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Hyperspace Playground Instructions

The exercises below will be completed in the Playground (PLY) training environment. To access PLY:

1. From the Citrix Receiver window, click to launch Hyperspace PLY.

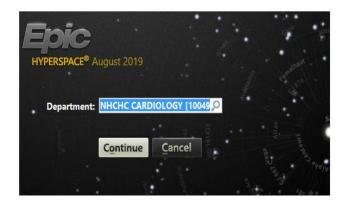


If Citrix Receiver is not visible on your device:

- Navigate to the toolbar located on the bottom of the screen OR use the search tool, bottom left, to search for Citrix Receiver.
- Click the 'show hidden icons' symbol, then click the Citrix Receiver icon
- Click to open Hyperspace Playground.
- Use the training Login ID in the User ID field and the password is 'train'. The training Login ID's are consecutive between TRN24730 TRN24759. Look for a TRN user that does not have Cupid documentation already completed on the patient(s). [Refreshed daily]



3. The defaulting department is correct. Click Continue. You are now logged into PLY.



Cupid Expansion Invasive Procedure Documentation

Cupid Expansion is expanding the workflow and functionality of Cardiology users. The coronary toolset within this application will guide structured reporting and enable automated registry reporting.

The exercises below introduce the appearance and basic functionality of Study Review documentation using Cupid Expansion. Workflow throughout Dimensions recommends working within the navigator; from top to bottom. This helps to ensure more accurate charting and deficiency reduction.

Because the focus of this exercise is Study Review documentation, we will begin with the Study Review section in the navigator. You will:

- 1. Become familiar with the appearance and functionality of the Drawing Tools
- 2. Practice post procedural documentation
- 3. Become familiar with Structured Reporting and Registry documentation

Exercise 1: Documenting an EP Study

Double click to open your Tach Breakfast patient's chart from the schedule located on the Provider Planner. Note that the patient record for a procedure *must* be opened from the Provider Planner schedule for the PostProc navigators to display the Procedure Note link to Study Review.

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DYZERO (Total: 2)	<u>T</u> oday 🗲	11/4/2019 📋 🔿	— •
Status Details	Me Time 📥 Inf Ri	Patient	Age
Cath/EP COMBO	12:00 AM	Breakfast, Tach.	26 y
Cath Lab 3	1:30 PM	Breakfast, Perr	. 26 y
Cath Lab 3	1:30 PM	Breakfast, Perr	. 2
	DYZERO (Total: 2) Status Details Cath/EP COMBO	DYZERO (Total: 2)	DYZERO (Total: 2)

Begin this exercise by opening Study Review. To launch the Study Review workspace:

1. Left click on Procedure Note in the navigator OR click the 'click here to launch Study Review activity' hyperlink.

	E	PreOperative	Postop Inpt-Obs	PostProc Dis	с	😈 Rounds	s 💯 Admis	si
	PostP	roc Discha	arge					
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;)	DISCHARG Unsigne	BE ORDERS d Orders						
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	Problem 24-Hr Re		+ Create Note	n NoteWriter	~	+ Create Note	See All Notes	K

- 2. The Study Review workspace opens defaulted to the Copy Findings window. The Copy Findings window contains information documented in the Procedure Log. Click Accept.
 - Clicking Accept will include items with a check mark in the finalized report.

aw.	Hyperspace - NHCHC CARDIOLOGY - Novant ACE1 - BRADYZERO B.	🖴 6 : Ch	nart Completion 🔤 0 - 💻 🖬 🗙
Epic - Breakfast, TachZero 🗙 🏠 Home 📛 Pt Look	up/Charl, 💾 Care Pathways 🗃 In Basket 💘 Remind Me. 💾 Novant Intranet 📋 DirectAdmit 📋 Prep for Case 🍃 Personalization - 🕌 Appts 🏢 UpToOate 🕂 NH McKesson P	ACS MidMark Vitals 🔧	🥶 🥔 🔒 Print 🗸 🔒 Secure 📑 Log Out
TachZero Breakfast MRN: 85021503 Male, 26 y.o., 10/30/1993 Bed: FMC EP LAB	Code: No Order Allergies: Hotpital Ht. 6'2' (Cardiology Distress: Intubation PRN Care Team: No PCP, Ref Provider: B Implants: None	Im Problem List No new Diabetes mellitu Active N	results None Mark as : Aeds (2) 조No results CrCI: None
Study Review for Exam date: 11/1/2019, Procedure	e: EP STUDY, Acc Num: R0000105	•• 🗇 ⊀ 🗙	Summary - Reference
🕤 Study History 🔢 View Images 🚸 Dictate 🔀 Media Manager 🛛 IB Mes	sage 🕊 CC Results 🗧 Sage 🚯 Needs River 🗸 Sign 🛛 👺 EP Study 🔯 Ablation AV node 🔯 Ablation CTI 🔯 Ablation PVI+CTI 🐺 Ablation SVT 🔯 Ablation VT Array 🔯 Ablation	on VT simple More 👻	Reference
Report SnapShot Procedure Log	Electrophysiology Findings - Conclusion Procedures Complications Charge Entry Follow Up		← * < > > > = < < < < < < < < < < < < < < <
👄 👂 🖶 Print 🕲 Copy Summary Statement 🖽 Undo Summary Statem	Copy Findings	rt Over I Copy New Findings	
	⑦ What is this?		Provider
	This is information that was documented in the Procedure Log for the procedures in this case. Findings with a check mark () next to them will be added to your report.		Documentation
	If you don't want to copy any of the findings, just 🗙 Cancel .		Checklist
	I don't need to see this explanation anymore		② Admission Checklist
	Electrophysiology Findings Jintervals: Intervals were collected pre-ablation. Sinus tachycardia was observed.		11/01/19 0802 A
	CG Rhythm: Sinus rhythm was observed.		Last Updated: Refresh 1208
			Overdue (1) ⊗
			 Admission Order Placed
			O Not Completed (3) ≈
			 Allergies Reviewed Has Active Code Status Order
		1	 Has H&P Written and/or Updated
			Completed (2) >
		1	Admission Quality Measures
			11/01/19 0802 A
			Last Updated: Refresh
			1208
			Not Completed (1) Order VTE Prophylaxis
			P order vie Propriyaats
			② Daily Checklist
	Don't show Copy Findings again		11/01/19 0803
		1	Last Updated: 1208 Refres
			Not Completed (3) All Orders Cosigned
			 Has ACP Note Within Current Encou Update Estimated Discharge Date
			Completed (5) >
			① Discharge Checklist ※

Take a few moments to become familiar with the layout of the workspace. This will aid with efficiency and ease of use.

Viewing this workspace in sections, the left pane is comprised of the Report, SnapShot and Procedure Log tabs.

- Report (default) contains general procedural information that will be included in the finalized report. (Ex. Physicians, indications, Pre/Post diagnosis, procedure, conclusion, etc).
 Hyperlinks offer quick navigation
- SnapShot displays information included in the Summary activity
- **Procedure Log** encompasses all Perioperative tech and nurse documentation
- Vessel Findings: specific result documentation; Coronary dominance selection

The right pane includes macros and other documentation tabs. We will begin with the Conclusion tab.

• Note: Tabs are defaulted based on the procedure.

