

## IV Pump Tester

Accepting the report on the current project and its conclusions another approach is required. This entails revealing exactly what happens to the IV pumps and what is required by the EBME departments

**How are the pumps actually used ?.**

**Is there a range of test requirements ?.**

**What do the EBME's actually require ?.**

1		<b>How are the pumps actually used</b>	<b>Yes</b>	<b>No</b>
a		<b>Does the pump stay with one patient for a long time (12+months)</b>		
	i	Is there a need to check it during this time		
	ii	Is it returned for service after 12 months		
b		<b>Is the pump used by more than one (1) patient in twelve months</b>		
	i	Is it fully serviced by manufacturer between patients		
	ii	Is it checked for calibration between patients		
	iii	Is it a quick minimum check		
	iv	Check Flow rates      How many points		
	v	Check torque		
	vi	Visual check for damage		
c		<b>Annual check</b>		
	i	Does every pump require a mandatory return to manufacturer annually		
	ii	Is a calibration certificate by the manufacturer required		
	iii	If not is Flow rate checked annually		
	iv	Is Torque checked annually		
	v	Are other checks mandatory		
d		<b>Are there any options on the annual check</b>		
	i	Full return to manufacturer for service & calibration		
	ii	Calibration only		
	Iii	Calibration only after service		
	i	Are there legal implications in calibration		
	Iv	Are there Insurance implications in calibration		
e		<b>What are the requirements for EBME carrying out the calibration</b>		
	i	Are they qualified ( factory trained) to open the case		
	Ii	Can they obtain and replace the labels		
f		<b>Could EBME's carry out simplified tests</b>		

<b>Possible simple tests</b>			
I	Full external tests by removal of battery only and substituting a test block		
Ii	Set pump at chosen rates		
Iii	Start pump		
Iv	Pump run time is computer controlled and gives Pass/Fail signal		
V	Fit syringe full of water and check volume over the time period		
Vi	Replace syringe with a weight and check torque		
vii	Pump can be left unattended and checked at various stages indicated by the computer		
viii	The computer can indicate when rate changes are required		
ix	Calibration certificate can be generated by the computer if the pump passes		
X	If fail advise return to manufacture		