PIRS 2016 - Blood loss

Permission to print:	Yes
Incident type	No Harm Incident
Type of incident:	Management
Catagory	blood loss
Description:	A patient on VV ECMO (legionella) required an additional oxygenator to meet oxygenation requirements. A circuit with 2 oxygenators in parallel was prepared and primed. The patient inflow and outflow lines were clamped and divided at which time the ventilator alarms activated (reason unknown) casing some confusion between the intensivist, nursing and perfusionist on whether the ECMO gas supply was OK (it was). The plan to flush on from the new circuit sequentially to the patient inflow and outflow line was briefly complicated in that the outflow line to the ECMO was simultaneously unclamped and the prime fluid flushed unexpectedly to the patient outfow (via the second oxygenator. The patient inflow connection was completed by backfilling from a syringe. ECMO was recommenced to 6.4LPM but the patient cardiac output dropped requiring initiation of cardiac compressions. It was then noticed that the 1 L priming bag that had about 350ml of crystalloid remaining had filled with blood as from the ECMO circuit as the tap on the prime line has been left open.
Preventive actions	A review team was formed to recommend preventive measures to include ECMO changeout connections to be made using syringe back flushing versus flushing from the circuit (no requirement to have an open connection to a priming bag) and construction of a simple checklist
GOOD CATCH - what went	
Protocol issue	No
Rule issue	Yes
Skill issue	Yes
Team Issue	Yes
Violation	No
Manufacturer advised:	No
Discussed with team:	Yes
Hospital incident filed:	Yes
Ext Authority Advised	No
Procedure acuity:	Emergent
Commentary	