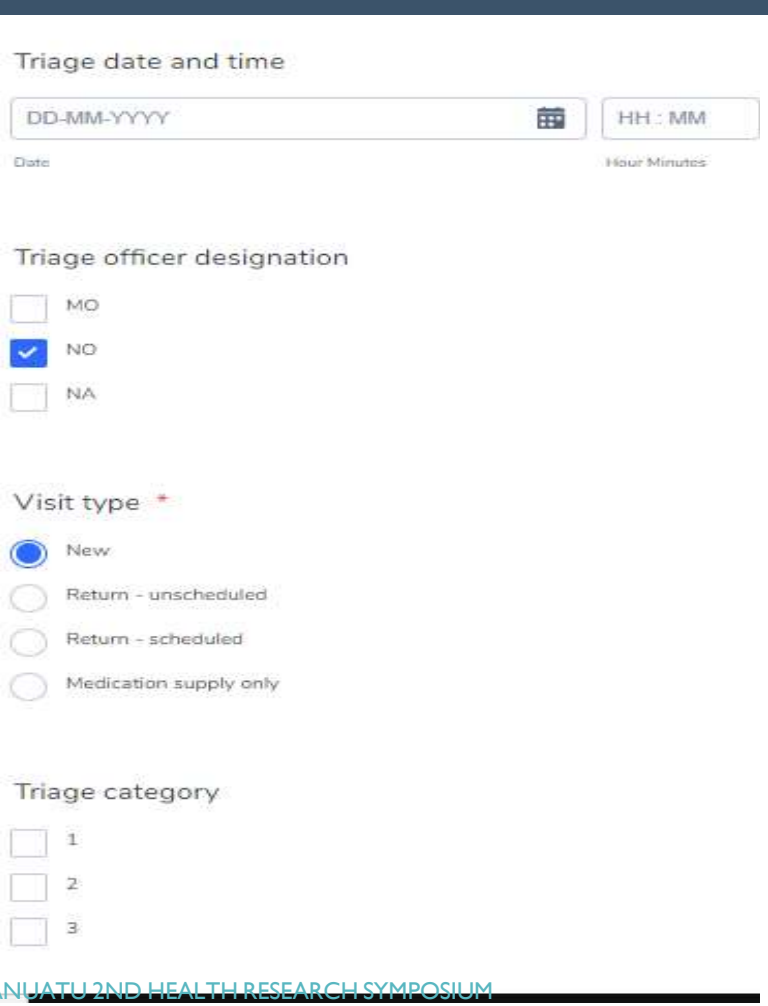
Arrival mode *

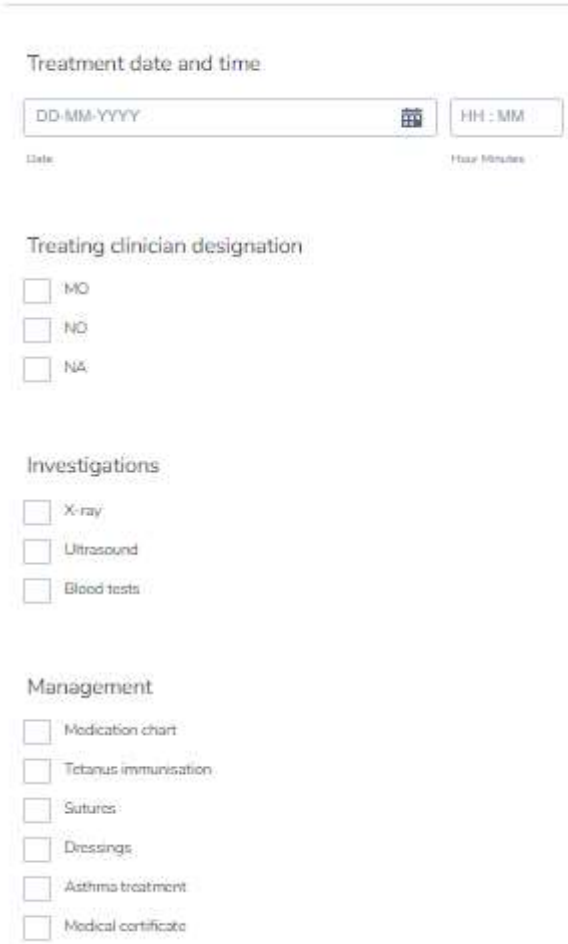
- Ambulance
- Other

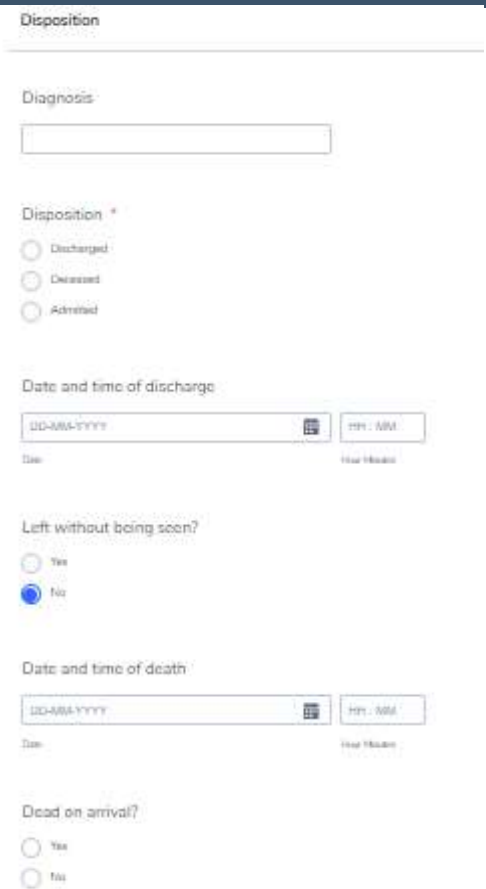
Referred patient *

- Yes
- No

Triage


Triage date and time
DD-MM-YYYY
HH : MM
Date
Hour Minutes
Triage officer designation
MO
NO
NA
Visit type *
New
Return - unscheduled
Return - scheduled
Medication supply only
Triage category
1
2
3


Treatment date and time
DD-MM-YYYY
HH : MM
Date
Hour Minutes
Treating clinician designation
MO
NO
NA
Investigations
X-ray
Ultrasound
Blood tests
Management
Medication chart
Tetanus immunisation
Sutures
Dressings
Asthma treatment
Medical certificate


Disposition
Diagnosis
Disposition *
Discharged
Deceased
Admitted
Date and time of discharge
Left without being seen?
Yes
No
Date and time of death
Dead on arrival?
Yes
No

Date and time of referral

Team

- Medicine
- Surgery
- O&G
- Paediatrics
- Other

Date and time of transfer to ward/discharge

Ward

- ICU
- Medical
- Surgical
- O&G
- Paediatric
- Other

Surveillance

Communicable

- Acute fever and rash
- Prolonged fever
- Influenza-like illness
- Watery diarrhoea
- Dengue/Zika/Chikungunya-like illness
- Acute jaundice
- Acute fever and neurological
- Ciguatera fish poisoning
- Acute flaccid paralysis
- Neonatal tetanus
- Diptheria
- Pertussis

Non-communicable

- Motor vehicle accident
- Work-related injury
- Other trauma
- Self harm
- Domestic violence
- AMI/Stroke
- Diabetes complications
- Asthma
- COPD

