

UMMC Recommended Maximum Surgical Blood Order Schedule (MSBOS)

| General Surgery | |
|----------------------------------|--------|
| Adrenalectomy | GXM 2U |
| Appendisectomy | GSH |
| Bowel resection | GXM 3U |
| CVL insertion | GSH |
| Chemoport insertion | GSH |
| Cholecystectomy | GSH |
| Colostomy | GSH |
| Circumcision | GSH |
| Excision ± biopsy (cysts, lumps) | GSH |
| Fistulectomy | GSH |
| Gastrectomy, partial | GXM 2U |
| Gastrectomy, total | GXM 4U |
| Haemorrhoidectomy | GSH |
| Hernia Repair | GSH |
| Hepatectomy | GXM 4U |
| Liver/ renal Biopsy | GSH |
| Laprotomy ± proceed | GXM 2U |
| Mastectomy ± axillary clearance | GSH* |
| Pancreatectomy (Whipple's) | GXM 4U |
| Sigmoidoscopy | GSH |
| Splenectomy | GXM 2U |
| Thyroidectomy, partial | GSH |
| Thyroidectomy, total | GSH |
| Tracheostomy | GSH |
| Vagotomy | GSH |
| Varicose vein repair | GSH |

| Thoracic Surgery | |
|------------------|--------|
| Bronchoscopy | GSH |
| Lobectomy | GXM 3U |
| Mediastinotomy | GSH |
| Pneumonectomy | GXM 3U |
| Tracheostomy | GSH |
| Thoracotomy | GXM 3U |
| Oesophagectomy | |

| Cardiac and Vascular Surgery | |
|----------------------------------|--------|
| Abdominal aortic aneurysm repair | GXM 6U |
| Arterial by pass and grafting | GXM 4U |
| Angiogram KIV PTCA | GSH |

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|-------------------------|--------|
| Pacemaker insertion | GSH |
| CABG | GXM 6U |
| Congenital heart repair | GXM 4U |
| Valve Replacement | GXM 6U |

| Neurology | |
|---|--------|
| Craniotomy & excision | GXM 2U |
| Burrhole & drainage | GXM 2U |
| Brain tumour excision | GXM 2U |
| Transphenoidal resection of pituitary tumor | GXM 2U |
| Spinal cord tumour excision | GXM 4U |
| VP shunt | GSH* |
| Laminectomy | GSH |
| Spinal instrumentation | GXM 2U |
| Cranioplasty | GXM 2U |

| Oral and maxillofacial | |
|------------------------|--------|
| Cleft lip + alveolus | GSH |
| Bone graft | GXM 2U |
| Palatoplasty | GSH |
| Maxillectomy | GXM 2U |
| Mandibulectomy | GXM 4U |

| Otorhinolaryngology | |
|-------------------------------|--------|
| Excisional biopsy | GSH |
| Excision of benign tumours | GSH |
| Excision of malignant tumours | GXM 2U |
| Laryngectomy | GXM 4U |
| Scope + biopsy | GSH |
| Laser cordectomy | GSH |
| Polypectomy/ FESS | GSH |
| Parotidectomy | GSH |
| Myringoplasty | GSH |
| Septoplasty | GSH |
| Tracheostomy | GSH |
| Mastoidectomy | GSH |
| Sphenoidectomy | GSH |
| Radical neck dissection | GXM 4U |
| Tonsillectomy | GSH |

| Obstetrics & Gynaecology | |
|--------------------------|-----|
| LSCS | GSH |

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|----------------------------------|--------|
| Elective LSCS with previous scar | GSH* |
| LSCS with placenta praevia | GXM 4U |
| Ectopic pregnancy | GXM 2U |
| Cervical cerclage | GSH |
| Vaginoplasty | GSH |
| Vulvectomy | GSH |
| Laparotomy + cystectomy | GSH |
| Tubal ligation | GSH |
| Hysteroscopy + D & C | GSH |
| Laprotomy + tumor debulking | GXM 4U |
| Polypectomy | GSH |
| Laparoscopic procedures | GSH |
| Myomectomy (inc. laparoscopic) | GXM 2U |
| Total Hysterectomy | GXM 2U |
| Vaginal Hysterectomy | GSH |
| Wertheim's Hysterectomy | GXM 4U |
| TAHBSO | GXM 2U |
| Cone Biopsy | GSH |
| Vesico vaginal fistula repair | GSH |

| Orthopedic | |
|--------------------------------|--------|
| Amputation above or below knee | GSH |
| Arthroscopic repair | GSH |
| Open reduction of fractures | GSH |
| ORIF (Upper Limb) | GSH |
| ORIF (Lower Limb) | GXM 1U |
| Osteotomy | GSH |
| Bone grafting | GSH |
| Wound Debridement | GSH |
| Revision/ removal of K-wire | GSH |
| Removal of nail | GSH |
| Removal of plate | GSH |
| Spinal fusion | GXM 2U |
| Endoprosthesis | GSH |
| Vertebroplasty | GSH |
| Hemiarthroplasty | GXM 2U |
| Total hip replacement (THR) | GXM 3U |
| Total knee replacement (TKR) | GXM 3U |
| Revision of THR/TKR | GXM 3U |

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|--------------------------------|--------|
| Dynamic hip screw (DHS) | GSH |
| Discectomy | GSH |
| Ilizarov fixation | GSH |
| Patellectomy | GSH |
| Resection of bone tumours | GXM 2U |
| Endoprosthesis | GSH |
| Plating femur | GXM 2U |
| Proximal femoral nailing (PFN) | GXM 2U |

| Urology | |
|---------------------------------|--------|
| Renal angiogram | GSH |
| Cystectomy, partial | GXM 2U |
| Cystectomy, total | GXM 4U |
| TURBT | GSH |
| TURP | GSH |
| Nephrectomy | GXM 2U |
| Percutaneous nephrolithotomy | GXM 1U |
| Renal Transplant - Donor | GXM 2U |
| Renal Transplant - Recipient | GXM 2U |
| Ureterolithotomy | GSH |
| Radical Prostatectomy | GXM 4U |
| Open Prostatectomy | GXM 2U |
| Ureteroplasty | GSH |
| Vesicolithotomy | GSH |
| Nephroureterectomy | GSH |
| Pyeloplasty | GSH |
| Ileoplasty | GSH |
| Bladder augmentation | GSH |
| Partial/ Total Penectomy | GXM 2U |
| JJ stenting | GSH |
| Insertion of Tenckhoff catheter | GSH |
| Cystolithopexy | GSH |
| TUNA | GSH |

* GXM may be considered in selected high-risk cases

In cases of unexpected bleeding, emergency release, type specific blood is available for ALL cases.