Epic - 🚰 Zzipoce, Tachone 🗙		Pathways	s 🚍 In Basket 🗴 Remind Me	H Novant Intranet	Direct Admit	Case 🖉 Personaliz	ation 🗸 🖳 Ap	ots IIII UnToDate	NH McKesson PAC	S MidMark Vitals		🚱 🄌 🔒 Pri	it 🗸 🕰 Secu	re 🕞 Log Out
Tachone Zzipoce Male, 26 y.o., 10/28/1993	MRN: 85013318 Code: No Order Bed: FMC EP L Distress: Intubatio			+	Care Team Care Team: No PCP, Ref Pro	Allergi Hosp	it EP AB	Recov, EP Lab 2 Patient Class: Ou		Cardiology		No new resu Active Meds	None	Mark a + CrCl:
Study Review for Exam date: 10	0/30/2019, Procedure: EP STUI	DY, Acc	cc Num: R0000105		1								_	• • * ×
🔊 Study History 🔠 View Images 🌵 Dictate 🚦	Media Manager 🛛 🖾 IB <u>M</u> essage 🛋 CC Res	ults 🛛 🖬 S	Saye 🚯 Needs Rv <u>w</u> 🗸 Sign	🕃 EP Study 📑	Ablation AV node 🛛 🗒 Ablation (CTI 📑 Ablation PVI-	+CTI 📑 Ablati	on SVT 🛛 🕃 Ablation VT	Array 📑 Ablation	VT simple 📑 Abl	lation VT Transs	eptal 📑 BiV-IC	D GenChg	More
Report SnapShot Procedure Log		E	Electrophysiology Findings	Conclusion Proc	edures Complications Cl	arge Entry Follov	v Up							
🗧 🖉 🖗 Print 🏟 Copy Summary Stateme	nt 🛯 Undo Summary Statement	Ado	Add Finding + Add New									🖍 Start C	ver 🗎 Copy	New Findings
Tachone Zzipoce	EP study Order# 175159		Intervals										+	Add Finding
Patient Information	ay aste: 10/30/19		Intervals Intervals were collected p ECG Rhythm	e-ablation. Sinus ta	chycardia was observed.		Click	ing 'Accep	t' pulls				+	Add Finding
Name MRN Tachone Zzipoce 85013318	Description 26 y.o. male	Ð	ECG Rhythm Sinus rhythm was observe	ed.			the d	ocumented	d. E					×
This is a preliminary report and ha	s not been finalized by a physician							edure Log.						
Physicians Panel Physicians Referring Physicians Brady Bundle, MD (Primary)	sician Case Authorizing Physician Brady Bundle, MD						signe will b	e the study ed this infor e included report.	rmation					
Procedures F PABLATION										J				
⊗ Indications ₅														
Pre Procedure Diagnosis	Post Procedure Diagnosis 5													
Tachycardia														
∠ EBL	Z Total Contrast Total Contrast Used: 0 mL(s).													
Estimated Blood Loss: 125 mL(s).	J -													
🗄 Conclusion 8														
IR FCG		~												

- 3. Click the Conclusion tab to open the documentation window. Search for a Dimensions created note template using the Insert Smart Text field.
 - To use your personalized Smart Phrase position the cursor in the note text window and enter the desired Smart Phrase (ex: .mycustomizedphrase).
 - Macros are available for use in the toolbar. (See highlight above)
 - If a Macro is selected, F2 through the note to complete documentation.

The note populates in the Conclusion section on the left and in the pane located in the body of your workspace.

- Note documentation completed in this space will also populate the Conclusion section in the left pane, meaning the Report is simultaneously updated.
- Documentation cannot be edited in the Report tab. Edits must be completed in the body of the workspace.

tudy Review for Exam date: 10/22/2019, Procedure: EP ST > Study History If View Images ● Dictate Image: Point SnapShot Procedure Log - P Print Dopy Summary Statement Image: P Image: P <th></th> <th>EP Study Ablation AV node Ablation CTI Ablation PVI+CTI Ablation SVT Ablation VT Array Ablation VT simple Electrophysiology Findings Conclusion Procedures Complications Charge Entry Follow Up Summary Statements</th>		EP Study Ablation AV node Ablation CTI Ablation PVI+CTI Ablation SVT Ablation VT Array Ablation VT simple Electrophysiology Findings Conclusion Procedures Complications Charge Entry Follow Up Summary Statements
Ally Training Ordering physician: David J Bohle, MD Study date: 10/22/19	EP study Order# 5815406	Sglect All Select None C Statements in bold have been edited and will not update automatically.
	Description 36 y.o. female	
This is a preliminary report and has not been finalized by a physician		
Physicians Panel Physician David J Bohle, MD (Primary) Referring Physician	Case Authorizing Physician	(<u>Conclusion</u> ☆ B 国 必 ☆ ☞ 徂 ✦ <mark>InterConctod व</mark> ← ⇔ 戰 ᠿ ♥ 冊
Procedures 5 EP ABLATION: A TACH V-TACH		
Molications [™]		

Ex. EP Study Macro selected. Position the cursor in the note and press F2 until all variables are complete.

Epic - 🏠 Home 📂 Pt Lookup	/Chart 🕌 Care Pathways 🚔 in Basket 🦹 Ren	nind Me 🕌 Novant Intranet 🔋 Direct Admit	🖗 Personalization 🖕 🏭 Appts 🔠 UpToDate 🕌 NH McKesson PACS - MidMark Vitals 🗈 Staff Daily 🕌 View Sche	ules 👷 Support Chat 💛 🚷 🤌 🖶 Print 🗸 🔒 Secure 📑 Log Out
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TachZero Breakfast	Report SnapShot Procedure Log		viology Findings Conclusion Processes Complications Charge Entry Follow Up	Beronaudi Friendi Beronaudi Frannyis more
Male, 26 y.o., 10/31/1993 📇 MRN: 85021482	🗧 🗧 👂 🖶 Print 🚯 Copy Summary Staten	nent 🛯 Undo Summary Statement	y Statements	
Bed: FMC EP LAB-EP LAB Code: No Order (no ACP docs) Distress: Intubation PRN	Panel Physicians Referring Phy Bradyzero Breakfast, MD (Primary)	rsician Case Authorizing Physician Bradyzero Breakfast, MD	t All Select None ① Statements in bold have been edited and will not update automatically.	
© Search Care Team: No PCP				
Brady Bundle, MD Ref Provider Allergies: No Known Allergies Implants: No	ABLATION Indications *			Y
Hospital Days: 1 	Pre Procedure Diagnosis 5	Post Procedure Diagnosis %	on	
Recov, Cath/EP COMBO	Tachycardia		🕀 🎨 🖆 🗿 🕂 Insert SmertText 🔁 😓 🔿 🦝 📿 🕐 🗮	
Patient Class: Outpatient Bed Requested: None	∠ EBL	Total Contrast Total Contrast Used: 0 mL(s).	ade Refractory Periods 2: o AVERP: ***	×
Ht: 6' 2" (188 cm) Wt: 189 lb (85.7 kg) BMI: 24.27 kg/m ²	Estimated Blood Loss: 125 mL(s).	•	o AVERP: ***	
	Technique:		ode recovery time was performed in the superior right atrium. Sinus node recovery times were obtained at multiple paci	ig cycle lengths ranging from *** to *** ms. The longest
CARDIOLOGY IMPLANTS None		the endland come becaused the	de recovery time was *** ms. The longest corrected sinus node recovery time was *** ms. These v	lues indicate *** sinus node function.
CARDIOLOGY PROBLEMS (0) Other problems (3)	After informed consent was obtained Electrophysiology Lab in the fasting s and the right neck region were prepp Sedation details are charted in the pr	state. The bilateral femoral regions ed and draped in sterile fashion.	ed Arrhythmias:	
NO NEW RESULTS, LAST 36H ACTIVE MEDS (2)	record. Vascular access was obtained using	ultrasound guidance.	17: mary:23013). el:23014)	
One-Step (2)	Intraprocedural anticoagulation detail and electronic medical record.	Is are charted in the procedure log		
A No results	Intracardiac electrograms were recor {Locations:23012}		st, BradyZero, MD 19	
CrCl: None Spec Coll: None	Intracardiac pacing was performed at {Locations:23012}	t the following locations:	-	×

4. Click the Procedures tab and update documentation as desired.

*A Post Procedure diagnosis must be entered in order to Sign the study. If the Post Procedure diagnosis is entered prior to opening the Study Review, (i.e. entered in the Post op Discharge navigator table of contents) the diagnosis will auto populate in the Study Review.