Research

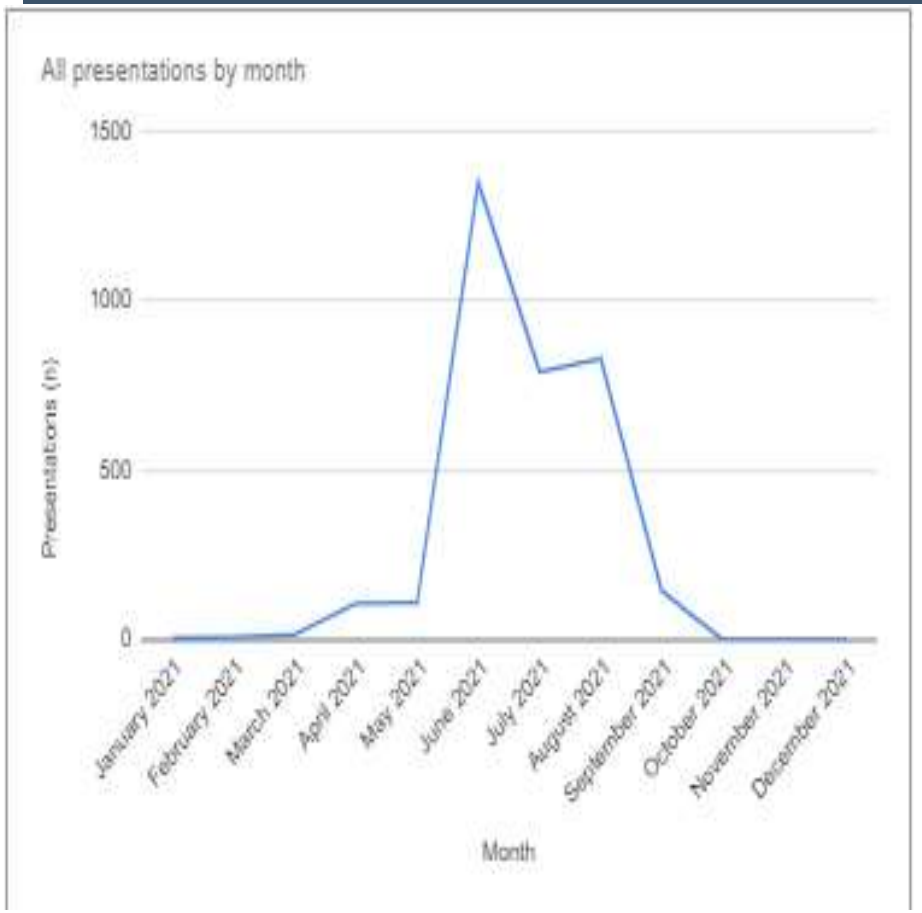
Research conditions

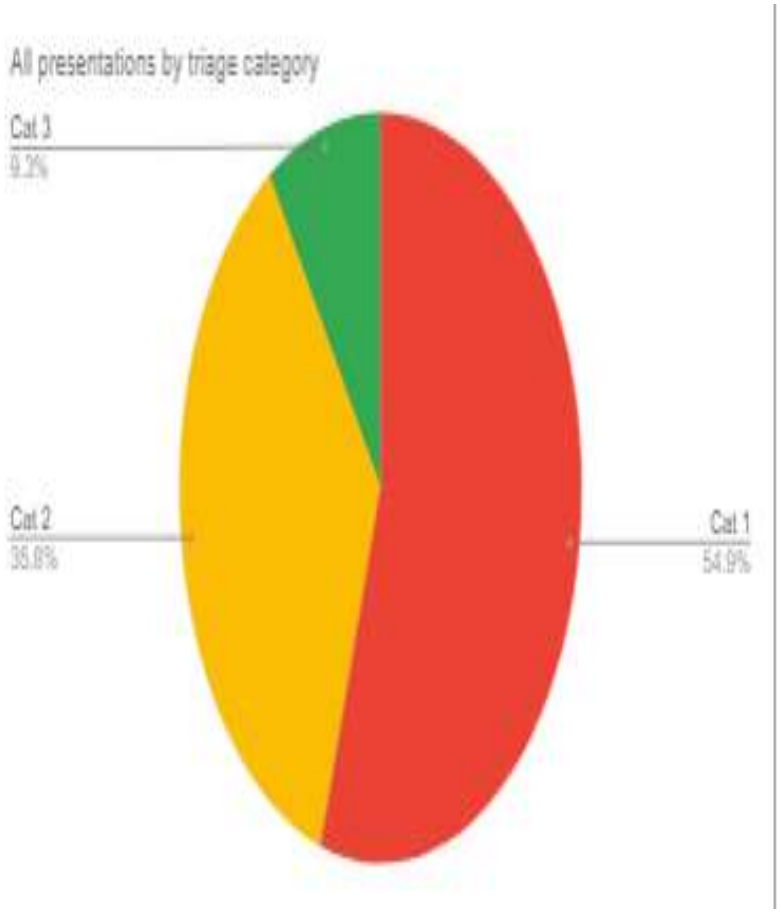
- Severe trauma
- Severe head injury
- Ruptured ectopic
- Septic shock
- AMI
- Severe asthma/COPD/PNA
- Acute bacterial meningitis
- Acute surgical abdomen

