**Supplemental File 2. Scenario Overview**

**Scenario Description:** Upon entering the simulation suite, all subjects are told they are in a community emergency department with on-call, but not in-house, cardiology support. They are informed that their patient has been intubated and has third degree heart block with hypotension unresponsive to all other standard clinical treatments for bradycardia, including transcutaneous pacing. All requisite equipment for the procedure was prepared in advance, and the transvenous pacemaker (TVP) sheath introducer placement was confirmed with a chest x-ray. The subject is then instructed to place a TVP. For the baseline assessment of both groups and the final assessment for the control group, no additional instructions were provided at the outset. For the final assessment of the intervention group, subjects were told they would have access to a Just-in-Time training and that their nurse would assist them with the device. The standardized emergency nurse served to introduce the subjects to the simulated patient scenario, execute nursing tasks, and deliver built-in scenario prompts to move the scenario along at times of impasse. The flow of the scenario was designed so the initial attempt at pacing would fail, requiring subjects to troubleshoot this failed capture, ultimately necessitating withdrawal of the pacing wire to the starting position for another attempt after all options were exhausted. If they overtly stated they were unable to do so, or failed to take appropriate next steps within a set time, they would be given prompts by the standardized nurse.

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| **Phase** | **Critical Actions** | **Step Description** |
| **Pre-scenario Introduction Script\*** | Sterile garb applied | Nurse actor (standardized patient) introduces him/herself, provides a brief introduction to the case:  *“You are an emergency physician in a small community hospital without in-house cardiology. Your patient, Mr. Smith, presents in 3rd degree heart block with a rate of 35. You have tried transcutaneous pacing without success. His pharmacotherapy has been maximized. He is intubated and has a blood pressure of 60/40 with a pulse ox of 99%. You have asked your nurse to set up for a transvenous pacer. Prior to this, you have already placed a right internal jugular introducer catheter for the pacer, and proper placement is confirmed on chest X-Ray. You may now use the personal protective materials on the table as you normally would. When you are ready, let the investigator know and they will open the door for you."* |
| **TIMING STARTS: Subject arrives at patient bedside** | | |
| **Phase 1: Preparation** | 1. Pacer wire adapter tips attached 2. Pacer wire connected to generator 3. Correct generator heart rate set 4. Correct generator output set | Subject enters simulated space configured like an emergency department space. The manikin is placed on a cardiac monitor with right internal jugular access via sheath introducer. A bedside table contains an opened transvenous pacer kit set upon a sterile workspace, and subjects are expected to prepare items for transvenous pacing. Additionally, an external pacing generator is provided off of the field. This phase ends when the subject makes any attempt to pace the manikin. |
| **Phase 2:**  **Troubleshooting Failed Capture** | 1. Pacer generator turned on 2. Returns pacer wire to "start" position to reattempt pacing† | Subject attempts to pace patient. Regardless of performance, all first attempts are unsuccessful.‡ This phase ends with the subject having to troubleshoot the failure to capture, and ultimately withdrawing the pacing wire to the start position.† |
| **Phase 3: Achieving Capture** | 1. Subject identifies successful *electrical* capture 2. Subject demonstrates successful *physiologic* capture | Subject again attempts to pace patient. Using correct technique, the subject achieves successful capture. This phase ends when the subject indicates they have achieved capture and have no further changes to make to external pacing generator settings. |
| **Phase 4: Post-Procedure** | Orders post-procedure chest x-ray | Subject is expected to secure the wire, confirm no complications, and determine a suitable disposition. |
| **TIMING ENDS: Subject indicates no further actions** | | |

\* Activities during the Pre-scenario Introduction Script are **not** included in overall time measures.

† Start position wire depth equals 15-20cm, corresponding to the wire being after the sheath introducer but extra-atrial.

‡ The failed capture rhythm is different for baseline and final assessment simulations. The failed capture rhythm for the baseline assessment is incomplete capture. The failed capture rhythm for the final assessment is non-capture.