SURGICAL OPERATIONS

Intermountain® Healthcare

Elective Procedure Guidance in the COVID-19 Pandemic Setting

May 19, 2020

Pre-op and Scheduling Process

- Assessment by surgeon and diagnosis of patient in physician clinic
- Determination of surgical intervention indicated and appropriate timing by surgeon and patient
- Appropriateness of the procedure and the patient within the current color risk level is assessed with the help of the surgery scheduling form. This form is to be submitted to the scheduling office along with the order for surgery.
- Order for surgery submitted to scheduling the week prior to the desired date
- Scheduling provides facility OR council with proposed schedule for the following week
- OR council will review to determine appropriateness of patient and procedure – *Appendix A*
    - Collaborative guidelines pertinent to the then-pertinent color level of risk
    - Physician contacted about any procedure deemed inappropriate for the current color state
    - If physician disagrees, consideration will be escalated to AMD of the respective specialty
    - Patient will be notified by physician clinic of the need to postpone
    - Appropriate procedures will be notified to scheduling
- Scheduling notifies PAT nurse
- PAT nurse contacts patients at least 3 days in advance of scheduled surgery. (Emergent/Urgent Cases where 3 days isn't possible, testing wouldn't take place)
    - PAT nurse will review patient health history.
    - PAT nurse will complete COVID 19 screening questions – *Appendix B*
    - PAT will provide instructions on COVID 19 testing, locations, and social isolation.
    - PAT nurse will place order for COVID 19 test. PAT COVID Testing Order Process
    - PAT nurse will give preoperative self-isolation instructions –*Appendix C*
- After completing PAT call, PAT nurse will transfer patient to pre-reg at 801-442-8600.
    - Emphasize to patient that they need to stay on the line after being transferred to complete their registration.
    - If Spanish speaker then stay on the line long enough to choose option 2
    - Don't need to stay on the line if English speaking
    - Pre-reg hours are 0800-1800.
- PAT nurse checks test the night prior to scheduled surgery
    - If positive, PAT nurse contacts surgeon
        - If postponement two weeks is possible, the patient will be rescheduled by surgeon

Immediate Pre-op to OR Transport

- Follow visitor restriction guidelines Visitor Requirements Talking Points
- Patients must sanitize hands upon entering the building
- Mask the patient at the hospital entrance
- Caregivers will be wearing appropriate PPE What PPE to Wear to Stay Safe
- Assess the patient for symptoms of COVID-19

    - Be alert for symptoms. Watch for fever, cough, or shortness of breath
    - Take patient temperature if symptoms develop
    - Encourage patient to practice social distancing. Maintain 6 feet of distance from others and stay out of crowded places (waiting rooms, intake spaces, etc.)
    - Follow if symptoms are identified or develop PAT COVID-19 Screening Protocol
- Surgical caregiver to assist the patient to the pre-op exam room
    - Maintain a distance of 6 feet from other people while traveling to and from exam room area as well as within confined spaces (pre/post-op bays)
    - Caregivers and patients must avoid gathering in groups and stay out of crowded places
- Limit physical contact with the patient except for necessary procedures while wearing appropriate PPE
    - Examples Lab draws and IV start
- Caregivers wash hands/use hand sanitizer before and after patient contact
- Caregiver/ provider transport to OR per facility guidelines
- Patient to wear facemask

Intra-op (OR and Endoscopy)

- Caregivers wash hands/use hand sanitizer before and after patient contact
- Caregivers will be wearing appropriate PPE
- Patient to continue to wear face mask into the operating room until induction
- Perform procedure/ Follow facility guidelines AGP in ORs and Endoscopy for pts WITHOUT known or suspected COVID-19 infection or Role-Specific Surgical Ops for PUI and Diagnosed COVID-19 Pts
- When appropriate and airway is stable, apply mask to patient after extubation for transport to PACU
- Caregivers follow standard precautions and Enhanced cleaning guidelines AGP in ORs and Endoscopy for pts WITHOUT known or suspected COVID-19 infection or Role-Specific Surgical Ops for PUI and Diagnosed COVID-19 Pts and OR cleaning guidelines, OR Cleaning Checklist, Non-Critical Patient Care Equipment Cleaning & Disinfection Guide