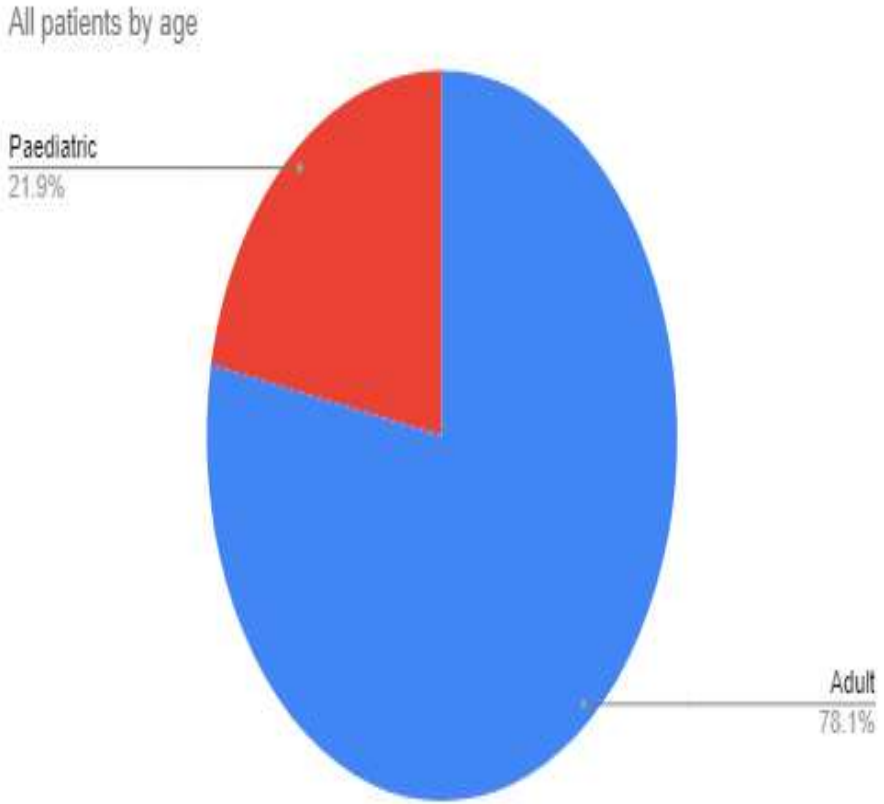
RESULTS

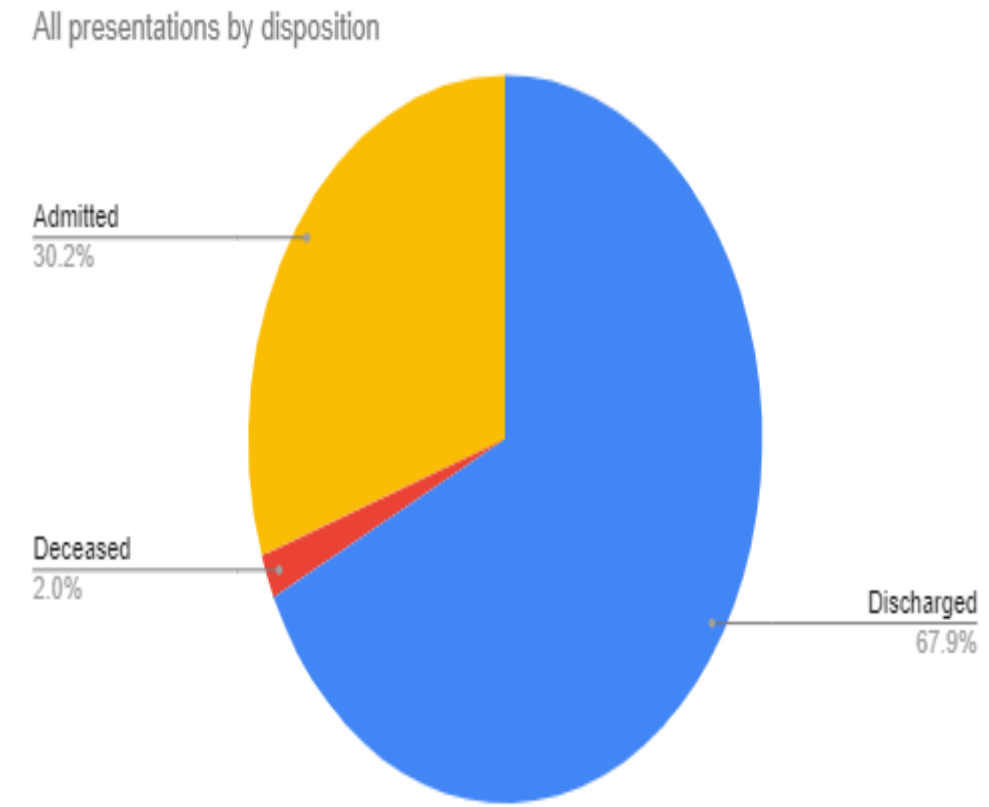
- Retrospective analysis of the data registry has provided key information which we have been able to use to improve data surveillance, monitor important public health conditions, improve patient safety, and implement innovative treatment models and identify gaps in our health care delivery. By the end of our retrospective analysis of the data we aim to identify crucial health trends amongst the Vanuatu population presenting to the Emergency Department at Vila Central Hospital.

