

If you are a team delivering Tier 5 Critical Care services, your site is expected to deliver all of the listed Clinical Services and have all of the listed Clinical Requirements in place

**CLICK HERE** for all SHA information on the **Tiers of Service**



**CLICK HERE** for further information on the **Critical Care** service line, including fillable checklists



Facility/Team Name:

Checklist completed by:

Checklist completed on (date):


### Critical Care - Tier 5 Checklist

Clinical Services	Available here?	Notes / Improvement Measures:
⑤ Provide complex multi-system general critical care for an indefinite period of time		
⑤ Access to some sub-specialties (may be virtual or remote access)		
④ Written care plan reviewed on multi-disciplinary rounds every 24 hours		
④ Written criteria for when escalation of care is required and consideration of transport to a higher tier is necessary		
④ Review and documentation of patient's Goals of Care with each ICU admission and as needed when condition changes.		
④ Processes and equipment to meet patient and family spiritual needs (i.e. virtual communication devices, protocols for accommodating ceremonies, etc)		
⑤ IMV capacity in a minimum of 50%-75% of beds		
⑤ Emergent or planned establishment of tracheostomy		
⑤ Long term IMV weaning - stable ICU patient requiring protocols to wean from ventilator support and multidisciplinary team to manage care		
⑤ Bronchoscopy (includes bedside bronchoscopy)		
④ Tracheostomy care after first trach change		
④ Acute non-invasive ventilation		
④ Stable long-term invasive mechanical ventilation patient waiting for placement other than ICU		

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④ Chest tube insertion, maintenance and removal		
④ Ultrasound guided thoracentesis		
④ High Flow Oxygen Therapy (AIRVO or OptiFlow)		
④ Prone positioning, chest physiotherapy, cough assist		
⑤ Massive Transfusion protocol with capacity to secure the necessary blood products and access to stat lab testing		
④ Sepsis management of unstable patients		
④ Management of infection disease requiring negative pressure room and the ability to ventilate within ventilator bed capacity		
④ Management of diseases requiring a private room for isolation		
⑤ Pulmonary artery catheter monitoring		
⑤ Temporary transvenous pacing		
④ Code Blue for all patient populations (including pediatrics patients to stabilize and transfer) with ACLS level care (defib, cardioversion, transcutaneous pacing)		
④ Post cardiac arrest management, stabilize and transfer to Tier 5 or 6 as required		
④ Arterial and central line insertion and pressure monitoring		
④ Single or multiple vasoactive/inotropic infusions		
④ Unstable angina/arteriosclerotic heart disease with known disease, no new management options required		
④ Temporary transcutaneous pacing		
④ Continuous cardiac monitoring		
④ Intermittent pneumatic compression (calf compressors)		
④ Protocols and pharmaceuticals available for care of STEMI and Non-STEMI with tenecteplase, in consultation with Cardiology		
④ Cooling/warming, targeted temperature management		
⑤ Management of traumatic brain injury requiring increased monitoring due to potential for rapid deterioration		
⑤ Access to intermittent or continuous EEG bedside monitoring, follow up with Neurologist may be virtual/remote		
④ Non-invasive intra-cranial pressure monitoring (i.e. GCS, pupils)		
④ Management of increased ICP with medications in consult with Neurologist		

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④ Non-surgical management of stroke in consult with Neurologist (i.e. administration of tPA)		
④ Train of Four monitoring		
④ IV infusion of paralytic medications		
⑤ TPN- initiate and continue specialty compounding of solutions 7 days per week		
⑤ Intra-abdominal pressure monitoring (bladder)		
⑤ Esophageal tamponade tube insertion and management		
④ Management of DKA/hypoglycemia		
④ Management of diabetes insipidus requiring hourly intake/output monitoring and adjustment of IV fluids/medications		
④ Insulin infusion - ICU protocols		
④ Initiate and manage tube feeding including standardized protocols for nutritional management		
④ Fecal management system		
④ NG/OG insertion in an unconscious patient		
⑤ CRRT		
⑤ Hemodialysis		
④ Nursing to manage established peritoneal dialysis when patient/family are unable to with support from Nephrology and provincial kidney program as needed (support may be virtual)		
⑤ Care of burns requiring specialized wound care		
④ Pressure injury prevention and management, including access to specialty mattresses and pressure relieving devices		
④ Negative Pressure Wound Therapy with support from wound care nurse as required		
⑤ Care of the donor until transport to Tier 6 as appropriate		
⑤ Organ donor transport to Tier 6 as appropriate		
④ Recognition of potential organ or tissue donor, consultation with Organ Donor Coordinators for further assessment		
④ Patient/family support in partnership with the Organ Donor Coordinator (support may be virtual/remote)		
⑤ Care of obstetrical emergencies, stabilize and transfer to Tier 6 (i.e. hypertensive crisis, post-partum hemorrhage)		
④ In units where children may be admitted, provide emergency stabilization and support prior to transfer to JPCH PICU within 24 hours		

