

MR #: \_\_\_\_\_

Name: \_\_\_\_\_

**CARDIOVASCULAR SURGERY: CABG/VALVE  
MULTIDISCIPLINARY CARE PATH – Page 1 of 4**

EXPECTED LENGTH OF STAY Postoperative 5 days	EXPECTED DATE OF DISCHARGE
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**NOTE:** The Multidisciplinary Care Path will be adapted to reflect the chronological age, physical capabilities or limitations, psycho-emotional, and spiritual needs of the patient

IMPRINT AREA

<b>Potential Problems:</b> 1. Knowledge deficit 2. Incisional pain 3. Hemodynamic instability 4. Respiratory insufficiency 5. Activity intolerance 6. Infection	<b>Expected Outcomes for Discharge:</b> 1. Patient/family understand self-care instructions for activities of daily living, meds, diet, medical follow-up and emergency notification procedures. 2. Patient's pain level is maintained at 0–1/10 on oral medication. 3. Patient is free of symptomatic dysrhythmias and is hemodynamically stable. 4. Patient is free from dyspnea with SpO <sub>2</sub> > 90% on room air or at baseline. 5. Patient tolerates unassisted ambulation for 5–10 min. QID or prescribed activity level without symptoms. 6. Afebrile, without signs of infection, wound edges are approximated and sternum stable.
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Aspects of Care	Presurgery/Preadmission Date:	Location:	Day Of Surgery	Date:	Location:	
<b>Assessment</b>	BP both arms Oxygen saturation on room air Height and weight		Order inpatient and outpatient charts Oxygen saturation on room air Weight <input type="checkbox"/> Admission assessment form completed and in chart			
<b>Diagnostic Tests (as per MD order)</b>	Bilateral carotid ultrasound (if ordered) <b>Complete within 7 days before surgery:</b> <input type="checkbox"/> CBC, Na, K+, Creatinine, glucose, ALB, AST, ALT, PTT/PT <input type="checkbox"/> Type and crossmatch 2 Units PRBCs (4 if redo) <input type="checkbox"/> Clean-catch urinalysis with micro and culture per protocol <input type="checkbox"/> EKG <input type="checkbox"/> CXR					
<b>Medications</b>	Discontinue Plavix/Coumadin 7 days before surgery Continue all other medications Pre-op beta blocker prescribed		Discontinue Lovenox after _____ Pre-op meds per MD Take cardiac meds with sip of water per MD order			
<b>Treatments</b>	Hibiclens shower/bath night before OR		Repeat Hibiclens shower/bath in a.m. Pre-op shave and preparation			
<b>Activity</b>	Ad lib		OOB until pre-op med given			
<b>Nutrition</b>	Continue same diet NPO after midnight except meds with sips of water		NPO except meds			
<b>Patient/Family Teaching</b>	<input type="checkbox"/> Provide printed teaching materials (CV teaching binder and video) _____ NP/PA _____ RN <input type="checkbox"/> Clinical path expectations, estimated LOS _____ NP/PA _____ RN <input type="checkbox"/> Advance Directive/Family Spokesperson _____ NP/PA _____ RN <input type="checkbox"/> Pain management _____ NP/PA _____ RN <input type="checkbox"/> Postoperative tubes, lines, possible use of restraints _____ NP/PA _____ RN <input type="checkbox"/> Sternal precautions _____ NP/PA _____ RN <input type="checkbox"/> Incentive spirometer, coughing, deep breathing _____ NP/PA _____ RN <input type="checkbox"/> Smoking cessation _____ NP/PA _____ RN <input type="checkbox"/> Encourage family attendance at CV surgery class _____ NP/PA _____ RN		<input type="checkbox"/> Review pain management/pain scale <input type="checkbox"/> Review sternal precautions <input type="checkbox"/> Provide incentive spirometer, instruct in use, and document, inspiratory volume			
<b>Care Coordination</b>	<b>Social Worker to review/provide additional resources/emotional support as needed</b> <b>Review Advance Directive, DPA with patient, family as needed</b>					
<b>Intermediate Outcomes/Progression to Discharge</b>	1. Cardiac surgery pre-op work-up complete 2. Informed consent complete 3. Patient's/family's Advance Directive wishes known and documented 4. Preoperative instruction completed		1. Surgical consent completed and in chart 2. Advance Directive in chart if available 3. Intensity of Intervention form signed by surgeon and in chart 4. Patient received beta blocker 5. Preoperative education completed or reviewed			
<b>Outcomes Variance</b>	(Comment on outcomes <b>not</b> met by number, initial and time)					
<b>Multidisciplinary Review/Signatures</b>	SIGNATURE/TITLE	PRINT NAME	INITIAL	SIGNATURE/TITLE	PRINT NAME	INITIAL