PACU/Post-op

- Discharge
- Patient to continue wearing their face mask when appropriate for surgical case or post-op care
- Caregivers wash hands/use hand sanitizer before and after patient contact
- Caregivers will be wearing appropriate PPE What PPE to Wear to Stay Safe
- Limit physical contact with the patient except for necessary procedures while wearing appropriate PPE
- When patient is ready for discharge, caregiver will transport the patient out of the facility and hand-off care to the patient's caregiver.
    - Maintain a distance of 6 feet from other people while discharging the patient from the hospital
    - Caregivers and patients must avoid gathering in groups during the discharge process

Guidance for Individual Facility Plans:

- See individual facility plans (see links below) outlining patient workflow with specific social distancing plans for patients and caregivers based upon facility space and workflow of bringing a patient from the entrance of the hospital until the patient is discharged home. Plans should include:
    - Caregiver dressing room guidelines, staggered entrance times to prevent crowded dressing room areas
    - Break room guidelines to prevent gatherings of large numbers of caregivers for meals or breaks (maximum occupancy notices, table/seating spacing to allow for 6 feet social distance)
    - Guidelines for front/control desk gatherings (limit to leadership persons regarding assignments), caregiver/providers should not gather
    - Develop patient flow from Intake to Discharge
    - Identify gaps and come up with action plans to resolve

Resources:

Facility Social Distancing Plans:

AFH Social Distancing

AVH Social Distancing

HVH Social Distancing

IMED Social Distancing

LDSH Social Distancing

North Area Hospitals Social Distancing

OCH Social Distancing

PCH Social Distancing

RVH Social Distancing

TOSH Social Distancing

UVH CP Social Distancing

UVH SDS Social Distancing

UVH Social Distancing

Facility Cleaning Documents:

AFH Checklist - Safely Resuming Surgery Workflow

AFH Endo Cleaning and Social Distancing

ASC Checklist and Social Distancing

AVH Checklist and Social Distancing

CCH Checklist and Social Distancing

DHPC Checklist and Social Distancing

DRMC Endo Checklist and Social Distancing

FCH Checklist and Social Distancing

GMH Checklist and Social Distancing

HVH Checklist - Safely Resuming Surgery Workflow

IMC Endo Checklist and Social Distancing

IMED Checklist - Safely Resuming Surgery Workflow

ISC ASC Checklist and Social Distancing

LDSH Checklist - Safely Resuming Surgery

LDSH Endo Checklist and Social Distancing

MCK ASC Checklist and Social Distancing

MKD Endo Checklist and Social Distancing

North Area Hospitals Checklist - Safely Resuming Surgery Workflow

OCH Checklist - Safely Resuming Surgery Workflow

PCH Checklist - Safely Resuming Surgery Workflow

PKH Checklist Social Distancing

RVH Checklist - Safely Resuming Surgery Workflow

RVH Endo Checklist and Social Distancing

TOSH Checklist - Safely Resuming Surgery Workflow

UVH Checklist - Safely Resuming Surgery Workflow

UVH Endo Checklist and Social Distancing

UVH PREP Checklist - Safely Resuming Surgery Workflow

UVOC Checklist and Social Distancing

Appendix A

Overview

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

OPHTHALMOLOGY

1a/1b	2a/2b	3a/3b
Low Acuity	Intermediate Acuity	High Acuity
*Cataract surgery -non-urgent indications or adequate vision to perform ADLs and self-care *IOL exchange *Penetratring keratoplasty -non-urgent indications *Lamellar keratoplasty *Microinvasive glaucoma -non-urgent indications *Strabismus surgery *Nasolacrimal duct surgery *Blepharoplasty *Eyelid ptosis repair *Eyelid malposition surgery -ectropion/entropion repair *Cosmetic surgery *Pars plana vitrectomy -epiretinal membrane -removal vitreous floaters	* Pars plana vitrectomy -lens fragment removal -macular hole repair -proliferative vitreoretinopathy -proliferative diabetic retinopathy -complex preretinal or macular pathology *Pars plana lensectomy -acute lens complications *Laser photocoagulation -pediatric patients with retinopathy of prematurity (if this cannot be in NICU) *Mohs eyelid defect repair *Brachytherapy for choroidal melanoma *Ocular/orbital tumor management *Other ocular surface procedures related to neoplasia *Ocular/Orbital tumor *Other ocular surface procedures related to neoplasia *Cataract surgery -congenital cataract in amblyopic period -monocular patient preventing ADL or self-care -lens induced glaucoma -angle closure or from acute lens complications *Enucleation/Evisceration -ocular trauma -infection -intractable glaucoma -globe perforation -intractable pain -intraocular malignancy *Exam under anesthesia -pediatric patients with retinoblastoma -Coats Disease -uveitis -glaucoma *Penetrating keratoplasty -pediatric patients with corneal blindness in both eyes in amblyopic period -severe infection *Fenestration of optic nerve -progressive vision loss *Filtration glaucoma surgery/goniotomy ab externo or ab interno/trabeculotomy/trans-scleral cyclophotocoagulation/trabeculectomy with or without scarring/aqueous drainage implant -uncontrolled intraocular pressure that is sight threatening -uncontrolled pain *Removal/Revision of aqueous drainage implant with/without graft -endophthalmitis -corneal touch -corneal decompensation -exposed plate *Frontalis sling for sight-threatening congenital ptosis *Tarsorrhaphy for impending corneal compromise *Synechiolysis for lens-induced or angle closure glaucoma *Strabismus surgery for torn or lost muscle *Biopsy of temporal artery for suspected temporal arteritis	* Pars plana vitrectomy -retinal detachment/tear -ocular trauma -endophthalmitis -vitreous hemorrhage -intraocular foreign body -misdirected aqueous -ciliary block glaucoma -malignant glaucoma -vitreous prolapse or tube shunt obstruction *Scleral buckle -retinal detachment -ocular trauma -intraocular infection -vitreous hemorrhage -intraocular foreign body *Pneumatic retinopexy -retinal detachment *Traumatic globe -injury/laceration repair *Traumatic eyelid/orbital injury -orbital fractures with muscle entrapment -oculocardiac reflex *Orbital abscess drainage *Orbital biopsy/exploration of orbit -tumor -life-threatening or sight-threatening conditions of orbit *Cantholysis/Canthotomy -orbital compartment syndrome *Probing/Decompression of dacryocele -neonate with obstructive respiratory compromise *Drainage of choroidal effusion or hemorrhage -appositional choroidal effusion -flat anterior chamber *Exenteration -life-threatening infection *Washout of anterior chamber -sight threatening infection *Exam under anesthesia -endophthalmitis -retinal detachment -presumed intraocular foreign body -ocular trauma

