GUIDELINES FOR OR COUNCILS

Intermountain® Healthcare

Review of Procedures in the Setting of COVID-19 Risk

May 18, 2020

This is meant to serve as a guiding document for OR Councils in the review for scheduling procedures. Please have surgeon clinics submit patients to schedule for a procedure the week prior to the date requested. This will provide you with time to review the appropriateness of the patient and the procedure for the current COVID-19 risks status as determined by the state as well as the current surge status of the facility as determined by Incident Command. It will also provide your team with time to coordinate with acute care and critical care where necessary.

The principles behind the classification system are based upon guidance from the Centers for Medicare and Medicaid Services as well as national specialty societies. Each clinical program has provided you with a sampling of procedures to aid OR Councils in their decisions. It is acknowledged that as we care for patients, there may be situations of special consideration, such as degree of symptoms or other situation that creates time-sensitivity. Please do not hesitate to leverage the expertise of the clinical program if there appears to be a request that may warrant such consideration. Know that you are trusted.

Summary of Scheduling Procedures During Present Risk Level

COVID-19 RED	COVID-19 ORANGE	COVID-19 YELLOW
○ Urgent or time-sensitive* *(include pertinent history below)*	○ Urgent or time-sensitive* *(include pertinent history below)* **or meets following elective criteria**: ○ Ambulatory (no admission) ○ Tier 2 procedure ○ BMI < 40 ○ Patient score 6-11 *(see below)*	○ Urgent or time-sensitive* *(include pertinent history below)* **or meets following elective criteria**: ○ Outpatient or Ambulatory ○ Tier 2 procedure ○ BMI < 40 ○ Patient score 6-15 *(see below)*

Factors To Assess Score for Risk of Severe COVID-19 Illness

modified from MeNTS criteria (Journal of the American College of Surgeons)

Factor	1 point	2 points	3 points	4 points	5 points
Patient Age	<20	21-40	41-50	51-65	>65
Lung Dz (asthma, COPD, CF)	Not present			Minimal (rare inhaler)	>Minimal
OSA	Not present			Mild/Moderate (no CPAP)	On CPAP
CV Dz (HTN, CHF, CAD)	None	Minimal (no meds)	Mild (1 med)	Moderate (2 meds)	Severe (> 2 meds)
Diabetes	No		Mild (no meds)	Moderate (PO meds only)	>Moderate (insulin)
Immunocompromised	No			Moderate	Severe

Surgery Acuity Scale

modified from St. Louis Univ. classification endorsed by the American College of Surgeons

Category	Definitions	Examples
1a	Low acuity (elective) surgery/Healthy patient	Carpal tunnel release, Cosmetic Surgery, Screening colonoscopy,
1b	Low acuity (elective) surgery/Unhealthy patient	As above
2a	Intermediate acuity surgery/Healthy patient	Low-risk cancer, Non-urgent spine, Ureteral colic, Biliary colic, ORIF displaced fracture, Total joint
2b	Intermediate acuity surgery/Unhealthy patient	As above
3a	High acuity surgery/Healthy patient	High-risk treatable cancers, Fournier gangrene, ORIF open long bone fracture, Hemorrhage, Ischemia, Sepsis
3b	High acuity surgery/Unhealthy patient	As above

Acuity Scale by Specialty

High Acuity Across Specialties - Life/Permanent Organ Damage Threat

- Hemorrhage
- Sepsis
- Ischemia
- Obstruction
- Replantation
- Deceased donor transplantation
- Airway

General Surgery

1a/1b	2a/2b	3a/3b
Low Acuity	Intermediate Acuity	High Acuity
*Bariatric Surgery -primary gastric bypass, sleeve, duodenal switch, gastric band -revisions for weight gain *Hernia Surgery: -asymptomatic *Benign tumor excision *Cosmetic procedures *Endocrine surgery (if medically manageable)	* Oncology * Smoldering diverticulitis * Dialysis access * Chemotherapy access -port, long-term catheter * Hernia Surgery: -symptomatic * Symptomatic gallbladder disease * Intractable reflux surgery * Intractable endocrine surgery *Bariatric -revisions for dysphagia, severe GERD, dehydration/malnutrition, strictures at risk for aspiration	*Bowel: -perforation -ischemia -volvulus -obstruction *Hernia -internal -strangulated *Pancreatic -necrosis/sepsis *Appendicitis *Acute cholecystitis

