**Tech in Surgery - Certified TS-C (NCCT) Detailed Test Plan**

**Effective Date:** February 17, 2014

This detailed test plan reflects the results of a national job analysis study that determined the critical job competencies to be tested by NCCT in this certification examination. It contains 175 scored items, 25 unscored pretest items, and candidates are allowed four (4) hours to complete the examination.

<table>
<thead>
<tr>
<th>Number of Scored Items</th>
<th>Critical Job Competencies</th>
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<tbody>
<tr>
<td><strong>135</strong></td>
<td><strong>Surgical Care</strong></td>
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<tr>
<td>(44)</td>
<td><strong>Pre-Surgical Care and Preparation</strong></td>
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<tr>
<td></td>
<td>• Prepare the operating room environment and equipment according to the surgical procedure.</td>
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<td></td>
<td>• Verify the presence of surgical team members and the patient.</td>
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<td></td>
<td>• Anticipate the needs of special patient populations (e.g., pediatric, geriatric, immune compromised).</td>
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<td>• Gather specific surgical supplies, medications, and equipment based on the surgeon’s preference card (pick list).</td>
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<td>• Check package integrity and expiration date of sterile supplies.</td>
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<td>• Obtain specialized patient equipment (e.g., sequential compression devices, pneumatic tourniquet, thermoregulatory devices).</td>
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<td>• Assemble and test positioning equipment.</td>
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<td>• Don personal protective equipment (e.g., mask, eye protection).</td>
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<td>• Follow the principles of aseptic technique while opening supplies for the surgery.</td>
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<td></td>
<td>• Perform surgical hand scrub.</td>
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<td>• Don sterile gown and gloves.</td>
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<td></td>
<td>• Set up and inspect sterile instruments and supplies for surgical procedures.</td>
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<td>• Perform pre-operative count with the circulating nurse (e.g., sutures, sharps, sponges, instruments).</td>
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<td>• Verify identity of the patient and operative site.</td>
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<td>• Transfer the patient to the operating room table.</td>
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<td>• Place the safety belt and pressure pads on the patient.</td>
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<td>• Assist the surgical team with gowning and gloving.</td>
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<td>• Assist with the draping the patient.</td>
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<td>• Verify and label medications and solutions at the sterile field pre-operatively.</td>
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<td>• Perform surgical Time Out.</td>
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<td>• Initiate preventative and/or corrective actions in potentially hazardous pre-operative situations.</td>
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<td>• Perform appropriate actions during a pre-operative emergency.</td>
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</tbody>
</table>
• **Intra Operative Care**
  
  • Maintain the operating room environment according to surgical procedure (e.g., temperature, lights, suction, and furniture).
  • Verify and label medications and solutions at the sterile field intra-operatively.
  • Assemble and test specialty equipment during surgery (e.g., computer navigation systems, harmonic scalpel, endoscopic technology).
  • Anticipate the need for retraction to facilitate proper operative exposure.
  • Pass instruments and supplies as anticipated during surgery.
  • Provide intra-operative assistance when delegated by the surgeon.
  • Anticipate the need for and then implement sponging, suctioning, and irrigation.
  • Ensure aseptic technique is maintained by all OR team members throughout the surgical procedure.
  • Anticipate the need for various hemostatic agents based on the type of surgery.
  • Assemble internal stapling devices.
  • Prepare and cut suture materials as directed.
  • Verify with the surgeon and the circulating nurse the specific type and/or size of implantable devices.
  • Cauterize when directed by the surgeon (e.g., laser, cryo, ESU).
  • Obtain the appropriate sutures/needles and stapling devices.
  • Handle specimens appropriately.
  • Prepare drains, catheters, and tubing for use at the end of the case.
  • Assist in the placement of wound drains.
  • Perform intra-operative counts with the circulating nurse (e.g., sutures, sharps, sponges, instruments).
  • Report the total amount of medications and solutions used during the procedure.
  • Assist with skin closure.
  • Connect and activate drains to the suction device.
  • Assemble and apply dressing material before transporting the patient to the recovery room.
  • Assist within application of casts, splints, braces, and similar devices.
  • Initiate preventative and/or corrective actions in potentially hazardous intra-operative situations.
  • Perform appropriate actions during an intra-operative emergency.
  • Provide the surgical team members the supplies and solutions required for the procedure.

• **Post-Operative Care**
  
  • Maintain the sterility of the back table and mayo stand until the patient leaves the room.
  • Observe the patient post-operatively for any bleeding and relay status to the surgical team (e.g., bleeding at surgical site, hematoma).
  • Remove the surgical drapes from the patient.
  • Cleanse the patient’s skin (e.g., blood, prep solution, body fluids).
  • Remove surgical gown, gloves and other personal protective equipment.
  • Assist with patient transfer from the operating table to the stretcher.
  • Comply with Standard Precautions when removing and discarding of drapes and waste.
  • Dispose of all sharps after surgery in compliance with Standard Precautions and procedures.
  • Assemble the instruments for the decontamination and sterilization process.
  • Return unused supplies and equipment to the designated location.
  • Perform room turnover after surgery.
  • Initiate preventative and/or corrective actions in potentially hazardous post-operative situations.
  • Perform appropriate actions during a post-operative emergency.
Additional Duties

- Administrative and Personnel
  - Revise surgeon’s preference card (pick list) as necessary.
  - Follow facility disaster plan protocol.
  - Recognize and react to safety and environment hazards (e.g. fire, chemical spill, laser smoke).
  - Follow cost saving measures.
  - Provide culturally appropriate care to patients from different backgrounds.
  - Precept to perioperative personnel when needed.
  - Perform transition of care as per hospital policies and procedures (e.g. breaks, lunch, end of shift, on call).
  - Record and report unusual events appropriately (e.g., sentinel events, incident reports).
  - Maintain par levels of supplies.
  - Act as an advocate for the patient.

- Equipment Sterilization and Maintenance
  - Operate sterilizing devices according to parameters and manufacturer’s recommendations.
  - Utilize and contain liquid sterilants and disinfectants according to parameters and manufacturer’s recommendations.
  - Manually decontaminate and clean instruments and equipment.
  - Visually inspect and assemble any equipment and instruments used during the case for future use.
  - Package, label, and sterilize instruments and equipment.
  - Perform biological and DART air removal tests per second.
  - Update equipment records and logs.

Total