CV SURGERY CARE PATH

MR #: \_\_\_\_\_

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**CARDIOVASCULAR SURGERY: CABG/VALVE  
MULTIDISCIPLINARY CARE PATH – Page 2 of 4**

IMPRINT AREA

Aspects of Care	Day of Surgery (Post-op)	Date/Time of Arrival:	/	Post-op Day 1	Date/Time of Transfer to TCU:	/
<b>Assessment</b>	Vital signs every 15 minutes x 4 hours, then every 30 minutes x 2 hours, then every 1 hour, Temperature every 1 hour x 4, then every 2 hours Cardiac output & hemodynamics every 1 hour x 6 hours, then as indicated Intake and output every 1 hour Monitor chest tube drainage every 1 hour x 12 hours, then as indicated Weight on admission to CVICU Pain assessed with vital signs and within 1 hour after pain med Sedation/agitation score assessed before and after med Temporary pacemaker settings and thresholds checked every shift			Vital signs and SpO <sub>2</sub> every 1–2 hours (every 4 after transfer) Intake and output every hour (every 8 after transfer) Monitor chest tube drainage every 4 hours Daily weight Cardiac rhythm is documented with monitor strip on transfer, with each change in rhythm, and at least once every 8 hours		
<b>Diagnostic Tests (as per MD order)</b>	On admission to CVICU: EKG, portable chest X-ray, CBC, K+, ABG, blood glucose Hct 4 hours post-op CPK-MB per MD order post-CABG			BUN, Cr, CBC, Na, K+ in a.m. Glucose, PT/INR, PTT (if ordered) EKG in a.m. Portable chest X-ray (if ordered) Fingerstick blood glucose QID AC/HS (if ordered)		
<b>Medications (per MD order)</b>	Titrate and wean vasoactive IV drips to maintain vital signs, hemodynamics within ordered parameters Volume/blood replacement Pain/sedation management Dysrhythmia, antibiotic, GI bleed prophylaxis Potassium replacement Continuous insulin infusion protocol			Pain management Dysrhythmia/hypertension prophylaxis (resume cardiac meds) Potassium replacement Anticoagulation (if ordered) Cholesterol management Antibiotic, GI bleed prophylaxis Insulin (maintenance and/or sliding scale) as ordered Stool softener		
<b>Treatments</b>	Continuous cardiac monitoring <input type="checkbox"/> Wean and extubate per Ventilation Protocol _____ RT _____ RN After extubation, keep SpO <sub>2</sub> > 92% with oxygen per nasal prongs Incentive spirometer every hour while awake Systemic rewarming to 37 degrees Temporary pacemaker, mode and rate as per MD order NG/OG tube to low suction, D/C after extubation Chest tube at –20 cm suction Foley to gravity Elastic bandages to legs			Continuous cardiac monitoring (telemetry after transfer) <input type="checkbox"/> Disconnect temporary pacemaker and cap wires Chest tube at –20 cm suction/water seal Foley to gravity Change sternal dressings D/C elastic bandages to legs (after 24 hours) and apply sterile dressing Oxygen per nasal prongs to keep SpO <sub>2</sub> > 92% <input type="checkbox"/> Incentive spirometer every hour while awake <input type="checkbox"/> Peripheral saline lock <input type="checkbox"/> Discontinue IJ/central line (unless on amiodarone)		
<b>Activity</b>	<input type="checkbox"/> Turn every 2 hours <input type="checkbox"/> Dangle on side of bed within 8 hours after extubation			<input type="checkbox"/> Physical therapy consult <input type="checkbox"/> Ambulate to chair BID/TID Bathe with assistance		
<b>Nutrition</b>	NPO Sips of water/ice after extubation			No added salt (ADA if ordered)		
<b>Patient/Family Teaching</b>	Reorient upon awakening <input type="checkbox"/> Review sternal precautions, coughing, deep breathing, and use of incentive spirometer as appropriate Provide family with patient progress updates Identify family spokesperson Review unit routine with family members			<input type="checkbox"/> Review contents of CV teaching binder, sternal precautions, coughing, deep breathing, use of incentive spirometer, pain management Orient to TCU after transfer Provide family with patient progress updates Review unit routine with family members <input type="checkbox"/> Encourage family attendance at CV surgery class		
<b>Care Coordination</b>				<input type="checkbox"/> Review clinical path expectations with family		
<b>Measurable Patient Outcomes</b>	1. Patient is hemodynamically stable with vital signs within ordered parameters 2. Patient is awake, calm, cooperative, and moves all extremities on command 3. Pain score is within comfort zone 4. Patient is weaned from mechanical ventilation and extubated per Ventilation Protocol 5. Patient tolerates activity progression after extubation			1. Patient is hemodynamically stable off vasoactive infusions 2. Patient is alert and oriented 3. Patient verbalizes pain relief is within comfort zone 4. SpO <sub>2</sub> greater than 92% on nasal cannula 5. Patient tolerates ambulation to chair		
<b>Outcomes Variance</b>	(Comment on outcomes by number, and initial and time)					
<b>Multidisciplinary Review/Signatures</b>	SIGNATURE/TITLE	PRINT NAME	INITIAL	SIGNATURE/TITLE	PRINT NAME	INITIAL