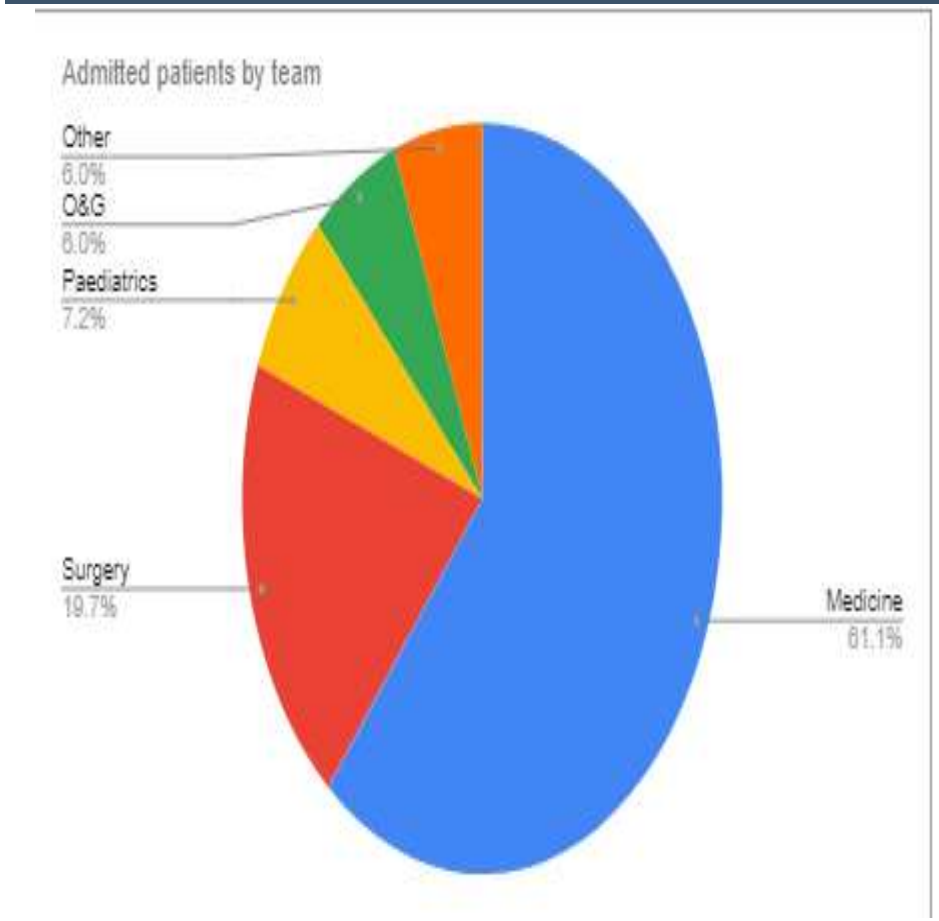
RESULTS

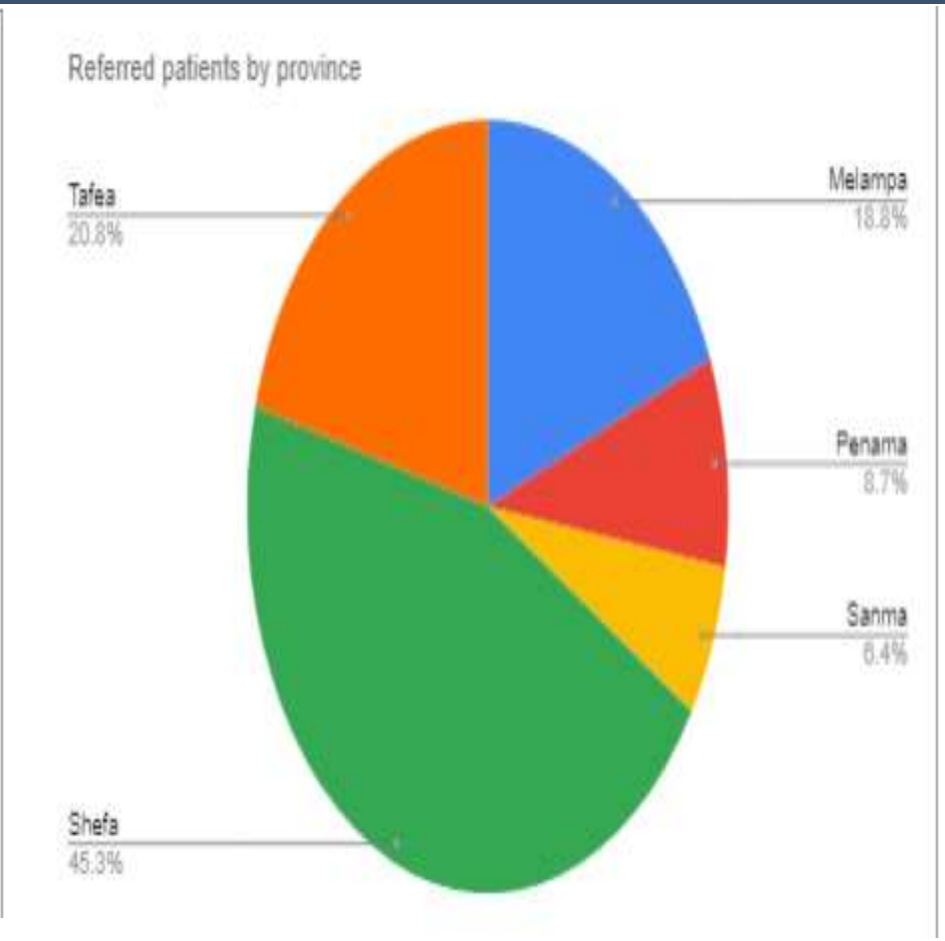

All presentations by month
1500
1000
500
0
Presentations (n)
January 2021
February 2021
March 2021
April 2021
May 2021
June 2021
July 2021
August 2021
September 2021
October 2021
November 2021
December 2021
Month

