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



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#### TS-C (NCCT) Detailed Test Plan

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. This certification examination is comprised of 95-98% standard, 4-option multiple-choice items and 2-5% alternative items (e.g., Drag and Drop, Multi-Select, Hotspot).

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# 55 1 Preoperative Care and Preparation

#### A Set up for surgical procedure

- A1 Arrange sterile instruments and supplies for surgical procedures.
- A2 Visually inspect and assemble any equipment and instruments used during the case.

# **B** Execute patient safety

- B1 Anticipate the needs of special patient populations (e.g., pediatric, geriatric, immune compromised).
- B2 Explain the surgical Time Out.
- B3 Understand safe transfer of the patient to the operating room table.
- B4 Understand placement of the safety belt and pressure pads on the patient.
- B5 Verify count with circulating nurse/nurse (e.g., sutures, sharps, sponges, instruments.

#### C Apply sterile technique

- C1 Use appropriate personal protective equipment (e.g., mask, eye protection).
- C2 Explain the principles of aseptic technique while opening supplies for the surgery.
- C3 Describe proper sequence for surgical hand scrub.
- C4 Describe the proper technique for donning sterile gown and gloves.
- C5 Outline the sequence for gowning and gloving the surgical team.
- C6 Outline the sequence for draping the patient.

# 68 2 Perioperative Care and Preparation

#### A Assess the integrity and sterility of items

- A1 Differentiate methods of sterilization (i.e. temperature, length of time).
- A2 Determine liquid sterilants and disinfectants according to parameters and manufacturer's recommendations.
- A3 Verify correct package integrity (read indicators, know what makes a package unsterile).
- A4 Verify biological and DART air removal tests per protocol.

#### **B** Utilize preference cards

- B1 Modify surgeon's preference card (pick list) as necessary.
- B2 Prepare supplies listed on preference card.
- B3 Utilize cost saving measures.

# C Document unusual events (e.g., sentinel events, incident reports)

- C1 Given an example, identify information required to complete an incident report.
- C2 Define reportable incidents.

#### **D** Understand environmental safety

- D1 Initiate preventative and/or corrective actions in potentially hazardous situations.
- D2 Perform appropriate actions during en emergency.
- D3 Explain RACE & PASS.
- D4 Utilize laser safety.
- D5 Explain what actions to take during a biohazard spill.
- D6 Utilize Safety Data Sheets (SDS).
- D7 Understand standard precautions.
- E Prepare the operating room according to the surgical procedure (e.g., temperature, position lights, ensure items are functioning, and placement of furniture)

# F Facilitate the completion of proper documentation

- F1 Handle specimens appropriately.
- F2 Report the total amount of medications and solutions used during the procedure.

# G Understanding of basic sciences as they relate to surgical procedures

- G1 Apply knowledge of human anatomy to the surgical procedure.
- G2 Apply principles of asepsis
- G3 Distinguish modes of transmission of microorganisms to apply appropriate contact precautions (e.g., TB, MRSA, CDiff, VRE).
- G4 Understand the uses, effects, and complications of drugs and solutions.
- G5 Execute the 5 rights of medication administration.
- G6 Understand appropriate fluid utilization.

# 35 3 Intraoperative Care and Preparation

# A Support the needs of the surgeon

- A1 Assess the need for retraction to facilitate proper operative exposure.
- A2 Determine necessary instruments and supplies during surgery.
- A3 Anticipate intra-operative assistance to the surgeon (e.g., sponging, suctioning, irrigation, wiping instruments).
- A4 Apply indirect cautery under the direction of the surgeon.
- A5 Prepare and cut suture materials as directed.

#### B Execute end of the procedure tasks

- B1 Summarize the steps to assist with skin closure.
- B2 Understand dressing materials.
- B3 Explain the application of casts, splints, braces, and similar devices.

# C Preparation of supplies

- C1 Distinguish among stapling devices.
- C2 Confirm with the surgeon and the circulating nurse the specific type and/or size of implantable devices.
- C3 Outline the steps for surgical device preparation (drains, catheters, tubing).
- C4 Identify the appropriate sutures/needles.

# 17 4 Postoperative Care and Preparation

#### A Recognize possible post op complications (e.g., bleeding at surgical site, hematoma)

#### B Execute end of case procedures

- B1 Complete room turnover after surgery (return unused supplies)
- B2 Maintain the sterility of the back table and mayo stand until the patient leaves the room.
- B3 Explain how to prepare the instruments for the decontamination and sterilization process.