

Annual Competency Assessment for the HPHA

Defibrillation/Pacing/Epinephrine administration Medical Directives

Assessor Toolkit

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**Helpful Hints for Assessors**

1. Plan “Blitz” days with other assessors instead of individual assessments whenever possible, to make the best use of your time and resources. You can coordinate with your scheduler to determine two days when the majority of staff are not working and can attend.
2. Communicate pre-requisite expectations with staff several months in advance to allow time for ACLS recertification and completion of the HPHA DEFIBRILLATION, CARDIOVERSION/PACING/EPINEPHRINE e-LEARNING MODULE e-learning module.
3. Secure Manager and Team Leader support to ensure compliance amongst staff and reinforce that continuing competence is an expectation of HPHA and the CNO.
4. Discuss payment of staff time with the Managers prior to completing assessments, to avoid assumptions and allow for accurate payroll. Keep accurate sign-in sheets for payroll as well.
5. Book a room to perform the assessments in well ahead of the assessment date. The Administration Assistants at each site or Educators can help you with this.
6. Plan to have all supplies needed well ahead of the assessment dates, including:
* ZOLL defibrillator (borrowed from one of your inpatient units or ER)
* Set of multi-function pacer pad and a set of paddles
* A resuscitation torso/mannequin(optional) (these are located at each site)
* Make copies of all forms in this toolkit
1. Have a remediation plan in place in case you are unable to verify a staff member’s competency due to their performance during the assessment (consider reviewing concerns with them and having them participate in a future session, perhaps with a different assessor).
2. Remember that some staff will be nervous. Try to make the assessments as stress free as possible! Encourage staff often, and remind them that they know this information!

**Important**

The assessors for each unit/site will work together with their unit/site leadership to ensure the annual defibrillation competency assessments are completed. Neither Training & Development, nor the Clinical Educators will track or require proof of completion of these assessments.

**The goal:**

To ensure ALL practicing RN staff at Seaforth, Clinton, and St. Mary’s sites, as well as the Stratford ED & Critical Care Unit, will have successful confirmation of their defibrillation/pacing/epinephrine administration competence by the completion of one of the annual assessment sessions offered by the delegated Assessors.

**“What it is”**

* An assessment of a Registered Nurses competence to use the defibrillating and pacing equipment correctly, and under the appropriate circumstance, as directed, as a Medically Delegated Act.

**“What it is not”**

* This is not a review session for nurses, and no new nursing information will be taught.
* No other nursing/clinical skills will be assessed (i.e.; review of I/O, intranasal delivery system, etc.)

**Expectations of you as an Assessor**

* Review the Medical Directives related to defibrillation, pacing and epinephrine administration, located on MyAlliance
* Maintain current ACLS certification and working knowledge of HPHA defibrillators
* Collaborate with the other designated assessors and unit leadership to complete the defibrillation competency assessments annually and keep track of when these assessments are due to be performed, as well as staff compliance. You are in control of all aspects of the annual assessment process for your unit/site.
* Every 2 years, collaborate as a group with the other designated assessors to schedule a repeat evaluation session with the Physicians that are providing you with written authority to act as assessors.

**Expectations of the Registered Nursing Staff you are assessing**

Clear expectations should be communicated to staff prior to them signing up for a competency assessment session.

Expectations include:

* Participating in the annual competency assessment in order to be a contributing member of their Unit’s Code Blue response team, and to be able to safely accompany patients on transport between facilities.
* Successfully completing the online e-learning defib/cardioversion/pacing module and exam PRIOR to their competency assessment date and bring proof of a passing grade to the assessment.
* Maintaining current ACLS certification. Staff may be asked by the Assessor to bring proof of certification to their assessment.
* Working with the Assessors, Team Leaders and Managers to ensure they can attend one of the offered assessment sessions, within the yearly timeframe specified by their site.
* If a staff member does not come to the assessment prepared, they will not be paid for their time and will need to select a different session once they are better prepared.

**Annual Competency Assessment Sign up**

**Site: Date: Assessor: Room:**

Reassessments are generally 1 hour in duration. The first half will be spent reviewing Defib equipment use and familiarity, the next half is for completing the competency assessment based on the standardized competency checklist list for Defib/pacing and cardioversion scenarios.

