

*University of Baghdad*

*College of Nursing*

***Clinical Evaluation Tool for Cardiology***

# **Adult Nursing (Cardiology)**

**Developed by: Dr. Mohammed Al-Jubouri, A.I. Safad R. Isam**

**February 2018**

**1<sup>st</sup> revision: February, 2019 : Dr. Hakema Shaker, A.I. Alaa Jawad, A.I. Safad R. Isam**

**2<sup>nd</sup> revision: February, 2021 : Dr. Hakema Shakir, A.I. Safad R. Isam**

**3<sup>rd</sup> revision: February, 2022 : Dr. Hakema Shakir, A.I. Safad R. Isam**

**4<sup>th</sup> revision: February, 2024 : Dr. Hakema Shakir, Dr. Safad R. Isam**

**5<sup>th</sup> revision: February, 2025 : Dr. Safad R. Isam**

**The last revision: 12/2/2025**

**This guide is subject to change. Changes will be announced to students.  
It is the responsibility of the student to comply with any changes.**

## **Distribution of Points**

The total grade for the clinical is divided as course requirements 40%. The clinical requirements include:

- Clinical performances (Two main areas: Surgical unit 10%, Catheterization unit 6%,  
other areas: CCU, ICU, HDU, OR, Cath 4%)\*
  - Written requirements (Assessments 5%, Nursing care plan 5%, Discharge care plan 5%, Assignment 5%).
- The total is 40 points.

\* Abbreviation, Medications and Lab Procedures are included in the all three areas in the clinical.

## **Learning Outcomes**

By the completion of four days in the clinical the student will be able to:

1. Apply the cardiology assessment
2. Analyze the pathophysiology and clinical signs and symptoms of patients with cardiac disorders\*
3. Distinguish the role of the nurse in prevention, detection, and treatment of cardiac disorders
4. Distinguish the multiple therapies used in the treatment of different cardiac disorders
5. Design a holistic care plan for patients with cardiac disorders
6. Appraise different diagnostic tests and procedures related to cardiac disorders
7. Utilize concepts of teaching and learning to promote wellness and self-care for patients with cardiac disorders
8. Analyze the effectiveness of clinical judgments utilizing critical thinking skills.
9. Utilize a discharge care plan for patients after cardiac catheterization
10. Distinguish the common abbreviations in cardiology

\* Cardiac disorders include MI, Angina, MS, MR, AS, AR, ASD, VSD, TOF

\*\*All the above objectives are based on specific criteria that are explained in the grading rubrics.

## **Requirements in the Clinical (lab and hospital)**

- Uniform      - Tag name      - Notebook and Two pens (a red and a blue)      - Ruler
- Thermometer      - Stethoscope      - Sphygmomanometer      - Tape measurement

\* The clinical is divided to four days; the first day will be in the Central Nursing Skills Lab at College of Nursing, University of Baghdad. The other three days, the students will be distributed in two main areas in Ibn-Albittar Specialized center for cardiac surgery (surgical unit and catheterization unit) other areas (CCU, ICU, HDU, OR, Cath). Each group is divided to three subgroups as shown at the end of this guide.

**Attending Rules (Morning):**

Present = 8:00 – 8:30 AM

Late = 8:30 – 8:45 AM

Absent = After 8:45 AM

One Absent = Minus 5 points

One late = Minus 2 points

**Attending Rules (Evening):**

Present = 11:00– 11:15 AM

Late = 11:15– 11:35 AM

Absent = After 11:35 AM

One Absent = Minus 5 points

One late = Minus 2 points

**The Requirements for the Clinical Performance in Surgical Unit**

<b>Domains</b>	<b>Points</b>
Distinguish the etiologies, signs and symptoms, pathophysiology, abbreviation, lab studies, treatments, patient teachings, and preventive measures of cardiac disorders	3
Implement nursing care for patients with cardiac disorders based on the relationship of the patient, health, and environment	2
Apply the cardiology assessment tool	3
Discuss case studies with the aspect of critical thinking	2
<b>Total</b>	<b>10</b>

