

ACC Mapping Tools for Milestones Reporting

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Partnership between CTWC and CMC

Cardiology Training and
Workforce Committee



Competency Management
Committee



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Objectives of Competency Mapping Project

Standards

- ACCF Curricular Competency and Milestones documents
- ACGME Subspecialty Reporting Milestones documents

Data Sources

- **Fellow rotation evaluations**
- In-training examination
- Direct observation



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ACGME Perspective

- Overview of ACGME perspective on first round reporting milestones from programs



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Mapping Tool Overview

- Rotation specific template evaluation tools
 - ACGME reporting milestones mapped to ACC curricular milestones
 - organized by 6 core competency domains
- Evaluation tools are not comprehensive
 - each program is encouraged to adapt templates to the needs of their institution and curriculum
- Faculty development is necessary to educate on milestones, evaluation tools, and methods to assess learners



Mapping Tools Online

- Overview of Evaluation Tool
- Ambulatory Clinic Tool
- Cardiology Consult Tool
- Cath Lab Tool
- Echo Tool

You may access the Mapping Tools at:

<http://www.cardiosource.org/ACC/ACC-Membership/Sections-Segments-Councils/Training-Directors.aspx>



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Ambulatory Clinic Mapping Tool

Patient Care Example

ACC CMC Template Evaluation Tool for Ambulatory Clinics Rotation				
Question No	Competency Area	Reporting Milestones Subcompetency	Link to ACC Curricular Milestone	
1	Patient Care	PC 1: Gathers and synthesizes essential and accurate information to define each patient's clinical problem(s). PC 3: Manages patients with progressive responsibility and independence.	M-ISCHEM-PC1	Obtain and utilize history, physical examination, and ECG findings in patients with chest pain syndromes to establish a clinical probability of the presence of symptomatic coronary artery disease.
			M-ISCHEM-PC2	Distinguish stable versus unstable coronary syndromes.
			M-ISCHEM-PC3	Select evidence-based and cost-effective non-invasive testing for diagnosis and/or risk assessment in patients with chest pain syndromes.
			M-ISCHEM-PC5	Perform and interpret exercise ECG testing.
			M-ISCHEM-PC9	Implement lifestyle and pharmacologic interventions to control and achieve target levels of risk factors.
			M-ISCHEM-PC10	Perform pre-operative risk-assessment in cardiovascular patients undergoing non-cardiac surgery.
			M-HF-PC2	Appropriately select and incorporate data from diagnostic and laboratory testing in the evaluation and management of HF.
			M-HF-PC6	Recognize and manage comorbidities in HF patients.
			M-ARR-PC1	Evaluate and manage patients with palpitations.
			M-ARR-PC2	Evaluate and manage patients with syncope.
			M-PREV-PC2	Implement and prescribe lifestyle and pharmacologic approaches for the management of risk factors, including hypertension, elevated lipids, tobacco use, sedentary lifestyle, obesity, and diabetes mellitus.
			M-ISCHEM-PC1, PC2, PC3, PC5, PC9, PC10; M-HF-PC2, PC6; M-ARR-PC1, PC2; M-PREV-PC2	



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Ambulatory Clinic Mapping Tool – Levels of Entrustment

Patient Care

ACGME Reporting Milestones:

PC 1: Gathers and synthesizes essential and accurate information to define each patient's clinical problem(s).

PC 3: Manages patients with progressive responsibility and independence.

ACC Curricular Milestones:

M-ISCHEM-PC1, PC2, PC3, PC5, PC9, PC10; M-HF-PC2, PC6; M-ARR-PC1, PC2; M-PREV-PC2

Level 1	Level 2	Level 3	Level 4	Level 5
Critical Deficiencies	Early Learner	Advancing-Improving	Ready for Unsupervised Practice	Aspirational
Fails to recognize the signs and symptoms of common cardiovascular diseases. Performs inadequate examination and assessment. Fails to develop comprehensive, evidence-based treatment plans. Provides inadequate follow-up to patients.	Possesses partial skills to conduct effective patient assessment. Is inattentive to patient safety and comfort. Develops incomplete treatment plans and not consistent with guideline-directed medical therapy.	Can safely perform clinical assessments and interpret uncomplicated data in common cardiovascular disorders. Recognizes most high-risk findings in all clinical settings and able to manage complications of common cardiovascular disorders.	Consistently and effectively performs clinical assessments and interprets diagnostic tests to develop guideline-directed medical therapy in common cardiovascular disorders. Consistently recognizes appropriate indications of testing and therapy and individual patient risks. Is able to assess and manage complications of common cardiovascular disorders and their therapies.	Demonstrates skills necessary to interpret, teach, and supervise others in the evaluation and management of a variety of cardiovascular disorders including uncommon conditions. Diagnoses and manages rare diagnoses.