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| Time | Employee Name (Print) | Initial Assessment or Reassessment  |
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| **🗹** | **HPHA Defibrillator/Pacing/ Cardioversion Equipment Competency Assessment** |
|  | Completion of My Alliance e-learning module :*“Defibrillation, Cardioversion & Transcutaneous Pacing Learning Package* |
| **General Use** |
|  | Code Policies on My Alliance: Code Blue- Cardiac Arrest/Medical Emergency - Adult |
|  | Daily Zoll check-checklist (where to find updated lists on MyAlliance) |
|  | How to change paper |
|  | Pad and paddle placement for anterior/lateral placement and anterior/posterior placement |
|  | Isolation procedureDo not take cart into rooms just the defibrillator (it can be wiped down) |
|  | 2 different ZOLL defibrillators within HPHA:* R series and M series: Both default to 200 joules

\*\*\*Each nurse is responsible for retaining familiarity with defibrillators throughout the hospital\*\*\* |
|  | MRI Code Blue Protocol:(Patient will be removed from MRI suite by MRI staff) |
|  | New Resuscitation Record1 copy for patient chart1 copy forwarded to Manager, CCU/Telemetry |
|  | Debriefing after a Code Blue/Code PinkForm to use |
| **Use of Defibrillation Mode** |
|  | “On/off” button |
|  | Modes: monitor, pacer, defib, |
|  | Battery: in/out and changing of battery weekly with crash cart check  |
|  | Hands free connection; Paddle connection (location) and show placement on mannequin |
|  | Buttons:* Lead button
* size button
* recorder button
* energy select
* shock button
* sync
* 4:1
* NIBP button
* option button
* parameters
* report data
 |
| **Use of Pacer Mode** |
|  | Pacer Mode |
|  | Milliamperes |
|  | Rate |
|  | Must have electrodes on patient to pace-Avoid pre-connecting electrodes to lead wires as they will more easily dry out |
|  | Other considerations before pacing:* Patient comfort/sedation or analgesic administration
 |
| **Medical Directives** |
| **What is a Directive?**A directive is an order for a procedure or series of procedures that may be implemented for a number of clients when specific conditions are met and specific circumstances exist. A directive is always written by a regulated health professional who has the legislative authority to order the procedure for which she/he has ultimate responsibility (CNO, 2014).**What is a controlled Act?**Controlled acts are defined as acts that could cause harm if performed by those who do not have the knowledge, skill and judgment to perform them. A regulated health professional is authorized to perform a portion or all of the specific controlled acts that are appropriate for her/his profession’s scope of practice (CNO, 2014). |
|  | MD-ED-CC-016 - Medical Directive: Defibrillation – Adult  |
|  | MD-ED-CC-010 - Initiation and Adjustment of Transcutaneous/Transvenous Pacemaker |
|  | MD-ED-CC-019 - Medical Directive: Epinephrine Administration in an Adult Code Blue |

Registered Nurse, \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_, has been assessed as having the knowledge, skill and judgment to utilize equipment intended to apply a form of energy used to perform the controlled act of defibrillation and pacing in accordance with HPHA Code Blue-Medical Emergency- Adult Policy; Defibrillation-Adult, Initiation and Adjustment of Transcutaneous Pacer, and Epinephrine Administration Medical Directives; and CNO standards of care.

Name of Registered Nurse:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Signature of Registered Nurse: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Name of Facilitator: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

 Signature of Facilitator: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Date: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

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| **Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Clinical Area: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_****Date: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Assessor: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_** |
|  **HPHA Defibrillator/Pacing/ Cardioversion Scenario and Oral Exam Competency Assessment** |
| **Scenario 1:**A 60-year-old woman presents to triage reporting a funny sensation in her neck.Vitals signs: Heart rate = 180 BP 140/80, Spo2 = 96%You are taking the patient and escort her into a room |
| **Question** | **Answers** | **Met/Unmet** |
| What are your first actions? | * Selects a room with a defibrillator
* Attach to cardiac monitor
* Manual pulse check (treat the pt, not the monitor)
 |  |
| What is the rhythm? | * PSVT
 |  |
| What are your next actions? | * Obtain a 12-lead ECG
* Start an IV, antecubital is 1st choice
* Anticipate vagal maneuvers by MD
 |  |
| What drugs do you anticipate the MD will order and what is the recommended dosing? | * Adenosine 6mg IV rapid push
* May repeat x 1 with 12mg dose
 |  |
| What is the next line of drug? | * Verapamil 2.5mg IV over 2 minutes; may repeat in 10 minutes with 5-10mg to a max of 15mg
* Diltiazem 20mg IV over 2 minutes; may repeat in 15 minutes with 25 mg
* Metoprolol 5mg IV; may repeat x 2 to a max of 15mg
 |  |
| After two doses of Adenosine the patient’s rate and rhythm remain the same. She has developed central chest pressure. Vital signs: HR: 210, BP: 100/60.  |
| What is the standard care for this and why? | * Synchronized Cardioversion
* Unstable criteria: CP/SOB/altered LOC/hypotensive
* Unstable pts are better treated electrically
 |  |
| List the required equipment for synchronized cardioversion and explain the set up. | **Equipment*** Crash cart with resuscitation equipment
* Cardiac monitor
* IV
* Supplemental oxygen

