THE IMPACT OF THE IMPALA MONITORING SYSTEM VERSUS USUAL CARE ON CHILD MORTALITY ON THE PEDIATRIC WARD IN MALAWI

EDCTP
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IMPALA

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Background:

- Paediatric in-hospital mortality remains unacceptably high in Malawi and other low-resource settings [1].
- Children admitted to the high-dependency unit are especially vulnerable to serious outcomes from clinical deterioration and death.
- Continuous monitoring may improve mortality outcomes by enabling earlier interventions.

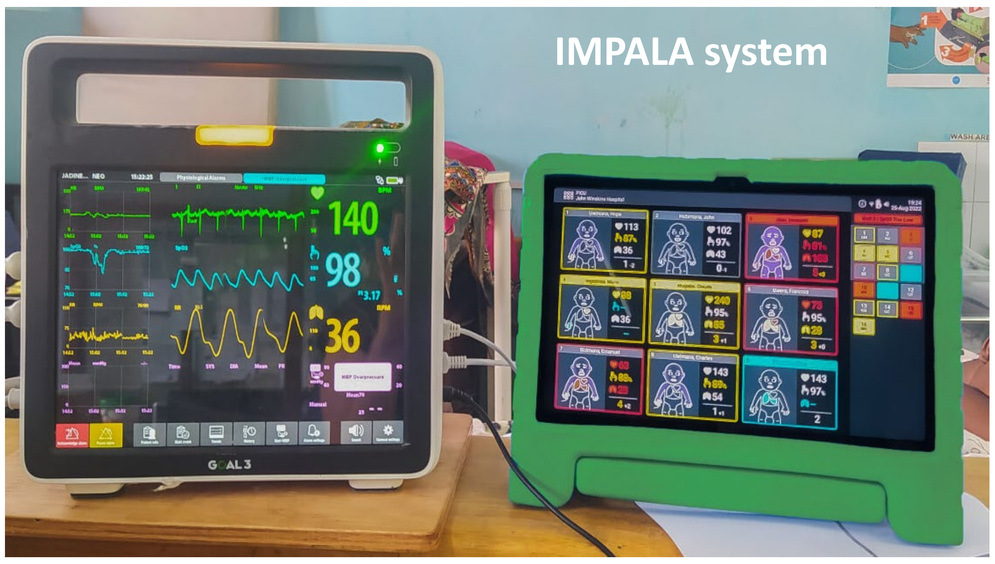
Study objectives:

1 IMPACT MORTALITY? To **assess the impact** of a locally tailored automated digital monitoring system – IMPALA – on mortality in hospitalized children compared to usual care – manual monitoring – in Malawi.

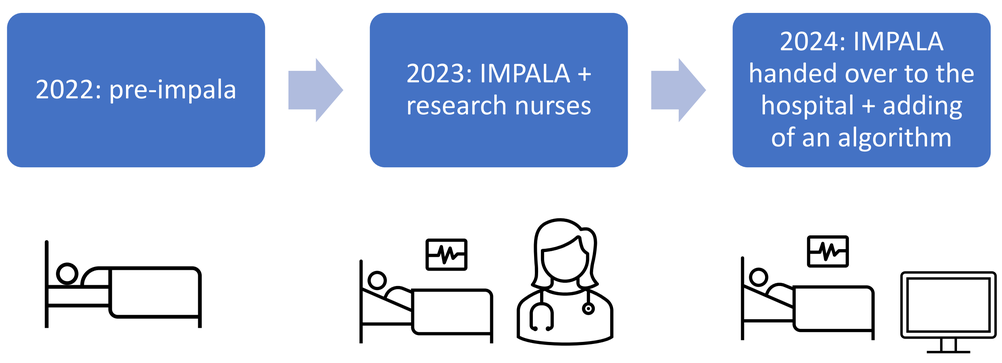
2 DISEASE CATEGORIES IMPACT? To understand **which patient groups benefit most** from the intervention