**The Requirements for the Clinical Performance in Catheterization Unit**

<b>Domains</b>	<b>Points</b>
Distinguish the etiologies and pathophysiology of cardiac disorders that related to catheterization	2
Implement pre/post catheterization care for patients with cardiac disorders (discharge care plan is included)	2
Analyze the lab studies, medications, and abbreviations of cardiac disorders that related to catheterization	2
<b>Total</b>	<b>6</b>

## The requirements for the Clinical Performance in other areas

<b>Domains</b>	<b>Points</b>
Following proper infection control measures	1
Discover the emergency medications and equipment and tools	1
Discuss the nursing care provided to patients	2
<b>Total</b>	<b>6</b>

## The Grading Rubric for the Clinical Performance in Surgical Unit

<b>Rating Scale</b>	<b>Learning Objectives</b>	<b>Score</b>	<b>2</b>	<b>1.5</b>	<b>1</b>	<b>0.5</b>	<b>0</b>
Distinguish the etiologies, signs and symptoms, pathophysiology, diagnostic tests, treatments, patient teachings, and preventive measures of heart disorders	2, 3, 4, 5, 6, 7, 10		Precisely demonstrates knowledge of the concepts in the "rating scale"	Consistently demonstrates knowledge of the concepts in the "rating scale"	Demonstrates some knowledge of the concepts in the "rating scale"	Demonstrates limited knowledge of the concepts in the "rating scale"	Demonstrates no knowledge of the concepts in the "rating scale"
Implement nursing care for patients with heart disorders based on the relationship of the patient, health, and environment	3, 4, 5, 8		Precisely implements all technical skills with a high degree of competence	Consistently implements all technical skills with a considerable competence	Implements some technical skills with a moderate competence	Implements some technical skills with a limited competence	Implements no technical skills
Apply the cardiology assessment tool	1		Precisely Apply the cardiology assessment tool	Consistently Apply the cardiology assessment tool	Apply some of the cardiology assessment tool with a moderate competence	Apply some of the cardiology assessment tool with a limited competence	Apply no assessment
Discuss case studies with the aspect of critical thinking	1-8		Precisely discuss case studies with applying critical thinking skills	Consistently discuss case studies with applying critical thinking skills	Discuss some case studies with the aspect of critical thinking	Discuss limited case studies with the aspect of critical thinking	Discuss no case studies
<b>Total score</b>							

## The Grading Rubric for the Clinical Performance in Catheterization Unit

Rating Scale	Learning Objectives	Score	2	1.5	1	0.5	0
Distinguish the etiologies and pathophysiology of cardiac disorders that related to catheterization	2, 8		Precisely demonstrates knowledge of the concepts in the "rating scale"	Consistently demonstrates knowledge of the concepts in the "rating scale"	Demonstrates some knowledge of the concepts in the "rating scale"	Demonstrates limited knowledge of the concepts in the "rating scale"	Demonstrates no knowledge of the concepts in the "rating scale"
Implement pre/post catheterization care for patients with cardiac disorders (discharge care plan is included)	5, 7, 9		Precisely implements all technical skills with a high degree of competence	Consistently implements all technical skills with a considerable competence	Implements some technical skills with a moderate competence	Implements some technical skills with a limited competence	Implements no technical skills
Analyze the lab studies, medications, and abbreviations of cardiac disorders that related to catheterization	4, 6, 10		Precisely analyze the concepts in the "rating scale"	Consistently analyze the concepts in the "rating scale"	Analyze some of the concepts in the "rating scale" with a moderate competence	Analyze some of the concepts in the "rating scale" with some competence	Analyze no concepts in the "rating scale"
<b>Total score</b>							