**Procedure*** Ensure the procedure is explained to the pt
* Ensure pt is connected to cardiac monitor
* Ensure patent IV
* Provide supplemental oxygen
* Obtain 12-lead ECG if not already done
* Connect pt to multifunction pads in anterior-posterior positions. Roll pads on to avoid air pockets to eliminate chance of arching current
* Connects 3-lead defibrillator electrodes
* Ensure monitor shows clear “R” wave w/o artifact. Select lead that best shows the “R” wave
* Push the sync button
* Ensure the sync marker is tagging the “R” wave
* Administer sedation meds
* Midazolam 1-5mg w or w/o Fentanyl 20-500 mcg IV push
* Propofol 50-150 mg IV push
* Select energy level per MD order
* When charged declare, “I’m clear, You’re Clear, We’re all Clear”
* Push and HOLD the discharge button
* Reassess rhythm and vitals
 |  |
| Post Cardioversion the monitor shows NSR with HR 75.  |
| Explain your next interventions | * Place in left lateral position
* 1:1 nursing care for the next hour including monitoring rhythm and vital signs
* Procedural sedation documentation, charting
* Repeat 12-Lead ECG
 |  |

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| **Scenario 2:** A 60-year-old gentleman was admitted to your unit yesterday with a NSTEMI. He is being managed medically. He is an IDDM who has stable vitals. His rhythm has been NSR with 10AV block. He has crackles in both bases and peripheral edema. After washing his face, the monitor alarm rings and you observe the following arrhythmia on the screen. |
| **Question** | **Answers** | **Met/Unmet** |
| What is the rhythm? | Ventricular tachycardia |  |
| What is your first response? | * Manual pulse check
* Assess responsiveness
* CABs (Circulation, Airway, Breathing)
 |  |
| This patient has no pulse. He is unconscious and bluish |
| What is your next action? | * Call for help, Initiate Code Blue
* Initiate CPR, 30:2 (1 cycle)
* 5 cycles (2 minutes or until defib is charged and ready)
* Oral airway, BVM
 |  |
| Your co-worker arrives with the crash cart and takes over CPR as you are the only one competent to perform the delegated act of defibrillation.  |
| What is your next action? | * Attach multifunction pads and leads
 |  |
| Explain/demonstrate correct pad placement | **Pads*** Anterior-posterior
* Anterior is over precordium just to the left of the left sternal border
* Posterior is behind the heart in the left intrascapular area

**Paddles*** Lt: just below and to the left of the pt’s left nipple along the anterior-axillary line. For women, the apex paddle is place at the 5th-6th ICS w the centre of the paddle at the mid-axillary line
* Rt: below the right clavicle to the patient’s right of the sternum
 |  |
| What is the rhythm? | * Ventricular Tachycardia
 |  |
| Demonstrate operation of the defibrillator in defib mode and describe your heart tracing source | * Turns machine to “defib”
* Paddles are selected as the ECG source when the instrument is turned to monitor or defib and paddles are connected to multifunction cable
* Multi-function pads are selected as the ECG source whenever the instrument is turned to monitor/defib
* ASAP place the electrodes on the patient’s chest and press “lead” button to select the lead that most clearly displays the rhythm
 |  |
| Explain the difference between monophasic and biphasic defibrillators | * Bi: positive directional flow for specified duration then reverses flow for same amount of time. Less energy required: 200 Joules. Charging must be done with pad/paddles on patient to account for impedance
 |  |
| Set the Energy Level for defibrillation | * Biphasic: 200Joules
 |  |
| How do you charge your defib? | **Paddles*** Press the “charge button” on the front panel of the defib or on the apex paddle handle
* Hold paddles firmly on patient’s chest until charge is complete to account for chest impedance
* Ensure paddles do not contact electrodes

