Guidelines for Surgery and Procedures Performed in the Inpatient Setting

InterQual® strongly recommends that this list be reviewed and approved at an organizational level before it is instituted. It is imperative to note that InterQual’s Guidelines for Surgery and Procedures in the Inpatient Setting is not designed to be all-inclusive and does not necessarily align with CMS guidelines on inpatient settings.

InterQual’s Guidelines for Surgery and Procedures in the Inpatient Setting was developed to assist clients in determining when a procedure might be appropriate for the inpatient setting. A procedure is designated as inpatient when admission to the hospital is planned prior to the procedure being performed. Patients who experience complications during an outpatient procedure, or immediately postoperatively, may require an inpatient admission. Appropriate criteria for complications of outpatient surgery can be found in the InterQual® Acute Level of Care Criteria.

The decision to admit a patient for a surgical procedure remains the responsibility of the treating provider. Determination of the appropriate setting (inpatient versus outpatient) is a clinical decision best made with consideration of multiple clinical factors including, but not limited to:

- type of procedure planned (e.g., laparoscopic versus open procedure, need for postoperative drains, monitoring, or therapy)
- urgency of the procedure
- patient’s hemodynamic stability
- medical stabilization of comorbidities (e.g., cardiac function, diabetes)
- likelihood of complications based on patient’s medical history (e.g., bleeding, infection, thrombolic events, fluid or electrolyte imbalance)

The actual setting may differ based upon legislative and geographic variances, including the sophistication level of the facility and their available resources, and might impact organizational policy. Documentation of the patient’s clinical condition is essential to ensure the appropriate setting and level of care required.

Procedures and interventions listed in these guidelines are organized alphabetically by surgical specialty (e.g., General, Orthopedics, Vascular) into two groups. The first group includes procedures and interventions for which InterQual Procedures Criteria are available to support medical necessity and the inpatient setting designation. The second group includes procedures and interventions that are appropriate for the inpatient setting but are not addressed by the InterQual Procedures Criteria.
Organizations that follow the Center for Medicare and Medicaid Services (CMS) inpatient designations can find a link to the CMS Inpatient Only List (Addendum E) on the Change Healthcare Customer Hub (http://customerhub.changehealthcare.com) in the Documents section by clicking “Documents” and then searching for the keyword “Addendum E”.

Interpreting the Guidelines
Qualifiers have been added to certain procedures to specify when that procedure is appropriate for the inpatient setting.

<table>
<thead>
<tr>
<th>Qualifiers</th>
<th>Example</th>
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<tbody>
<tr>
<td>Certain approaches, age restrictions, or conditions make a procedure</td>
<td>Myomectomy: Open – Open removal of a fibroid is appropriate for the</td>
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<tr>
<td>appropriate for the inpatient setting.</td>
<td>inpatient setting, while laparoscopic myomectomy or mini-laparotomy</td>
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<td></td>
<td>can be safely performed in the outpatient setting.</td>
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<tr>
<td>An asterisk “*” next to a procedure indicates the procedure may be</td>
<td>Meckel’s Diverticulum Excision:</td>
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<td>performed in either the inpatient or outpatient setting due to variations</td>
<td>Laparoscopic*</td>
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<tr>
<td>in practice.</td>
<td>Open</td>
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<td></td>
<td>In this example, the open procedure is appropriate for the inpatient</td>
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<td>setting, but laparoscopic excision may be appropriate for either the</td>
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<td></td>
<td>inpatient or outpatient setting.</td>
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<tr>
<td>Certain approaches, age restrictions, or conditions make a procedure</td>
<td>Gastric Stimulation*:</td>
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<td>appropriate for the inpatient setting.</td>
<td>Enterra Therapy System</td>
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<td></td>
<td>Gastric Pacemaker insertion</td>
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<td></td>
<td>In this example, gastric stimulation may be appropriate for either the</td>
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When a procedure is also known by another name, or if a different procedure will produce the same result, the additional procedure name is italicized and indented beneath the original. For example: “Total Joint Replacement (TJR), Hip” is also known as “Arthroplasty, Total, Hip.”

Procedures in the Pediatric category have been specifically reviewed or evaluated for pediatric indications.
CARDIAC

For patients who are unstable on presentation and require Implantable Cardioverter Defibrillator (ICD) Insertion, Pacemaker Insertion, or Percutaneous Coronary Intervention (PCI), refer to the appropriate Condition Specific or General Medical subset to determine if admission criteria are met. Episode Day One criteria should be applied. These criteria reflect the minimum standard of care and, when met, allow for the performance of additional procedures deemed clinically appropriate by the treating physician.

The following procedures are appropriate for the inpatient setting based on InterQual Procedures Criteria:

- Implantable Cardioverter Defibrillator (ICD) Insertion:
  - Thoracotomy approach
  - Subxiphoid approach
- Left Ventricular Assist Device (LVAD) Insertion
- Pacemaker Insertion:
  - Thoracotomy approach
- Pacemaker Insertion, Biventricular*:
  - Cardiac Resynchronization Therapy (CRT)
- Pacemaker Insertion, Biventricular + Implantable Cardioverter Defibrillator (ICD) Insertion*:
  - Thoracotomy approach
  - Subxiphoid approach
  - Cardiac Resynchronization Therapy-Defibrillator (CRT-D) Insertion*
  - Cardiac Resynchronization Therapy-Implantable Cardioverter Defibrillator (CRT-ICD) Insertion*

The following procedures are appropriate for the inpatient setting, but are not addressed by InterQual Procedures Criteria:

- Ablation, Cardiac: Open
- Aortoplasty
- Cardiotomy
- Coarctation of the Aorta, Repair:
  - Anastomosis
  - Waldhausen Procedure
- Implantable Cardioverter Defibrillator (ICD), Removal*
- Intra-aortic Balloon Pump (IABP) Insertion
- Myectomy / Myocardial Resection
- Pacemaker Removal, by Thoracotomy
- Pulmonary Veins, Anomalous Drainage Repair
- Repair:
  - Aorta / Great Vessels
  - Atrial-Ventricular (AV) Septal Defect (Complete)
- Right Ventricular Assist Device (RVAD) Insertion
- Thrombolysis, Coronary, Intracoronary Infusion
- Ventriculotomy
The following procedures are appropriate for the inpatient setting based on InterQual Procedures Criteria:

Antireflux Surgery / Hiatal Hernia Repair:
- Belsey's Wrap
- Collis Gastroplasty
- Dor Fundoplication
- Hill's Gastropexy
- Laparoscopic Fundoplication
- Nissen Fundoplication
- Open Fundoplication
- Rosetti Fundoplication
- Thal-Nissen Repair
- Toupet Fundoplication

Aortic Valve Replacement (AVR)
Aortic Valvuloplasty, Percutaneous Balloon
Atrial Septal Defect (ASD) Repair: Open
Coronary Artery Bypass Graft (CABG)
Lobectomy
Lung Volume Reduction Surgery (LVRS)
Mitral Valve Replacement (MVR) / Repair
Mitral Valvuloplasty, Percutaneous Balloon
Pneumonectomy
Thoracoscopy, Video Assisted (VAT)
Transcatheter Aortic Valve Replacement (TAVR):
- Subclavian Transcatheter Aortic Valve Replacement
- Transaortic Transcatheter Aortic Valve Replacement
- Transapical Transcatheter Aortic Valve Replacement
- Transcarotid Transcatheter Aortic Valve Replacement
- Transcatheter Aortic Valve Insertion (TAVI)
- Transfemoral Transcatheter Aortic Valve Replacement
Tricuspid Valve Annuloplasty
Tricuspid Valve Replacement (TVR) / Repair / Resection
Wedge Resection / Segmentectomy, Lung

The following procedures are appropriate for the inpatient setting, but are not addressed by InterQual Procedures Criteria:

Aortic Dissection Repair
Biopsy, Lung: Open
Bronchoplasty
Carinal Resection
Esophageal Perforation Repair
Esophagectomy
Esophagomyotomy:
  - Heller Myotomy
Excision:
  - Esophageal Lesion / Tumor
  - External / Intracardiac Tumor
CARDIO THORACIC (cont)

- Pericardial Cyst / Tumor
- Mediastinal Mass Resection
- Myotomy, Cricopharyngeal: Open
  - Zenker's Diverticulum Resection / Repair
  - Zenker's Diverticulectomy
  - Zenker's Diverticulopexy
- Pericardiectomy: Subxiphoid
- Pericardiectomy
- Pericardiocentesis
- Pleurectomy
- Pulmonary Decortication
- Repair Lacerated Diaphragm
- Resection, Radical: Rib
- Revision Chest Wall
- Revision / Resection, Diaphragm
- Rib Resection, Thoracic Outlet Syndrome (TOS)
- Sternal Reduction / Resection / Debridement
- Suture, Tracheal Wound
- Thoracic Duct Repair
- Thoracostomy Tube Insertion
- Thoracotomy:
  - Pleural Disease
  - Bullectomy
- Tracheal Stenosis Repair
- Tracheoplasty
- Ventricular Septal Defect (VSD) Repair: Open

GENERAL

The following procedures are appropriate for the inpatient setting based on InterQual Procedures Criteria:

- Appendectomy*:
  - Appendiceal abscess
  - Appendiceal phlegmon
  - Gangrenous appendicitis
  - Perforated appendix
  - Suppurative appendicitis
- Bariatric or Metabolic Surgery (Primary):
  - Biliopancreatic Diversion with Duodenal Switch
  - Roux-en-Y Gastric Bypass (RYGB)
  - Sleeve Gastrectomy
- Bariatric Surgery (Revisional):
  - Revision of gastroduodenal anastomosis with reconstruction
  - Revision of gastrojejunal anastomosis with reconstruction
- Cholecystectomy, Open
GENERAL (cont)

Open Cholecystectomy with Intraoperative Cholangiogram.

Colectomy:
Left:
  - Left Hemicolecctomy
  - Left Partial Colectomy
  - Low Anterior Resection
  - Sigmoid Colectomy
  - Sigmoidectomy
Right:
  - Cecectomy
  - Right Hemicolecctomy
  - Right Partial Colectomy

Exploratory Laparotomy

Herniorrhaphy, Inguinal / Femoral*:
  - Strangulated hernia*
    - Bilateral Inguinal or Femoral Hernia Repair +/- Mesh*
    - Laparoscopic Inguinal or Femoral Hernia Repair +/- Mesh*
    - Open Inguinal or Femoral Hernia Repair +/- Mesh*
    - Unilateral Inguinal or Femoral Hernia Repair +/- Mesh*

Herniorrhaphy, Umbilical*:
  - Strangulated hernia*
    - Laparoscopic Umbilical Hernia Repair +/- Mesh*
    - Open Umbilical Hernia Repair +/- Mesh*
    - Umbilical Hernia Repair +/- Mesh*