Epic - 🏠 Home 焟 Pt Lookup/	Chart 🕌 Care Pathways 🕮 In Basket 🦹 Remind Me 🕌 Novant Intranet	📋 Din	ect Admit 📋 Prep for Case 🍃 Personalization 🕞 📇 Appl	s 👭 UpToDate 🕌 NH McKesson PACS MidMark Vitals 🗈 Staff Daily 💾 View Schedu	les 🙀? Support Chat 😕	😢 🤌 🖶 Print 🗸 🔒 Secure 🕒 Log Out
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TachZero Breakfast	Report SnapShot Procedure Log		Electrophysiology Findings Conclusion Procedu	res Complications Charge Entry Follow Up		Provider
Male, 26 y.o., 10/31/1993 📛 MRN: 85021482	← P A Print + Copy Summary Statement	lore +	Changes made to the information on this tab will save imme	diately.	+ Add	Documentation
Bed: FMC EP LAB-EP LAB Code: No Order (no ACP docs)	Central veins were accessed using ultrasound guidance.	^	Bradyzero Breakfast, MD - Cardiovascula Procedures	r	✓ Edit ⇔	Checklist
Distress: Intubation PRN	Access sites, catheters and sheaths are documented in the procedure log.		% EP ABLATION Assisting Physicians		×	② Admission Checklist
Care Team: No PCP			None	Add Post procedure diagnosis; Associate diagnoses	T	11/02/19 0802 ☆ Last Updated: Refresh
Brady Bundle. MD Ref Provider	EP Study Data Antegrade 1:1 AV Node Function			Ŭ		1205 [●] Overdue (1) ◇
Allergies: No Known Allergies Implants: No	Baseline: 1:1 antegrade conduction was maintained to 2 ms with block occurring at 2 ms.			Click 'Refresh Report' to ensure all updated documentation is		 Admission Order Placed O Not Completed (3)
Hospital Days: 1 EP ABLATION	On isuprel: 1:1 antegrade conduction was maintained to 2 ms with block occurring at 2 ms.			retained.		Allergies Reviewed Has Active Code Status Order Has H&P Written and/or Updated
Bradyzero Breakfast, MD Recov, Cath/EP COMBO	Retrograde 1:1 AV Node Function					Completed (2) ×
Patient Class: Outpatient Bed Requested: None	Retrograde conduction was concentric. Baseline: 1:1 retrograde conduction was maintained to 2 ms					Admission Quality
Ht: 6' 2" (188 cm)	with block occurring at 2 ms. On isuprel: 1:1 retrograde conduction was maintained to 2					Measures
Wt: 189 lb (85.7 kg) BMI: 24.27 kg/m ²	ms with block occurring at 2 ms. Antegrade Refractory Periods					Last Updated: Refresh
CARDIOLOGY IMPLANTS	Baseline: -> AVNERP: 5		Indications	Associate a	all 🕐 Associate 🕂 Add	1205 ② Not Completed (1) ☆
None	On isuprel: > AVNERP: 5					Order VTE Prophylaxis
CARDIOLOGY PROBLEMS (0) Other problems (3)	Ventricular Refractory Period > VERP: 5					② Daily Checklist 11/02/19 0803
NO NEW RESULTS, LAST 36H	Retrograde Refractory Periods					Last Updated: 1205 Refres
ACTIVE MEDS (2) Second Control (2)	Baseline: > Retro AVERP: 5 On isuprel:					 O Not Completed (3) ▲ All Orders Cosigned
None	> Retro AVERP: 5		Pre-Procedure Dx	Post-Procedure Dx	Refresh Report	 Has ACP Note Within Current Encou Update Estimated Discharge Date
A No results Start Review	Sinus node recovery time Pacing was performed in the superior right atrium. Sinus node recovery times were obtained at multiple pacing cycle		Tachycardia			Completed (5) ∀
CrCl: None	lengths ranging from 2 to 5 ms. The longest sinus node recovery time was 5 ms. The longest sinus node	L				② Discharge Checklist ≈ ✓

5. Click the Complications tabs and make selections.

* The Complications Smart Form must be completed in order to Sign the study. If there are no complications to document, select 'No immediate complications'.

Electrophysiology Findings Conclu	usion Proce	dures Complications Charge Entry Follow Up		
Clear All				
No immediate complications				
General Complications				
+ periprocedural MI	—	+ cardiogenic shock —	+ congestive heart failure	—
+ CVA/stroke	—	+ tamponade -	+ thrombocytopenia	—
+ contrast reaction	—	+ renal failure —	+ emergency PCI	—
+ pericardial effusion	—	+ sedation complications -	+ diaphragmatic paralysis	—
\pm right atrial perforation	—	+ anesthesia complications —	+ IVC laceration	—
+ cardiac arrest	—	+ pneumothorax —	+ pulmonary edema	—
+ respiratory insufficiency	—	+ death in lab —	+ perforation	—
+ hematoma	—	+ blood transfusion —		
leeding Complications				
+ percutaneous entry site	—	+ retroperitoneal bleeding -	+ gastrointestinal bleeding	_
+ genital-urinary bleeding	_	+ AV fistula –	+ access site occlusion	_
+ peripheral embolization	_	+ dissection —	+ pseudoaneurysm	
Arrhythmias				
+ atrial fibrillation	_	+ non-sustained v-tach -	+ high degree AV block	_
+ v-tach requiring therapy	_	+ ventricular fibrillation -	+ symptomatic bradycardia	
+ asystole	_		y promitice bracky carelle	
,				

The next tab, charge entry is available to complete charge capture as needed.

Service Date	Department	Place of Service	Service Provider	Billing Provider	Referring Provider	Diagnoses	
← 10/30/2019 📋 →	FMC ELECTROPHYSI ,	FMC EP Lab	Brady Bundle, MD	A 0	9	O Associate	
earch for new charge + Add							
narges Entered Within the L	ast 7 Days My Charges (Se	ervice or Billing Provider)					
_	ast 7 Days My Charges (Se Personal Filter	ervice or Billing Provider)					

6. Once all documentation is complete, Sign.

- To review the finalized documentation:

*Go to Chart Review and select the Cardiology tab. *Double click to read the report.

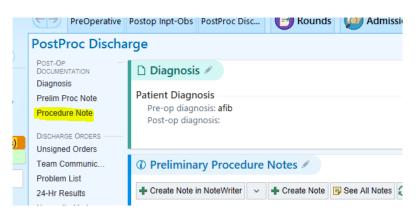
- To Addend:

*Select the Study Review activity, then Addendum. *Update the information and Sign.

Exercise 2: Peripheral Study Result

Double click to open your Perry Breakfast patient's chart from the schedule located on the Provider Planner. We will begin by opening Study Review using the hyperlink.

1. Left click on Procedure Note in the navigator OR click the 'click here to launch Study Review activity' hyperlink.



2. The Study Review workspace displays defaulted to the Report tab on the left and the Conclusion tab in the body of the workspace. The diagram below provides an overview of the workspace.

	hart 🕂 Care Pathways 🗐 In Bastet 🤻 Remind Ma 💾 Nievand Infranet 🗒 Direct Komt 📋 Prep for Case 🄌 Personalcation - 🚔 Apols 🏥 UpToDate 🥂 NH McKesson PACS Micklark Vitals 🕞 Statt Daily 👬 Wew Schedules 🧬 Support Chat 🤲 🖗 🐥 Amt - 🔒 Secure 🕒 Log	Out
	Breakfast, PerryZero ×	rch
	PreOperative Postop Inpt-Obs PostPro. PostPostPostPro. PostPostPostPro. PostPostPostPostPostPostPostPostPostPost	
Maile 20	Report SnapShot Procedure Log Conclusion Procedures Complications Charge Entry Follow Up ← D* the Print #2) Core Summary Statement HUndo Summary Statement HUndo Summary Statement Insummary Statement Insummary Statement Insummary Statement Insummary Statement Insummary Statement Insummary Statement Insummary Statement Insummary Statement Insummary Statement Insumary Statement Insummary Statement <td></td>	
MRN: 85021479 Bed: FMC CATH LAB-CATH LAB Code: No Order (no ACP docs) Distress: Intubation PRN	Contract Statement in Cold Statements in bold have been edited and will not update automatically.	
Search Care Team: No PCP Brady Bundle, MD Ref Provider	See Patient Information Name MRN Description PetryZero Breakfast 85021479 26 y.o. male	4
Allergies: No Known Allergies Implants: No Hospital Days: 1	**This is a preliminary report and has not been finalized by a physician**	
ANGIO-VENOGRAPHY LOWER DIAGNOSTIC - LEFT Bradyzero Breakfast. MD Recov. Cath Lab 3 Patient Class: Outpatient	PACS Images A Show images for Cardiac Catheterization Conclusion ☆ B Ø ♡ at ② + Exact Smartfeet ⓓ ← → ➡ ⑦ ♡ ₪	
Bed Requested: None Ht: 6' 2" (188 cm) Wt: 189 lb (85.7 kg) BMI: 24.27 kg/m ²	Panel Physicians Referring Physician Case Authorizing Physician Bradyzero Breakfast, MD Bradyzero Breakfast, MD	
CARDIOLOGY IMPLANTS None CARDIOLOGY PROBLEMS (1)	Angio-venography Lower Diagnostic	
Phlebitis and thrombophlebitis Other problems (3) NO NEW RESULTS, LAST 36H	Pre Procedure Post Procedure Diagnosis % Diagnosis % Rest Pain	
ACTIVE MEDS (2) One-Step (2)	⊗ Indications <	
No results Start Review	Conclusion	

- 3. Search for a Dimensions created note template using the Insert Smart Text field.
 - * To use your personalized Smart Phrase position the cursor in the note text window and enter the desired Smart Phrase (ex: .mycustomizedphrase).
 - The note populates in the Conclusion section on the left and in the pane located in the body of your workspace.
- 4. F2 through the note to complete documentation. The report is simultaneously updated in the Conclusion section of the Report tab.
 - Documentation cannot be edited in the Report tab. Edits must be completed in the body of the workspace.

