

PROCEDURE FOR: Cardiac Output Determination: Bolus Method

POLICY: 1. Bolus Cardiac Output determinations are made by the nurse every four hours, or as ordered, if patient has a Swan-Ganz catheter that does not continuously read cardiac output, or PRN if values obtained with continuous cardiac output (CCO) monitoring are in question. Refer to Hemodynamic Monitoring Protocol.

EQUIPMENT: Bedside Monitor or SvO2 monitor
500 ml D₅W (injectate)
Cardiac Output(C.O.)Injectate Delivery Set
Cardiac output module (for bedside monitor)
Cardiac output thermister & injectate temperature cable

PROCEDURE:

<u>ACTION</u>	<u>POINTS OF EMPHASIS</u>
1. Prepare injectate solution and label with date and time.	1. Bag and tubing are changed every 72 hours. Use room temperature, 10 ml injectate computation constant (posted on door of the cabinet where Swan-Ganz catheters are kept).
2. Connect C.O. delivery set to injectate solution.	
3. Flush system through to rid all air.	
4. Connect C.O. set to the 3-way stopcock on the proximal (RA/blue) port of the Swan-Ganz catheter.	
5. Plug C.O. module into bedside monitor (not required if using SvO2 monitor).	5. Refer to monitor manual for further reference.
6. Attach thermister and injectate temperature cable.	
7. Check computation constant on the bedside monitor and adjust as needed.	7. Computation constant must be set based on catheter size, injectate temperature and volume of injectate. See P.O.E. #1.
8. Push 'Cardiac Output' on cardiac output module or monitor.	
9. Draw up 10 ml of injectate in syringe.	
10. Using either the soft keys on the monitor or on the remote pad, press the 'start' button and follow the directions on when to 'inject'.	
11. Perform 3 to 5 cardiac output	11. May need to only do 3 readings if

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ACTION

POINTS OF EMPHASIS

readings.

values are within ± 10% range.

12. 'Edit' values to obtain average of
the readings performed and
'confirm' to store value.

13. Document cardiac output on
flowsheet.

APPROVAL: ICU Standards Committee
Nursing Standards Committee

EFFECTIVE DATE: 1/80

REVISION DATE: 8/82, 11/85, 2/87, 1/88, 2/90, 1/93, 8/00, 10/03, 10/09