GRACE Observations Data Capture Form

1. Are regional anesthesia blocks performed?  
   ☐ No  If no, SKIP to PAGE 5, Q2  
   ☐ Yes

If yes,
1.1 Who performs these blocks?  
   Mark all that apply  
   ☐ Anesthesia faculty physician Specialists  
   ☐ Anesthesia faculty physician Fellows  
   ☐ Anesthesia resident physicians  
   ☐ Nurse anesthetists  
   ☐ Student nurse anesthetists  
   ☐ Other (Specify) __________________________________________________________________

1.2 What is the purpose of these blocks?  
   Mark all that apply  
   ☐ Postoperative pain control  
   ☐ Primary anesthetic for surgery  
   ☐ Labor analgesia

1.3 What factors influence whether regional anesthesia block or general anesthesia is used as the primary anesthetic for a given surgery?  
   Mark all that apply and elaborate  
   ☐ Anesthesia provider training/expertise in regional anesthesia __________________________________________________________________

   ☐ Equipment availability __________________________________________________________________

   ☐ Cost __________________________________________________________________

   ☐ Patient preference __________________________________________________________________

   ☐ Anesthesia provider preference __________________________________________________________________

   ☐ Surgeon preference __________________________________________________________________

   ☐ Other (Specify) __________________________________________________________________
1.4 What factors prevent the use of regional anesthesia blocks?  

*Mark all that apply and elaborate*

- Anesthesia provider training/expertise in regional anesthesia
- Equipment availability
- Cost
- Patient preference
- Anesthesia provider preference
- Surgeon preference
- Other *(Specify)*

1.5 Which blocks are performed?  

*Mark all that apply*

- Intra- and peri-articular infiltration of local anesthetic
- Airway regional and topical anesthesia (for awake endotracheal intubation)
- Intravenous regional anesthesia (Bier block) for extremity surgery
- Head (e.g. scalp, face, eye, ear, nose, and oral)
- Cervical plexus
  - Intercostal
  - Paravertebral
  - Transversus abdominis plane
  - Ilioinguinal-hypogastric
  - Rectus sheath
  - Pectoralis
  - Serratus
  - Quadratus lumborum

Upper extremity:

- Brachial plexus:
  - Interscalene
  - Supraclavicular
  - Infraclavicular
  - Axillary
  - Suprascapular
1.5 **CONTINUED:** Which blocks are performed?

*Mark all that apply*

Upper extremity
- Intercostobrachial
- Elbow
- Wrist

Lower extremity:
- Sciatic:
  - Gluteal/subgluteal
  - Popliteal fossa
  - Femoral
  - Fascia iliaca
  - Obturator
  - Lateral femoral cutaneous
  - Adductor canal/saphenous
  - Ankle
  - Interspace between the popliteal artery and capsule of the knee (IPACK)
  - Lumbar plexus

Neuraxial:
- Spinal
- Epidual
- Combined spinal-epidural (CSE)
- Caudal
- Epidural blood patch

1.6 Are single-shot blocks performed?  
- No
- Yes

1.7 Are indwelling catheter-based blocks performed?  
- No if no, **SKIP to Q1.8**
- Yes

*If yes, Who is responsible for managing these catheters postoperatively? ____________________________
___________________________

1.8 What local anesthetic medications are available for regional anesthesia?

*Mark all that apply and include concentration(s) and baricity*

- Bupivacaine  Concentration(s) ____________  Baricity ____________
- Ropivacaine  Concentration(s) ____________  Baricity ____________
- Lidocaine  Concentration(s) ____________  Baricity ____________
- Mepivacaine  Concentration(s) ____________  Baricity ____________
- Chloroprocaine  Concentration(s) ____________  Baricity ____________
- Other **Specify Medication(s), Concentration(s) and Baricity**

1.9 What additives are mixed with local anesthetic medication for peripheral nerve blocks?  
*Mark all that apply*
- [ ] Epinephrine
- [ ] Dexamethasone
- [ ] Clonidine
- [ ] Opioids *(Specify)*
- [ ] Other *(Specify)*

1.10 What additives (if any) are mixed with local anesthetic medication for spinal blocks?  
*Mark all that apply*
- [ ] Opioids *(Specify)*
- [ ] Other *(Specify)*

1.11 What additives (if any) are mixed with local anesthetic medication for epidural blocks?  
*Mark all that apply*
- [ ] Epinephrine
- [ ] Bicarbonate
- [ ] Opioids *(Specify)*
- [ ] Other *(Specify)*

1.12 What nerve localization techniques are used for peripheral nerve blocks?  
*Mark all that apply*
- [ ] Ultrasound
- [ ] Nerve stimulator
- [ ] Paresthesia-seeking
- [ ] Perivascular/transvascular
- [ ] Surface anatomy-based

