

## Background

The COVID-19 pandemic has led to an unprecedented international health crisis. As the duration of cardiology fellowship training is limited, interruption to training from COVID-19 pandemic may have substantial limitation on the education of fellows.

## Discussion

A standard cardiology fellowship curriculum generally follows recommendations of AOA and ACGME policies and COCATS guidance. However there are no standardized recommendations for cardiology training during the times of COVID-19 pandemic where education may not be a high priority. Several fellowship programs have maintained only essential rotations minimizing COVID-19 exposure and total number of fellows in the hospitals at any given time. CMS has introduced regulatory and reimbursement waivers to enable healthcare providers to offer additional services by telehealth visits. A recent study found significant reduction in the ST segment elevation cardiac catheterization laboratory activations in the United States during COVID-19 pandemic. While there is more flexibility available in large institutions, restructuring of rotations may strengthen education in small fellowship programs. In addition, revision of AOA, ACGME and COCATS guidelines may be necessary to meet the training requirements during COVID-19 pandemic and similar natural disasters in the future.

## Methods

A comprehensive literature review was performed including PubMed, CDC, AOA, ACGME websites and evidence incorporated in the poster.

## Conclusions

Although COVID-19 pandemic has exposed several limitations to cardiology FITs education, the isolation has brought us together through social media and innovative ideas. As Albert Einstein said *“in the midst of every crisis, lies great opportunities”*; COVID-19 pandemic presents several challenges and novel opportunities for FITs and the lessons learned during COVID-19 pandemic may give impetus to revise the AOA, ACGME milestones and COCATS guidelines to improve the training experience for FITs and be better prepared for the next global threat.

Traditional Methods and Competency Statements	Changes Following COVID-19 Pandemic	Proposed Solutions	Call for Revision of COCATS Guidelines
Specific requirements for completion of core rotations and elective rotations	Interruptions to adequate teaching and limitation or elimination of elective rotations	<ul style="list-style-type: none"> <li>❖ Use of shared video platforms, virtual cardiology electives, online mentoring programs for FITs</li> <li>❖ FITs to log the study interpretation and simulation to fill knowledge gaps</li> </ul>	Recognition of virtual learning, online electives, webinar credits as approved form of FITs education towards training milestones
Emphasis on duration and volume based targets in heart catheterization, nuclear and echocardiography rotations	Reduction in number of elective heart catheterization, TEEs, stress echoes and elective imaging studies	<ul style="list-style-type: none"> <li>❖ Virtual simulation of heart catheterization and TEEs, interpretation of imaging studies uploaded on centralized/national digital library to be available for all FITs</li> <li>❖ Some FITs may achieve competency with fewer hands-on procedures</li> </ul>	<ul style="list-style-type: none"> <li>❖ Recognition of virtual simulation of procedures and award of credits upon successful completion of interpretation of imaging studies in national digital library</li> <li>❖ Emphasis on competency of FITs rather than duration and volume of procedures as determined by program directors</li> </ul>
FITs from smaller programs usually rotate in outside bigger institutions when elective rotation not available in home institutions	Limitation or elimination of elective rotations and cancellation of rotations to external FITs to minimize COVID-19 exposure	Smaller fellowship programs and FITs may collaborate with faculty and investigators of outside institutions in research activities and development of online education/simulation tools	<ul style="list-style-type: none"> <li>❖ Recognition of scholarly activities as a form of learning in training milestones</li> <li>❖ Promotion of collaboration among ACGME, ASNC, ASE, ACC and SCAI towards a well balanced training</li> <li>❖ Adoption of changes and innovation of training tools</li> </ul>