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Echo Mapping Tool

Medical Knowledge Example

ACC CMC Template Evaluation Tool for Echocardiography R			
Question No. ▼	Competency Area ▼	Reporting Milestones Subcompetency ▼	Link to ACC
2	Medical Knowledge	MK2: Knowledge of diagnostic testing and procedures.	M-IMAG-ECHO-MK2, MK7, MK8, MK9, MK10, MK11, MK13, MK15, MK16, MK17

M-IMAG-ECHO-MK2	Know the appropriate indications for: M-mode, two-dimensional, and three-dimensional transthoracic echocardiography (TTE); Doppler echocardiography and color flow imaging; transesophageal echocardiography (TEE); tissue Doppler and strain imaging; contrast echocardiography.
M-IMAG-ECHO-MK7	Know the characteristic findings of cardiomyopathies.
M-IMAG-ECHO-MK8	Know how to use echo and Doppler data to evaluate native and prosthetic valve function and diseases.
M-IMAG-ECHO-MK9	Know the echo and Doppler findings of cardiac ischemia and infarction and the complications of myocardial infarction.
M-IMAG-ECHO-MK10	Know the echo findings of pericardial disease, pericardial effusion, and pericardial constriction.
M-IMAG-ECHO-MK11	Know the characteristic findings of basic adult congenital heart diseases.
M-IMAG-ECHO-MK13	Know how to evaluate cardiac mass and suspected endocarditis.
M-IMAG-ECHO-MK15	Know how to assess pulmonary artery pressure and diseases of the right heart.
M-IMAG-ECHO-MK16	Know how to evaluate patients with systemic diseases involving the heart.
M-IMAG-ECHO-MK17	Know the indications for and the echocardiographic findings in patients with known or suspected cardio-embolic events.



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Echo Mapping Tool – Levels of Entrustment

Medical Knowledge

ACGME Reporting Milestone:

MK2: Knowledge of diagnostic testing and procedures.

ACC Curricular Milestones:

M-IMAG-ECHO-MK2, MK7, MK8, MK9, MK10, MK11, MK13, MK15, MK16, MK17

Level 1 ▼	Level 2 ▼	Level 3 ▼	Level 4 ▼	Level 5 ▼
Critical Deficiencies	Early Learner	Advancing-Improving	Ready for Unsupervised Practice	Aspirational
Lacks foundational knowledge regarding the appropriate indications for echocardiographic examinations.	Minimally understands the role of echocardiography in assessing patients with a variety of cardiac problems.	Understands the key echocardiographic findings for the most common cardiac problems. Understands the basic acquisition parameters and views needed to obtain a limited examination.	Consistently understands the key echocardiographic findings for a wide spectrum of cardiac problems. Understands the basic acquisition parameters and views needed to obtain a comprehensive examination.	Understands subtle nuances in interpreting test results. Pursues knowledge of emerging techniques in echocardiography.



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Systems-Based Practice Example

M-INV/INT-SBP1	Coordinate care in a multidisciplinary approach for patient management, including transition of care.
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Cardiac Cath Mapping Tool – Levels of Entrustment

Systems-Based Practice

ACGME Reporting Milestone:

SBP1: Works effectively within an interprofessional team.

ACC Curricular Milestone:

INT-SBP1

Level 1 ▼	Level 2 ▼	Level 3 ▼	Level 4 ▼	Level 5 ▼
Critical Deficiencies	Early Learner	Advancing-Improving	Ready for Unsupervised Practice	Aspirational
Frequently requires reminders from laboratory staff to complete responsibilities.	Engages in discussion when directly approached but does not actively seek input from others.	Actively engages members of the laboratory staff in collaborative decision-making.	Efficiently coordinates activities of the cardiac catheterization laboratory team to optimize care.	Viewed by cardiac catheterization laboratory team as a leader in delivery of high-quality care.



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Cardiology Consult Mapping Tool

Professionalism Example

ACC CMC Template Evaluation Tool for Cardiology Consult Service Rotation			
Question No	Competency Area	Reporting Milestones Subcompetency	Link to ACC Curricular Milestone
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Cardiology Consult Mapping Tool – Levels of Entrustment

Professionalism

ACGME Reporting Milestones:

PROF1: Has professional and respectful interactions with patients, caregivers, and members of the interprofessional team (e.g., peers, consultants, nursing, ancillary professionals, and support personnel).

PROF2: Accepts responsibility and follows through on tasks.

PROF3: Responds to each patient's unique characteristics and needs.

PROF4: Exhibits integrity and ethical behavior in professional conduct.

ACC Curricular Milestones:

M-ISCHEM-PROF1, PROF2

Level 1	Level 2	Level 3	Level 4	Level 5
Critical Deficiencies	Early Learner	Advancing-Improving	Ready for Unsupervised Practice	Aspirational
Lacks sensitivity to patients' needs. Is disrespectful when interacting with patients, staff, and peers. Does not accept responsibility for tasks.	Exhibits inconsistent sensitivity and respect when interacting with patients, staff, and peers. Requires reminders to follow through on tasks.	Has respectful interactions with patients and is sensitive to their needs. Exhibits professional behavior in most settings when interacting with staff and peers. Rarely requires reminders to follow through on tasks.	Consistently exhibits professional behavior with patients, staff, and peers. Accepts responsibility for assigned tasks.	Serves as a role model for others with respect to professional interactions with patients, staff, and peers.



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Future Plans

- Creation of resources for use in demonstrating a Fellow's level of competence for areas within subspecialty reporting milestones that may not be currently covered via typical rotations
 - Examples
 - In training exam performance
 - Direct observation
 - Simulation



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Wrap Up

- You may access the ACC CMC's Mapping Tools via CardioSource
 - <http://www.cardiosource.org/ACC/ACC-Membership/Sections-Segments-Councils/Training-Directors.aspx>
- Please type in your question(s) for our presenters



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