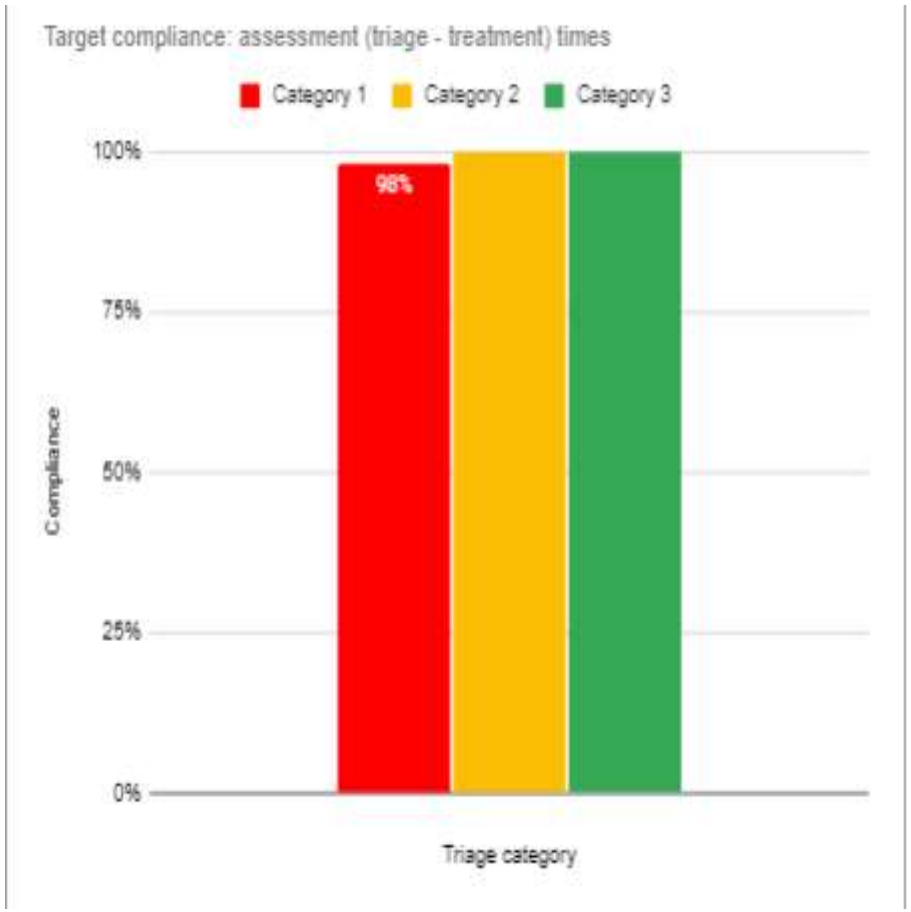

All presentations by triage category
Cat 3
9.2%
Cat 2
35.8%
Cat 1
54.9%

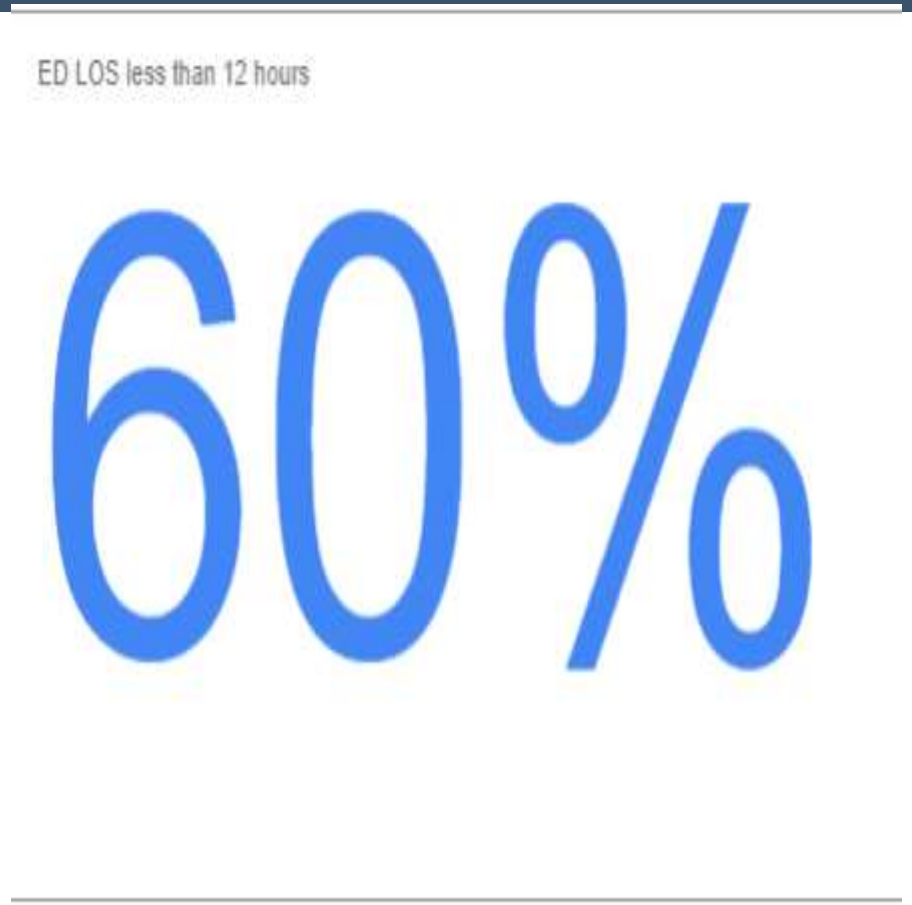

All patients by age
Paediatric
21.9%
Adult
78.1%


All presentations by disposition
Admitted
30.2%
Deceased
2.0%
Discharged
67.9%


Admitted patients by team
Other
6.0%
O&G
6.0%
Paediatrics
7.2%
Surgery
19.7%
Medicine
61.1%


Referred patients by province
Tafea
20.8%
Melampa
18.8%
Penama
8.7%
Sanma
6.4%
Shefa
45.3%


Target compliance: assessment (triage - treatment) times
Category 1
Category 2
Category 3
100%
75%
50%
25%
0%
98%
Compliance
Triage category


ED LOS less than 12 hours
60%

DISCUSSION

- The electronic data registry is the first of its kind in Vanuatu Emergency Departments which allows us to improve the delivery of health care to patients, identify important trends in public health conditions, evaluate our effectiveness and enable us to compare our standards to global emergency departments using objective measurements.

RECOMMENDATIONS / IMPLICATIONS

- Implement a permanent data registry
- Utilize data registry to analyze KPI annually
- Employ permanent staffs for data registry
- Use key performance indicators to monitor progress of hospital

ACKNOWLEDGEMENTS

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