3 WHY? To understand **how monitoring may affect treatment**

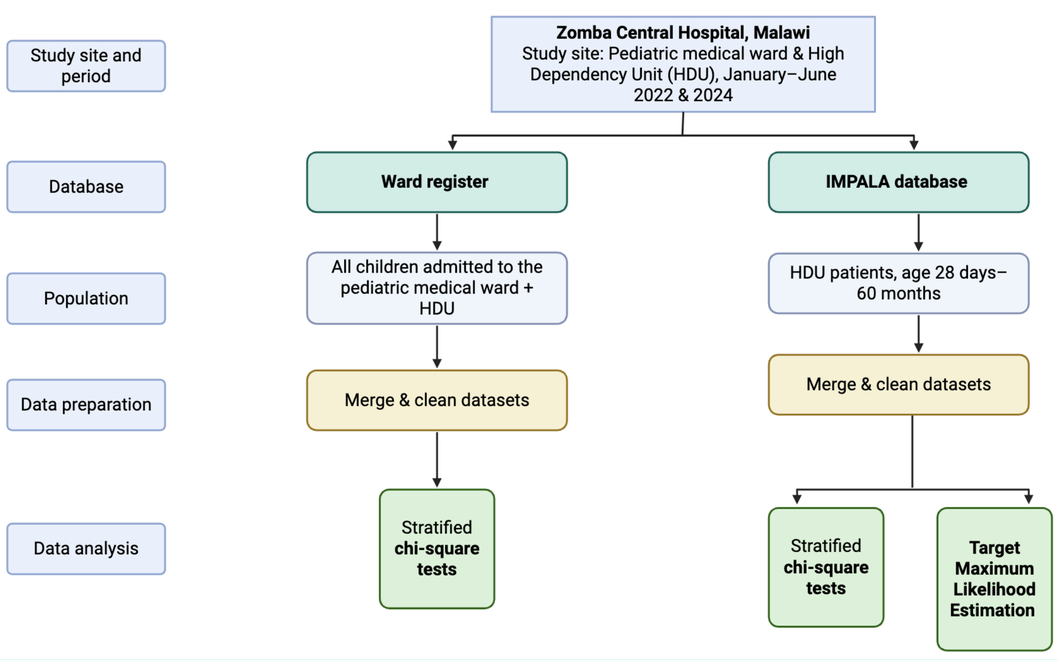
Methods:



Study timeline



Data & Analyses

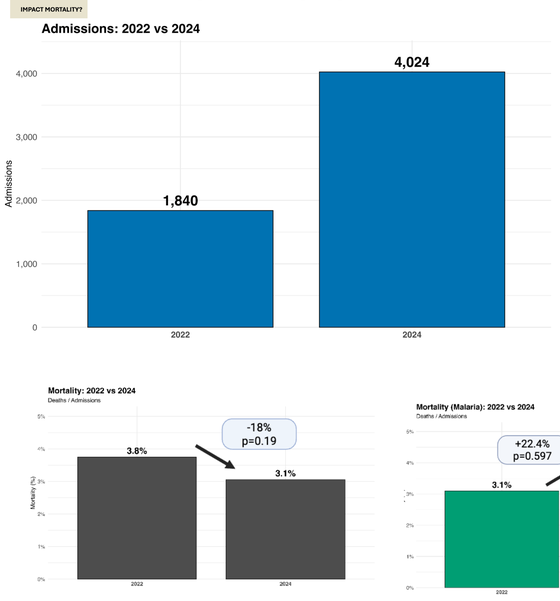


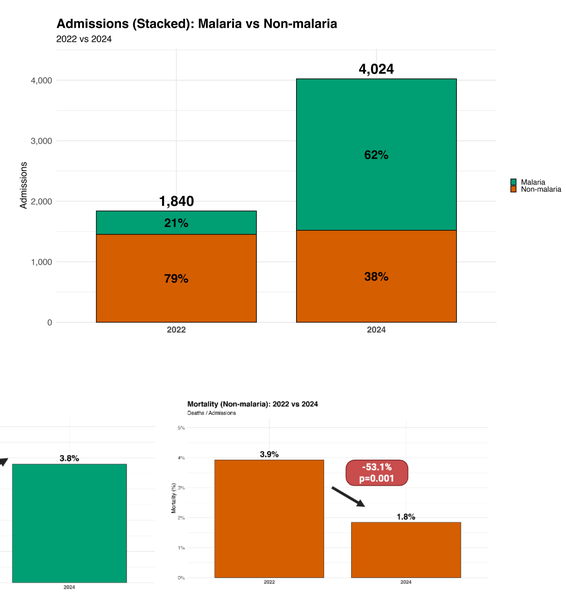
More information:

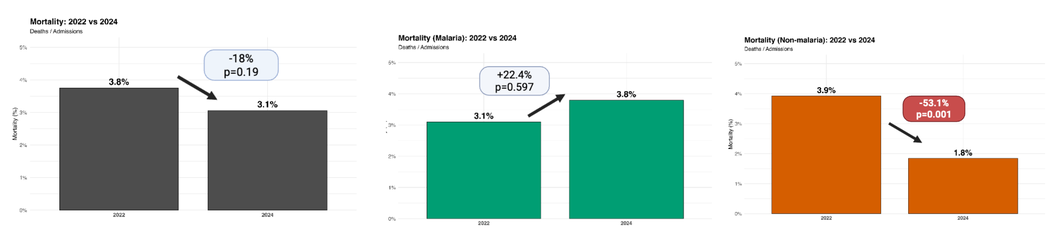
PAEDIATRIC DAYS AMMAN 2025

Results:

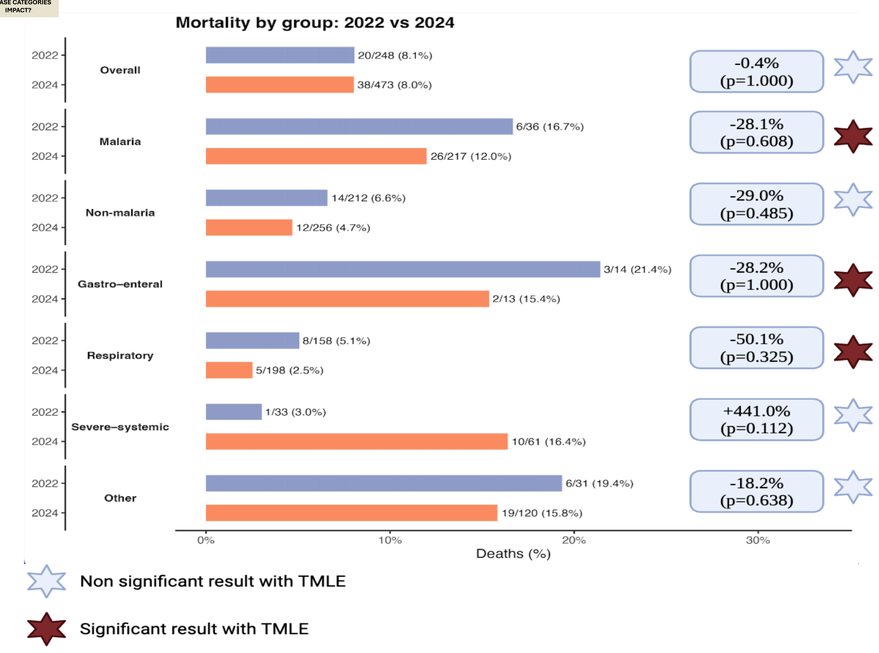
1 IMPACT MORTALITY? IMPACT - ward



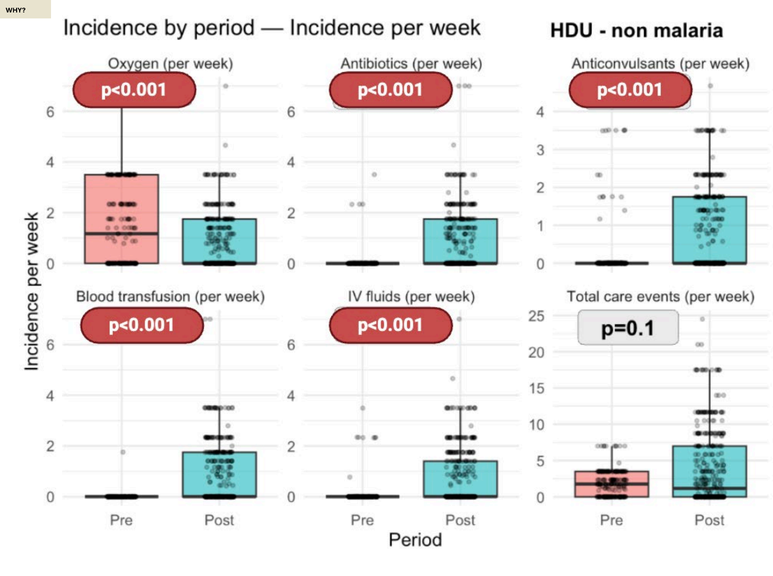




2 DISEASE CATEGORIES IMPACT? WHICH PATIENTS - HDU



3 WHY? WHICH TREATMENTS - HDU



Conclusion:

1 IMPACT MORTALITY? **Overall ward:** after correcting for malaria: **53% reduction** in mortality (significant)

2 DISEASE CATEGORIES IMPACT? After adjusting for severity (TMLE, HDU) significant mortality reductions in: **Malaria** cases, **respiratory** cases and **gastro-enteritis** cases

3 WHY? Ealier initiation of **antimalarials at admission**, **more frequent use of other treatments** post-IMPALA, decrease of oxygen events

Acknowledgements:

- Patients & Guardians
- IMPALA study team
- Zomba Central Hospital staff