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Linking Curricular Competencies and Milestones to ACGME Reporting Milestones: Emerging New Tools

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MARCH 14 – 16, 2015
SAN DIEGO
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Learning Objectives

- Review the **basic concepts** of competency based education
- Evaluate **effective** and **efficient** ways of integrating curricular competencies and milestones to reporting milestones
- Discuss **tools** developed by ACCF to facilitate integration of curricular and reporting milestones

Competency Based Medical Education (CBME)

- An **outcomes based approach** to the design, implementation, assessment and evaluation of medical education programs, **using an organizational framework of competencies**

Frank JR et al. Medical Teacher 2010; 32 (8); 638-45

Competency Based Curriculum

	Traditional Education	Competency-based Education
Goal of educational encounter	Acquisition of knowledge	Application of knowledge
Responsible for driving educational process	Teacher	Learner
Responsible for content	Teacher	Learner and teacher
Timing of assessment	Emphasis on summative	Emphasis on formative
Typical assessment tool	Indirect	Direct
Evaluation standards	Relative to peers	Relative to objective measures
Program completion	Fixed time	Variable time

Kuvin J. Am J Cardiol 2011;108:1508

What are Milestones?

- General Definition: **Skill and knowledge-based development** that commonly occur by a **specific time**
- Milestone definition (ACGME and Specialty Boards): Specific **behaviors, attributes, or outcomes** in the six general competency domains to be demonstrated by residents during residency

Milestones

- **Observable developmental steps** moving from **Critical deficiencies/Novice (Beginner)** to **Expert/Master/Aspirational**
- Organized under the rubric of the six domains of **general clinical competency**
 - Describes a trajectory of progress from neophyte towards independent practice
 - Articulates shared understanding of expectations
 - Subset of all dimensions of clinical competency
 - Required of all residents in that discipline
 - Sets aspirational goals of excellence
 - Provides a framework and language for discussions across the continuum

Entrustable Professional Activities (EPA)- COCATS4

- Initially evaluate, diagnose and develop a treatment plan for patients at risk for or with cardiovascular disease (**Cardiovascular Consultation**)
- Manage acute cardiac conditions including management of team-based care (**Acute Cardiac Care**)
- Manage chronic cardiovascular disease, including management of team-based care (**Chronic Cardiovascular Disease Management**)
- Utilize cardiovascular testing appropriately (**Cardiovascular Testing**)
- Carry out disease prevention and risk factor control measures, addressing morbidities (**Disease Prevention and Risk factor Control**)
- Engage in lifelong learning (**Lifelong Learning**)

COCATS 4

- All curricular milestones are now contained in COCATS 4 documents & competency tables
- [ACC 2015 Core Cardiovascular Training Statement \(COCATS 4\) \(Revision of COCATS 3\): A Report of the ACC Competency Management Committee. *J Am Coll Cardiol* 2015;Mar 13:\[Epub ahead of print\].](#)

IM Subspecialty Reporting Milestones

The Internal Medicine Subspecialty Milestones Project

A Joint Initiative of
The Accreditation Council for Graduate Medical Education
and
The American Board of Internal Medicine



American Board
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Subspecialty Reporting Milestones

- For use in **semi-annual review** of fellow performance and reporting to ACGME
- Tracks development of competence from an **early subspecialty learner up to that expected for unsupervised practice (and even beyond- 'ASPIRATIONAL')**
- Each competency has milestones that describe development of competence
 - Knowledge, Skills, Attitudes, Other attributes

Subspecialty Reporting Milestone

- 23 items developed around the 6 core general competencies
 - Patient Care and Procedure Skills (5)
 - Medical Knowledge (3)
 - System Based Practice (4)
 - Practice Based Learning and Improvement (4)
 - Professionalism (4)
 - Interpersonal and Communication Skills (3)

Challenges

- **Adaptation** of the curricular competencies (now contained in COCATS 4 competency table) to **various rotations**
- Example: Coronary Care Unit rotation
 - Acute coronary syndrome
 - Heart Failure
 - Arrhythmias
- Predominantly an exercise requiring adaptation and mapping in the patient care, procedure skills and medical knowledge domains
- Clear documentation needed for '**Critical Deficiencies**' and '**Aspirational**'
- **New (relatively): work within inter-professional teams, system error detection and system improvement, cost-effective care, transitions of care, self performance audit**

The Ideal Evaluation Tool

- Mapped to curricular milestones (COCATS4 tables)
- Relevant and realistic to actual rotation experience
- Modeled after the Reporting Milestone format
- Containing clearly stated narratives of progression from novice to aspirational (faculty & fellows are both stakeholders)
- Easy to use by faculty
- Compatible with the institution's residency management platform

