

SmartPump 300 Infusion System Evaluation

Name of product:	SmartPump 300 Infusion System
Supplier:	MedTech Innovation Ltd
Type of trial:	Full patient trial
Trial length:	6 months
Trial dates:	January – June 2023
Trial ward/department:	Critical Care Unit, St James' University Hospital
Number of units/patients:	24 pumps deployed
Clinical lead for the trial:	Sarah Mitchell

Final scores:

	Criteria	Score out of 5:	Notes
1	Ease of setup	3	Setup process is average; the initial programming steps in the software configuration are non-intuitive, which led to minor delays in the first cases.
2	Ease of use	3	The interface is moderately complex. Staff found the integration with the Electronic Medical Record to be clunky, requiring too many confirmation screens.
3	Patient comfort	4	Patients find the pump quiet and minimally disruptive. The compact design and integrated handle made the pump easy to carry when patients were in transit.
4	Maintenance	2	Maintaining the required IT infrastructure for the drug library and EMR required specialist staff. Frequent software updates were time-consuming, necessitating device downtime and using a significant amount of Biomedical Engineering and IT resources.
5	Safety	5	The inbuilt Dose Error Reduction System accurately logged and flagged every attempt to program a dose outside of the defined limits.
6	Reliability	5	The pump maintained a secure wireless connection to the network and EMR throughout the whole the trial period. Battery life was excellent, consistently exceeding the 6-hour minimum for transport.

Other notes:

While the Dose Error Reduction System is excellent, the volume of soft alerts led to frustration with clinical staff, especially during shift changes.

The supplier provided adequate training, with a 4-hour session for standard infusions followed by an additional 3-hour session on advanced auto programming features.