Herniorrhaphy, Ventral, Incisional, or Epigastric*:
  - Incarcerated or strangulated hernia*
  - Large hernia (defect > 4 cm)*
  - Multiple fascial defects*
  - Recurrent hernia*
    - Laparoscopic Ventral or Incisional or Epigastric Hernia Repair +/- Mesh*
    - Open Ventral or Incisional or Epigastric Hernia Repair +/- Mesh*
    - Ventral or Incisional or Epigastric Hernia Repair +/- Mesh*

Laparotomy

Mastectomy, Modified Radical (MRM)*
Mastectomy, Prophylactic, Total / Simple with Reconstruction
Small Bowel Resection
Thyroidectomy, Partial or Total:
  - Radical Neck Dissection
  - Sternal Split
  - Transthoracic

The following procedures are appropriate for the inpatient setting, but are not addressed by InterQual Procedures Criteria:

  - Abdominal Perineal Resection (APR)
  - Adrenalectomy / Adrenal Mass Removal: Open
  - Anoplasty*
  - Biopsy: Open
    - Liver
    - Pancreas
GENERAL (cont)

Stomach
Cecostomy:
  Open
  Tube*
Cholecystoenterostomy
Cholecystojejunostomy
Cholecystostomy*
Choledochoduodenostomy
Choledochoejejunostomy
Choledochostomy
Choledochotomy
Colectomy:
  Subtotal Colectomy, + Ileostomy
  Total Colectomy, + Ileostomy:
    Continent Ileostomy with Total Colectomy
    Ileo-Anal Pouch Anastomosis with Total Colectomy
    Ileo-Rectal Anastomosis with Total Colectomy
    Proctocolectomy, Total, with Ileostomy
Colostomy Closure
Colostomy Creation
Common Duct Exploration (CDE)
Drainage Abdominal Abscess: Open
Duodenal Atresia Repair
Duodenoduodenostomy
Duodenojejunostomy
Enterostomy
Esophagogastrotomy*
Esophagojejunostomy
Esophagogastoplasty
Esophagostomy
Esophagotomy
Exploration, Radical Abdominal
Fistula Repair:
  Colonic
  Cutaneous
  Enteroenteric
  Vesical
Gastrectomy:
  Antrectomy
  Hemigastrectomy
Subtotal
Total
Gastroduodenostomy
Gastroenterostomy
Gastrojejunostomy
Gastroplasty: Revision (Janeway Procedure)
Gastrostomy
Hepatic:
  Exploration
GENERAL (cont)

- Lobectomy
- Repair
- Resection
- Hepatectomy: Donor Partial
- Hepaticotomy
- Hepatotomy
- Incision & Drainage Appendiceal Abscess: Open Ileostomy: Koch Procedure
- Intestinal Plication
- Intussusception Reduction
- Ladd Procedure
- Laparotomy and Drainage, Pancreatic Pseudocyst
- Laparotomy for Staging
- Ligation of Esophageal Varices
- Lysis of Adhesions*
- Mastectomy: Radical
- Meckel's Diverticulum Excision:
  - Laparoscopic*
  - Open
- Omentectomy*
- Pancreatectomy:
  - Subtotal
  - Total
- Pancreatocystogastrostomy
- Pancreatocystojejunostomy
- Pancreatoduodenectomy: Whipple Procedure
- Pancreatopojejunostomy:
  - Beger Procedure
  - Frey Procedure
  - Partington-Rochelle Procedure
  - Puestow Procedure
- Pharyngoesophageal Repair
- Proctopexy
- Pyloroplasty and Vagotomy
- Radical Neck Dissection
- Rectal Prolapse Repair
- Splenectomy:
  - Laparoscopic
  - Open
- Thymectomy
- Vagotomy
- Volvulus Reduction:
  - Colon
  - Small Intestine
HAND, PLASTIC, & RECONSTRUCTIVE

The following procedures are appropriate for the inpatient setting based on InterQual Procedures Criteria:

Breast Reconstruction: Flap,
   Autologous Tissue Reconstruction, Flap
   Gluteal Flap (GAP Free Flap)
   Gracilis Free Flap
   Latissimus Dorsi Muscle Flap
   Oncoplastic Reconstruction
   Pedicle Flap
   Profunda Perforator Flap
   Rubens Flap
   Superficial Inferior Epigastric Artery (SIEA) Flap
   Superficial or Deep Inferior Epigastric Perforator (SIEP/DIEP) Flap
   Transverse Rectus Abdominis Myocutaneous (TRAM) Flap
Facial Nerve Repair*
Local Flap*:
   Cutaneous Flap
   Fascial / Fasciocutaneous Flap
   Muscle / Musculocutaneous Flap
   Pedicle Flap, Local
   Perforator Flap, Local

The following procedures are appropriate for the inpatient setting, but are not addressed by InterQual Procedures Criteria:

Burn, Excision, +/- Graft:
   Full Thickness (3rd degree)
   Deep Partial Thickness (2nd degree)
Digital Artery Repair, Hand, Microsurgical*
Escharotomy (3rd degree burn)
Free Tissue Transfer
   Incision & Drainage, Infection, Hand / Digit:
   High Pressure Injection Injury
   Septic Joint*
   Suppurative Flexor Tenosynovitis*
   Toe / Hand Transfer

NEUROLOGIC & SPINE

The following procedures are appropriate for the inpatient setting based on InterQual Procedures Criteria:

Artificial Disc Replacement, Cervical*:
   Arthroplasty, Total Disc, Cervical
   Replacement, Total Disc, Cervical
NEUROLOGIC & SPINE (cont)