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	Available here?	Notes / Improvement Measures:
4 Stabilization and transfer of critically ill or injured obstetrical patients in consult with obstetrician		
5 ICU physician support for code blue, medical emergencies or ICU consultations		
5 Massive Transfusion Protocol support		
4 Rapid Response/Outreach Team support (assessment and management of deteriorating patient on general ward)		
4 Code blue support		
4 Trauma team support		
4 RT escort for mechanically ventilated patients requiring tests/treatments outside ICU, where required		
5 Clinical workload of more than 200 IMV patients per year to maintain clinical expertise. Alternatively, 150 IMV and more than 50 NIV patients per year		
5 At least 30% of patient days with IMV		
5 At least 50% of patient days with arterial line monitoring		
5 At least 25% of patient days with single or multiple vasoactive/inotropic infusions		
5 Annual occupancy rate of 60% or more		
<b>Clinical Requirements</b>		
5 Intensivist Most Responsible Physician Model - all care in the unit directed by Intensivist. May be supported by other physician or learner models.		
5 Clinical Resource Nurse/Clinical Nurse Educator with Critical Care expertise dedicated to the ICU		
5 Continuing Care Aid or Unit Support Worker - 12 hr/day		
5 Unit clerk 12-16 hours per day M-F		
5 RT on site 24/7, participate in rounds daily		
5 PT primary assignment to the ICU available 5 days per week, participate in daily rounds as able		
5 Registered Dietitian participate in round M-F, 1 RD:20 ICU beds		
5 Social Work participate in rounds M-F, available 5 days per week		
Critical Care trained RN - ability to meet 1:1 nurse to patient ratio if care needs require it. Supernumary charge RN.		
4 Minimum 2 RNs present in the unit at all time when a patient is admitted to unit. Local Clinical Nurse Educator/Clinical Resource Nurse and front line Critical Care team in Tier 4 ICUs will have access to Critical Care Outreach Coordinators for educational support		

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④ SLP & OT available 5 days per week, participate in rounds as able/needed		
⑤ TPN- initiate and continue specialty compounding of solutions 7 days per week		
④ Pharmacy dept to provide some pre-mixed medications to the ICU prioritizing high risk medications		
④ Pharmacy technician time - 30 minutes per ICU bed		
④ Pharmacist dedicated to support ICU 7 days per week, on call after hours; 1 Pharmacist FTE:12 ICU beds		
④ Thrombolytic components for tPA or TNK and medications used for massive transfusion protocols (i.e. tranexamic acid)		
④ Automated medication system available to support medication safety (i.e. Pyxis)		
⑤ Markers of heart function or damage: NT-proBNP		
⑤ Blood product supply on site to support Massive Transfusion Protocol		
④ Lab services available 24/7 for ICU support		
④ Metrics of renal function and dehydration: electrolytes, urea, creatinine		
④ Markers of heart function or damage: Troponin		
④ Blood gases		
④ Metrics of coagulation: D-dimers or equivalent		
④ Metrics of inflammation: lactate or procalcitonin		
④ Markers of blood cell status: Hb, WCC, etc		
④ Microbiology: processes in place to support cultures off site		
④ Access to ECG 24/7		
⑤ Portable ultrasound		
⑤ Interventional radiology - i.e. PICC line insertion, insertion of ports, nephrostomy, percutaneous gastrostomy		
⑤ Access to PET services		
⑤ Basic digital subtraction angiography (DSA) suite for interventional services		
⑤ EEG available 5 days per week		
④ Portable x-ray		
④ Ultrasound		

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	Available here?	Notes / Improvement Measures:
4 CT services		
4 Fluoroscopy		
4 Modified barium swallowing		
5 Access to bronchoscope		
5 Temporary transvenous pacing device		
5 EEG monitoring device		
4 Ventilators, intubation supplies, NIV/HFNC devices, suction (including portable for transport of patients outside of ICU)		
4 Cardiac bedside monitors with the ability to support continuous cardiac and hemodynamic monitoring (ART line and CVP), Respiratory measurements such as SpO2 and EtCO2)		
4 Temporary transcutaneous pacing device		
4 Intermittent pneumatic compression devices		
4 Train of Four monitor		
4 Cooling, warming devices		
4 Tube feed pump		
4 Rapid infuser		
4 Pressure relieving devices (specialty mattresses, cushions, boots, etc). Mobility devices. Mechanical percussor/vibration, cough assist machine.		
4 Access to vac dressing pumps		
5 Intra-abdominal pressure monitor		
5 CRRT, hemodialysis devices and supplies		
5 Blood warmer		
4 Virtual communication devices for patient and family. Recliners or other comfortable sitting for visitors.		
4 Computer for each bed plus additional workstations for physicians, charge nurse and unit support staff. A computer on wheels.		
4 Desk for each bed (build in or mobile)		
4 Two bedside tables per bed		
4 Supply cart for each patient room		
5 Requirements for Dialysis hook up for water and drainage supply		

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	Available here?	Notes / Improvement Measures:
④ Commode		
④ Negative pressure room(s) for isolation. Private rooms that allow for isolation precautions		
④ Video monitoring system for patient rooms and doorways		
④ Ceiling tracks and lifts including some with bariatric weight capacity		
④ Oxygen and medical gas outlets available for each side of the bed, and sufficient oxygen and medical gas capacity for facility overall given bed/IMV/NIV capacity		
④ Adequate suction capacity for each patient room - should be available on each side of the bed		
④ 3 - 4 emergency back up power outlets for each bed or if at possible Uninterrupted Power Supply outlets for emergency equipment such as ventilators		
④ Physical space in room that is adequate to perform care		
④ Hand washing capacity within the room or very near by. Adequate ability to dispose of patient blood and body fluids - hoppers, toilets etc		
④ Lighting to suit both task and ambient. Blinds, curtains or electric glass for privacy.		

**Legend:**

- ⑤ Services or requirements expected for teams/facilities providing Tier 5 services
- ④ Services or requirements expected for teams/facilities providing Tier 4 or higher services
- ③ Services or requirements expected for teams/facilities providing Tier 5 or higher services

Director review of completed checklist by:

Date of review:


Notes:

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