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**CARDIOVASCULAR SURGERY: CABG/VALVE  
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IMPRINT AREA

Aspects of Care	Post-op Day 2	Date:	Location:	Post-op Day 3	Date:	Location:
<b>Assessment</b>	Vital signs and SpO <sub>2</sub> every 4 hours Intake and output every 8 hours Pain assessed with vital signs and within 1 hour after pain med Daily weight			Vital signs and SpO <sub>2</sub> every 4 hours Intake and output every 8 hours Pain assessed with vital signs and within 1 hour after pain med Daily weight		
<b>Diagnostic Tests</b>	Labs per MD order			Labs per MD order		
<b>Medications (per MD order)</b>	Pain management with oral meds only Dysrhythmia/hypertension prophylaxis (resume cardiac meds) Potassium replacement Anticoagulation Cholesterol management GI bleed prophylaxis Insulin (maintenance and/or sliding scale) as ordered Stool softener			Pain management with oral meds only Dysrhythmia/hypertension prophylaxis (resume cardiac meds) Potassium replacement Anticoagulation (if ordered) Cholesterol management GI bleed prophylaxis Insulin (maintenance and/or sliding scale) as ordered Stool softener <input type="checkbox"/> <b>Dulcolax suppository if no BM since surgery</b>		
<b>Treatments</b>	Continuous cardiac monitoring (telemetry) <input type="checkbox"/> <b>Discontinue chest tubes</b> _____ <b>CVPA</b> Discontinue sternal and leg dressings if not oozing <input type="checkbox"/> <b>Discontinue Foley at 0600</b> Peripheral saline lock <input type="checkbox"/> <b>Wean oxygen to room air, maintaining SpO<sub>2</sub> &gt; 90%</b> <input type="checkbox"/> <b>Incentive spirometer every hour while awake</b> Peripheral saline lock			Continuous cardiac monitoring (telemetry) <input type="checkbox"/> <b>D/C pacing wires</b> _____ <b>CVPA</b> <input type="checkbox"/> <b>Incentive spirometer every hour while awake</b>		
<b>Activity</b>	<input type="checkbox"/> <b>Ambulate in hall with assist QID</b> <input type="checkbox"/> <b>Cardiac rehab</b> Bathe with minimal assistance			<input type="checkbox"/> <b>Ambulate in hall with assist QID</b> <input type="checkbox"/> <b>Cardiac rehab</b> Bathe with minimal assistance		
<b>Nutrition</b>	No added salt (ADA if ordered)			No added salt (ADA if ordered)		
<b>Patient/Family Teaching</b>	<input type="checkbox"/> <b>Review contents of CV teaching binder, sternal precautions, coughing, deep breathing, use of incentive spirometer, pain management, wound care</b> Provide family with patient progress updates <input type="checkbox"/> <b>Encourage family attendance at CV surgery class</b>			<input type="checkbox"/> <b>Review contents of CV teaching binder, sternal precautions, coughing, deep breathing, use of incentive spirometer, pain management, wound care</b> Provide family with patient progress updates <input type="checkbox"/> <b>Encourage family attendance at CV surgery class</b>		
<b>Care Coordination</b>	<input type="checkbox"/> <b>Review clinical path expectations with family, 11 a.m. discharge</b> <input type="checkbox"/> <b>Assess home care situation, transportation plan, available resources</b> <input type="checkbox"/> <b>Provide disposition help as needed</b>			<input type="checkbox"/> <b>Discharge medication orders and instructions written</b> <input type="checkbox"/> <b>Follow-up appointments scheduled: Cardiology (7–10 days), CVS (4 weeks), Internist (6 weeks)</b> <input type="checkbox"/> <b>Review clinical path expectations with family, 11 a.m. discharge, transport home</b> <input type="checkbox"/> <b>Assess home care situation, transportation plan, available resources</b> <input type="checkbox"/> <b>Provide disposition help as needed</b> <input type="checkbox"/> <b>Make home health referral</b>		
<b>Measurable Patient Outcomes</b>	1. Oxygenation within normal limits for patient on room air 2. Cardiac rhythm/BP/weight within normal limits for patient 3. Patient tolerates ambulation in hall QID 4. Patient verbalizes pain relief on oral meds 5. Patient tolerates oral intake			1. Oxygenation within normal limits for patient on room air 2. Cardiac rhythm/BP/weight within normal limits for patient 3. Patient tolerates ambulation in hall QID 4. Patient verbalizes pain relief on oral meds 5. Patient tolerates oral intake		
<b>Outcomes Variance</b>	(Comment on outcomes by number, and initial and time)					
<b>Multidisciplinary Review/Signatures</b>	SIGNATURE/TITLE	PRINT NAME	INITIAL	SIGNATURE/TITLE	PRINT NAME	INITIAL

