University of Medical Center

CLINICAL PATHWAY:
Cardiac Catheterization/Interventional Cardiology

Cardiac Cath Lab

PATIENT IDENTIFICATION Stamp here or attach

Date: _____	**PREPROCEDURE** **ISOLATION O NO O YES TYPE:_____**	VARIANCE NOTES (DATE, TIME, AND INITIALS)
UNIT	O Cath Lab Admitting Area O 8W O PCU O CCU O Other:	
TESTS	Report on chart or in Patient Plus for (if not obtain): O PT/PTT O CBC O G3 O ECG O Serum HCG, if premenopausal female (order stat if not on chart) Date of labs _____ O Fingerstick (all diabetics) _____ (Notify NP/MD for glucose >250<100 to obtain insulin orders)	
ASSESSMENT	O Pre-procedure Assessment Height:_____ Weight:_____ O Baseline vitals BP: ____ Temp: ____ HR: ____ Resp: ____ POX: ____ O H/O contrast dye allergy ____ Yes ____ No Pre-meds given:____ O Allergies: ____ NKDA ____ Yes List and type of reaction:_____ _____ O Last menstrual period:_____ O Check peripheral pulses: DP/PT Dop:____ Palp:____	
TREATMENTS	O 20G Jelco PATENT, not in ACS O IVF as per physician order	
MEDS	O Soluble aspirin 325 mg po (unless hx anaphylactic reaction) O Note any hypoglycemics taken:_____ O Dye prophylaxis protocol with allergy O Metformin stopped 24 hours before procedure O Warfarin stopped 3-4 days prior to procedure O Hold diuretics	
DIET	O NPO ____ No ____ Yes, Since_____	
ACTIVITY	O As ordered	
PATIENT/ FAMILY EDUCATION	O *Health Problems related to admission:* Notify staff if have chest discomfort/pressure, prepare for cath lab procedures, activity restrictions post-procedure, provide teaching materials, direct family to waiting area in 3 Gudelsky O *Medications:* Discuss plan for sedation & pain management, ASA status O *Medical Equipment/Rehab/Community Resources:* N/A O *Diet/Food/Drug interactions:* NPO after midnight except medications.	
EXPECTED OUTCOMES	O VS stable, afebrile, OR O Physician notified for 50<P>120; 90<SBP>180; 50<DBP>100 O Lab results within normal limits, if not document abnormal results & notify Cath Lab O Verbalizes anxiety or concerns O Patient verbalizes understanding of: Procedure, rationale, post-procedure routine, expected LOS, expected outcomes, & possible adverse outcomes O Properly dressed (gown on, underwear off) O ID band correct & in place O Consent signed & witnessed, or O Notify Cath Lab staff if not on chart O H&P by NP/MD, or O Notify Cath Lab staff if not on chart	
DAILY EVALUATION	Critical Functions Done O : YES____ NO____ Patient Outcomes Met O : YES____ NO____ (If not, document in variance notes)	Date, Time, Signature

"This pathway represents the course of care for the majority of the patients in this case-type including resource utilization and outcomes. Each patient will have variations from this pathway almost everyday"

Patient Name:_____ Medical Rec. No.:_____

SAME DAY AREA PRE-PROCEDURE CHECKLIST	FAMILY WAITING AT (LOCATION & PHONE):

ADVANCE DIRECTIVES ☐ YES ☐ NO IF YES, SPECIFY ☐ LIVING WILL ☐ DURABLE POWER OF ATTORNEY FOR HEALTH CARE ☐ OTHER ☐ INFO GIVEN

IV SITE: _____ WITHOUT REDNESS/ EDEMA _____ CATH SIZE _____ SOLUTION _____
STARTED AT_____

ARRIVAL STATUS: ☐ AMBULATORY ☐ TRANSFER FROM:	PERSONAL BELONGINGS: ☐ WITH FAMILY ☐ OTHER/STRETCHER	VALUABLES REMOVED/DISPOSITION ENVELOPE #_____

PRIOR HOSPITALIZATIONS/PERTINENT MEDICAL HISTORY/CHIEF COMPLAINT:

CURRENT MEDS/DOSAGE/FREQUENCY/LAST TAKEN:

ASSESSMENT/TIME			ASSESSMENT/TIME		
MENTAL STATUS (1)			VOIDING PROBLEMS? (Y) (N)		
EXTREMITY MOVEMENT/SENSATION (2)			CATHETER REQUIRED? (Y) (N)		
EDEMA			PAIN/LOCATION		
HEART RHYTHM: (R)EGULAR (I)RREGULAR			PAIN SCORE 1-10		
PULSES (3) DP: R/L			BOWEL SOUNDS		
PT: R/L			BEHAVIORAL RESPONSE (6)		
SKIN INTEGRITY			THOUGHT PROCESSES (7)		
RESPIRATORY PATTERN (4)/ PULSE OX O2			PLANS FOR SEDATION: DISCUSSED WITH PATIENT? (Y) (N)		
BREATH SOUNDS (5) R/L			SIGNATURE, INITIALS, DATE AND TIME		

LEGENDS

1. Mental Status: A=awake O=oriented D=disoriented I=inappropriate DR=drowsy U=unresponsive S=chem sedated
2. Movement: I=interact Paresis/Plegia: Q=quad P=para LH=left hemi RH=right hemi UE=upper extremity LE=lower extremity Sensation: T=tingling N=numb
3. Pulses: P=palpable D=doppler A=absent
4. Resp: R=regular S=shallow L=labored I=irregular
5. Breath Sounds: CL=clear CR=crackles W=wheezes D=decreased A=absent S=stridor
6. Behavior: C=cooperative U=uncooperative A=anxious I=irritable
7. Thought Processes: A=appropriate C=confused P=paranoid D=delusional

University of Medical Center

CLINICAL PATHWAY:
Cardiac Catheterization/Interventional Cardiology

Cardiac Cath Lab

PATIENT IDENTIFICATION Stamp each sheet separately

	INTRA-PROCEDURE IN CARDIAC CATHETERIZATION LABORATORY	VARIANCE NOTES (DATE, TIME, AND INITIALS)
PROCEDURE	O PCI-Type_____ O Other Procedure _____ O Diagnostic Cath Physicians performing/procedure: Attending:_____ Fellow: _____ Date of Procedure:_____ Time Procedure Started:_____	
TESTS	O Cardiac Catheterization O ACTs O IVUS O Flowire	
ASSESSMENT	O Lab results on chart O Continuous EKG monitoring O Continuous SaO2 monitoring O HR, RR, BP, level of consciousness & SaO2 documented O 15 minutes O Pain O 15 minutes as needed O I & O O Anxiety Level O Ramsey Score O 15 minutes	
TREATMENTS	Pre-Procedure: O Assure both groins are scrubbed & shaved x1 O Assure patent IV access - 20G jelcen O O2 PRN to keep SaO2 > 94%: type used:_____ O IVF per physician order Sheath size & site: Arterial_____ Venous_____ Approach used:_____ Angioseal/Perclose: Time deployed:_____	
MEDS	O Administer Conscious Sedation as per UMMS policy: O Midazolam 0.5 mg - 2.0 mg IV as ordered:_____ total =____ O Fentanyl 25 mcg - 50 mcg IV as ordered:_____ total =____ O Benadryl 25 mg- 50 mg IV as ordered: _____ total =____ O Local anesthesia by physician (Lidocaine 1% or 2% sq.) O Heparin: O Continuous gtt in Lab: yes no - Time turned off: O IV bolus as ordered prn to keep ACT 250-325 Amount of heparin given in lab:_____units O Nitroglycerin: O IC by physician O IV gtt O SL 0.4 mg O GP IIb/IIIa receptor inhibitor used: _____ Bolus = _____ Time and dose of gtt started: _____ O Contrast given in lab: Amount=_____ml. Type used: _____ O Other meds given: Type/Reason/Effect _____ _____ _____ _____ _____	
PATIENT/ FAMILY EDUCATION	O *Health Problems related to admission:* explain steps of preparation and procedure, (e.g. sterile drapes, immobilization devices, SaO2) give ongoing feedback O *Pain Management related to procedure* O *Medications/Diet/Food/Drug interactions:* N/A O *Medical equipment/devices/Rehab/Community resources: N/A*	
DISCHARGE PLANNING	O Inform Heart Center/Cath Service of outcome to determine pt disposition O Give report to receiving unit: including sheath size, fluids, I&O, dye amount, meds administered, lab results (BUN, Creat, HCT), cath insertion site assessment, hemodynamic status, & progress on clinical pathway; Name of RN report given to:_____ Unit/Bed:_____ Time:_____	

