Rotation Overview
Nashville General Hospital at Meharry is the public hospital for Nashville and Davidson County. As such it is the primary source of healthcare delivery for the underserved and indigent population in this region, and provides a diverse clinical experience for Fellows. The General Cardiology Rotation at NGH at Meharry presents the Cardiologist In Training (CIT) a unique and rare opportunity of real world community based cardiovascular practice and training. The program is designed to give the fellow hands on training in decision making thought processes from the initial contact with a patient in the Emergency Department and/or Inpatient services through complete patient assessment and multi-modality cardiovascular diagnostic testing/treatments to the point of patient discharge. At the end of this rotation, the CIT should in addition to enhanced confidence as a cardiovascular medicine consultant, be better equipped to manage cardiovascular disease in diverse and special patient populations.

Learning Objectives

Patient Care

<table>
<thead>
<tr>
<th>Objective</th>
<th>Teaching Methods</th>
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</thead>
<tbody>
<tr>
<td>Obtain pertinent medical histories, including review of patient medical</td>
<td>Clinical Teaching, Clinical Experiences, Performance</td>
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<tr>
<td>records, and perform accurate examinations with an emphasis on cardiac</td>
<td>Feedback</td>
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<tr>
<td>findings to guide appropriate decision making and disposition of</td>
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<tr>
<td>cardiovascular medicine patients.</td>
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<tr>
<td>Initiate evidence-based management of cardiac patients</td>
<td>Clinical Teaching, Clinical Experiences, Performance</td>
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<tr>
<td>Hone in skills as a cardiovascular medicine consultant.</td>
<td>Feedback</td>
</tr>
<tr>
<td>Increase proficiency in the selection, performance and interpretation of</td>
<td>Clinical Teaching, Clinical Experiences, Performance</td>
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<tr>
<td>different cardiac diagnostic tests including Echocardiogram (both TTE &amp;</td>
<td>Feedback</td>
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<tr>
<td>TEE), stress testing, Cardiac catheterization, device interrogations/</td>
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<tr>
<td>interpretations, etc.</td>
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<tr>
<td>Patient care emphasis including documentation, decision making,</td>
<td>Clinical Teaching, Clinical Experiences, Performance</td>
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<tr>
<td>interpretation of tests, risk stratification, patient management,</td>
<td>Feedback</td>
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<tr>
<td>performance of procedures, management of complications, patient</td>
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<tr>
<td>education, and dealing with difficult patient populations like</td>
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<tr>
<td>financially disadvantaged patients, polysubstance abusers, noncompliant</td>
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<tr>
<td>patients and discussion of end of life issues.</td>
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Medical Knowledge

<table>
<thead>
<tr>
<th>Objective</th>
<th>Teaching Methods</th>
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<tbody>
<tr>
<td>Master core areas of cardiovascular medicine including but not limited to:</td>
<td>Clinical Teaching, Clinical Experiences, Didactics</td>
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<tr>
<td>a. Acute coronary syndromes</td>
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<tr>
<td>b. Cardiac risk stratification</td>
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<tr>
<td>c. Heart failure and cardiomyopathies</td>
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<tr>
<td>d. Cardiac Arrhythmias recognition and management/Device-based therapies</td>
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<tr>
<td>e. Valvular Heart diseases</td>
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<tr>
<td>f. Hypertension and Hypertensive Heart Disease</td>
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<tr>
<td>g. Peripheral Vascular disease</td>
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<tr>
<td>h. Explore current medical literature, Interpretation of tests...</td>
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</table>
### Professionalism

<table>
<thead>
<tr>
<th>Objective</th>
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</thead>
<tbody>
<tr>
<td>Demonstrate accountability and professional behavior towards patients, family members, and members of the health care team and adherence to ethical principles</td>
<td>Clinical Teaching, Clinical Experiences, Didactics, Role Models</td>
</tr>
<tr>
<td>Demonstrate compassion and respect for others, including patients from a diverse cultural, social, and religious backgrounds</td>
<td>Clinical Teaching, Clinical Experiences, Role Models</td>
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</tbody>
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### Interpersonal and Communication Skills

<table>
<thead>
<tr>
<th>Objective</th>
<th>Teaching Methods</th>
</tr>
</thead>
<tbody>
<tr>
<td>Communicate effectively with patients, families, and members of the health care team, including findings and diagnoses when appropriate to both patients and consulting physicians</td>
<td>Clinical Teaching, Clinical Experiences, Role Models</td>
</tr>
<tr>
<td>Maintain timely and comprehensive medical records</td>
<td>Clinical Teaching, Clinical Experiences, Role Models</td>
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</tbody>
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### Practice Based Learning and Improvement