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

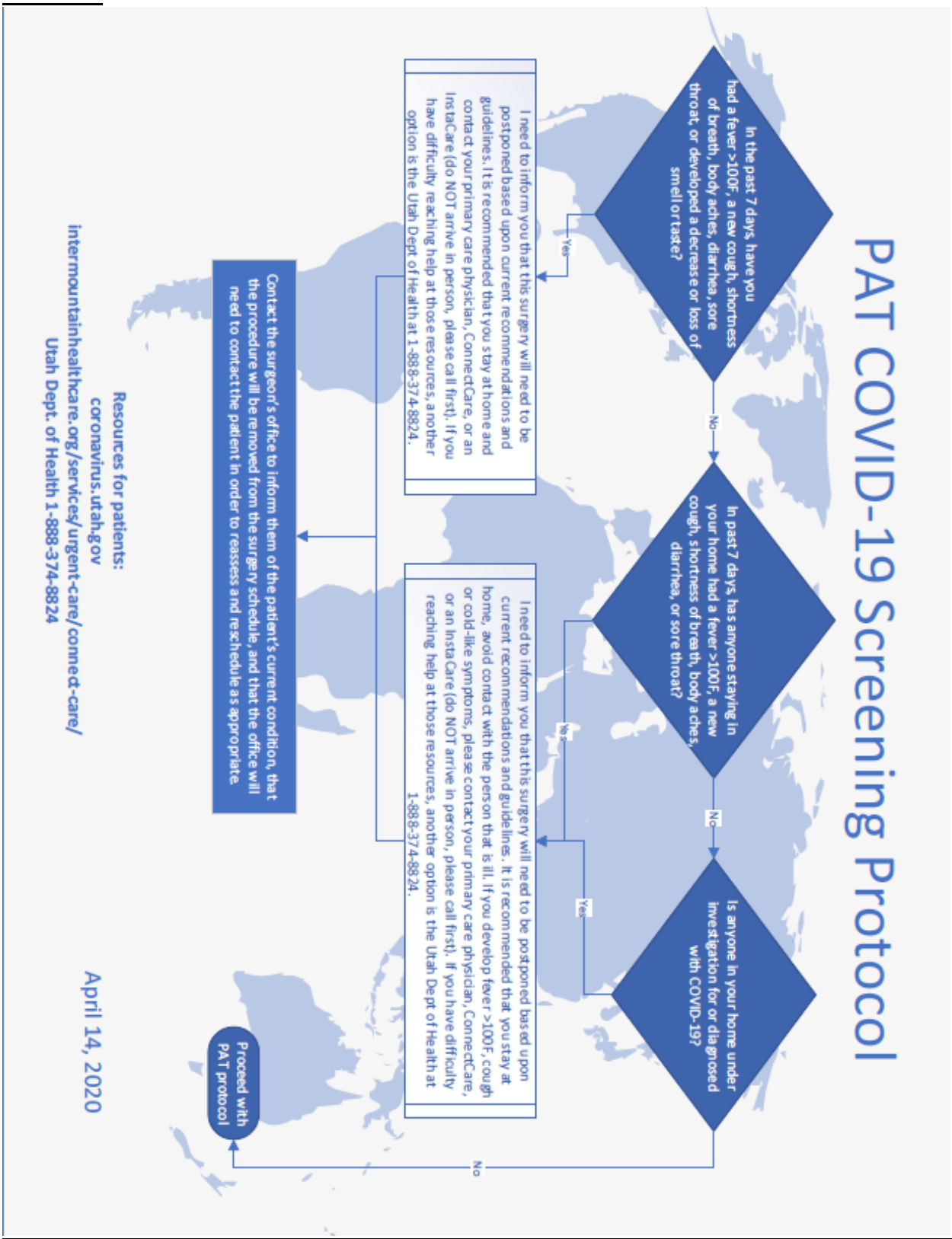
May 19, 2020

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).

GASTROENTEROLOGY/ENDOSCOPY

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)

APPENDIX B


PAT COVID-19 Screening Protocol
In the past 7 days, have you had a fever >100F, a new cough, shortness of breath, body aches, diarrhea, sore throat, or developed a decrease or loss of smell or taste?
Yes
I need to inform you that this surgery will need to be postponed based upon current recommendations and guidelines. It is recommended that you stay at home and contact your primary care physician, ConnectCare, or an InstaCare (do NOT arrive in person, please call first). If you have difficulty reaching help at those resources, another option is the Utah Dept of Health at 1-888-374-8824.
No
In past 7 days, has anyone staying in your home had a fever >100F, a new cough, shortness of breath, body aches, diarrhea, or sore throat?
Yes
I need to inform you that this surgery will need to be postponed based upon current recommendations and guidelines. It is recommended that you stay at home, avoid contact with the person that is ill. If you develop fever >100F, cough or cold-like symptoms, please contact your primary care physician, ConnectCare, or an InstaCare (do NOT arrive in person, please call first). If you have difficulty reaching help at those resources, another option is the Utah Dept of Health at 1-888-374-8824.
No
Is anyone in your home under investigation for or diagnosed with COVID-19?
Yes
Contact the surgeon's office to inform them of the patient's current condition, that the procedure will be removed from the surgery schedule, and that the office will need to contact the patient in order to reassess and reschedule as appropriate.
No
Proceed with PAT protocol
Resources for patients:
coronavirus.utah.gov
intermountainhealthcare.org/services/urgent-care/connect-care/
Utah Dept. of Health 1-888-374-8824
April 14, 2020