Sedation Score 0-6 (Ramsey score)

1 - Anxious and agitated or restless or both
2 - Cooperative, accepting ventilation, oriented and tranquil
3 - Asleep, brisk response
4 - Asleep, sluggish response
5 - Responds to painful stimulus
6 - Unresponsive

Patient Name:_____ Medical Rec. No.:_____

FLOWSHEET

INTAKE AND OUTPUT

INTAKE TIME	FLUIDS	AMOUNT		TOTAL	OUTPUT TIME	SOURCE	AMOUNT		TOTAL

VARIANCE NOTES (DATE, TIME, AND INITIALS)

University of Medical Center

CLINICAL PATHWAY:
Cardiac Catheterization/Interventional Cardiology

Cardiac Cath Lab

Intraprocedure (continued)

PATIENT IDENTIFICATION: (Stamp, write or affix separately)

EXPECTED OUTCOMES	☐ Acknowledges & describes chest discomfort during procedure ☐ Sa02 at pre-procedure baseline O Hemodynamically stable O No bleeding or hematoma at cath insertion site O Pain level/Acceptable anxiety level O No nausea or vomiting O No allergic reaction O Post cath orders written O Last ACT= Time: Type of bed patient transferred to: O Telemetry Status O ICU Status O Floor O 8W Service: O CCU O PCU O Cath O Other:	Time out of room Date, Time, Signature
DAILY EVALUATION	Critical Functions Done O: YES___ NO___ Patient Outcomes Met ☐ : YES___ NO___	

RECOVERY SCORE

	TIME	ACTIVITY	RESP/REFLEXES	CIRC	CONSCIOUSNESS	COLOR	TOTAL	INITIALS
BASELINE								
DISCH								

LEGEND

	ACTIVITY	RESP/REFLEXES	CIRCULATION	CONSCIOUSNESS	COLOR
2=	ABLE TO MOVE 4 EXTREMITIES VOLUNTARILY OR TO COMMANDS	2=ABLE TO DEEP BREATH, COUGH, SWALLOW FREELY, GAG REFLEX PRESENT	2= BP +/- 20MM OF PREANESTHETIC LEVEL	2= FULLY AWAKE	2= PINK
1=	ABLE TO MOVE 2 EXTREMITIES VOLUNTARILY OR TO COMMANDS	1=DYSPNEA OR LIMITED BREATHING	1= BP +/- 20-40MM OF PREANESTHETIC LEVEL	1= AROUSABLE ON CALLING	1= PALE, DUSKY, SLOTCHY, JAUNDICED, OTHER
0=	ABLE TO MOVE 0 EXTREMITIES VOLUNTARILY OR TO COMMANDS	APNEIC, UNABLE TO SWALLOW, NO GAG REFLEX	0= BP +/- 40MM OF PREANESTHETIC LEVEL	0= NOT RESPONDING	0= CYANOTIC

University of Medical Center

CLINICAL PATHWAY:
Cardiac Catheterization/Interventional Cardiology

Cardiac Cath Lab

PATIENT IDENTIFICATION (place label here)