<table>
<thead>
<tr>
<th>Objective</th>
<th>Teaching Methods</th>
</tr>
</thead>
<tbody>
<tr>
<td>Identify both strengths and gaps in knowledge and expertise and set appropriate learning goals. Accept constructive criticism in order to improve skills and knowledge set</td>
<td>Independent reading, Clinical teaching, Didactics, Attending evaluation and feedback</td>
</tr>
<tr>
<td>Utilize information technology to effectively locate, appraise, and utilize evidence based medicine with in current literature to improve patient care</td>
<td>Independent reading, Clinical teaching, Didactics, Attending evaluation and feedback</td>
</tr>
<tr>
<td>Utilize quality improvement methods to implement changes within the practice environment</td>
<td>Independent reading, Clinical teaching, Didactics, Attending evaluation and feedback</td>
</tr>
</tbody>
</table>

### Systems Based Practice

<table>
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<tr>
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<tbody>
<tr>
<td>Work effectively as a member of the Cardiac health care team, including coordination of patient care to ensure optimal outcomes,</td>
<td>Clinical teaching, Role models, Attending evaluation and feedback</td>
</tr>
<tr>
<td>Understand the complexities of and work with the multidisciplinary resources necessary to ensure quality cardiovascular care and outcomes in a diverse underserved population,</td>
<td>Clinical teaching, Role models, Attending evaluation and feedback</td>
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### Systems Based Practice (cont’d)

<table>
<thead>
<tr>
<th>Objective</th>
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<tr>
<td>Demonstrate understanding of cost-effectiveness and risk-benefit analysis and incorporate these into patient care</td>
<td>Clinical teaching, Role models, Attending evaluation and feedback</td>
</tr>
<tr>
<td>Advocate for and work towards patient safety and improved quality of care</td>
<td>Clinical teaching, Role models, Attending evaluation and feedback</td>
</tr>
<tr>
<td>Identify system errors and implement systems solutions</td>
<td>Clinical teaching, Role models, Attending evaluation and feedback</td>
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Rotation Format and Responsibilities:
This rotation focuses on an integrated mixture of inpatient consults, nuclear cardiology, cardiac catheterization, TEE’s, ECG and Echo interpretation. The rotation is designed to be flexible enough to emphasize training in areas of individual interest to the rotating Fellow. The Fellow will play a significant role in the teaching of medical students and the Housestaff. This is a rotation intended for Senior Fellows and in some cases Junior Fellows at the end of the 1st year of training.

Expectations and Structure
Performing all Consults or directing the Consult Resident/student to do so when one is assigned to the Service and reviewing the patients with the appropriate attending;
Dictating/completing the pre-procedure /H&P notes on all outpatients presenting for procedures in the cathlab;
Participating in no more than two cardiac catheterizations each day (except the fellow desires to do more after completing other responsibilities of the day);
Interpreting and completing at least five (5) 2D preliminary echo reports daily;
Performing all TEE’s with the appropriate attending;
Supervision over nuclear and exercise stress tests;
Presenting with an attending, a “Case of the month” conference by the third week of each rotation;
Fellows are on call six nights of the month except for weekends and General Hospital holidays.

Expectations
As directed by VUMC Cardiology Fellowship Director and ACGME requirements. Fellows are expected to have highest level of participation and accountability. Fellows also expected to be considerate of the special patient populations they will be caring for.
Evaluation and Feedback:
   Fellows are evaluated at the end of the rotation with a competency based evaluation system by each attending they interacted with during the rotation.
   Fellows are directly observed and given real time feedback on their performance
   Fellows participate in structured case discussions such as clinical, Echo or Nuclear-cath Co-relation conference. Feedback from Fellows about their rotation experience is required at the end of each rotation.

Recommended Reading
ACCSAP 7 via www.cardiosource.com (http://cardiosource.com/sapsInfo/index.asp)
Braunwald’s Heart Disease – A textbook of cardiovascular Medicine by Zipes, Libby and Braunwald et al;
ACC/AHA clinical guidelines at www.acc.org
Electronic digital libraries for focused review of cardiovascular topics of interest
Appendix A

Meharry Rotation Clinical Tracks

Meharry Cardiology Rotation
Core Responsibilities
* Manage the consult service
* Perform cardiac caths on consult patients
* Pre-read Echos on consult patients
* Perform TEE on consult patients
* Pre-read stress tests on consult patients
* Triage stress tests
* Complete pre-caths on outpatients
* Prepare CMC Conference presentation

In addition to the core responsibilities you will choose a supplementary track based on your interests

Invasive Track
* Cath all inpatients and outpatients
* Option to be involved in interventions
* Option to round in CCU when cath schedule allows

Clinical Management Track
* Round on all the CCU in addition to consult service
* Perform caths on CCU patients
* Pre-read studies on CCU patients in addition to consult patients
* Perform TEE on consult patients
* Option to teach attending morning report as time allows

Non-invasive Imaging Track
* Pre-read all Echos
* Pre-read all nuclear studies
* Perform all TEEs
* Read Echos/stress tests with attendings