5. Click the Procedures tab and update documentation as desired.

*A Post Procedure diagnosis must be entered in order to Sign the study. If the Post Procedure diagnosis is entered prior to opening the Study Review, (i.e. entered in the Post op Discharge navigator table of contents) the diagnosis will auto populate in the Study Review.

Epic - 🏠 Home 📂 Pt Lookup/	Chart 🕌 Care Pathways 📾 In Basket 🔻 Remind Me 🕌 Novant Intranet	📋 Dire	ctAdmit 📋 Prep for Case 🌛 Personalization 🗸 🚜 Appl	s 🎬 UpToDate 🕌 NH McKesson PACS 🛛 MidMark Vitals 🗈 Staff Daily 🔒	View Schedules 🔐 Support Chat 💛	🛞 🤌 🔒 Print 🗸 🔒 Secure 📑 Log Out
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			-	Manag Event Log Interdi Bedsid Adv Ca MyCha Stud		Summary ¥ Reference
9 0 0	Study Review for Exam date: 11/2/2019, Proced Study History III View Images & Dictate C Media Manager		and the second	🗒 EP Study 🗒 Ablation AV node 📑 Ablation CTI 🍜 Ablation PVI+CTI 📑 /	⊙ ② 🖍 🗙 Ablation SVT More ▾	← * > ≠ ₫ C
TachZero Breakfast	Report SnapShot Procedure Log		Electrophysiology Findings Conclusion Proceed	res Complications Charge Entry Follow Up		Provider
Male, 26 y.o., 10/31/1993 👑 MRN: 85021482	← 🖉 🖉 Erint 🕲 Copy Summary Statement	lore +	Changes made to the information on this tab will save imm	ediately.	🕂 Add	Documentation
Bed: FMC EP LAB-EP LAB Code: No Order (no ACP docs)		^	Bradyzero Breakfast, MD - Cardiovascula	r	🖋 Edit 😞	Checklist
Distress: Intubation PRN	Central veins were accessed using ultrasound guidance. Access sites, catheters and sheaths are documented in the procedure log.		Procedures % EP ABLATION		Edit the p	rimary physician for this panel
O Search	historia indi		Assisting Physicians None	Add Post procedure diagnosis;	+	11/02/19 0802 🛠
Brady Bundle, MD Ref Provider	EP Study Data			Associate diagnoses		Last Updated: Refresh 1205
Allergies: No Known Allergies Implants: No	Antegrade 1:1 AV Node Function Baseline: 1:1 antegrade conduction was maintained to 2 ms with block occurring at 2 ms.			Click 'Refresh Report' to ensure		Overdue (1) Admission Order Placed Not Completed (3)
Hospital Days: 1	On isuprel: 1:1 antegrade conduction was maintained to 2 ms with block occurring at 2 ms.			all updated documentation is retained.		Allergies Reviewed Has Active Code Status Order
EP ABLATION Bradyzero Breakfast, MD Recov. Cath/EP COMBO	Retrograde 1:1 AV Node Function					A Has H&P Written and/or Updated
Patient Class: Outpatient Bed Requested: None	Retrograde conduction was concentric. Baseline: 1:1 retrograde conduction was maintained to 2 ms					Admission Quality
Ht: 6' 2" (188 cm)	with block occurring at 2 ms. On isuprel: 1:1 retrograde conduction was maintained to 2					Measures
Wt: 189 lb (85.7 kg) BMI: 24.27 kg/m ²	ms with block occurring at 2 ms. Antegrade Refractory Periods					Last Updated: Refresh
CARDIOLOGY IMPLANTS	Baseline: -> AVNERP: 5		Indications	(🖉 Associate all 🕜 Associate 🕂 Add	1205 ② Not Completed (1) ⊗
None	On isupret: -> AVNERP: 5					Order VTE Prophylaxis
CARDIOLOGY PROBLEMS (0) Other problems (3)	Ventricular Refractory Period					② Daily Checklist
NO NEW RESULTS, LAST 36H	Retrograde Refractory Periods					11/02/19 0803 Last Updated: 1205 Refres
ACTIVE MEDS (2) È One-Step (2)	Baseline: > Retro AVERP: 5 On isuprel:					Not Completed (3) All Orders Cosigned
None	> Retro AVERP: 5		Pre-Procedure Dx	Post-Procedure Dx	Refresh Report	Has ACP Note Within Current Encou Update Estimated Discharge Date
A No results	Sinus node recovery time Pacing was performed in the superior right atrium. Sinus node recovery times were obtained at multiple pacing cycle		Tachycardia			Completed (5) ✓
CrCl: None	lengths ranging from 2 to 5 ms. The longest sinus node recovery time was 5 ms. The longest sinus node					② Discharge Checklist *

6. Click the Complications tabs and make selections.

* The Complications Smart Form must be completed in order to Sign the study. If there are no complications to document, select 'No immediate complications'.