## The Grading Rubric for the Clinical Performance in other areas

Rating Scale	Learning Objectives	Score	2	1.5	1	0.5	0
Following proper infection control measures	6, 8		Precisely demonstrates knowledge of the concepts in the "rating scale"	Consistently demonstrates knowledge of the concepts in the "rating scale"	Demonstrates some knowledge of the concepts in the "rating scale"	Demonstrates limited knowledge of the concepts in the "rating scale"	Demonstrates no knowledge of the concepts in the "rating scale"

Discover the emergency medications and tools	4, 8		Precisely demonstrates knowledge of the concepts in the "rating scale"	Consistently demonstrates knowledge of the concepts in the "rating scale"	Demonstrates some knowledge of the concepts in the "rating scale"	Demonstrates limited knowledge of the concepts in the "rating scale"	Demonstrates no knowledge of the concepts in the "rating scale"
Discuss the nursing care provided to patients	4, 6, 8, 10		Precisely discuss the concepts in the "rating scale"	Consistently discuss the concepts in the "rating scale"	Discuss some of the concepts in the "rating scale"	Discuss limited concepts in the "rating scale"	Discuss no concepts in the "rating scale"
<b>Total score</b>							

### List of the Medications

<b>The Criteria:</b>	Indication	Rout, Dose, frequency	Side effects	Contraindication	Nursing consideration

<b>ACE Inhibitors</b>	<b>Enalapril melete (Vasotec), Captopril (Capoten),</b>
<b>Antiarrhythmics</b>	<b>Propafenone HCl (Rythmol), Amiodarone (Cordarone)</b>
<b>Anticoagulants and platelet inhibitors</b>	<b>Plavix, Warfarin, Aspirin, Heparin</b>
<b>Antihypertensives</b>	<b>Methyldopa (Aldomet)</b>
<b>Beta blockers</b>	<b>Propranolol (Inderal), Metoprolol (Lopressor) Atenolol (Tenormin)</b>
<b>Calcium channel blockers</b>	<b>Nifedipine (Adalat), Amlodipine besylate (Norvasc)</b>
<b>Digitalis glycosides</b>	<b>Digoxin</b>
<b>Diuretics</b>	<b>Spironolactone (Aldactone), Furosemide (Lasix)</b>
<b>Lipid medications</b>	<b>Fluvastatin sodium (Lescol), Atorvastatin calcium (Lipitor)</b>
<b>Nitrates and other Antianginals</b>	<b>Nitroglycerin : Oral, Ointment, Sublingual tablets, Skin patches</b>
<b>Pain medications</b>	<b>Ibuprofen (Advil, Motrin), Tramadol HCl (Ultram) Acetaminophen and codeine (Tylenol)</b>
<b>Emergency Medications</b>	<b>Adrenaline, Xylocaine, Dopamine, Hydrocortisone, Nitroglycerin, Atropine, Calcium Chloride, Sodium Bicarbonate</b>

## The List of Lab Studies

Include: Client's normal/abnormal lab values, diagnostic procedures (i.e. ECG, chest X-ray, MRI, CT, Ultrasound, Catheterization).

Date & Time	Test	Results	Normal Range	Why Abnormal for this Client?
	Complete Blood Count(CBC)	Hgb	Male: 13–17 g/dL Female: 12–15 g/dL	
		Hct	Male: 43–49 Female: 38–44	
		WBC	4.5–10× 10 <sup>3</sup> /μL/mm <sup>3</sup>	
		Neutrophils	60%–70%	
		Lymphocyte	20%–40%	
		Basophile	0–1%	
		Eosinophil	0–4%	
		Platelets	150–450 × 10 <sup>3</sup> /μL/mm <sup>3</sup>	
	Coagulation Profile	Prothrombin time (PT)	11–13.5 sec	
		Partial thromboplastin time (PTT)	25–38 sec	
	Comprehensive Metabolic Panel (CMP)	Glucose (Fasting)	70–100 mg/dL	
		Calcium	8.2–10.2 mg/dL	
		Albumin	3.4–4.8 g/dL	
		Total Protein	6.0–8.0 g/dL	
		Na	135–145 mEq/L	
		K	3.5–5.0 mEq/L	
		Mg	1.6–2.6 mg/dL	
		Cl	97–107 mEq/L	
		Blood Urea Nitrogen (BUN)	8–21 mg/dL	
		Creatinine	0.6–1.2 mg/dL	
		ALP (phosphate)		
	Total Bilirubin	0.3–1.2 mg/dL		
	Cardiac Enzymes	Creatine Kinase (CK)	Female: 26–140 units/L Male: 38–174 units/L	
		Creatine Phosphokinase (CPK)	50–300 mU/mL	
		Troponin I	<0.35 ng/mL	
		SGOT (Aspartate Aminotransferase Formerly [AST])	10–40 U/L	
		SGPT (Alanine Aminotransferase)	10–40 U/mL	