**Pads*** Press the “charge” button on the front panel of the defibrillator
 |  |
| What do you do before you press the “shock” button? | * declare, “I’m clear, You’re Clear, We’re all Clear”
* visually confirm everyone is clear
* observe the monitor to verify a shockable rhythm
 |  |
| Demonstrate how you would deliver the shock | **Paddles:*** Press paddles firmly only gel pads applying 25 pounds of pressure. Simultaneously press and hold both “Shock” buttons on each paddle until energy is delivered to the patient

**Pads*** press and hold the “shock” button on the front panel of the defibrillator until energy is delivered to the pt
 |  |
| The rhythm is now V-fib. What is your next action? | Resume CPR for 2 minutes without interruption. Do not stop CPR to check pulse or rhythm |  |
| What is the 1st IV drug to administer? | Epinephrine 1mg (1:10,000 in 10 mL) IV direct. May be administered q3-5 minutes |  |
| After 2 minutes of CPR what is your next step? | Reassess rhythm |  |
| VF continues. For what would you prepare next? | * Defib again
* CPR x 2 min w/o rhythm check
* Continue epi
 |  |
| What other drugs may be considered | * Amiodarone direct IV direct-300mg diluted in 20 mL D5W in a 30ml syringe.
* Then IV bolus of 150mg in 100mL D5W over 10 minutes
* Lidocaine 1.5mg/kg to a max of 3mg/kg
* Magnesium sulfate 1-2 gm slow IV push over 2 minutes
 |  |
| After defibrillating twice, the rhythm changes. What is it? | * NSR with unifocal PVCs
 |  |
| What infusion do you expect the MD to order? | * Amiodarone 900mg in 500cc D5W with filter.
 |  |
| **Scenario 3:** Continuation of scenario 2. Forty-eight hours later this patient is off the Amiodarone infusion. After returning from the bathroom he reports central chest pain with nausea.  |
| **Question** | **Answers** | **Met/Unmet** |
| What is the rhythm? | Sinus bradycardia |  |
| Next action? | * Return patient to bed
* Vitals signs
* ECG
 |  |
| HR = 40bpm, BP78/40. Patient is dizzy and nauseated. |
| What is the rhythm? | * 3rd degree block
 |  |
| Next action? Demonstrate it. | * Prepare for TCP
* Roll on MFE pads A/P placement
* Connects 3-lead defibrillator electrodes
* Set monitor to Pacer mode
* Sets pacer rate to 70ppm as per Medical Directive for symptomatic bradycardia (also applies to witness asystole)
* Sets rate according to MD order
* Sets pacer output
 |  |
| What medications would you anticipate? | * Analgesia and/or sedation
 |  |
| How do you set pacer output in mA? | * Slowly increase output until the pacer spike appears on the monitor screen. Continue increasing output until the ECG tracing indicates electrical capture. Add 2 mA or set the output 10% higher than the threshold of initial capture (40-70mA usually, can increase to 100ma)
 |  |
| How do you confirm capture? | * Femoral pulse
 |  |
| Which button do you press to withhold pacing in order to see the underlying rhythm? | * 4:1 mode
 |  |

 All scenarios were successfully demonstrated: Yes\_\_\_\_\_\_\_ No\_\_\_\_\_\_\_\_

A second oral exam is required: Yes\_\_\_\_\_\_\_ No\_\_\_\_\_\_\_\_

Competency to perform according to the related medical Directives: Yes\_\_\_\_\_\_\_ No\_\_\_\_\_\_\_\_

Nurse’s Name and Signature: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_/\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Assessor’s Name and Signature: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_/\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Annual Defibrillation Competency Assessment Tracker**

**Unit:** **Manager:** **Year:**

|  |  |  |  |
| --- | --- | --- | --- |
| Staff Name | Date of last ACLS Certification | Date pre-requisite E-learning module completed | Date of Annual Defibrillation Competency Assessment |
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This form can be filled out on assessment “Blitz” days by the Assessors, and then forwarded to the Manager for their records, and updated as needed.