GYNECOLOGY

1a/1b	2a/2b	3a/3b
Low Acuity	Intermediate Acuity	High Acuity
*Laparoscopy -diagnostic -BTL -chronic pain -benign appearing adnexal masses *Hysteroscopy -endometrial ablation -benign appearing polyps -AUB without anemia *Hysterectomy -AUB without excessive bleeding -fibroids -prolapse -chronic pain *Incontinence or pelvic prolapse procedures *Vulvar, vaginal, cervical or hymen procedures for benign indications *Oncologic procedures (some may be 2a/b, see SGO recommendations)	*Laparoscopy -abdominopelvic masses concerning for malignancy -adnexal mass >6 cm with intractable pain *Hysteroscopy -postmenopausal bleeding or AUB, suspicious for malignancy -persistent severe AUB with moderate to severe anemia, despite maximal medical therapy *Hysterectomy -AUB with moderate to severe anemia, not controlled by maximal medical therapy *Oncology surgery -some may fall into 1a/1b *Cervical cerclage -prophylactic *Dilation and Curettage -for missed abortion *Dilation and Evacuation	*Ectopic pregnancy *Ovarian torsion *Vaginal hemorrhage *Dilation and Curettage -active bleeding *Cervical cerclage -rescue *Vaginal cuff dehiscence *Molar pregnancy *Ruptured TOA

NEUROSURGERY

1a/1b	2a/2b	3a/3b
Low Acuity	Intermediate Acuity	High Acuity
*Cervical/Thoracic/Lumbar stenosis with intractable pain -disk herniation -synovial cyst -tumor -spondylosis *Carpal Tunnel Release	*Progressive cervical spondylitis myelopathy *Cervical/Thoracic/Lumbar stenosis with motor deficit *Cervical/Thoracic/Lumbar progressive fracture/deformity *Functional neurosurgery	*Cranial/Spinal hematoma *Depressed skull fracture, open *Aneurysm, ruptured *Cranial/Spinal vascular malformation, ruptured *Cauda equina syndrome *Cervical/Thoracic/Lumbar fracture, unstable symptomatic *Cranial/Spinal tumor with deficit or mass effect

AMERICAN ACADEMY OF OPHTHALMOLOGY®

Intermountain Ophthalmology COVID19 Surgical Prioritization Strategy
Adapted from AAO Guidelines

Surgery Prioritization Strategy — Typical Ophthalmic Case*

RED		ORANGE	YELLOW	GREEN
• Endophthalmitis • Intraocular foreign body • Open globe • Cantholysis/canthotomy • Orbital cellulitis • Orbital cellulitis/abscess • Acute dacryocystitis • Canalicular lacerations • Traumatic extraocular muscle tear • Compressive optic neuropathy • Orbital decompression for vision loss • Orbital abscess • Anterior chamber tap • Angle closure glaucoma	• Temporal artery biopsy • Retinal detachment - macula on • Exam under anesthesia for tumor, infection, retinal detachment • Corneal foreign body • Ocular surface reconstruction with progressive melting, impending perforation, Descemetocele • Nasolacrimal duct probe for infection • Lid, facial lacerations • Orbital, facial fractures • Retrobulbar injection for pain • Neonatal dacryocystocele • Lid Lacerations • Orbital Fractures • Tarsorrhaphy for corneal compromise • Orbit/eyelid/intraocular malignancy • Enucleation for pain, infection, tumor • Evisceration for pain, tumor • Exenteration for infection • Optic nerve sheath fenestration • Anterior chamber washout for hyphema • Remove/revise aqueous drainage implant • Infantile glaucoma • Flat anterior chamber • Phacomorphic glaucoma • Glaucoma, uncontrolled	• Infantile cataract • Adult cataract unable to drive, work, fall risk, or intolerable anisometropia • Pediatric cataract at risk for amblyopia • Intravitreal injection • Brachytherapy • Drain choroidal(s) • Infantile ptosis • Retinal detachment - macula off • Proliferative diabetic retinopathy • Proliferative vitreoretinopathy • Macular hole • Retisert placement • Enucleation for melanoma • Basal cell, squamous cell cancer of eyelids and conjunctiva • Glaucoma procedures (all) if progressing • Bleb leak • Hypotony/cyclodialysis cleft • Corneal biopsy for undiagnosed corneal ulcer • Conjunctival biopsy for cicatrizing conjunctivitis • Ocular surface reconstruction • Pediatric corneal transplant at risk for amblyopia • Corneal transplant unable to drive or with pain	• Pediatric cataract – less critical for impact on amblyopia or ADL • Childhood strabismus • Adult cataract – less critical/disabling impact on ADL • Corneal transplant- no pain, less critical/disabling impact on ADL • Progressive pterygium • Glaucoma with stable VF, nerve • Infantile ptosis • Epiphora • Symptomatic entropion • Adult strabismus with diplopia • Epiretinal membrane • Ectropion • Functional blepharoplasty • Functional ptosis	• Adult strabismus without diplopia • Cosmetic ptosis • Cosmetic blepharoplasty