No immediate complications Seneral Complications + periprocedural MI - + cardiogenic shock - + congestive heart failure + CVA/stoke - + tamponade - + thrombocytopenia + contrast reaction - + renal failure - + diaphragmatic paralysis + perioradial effusion - + sedation complications - + diaphragmatic paralysis + right atrial perforation - + aresthesia complications - + Valceration + respiratory insufficiency - + death in lab - + perforation + hematoma - + blood transfusion - + percutaneous entry site - + retroperitoneal bleeding - + gastrointestinal bleeding + genipheral embolization - + dissection - + pseudoaneurysm	ear All	harge Entry F	ollow Up			
+ periprocedural MI - + cardiogenic shock - + congestive heart failure + CVA/stroke - + tamponade - + thrombocytopenia + contrast reaction - + renal failure - + thrombocytopenia + contrast reaction - + renal failure - + thrombocytopenia + pericardial effusion - + sedation complications - + diaphragmatic paralysis + right atrial perforation - + sedation complications - + toponary edema + cardiac arrest - + penemothorax - + pulmonary edema + respiratory insufficiency - + death in lab - + perforation + hematoma - + blood transfusion - - Beeding Complications - + teroperitoneal bleeding - + gastrointestinal bleeding + genital-urinary bleeding - + AV fistula - + access site occlusion + peripheral embolization - + dissection - + pseudoaneurysm Arrhythmias - + toricular fibrillation - + symptomatic bradycardia <th></th> <th></th> <th></th> <th></th> <th></th> <th></th>						
+ periprocedural MI - + cardiogenic shock - + congestive heart failure + CVA/stroke - + tamponade - + thrombocytopenia + contrast reaction - + renal failure - + thrombocytopenia + contrast reaction - + renal failure - + thrombocytopenia + pericardial effusion - + sedation complications - + diaphragmatic paralysis + right atrial perforation - + sedation complications - + toponary edema + cardiac arrest - + penemothorax - + pulmonary edema + respiratory insufficiency - + death in lab - + perforation + hematoma - + blood transfusion - - Beeding Complications - + teroperitoneal bleeding - + gastrointestinal bleeding + genital-urinary bleeding - + AV fistula - + access site occlusion + peripheral embolization - + dissection - + pseudoaneurysm Arrhythmias - + toricular fibrillation - + symptomatic bradycardia <th>eneral Complications</th> <th></th> <th></th> <th></th> <th></th> <th></th>	eneral Complications					
+ contrast reaction - + renal failure - + emergency PCI + pericardial effusion - + sedation complications - + diaphragmatic paralysis + right atrial perforation - + anesthesia complications - + livC laceration + cardiac arrest - + pneumothorax - + pulmonary edema + respiratory insufficiency - + death in lab - + perforation + hematoma - + blood transfusion - + gastrointestinal bleeding + genital-urinary bleeding - + retroperitoneal bleeding - + gastrointestinal bleeding + genital-urinary bleeding - + AV fistula - + pseudoaneurysm + urinythmias - + non-sustained v-tach - + high degree AV block + v-tach requiring therapy - + ventricular fibrillation - + symptomatic bradycardia		—	+ cardiogenic shock	—	+ congestive heart failure	-
+ pericardial effusion - + sedation complications - + right atrial perforation - + anesthesia complications - + cardiac arrest - + pneumothorax - + perforation - + perpiratory insufficiency - + death in lab - + hematoma - - + blood transfusion - + gastrointestinal bleeding + percutaneous entry site - - + retroperitoneal bleeding + genital-urinary bleeding - + dissection - + genital-urinary bleeding - + dissection - + pseudoaneurysm	- CVA/stroke	_	+ tamponade	-	+ thrombocytopenia	-
+ right atrial perforation - + anesthesia complications - + IVC laceration + cardiac arrest - + pneumothorax - + pulmonary edema + respiratory insufficiency - + death in lab - + perforation + hematoma - + blood transfusion - + eeding Complications - + gastrointestinal bleeding - + gastrointestinal bleeding + genital-urinary bleeding - + AV fistula - + access site occlusion + peripheral embolization - + dissection - + pseudoaneurysm	contrast reaction	_	+ renal failure	-	+ emergency PCI	-
+ cardiac arrest - + performance + + respiratory insufficiency - + death in lab - + hematoma - + blood transfusion - eeding Complications + perturbance service s	- pericardial effusion	—	+ sedation complications	—	+ diaphragmatic paralysis	-
+ cardiac arrest - + performance + + respiratory insufficiency - + death in lab - + hematoma - + blood transfusion - eeding Complications + perturbance service s	right atrial perforation	-	+ anesthesia complications	-	+ IVC laceration	-
+ respiratory insufficiency - + death in lab - + perforation + hematoma - + blood transfusion - eeding Complications - + gastrointestinal bleeding - + genital-urinary bleeding - + gastrointestinal bleeding - + genital-urinary bleeding - + dissection + access site occlusion + peripheral embolization - + dissection - + pseudoaneurysm		_	+ pneumothorax	-	+ pulmonary edema	
eeding Complications	respiratory insufficiency	_		_	+ perforation	
eeding Complications percutaneous entry site genital-urinary bleeding percutaneous entry site genital-urinary site genital-urinary bleeding percutaneous entry site genital-urinary bleeding percutaneous entry site genital-urinary bleeding percutaneous entry site genital-urinary	hematoma	_	+ blood transfusion	-		
genital-urinary bleding - + AV fistula - + access site occlusion peripheral embolization - + dissection - + pseudoaneurysm rhythmias - + non-sustained v-tach - + high degree AV block + v-tach requiring therapy - + ventricular fibrillation - + symptomatic bradycardia		_	+ retroperitoneal bleeding	_	+ gastrointestinal bleeding	
Peripheral embolization - + dissection - + pseudoaneurysm rhythmias - + non-sustained v-tach - + high degree AV block + v-tach requiring therapy - + ventricular fibrillation - + symptomatic bradycardia		_		_		
rhythmias + atrial fibrillation — + non-sustained v-tach — + high degree AV block + v-tach requiring therapy — + ventricular fibrillation — + symptomatic bradycardia						
+ atrial fibrillation - + hon-sustained v-tach - + high degree AV block + v-tach requiring therapy - + ventricular fibrillation - + symptomatic bradycardia	F F					
v-tach requiring therapy - + ventricular fibrillation - + symptomatic bradycardia	rhythmias					
	atrial fibrillation	—	+ non-sustained v-tach	—	+ high degree AV block	
	v-tach requiring therapy		+ ventricular fibrillation		+ symptomatic bradycardia	
asystole	asystole	—				
	mments					
omments						
omments						

- 7. Using the Charge Entry tab, file charges if needed.
- 7. Once all documentation is complete, Sign
- To review the finalized documentation:

*Go to Chart Review and select the Cardiology tab. *Double click to read the report.

- To Addend:

*Open the Post op Discharge Navigator; Select Study Review, then Addendum. *Update the information and Sign.

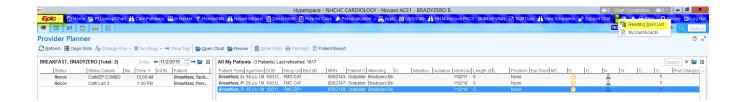
Exercise 3: Left Heart Catherization

This exercise introduces the drawing tool used to document the results of a left and right heart cath procedures. In this scenario a left heart cath was performed on your Lefty Breakfast patient. The procedure was well tolerated and you are ready to complete procedural documentation for the day.

We will use the Reading Work List to access the studies to be reviewed.

1. From the Epic toolbar, launch the Reading Worklist.

If not visible, click the chevrons (>>) to launch the Reading Worklist



- 2. The Reading Work List Report Settings window opens. Scroll and select 'My Studies -All Locations'.
 - To make 'My Studies All Locations' your default report select 'My default' in the bottom left corner of the Reading Work List Report Settings window.
 - Click 'Run'.

Breakfast, T: 26 vo / M 10/31/ FMC FP	8502148: Outpatier Bradvzero Bre 11/2/19 0	None
	Reading Work List Report Settings	×
Available Settings	Crit <u>e</u> ria <u>F</u> ilter Disp <u>l</u> ay Appeara <u>n</u> ce Pr <u>i</u> nt Layout <u>G</u> eneral	
GWSM Radiology RWL [728 ^		
HAMC Cardiology RWL [774	Physician Resident	
HAMC Neurology RWL [728]	j Logged in user j include signed studies	
HAMC Neurology RWL [7746		
HMC and PMC PFT Lab [64(
HMC Continuous EEG [3710	Study Status	
HMC Neurodiagnostics [3710	Group orders Images available	
HMC NIV Cardiology [37099]		
HMC PFT Lab [25876]		
HVI CV Device Check RWL		
KMC Continuous EEG RWL	Order Type Modality Type	
KMC Neurodiagnostics [4214	Imaging orders	
KMC NIV Cardiology [42136]		
KMC NIV Cardiology Prelim		
KMC PFT Lab [46293]		
MHMC PFT Lab [7300120] MMC Continuous EEG [3615	Performing Department Cogin Dept Location	
MMC Neurodiagnostics [371		
MMC NV Cardiology [35935		
MMC PFT Lab [35623]		
My Pools' Studies - All Loca		
My Studies - All Locations [6764	Procedure Procedure Category Anatomical Region	
NH RAD Imaging [7027391]		
NVA CV Cath & EP RWL [7]		
NVA CV Device Check RWL		
	☐ Include studies locked by other users	
E.M. L.C. II	Dura Dalata Datara Dirit	Canad
n My default	Run Delete Restore Print	<u>C</u> ancel

3. Your Reading Work List studies will populate.

Epic	👻 🟠 Home 🛗 I	Pt Lookup/Char	t 🕌 Care Pathways 🚪	🖥 In Basket - 🔻 Remind Me 🕌	Novant Intranet 📋 Dire	ctAdmit 📋 Prep for Case	🌮 Personalization 👻 🛱 Appts 🏢 U	pToDate 🕌 NH McKes:
·•								
Readir	ng Work List	: My Stuc	lies - All Locati	ons, Total Count: 2,	Reading Mode	: Single Select		
C R <u>e</u> fresh	View <u>s</u> Stud	ک y <u>R</u> eview Stud	ာ 🤗 dy <u>History Assign R</u>	eading Mode Sign Study Re	 Cent Studies Report 			
Pri Medi	a IS Class	MRN	Patient	Procedure	End Exam	Expected Recipients	Assigned Phys	Dept
		85013318	Zzipoce, Tachone	EP STUDY	10/30/2019 8:17 AM	-		

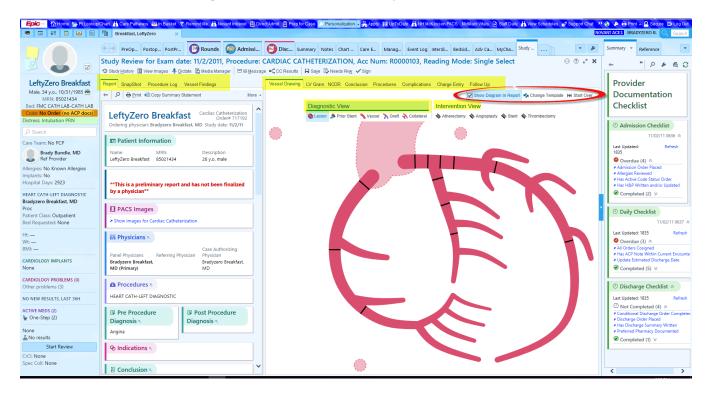
4. Double-click to open the chart of your Lefty Breakfast patient and review the workspace. The workspace is primarily divided into left and right panes.