Artificial Disc Replacement, Lumbar:
- Arthroplasty, Total Disc, Lumbar
- Replacement, Total Disc, Lumbar

Craniotomy:
- Biopsy of brain tumor / metastases
- Clipping of intracranial aneurysm
- Epilepsy surgery
  - Anterior temporal lobectomy
  - Corpus callosotomy
- Microvascular decompression
- Resection of arteriovenous malformation (AVM)
- Resection / Excision of brain tumor / metastases

Decompression +/- Fusion, Cervical:
- Discitis or epidural abscess by MRI
- Anterior Cervical Discectomy and Fusion (ACDF)*
  - Vertebral Corpectomy and Fusion, Cervical*
- Multiple-level Laminectomy +/- Fusion, Cervical
  - Multi-level Laminoplasty, Cervical
- Single-level Laminectomy with Fusion, Cervical*
  - Single-level Laminoplasty with Fusion, Cervical*

Decompression +/- Fusion, Lumbar:
- Discitis or epidural abscess by MRI
- Multiple-level Laminectomy +/- Fusion, Lumbar
- Single-level Laminectomy with Fusion, Lumbar

Decompression +/- Fusion, Thoracic:
- Laminectomy +/- Fusion, Thoracic

Endovascular Intervention, Intracranial:
- Endovascular Coiling
- Endovascular Embolization
- Endovascular Revascularization
- Intra-arterial Thrombolitics
- Mechanical Thrombectomy

Fusion:
- Cervical Spine:
  - Arthrodesis, Cervical
- Multiple-level Fusion, Cervical
- Single-level Fusion, Cervical*
- Lumbar Spine:
  - Anterior Lumbar Interbody Fusion (ALIF)
  - Arthrodesis, Lumbar
  - Extreme Lateral Interbody Fusion (XLIF)
  - Posterior Lumbar Interbody Fusion (PLIF)
  - Posterior Lumbar Intertransverse Process Fusion (PLIT)
- Thoracic Spine:
  - Arthrodesis, Thoracic

The following procedures are appropriate for the inpatient setting based on InterQual Procedures Criteria:

- Scoliosis Surgery:
  - Spinal Instrumentation Surgery +/- Fusion
  - Stereotactic Introduction, Subcortical Electrodes:
NEUROLOGIC & SPINE (cont)

Deep Brain Stimulation
   Intracranial electrode placement
Dystonia*
Essential Tremor*
Parkinson Disease*
Planned placement of electrodes for pre-operative mapping

The following procedures are appropriate for the inpatient setting, but are not addressed by InterQual Procedures Criteria:

Biopsy / Excision:
   Brain
   Nerve Root Tumor
   Spinal Cord Tumor
Cerebral Thrombolysis
Cerebrospinal Fluid Shunt Insertion / Revision*:
   Internal Shunt, Third Ventriculostomy / Revision
   Lumbar Peritoneal Shunt/ Revision
   Ventriculo-Cisternostomy / Revision
   Ventriculooatrical Shunt Insertion / Revision
   Ventriculojugular Shunt Insertion / Revision
   Ventriculoperitoneal Shunt Insertion / Revision
   Ventriculopleural Shunt Insertion / Revision
Cerebrospinal Fluid Shunt Removal* / Replacement*
Cranioplasty
Craniotomy / Craniectomy / Burr Holes:
   Subdural Hematoma
   Epidural Hematoma
   Spontaneous Intracranial Hematoma
   Trauma-induced Intracranial Hematoma
   Skull fracture / Intracranial Wound
Harrington Rod Removal*
Kyphectomy Muscle / Skin / Fascia Flap (Local)
Meningocoele Repair
Metastatic Tumor Excision, Spine
ORIF, Odontoid
Osteotomy, Spine
Pituitary Tumor Excision / Hypophysectomy, Transsphenoidal
Removal, Vertebrae:
   Vertebrectomy
   V-P Shunt or Ventriculocisternostomy Repair* / Replacement* / Removal*

OBSTETRICS & GYNECOLOGY

The following procedures are appropriate for the inpatient setting based on InterQual Procedures Criteria:

Cesarean Section:
   During Labor
Prior to Onset of Labor
Colpopexy: Open
  Sacrocolpopexy: Open
  Vaginal Cuff Suspension: Open
Hysterectomy:
  +/- Bilateral Salpingo-Oophorectomy (BSO) or Bilateral Salpingectomy
  Abdominal, Supracervical +/- Bilateral Salpingo-Oophorectomy (BSO) or Bilateral Salpingectomy
  Abdominal, Total +/- Bilateral Salpingo-Oophorectomy (BSO) or Bilateral Salpingectomy
  Laparoscopically Assisted Vaginal (LAVH) +/- Bilateral Salpingo-Oophorectomy (BSO) or Bilateral Salpingectomy*
  Vaginal +/- Bilateral Salpingo-Oophorectomy or Bilateral Salpingectomy*
Radical:
  Laparoscopic
  Open
  Schauta Operation
Myomectomy: Open
Salpingectomy: Open*
Salpingo-Oophorectomy, Bilateral or Oophorectomy, Bilateral: Open*
Salpingo-Oophorectomy, Unilateral or Oophorectomy, Unilateral: Open*
Cystectomy, Ovarian: Open*
Salpingostomy: Open*
Uterine Artery Embolization (UAE):
  Postpartum uterine bleeding ≤ 24 hours post delivery
  Post hysterectomy bleeding
  Vaginal Delivery, Early Elective