Date & Time	Test	Results	Normal Range	Why Abnormal for this Client?
	Arterial Blood Gas (ABG)	ase Formerly [ALT]		
		pH	7.35–7.45	
		pCO <sub>2</sub>	35–45 mm Hg	
		pO <sub>2</sub>	80–95 mm Hg	
		Bicarb		
		O <sub>2</sub> sat	95–100%	
	Lipids	Cholesterol	180- 200 mg/dL	
		Low Density Lipoprotein (LDL)	70 and 100 mg/dL	
		High Density Lipoprotein (HDL)	More than 60 mg/dL	

### List of Abbreviation \*

<b>AMI</b>	Acute Myocardial Infarction
<b>ASD</b>	Arterial Septal Defect
<b>AV</b>	Atrioventricular
<b>AVR</b>	Aortic Valve Replacement
<b>CABG</b>	Coronary Artery Bypass Graft Surgery
<b>CAD</b>	Coronary Artery Disease
<b>Cath</b>	Catheter
<b>CCE C/C/E</b>	Clubbing, cyanosis, and edema (general signs of cardiovascular disease)
<b>CCU</b>	Coronary Care Unit
<b>CHF</b>	Congestive Heart Failure
<b>COPD</b>	Chronic Obstructive Pulmonary Disease
<b>CVC</b>	Central Venous Catheter
<b>EKG (ECG)</b>	Electrocardiogram
<b>MVR</b>	Mitral Valve Replacement
<b>MVV</b>	Mitral Valve Valvuloplasty
<b>PAP</b>	Pulmonary Arterial Pressure
<b>PDA</b>	Patent Ductus Arteriosus
<b>PMI</b>	Point of Maximal Impulse
<b>PTA</b>	Percutaneous Transluminal Angioplasty
<b>PWAP</b>	Pulmonary Wedge Artery Pressure
<b>PWP</b>	Pulmonary Wedge Pressure
<b>TVR</b>	Tricuspid Valve Replacement
<b>TVV</b>	Tricuspid Valve Valvuloplasty
<b>VSD</b>	Ventricular Septal Defect

\* The abbreviation in the lab studies are included

The Written Requirements for the Clinical are an **Assessment**, a **Nursing Care Plan**, a **Discharge Care Plan**, and the **Assignment**.

**Assessment tool** (attached separately)

The Grading Rubric for the Assessment based on OSEN; Quality and Safety Education for Nurses

	Criteria		
<b>Assessment</b>	<b>Student must have the following Assessment Criteria:</b>		<b>5 Points</b> possible  ____St.'s awarded
	• <b>Completed Physical Assessment</b>		
	Student presents all relevant assessment data.....	5	
	Student leaves out one relevant area in assessment data.....	4	
	Student leaves out 2 or more relevant areas in assessment data.....	3.5-0.5	
	Student does not present relevant data regarding assessment.....	0	
<b>Total</b>	<b>Possible points = 5/5</b>		<b>Total Points awarded ...../5</b>

