**AUTONOMIC NERVOUS SYSTEM TESTING PRACTICE ANALYSIS**

This Document represents a delineation of the tasks (T) performed and knowledge (K) applied by Autonomic Nervous System (ANS) testing technologists engaged in the practice of their profession. This practice takes place in the context of their unwavering commitment to patient care and safety.

**(15%) Domain I – Assessment**

T-1 Gather additional medical information by taking a patient history in order to confirm clinical symptoms, plan test strategies, avoid adverse effects and establish rapport.

The safe and effective performance of this task requires knowledge of:

K-1 Elements of a patient history

K-2 Medical terminology

K-3 Effects of medication on patients and testing

K-4 ANS disorders

K-5 Contraindications to ANS testing

K-6 Anatomy and physiology

K-7 Allergies and sensitivities

T-2 Observe and document patient characteristics and clinical status to obtain additional information, confirm readiness for testing and ensure patient safety.

The safe and effective performance of this task requires knowledge of:

K-2 Medical terminology

K-3 Effects of medication on patients and testing

K-4 ANS disorders

K-5 Contraindications to ANS testing

K-6 Anatomy and physiology

K-7 Allergies and sensitivities

**(20%) Domain II - Setup**

T-1 Prepare the equipment for testing by ensuring functionality and entering patient specific information.

The safe and effective performance of this task requires knowledge of:

K-2 Medical terminology

K-5 Contraindications to ANS testing

K-7 Allergies and sensitivities

K-8 Autonomic testing procedures

K-9 ANS equipment components

K-10 Principles of electrical safety

K-11 Infection control

T-2 Prepare the testing laboratory by obtaining required supplies.

The safe and effective performance of this task requires knowledge of:

K-7 Allergies and sensitivities

K-8 Autonomic testing procedures

K-9 ANS equipment components

K-10 Principles of electrical safety

K-12 Test specific supplies

T-3 Prepare the patient for testing by explaining the procedure, positioning for testing and applying the testing equipment.

The safe and effective performance of this task requires knowledge of:

K-2 Medical terminology

K-3 Effects of medication on patients and testing

K-4 ANS disorders

K-5 Contraindications to ANS testing

K-6 Anatomy and physiology

K-7 Allergies and sensitivities

K-8 Autonomic testing procedures

K-9 ANS equipment components

K-10 Principles of electrical safety

K-12 Test specific supplies

K-13 Age/cognitive level specific test instructions

**(55%) Domain III - Patient Testing**

T-1 Perform ANS tests.

The safe and effective performance of this task requires knowledge of:

K-2 Medical terminology

K-3 Effects of medication on patients and testing

K-4 ANS disorders

K-6 Anatomy and physiology

K-7 Allergies and sensitivities

K-8 Autonomic testing procedures

K-9 ANS equipment components

K-10 Principles of electrical safety

K-13 Age/cognitive level specific test instructions

K-14 ANS tests

A. Sudomotor

1. Quantitative Sudomotor Axon Reflex Test (QSART)

2. Resting Sweat Output (RSO)

3. Thermoregulatory Sweat Test (TST)

B. Adrenergic

1. Head Up Tilt Test

2. Beat-to-beat Blood Pressure Response to Valsalva Maneuver

C. Cardiovagal

1. Heart Rate Response to Deep Breathing

2. Valsalva Ratio

T-2 Maintain the laboratory environment to optimize the quality of test data.

The safe and effective performance of this task requires knowledge of:

K-8 Autonomic testing procedures

K-9 ANS equipment components

K-10 Principles of electrical safety

K-12 Test specific supplies

K-13 Age/cognitive level specific test instructions

K-14 ANS tests

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1. Head Up Tilt Test

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C. Cardiovagal

1. Heart Rate Response to Deep Breathing

2. Valsalva Ratio

K-15 Factors affecting test data

T-3 Modify or adjust the recording strategy, instrument parameters or both based on the technologist’s evaluation of recorded data to ensure complete, comprehensive and technically satisfactory studies.

The safe and effective performance of this task requires knowledge of:

K-2 Medical terminology

K-3 Effects of medication on patients and testing

K-4 ANS disorders

K-6 Anatomy and physiology

K-7 Allergies and sensitivities

K-8 Autonomic testing procedures

K-9 ANS equipment components

K-10 Principles of electrical safety

K-11 Infection control

K-13 Age/cognitive level specific test instructions

K-14 ANS tests

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K-15 Factors affecting test data

K-16 Troubleshooting techniques

K-17 Artifact monitoring, identification and elimination techniques

K-18 Data anomalies

T-4 Document patient behavior and clinical events to obtain additional information for test interpretation.

The safe and effective performance of this task requires knowledge of:

K-2 Medical terminology

K-3 Effects of medication on patients and testing

K-4 ANS disorders

K-6 Anatomy and physiology

K-7 Allergies and sensitivities

K-8 Autonomic testing procedures

K-13 Age/cognitive level specific test instructions

K-14 ANS tests

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K-15 Factors affecting test data

K-17 Artifact monitoring, identification and elimination techniques

K-18 Data anomalies

**(10%) Domain IV - Post-testing**

T-1 Verify data integrity and storage.

The safe and effective performance of this task requires knowledge of:

K-9 ANS equipment components

K-14 ANS tests

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3. Thermoregulatory Sweat Test (TST)

B. Adrenergic

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C. Cardiovagal

1. Heart Rate Response to Deep Breathing

2. Valsalva Ratio

K-18 Data anomalies

T-2 Process and provide to the physician assessment, observational and test data.

The safe and effective performance of this task requires knowledge of:

K-4 ANS disorders

K-14 ANS tests

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3. Thermoregulatory Sweat Test (TST)

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1. Heart Rate Response to Deep Breathing

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K-18 Data anomalies

K-19 Test responses

T-3 Clean and prepare the equipment and the environment for subsequent use.

The safe and effective performance of this task requires knowledge of:

K-9 ANS equipment components

K-10 Principles of electrical safety

K-11 Infection control

K-12 Test specific supplies

T-4 Ensure that scheduled maintenance is performed.

The safe and effective performance of this task requires knowledge of:

K-20 Equipment maintenance schedules