



Issue: Monitor - Defibrillator specifications

Raised by: Remote Health Capital Equipment Group and other individuals.

Background: A varied range of monitoring and/or defibrillation equipment currently exists in RHB health centres. This equipment is considered part of [standard clinical equipment](#) for all staffed RHB health centres, and it would be beneficial to establish an ongoing procurement contract to ensure consistency and ease of replacement purchases, where needed. Best Practice Group has been requested to recommend specifications for tender purposes.

The majority of existing monitor/defib units in Remote Health are Zoll M or E Series, with a number of different Heartstart, Heartstream and Lifepak SAED/AED units in other sites.

There are also a number of simpler patient monitoring devices in some sites. The Phillips SureSigns Patient monitor is the predominant unit of this type and is currently present in all Top End health centres.

Discussion: Discussion* regarding components considered essential / not essential elicited the following:

Essential

- Non-invasive blood pressure
- SpO₂ monitoring
- Continuous cardiac monitoring
- SAE Defibrillation
(potential to not be combined with monitoring unit)
- Event recording (preferably downloadable)

NOT Essential ~ (and primary rationale)

- 12 lead ECG (relative cost for this module)
- pacing ability (training needs, ensuing care responsibilities)
- temperature (cost versus simplicity of options)
- invasive monitoring

Beyond the basic specification to be put to tender, appropriately weighted consideration for tender assessment should also include:

- Battery life / life of the battery while in use (including back up options and the use of optional power sources eg vehicle cigarette lighter sockets)
- Simplicity of patient connections (eg wireless connection or retractable leads)
- Robust, light weight and dust proof
- Compatibility with retrieval service equipment
- Intuitive / simple user interface
- Ability to lock configuration and compliance with Australian Resuscitation Council standards
- Service / maintenance requirements and level of support offered
- Training (provider sponsored, clear self directed learning, etc.)
- Life and cost of consumables

While standardisation of monitor/defib equipment availability in all health centres remains, simpler patient monitoring devices are also recommended for sites with larger staff complements. This equipment promotes the more comprehensive device being available for emergencies, with the simpler units absorbing the heavier levels of daily use. However, use of the simpler units should not lead to reduced competence with other equipment.

While it is recognised that capital equipment purchasing is subject to finite funding, the following table offers a guide to an appropriate and equitable distribution of equipment.

Site:	Category 1	Category 2	Category 3A	Category 3B
Monitor / SAED (eg Zoll type)	1	1	1	1
Stand alone SAED / AED (eg Heartstart)	+/- 1	-	-	-
Patient Monitor (eg existing Phillips type)	2	1	1	-

Consultation: Aerial Medical Service, RFDS, Dr Colin Meyers (RDH Retrieval)

Outcome: Recommendation to apply discussion outcomes as above.

* It is not possible to detail all rationale in this communiqué: more detail can be provided by the Best Practice Group on request.

~ It is acknowledged that modules considered **not** essential may be debated, as each have potential value. Decisions are based on cost, context and risk management.