



### Instructions for Use

### Wrist Block Simulator

### MS2-MED

## 1. Preparation

### TRAINING GOAL #1: SETTING UP THE ULTRASOUND MACHINE

- Needle: Use sharp bevel needles, best with  $\leq 22G$  best with small diameter (25G). The use of small gauge needles increases the lifespan of the simulators.
- Sterile water ONLY when practicing injections
- Transducer: Linear - high-frequency transducer
- Depth: 3-4 cm
- **IMPORTANT: INCREASE the ultrasound gain BEFORE SCANNING (simulators are somewhat less echogenic and require more gain to obtain images similar to the human tissue)**

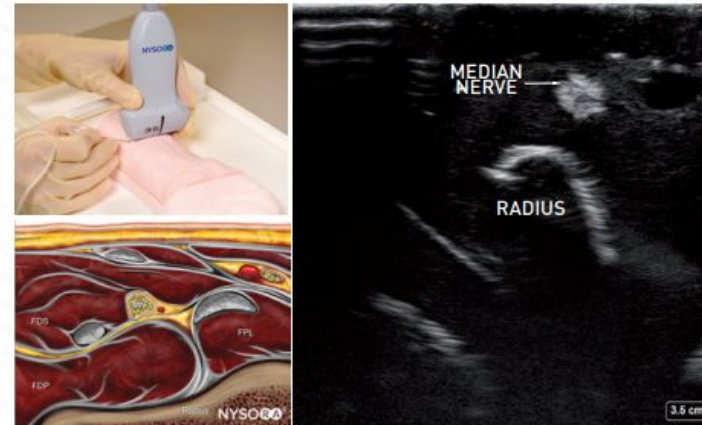
## 2. Scanning

### TRAINING GOAL #2: ANATOMY RECOGNITION

**Median nerve:** Place the transducer, in a transverse orientation proximally to the wrist crease, with a slight tilt distally (toward the hand).

Identify the following structures:

- Median nerve (MN)
- Radial artery
- Radius

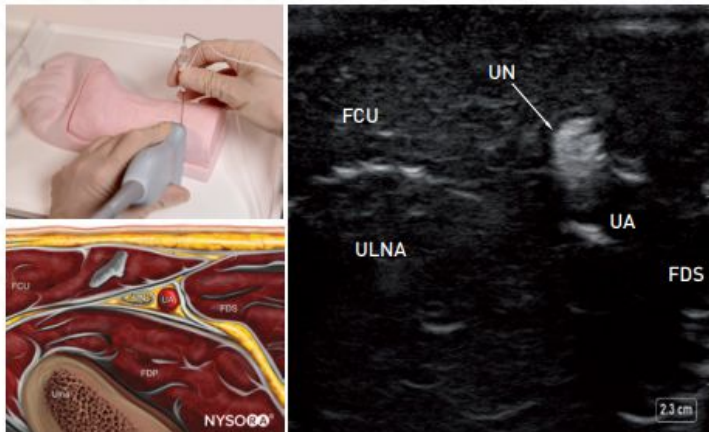




**Ulnar nerve:** Place the transducer in a transverse orientation over the anteromedial aspect (ulnar side) of the forearm

Identify the following structures:

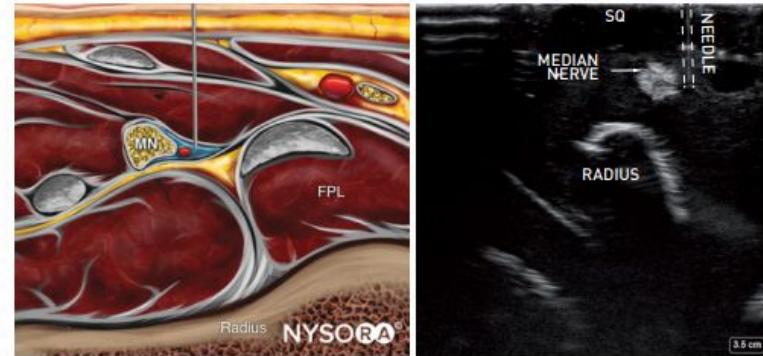
- UN: Ulnar nerve
- UA: Ulnar artery
- FCU: Flexor carpi ulnaris muscle
- FDS: Flexor digitorum superficialis muscle



### 3. Procedure

**TRAINING GOAL #3:** PRACTICE NEEDLE INSERTION INTO RELEVANT ANATOMY

To block the median nerve: Insert the needle in-plane or out-of-plane toward the lateral or medial side of the nerve (ergonomics often dictates which needle approach is better).



To block the ulnar nerve: Insert the needle in-plane or out-of-plane toward the lateral or medial side of the nerve (ergonomics often dictate which needle approach is more convenient).