	POST PROCEDURE Unit_____ Date_____	VARIANCE NOTES (DATE, TIME, AND INITIALS)
PROCEDURE	O Dx Cath O PCI (Percutaneous Coronary Intervention) type:_____	
TESTS	O ACT's O EKG with M1 or complicated procedure O Re-check finger stick:_____	
ASSESSMENT	O VS, cath insertion site check & affected extremity check: q 15 x 4, q 30 x 4, q 1 x 2, then q 4 hours. Start immediately post procedure and post sheath removal. O While manual compression being held to cath insertion site, check VS & peripheral pulses in affected extremity q 3 min & do bedside cardiac monitoring (RN to stay with patient the first 10 minutes with arterial sheath pull) O Returned to baseline post sedation O Void within 6 hours Time:_____ Foley inserted Time:_____ O Cardiac risk factors and appropriateness for cardiac rehab	
TREATMENTS	O Sheaths removed @ _____ (time) by_____ O Compression method: manual compression for_____ minutes until hemostasis then, Femostop applied @ _____ by_____ @ _____ mmHg Femostop removed per policy@_____ by_____ O Angioseal or Perclose deployment_____ (time) O Pressure tubing if sheath > 6F and in place for > 6 hours	ACT before sheath removal:
MEDS	O Oxycodone 5 mg/acetaminophen 325 mg prn(1-2 q 4-6 hr PO) O Continue routine meds O Continue dye allergy protocol prn O Continue lipid altering meds O Soluable Aspirin 325 mg po q d (unless hx anaphylactoid reaction) OR O Ticlopidine/Clopidogrel as ordered or if ASA allergic. O GP IIb/IIIa inhibitor _____ (name of agent) stopped @_____ O Fluids as ordered O Hold metformin 48 hours after procedure	
DIET	O Clear liquids until 1 hour after sheath removal then advance O Encourage po fluids	
ACTIVITY	***For Manual Compression of Femoral arterial site (also includes use of femostop):*** O For 4 hours after sheath pull or femostop removal: Strict bedrest on back, affected leg straight, HOB flat (may elevate HOB to 30-1 hour after sheath removed) O If groin stable 4 hours after sheath removal: dangle for 15 minutes and them ambulate ***Sheath removal with Angioseal or Perclose:*** O Bedrest for two hours after sheath removal ***For Brachial (Sones) access Site:*** O HOB elevated, BRP and restricted flexion of affected elbow x 2 hours O **If post sheath removal bleeding or hematoma: Mandatory bedrest overnight**	

University of Medical Center

CLINICAL PATHWAY:
Cardiac Catheterization/Interventional Cardiology

Cardiac Cath Lab

PATIENT IDENTIFICATION (stamp/label other pertinent)

PATIENT/ FAMILY EDUCATION	O *Pain Management post procedures* O *Personal hygiene: Site care* O *Health Problems related to admission: Give* risk factor education packet, the Health TV (channel 43), "Cholesterol and You", management of cath site educational material. O *Medications:* carry a list of medications in wallet, explanation of post-procedure meds. (Plavix, Lovenox, etc.) O *Medical Equipment/devices:* need to carry stent implant card always. Angioseal card for 90 days. O Community resources/Rehab: Activity restrictions (no driving, extreme hop flexion, heavy lifting or exertion x 24 hrs.) O *Diet/Food/Drug interactions:* Cardiac diet	
DISCHARGE PLANNING	O Determine need for home health care O Inform family of anticipated d/c date and time O Same Day discharge: Person responsible for pick-up:_____	
EXPECTED OUTCOMES	***Day I*** ***Date***_____ O Vital signs stable O Neuro vascular status stable O No significant hematoma (>5x5 cm or requiring surgical intervention)/ No bruit O No complications from sedation O Complaint with activity restrictions O Acceptable pain/anxiety level O No cardiac pain O Pt verbalizes understanding of activity plan and medical plan of care ***Day II*** ***Date***_____ ☐ Vital signs stable ☐ Neuro vascular status stable to affected extremity ☐ No significant hematoma ☐ Acceptable pain/anxiety level ☐ No cardiac pain ☐ Pt verbalizes symptoms to report to M.D., medications (dose, purpose and side effects), risk factors for heart disease and activity restrictions prior to discharge.	**Discharge date and time:**
EVALUATION	Expected outcomes met? (shift/time/initials/signature) Yes _____ No_____ Yes _____ No_____ Yes _____ No_____ Yes _____ No_____ Yes _____ No_____	

Patient Name:______________________________ Medical Rec. No.:____________________

FLOWSHEET

DATE	TIME	TEMP	PULSE	BP	02 STATS	DISTAL PULSE CHECKS	CATH SITE CONDITION	PAIN SCORE/1-10 (VARIANCE NOTE W/PAIN)	SIGNATURE	

CODE: BL=BLEEDING BR=BRUIT E=ECCHYMOSIS H=HEMATOMA D=DRY & INTACT