The following procedures are appropriate for the inpatient setting, but are not addressed by InterQual Procedures Criteria:
  Cervical Cerclage:
    Abdominal
  Colporrhaphy, Anterior:
    Cystocele Repair
  Enterocystoplasty
  Fimbrioplasty: Open*
  Fistula Closure (Recto-Vaginal)*
  Hemivulvectomy
  Hysteroplasty: Open
  Hysterosorraphy:
    Laparoscopic*
    Open
  Hysterotomy*
  Pelvic Exenteration
  Repair Ruptured Uterus
Termination of Pregnancy, Septic
  Trachelectomy:
    Laparoscopic*
    Open
  Unification, Bicornuate Uterus*
OBSTETRICS & GYNECOLOGY (cont)

Uterine Suspension: Open
Vaginectomy
Vulvectomy, Radical
Wedge Resection, Ovary: Open*

ORO-MAXILLO-FACIAL & OTOLARYNGOLOGY

The following procedures are appropriate for the inpatient setting based on InterQual Procedures Criteria:

Bone Augmentation, Mandible
Autologous Iliac Crest Donor Site
Bone Augmentation, Maxilla
Autologous Iliac Crest Donor Site
Ethmoidectomy: Open*
Glossectomy, Partial
Hemiglossectomy
Maxillectomy
Osteotomy:
LeFort I
Sagittal Split, Mandible Ramus
Sinusotomy, Frontal: Open
Temporomandibular Joint (TMJ):
Arthroplasty
Discectomy
Reconstruction
Total Joint Replacement (TJR), Temporomandibular Joint (TMJ)
Tonsillectomy:
Obstructive Sleep Apnea*
Adenotonsillectomy*
Peritonsillar Abscess*
Adenotonsillectomy*
Tonsillar Malignancy*

The following procedures are appropriate for the inpatient setting, but are not addressed by InterQual Procedures Criteria:

Control, Nose Bleed, Complicated
Excision External Auditory Canal Lesion: Radical
Facial / Jaw Reconstruction
Frontal Sinus Obliteration
Laryngectomy
Laryngoplasty*
Mandible / Maxilla Resection Muscle Length Change
Nasomaxillary Complex Fracture (LeFort II Type), Wiring / Local Fixation: Open
Oronasal Fistula Repair with Bone Grafting
Parotidectomy*:
Sialoadenectomy, Parotidectomy*
Pharyngolaryngectomy
Posterior Segment, Maxilla
Removal, Tumor, Temporal Bone
Resection Temporal Bone, External Approach
Revision Pharyngeal Wall
Submandibular Gland Excision*:
   Sialoadenectomy, Submandibular Gland Excision*
Tonsillectomy, Radical*

ORTHOPEDIC

Upper and Lower Extremity

The following procedures are appropriate for the inpatient setting based on InterQual Procedures Criteria:

Amputation:
   Extremity (Excludes Digit)
   Digit with Contamination / Infection
   Bone Graft and Implantable Stimulator, Fracture Nonunion

The following procedures are appropriate for the inpatient setting, but are not addressed by InterQual Procedures Criteria:

Bone Graft, Fracture Malunion or Nonunion, Long Bones:
   Humerus*
   Radius*
   Ulna*
   Femur
   Fibula*
   Tibia

Upper Extremity

The following procedures are appropriate for the inpatient setting based on InterQual Procedures Criteria:

Arthroscopy or Arthroscopically Assisted Surgery, Shoulder:
   Lavage of joint with joint aspirate diagnostic for infection
Arthroscopy or Arthroscopically Assisted Surgery, Wrist:
   Lavage of joint with joint aspirate diagnostic for infection
Arthroscopy, Surgical Elbow:
Upper Extremity (cont)

Lavage of joint with joint aspirate diagnostic for infection

Arthrotomy:
  Elbow:
    Contracture release with or without manipulation under anesthesia
    Lavage of joint with joint aspirate diagnostic for infection
  Shoulder:
    Joint exploration post penetrating joint injury*
    Lavage of joint with joint aspirate diagnostic for infection
  Wrist:
    Lavage of joint with joint aspirate diagnostic for infection

Joint Replacement, Elbow:
  Arthroplasty, Total, Elbow
  Total Joint Replacement (TJR), Elbow

Joint Replacement, Shoulder:
  Arthroplasty, Partial, Shoulder
  Arthroplasty, Total, Shoulder
  Hemiarthroplasty, Shoulder
  Resurfacing, Shoulder
  Total Joint Replacement (TJR), Shoulder

Joint Replacement, Wrist:
  Arthroplasty, Wrist
  Total Joint Replacement (TJR), Wrist

Removal and Replacement, Total Joint Replacement (TJR), Shoulder

The following procedures are appropriate for the inpatient setting, but are not addressed by InterQual Procedures Criteria:

Disarticulation:
  Shoulder
  Elbow
  Wrist*

Reamputation:
  Arm
  Forearm

Reduction and Fixation, Humeral Shaft Fracture*:
  Humeral Shaft External Fixator*
  Humeral Shaft Intramedullary Device*
  Humeral Shaft Plate*
  ORIF, Humeral Shaft*

Replantation:
  Arm
  Forearm

Resection / Removal, Radical:
  Clavicle
  Elbow
  Humerus
  Scapula
  Supracondylar Fracture Repair, Elbow: Open*
Lower Extremity

The following procedures are appropriate for the inpatient setting based on InterQual Procedures Criteria:

Arthrodesis:
  Fusion
  Ankle (Talotibial Joint)
  Triple (Subtalar, Talonavicular, and Calcaneocuboid Joints)
  Hip
  Knee
Arthroscopy or Arthroscopically Assisted Surgery, Knee:
  Lavage of joint with joint aspirate diagnostic for infection
Arthroscopy, Surgical, Ankle:
  Lavage of joint with joint aspirate diagnostic for infection
Arthroscopy, Surgical, Hip:
  Lavage of joint with joint aspirate diagnostic for infection
Arthrotomy, Ankle:
  Joint exploration post penetrating joint injury*
  Lavage of joint with joint aspirate diagnostic for infection
  Repair of intra-articular fracture*
    Open Reduction Internal Fixation (ORIF), Ankle*
Synovectomy (major)*
Arthrotomy, Hip:
  Acetabuloplasty
  Contracture release
  Joint exploration post penetrating joint injury
  Lavage of joint with joint aspirate diagnostic for infection
  Open reduction of hip dislocation
  Repair of intra-articular fracture:
    Open Reduction Internal Fixation (ORIF), Acetabulum
    Open Reduction Internal Fixation (ORIF), Femoral Neck
    Open Reduction Internal Fixation (ORIF), Pelvis
Synovectomy
Arthrotomy, Knee:
  Chondroplasty
  Contracture release
  Joint exploration post penetrating joint injury
  Lavage of joint with joint aspirate diagnostic for infection
  Quadricepsplasty
  Reconstruction / repair of lateral collateral ligament (LCL) or posterolateral corner injury
  Reconstruction / repair of medial collateral ligament (MCL) injury*
  Reconstruction / repair of multiligamentous injury
  Repair of intra-articular fracture
    Open Reduction Internal Fixation (ORIF), Knee
Synovectomy (major)
Osteotomy:
  Femoral Neck
  Femur, Proximal
  High Tibial
Lower Extremity (cont)

Pelvic
  Supracondylar Femur
    Osteotomy, Distal Femoral (DFO)
Prosthetic Replacement, Fracture, Hip (Proximal Femur):
    Hemiarthroplasty, Hip
Removal and Replacement, Total Joint Replacement (TJR), Hip
Removal and Replacement, Total Joint Replacement (TJR), Knee
Total Joint Replacement (TJR), Ankle:
    Arthroplasty, Total, Ankle
Total Joint Replacement (TJR), Hip:
    Arthroplasty, Total, Hip
Total Joint Replacement (TJR), Knee:
    Arthroplasty, Total, Knee
    Avascular Necrosis (Osteonecrosis), Tibia Plateau or Femoral Condyle*
    Osteoarthritis or Post-Traumatic Arthritis*
    All Others - Inpatient
    Unicondylar Knee Replacement*

The following procedures are appropriate for the inpatient setting, but are not addressed by InterQual Procedures Criteria:

  Arthrodesis:
    Sacroiliac
  Baker’s Cyst Removal*:
    Popliteal Cyst Removal*
  Closed Treatment, Fracture:
    Femoral Shaft
    Hip
  Clubfoot Repair
  Core Decompression, Hip with Vascularized Bone Graft
  Disarticulation:
    Ankle
    Hip
    Knee
  Excision, Partial Hip Bone
  Fasciotomy:
    Hip
    Thigh
  Fixation In Situ, Fracture, Hip (Proximal Femur)
  Hemipelvectomy
  Incision & Drainage:
    Femur
    Hip bone
    Knee: Open
    Knee: Arthroscopic*
    Pelvis
  Open Reduction Internal Fixation (ORIF):
    Calcaneal*
  Osteoplasty:
    Femur
Lower Extremity (cont)

Fibula
Tibia
Patellar Fracture Repair*
Patellar Tendon Rupture Repair*
Patellectomy*
Reamputation:
   Above the Knee
   Below the Knee
Metatarsal*
Metatarsophalangeal*
Midtarsal
Transmetatarsal
Reduction and Fixation, Shaft / Hip Fracture:
   Femoral Shaft:
      Femoral Shaft Intramedullary Device
      Femoral Shaft Plate
      Femoral Shaft External Fixator
      ORIF, Femoral Shaft
   Hip (Proximal Femur):
      Hip Intramedullary Device
      Hip Plate
      ORIF, Hip (Proximal Femur)
   Tibial Shaft:
      ORIF, Tibial Shaft
      Tibial Shaft External Fixator
      Tibial Shaft Intramedullary Device
      Tibial Shaft Plate
Reinforcement (Nailing, Pinning, Plating, Wiring):
   Femur
   Hip
Release, Hip Flexor*
Replantation:
   Digit
   Foot
Resection / Removal, Radical:
   Femur
   Fibula
   Hip
   Knee
   Tibia
Tenotomy, Hip: Open*
The following procedures are appropriate for the inpatient setting based on InterQual Procedures Criteria:

**Adenoidectomy:**
- < 3 years of age*
- Obstructive Sleep Apnea Syndrome (OSAS) or Obstructive Sleep-Disordered Breathing*

**Appendectomy**:*
- Appendiceal abscess
- Appendiceal phlegmon
- Gangrenous appendicitis
- Perforated appendix
- Suppurative appendicitis

**Arthroscopy or Arthroscopically Assisted Surgery, Knee (Pediatric):**
- Joint exploration post penetrating joint injury
- Lavage of joint with joint aspirate diagnostic for infection
- Reconstruction / repair of multiligamentous injury*

**Arthroscopy or Arthroscopically Assisted Surgery, Shoulder *(Adolescent):**
- Lavage of joint with joint aspirate diagnostic for infection

