## Checklist for the Response to Intraoperative Neuromonitoring Changes in Patients with a Stable Spine

### GAIN CONTROL OF ROOM
- Intraoperative pause: stop case and announce to the room
- Eliminate extraneous stimuli (e.g., music, conversations, etc.)
- Summon ATTENDING anesthesiologist, SENIOR neurologist or neuropathologist, and EXPERIENCED nurse
- Anticipate need for intraoperative and/or perioperative imaging if not readily available

### ANESTHETIC/SYSTEMIC
- Optimize mean arterial pressure (MAP)
- Optimize hematocrit
- Optimize blood pH and pCO₂
- Seek normothermia
- Discuss POTENTIAL need for wake-up test with ATTENDING anesthesiologist

### TECHNICAL/NEUROPHYSIOLOGIC
- Discuss status of anesthetic agents
- Check extent of neuromuscular blockade and degree of paralysis
- Check electrodes and connections
- Check neck and limb positioning; check limb position on table especially if unilateral loss
- Determine pattern and timing of signal changes

### SURGICAL
- Discuss events and actions just prior to signal loss and consider reversing actions:
  - Remove traction (if applicable)
  - Decrease/remove distraction or other corrective forces
  - Remove rods
  - Remove screws and probe for breach
  - Evaluate for spinal cord compression, examine osteotomy and laminotomy sites
  - Intraoperative and/or perioperative imaging (e.g., O-arm, fluoroscopy, xray) to evaluate implant placement

### ONGOING CONSIDERATIONS
- REVISIT anesthetic/systemic considerations and confirm that they are optimized
- CONSIDER Wake-up test
- Consultation with a colleague
- Continue surgical procedure versus staging procedure
- IV steroid protocol: Methylprednisolone 30 mg/kg in first hr, then 5.4 mg/kg/hr for next 23 hrs

---

Date of Revision: 2/20/2014