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**CARDIOVASCULAR SURGERY: CABG/VALVE  
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IMPRINT AREA

Aspects of Care	Post-op Day 4	Date:	Location:	Post-op Day 5	Date:	Location:
<b>Assessment</b>	Vital signs and SpO <sub>2</sub> every 4 hours Intake and output every 8 hours Pain assessed with vital signs and within 1 hour after pain med Daily weight			Vital signs and SpO <sub>2</sub> every 4 hours Intake and output every 8 hours Pain assessed with vital signs and within 1 hour after pain med Daily weight		
<b>Diagnostic Tests</b>	EKG in a.m., send copy home with patient Labs per MD order			EKG in a.m., send copy home with patient Labs per MD order		
<b>Medications (per MD order)</b>	<input type="checkbox"/> <b>Pain management with oral meds (Vicodin) only</b> Dysrhythmia/hypertension prophylaxis (resume cardiac meds) Potassium replacement Anticoagulation Cholesterol management GI bleed prophylaxis Insulin (maintenance and/or sliding scale) as ordered Stool softener			Pain management with oral meds only Dysrhythmia/hypertension prophylaxis (resume cardiac meds) Potassium replacement Anticoagulation (if ordered) Cholesterol management GI bleed prophylaxis Insulin (maintenance and/or sliding scale) as ordered Stool softener		
<b>Treatments</b>	<input type="checkbox"/> <b>Incentive spirometer every hour while awake</b> <input type="checkbox"/> <b>Discontinue peripheral saline lock prior to discharge</b>			Discontinue telemetry Discontinue peripheral saline lock <input type="checkbox"/> <b>Incentive spirometer every hour while awake</b>		
<b>Activity</b>	<input type="checkbox"/> <b>Fully ambulatory, minimum 5 minutes QID</b> <input type="checkbox"/> <b>Cardiac rehab</b> Shower after pacing wires removed			<input type="checkbox"/> <b>Fully ambulatory, minimum 5 minutes QID</b> <input type="checkbox"/> <b>Cardiac rehab</b> Shower after pacing wires removed		
<b>Nutrition</b>	No added salt (ADA if ordered)			No added salt (ADA if ordered)		
<b>Patient/Family Teaching</b>	<input type="checkbox"/> <b>Review contents of CV teaching binder, sternal precautions, coughing, deep breathing, use of incentive spirometer, pain management, wound care</b> <input type="checkbox"/> <b>Review wound care, discharge meds/instructions, follow-up appointments, who to notify for medical needs before scheduled appointments</b> <input type="checkbox"/> <b>Encourage family attendance at CV surgery class</b>			<input type="checkbox"/> <b>Review contents of CV teaching binder, sternal precautions, coughing, deep breathing, use of incentive spirometer, pain management, wound care</b> <input type="checkbox"/> <b>Review wound care, discharge meds/instructions, follow-up appointments, who to notify for medical needs before scheduled appointments</b> <input type="checkbox"/> <b>Encourage family attendance at CV surgery class</b>		
<b>Care Coordination</b>	<input type="checkbox"/> <b>Review clinical path expectations with family, 11 a.m. discharge, transport home</b> <input type="checkbox"/> <b>Assess home care situation, available resources, arrange home care if needed</b>			<input type="checkbox"/> <b>Review clinical path expectations with family, 11 a.m. discharge, transport home</b> <input type="checkbox"/> <b>Assess home care situation, available resources, arrange home care if needed</b>		
<b>Measurable Patient Outcomes</b>	1. Oxygenation within normal limits for patient on room air 2. Cardiac rhythm/BP/weight within normal limits for patient 3. Patient tolerates ambulation in hall QID 4. Patient verbalizes pain relief on oral meds 5. Patient tolerates oral intake			1. Oxygenation within normal limits for patient on room air 2. Cardiac rhythm/BP/weight within normal limits for patient 3. Patient tolerates ambulation in hall QID 4. Patient verbalizes pain relief on oral meds 5. Patient tolerates oral intake		
<b>Outcomes Variance</b>	(Comment on outcomes by number, and initial and time)					
<b>Multidisciplinary Review/Signatures</b>	SIGNATURE/TITLE	PRINT NAME	INITIAL	SIGNATURE/TITLE	PRINT NAME	INITIAL