**Arthroscopy, Surgical, Hip (Pediatric)**:
- Lavage of joint with joint aspirate diagnostic for infection

**Bariatric or Metabolic Surgery (Primary) (Adolescent):**
- Roux-en-Y Gastric Bypass (RYGB)
- Sleeve Gastrectomy

**Bariatric Surgery (Revisional) (Adolescent):**
- Revision of gastroduodenal anastomosis with reconstruction
- Revision of gastrojejunal anastomosis with reconstruction

**Cleft Lip or Palate Repair:**
- Isolated Cleft Palate Repair
- Combined Cleft Lip or Nasal Deformity and Palate Repair
- Cheiloplasty
- Orofacial Cleft Repair
- Palatoplasty

**Electroconvulsive Therapy (ECT), *(Adolescent)*

**Herniorrhaphy, Inguinal**:
- Strangulated hernia*
- Bilateral Inguinal Hernia Repair +/- Mesh*
- Laparoscopic Inguinal Hernia Repair +/- Mesh*
- Open Inguinal Hernia Repair +/- Mesh*
- Unilateral Inguinal Hernia Repair +/- Mesh*

**Herniorrhaphy, Umbilical**: *
- Strangulated hernia
- Laparoscopic Umbilical Hernia Repair +/- Mesh
- Open Umbilical Hernia Repair +/- Mesh
- Umbilical Hernia Repair +/- Mesh

**Herniorrhaphy, Ventral, Incisional, or Epigastric**: *
- Incarcerated or strangulated hernia
- Large hernia (defect > 4 cm)
- Multiple fascial defects
- Recurrent hernia
- Laparoscopic Ventral or Incisional or Epigastric Hernia Repair +/- Mesh
- Open Ventral or Incisional or Epigastric Hernia Repair +/- Mesh

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*Note: The asterisk (*) indicates specific criteria or conditions.
PEDiATRIC (cont)

Ventral or Incisional or Epigastric Hernia Repair +/- Mesh
Hyperbaric Oxygen Therapy*
Pectus Deformity Repair:
  Abramson Repair
  Minimally Invasive Repair of Pectus Carinatum
  Minimally Invasive Repair of Pectus Excavatum
  Nuss Procedure
  Open Repair of Pectus Carinatum
  Open Repair of Pectus Excavatum
  Ravitch Procedure
Pyloromyotomy*:
  Fredet-Ramstedt Procedure*
  Hypertrophic Pyloric Stenosis (HPS) Pyloromyotomy*
  Ramstedt Procedure*
Scoliosis Surgery:
  Spinal Instrumentation +/- Fusion
Thyroidectomy, Partial or Total
  Radical neck dissection
  Sternal split
  Transsthoracic
Tonsillectomy:
  < 3 years of age*
  Obstructive sleep apnea syndrome (OSAS) or Obstructive Sleep-Disordered Breathing*
  Peritonsilar abscess*
  Tonsilar malignancy*
Ureter Reimplantation:
  Boari Flap
  Laparoscopic Cystoneocystostomy
  Open Cystonoeocystostomy
  Psoas Hitch
Video Electroencephalographic (EEG) Monitoring*

The following procedures are appropriate for the inpatient setting, but are not addressed by InterQual Procedures Criteria:

  Aortopexy
  Atrial Septostomy / Septectomy
  Bladder Augmentation
  Blalock-Hanlon Procedure
  Blalock Shunt / Blalock-Taussig, Modified
  Coarctation of the Aorta, Repair (Anastomosis / Waldhausen Procedure)
  Epiphysiodesis*
  Exstrophy of Bladder, Reconstruction*
  Fontan Procedure
  Gastrochisis Repair
  Gastrostomy (G-tube Insertion)*
  Jejunostomy (J-tube Insertion)
  Myelomeningocele Repair
  Omphalocele Repair
  Pulmonary Veins, Anomalous Drainage Repair
PEDIATRIC (cont)

Patent Ductus Arteriosus:
  Division
  Ligation
Repair Atrial-Ventricular (AV) Septal Defect (Complete)
Repair Endocardial Cushion Defect +/- Prosthesis / Tissue Graft: Open
Repair Malunion / Non-Union: Epiphyseal Separation*
Repair Pulmonary Atresia
Repair Pulmonic Stenosis
Repair Tetralogy of Fallot
Repair Truncus Arteriosus
  Repair Transposition of the Great Vessels
  Sphincteroplasty
  Urethroplasty*: Epispadias* / Hypospadias*
Ventriculomyotomy

SPECIALIZED PROCEDURES

The following procedures are appropriate for the inpatient setting based on InterQual Procedures Criteria:

Ablative Therapy, Liver: Open:
  Cryoablation, Liver, Open
  Microwave Ablation, Liver, Open
  Radiofrequency Ablation (RFA), Liver, Open
Electroconvulsive Therapy (ECT)*
Gastric Stimulation*:
  Enterra Therapy System
  Gastric Pacemaker insertion
Gender Reassignment Surgery*:
  Bilateral Mastectomy
  Clitoroplasty
  Hysterectomy
  Intersex Surgery
  Metoidioplasty
  Ovariectomy/Salpingo-Oophorectomy
  Phalloplasty
  Scrotoplasty
  Urethroplasty
  Vaginoplasty
Hyperbaric Oxygen Therapy*
Transplantation, Cardiac:
  Heart Transplant
Transplantation, Allogeneic Stem Cell:
  Myeloablative Allogeneic Stem Cell Transplant
Transplantation, Liver
Transplantation, Renal
SPECIALIZED PROCEDURES (cont)