OPHTHALMOLOGY

ORTHOPEDIC SURGERY

1a/1b	2a/2b	3a/3b
Low Acuity	Intermediate Acuity	High Acuity
*Trigger finger release *Carpal tunnel release *Ganglion cyst *Mucous cyst *Benign mass excision *Hardware removal -asymptomatic *Tendon transfer -non-traumatic *Acromioclavicular/glenohumeral degenerative joint disease procedure *Wrist/thumb procedures for arthritis *Bunion procedures *Hammertoe procedures *Ankle instability *Exostectomy *Osteochondral defects *Hardware removal -asymptomatic	*Closed fracture repair *Repair displace bony fragments *Soft tissue rupture repair -open -arthroscopic *Periprosthetic fracture *Unreduced bucket-handle meniscus repair *ACL reconstruction with meniscus repair *Rotator cuff repair -acute, traumatic *Hardware removal -symptomatic *Meniscus repair *Recurrent joint dislocations *Tendon transfer -traumatic *ORIF for aseptic nonunion *Primary elective arthroplasty -hip, knee, shoulder, ankle, etc. *Arthroplasty revision for chronic infection -hip, knee, shoulder, ankle, etc. *Joint arthrodesis *ACL reconstruction without meniscus repair *Multi-ligament knee reconstruction *Knee meniscectomy *Patella instability repair for recurrent instability *Rotator cuff repair *Shoulder instability procedures -Bankart, Latarjet, etc. *Uncertain mass excision *Significant symptom nerve decompression	*Compartment syndrome *Infection/Sepsis *Open fracture repair *Unreducible acute joint dislocation *Ischemia

OMFS (Oral MaxilloFacial Surgery)

1a/1b	2a/2b	3a/3b
Low Acuity	Intermediate Acuity	High Acuity
*Dentoalveolar, asymptomatic * Implant therapy *Orthognathic surgery *Cosmetic surgery *Benign pathology *Non-functional reconstruction	*Odontogenic infection/osteomyelitis *Dental extraction, symptomatic *Facial trauma -minimally displaced fracture -simple mandible fx -closed condyle fx -zygoma and/or zygomatic arch fx *Benign pathology, symptomatic *Reconstruction, functional *TMJ	*Odontogenic fracture *Facial trauma -comminuted open fx -panfacial fx -ocular emergency -significant soft tissue *Head/Neck Cancer

Otolaryngology

1a/1b	2a/2b	3a/3b
Low Acuity	Intermediate Acuity	High Acuity
*Tonsillectomy/Adenoidectomy for mild/moderate OSA or tonsiliths *Tympanoplasty *Septoplasty *Sinus surgery (routine) *Cosmetic surgery *Rhinoplasty *Benign tumors without morbidity *Congenital lesions without symptoms - branchial cleft - thyroglossal duct cyst *Routine polypectomy *Routine microlaryngoscopy *Cochlear implants (Adult) *Scar revision	*Cancer surgery - includes SCCA, salivary, thyroid *Benign tumors causing morbitdity (e.g. facial disfigurement, compressive airway symptoms) *Benign endocrine surgery for active symptoms (e.g. compressive goiter, hyperparathyroidism complications) *Facial trauma *Recalcitrant OM, effusion *Tonsillectomy/Adenoidectomy for severe, recurrent infection *Sinus surgery for CSF repair or active symptoms after 12 weeks of failed medical management *Cochlear implants (pediatric) *Supraglottoplasty *Bronchoscopy and symptomatic airway stenosis intervention *Microlaryngoscopy intervention for aspiration	*Trachea fracture *Airway emergency -obstruction -stenosis *Trachea fracture *Airway emergency *Complicated mastoiditis *Esophageal foreign body *Complicated sinusitis (intracranial or intraorbital complication or invasive fungal sinusitis) *Uncontrolled bleeding