Competency & Milestones Mapping Workgroup

- Lisa Mendes MD, CV PD, Vanderbilt, TN
- Jim Arrighi MD, CV PD, Brown University, RI
- James McPherson MD, IM PD, Vanderbilt, TN
- C.A.Sivaram MD, CV PD, University of Oklahoma, OK
- ACC Staff: Dawn Phoubandith, Robyn Snyder

Completed & In Development Mapping Tools

Completed

1. Ambulatory Clinics
2. Cardiology Consultation
3. CV Intensive Care Unit
4. CVD Prevention
5. Cath Lab
6. Echocardiography
7. Heart Failure
8. Vascular Medicine

In Development

1. Nuclear Cardiology
2. EP
3. Pacing
4. Research
5. Adult Congenital HD

Ambulatory Clinic Mapping Tool

Patient Care Example

ACC CMC Template Evaluation Tool for Ambulatory Clinics Rotation			
No.	Competency Area	Reporting Milestones Subcompetency	Link to COCATS 4 Curricular Milestones
2	Patient Care and Procedural Skills	PC1: Gathers and synthesizes essential and accurate information to define each patient's clinical problem(s). PC3: Manages patients with progressive responsibility and independence.	M-AMB-PC1, PC2, PC3, PC4, PC5, PC8, PC10, PC11

COCATS 4 Competencies

M-AMB-PC1	Skill to effectively and efficiently perform an initial outpatient cardiovascular consultation, and establish a differential diagnosis.
M-AMB-PC2	Skill to appropriately utilize diagnostic testing – both for initial diagnosis and for follow-up care.
M-AMB-PC3	Skill to integrate clinical and testing results to establish diagnosis, assess cardiovascular risk, and formulate treatment and follow-up plans.
M-AMB-PC4	Skill to appropriately obtain and integrate consultations from other healthcare professionals in a timely manner.
M-AMB-PC5	Skill to recognize acute cardiovascular disorders or high-risk states that require immediate treatment and/or hospitalization, and prioritize management steps in patients with complex or multi-component illness.
M-AMB-PC8	Skill to effectively carry out chronic disease management in patients with chronic ischemic heart disease, hypertension, heart failure, and peripheral vascular disease.
M-AMB-PC10	Skill to effectively facilitate transition of care from hospital to ambulatory or intermediate care settings.
M-AMB-PC11	Skill to perform preoperative assessments for noncardiac procedures in patients with cardiovascular disease.

Ambulatory Clinic Mapping Tool

Levels of Entrustment

Patient Care and Procedural Skills

Reporting Milestones Subcompetency

PC1: Gathers and synthesizes essential and accurate information to define each patient's clinical problem(s). **PC3:** Manages patients with progressive responsibility and independence.

Link to COCATS 4 Curricular Milestones

M-AMB-PC1, PC2, PC3, PC4, PC5, PC8, PC10, PC11

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 provides treatment that is 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 is 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.

Preview Form

Printed on Feb 18, 2015



Cardiology Clinic

[Insufficient contact to evaluate](#) (delete evaluation)

- Evaluation form based on the Reporting Milestone Format
 - Housed in MedHub, our residency evaluation platform
 - Contains narratives to help faculty to evaluate appropriately
- Created by Ms. Candice Edwards, Oklahoma City*

Critical Deficiencies	Early Learner	Advancing/ Improving	Ready for unsupervised practice	Aspirational
<ul style="list-style-type: none"> ▪ 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. 	<ul style="list-style-type: none"> ▪ 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. 	<ul style="list-style-type: none"> ▪ 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. 	<ul style="list-style-type: none"> ▪ Consistently and effectively performs clinical assessments and interprets diagnostic tests to develop guideline-directed medical therapy in common cardiovascular disorders. ▪ Consistently recognizes appropriate indication of testing and therapy and individual patient risks. ▪ Is able to assess and manage complications of common cardiovascular disorders and their therapies. 	<ul style="list-style-type: none"> ▪ 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.

1. Cardiology Clinic - Patient Care

Comments

▲ Collapse ▼

History & Mission of the ToolKit

- Cardiology Training and Workforce Committee Working Group
- Develop an online Tool Kit for Cardiology Program Directors
 - Reside within ACC Cardiosource
 - Provide a centralized location for information and resources
 - Allow PDs and Program Coordinators to share experiences and successful approaches
 - Able to evolve and grow along with needs of PDs and Coordinators

PD ToolKit Work Group Champions

- Julie Damp MD, Associate PD, Vanderbilt University
- Andy Kates MD, PD, Washington University St. Louis
- Larry Jacobs MD, PD, Lehigh Valley Health Network, Allentown PA

PD ToolKit Content Areas

- Accreditation Resources
- Assessment and Evaluation Tools
- Curriculum Tools
- Faculty Development
- Recruitment
- FAQ/Helpful Links

PD ToolKit Next Steps

- Solicit submissions
 - Specific strategies and resources used at your institution
 - Novel programs and tools
- Ideas for improvement or expanded content