Kidney Transplant
Video Electroencephalographic (EEG) Monitoring*

The following procedures are appropriate for the inpatient setting, but are not addressed by InterQual Procedures Criteria:

- Transplantation, Heart-Lung
- Transplantation, Lung
- Transplantation, Pancreas
- Transplantation, Small Bowel

UROLOGY

The following procedures are appropriate for the inpatient setting based on InterQual Procedures Criteria:

- Bladder Neck Suspension/Sling, Female:
  - Open Burch Colpsuspension Procedure
- Nephrectomy, Partial
- Nephrectomy, Radical
  - Laparoscopic
  - Open
- Nephrectomy, Simple
  - Laparoscopic
  - Open
- Prostatectomy: Open
- Prostatectomy: Radical:
  - Laparoscopic
  - Laparoscopically-Assisted
  - Open
  - Robotic-Assisted
- Radiofrequency Ablation (RFA) or Cryoablation, Renal: Laparoscopic*

The following procedures are appropriate for the inpatient setting, but are not addressed by InterQual Procedures Criteria:

- Cystectomy:
  - Partial
  - Radical
  - Simple
- Cystorrhaphy
- Cystoplasty
- Cystourethroplasty*
- Drainage, Renal Abscess*
- Fistula Repair:
  - Nephrocutaneous
  - Nephrovisceral
UROLOGY (cont)

Pyelocutaneous
Ureterocutaneous
Ureterovisceral
Neobladder Creation:
  Orthotopic Continent Urinary Diversion
  Orthotopic Urinary Reconstruction
Nephrolithotomy: Percutaneous*:
  Nephrolithotripsy: Percutaneous*
Nephorrhaphy
Nephrotomy
Penectomy
Penoplasty*
Pyelolithotomy
Pyeloplasty: Open
Pyelostomy*
Pyelotomy

The following procedures are appropriate for the inpatient setting, but are not addressed by InterQual Procedures Criteria:

Renal Exploration
Transureteroenterostomy
Ureter Reimplantation
Ureterectomy
Ureterocalicostomy
Ureteroureterostomy
Ureterolithotomy
Ureterolysis
Ureteroneocystostomy
Ureteroplasty
Ureteropyelostomy
Ureterorrhaphy
Ureterosigmoidostomy
Ureterostomy*
Ureterotomy*
Urethral Repair*
Urinary Diversion, Intestinal Conduit
Urinary Reservoir, Continent Catheterizable
Vesiculectomy
Vesiculotomy, Complicated

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VASCULAR

The following procedures are appropriate for the inpatient setting based on InterQual Procedures Criteria:

Bypass, Distal, Peripheral Artery:
  Femoro-Pedal
VASCULAR (cont)

Femoro-Popliteal
Femoro-Tibial
Popliteal-Pedal
Popliteal-Tibial
Bypass, Proximal, Peripheral Artery:
  Aorto-Femoral
  Aorto-iliac
  Axillo-Bifemoral
  Axillo-Femoral
  Femoral-Femoral
  Ilio-Femoral

Endarterectomy, Carotid

Endovascular Intervention, Peripheral Artery:
  Angioplasty, Peripheral Artery
  Atherectomy, Peripheral Artery
  Embolectomy, Peripheral Artery
  Stent, Peripheral Artery
  Thrombectomy, Peripheral Artery
  Thrombolysis, Peripheral Artery

Acute limb ischemia
Planned anticoagulation*
Renal failure*

Endovascular Repair, Abdominal Aortic Aneurysm (AAA)
Endovascular Repair, Thoracic Aortic Aneurysm:
  Thoracic Aorta Aneurysm Endovascular Repair + Stenting
  Thoracic Endovascular Aneurysm Repair (TEVAR)

Resection and Graft, Abdominal Aortic Aneurysm (AAA):
  Aorto-Aortic Bypass Graft
  Aorto-Bifemoral Bypass Graft
  Aorto-Biiliac Bypass Graft

Resection and Graft, Thoracic or Thoracoabdominal Aortic Aneurysm

Thrombolysis, Deep Vein Thrombosis (DVT):
  Catheter-Directed Thrombolysis (CDT)
  Pharmacomechanical Catheter-Directed Thrombolysis (PCDT)

The following procedures are appropriate for the inpatient setting, but are not addressed by InterQual Procedures Criteria:

Aorto-Celiac / Aorto-Mesenteric Repair, +/- Graft:
  Aorto-Celiac / Aorto-Mesenteric Endarterectomy
Atherectomy: Open
Arterial Graft with Re-exploration / Revision / Re-operation
Arterial Ligation*
Arterial Transposition
Cavernous Hemangioma Revision
Embolectomy:
  Celiac Artery
  Mesenteric Artery
Embolectomy / Thrombectomy: Pulmonary Artery
Endarterectomy / Bypass, Renovascular:
  Aortorenal
  Hepatorenal
VASCULAR (cont)

Splenorenal
Endoaneurysmorrhaphy, Peripheral
Excision / Removal, Infected Graft
Ligation, Major Artery:
Abdominal
Chest
Peripheral Aneurysm / Pseudoaneurysm Repair, +/- Graft:
Endoaneurysmorrhaphy, Peripheral
Repair, Intra-abdominal / Intrathoracic:
A-V Aneurysm
Blood Vessel
Thrombectomy:
Celiac Artery
Mesenteric Artery
Thromboendarterectomy
Transection Repair, Pulmonary Artery
Venous Valve Reconstruction