PLASTIC SURGERY

1a/1b	2a/2b	3a/3b
Low Acuity	Intermediate Acuity	High Acuity
*Cosmetic procedures *Secondary reconstruction of any site *Hardware removal if not threatened *Asymptomatic nerve compression *Autologous tissue reconstruction (breast) *Carpal Tunnel release *Trigger finger release	*Symptomatic nerve compression *Reconstruction of exposed vital structures *Closed fracture *Tendon injury *Reconstruction of threatened surgical hardware *Oncologic reconstruction -tissue expander -oncoplastic after lumpectomy	*Vascular injury *Open fracture *Unstable fractures -within 1 week *Nerve injury any site -within 1 week *Nerve compression, symptomatic

UROLOGY

1a/1b	2a/2b	3a/3b
Low Acuity	Intermediate Acuity	High Acuity
*Penile implants *Urologic cancer -some cancers may be 2a/2b *Varicocele/hydrocele repair *Orchiectomy, simple *TURP *Stress incontinence procedure	*Cancer surgery -some may fall into 1a/1b * Orchiectomy, radical (cancer) TURP (sepsis/recurrent cystoprostatitis) * Scrotal surgery (highly-symptomatic only)	*Symptomatic kidney stones -stent vs. ESWL *Testicular torsion *Fournier gangrene *Priapism *Penile fracture *Hemorrhagic cystitis *Clot urinary retention

CARDIOVASCULAR/THORACIC

1a/1b	2a/2b	3a/3b
Low Acuity	Intermediate Acuity	High Acuity
*Pre-operative coronary angiography for elective surgery *Pre-renal transplant coronary angiography *Low risk positive stress test *Chronic total occlusion CAD patients on medical therapy *CAD well controlled on medical therapy *Annual heart transplant biopsy (unless clinical change) *Asymptomatic ASD/PFO closure *Watchman (LAA occlusion device) *Generator change: battery > 6 months *Cardioversions: asymptomatic patients or symptomatic patients not on maximal medical therapy *Stable Afib/SVT/PVC Ablation *Asymptomatic lead extraction *Implantable loop recorders: palpitations *Venous procedures	*Cardiac surgery in stable and/or asymptomatic patients with CAD and/or valvular heart disease and/or aortic disease *Thoracic surgery in stable and/or asymptomatic patients with cancer diagnosis or unknown mass *Percutaneous valvular intervention in difficult to manage heart failure *Coronary angiography for new onset LV dysfunction that cannot undergo non-invasive evaluation *Coronary angiography for medium risk stress test on maximal medical therapy *Percutaneous coronary angiography for Non-STE-ACS (i.e. NSTEMI): Can be delayed up to 48 hours if stable *Percutaneous coronary intervention in high risk anatomy turned down for CABG (3v CAD, LM with LV dysfunction) *Percutaneous coronary intervention in high-risk positive stress test on maximal medical therapy (high ischemic burden) *Symptomatic refractory HF/Pulm HTN right heart catherization for refractory *Symptomatic or high-risk HCM alcohol septal ablation *ICD implantation in survivor of sudden cardiac death, VT/VF *CRT placement for refractory heart failure with recurrent readmissions/high risk for readmissions *Generator change in battery < 6 months *Afib/SVT ablation in unstable/refractory symptoms despite maximal medical therapy *Lead extraction for lead infection and unable to clear despite appropriate antibiotic therapy *Cardioversions: symptomatic despite maximal medical therapy *Implantable loop recorders: recurrent syncope of unknown etiology	*Cardiac surgery in patients who cannot safely leave the hospital without surgery: - CABG for left main surgery, unstable multivessel CAD - Aortic surgery for acute Type A dissection, unstable aortic aneurysm - Cardiac transplant - Initiation or complication of mechanical circulatory support - AVR/MVR/TVR for critical valvular disease *Vascular surgery in patients who cannot safely leave the hospital - Vascular procedures for critical/acute limb ischemia - Carotid stenting and/or endarterectomy for acute stroke - Thoracic/Abd Aortic repair for unstable type B dissection, unstable aortic aneurysm *Thoracic surgery in patients who cannot safely leave the hospital without surgery - Initiation of VV ECMO - Symptomatic lung resection unstable airway - Tracheal repair symptoms despite maximal medical therapy - Urgent oncologic management * TAVR in symptomatic critical aortic stenosis *Percutaneous mitral valve repair/replacement in severe, symptomatic mitral regurgitation/stenosis *Percutaneous coronary intervention in ST-elevation MI, hemodynamically unstable evolving acute coronary syndrome refractory to aggressive medical management *Pacemaker implantation for symptomatic complete heart block, syncope/near syncope with high-grade (Mobitz type 2) heart block or sinus node dysfunction *Generator change if battery EOL *Ablation for symptomatic refractory VT/VF despite aggressive medical management *Lead extraction for lead malfunction with resultant syncope/near syncope