APPENDIX C

Preoperative Self-Isolation Guidelines

1. *When possible, shelter in place for two weeks before the time of your surgery.*
    - *This means avoiding contact with those outside your home as much as possible.*
2. *To maximize your safety, a preoperative COVID-19 test will be coordinated by Intermountain Healthcare to be performed three days before your scheduled procedure*
    a. *You will receive a call to coordinate the timing and location of this test and will be contacted when the results of the test return*
    b. Testing Location Information is located at: https://intermountainhealthcare.org/covid19-coronavirus/get-testing/
    c. *Early studies show that surgical care is much safer in patients WITHOUT COVID-19, so it is essential that immediately after you give your preoperative COVID-19 testing sample you observe strict self-isolation in the three days prior to surgery.*
        i. *Stay home as much as possible*
        ii. *Maintain six feet of distance between yourself and others*
        iii. *Use careful handwashing technique*
        iv. *Notify your doctor if you develop any viral symptoms*
            1. *Temperature greater than 100.4 F*
            2. *Cough*
            3. *Shortness of Breath*
            4. *New Body Aches*
            5. *Diminished sense of smell or taste*

APPENDIX D

Anesthesia Setup and Turnover Checklist

First Case of Day Checklist

- ☐ Verify Ambu bag behind anesthesia cart
- ☐ Verify full anesthesia machine safety test has been completed within the last 24 hours
- ☐ Open valve of O_2 E-cylinder behind the anesthesia machine, check pressure, close valve. Full tank 2200 psi. If < 1100 psi, replace.
- ☐ Breathing circuit
- ☐ Circuit tubing, filter, mask, green inflation bag assembled
- ☐ Circuit tubing connected to inspiratory and expiratory limbs
- ☐ Run circuit leak test
- ☐ APV valve set to Min
- ☐ Suction canister, tubing, and yankauer assembled. Verify suction is working
- ☐ Monitors
  - ☐ Philips monitor is turned on
  - ☐ 3-lead EKG with sticker pads
  - ☐ Long NIBP cuff (check that all sizes of cuffs are in the anesthesia cart)
  - ☐ Pulse oximetry
  - ☐ Bis monitor and cable
  - ☐ Temperature cable
  - ☐ CO_2 tubing connected to both the plastic circuit piece and analyzer
- ☐ Verify that vaporizers are adequately filled
- ☐ Verify that anesthesia computer is turned on
- ☐ Verify two IV poles with clamps on each
- ☐ Verify that Alaris brain, channel pump, and syringe pump are attached to one IV pole

In-between Case "Turnover" Checklist

- ☐ Clean laryngoscope handle with gray-top Sani-Cloth 3 times and place in zip-lock bag
- ☐ Clean anesthesia machine, keyboard and mouse with gray-top Sani-Cloth
- ☐ Clean monitor cables and BP cuff with gray-top Sani-Cloth
- ☐ Clean computer and anesthesia machine screens with alcohol swabs
- ☐ Replace breathing circuit
  - ☐ Circuit tubing, filter, mask, green inflation bag, and CO_2 line assembled
  - ☐ Run circuit leak test
  - ☐ Set APL valve to Min
  - ☐ Verify that vaporizers are adequately filled
- ☐ Replace suction canister, tubing, and yankauer tip. Verify suction is working
- ☐ Replace CO2 Canister after Airborne contaminant case (COVID 19, TB, etc).