**Nursing Care Plan** (attached separately)

The Grading Rubric for Nursing Care Plan

	<b>20</b>	<b>15</b>	<b>10</b>	<b>5</b>	<b>0</b>
<b>Assessment</b> ( <i>write the problems' list here</i> ) Includes subjective, objective and historical data that support actual or risk for nursing diagnosis.	Includes all data that related to nursing diagnosis and does not include data that is not related to nursing diagnosis.	Includes all data that related to nursing diagnosis, but also includes data not related to nursing diagnosis.	Does not include all data that related to nursing diagnosis. May also include data that does not relate to nursing diagnosis.	Assessment portion is incomplete.	No assessment is written
<b>Nursing Diagnosis</b> Includes the most appropriate diagnosis for patient and ordinal number that includes all appropriate parts (stem, related to or R/T, and as evidenced by AEB for actual diagnosis) and is NANDA approved.	Diagnosis is appropriate for patient and ordinal level, and diagnosis is NANDA approved. Diagnosis also includes all parts and information is listed in correct part of diagnosis.	Diagnosis is appropriate for patient and ordinal level, and diagnosis is NANDA approved, but does not include all parts or information is listed in wrong part of diagnosis.	Diagnosis is not appropriate for patient and ordinal level (first diagnosis, second diagnosis, etc). May also not be NANDA and may not include all parts.	Diagnosis portion is incomplete.	No nursing diagnosis was written
<b>Planning</b> Includes a patient or family goal that is most appropriate for the patient/family and the nursing diagnosis. Goal should	Goal statement is patient or family oriented, and	Goal statement is patient or family oriented, and	Goal statement is not patient or family oriented and	Goal portion is incomplete.	No planning was written

be measurable by at least two criteria and have a target date or time.	contains two measurable criteria and a target date or time.	contains at least one measurable criteria or a target date/time.	may not have measurable criteria or a target date or time.		
<p><b>Implementation</b></p> <p>Includes interventions or nursing actions that directly relate to the patient's goal, that are specific in action and frequency, are labeled "I" for independent and "C" for collaborative, and include a referenced rationale with page number (if applicable). Number of interventions should be appropriate to help patient or family meet their goal.</p>	Interventions portion contains adequate number of interventions to help patient/family meet goal, and interventions are specific in action and frequency, labeled with "I" or "C" and are listed with referenced rationales.	Interventions portion contains adequate number of interventions to help patient/family meet goal, but interventions may not be specific, labeled or listed with rationales.	Interventions portion does not include adequate number of interventions to help patient/family meet goal. Interventions may also not be specific, labeled or listed with rationales.	Interventions portion is incomplete.	No intervention was written
<p><b>Evaluation</b></p> <p>Includes data that is listed as criteria in goal statement. Based on this data, goal is determined to be met, partially met, or not met.</p>	Evaluation portion does contain data that is listed as criteria in goal statement. Does describe goal as met, partially met, or not met.	Evaluation portion does contain data that is listed as criteria in goal statement, but does not describe goal as met, partially met, or not met.	Evaluation portion does not contain data that is listed as criteria in goal statement. May also not describe goal as met, partially met, or not met.	Evaluations portion is incomplete.	No evaluation was written
<b>Total</b>	<b>Possible points 100% = 5/5</b>		Total Points awarded ...../100 = ..../5		

**Discharge Care Plan:**

*	Areas that may require alteration/ assistance & teaching	Explain
1	Self-care Activities	
2	Sleeping	
3	Ambulation	
4	Wound or Tubes Care	
5	Working	
6	Sexual life	
7	Sport	
8	Driving	
9	Follow up date	
10	Others	

## Assignment

The student shall be assigned to write an assignment regarding medications or lab procedures in cardiology.

