

**INTRODUCTION: BACKGROUND & CONTEXT**

- The Structural Heart Team works in a dynamic, fast paced, high procedural volume environment with multiple team members
- Highly recognized for successes in:
  - o Patient outcomes
  - o Patient satisfaction
- Continued growth in procedural volume & innovative technology in the Cardiac Catheterization Laboratory (CCL) → increased complexity of CCL fellowship training



**MISSION/VISION STATEMENT**

**AHC GME Vision:** To demonstrate GME’s leadership role in driving a culture of continuous learning → high reliability org

**CCL Vision:** To demonstrate high quality communication within the CCL to promote educational training, patient outcomes, CCL efficiency, and staff well-being

**AHC GME Mission:** To improve care for our patients & the well-being of our clinical team members through implementation of system aligned QI projects

**CCL Mission:** To improve procedural education of the fellows and the well-being of our clinical team members through implementation of CCL initiatives

**AIM/PURPOSE/OBJECTIVES**

- Improve communication/feedback between fellows ↔ faculty
- Improve the effectiveness and efficiency of the CCL

**METHODS: INTERVENTIONS/CHANGES**

- Explicitly defined fellow’s role in the CCL based on PGY status
  - o Delineated levels of supervision x whom (attending, IC fellow)
  - o Feedback frequency, formality, timing (pre-post procedure)
- Promote in office procedural consent - goal >70% outpatient
- Earlier procedural case assignment to the fellows
- Fellow confirmation of procedure and access site

**CCL Fellow Objectives & Expectations by Year/Rotation**

CARDIAC CATH LAB PGY Year and Rotation/Semester → Objectives w Levels of Supervision ↓	1 <sup>st</sup> Yr PGY4/Fel1	2 <sup>nd</sup> Year PGY5/Fel2				3 <sup>rd</sup> Year PGY6/Fel 3	Interv PGY7	
	No formal lab rot	1 <sup>st</sup> & 2 <sup>nd</sup> Blk	3 <sup>rd</sup> & 4 <sup>th</sup> Blk	5 <sup>th</sup> & 6 <sup>th</sup> Blk		1 <sup>st</sup> Sem	2 <sup>nd</sup> Sem	
Level of Supervision*		A	B	C	D	E	F	
Communication/feedback †		A	B	C	D	E	E	
<b>MEDICAL KNOWLEDGE: ASSUMES PRIOR LEVEL KNOWLEDGE UNLESS OTHERWISE NOTED</b>								
1. Coronary anatomy as pertaining to LV function and wall motion	1							
2. Coronary anatomy and role with patients presenting with Acute Coronary Syndrome	1							
3. Indications for invasive diagnostics	1							
4. Basic understanding Coronary Angiogram films and views <ul style="list-style-type: none"> <li>o Identification of view and projection</li> <li>o Identification of coronary anatomy</li> <li>o Identification of basic angiographic abnormalities</li> </ul>	1							
5. Procedural H&P, sedation note, AUC, consent			1					
5.1. Procedural H&P, sedation note, AUC		1						
6. Pertinent patient information; including prior surgical		1						
7. Review of prior angiogram results and/or images independently					1			
7.1. Review of prior angiogram results and/or images with IC fellow/attending		1						
8. Understanding of fluoroscopy and radiation safety		1						
<b>PROCEDURAL SKILLS:</b>								
20. Develop understanding in the setup, use, and interpretation of advanced equipment (ie, Atherectomy, Impella)						1		
20.1. Proficiency in appropriate coronary equipment selection						1		
20.2. Complete competency in setting up patient and equipment for procedure			1					
21. Proficiency in sterile scrub technique and procedural draping		1						
21.1. Setting up procedural area: drape, manifold connections, zoll, etc		1						
22. Development of proficiency in peripheral vascular equipment selection						1		
23. Independent conscious sedation administration			1					

\* Level of supervision: A = Close, immediate oversight by the attending; B = Close, immediate oversight by the IC fellow and/or attending; C = Limited; D = Diagnostic studies= independent & Advanced/interventional procedures= Direct; E = Diagnostic studies= independent & Advanced/interventional procedures= Direct; F = limited → independent for diagnostic and advanced/interventional procedures

† Communication/feedback: A = verbal, before and after case. Write post op report with attending; B = verbal. Write post op report with attending/IC fellow; C = verbal, pre and post op brief with attending. Independently write post op report; D = verbal, in person, two-way assessment; E = verbal, in person, Pre-Post PCI brief;

**METHODS: MEASURES/METRICS**

- CCL data regarding volume, transition, and delays
- ACGME semi-annual survey data for fellows/faculty
- Clinical Learning Environment Quick Survey (CLEQ)
- Mayo Well-Being Index

**BARRIERS – STRATEGIES**

- HIGH VOLUME & SCHEDULING – PACE & TRANSITION**
- STRATEGY: Team Buy In
    - o Keeping fellows involved and driving change
    - o Instilling the value/importance of system changes for faculty
    - o Promoting a culture where staff (RNs, techs, non clinical members) feel valued as essential team members within the CCL
- HIERARCHICAL STRUCTURE**
- Lack on input/response by non fellow/faculty team members despite outreach
  - STRATEGY: Team Buy In
    - o Consistency: Continued promotion of interventions
    - o Utilize Data: Redirect actions post data analysis to improve interventions
    - o Communication: Continuous updates/action items presented at faculty and fellow meetings

**DISCUSSION**

- CRITICAL NEXT STEPS**
- Re-evaluation via CLEQ survey post intervention
  - Comparison of pre and post intervention data
  - Revision of current interventions to correct course/direction
  - Create fellows’ Role of Training (ROT) framework document to be used as template outside the CCL
- AREAS SEEKING GUIDANCE/INPUT**
- Motivating fellows/faculty to actively participate
  - Strategies to address hierarchical structure/culture in CCL: high stakes, fast paced, complex

**GROUP FEEDBACK**

Empty space for group feedback.