The left pane consists of four tabs:

- Report (default) contains general procedural information that will be included in the finalized report. (Ex. Physicians, indications, Pre/Post diagnosis, procedure, conclusion, etc).
 Hyperlinks offer quick navigation
- SnapShot displays information included in the Summary activity
- Procedure Log encompasses all Perioperative tech and nurse documentation
- Vessel Findings: specific result documentation; Coronary dominance selection

The right pane:

- Drawing tool
 - o Diagnostic and Interventional View
 - The red circles within the image window represent arteries.
 - o The option to Change Template, Start Over and option to Show Diagram in Report
- Documentation/report tabs (ex. Vessel drawing, LV Gram, Conclusion, etc).



The next section will guide you through Smart Form completion and diagram annotation using the drawing tool. When using this tool remember the following:

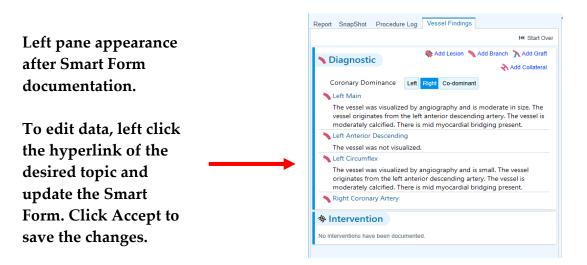
- All documentation can be completed in the Vessel Findings tab.
- Smart Forms are located under the Vessel Findings tab and can be edited by clicking the hyperlink of the desired section/topic.
- Selecting Start Over clears all data and all documentation will need to be re-entered.
- The Vessel Drawing (right pane) displays both Diagnostic and Intervention views. Some Smart Form elements may appear as additional avatars on the drawing,
- In some instances, Comments may be added to the drawing.

- Change Template opens the Template Selector. Select your dominance preference and save as a favorite.
- Click & drag functionality can be used on the diagram for easy manipulation.

Smart Forms and the Drawing Tool

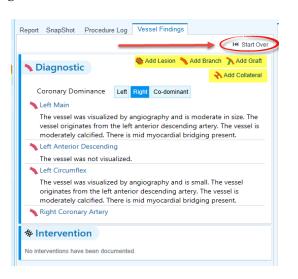
- 1. Select Vessel Findings from the left pane. Here you will document findings using the Smart Forms embedded within the hyperlinks.
 - Select any hyperlink and document findings. Multiple Smart Forms and options can be chosen.
 - Once the selections are made click Accept.

Report SnapShot Procedure Log Vessel Findings		Vessel Drawing LV Gram NCDR Conclusion Procedures Complications Charge Entry Follow Up	
	I Start Over		Show Dia
Add Lesion 📏 Add	Branch 🔭 Add Graft	Diagnostic View Intervention View	
Diagnostic	💫 Add Collateral	🏶 Lesion 🎄 Prior Stent 🔨 Vessel 🔪 Graft 🗞 Collateral 🛛 🛱 Atherectomy 🏘 Angioplasty 🕏	∳Stent 毋TI
Coronary Dominance Left Right Co-dominant		Vessel Finding Documentation	
🔪 Left Main	Left Circumflex D	etails	~
Left Anterior Descending	Normal Clear All		
📏 Left Circumflex		Make selections to	
Right Coronary Artery	Visualization	not visualized injected not injected non-selective document your	
毎 Intervention	Size	small moderate large findings	
No interventions have been documented.		Vessel >= 2.0 mm	
L	Vessel disease	0% 5% 10% 15% 20% 25% 30% 35% 40% 45% 50% 55% 60% 65% 70% 75% 80% 85% 90	96
		95% 99% 100% minimal luminal irregularities	
	Morphology	atretic calcified tortuous ectasia aneurysm pseudoaneurysm	
	Calcification	mild moderate severe	
	Abnormal origin	separate ostium aorta right coronary sinus left coronary sinus LAD Cx RCA	
	Myocardial bridging	proximal mid distal	
	Other findings		
			~
	Left Circumflex D	etails	
	The vessel was visual	lized by angiography and is small. The vessel is moderately calcified.	
		✓ Accept	× <u>C</u> ancel



To edit, left click the hyperlink in the desired section or click Start Over.

Selecting Start Over will remove information in all sections and the image.



Now that we are familiar with the basic functionality available in the Vessel Findings tab, we will expand to include documentation that is transposed onto the diagram for representation. The highlighted information above is used to facilitate that transposition.

In addition, documenting on the Vessel Drawing will update Vessel Findings.

Diagram Annotation

Scenario: Lefty successfully underwent a left heart cath procedure and you are ready to complete your documentation.

1. Your workspace should be open displaying the Study Review palette. If so, start by reviewing the information contained in the Report tab.

• If your workspace is NOT displaying the Study Review palette, use steps 1 – 4 above to access the study through the Reading Work List (RWL) **OR** use the Post op Discharge Navigator to launch Study Review.

The hyperlinks embedded in the Report tab can be used to access data quickly. The Procedure Log hyperlink has the same information as the Procedure Log tab.

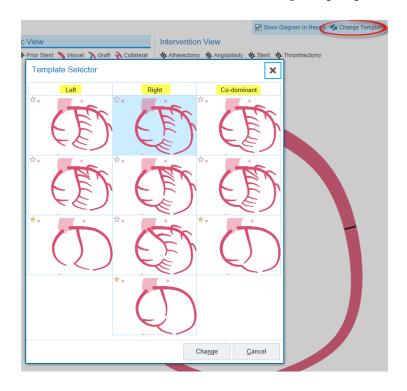
8
Study Review for Exam date: 11/3/2011, Procedure: CAR
🔊 Study History 🔢 View Images 🧶 Dictate 💽 Media Manager 🛛 🗠 IB Message 🛋
Report SnarShot Procedure Log Vosed Findings
🔶 👂 🖶 Print 🚓 Copy Summary Statement 144 Undo Summary Statement
Atrium
Mitral Valve
Aortic
Valve
😍 Vessel Findings
Diagnostic 5 Dominance: Right
Left Main
Left Anterior Descending
Left Circumflex Right Coronary Artery
Right Coronary Artery
No interventions have been documented.
No interventions have been documented.
Supporting Images
1 Implants a
No active implants to display in this view.
E Link to Procedure Log
Procedure Log

The Report tab is updated as information is documented. No edits can be made in the Report tab. Edits must be carried out within Smart Forms and the documentation window. The report is simultaneously updated as edits are made.

Review the Snapshot and Procedure Log tabs (if desired) then click the Vessel Findings tab.

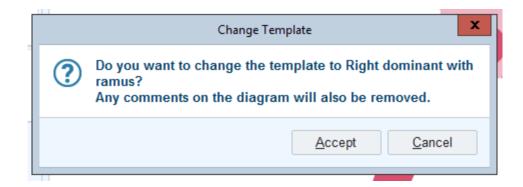
2. Look at the Coronary dominance selection. Change this by clicking another option if desired.

- The diagram will change based on selection.
- To change the diagram, click Change Template in the right pane and make your selection. Hover over each to view the diagram perspective.



Make a selection of your choice and click 'Change'.

- The Change Template pop-up window will present asking you to confirm this change.
- If the template referenced in this confirmation prompt is correct, click Accept. Otherwise, click 'Cancel' and repeat your action or keep the template that auto defaulted.
- Only one template can be used at a time.



Remember any changes will update both the image (Vessel Drawing) and Smart Forms (Vessel Findings). With the desired image in place you are ready to begin documentation.

This portion of the exercise will not be guided but will allow you the opportunity to make selections guided by true clinical relevance. While documenting be sure to include as many diagnostic and intervention selections as possible. Sample documentation is included below.