1.13 Is there a dedicated regional anesthesia block service?  
- [ ] No *If no, SKIP to PAGE 5, Q2*
- [ ] Yes

*If yes,*
What providers staff the regional anesthesia block service?  
*Mark all that apply*
- [ ] Anesthesia faculty physician Specialists
- [ ] Anesthesia faculty physician Fellows
- [ ] Anesthesia resident physicians
- [ ] Nurse anesthetists
- [ ] Student nurse anesthetists
- [ ] Other *(Specify)*
2. What systemic enteral/parenteral medications are used to manage pain in the perioperative period?  
Mark all that apply
- Opioids *(Specify)* 
- Ketamine 
- Nitrous oxide 
- Intravenous local anesthetic (e.g. lidocaine) 
- Dexmedetomidine 
- Acetaminophen 
- Non-steroidal antiinflammatory drugs *(Specify)* 
- Steroids *(Specify)* 
- Antiepileptics *(Specify)* 
- Antidepressants *(Specify)* 
- Other *(Specify)*

3. Are anesthesia providers involved with acute pain management outside of the preoperative holding area, operating rooms, and post-anesthesia recovery units?  
   - No *If no, SKIP to Q4*  
   - Yes

   If yes
   3.1 Is there a dedicated acute pain service?  
      - No *If no, SKIP to Q4*  
      - Yes

      If yes
      3.1.1 What providers staff the acute pain service?  
         Mark all that apply
         - Anesthesia faculty physician Specialists 
         - Anesthesia faculty physician Fellows 
         - Anesthesia resident physicians 
         - Nurse anesthetists 
         - Student nurse anesthetists 
         - Other *(Specify)*

4. What regional anesthesia resources are available?  
Mark all that apply
- Ultrasound machine. *Provide make and model*
  Ultrasound probes
  - Linear 
  - Curvilinear 
  - Vascular/high frequency 
  - Ultrasound gel 
  - Ultrasound probe cover (sterile) 
  - Nerve stimulator (and electrode stickers). *Provide make and model* 
  - Topical disinfectant

GRACE Observations Data Capture Form

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4. **CONTINUED:** What regional anesthesia resources are available?

**Needles**  
*Mark all that apply*

- Hypodermic needles: Gauge(s), Length(s), Tip(s) ________________________________
- Angiocatheters: Gauge(s), Length(s) ___________________________________________
- Needles to draw medication into syringes______________________________________
- Spinal needles: Gauge(s), Length(s), Tip(s) (e.g. pencil-point or cutting) __________
- Epidural needles: Gauge(s), Length(s), Tip(s) (e.g. Tuohy) ______________________
- Peripheral nerve block needles: Gauge(s), Length(s) _____________________________
- Indwelling catheters for neuraxial and peripheral nerve blocks____________________

- Syringes to hold and deliver medications
- Extension tubing
- Normal saline/sterile water for drug dilution

**Indwelling catheter securement/dressing supplies**

- Tape
- Occlusive dressing
- Suture
- Antibiotic patches
- Gauze/sponges
- Other *(Specify)* ________________________________

- Marking pen
- Ruler

**Monitors**

- Electrocardiograph
- Non-invasive blood pressure monitor
- Pulse oximeter
- Capnograph

**Sedatives**

- Benzodiazepines
- Opioids
- Propofol
- Ketamine
- Other *(Specify)* ________________________________
4. **CONTINUED:** What regional anesthesia resources are available?

   **Mark all that apply**
   
   Resuscitation equipment
   
   - [ ] Oxygen supply
   - [ ] Nasal cannula
   - [ ] Nasal/oral airways
   - [ ] Oxygen mask
   - [ ] Resuscitators (bag-mask ventilation device)
   - [ ] Laryngeal mask airways
   - [ ] Endotracheal tubes
   - [ ] Laryngoscopes/blades
   - [ ] Video laryngoscopes
   - [ ] Suction
   - [ ] Defibrillator
   - [ ] Intravenous cannulas

   Resuscitation drugs
   
   - [ ] Intralipid®
   - [ ] Atropine
   - [ ] Epinephrine
   - [ ] Succinylcholine
   - [ ] Ephedrine
   - [ ] Phenylephrine
   - [ ] Glycopyrrolate

5. What elements of practice are followed?

   **Mark all that apply**
   
   - [ ] Informed consent
   - [ ] Pre-block checklist

   Documentation of block
   
   - [ ] Procedure description
   - [ ] Personnel
   - [ ] Equipment/drugs used
   - [ ] Success/complications
   - [ ] Sterility
   - [ ] Monitors used/vital signs

6. What improvements can be made to this form?

   *(Use white space anywhere on form and continue on back page, if desired)*

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Thank you for making observations and providing feedback!