### The Grading Rubric for the Assignment (Medications and Lab procedures) based on QSEN; Quality and Safety Education for Nurses

Assignment		
<b>Medication</b>	<p><b>Student must complete each section of Medication Criteria:</b></p> <ul style="list-style-type: none"> <li>• Specific classification, indication, dose, frequency, route, contraindication, interaction, and nursing consideration</li> <li>• Rate information for IV medications</li> <li>• The rationale for the client getting this medication</li> <li>• Nursing responsibilities for administration</li> <li>• Client education regarding medication</li> </ul> <p>Student presents all relevant medication criteria.....2.5            Student leaves out one relevant area of medication criteria.....2-1.5            Student leaves out 2 or more relevant areas of medication criteria.....1-0.5            Student does not present relevant data regarding medication criteria.....0</p>	<p><b>2.5 Point possible</b></p> <p>_____ St.'s awarded</p>
<b>Lab and Diagnostic Data</b>	<p><b>Student must complete each section of Lab and Diagnostic Criteria:</b></p> <ul style="list-style-type: none"> <li>• Examines the clinical significance and related nursing implications of the various laboratory and diagnostic tests used in cardiology</li> <li>• Documents the required laboratory or diagnostic procedures</li> <li>• Documents reason for abnormal findings for client</li> </ul> <p>Student presents all relevant lab/diagnostic criteria.....2.5            Student leaves out 1 or more relevant areas lab/diagnostic criteria.....2-0.5            Student does not present relevant data regarding lab/diagnostic criteria.....0</p>	<p><b>2.5 Point possible</b></p> <p>_____ St.'s awarded</p>
<b>Total</b>	<b>Possible points = 5/5</b>	<p><b>Total Points awarded ...../5</b></p>

**\* All the aspects in the above evaluating measures MUST be relevant and logic. Otherwise, the student shall earn zero.**

**Clinical Groups: Attached separately**

## References

- Billings, D. M., & Halstead, J. A. (2015). *Teaching in Nursing-E-Book: A Guide for Faculty*. Elsevier Health Sciences.
- Bimray, P. B., Le Roux, L. Z., & Fakude, L. P. (2013). Innovative education strategies implemented for large numbers of undergraduate nursing students: The case of one South African university nursing department. *Journal of Nursing Education and Practice*, 3(11), 116
- Burns, C., Beauchesne, M., Ryan-Krause, P., & Sawin, K. (2006). Mastering the preceptor role: challenges of clinical teaching. *Journal of Pediatric Health Care*, 20(3), 172-183
- Ching, Y. H. (2014). Exploring the impact of role-playing on peer feedback in an online case-based learning activity. *The International Review of Research in Open and Distributed Learning*, 15(3)
- Drexel University. (n.d). *Clinical skills labs*, Retrieved from <http://drexel.edu/cnhp/about/CICSP/Clinical-Skills-Labs/>
- Gaberson, K., & Oermann, M. (2010). *Clinical teaching strategies in nursing*. Springer publishing company
- Lynn, P., & Lebon, M. (2011). *Skills checklists for Taylor's clinical nursing skills*. Lippincott Williams & Wilkins
- Quality and Safety Education for Nurses. (2017). *Integrating QSEN into clinical evaluation tools*. Retrieved from <http://qsen.org/integrating-qsen-into-clinical-evaluation-tools>
- Rafiee, G., Moattari, M., Nikbakht, A. N., Kojuri, J., & Mousavinasab, M. (2014). Problems and challenges of nursing students' clinical evaluation: A qualitative study. *Iranian journal of nursing and midwifery research*, 19(1), 41
- Smeltzer, S., Bare, B., Hinkle, J., & Cheever, K. (2010). *Textbook of medical surgical nursing*. Brunner and suddarth. *China.: Lippincott Williams and Wilkins.*
- Tofade, T., Khandoobhai, A., & Leadon, K. (2012). Use of SMART learning objectives to introduce continuing professional development into the pharmacy curriculum. *American journal of pharmaceutical education*, 76(4), 68
- University of Connecticut. (n.d.) *Clinical Resource Center – Simulation Lab*, Retrieved from <http://nursing.uconn.edu/about-the-school/simulation-lab/>
- Wilkinson, J. M., Treas, L. S., Barnet, K. L., & Smith, M. H. (2016). *Procedure Checklists for Fundamentals of Nursing*. FA Davis
- Williams, L. S., & Hopper, P. D. (2015). *Understanding medical surgical nursing*. FA Davis.