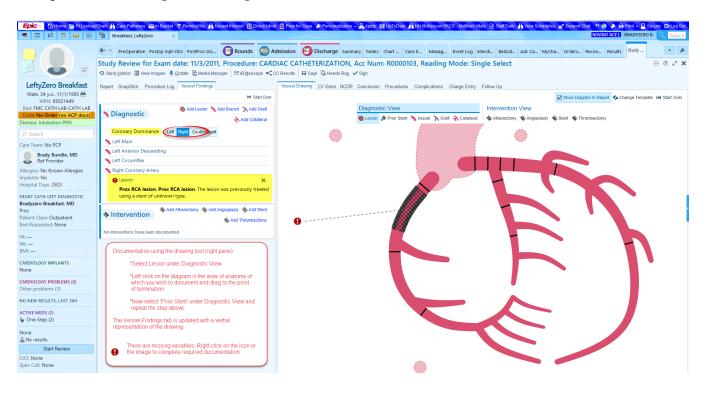
Things to Remember:

- An avatar (lesion, stent, graft, etc.) can be manipulated once on the diagram using click & drag functionality.
- Right click on the avatar to add comments or remove erroneous documentation.
- Updates in either Vessel Findings or Vessel Drawings are reciprocated and the Report is updated simultaneously as well.
- Edits cannot be made in the Report tab.
- The Drawing Tool does support 'layering'. (I can document a lesion and stent and the image will display both).

Suggestions:

- Document as close as possible to a 'real' case so that you might become familiar with the location of options, appearance and functionality.
- Identify workflow that fosters Ease of Use.
- Understand that this is a transition to Structured Reporting.

To replicate the findings in the image below:

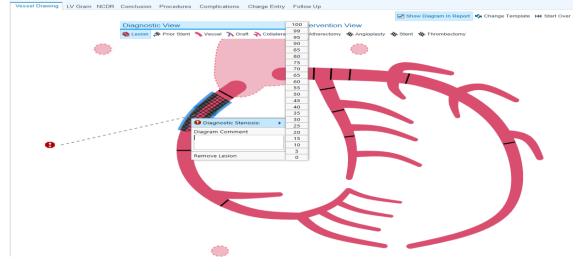


- 1. From the right pane select Lesion under Diagnostic View.
- 2. Left click on the diagram in the area of anatomy of which you wish to document and drag to the point of termination.
- 3. Select Prior Stent and duplicate step 2.

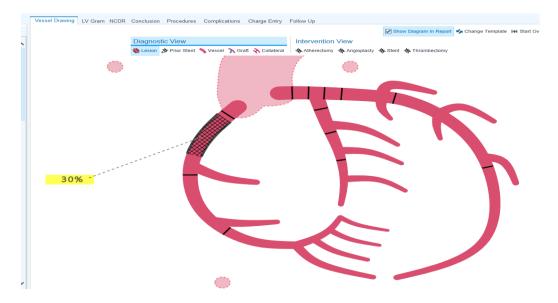
The Vessel Findings tab is updated with the verbal representation of the drawing.

The hardstop 😻 indicates missing variables required for documentation. Hover over the icon or avatar to reveal the deficiency. To resolve:

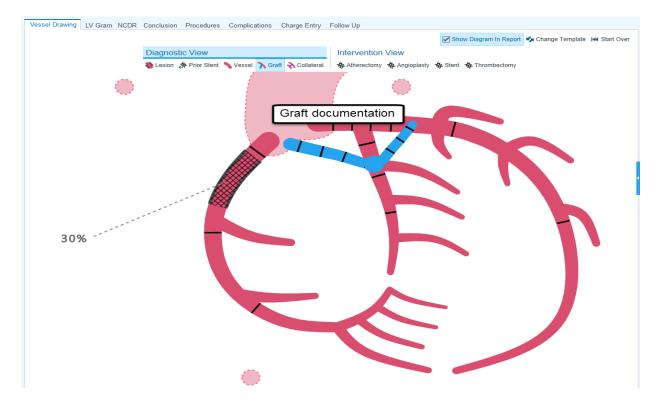
- Right click on either the hardstop icon OR the avatar on the image.
- Document the missing information and include comments if desired.



Make a selection. The diagram will update to reflect the selected information. (See below)



Use steps 1 – 2 above to document graft placement.



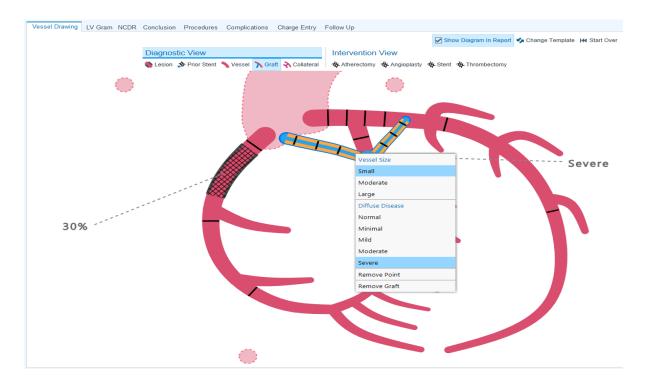
To edit:

1. Right click on the graft.

2. Make selections from the pop-up window.

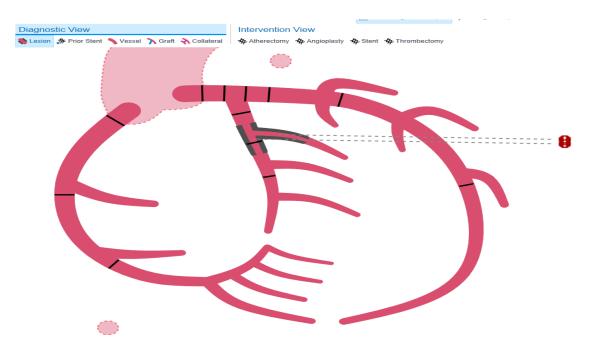
• To delete select remove graft from the pop-up window.

Review the Report tab to view real-time edits.



To document a bifurcation lesion:

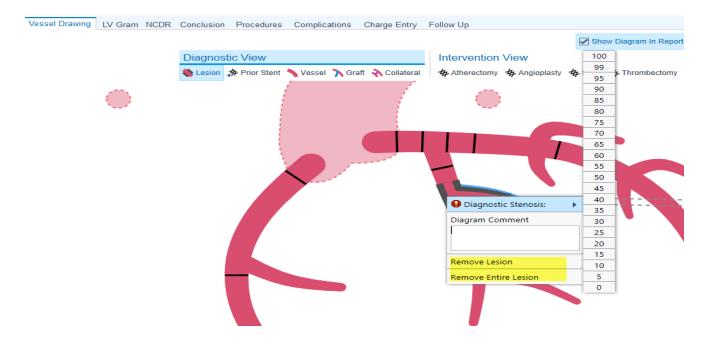
1. With Lesion selected, left click and drag the entire section without releasing until you've reached the point of termination.



To edit a lesion drawn as a bifurcation:

1. Right click on the lesion or hardstop and complete documentation.

• Because this lesion was drawn using one continuous stroke, the editing options include 'Remove Lesion' and 'Remove Entire Lesion'.



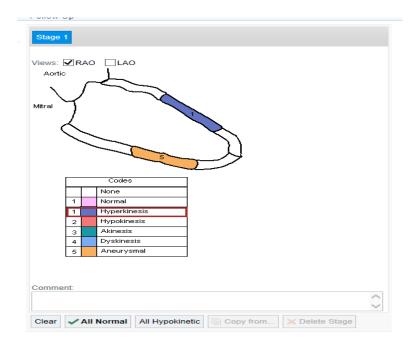
Once you've completed all documentation on the Vessel Drawing tab, select the LV Gram tab. Take a moment to review this workspace.

