

Supplement to: Critical Care Units in Malawi: A Cross-Sectional Study

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Table S1. Level 1 ICU criteria

	HDUs (n=4)	ICUs (n=4)
Physicians with some experience in critical care available, at least during the day <i>n (%)</i>	0	3 (75%)
Higher nurse to patient ratios for critically ill patients <i>n (%)</i>	4 (100%)	4 (100%)
At least twice daily reassessment of critically ill patients <i>n (%)</i>	2 (50%)	2 (50%)
Pulse oximetry <i>n (%)</i>	2 (50%)	4 (100%)
Cardiac monitoring <i>n (%)</i>	3 (75%)	4 (100%)
Availability of oxygen <i>n (%)</i>	2 (50%)	4 (100%)
Availability of non-invasive ventilation <i>n (%)</i>	0	4 (100%)
Basic quality improvement program [^] <i>n (%)</i>	4 (100%)	2 (50%)
Policy and protocol for transferring patients to higher level of care <i>n (%)</i>	1 (25%)	0
Number of criteria met (out of a possible 9) <i>median (range)</i>	4.5 (3 to 6)	6.0 (5 to 7)
Units meeting all Level 1 ICU criteria <i>n (%)</i>	0	0

Criteria adapted from the World Federation of Societies of Intensive and Critical Care Medicine
[^]Defined as any quality improvement project related to the ward within the last 12 months.

Table S2. Infrastructure, equipment, and diagnostics

	HDUs (n=4)	ICUs (n=4)
Infrastructure		
Running water <i>n</i> (%)	3 (75%)	4 (100%)
Electricity <i>n</i> (%)	2 (50%)	4 (100%)
Staff work area <i>n</i> (%)	0	0
Toilet for patient and staff <i>n</i> (%)	2 (50%)	4 (100%)
Storage space (including substances) <i>n</i> (%)	3 (75%)	4 (100%)
Crash trolley or code cart <i>n</i> (%)	2 (50%)	4 (100%)
Oxygen sources		
Central piped system <i>n</i> (%)	1 (25%)	1 (25%)
Concentrator stored on unit <i>n</i> (%)	2 (50%)	3 (75%)
Tanks stored on unit <i>n</i> (%)	2 (50%)	4 (100%)
Call for tank from central location if needed <i>n</i> (%)	2 (50%)	4 (100%)
Call for concentrator from central location if needed <i>n</i> (%)	2 (50%)	4 (100%)
None <i>n</i> (%)	2 (50%)	0
Diagnostics and monitoring		
Full blood count <i>n</i> (%)	4 (100%)	4 (100%)
Glucose <i>n</i> (%)	3 (75%)	4 (100%)
Electrolytes <i>n</i> (%)	2 (50%)	2 (50%)
Blood urea nitrogen and creatinine <i>n</i> (%)	2 (50%)	4 (100%)
Lipase <i>n</i> (%)	0	0
Coagulation profile (PT/PTT, INR) <i>n</i> (%)	0	0
Cross matching for blood and blood products <i>n</i> (%)	4 (100%)	4 (100%)
Cardiac marker (e.g., troponin) <i>n</i> (%)	0	0
Arterial blood gas <i>n</i> (%)	0	1 (25%)
Perform and interpret electrocardiogram <i>n</i> (%)	2 (50%)	4 (100%)
Perform and interpret point of care ultrasound <i>n</i> (%)	2 (50%)	3 (75%)
Stationary x-ray <i>n</i> (%)	4 (100%)	3 (75%)
Portable x-ray <i>n</i> (%)	1 (25%)	2 (50%)
CT scan <i>n</i> (%)	0	1 (25%)

Table S3. Practice patterns and clinical protocols

	HDUs (n=4)	ICUs (n=4)
Formal written policy outlining criteria for admission to unit <i>n</i> (%)	4 (100%)	2 (50%)
Formal written policy outlining criteria for discharge from unit <i>n</i> (%)	2 (50%)	3 (75%)
Frequency (in hours) of observations for patients <i>median (range)</i>	1.2 (1 to 2)	2.0 (1 to 2)
Frequency (in hours) of vital signs <i>median (range)</i>	1.3 (1 to 2)	2.0 (2 to 2)
Nurse can initiate treatment in response to clinical change <i>n</i> (%)	4 (100%)	4 (100%)
Protocols		
Volume resuscitation <i>n</i> (%)	1 (25%)	3 (75%)
Asthma treatment <i>n</i> (%)	2 (50%)	2 (50%)
Pneumonia treatment <i>n</i> (%)	2 (50%)	2 (50%)
Sepsis treatment <i>n</i> (%)	3 (75%)	3 (75%)
Diabetic ketoacidosis <i>n</i> (%)	3 (75%)	2 (50%)
Infection control <i>n</i> (%)	3 (75%)	3 (75%)
Managing hazardous exposures (including designated decontamination area) <i>n</i> (%)	4 (100%)	2 (50%)
Containment and disposal of sharps and biomedical waste <i>n</i> (%)	4 (100%)	3 (75%)
Protocol for post exposure prophylaxis for healthcare workers <i>n</i> (%)	3 (75%)	3 (75%)
Hand-over protocols when transferring patients from one care provider to another <i>n</i> (%)	2 (50%)	3 (75%)
End-of-life care <i>n</i> (%)	2 (50%)	0
Monitoring of nosocomial infections and antimicrobial resistance patterns <i>n</i> (%)	0	0