GASTROENTEROLOGY/ENDOSCOPY

This priority scale is to be used as a guide when scheduling is affected by Utah COVID risk status or specific facility conditions (such as capacity, PPE supplies, and/or staffing availability).

PRIORITY 1 *URGENT – DO NOT DEFER*	PRIORITY 2 *FURTHER DELAY WILL LIKELY CAUSE HARM*	PRIORITY 3 *FURTHER DELAY MAY CAUSE HARM*	PRIORITY 4 *DEFERRAL WILL NOT LIKELY CAUSE HARM*
EXAMPLE INDICATIONS	EXAMPLE INDICATIONS	EXAMPLE INDICATIONS	EXAMPLE INDICATIONS
• Active/overt GI blood loss with anemia (in cirrhotic r/o suspected variceal hemorrhage) • Active/overt GI blood loss in cirrhotic patients (r/o suspected variceal hemorrhage) • New iron deficiency anemia (symptomatic) • Dysphagia (new onset, progressive, dysphagia resulting in food impaction/malnutrition) • Severe odynophagia • Food impaction/Foreign body removal • Imaging suggestive of new malignancy • Treatment of severe stenosis and strictures • PEG tube placement • Esophageal, gastric, duodenal, small bowel stents for palliation of obstruction • Treatment of esophageal precancerous lesions concerning for malignancy (EMR) • Suspected choledocholithiasis or biliary obstruction • Obstructive jaundice, Gallstone pancreatitis • Bile leaks, traumatic or surgical biliary injury • Evaluation of pancreatic cysts with alarm features/concerns for malignancy	• Noninfectious diarrhea with weight loss or malnutrition • Unexplained weight loss • New iron deficiency anemia (asymptomatic) • Change in bowel habits/stool caliber with concern for cancer • ED referrals in symptomatic patient with alarm symptoms • Needed semi-urgent stricture dilation • Prior PEG deferral in favor of NJ tube placement • Ongoing Variceal Banding Therapy after recent variceal hemorrhage • Treatment of esophageal pre-cancerous lesions (Barretts' ablation) • High risk gastric/duodenal EMRs (risk vs benefit to be reviewed by provider) • Surveillance colonoscopy after mucosal resection for large polyps with concerning features (i.e. incomplete resection of HGD) • Pancreatic fluid collection drainage/debridement (P1 if symptomatic) • IBD surveillance with prior dysplasia • Assessment of IBD in active disease/active symptoms with anticipated therapy change	• Acute/subacute abdominal pain w/u • ED referrals in stable patient with chronic symptoms w/o alarm features • Chronic GI symptoms w/o warning signs • Stable chronic anemia without risks factors • FIT®, Cologuard® in stable non-anemic patient • Barrett's surveillance (hx dysplasia) • IBD activity assessment (i.e. post-op) • Overdue surveillance colonoscopy • Surveillance colonoscopy after piecemeal polypectomy without concerning features • Evaluation of pancreatic cysts (common referrals for EUS – no alarm features/concerns for malignancy)	• Gastroesophageal reflux disease (GERD) • Routine dyspepsia • Average screening colonoscopy • Routine surveillance colonoscopy • Routine low risk surveillance (i.e. routine IBD, Barrett's) • Routine variceal screening • Colonoscopy in uncomplicated diverticulitis • Motility studies, pH monitoring, and anti-reflux mucosectomy (unless required as surgical or urgent evaluation)