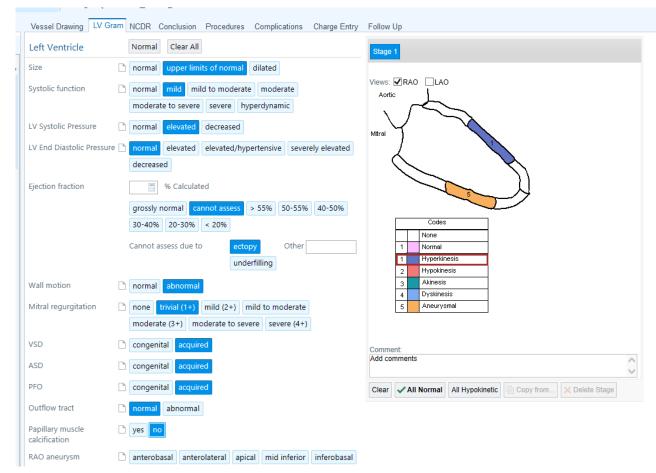
	Breakfast, LeftyZero X			NOVANT ACE1 BRADYZERO B. Q Searc
	←→ PreOperative Postop Inpt-Obs PostProc Dis 📴 Rounds 🧔	Admission 🙆 Dischar	ge Summary Notes Chart Care E Manag Event Log	Interdi Bedsid Adv Ca MyCha Orders Recon Results Study
	Study Review for Exam date: 11/3/2011, Procedure: CAR © Study History 🗄 View Images 🌵 Dictate 🛱 Media Manager 🛛 🖾 Message 🛋			ingle Select \odot \heartsuit \checkmark
LeftyZero Breakfast	Report SnapShot Procedure Log Vessel Findings	Vessel Drawing LV Gra	M NCDR Conclusion Procedures Complications Charge Entry	/ Follow Up
Male, 34 y.o., 11/1/1985 👑 MRN: 85021449	🗧 🖉 🖶 Print 🍋 Copy Summary Statement 144 Undo Summary Statement	Left Ventricle	Normal Clear All	Stage 1
Bed: FMC CATH LAB-CATH LAB Code: No Order (no ACP docs) stress: Intubation PRN D Search	LeftyZero Breakfast Cardiac Catheterization Orderia physician: Bradyzero Breakfast, MD Ordering physician: Bradyzero Breakfast, MD Study date: 11/3/11		normal upper limits of normal dilated normal mild mild to moderate moderate moderate to severe severe hyperdynamic	Views ØRAO LLAO Aortic
are Team: No PCP		LV Systolic Pressure	normal elevated decreased	Mfrai
Brady Bundle, MD Ref Provider lergies: No Known Allergies	Name MRN Description LeftyZero Breakfast 85021449 26 y.o. male	LV End Diastolic Pressure	Image:	
nplants: No lospital Days: 2923 EART CATH-LEFT DIAGNOSTIC radyzero Breakfast, MD	**This is a preliminary report and has not been finalized by a physician**	Ejection fraction	% Calculated grossly normal cannot assess > 55% 50-55% 40-50% 30-40% 20-30% < 20%	Codes
roc atient Class: Outpatient ed Requested: None	PACS Images Show images for Cardiac Catheterization		normal abnormal none trivial (1+) mild (2+) mild to moderate	Normal 1 Normal 1 Hyperkinesis 2 Hyperkinesis
t: — /t: — MI: —	🛞 Physicians ĸ	VSD	moderate (3+) moderate to severe severe (4+)	3 Alinesis 4 Dyskinesis 5 Anouysmal
ARDIOLOGY IMPLANTS one	Case Authorizing Panel Physicians Referring Physician Physician Bradyzero Breakfast, MD		C congenital acquired	
ARDIOLOGY PROBLEMS (0) ther problems (3)	MD (Primary)		congenital acquired	Comment:
D NEW RESULTS, LAST 36H	HEART CATH-LEFT DIAGNOSTIC	Papillary muscle	yes no	Ciear 🖌 All Normal 🛛 All Hypokinetic 🕞 Copy from 🔀 Delete Stage
CTIVE MEDS (2) One-Step (2)	Pre Procedure Post Procedure		anterobasal anterolateral apical mid inferior inferobasal	
lone No results	Diagnosis 5 Angina	LAO aneurysm Mass	lateral posterolateral apical septal basal septal thrombus apical thrombus tumor	
Start Review IrCl: None pec Coll: None	⊗ Indications ◄	Other findings		

To document findings use the Smart Form to make selections. To document on the diagram:

- 1. Left click the code you wish to select.
- 2. Navigate to the diagram and left click to insert the selection.

*Use quick buttons for documentation.





Navigate to the NCDR tab once the LV Gram documentation is complete.

As we continue to expand Structured Reporting, NCDR documentation will, in the future, become automated. This requires registry documentation to be completed by the Physician. Dictation using Dragon One Medical does not support automated registry transmission. Take a moment make selections on the registry form. See sample documentation below:

Vessel Drawing LV Gra	am NCDR	Conclusion	Procedur	es Complications Cha	irge Entr	y Follow	Up				
*											
Clinical Data											
CSHA Clinical Frailty	🗌 1. Very F	it	🗌 2. W	/ell 3. 1	Managin	g Well	4. Vulnerable		5. Mildly Frail	I 🗆	6. Moderately Frail
	7. Severe	ely Frail	🗌 8. V	ery Severely Frail 🗌 9. 1	Ferminal	ly III					
Previous Cath	No	Unknown	Yes								
STEMI, Reason for Delay	difficult acc	ess		difficulty crossing lesion		patient/f	amily consent	car	diac arrest and/c	or intubation	
	LV assist de	evice placem	ent	other							
Indication for Cath	Cardiomyo	pathy / CHF		No Symptoms		Non-STE	MI	Pre	e-Op Eval for Car	rdiac Surgery	
	Stable Ang	ina		STEMI		Unstable	Angina				

Additional options cascade as selections are made. (See below)

Vessel Drawing LV Gra	am NCDR Conc	usion Procedu	es Complic	ations Charge	Entry	y Follow Up			
*									
Clinical Data									
CSHA Clinical Frailty	🗌 1. Very Fit	2. V	/ell	✔ 3. Man	aging	g Well 🗌 4. V	ulnerable	5. Mildly Frail	6. Moderately Frail
	7. Severely Fra	ail 🗌 8. V	ery Severely F	rail 🗌 9. Tern	ninall	ly III			
Previous Cath	No	nown Yes							
STEMI, Reason for Delay	difficult access		difficulty cro	ssing lesion		patient/family con	nsent	cardiac arrest and/or intul	ubation
	LV assist device	placement	other						
Indication for Cath	Cardiomyopathy	/ CHF	No Sympton	ms		Non-STEMI		Pre-Op Eval for Cardiac S	Surgery
	Stable Angina		STEMI			Unstable Angina			
Anginal Classifica (CCS)	tion w/in 2 weeks	0 1 11	III IV						
Anti-Anginal Med	ds w/in 2 Weeks?	Yes No							
If Yes, Type		Beta Blockers	Ca C	hannel Blockers	Lor	ng Acting Nitrates	Ranolazine	Other	
Stress Test		Positive Neg	ative						
Stress Results		High	Intermediate	Low					
LV Systolic Dysfu	nction	Yes No							
Congestive Heart Weeks	Failure w/in 2	Yes No							
NYHA		I II III	V						
Cardiogenic Shoo	:k	Yes No							
Cardiac Arrest		Yes No							

Navigate to the Conclusion tab. Notice that documented assessment and intervention throughout the procedure is visible on the Report tab. Complete documentation in the remaining tabs and **Sign**.

Exercise 4: Right Heart Catherization

Right Heart Cath procedure documentation is completed the same as detailed above. Take time to review the screenshots below.

RV Gram Smart Form Preview:

Right Ventricle Normal Clear All
Size normal dilated
Function normal abnormal
Mass present
Tricuspid regurgitation none trivial (1+) mild (2+) moderate (3+) severe (4+)
Other findings
Right Atrium Normal Clear All
Size normal upper limits of normal dilated
Right atrial pressure normal decreased elevated
elevated with large V wave and rapid Y descent
Other findings

Right Heart Smart Form Preview:

Right Heart								
PA Catheter Inserted	left brachial vei	n left f	emoral vein	left internal jugular	vein right brachial vein	right femoral vein	right internal jugular	vein
Pulmonary Hypertension	no mild mo	derate	severe					
Abnormalities	constrictive per	icarditis	constrictive	effusive pericarditis	restrictive cardiomyopa	thy left ventriclua	r diastolic dysfunction	pulmonary venous hypertension
	combined post	capillary	pulmonary h	ypertension				
Shunt	ASD VSD							
RHC Summary	Ba	seline	NO	Exercis	e Volume			
PA (mmHg)								
PCWP (mmHg)								
RV (mmHg)								
RA (mmHg)								
LV (mmHg)								
AO (mmHg)								
TDCO / CI								
Fick CO / CI								
PVR								
SVC Hb02 (%) / THb (g/dL)							
PA Hb02 (%) / THb (g,	/dL)							
RV Hb02 (%) / THb (g,	/dL)							
RA Hb02 (%) / THb (g,	/dL)							
AO Hb02 (%) / THb (g	/dL)							
The values documente	ed in this report a	re verbal	values obtai	ned from the perform	ing physician during the	right		

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